Up-date to the operating and service manual A820-2CH

Operation

1 Menu tree for the latest software version 02/93.

2 Description of new functions.

UP-DATE Master Section

UP-DATE Tape Deck Section

UP-DATE Audio Section

UP-DATE Accessories Section

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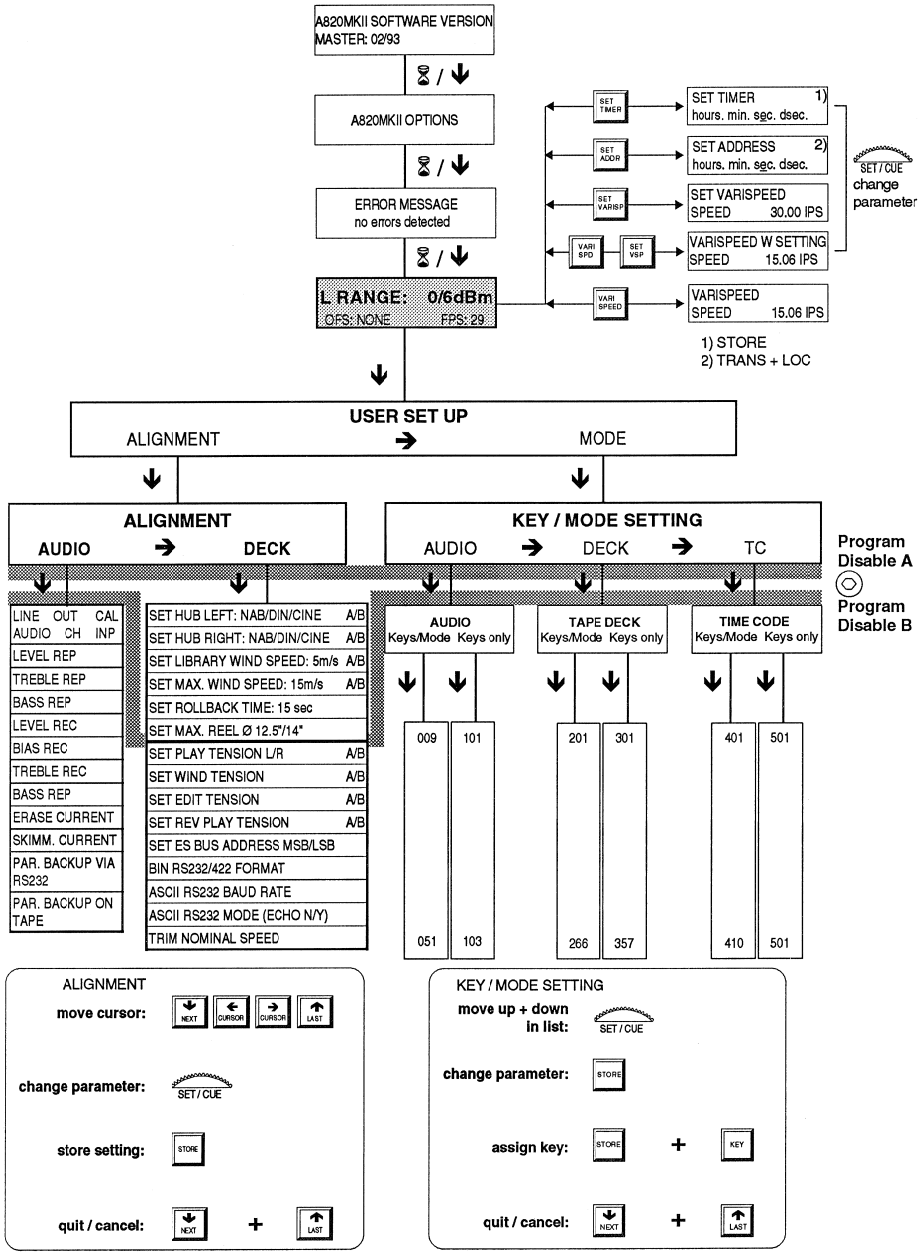
Order no. 10.27.3541 (Ed. 0895)

Menu tree for A820-2CH software version 02/93



Audio Keys/Mode

009	LEVEL RANGE 0/6 dBm	Y/N
010	LEVEL RANGE 4/10 dBm	Y/N
011	LEVEL RANGE 8/14 dBm	Y/N
012	LEVEL RANGE 10/16 dBm	Y/N
021	MASTER SAFE	Y/N
022	TAPE A	Y/N
023	TAPE B	Y/N
024	TAPE A/B	
031	MONO/STEREO	
032	CCIR/NAB	
033	CIRR/NAB PAR SAME/INDIV	
034	REP/SYNC PAR SAME/INDIV	
041	AUTO MUTE	ON/OFF
042	AUTO INPUT A	Y/N
043	AUTO INPUT B	Y/N
044	IN/OUT DELAY	Y/N
045	DOLBY HX PRO	ON/OFF
046	AUTO LOW PASS	Y/N
051	CH CONTROL PAR/INDIV	

Audio Keys only

101	REHEARSE
102	SPOT ERASE
103	SKIMMING

Time Code Keys/Mode

401	24 FRAMES/SEC	Y/N
402	25 FRAMES/SEC	Y/N
403	29.97 FRAMES/SEC	Y/N
404	30 FRAMES/SEC	Y/N
406	25/29.97 FRAMES/SEC	
407	29.97/30 FRAMES/SEC	
408	24/25/29/30 FRAMES/SEC	
409	OFFSET 1.2"	Y/N
410	TC MODE	NORM/SPEC

Time Code Keys only

501	FUTURE USE

Tape Deck Keys/Mode

201	TAPE GUARD A	NO/RED
202	TAPE GUARD B	NO/STOP
211	3.75 IPS	Y/N
212	7.5 IPS	Y/N
213	15 IPS	Y/N
214	30 IPS	Y/N
215	3.75/7.5 IPS	
216	7.5/15 IPS	
217	15/30 IPS	
218	3.75/7.5/15 IPS	
219	7.5/15/30 IPS	
220	3.75/7.5/15/30 IPS	
230	FADER MASTER ENABLE	Y/N
231	FADER A	Y/N
232	FADER B	Y/N
233	FADER C	Y/N
234	FADER D	Y/N
241	VARISPEED %	Y/N
242	VARISPEED HT	Y/N
243	VARISPEED IPS	Y/N
244	VARISPEED % / IPS / HT -"-	
245	VS IND. ENHANCED -"-	Y/N
246	SAVE KEY SETTING	Y/N
247	PROGRAM DISABLE	A/B
250	SHUTTLE IN PLAY	Y/N
251	SHUTTLE MODE	A/B
252	CAPSTAN MODE	A/B
253	WIND MODE	A/B
254	EDIT MODE	A/B
255	REC INDIC MODE	A/B
259	SINGLE LOOP MODE	A/B
265	AUTO LOAD ENABLE	Y/N
266	QUICK START	Y/N

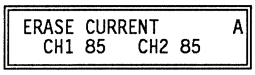
Tape Deck Keys only

301	REWIND	
302	FORWARD	
303	LIBRARY WIND	
304	PLAY	
305	REVERSE PLAY	
306	STOP	
307	RECORD A	
308	RECORD B	
309	EDIT	
310	CUT	
311	TRANSFER	
312	HOLD	
313	LOCATE 1	
314	LOCATE 2	
315	LOCATE 3	
316	LOCATE 4	
317	LOCATE 5	
318	LOCATE ZERO	
319	LOC START PLAY	
320	LOC START STOP	
321	LOC START REC	
322	ROLLBACK PLAY	
323	ROLLBACK STOP	
324	ROLLBACK RECORD	
325	BACKSPACE STOP	
326	BACKSPACE PLAY	
327	TAPE DUMP A	
328	TAPE DUMP B	
329	TAPE DUMP C	
330	TAPE DUMP D	
332	LIFTER	
334	LAP/WATCH DISPLAY	
335	RESET TIMER	
336	SET TIMER	
337	SET ADDRESS	
338	SET VARISPEED	
339	VARISPEED	ON/OFF
345	REMOTE A REM CTL ONLY	
346	REMOTE B REM+LOCAL	
347	SHUTTLE BAR	
348	UNLOAD	
351	NO FUNCTION	
355	SINGLE LOOP	
356	AUTO LOOP	
357	INSTANT LOOP	

EDITION: 12. November 1993

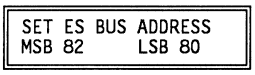
2 Beschreibung neuer Funktionen ab Software 02/93

2.1 Menü "Alignment - Audio"

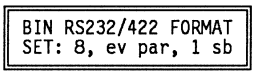


Anwahl der **Löschstrom** Einstellung für Bandsorte A, Kanal 1 bzw. 2.

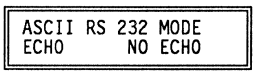
2.2 Menü "Alignment - Deck"



Setzen der SMPTE/EBU-Busadresse.
Zur Adressierung der A812MKII in einem Verbundsystem mit der SMPTE/EBU Bus Option 1.820.751.XX.

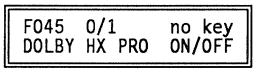


Setzen des BINÄR CODE FORMATS für die Option SMPTE/EBU Schnittstelle 1.820.751.XX.
8 = 8 bit code
ev par = even parity (gerade)
odd par = odd parity (ungerade)
1 sb = 1 stop - bit

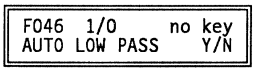


Setzen der ECHO oder NO-ECHO Funktion der Option RS 232 1.810.751.XX mit ASCII Protokoll.

2.3 Menü "Audio - Keys / Mode"



ON: Dolby HX PRO ist eingeschaltet.
OFF: Dolby HX PRO ist ausgeschaltet.



Y: Die automatische Höhenabsenkung beim Umspulen ist aktiert. Die Parameter der Tonhöhenwiedergabe werden zum Schutz der Monitorlautsprecher auf Null (00) gesetzt.
N: Die automatische Höhenabsenkung beim Umspulen ist nicht aktiv.

2.4 Menü "Tape Deck - Keys / Mode"

```
F247 1/0      no key
PROGRAM DISABLE A/B
```

A: Die geschlossene Programmiersperre (Freigabeschraube [28] auf S. D/6) erlaubt kein Zugriff in das Menü.
B: Die geschlossene Programmiersperre (Freigabeschraube [28] auf S. D/6) erlaubt folgende Menüzugriffe:

- SET HUB DIAMETER LEFT
- SET HUB DIAMETER RIGHT
- SET LIBRARY WIND SPEED
- SET MAX. WIND SPEED
- SET ROLLBACK TIME
- SET MAX. REEL DIAMETER

Es ist nicht möglich, eine Tastenfunktion zu programmieren, solange die Programmiersperre geschlossen ist. Ein allfälliger Versuch wird auf dem Service-Display mit der Meldung "program mode not enabled" angezeigt. Zum öffnen der Programmiersperre muss die Freigabeschraube gedreht werden.

```
F250 1/0      no key
SHUTTLE IN PLAY  Y/N
```

Y: Das SHUTTLE-Rad ist auch im Play Betrieb aktivierbar.
N: Das SHUTTLE-Rad ist im Play Betrieb nicht aktivierbar

```
F252 0/1      no key
CAPSTAN MODE    A/B
```

A: Capstan dreht im Stop-Modus nicht. PLAY oder RECORD Befehl aktiviert den Capstan erst, nachdem die Andruckrolle das Band gegen die Capstanachse gedrückt hat (Bandschonung).
B: Capstan dreht immer bei eingelegtem Band (schnelleres Startverhalten).

```
F253 0/1      no key
WIND MODE A/B
```

A: Der Bandabhebebolzen hebt das Band während dem Umspulen von den Audioköpfen ab.
B: Das Band berührt den Bandabhebebolzen während dem Umspulen nicht (Bandschonend). Andruckaggregat ganz ausgefahren.

```
F254 1/0      no key
EDIT MODE A/B/C
```

Mit der Funktion F254 EDIT A/B/C kann die Logik der Bandzugsensorblockierung gewählt werden.

EDIT A: Keiner der beiden Bandzugsensoren blockiert.
EDIT B: Linker Bandzugsensor blockiert, ideal für Editieren mit dem rechten Bandteller.
EDIT C: Rechter Bandzugsensor blockiert, ideal für Editieren mit dem linken Bandteller.

```
F255 1/0      no key
REC INDIC MODE A/B
```

A: Aufnahmerückmeldung der Laufwerktaste [10] ist nur aktiv, wenn mindestens 1 Kanal auf Aufnahme geschaltet ist.
B: Aufnahmerückmeldung auf der Laufwerktaste [10] ist unabhängig vom Aufnahmezustand des Audioteils.
Anwendung: "Follow external Record" mit TLS 4000.

```
F259 1/0      no key
SINGLE LOOP MODE A/B
```

Für LOOP-Betrieb ohne numerische Eingabe einer Endadresse.
A: Die SINGLE LOOP Taste **auf dem Autolocator** funktioniert als Instant Loop.
B: Die SINGLE LOOP Taste **auf dem Autolocator** funktioniert als Single Loop.

Erklärung Single Loop Eine einzelne auf dem Autolocator angewählte Schleife wird gefahren.

Erklärung Instant Loop Drücken der Taste INSTANT LOOP bestimmt eine Endlosschleife zwischen dem angezeigten Zählerstand und der in LOC 1 abgespeicherten Bandposition. Dabei gilt der kleinere Wert als Startadresse.

```
F265 0/1        no key
AUTO LOAD ENABLE Y/N
```

AUTO LOAD dient zum automatischen Programmieren der Punch-In und Punch-Out Adressen auf dem Autolocator im AUTOREC Modus. Die Adressen werden durch Drücken von REC bzw. PLAY eingegeben.

Y: Die Taste mit der TRANS Funktion **auf dem Autolocator** bekommt die AUTO LOAD Funktion.

B: Die ursprüngliche Funktion TRANSFER (Rückmelde LED blinkt) ist wieder auf der TRANS/REV PLAY-Taste des Autolocators programmiert.

```
F266 0/1        no key
QUICK START       Y/N
```

Neu ist bei 1/4"-Ausführungen die Funktion Nr. 266, "Quick Start Yes/No", mit Default auf "No" implementiert. Voraussetzung für Quick Start ist, dass 12,5"-Spulen eingelegt und nicht 30ips Nominalgeschwindigkeit eingestellt sind, so dass sich der Algorithmus zur Trägheitsmessung vereinfacht. Der aktivierte Quick Start Modus wird irreversibel ausgeworfen, wenn der Spulendurchmesser im Menü "Tape Deck Alignment" auf 14" umprogrammiert wird oder wenn man auf die Nominalgeschwindigkeit von 30ips per Taste umschaltet. Der Operator muss bewusst per Tastendruck Quick Start reaktivieren, nachdem die Voraussetzungen wiederhergestellt sind. Ausserdem kann in der Quick Start Betriebsart weder irgendein Varispeed Modus (inkl. Setting) ein- oder ausgeschaltet noch der Capstan Modus von B nach A umgeschaltet werden.

Der Quick Start Modus bleibt **als Vorwahl** auch dann gespeichert, wenn auf eine unzulässige Nominalgeschwindigkeit oder einen unzulässigen Kerndurchmesser umgeschaltet wird. Ein- und Ausschalten des Quick Start Modus sind nur bei zulässigen Randbedingungen erlaubt, um sofortige Quittierung zu gewährleisten.

Varispeed ist bei Quick Start unter allen Bedingungen ausgeschlossen.

2.5 Menü "Tape Deck - Keys only"

```
F305            no key
REVERSE PLAY
```

Wiedergabe in Rückwärtsrichtung. Funktioniert auch mit der Taste HOLD und PLAY gleichzeitig gedrückt.

```
F325            no key
BACKSPACE STOP
```

Mit dieser Vorlauffunktion kann das Band mit Kopfkontakt und vierfacher PLAY-Geschwindigkeit zurückgespult werden. Funktioniert nur solange die Taste gedrückt wird.

```
F326            no key
BACKSPACE PLAY
```

Mit dieser Vorlauffunktion kann das Band mit Kopfkontakt und vierfacher PLAY-Geschwindigkeit zurückgespult werden. Nach dem Loslassen der BACKSPACE PLAY Taste geht die Maschine in den PLAY Zustand.

F327 Loc.k10 TAPE DUMP A

F328 no key TAPE DUMP B

F329 no key TAPE DUMP C

F330 no key TAPE DUMP D

Mit den Funktionen F327–F330 können folgende Modi angewählt werden:

Papierkorb Betriebsarten (F327–F330):	**A** **F327**	**B** **F328**	**C** **F329**	**D** **F330**
Direkte Anwahltaste TAPE DUMP (Abbrechen mit STOP oder TAPE DUMP)	■	■		
Vorbereitungstaste TAPE DUMP Aktivieren durch PLAY (unterbrechen mit STOP)			■	■
Bandzähler aktiv	■		■	
Bandzähler abgeschaltet		■		■

F348 no key UNLOAD

Schaltet die Wickelmotorsteuerung aus. Das Band wird entlastet. Funktion nur in STOP.

2.6 Menü "Time Code – Keys / Mode"

F410 1/0 no key TC MODE NORM/SPEC

Aktivieren der Zeitcodeaufnahme bzw. Wiedergabe bei 3 3/4 ips.
NORM: Keine Zeitcode-Aufnahme bzw. Wiedergabe bei 3 3/4 ips möglich.
SPEC: Freigabe der Zeitcode-Aufnahme bzw. Wiedergabe bei 3 3/4 ips.

Hinweis: Bei dieser Bandgeschwindigkeit ist mit erhöhter drop-out Rate zu rechnen. Der Zeitcode-Aufnahmepegel R2 ist für 3 3/4 und 7 1/2 ips zu verwenden. Es wird empfohlen, den Pegel für die gebräuchlichere Anwendung zu optimieren.

2.7 Allgemeine Geräte-Funktionen

Faderstart

Der Anschluss eines Fader-READY-Schalters soll als Impulstaste gemäss folgenden Varianten erfolgen:

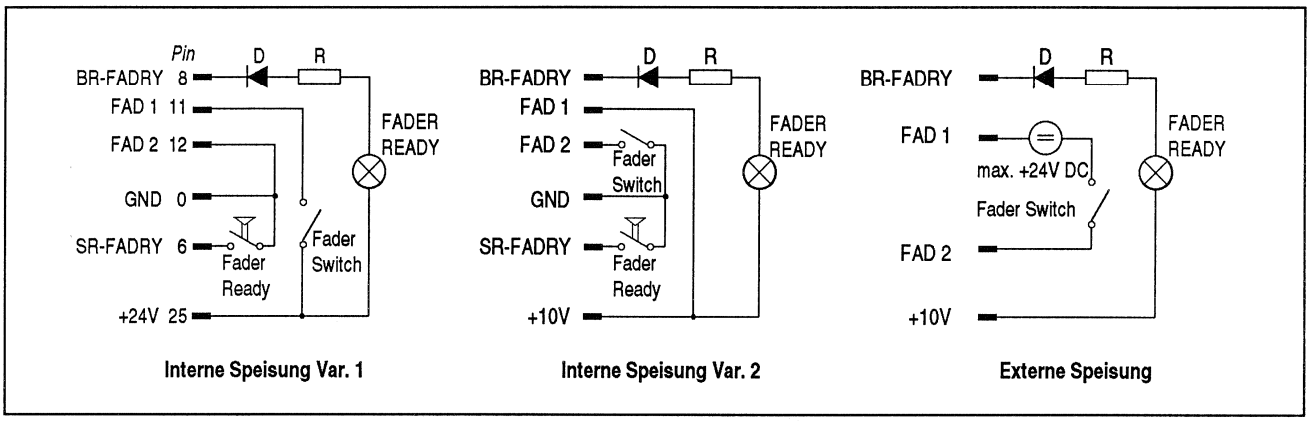


Fig. 1.13 FADER START-Funktion mit interner oder externer Speisung am Anschluss PAR. REM. CTRL.

Locator-Adressen

Da die Adressen von Loc Start, AREC Punch In und Punch Out auf die Bandpositionen bezogen sind, werden bei versehentlichem Betätigen der Zähler-Rückstelltaste RESET TIMER **keine** unerwünschten Verschiebungen auftreten!

Autolocator

Autolocator-Tasten sind keine "Soft-Tasten" und nicht frei programmierbar. (Nur bedingt über lokales LCD mit veränderter Funktionalität: siehe Funktionen im Menü!)

Dokumentation

Ausführliche Beschreibungen der seriellen Schnittstelle sind in Englisch unter folgenden Bestellnummern erhältlich.

Protokoll der RS232-Schnittstelle	Best. Nr. 10.85.1330
Studer ATR ES-Bus-Protokoll	Best. Nr. 10.85.1350

2 Description of new functions Software 02/93 and up

2.1 Menu "Alignment - Audio"

```
ERASE CURRENT        A
  CH1 85   CH2 85
```

Selects the **erase current** alignment for tape type A, channel 1 or 2.

2.2 Menu "Alignment - Deck"

```
SET ES BUS ADDRESS
MSB 82      LSB 80
```

Sets the SMPTE/EBU bus address.
For addressing the A812 MKII operating in an interlinked system in conjunction with the SMPTE/EBU option 1.820.751.XX.

```
BIN RS232/422 FORMAT
SET: 8, ev par, 1 sb
```

Sets the BINARY CODE FORMAT for the optional SMPTE/EBU interface 1.820 751.XX.
8 = 8-bit code
ev par = even parity
odd par = odd parity
1 sb = 1 stop bit

```
ASCII RS 232 MODE
ECHO       NO ECHO
```

Sets the ECHO or NO ECHO function of the RS232 option 1.810.751.XX with ASCII protocol.

2.3 Menu "Audio - Keys / Mode"

```
F045  0/1      no key
DOLBY HX PRO   ON/OFF
```

ON: Dolby HX PRO switched on.
OFF: Dolby HX PRO switched off.

```
F046  1/0      no key
AUTO LOW PASS    Y/N
```

Y: Automatic treble attenuation during fast wind is active. The parameters for high frequency reproduction are set to zero (00) for protection of the monitor speakers.
N: Automatic treble attenuation during fast wind is not activated.

2.4 Menu "Tape Deck - Keys / Mode"

```
F247 1/0      no key
PROGRAM DISABLE A/B
```

A: The closed programming lock (enable screw [28] on page E/6) prevents access to the menu.

B: The closed programming lock (enable screw [28] on page E/6) allows the following menu accesses:

- SET HUB DIAMETER LEFT
- SET HUB DIAMETER RIGHT
- SET LIBRARY WIND SPEED
- SET MAX. WIND SPEED
- SET ROLLBACK TIME
- SET MAX. REEL DIAMETER

It is not possible to program a key function as long as the programming lock is closed. Any attempt will be rejected with the message "program mode not enabled" on the service display. For opening the programming lock, the enable screw [28] on page E/6 must be turned.

```
F250 1/0      no key
SHUTTLE IN PLAY  Y/N
```

Y: The SHUTTLE wheel can also be activated in play mode.

N: The SHUTTLE wheel cannot be activated in play mode.

```
F252 0/1      no key
CAPSTAN MODE    A/B
```

A: The capstan does not turn in stop mode. PLAY or RECORD activates the capstan only when the pinch roller presses the tape against the capstan shaft (more gentle tape handling).

B: The capstan always turns when the tape is inserted (faster acceleration behavior).

```
F253 1/0      no key
WIND MODE A/B
```

A: The tape lift pin lifts the tape off the soundhead in spooling mode.

B: The tape does not contact the tape lift pin in spooling mode (gentle tape handling). The pinch roller assembly is fully disengaged.

```
F254 1/0/0    no key
EDIT MODE A/B/C
```

With function F254 EDIT A/B/C the ogic of the tape tension sensor arrest can be selected.

EDIT A: Both tape tension sensors free.

EDIT B: Left-hand tension sensor arrested (blocked). Ideal for cueing and editing by manipulating the right hand reel.

EDIT C: Right-hand tension sensor arrested (blocked). Ideal for cueing and editing by manipulating the left hand reel.

```
F255 1/0      no key
REC INDIC MODE A/B
```

A: Record indication on the tape deck key [10] is only active if at least 1 channel is switched to record.

B: Record indication on the tape deck key [10] is independent of the audio section status.
Application: "Follow external record" with TLS 4000.

F259 1/0 no key SINGLE LOOP MODE A/B

For LOOP mode without numeric input of an end address.
A: The SINGLE LOOP key **on the autolocator** functions as an instant loop.
B: The SINGLE LOOP key **on the autolocator** functions as a single loop.

Explanation of single loop

One individual loop as selected on the autolocator is performed.

Explanation of instant loop

When the INSTANT LOOP key is pressed, a loop between the displayed counter address and the tape address stored in LOC 1 is performed endlessly. The lower of the two values is taken as the starting address.

F265 0/1 no key AUTO LOAD ENABLE Y/N

AUTO LOAD is used for automatic programming the punch-in and punch-out addresses on the autolocator in AUTOREC mode. The addresses are entered by pressing REC or PLAY respectively.
Y: The key with the TRANS/REV PLAY function **on the autolocator** determines the AUTO LOAD function.
B: The original function TRANSFER (LED flashes) is again assigned to the TRANS/REV PLAY key function **on the autolocator.**

F266 0/1 no key QUICK START Y/N

A new feature of the 1/4" version is the function No. 266 "Quick Start Yes/No". The default setting is "No". A precondition for quick start is that 12.5" reels are mounted and that the 30 ips speed is deselected in order to simplify the algorithm for inertia measurement. The activated Quick Start mode is irrevocably rejected if the reel diameter in the "Tape deck alignment" menu has been reprogrammed to 14", or if the 30 ips nominal speed is selected. The operator must activate the Quick Start function explicitly by pressing this key after these preconditions have been established. In Quick Start mode neither a Varispeed mode (incl. setting) can be activated or deactivated, nor can the capstan mode be changed from mode B to A.

The Quick Start mode remains preselected even if an inadmissible nominal speed has been activated or if an inadmissible reel diameter has been selected. The Quick Start mode can only be deactivated if all required operating conditions exist. This will be acknowledged immediately.

Varispeed is precluded under all conditions if Quick Start is active.

2.5 Menu "Tape Deck - Keys only"

F305 no key REVERSE PLAY

Playback in reverse direction. The function can also be activated by simultaneously pressing the HOLD and PLAY keys.

F325 no key BACKSPACE STOP

With this spooling function the tape can be rewound at four times the PLAY speed with tape-head contact. This function remains only active for as long as this key is pressed.

F326 no key BACKSPACE PLAY

With this spooling function the tape can be rewound at four times the PLAY speed with tape-head contact. When the BACKSPACE key is released, the machine switches to PLAY mode.

F327 Loc.k10
TAPE DUMP A

F328 no key
TAPE DUMP B

F329 no key
TAPE DUMP C

F330 no key
TAPE DUMP D

With the functions F327–F330 the following modes can be selected

Dump edit modes (F327–F330):	A F327	B F328	C F329	D F330
Direct selection key TAPE DUMP (cancel with STOP or TAPE DUMP)	■	■		
Preselection key TAPE DUMP activate with PLAY (cancel with STOP)			■	■
Tape timer active	■		■	
Tape timer switched off		■		■

F348 no key
UNLOAD

Key for retracing the tape guide assembly. Spooling motor control switched off. Effective in STOP only.

2.6 Menu "Time Code - Keys / Mode"

F410 1/0 no key
TC MODE NORM/SPEC

Activates the time code recording or reproduction at 3 3/4 ips.
NORM: No time code recording or reproduction at 3 3/4 ips.
SPEC: Enables time code recording or reproduction at 3 3/4 ips.

Note: At this tape speed one has to expect a higher drop-out rate. The time code record level R2 has to be used for 3 3/4 and 7 1/2 ips. It is recommended to optimize the level for the more frequently used speed.

2.7 General equipment functions

Faderstart

A Fader READY switch must be connected as a momentary action push button according to one of the following versions:

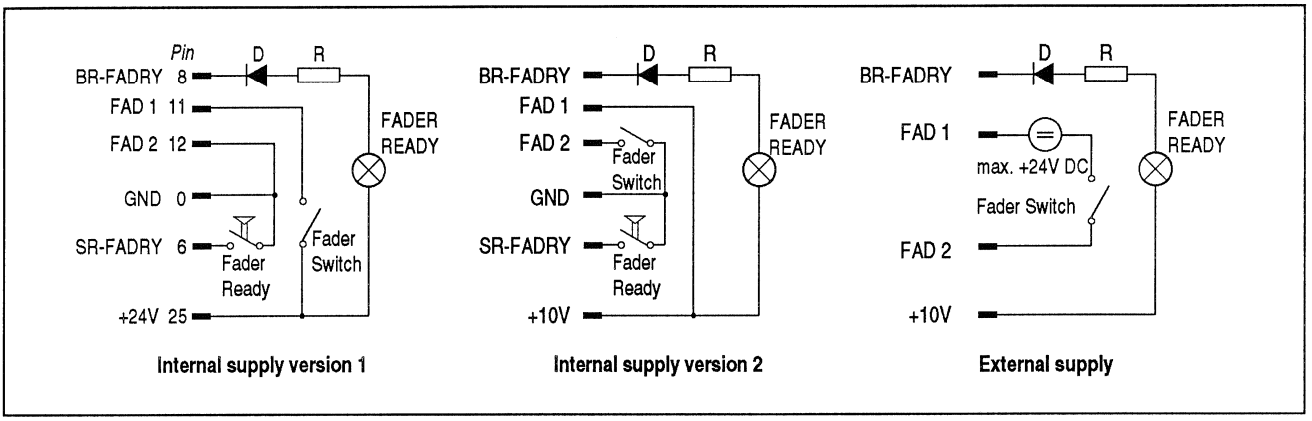


Fig. 1.13 FADER START function with internal or external supply at the PAR. REM. CTRL. terminal.

Locator addresses

Since the Loc Start, AREC punch in and punch out addresses relate to the actual tape positions, no unwanted offsets occur if the RESET TIMER key is inadvertently pressed!

Autolocator

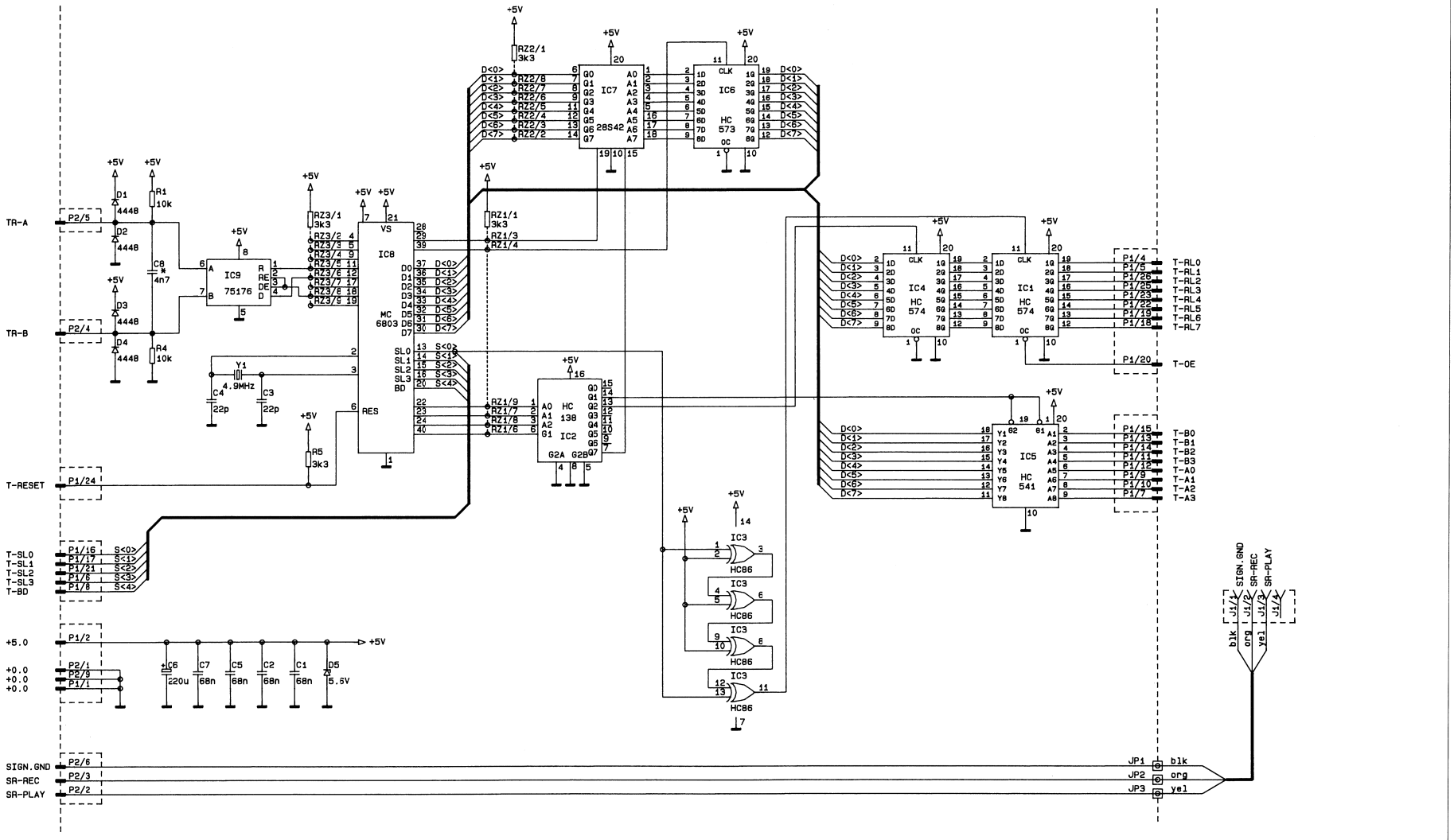
Autolocator keys do not function as soft keys and are not freely programmable. (Only subject to certain restrictions via a local LCD with changed functionality: see menu functions!)

Documentation

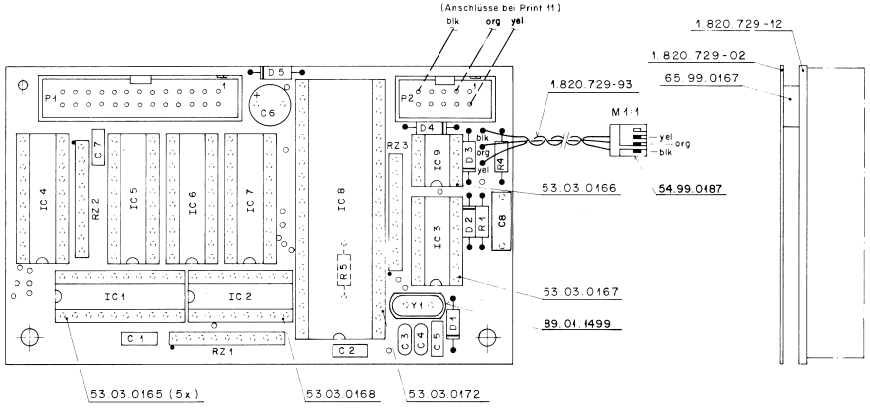
A detailed English description of the interface can be ordered under the following publication numbers:

Protocol of the RS232 interface	Order No. 10.85.1330
Studer ATR ES bus protocol	Order No. 10.85.1350

SERIAL REMOTE INTERFACE 1.820.729.25



SERIAL REMOTE INTERFACE 1.820.729.25



Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
20	C.....1	59.40.0683	68nF	10%, PETP	
20	C.....2	59.40.0683	68nF	10%, PETP	
20	C.....3	59.45.2220	22pF	5%, CER	
21	C.....3	59.34.2330	33pF	5%, CER	
20	C.....4	59.45.2220	22pF	5%, CER	
21	C.....4	59.34.2330	33pF	5%, CER	
20	C.....5	59.40.0683	68nF	10%, PETP	
20	C.....6	59.22.3221	220uF	20%, 10V EL	
20	C.....7	59.40.0683	68nF	10%, PETP	
25	C.....8	59.03.2472	4.7nF	10%, PETP	
20	D.....1	50.04.0125	1N4448		Fc,ITT,Ses,Ph
20	D.....2	50.04.0125	1N4448		Fc,ITT,Ses,Ph
20	D.....3	50.04.0125	1N4448		Fc,ITT,Ses,Ph
20	D.....4	50.04.0125	1N4448		Fc,ITT,Ses,Ph
20	D.....5	50.04.1108	5.6V Z	BZX83 C 5V6, BZX55 C 5V6, ZPD5.6	ITT,Ses
20	IC....1	50.17.1574	74HC 574	... 74 HC 574	Ph,Mot,NS,RCA,To,TI
20	IC....2	50.17.1138	74HC 138	... 74 HC 138	Mot,NS,Ph,RCA,SGS,TI
20	IC....3	50.17.1086	74HC 86	... 74 HC 86	Mot,NS,Ph,RCA,SGS,TI
20	IC....4	50.17.1574	74HC 574	... 74 HC 574	Ph,Mot,NS,RCA,To,TI
20	IC....5	50.17.1541	74HC 541	... 74 HC 541	Ph,Mot,NS,RCA,To,TI
20	IC....6	50.17.1573	74HC 573	... 74 HC 573	Ph,Mot,RCA,To,TI,SGS
	IC....7	50.14.0120	TBP28S42N		TI
20	IC....7	1.820.999.20		Software 13/85	St
21	IC....7	1.820.999.21		Software 50/86	St
22	IC....7	1.820.999.22		Software 29/87	St
23	IC....7	1.820.999.23		Software 41/87	St
20	IC....8	50.16.0107	MC6803 P-1	MD 6803P-1	Mot,Hi
20	IC....9	50.15.0115	SN75176 AP	DS 3695 N	TI,NS
20	P.....1	54.14.2003	connector	26 contacts, flat cable	
20	P.....2	54.14.2001	connector	10 contacts, flat cable	
20	R.....1	57.11.3103	10 kOhm	2%	
20	R.....2	57.11.3102	1 kOhm	2%	
25	R.....2	00.00.0000	not used	replaced by C8	
20	R.....4	57.11.3103	10 kOhm	2%	
20	R.....5	57.11.3332	3.3 kOhm	2%	
20	RZ....1	57.88.4332	8*3.3kOhm	Network, 8 * 3.3 kOhm, 5%, single line	
20	RZ....2	57.88.4332	8*3.3kOhm	Network, 8 * 3.3 kOhm, 5%, single line	
20	RZ....3	57.88.4332	8*3.3kOhm	Network, 8 * 3.3 kOhm, 5%, single line	
20	Y.....1	89.01.0553		4.9152 MHz, TD 18	
21	Y.....1	89.01.0560		4.9152 MHz, +- 100 ppm	

(21) 86.12.08 Improved quarz accuracy, extension of autolocater key board.

(22) 87.07.13 Software 29/87 (wrong stroke).

(23) 87.10.08 Software 41/87.

(24) 89.04.06 Additional connections to Parallel Remote, SR-PLAY, SR-REC for improved progress time.

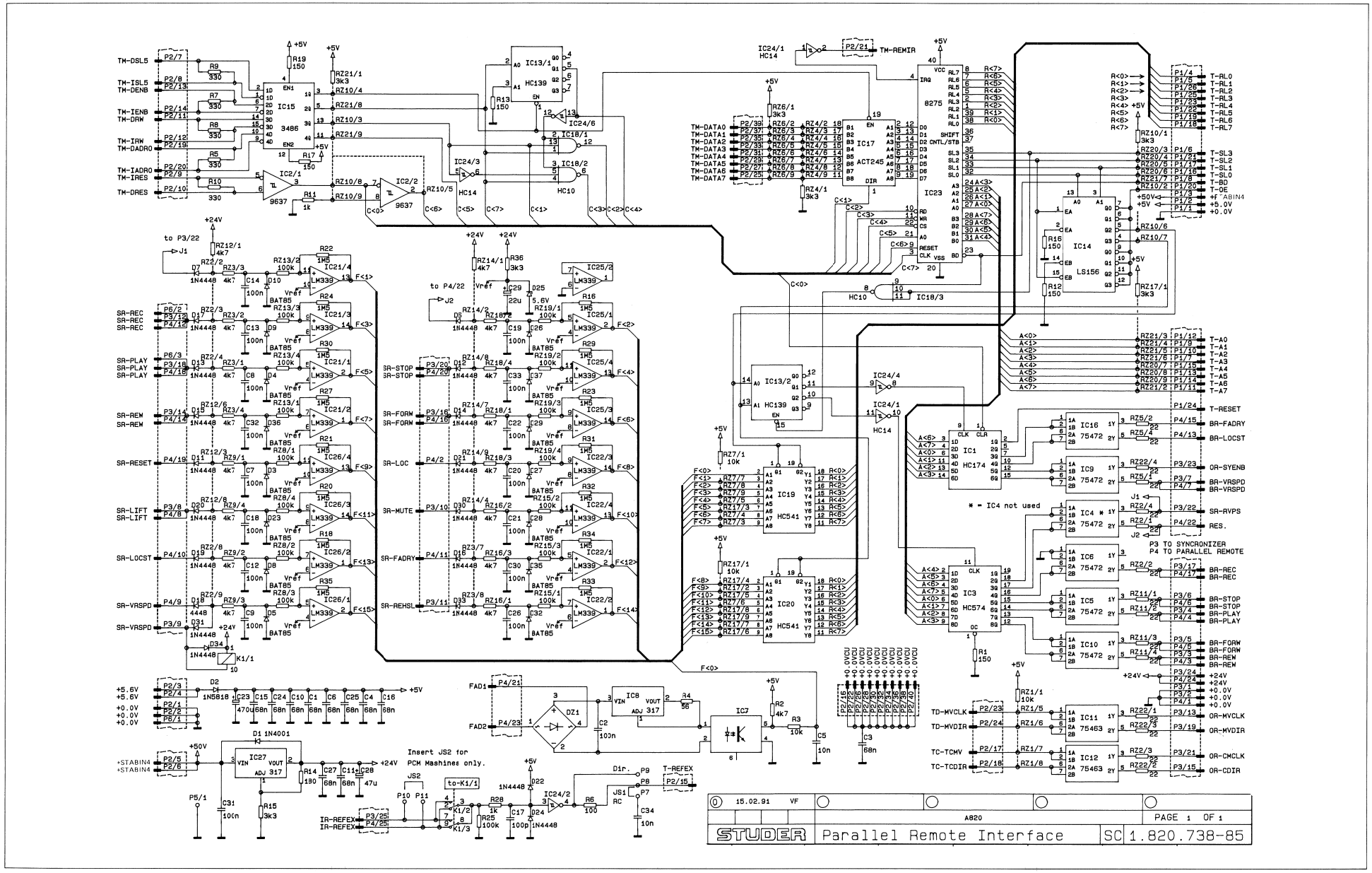
(25) 89.09.25 Improved noise suppression on differential line.

El=Electrolytic, PETP=Polyester, CER=Ceramic, SAL=Solid Aluminium

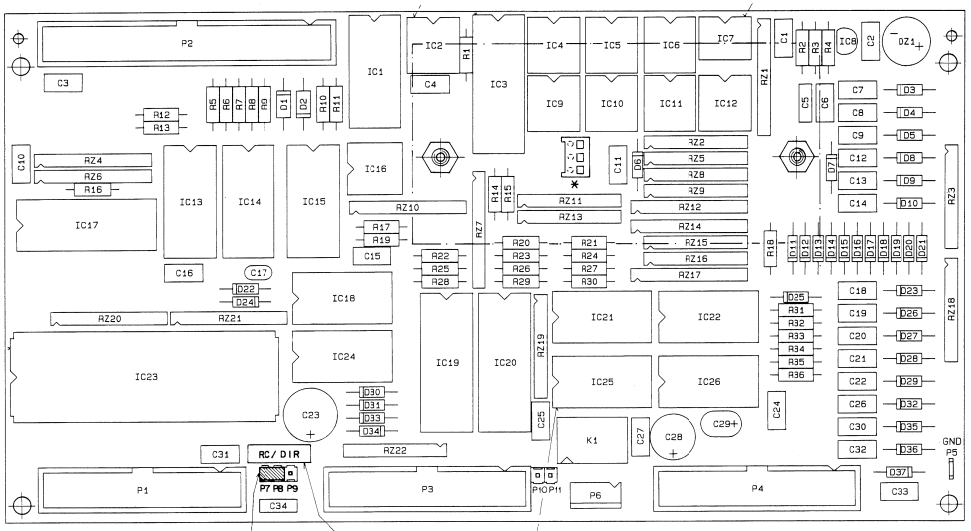
MANUFACTURERS: Fe=Ferranti, Hi=Hitachi, Is=Intersil, Mot=Motorola, NS=National Semiconductors, Ph=Philips, RCA=RCA Corporation, SGS=SGS/Ates, St=Studer TI=Texas Instruments, To=Toshiba

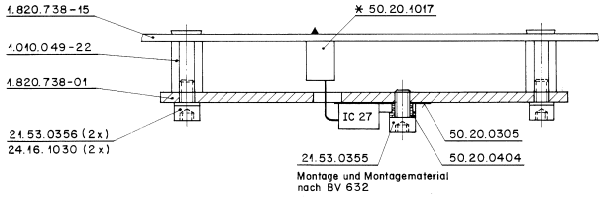
1.820.729.00	SERIAL REMOTE INTERFACE	SU85/03/2100
1.820.729.00	SERIAL REMOTE INTERFACE	SU85/03/2120
1.820.729.00	SERIAL REMOTE INTERFACE	BD86/12/0821
1.820.729.00	SERIAL REMOTE INTERFACE	BD87/07/1322
1.820.729.00	SERIAL REMOTE INTERFACE	BD87/10/0823
1.820.729.00	SERIAL REMOTE INTERFACE	VF89/04/0624
1.820.729.00	SERIAL REMOTE INTERFACE	VF89/09/2525

PARALLEL REMOTE INTERFACE 1.820.738.85



PARALLEL REMOTE INTERFACE 1.820.738.85





Ad	..POS..	...REF.No...	DESCRIPTION			MANUFACTURER
	C.....1	59.40.0683	68 nF	-10%,	PETP	
	C.....2	59.40.0104	0.1 uF	-10%,	PETP	
	C.....3	59.40.0683	68 nF	-10%,	PETP	
	C.....4	59.40.0683	68 nF	-10%,	PETP	
	C.....5	59.40.0103	10 nF	-10%,	PETP	
	C.....6	59.40.0683	68 nF	-10%,	PETP	
	C.....7	59.40.0104	0.1 uF	-10%,	PETP	
	C.....8	59.40.0104	0.1 uF	-10%,	PETP	
	C.....9	59.40.0104	0.1 uF	-10%,	PETP	
	C....10	59.40.0683	68 nF	-10%,	PETP	
	C....11	59.40.0683	68 nF	-10%,	PETP	
	C....12	59.40.0104	0.1 uF	-10%,	PETP	
	C....13	59.40.0104	0.1 uF	-10%,	PETP	
	C....14	59.40.0104	0.1 uF	-10%,	PETP	
	C....15	59.40.0683	68 nF	-10%,	PETP	
	C....16	59.40.0683	68 nF	-10%,	PETP	
	C....17	59.45.4101	100 pF	5%,	CER	
	C....18	59.40.0104	0.1 uF	-10%,	PETP	
	C....19	59.40.0104	0.1 uF	-10%,	PETP	
	C....20	59.40.0104	0.1 uF	-10%,	PETP	
	C....21	59.40.0104	0.1 uF	-10%,	PETP	
	C....22	59.40.0104	0.1 uF	-10%,	PETP	
	C....23	59.22.3471	470 uF	-20%, 10V,	EL	
	C....24	59.40.0683	68 nF	-10%,	PETP	
	C....25	59.40.0683	68 nF	-10%,	PETP	
	C....26	59.40.0104	0.1 uF	-10%,	PETP	
	C....27	59.40.0683	68 nF	-10%,	PETP	
	C....28	59.41.6470	47 uF	-20%, 40V,	EL	
	C....29	59.42.1220	22 uF	-20%, 10V,	SAL	
	C....30	59.40.0104	0.1 uF	-10%,	PETP	
	C....31	59.40.0104	0.1 uF	-10%,	PETP	
	C....32	59.40.0104	0.1 uF	-10%,	PETP	
	C....33	59.40.0104	0.1 uF	-10%,	PETP	
	C....34	59.40.0103	10 nF	-10%,	PETP	
	D.....1	50.04.0122	1N 4001	1N4004		Mot
	D.....2	50.04.0512	1N 5818	1N 5819		Mot
	D.....3	50.04.0127	BAT 85	BAS 40-02		Ph,Sie
	D.....4	50.04.0127	BAT 85	BAS 40-02		Ph,Sie
	D.....5	50.04.0127	BAT 85	BAS 40-02		Ph,Sie
	D.....6	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
	D.....7	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
	D.....8	50.04.0127	BAT 85	BAS 40-02		Ph,Sie
	D.....9	50.04.0127	BAT 85	BAS 40-02		Ph,Sie
	D....10	50.04.0127	BAT 85	BAS 40-02		Ph,Sie
	D....11	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
	D....12	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
	D....13	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
	D....14	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
	D....15	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
	D....16	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
	D....17	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
	D....18	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
	D....19	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
	D....20	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
	D....21	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
	D....22	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
	D....23	50.04.0127	BAT 85	BAS 40-02		Ph,Sie
	D....24	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
	D....25	50.04.1108	5.6 V Z	BZX83 C 5V6, BZX55 C 5V6, ZPD 5.6		ITT,Ses
	D....26	50.04.0127	BAT 85	BAS 40-02		Ph,Sie
	D....27	50.04.0127	BAT 85	BAS 40-02		Ph,Sie
	D....28	50.04.0127	BAT 85	BAS 40-02		Ph,Sie
	D....29	50.04.0127	BAT 85	BAS 40-02		Ph,Sie
	D....30	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
	D....31	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
	D....32	50.04.0127	BAT 85	BAS 40-02		Ph,Sie
	D....33	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
	D....34	50.04.0125	1N 4448			Fc,ITT,Ph,Ses
	D....35	50.04.0127	BAT 85	BAS 40-02		Ph,Sie
	D....36	50.04.0127	BAT 85	BAS 40-02		Ph,Sie
	D....37	50.04.0127	BAT 85	BAS 40-02		Ph,Sie
	DZ....1	70.01.0223		B 250 C 800 SI		GI,Mot
	IC....1	50.17.1174	74 HC 174	.. 74 HC 174 .		Mot,NS,Ph,RCA,SGS,TI,To
	IC....2	50.15.0114	uA9637ATC	uA9637ACP		Fc,TI
	IC....3	50.17.1574	74 HC 574	.. 74 HC 574 .		Mot,NS,Ph,RCA,SGS,TI,To
	IC....4	- - - 0	not used			TI
	IC....5	50.05.0227	SN 75462P			TI
	IC....6	50.05.0227	SN 75462P			TI
	IC....7	50.99.0126	4N 28	4N 26		Mot
	IC....8	50.10.0108	LM 317 LZ			NS,Mot
	IC....9	50.05.0227	SN 75462P			TI
	IC....10	50.05.0227	SN 75462P			TI
	IC....11	50.05.0203	SN 75463P			TI
	IC....12	50.05.0203	SN 75463P			TI
	IC....13	50.17.1139	74 HC 139	.. 74 HC 139 .		Mot,NS,Ph,RCA,SGS,TI,To
	IC....14	50.06.0156	74 LS 156	SN 74 LS 156 N		Fc,NS,TI
	IC....15	50.15.0104	MC 3486 P	DS 3486 N		Mot,NS
	IC....16	50.05.0227	SN 75462P			TI
	IC....17	50.17.7245	74ACT 245	.. 74ACT 245 .		Ph,Sie,Tf
	IC....18	50.17.1010	74 HC 10	.. 74 HC 10 .		Mot,NS,Ph,RCA,SGS,TI,To
	IC....19	50.17.1541	74 HC 541	.. 74 HC 541 .		Mot,NS,Ph,RCA,SGS,TI,To
	IC....20	50.17.1541	74 HC 541	.. 74 HC 541 .		Mot,NS,Ph,RCA,SGS,TI,To
	IC....21	50.11.0104	LM 339 AN	339 A,UA 339		Fc,Mot,NS,Tho
	IC....22	50.11.0104	LM 339 AN	339 A,UA 339		Fc,Mot,NS,Tho
	IC....23	50.16.0111	IP 8279-5	M5L 8279 P-5		It,Mi
	IC....24	50.17.1014	74 HC 14	.. 74 HC 14 .		Mot,NS,Ph,RCA,TI,To
	IC....25	50.11.0104	LM 339 AN	339 A,UA 339		Fc,Mot,NS,Tho
	IC....26	50.11.0104	LM 339 AN	339 A,UA 339		Fc,Mot,NS,Tho
	IC....27	50.10.0104	LM 317 T	LM 317 SP		NS,Mot,TI,Tho
	K.....1	56.04.0197	24 V 2*U	125V/ 2 A, AG/AU		
	P.....1	54.14.2003	Connector	26 contacts, flat cable		
	P.....2	54.14.2004	Connector	40 contacts, flat cable		
	P.....3	54.14.2003	Connector	26 contacts, flat cable		
	P.....4	54.14.2003	Connector	26 contacts, flat cable		
	P.....5	54.02.0320	Connector	1 contact , 2.8*0.8, flat		
	P.....6	54.99.0213	Connector	4 contacts, straight, AMP		
	P.....7	54.01.0020	Connector	1 contact , .63*.63, H=5.8/3.4		
	P.....8	54.01.0020	Connector	1 contact , .63*.63, H=5.8/3.4		
	P.....9	54.01.0020	Connector	1 contact , .63*.63, H=5.8/3.4		
	P....10	54.01.0020	Connector	1 contact , .63*.63, H=5.8/3.4		
	P....11	54.01.0020	Connector	1 contact , .63*.63, H=5.8/3.4		
	R.....1	57.11.3151	150 Ohm	2%		
	R.....2	57.11.3472	4.7 kOhm	2%		
	R.....3	57.11.3103	10 kOhm	2%		
	R.....4	57.11.3560	56 Ohm	2%		
	R.....5	57.11.3331	330 Ohm	2%		
	R.....6	57.11.3101	100 Ohm	2%		
	R.....7	57.11.3331	330 Ohm	2%		
	R.....8	57.11.3331	330 Ohm	2%		
	R.....9	57.11.3331	330 Ohm	2%		
	R....10	57.11.3331	330 Ohm	2%		
	R....11	57.11.3102	1 kOhm	2%		
	R....12	57.11.3151	150 Ohm	2%		
	R....13	57.11.3151	150 Ohm	2%		
	R....14	57.11.3181	180 Ohm	1%		
	R....15	57.11.3332	3.3 kOhm	2%		
	R....16	57.11.3151	150 Ohm	2%		
	R....17	57.11.3151	150 Ohm	2%		
	R....18	57.11.5155	1.5 MOhm	5%		
	R....19	57.11.3151	150 Ohm	2%		
	R....20	57.11.5155	1.5 MOhm	5%		
	R....21	57.11.5155	1.5 MOhm	5%		
	R....22	57.11.5155	1.5 MOhm	5%		
	R....23	57.11.5155	1.5 MOhm	5%		
	R....24	57.11.5155	1.5 MOhm	5%		
	R....25	57.11.3104	100 kOhm	2%		
	R....26	57.11.5155	1.5 MOhm	5%		
	R....27	57.11.5155	1.5 MOhm	5%		
	R....28	57.11.3102	1 kOhm	2%		
	R....29	57.11.5155	1.5 MOhm	5%		
	R....30	57.11.5155	1.5 MOhm	5%		
	R....31	57.11.5155	1.5 MOhm	5%		
	R....32	57.11.5155	1.5 MOhm	5%		
	R....33	57.11.5155	1.5 MOhm	5%		
	R....34	57.11.5155	1.5 MOhm	5%		
	R....35	57.11.5155	1.5 MOhm	5%		
	R....36	57.11.3332	3.3 kOhm	2%		
	RZ....1	57.88.4103	Network,	8 * 10 KOhm, 2%, single line		
	RZ....2	57.88.2220	Network,	4 * 22 Ohm, 2%, single line		
	RZ....3	57.88.2472	Network,	4 * 4.7 KOhm, 2%, single line		
	RZ....4	57.88.4332	Network,	8 * 3.3 kOhm, 5%, single line		
	RZ....5	57.88.2220	Network,	4 * 22 Ohm, 2%, single line		
	RZ....6	57.88.4332	Network,	8 * 3.3 kOhm, 5%, single line		
	RZ....7	57.88.4103	Network,	8 * 10 KOhm, 2%, single line		
	RZ....8	57.88.2104	Network,	4 * 100 KOhm, 2%, single line		
	RZ....9	57.88.2472	Network,	4 * 4.7 KOhm, 2%, single line		
	RZ...10	57.88.4332	Network,	8 * 3.3 kOhm, 5%, single line		
	RZ...11	57.88.2220	Network,	4 * 22 Ohm, 2%, single line		
	RZ...12	57.88.4472	Network,	8 * 4.7 KOhm, 2%, single line		
	RZ...13	57.88.2104	Network,	4 * 100 KOhm, 2%, single line		
	RZ...14	57.88.4472	Network,	8 * 4.7 KOhm, 2%, single line		
	RZ...15	57.88.2104	Network,	4 * 100 KOhm, 2%, single line		
	RZ...16	57.88.2472	Network,	4 * 4.7 KOhm, 2%, single line		
	RZ...17	57.88.4103	Network,	8 * 10 KOhm, 2%, single line		
	RZ...18	57.88.2472	Network,	4 * 4.7 KOhm, 2%, single line		
	RZ...19	57.88.2104	Network,	4 * 100 KOhm, 2%, single line		
	RZ...20	57.88.4332	Network,	8 * 3.3 kOhm, 5%, single line		
	RZ...21	57.88.4332	Network,	8 * 3.3 kOhm, 5%, single line		
	RZ...22	57.88.2220	Network,	4 * 22 Ohm, 2%, single line		

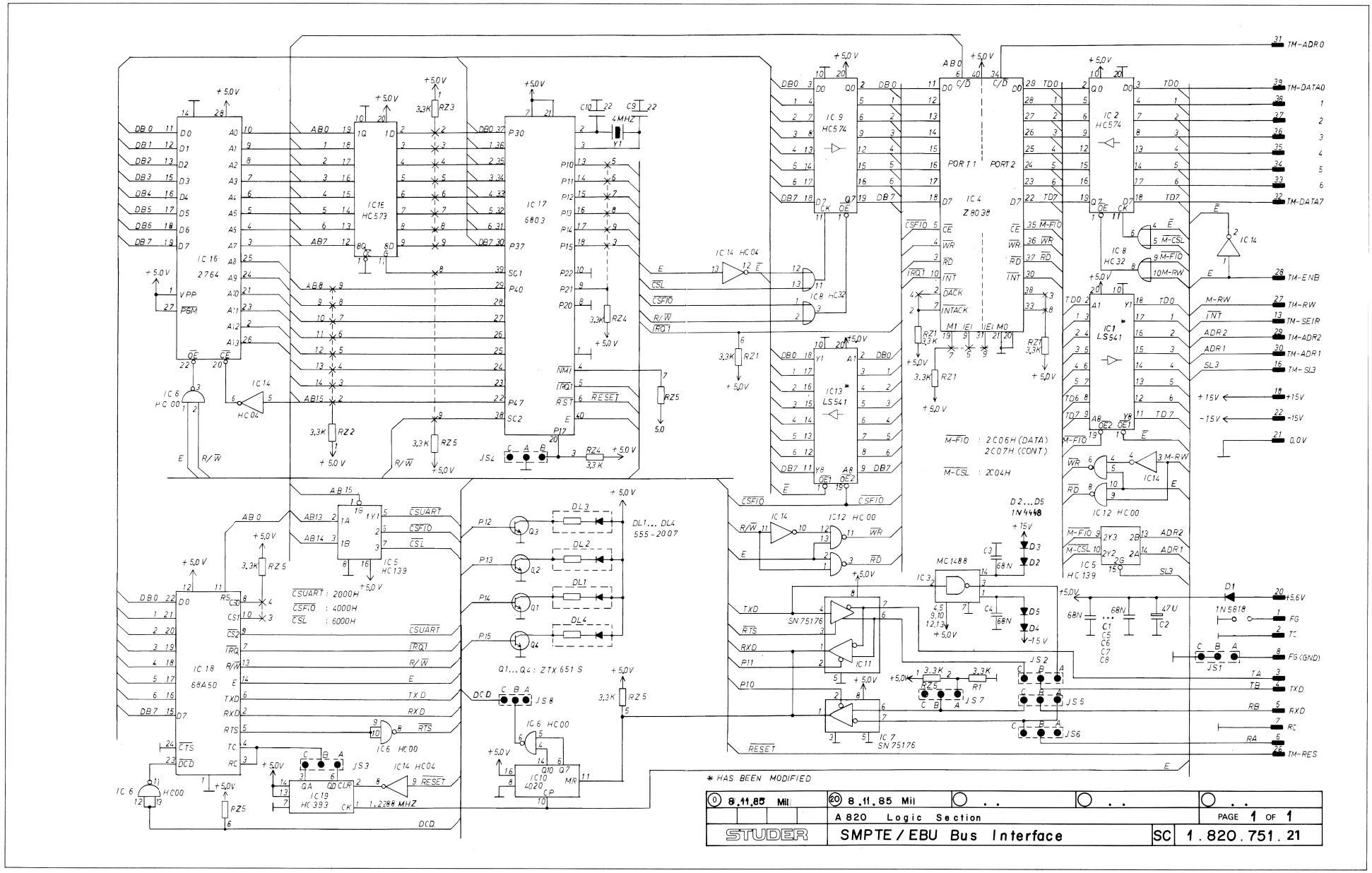
El=Electrolytic, PETP=Polyester, CER=Ceramic, SAL=Solid Aluminium

MANUFACTURERS: Fc=Fairchild, GI=General Instruments, It=Intel, Mi=Mitsubishi,
Mot=Motorola, NS=National Semiconductors, Ph=Philips,
RCA=RCA Corporation, SGS=SGS/Ates, Tho=Thomson,
TI=Texas Instruments, To=Toshiba.

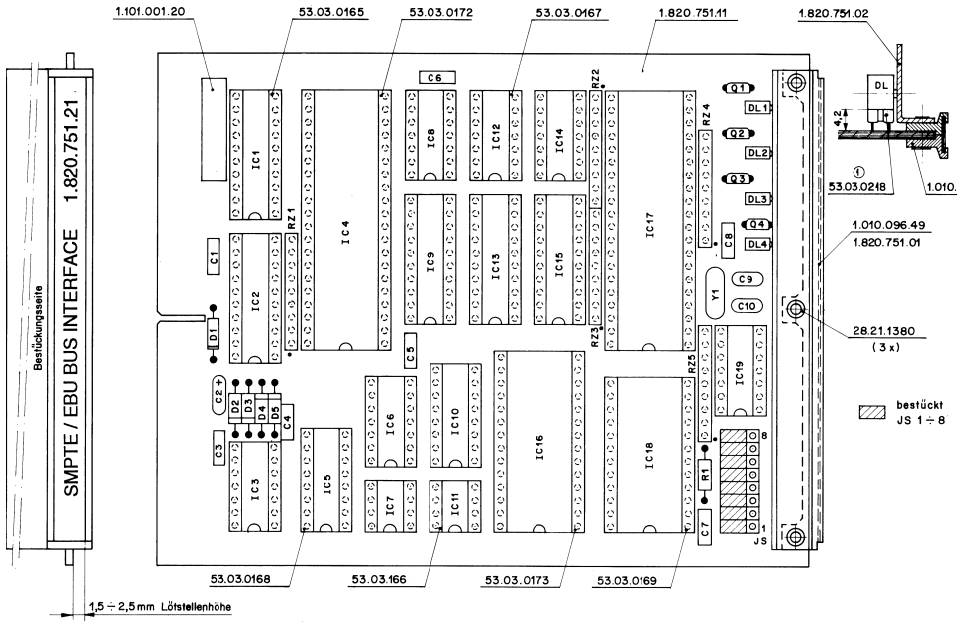
1.820.738.85 PARALLEL REMOTE INTERFACE VF 91/02/1500

END
+

SMPTE / EBU BUS INTERFACE 1.820.751.21



SMPTE / EBU BUS INTERFACE 1.820.751.21



Ad	..POS..	...REF.No...	DESCRIPTION			MANUFACTURER
20	C.....1	59.06.0683	68 nF	10%,	PETP	
20	C.....2	59.26.0470	47 uF	20%, 6.3V,	SAL	
20	C.....3	59.06.0683	68 nF	10%,	PETP	
20	C.....4	59.06.0683	68 nF	10%,	PETP	
20	C.....5	59.06.0683	68 nF	10%,	PETP	
20	C.....6	59.06.0683	68 nF	10%,	PETP	
20	C.....7	59.06.0683	68 nF	10%,	PETP	
20	C.....8	59.06.0683	68 nF	10%,	PETP	
20	C.....9	59.34.2220	22 pF	5%,	CER	
20	C....10	59.34.2220	22 pF	5%,	CER	
20	D.....1	50.04.0512	1N 5818	1N 5819		Mot
20	D.....2	50.04.0125	1N 4448			Fc,ITT,Ph,Ses,Tf
20	D.....3	50.04.0125	1N 4448			Fc,ITT,Ph,Ses,Tf
20	D.....4	50.04.0125	1N 4448			Fc,ITT,Ph,Ses,Tf
20	D.....5	50.04.0125	1N 4448			Fc,ITT,Ph,Ses,Tf
20	DL....1	50.04.2107	555-2007			Di
20	DL....2	50.04.2107	555-2007			Di
20	DL....3	50.04.2107	555-2007			Di
20	DL....4	50.04.2107	555-2007			Di
20	IC....1	50.06.0541	74 LS 541	..74 LS 541..		Mot,NS,Ph,RCA,SGS,TI,To
20	IC....2	50.17.1574	74 HC 574	..74 HC 574..		Mot,NS,Ph,RCA,SGS,TI,To
20	IC....3	50.15.0106	MC 1488 P			Mot
20	IC....4	50.16.0118	Z 8038 PS	Z 8038 DC		AMD,Zy
20	IC....5	50.17.1139	74 HC 139	..74 HC 139..		Mot,NS,Ph,RCA,SGS,TI,To
20	IC....6	50.17.1000	74 HC 00	..74 HC 00..		Mot,NS,Ph,RCA,SGS,TI,To
20	IC....7	50.15.0115	SN75176AP	DS 3695 N		NS,TI
20	IC....8	50.17.1032	74 HC 32	..74 HC 32..		Mot,NS,Ph,RCA,SGS,TI,To
20	IC....9	50.17.1574	74 HC 574	..74 HC 574..		Mot,NS,Ph,RCA,SGS,TI,To
20	IC...10	50.07.0020	MC14020BCP	...4020...		Mot,NS,Ph,RCA,To
20	IC...11	50.15.0115	SN75176AP	DS 3695 N		NS,TI
20	IC...12	50.17.1000	74 HC 00	..74 HC 00..		Mot,NS,Ph,RCA,SGS,TI,To
20	IC...13	50.06.0541	74 LS 541	..74 LS 541..		Mot,NS,Ph,RCA,SGS,TI,To
20	IC...14	50.17.1004	74 HC 04	..74 HC 04..		Mot,NS,Ph,RCA,SGS,TI,To
20	IC...15	50.17.1573	74 HC 573	..74 HC 573..		Mot,NS,Ph,RCA,SGS,TI,To
	IC...16	50.14.0113	D 2764-3	.... 2764 ...		Hi,It,SGS,TI
20	IC...16	1.820.998.20	Software 48/65, SMPTE/EBU IF			St
20	IC...17	50.16.0107	MC6803 P-1	MD6803 P-1		Hi,Mot
20	IC...18	50.16.0101	MC68 A 50P	S 68 A 50		AMI,Mot
20	IC...19	50.17.1393	74 HC 393	..74 HC 393..		Mot,NS,Ph,RCA,SGS,TI,To
20	JS....1	00.00.0000		See note 1		
20	JS....2	00.00.0000		See note 1		
20	JS....3	00.00.0000		See note 1		
20	JS....4	00.00.0000		See note 1		
20	JS....5	00.00.0000		See note 1		
20	JS....6	00.00.0000		See note 1		
20	JS....7	00.00.0000		See note 1		
20	JS....8	00.00.0000		See note 1		
20	Q.....1	50.03.0523	ZTX 651 S			Fe
20	Q.....2	50.03.0523	ZTX 651 S			Fe
20	Q.....3	50.03.0523	ZTX 651 S			Fe
20	Q.....4	50.03.0523	ZTX 651 S			Fe
20	R.....1	57.11.4332	3.3 kOhm	5%		
20	RZ....1	57.88.4332		see note 2		
20	RZ....2	57.88.4332		see note 2		
20	RZ....3	57.88.4332		see note 2		
20	RZ....4	57.88.4332		see note 2		
20	RZ....5	57.88.4332		see note 2		
20	Y.....1	89.01.0550		4.000 MHz, +- 40 ppm		

(20) {01} 86.06.12 Compatibility of logic levels, use of low power Schottky logic for IC 1 and IC 13.

Note 1 - Jumper switch

Contact Pin:	Studer Nr.	54.01.0020
	Berg Nr.	77 311-102-36
	Philips Nr.	2422 062 43241
	Fawag Nr.	AS 1-034/058-36 G-0.75u Au
Bridge:	Studer Nr.	54.01.0021
	Berg Nr.	65 474-001
	Philips Nr.	2422 024 88003
	AMP Nr.	141 767-1

Note 2 - Resistor network 8 * 3.3 kOhm, 5%

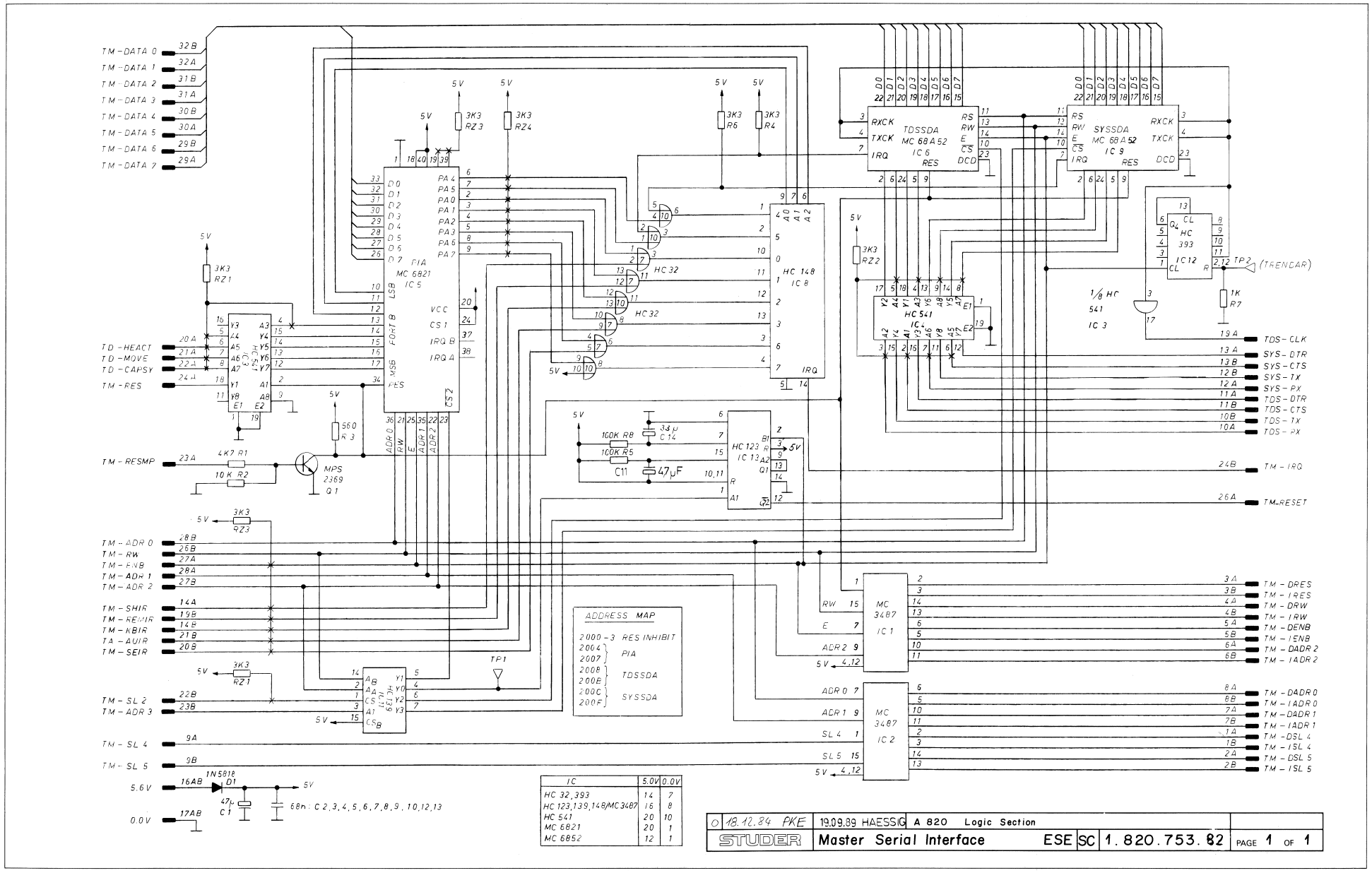
Bourns Nr.	4609 X - 101 332
Beckmann Nr.	L - 09 - 1 - R 3.3 k J
Sprague Nr.	256 C J 332 X 2 PD
Matsushita Nr.	F 9 E 3.3 k 5k
Tama Nr.	MRG C 09 X 3.3 k J

CER=Ceramic, PETP=Polyesterfilm, SAL=Solid Aluminium.

MANUFACTURERS: AMD=Advanced Micro Devices, AMI=American Microsystem Inc., Di=Dialco, Fc=Fairchild, Fe=Ferranti, Hi=Hitachi, It=Intel, ITT=Intermetall, Mot=Motorola, NS=National Semiconductors, Ph=Philips, RCA=RCA Corporation, Ses=Sescosem, SGS=SGS/Ates, St=Studer, Tf=Telefunken, TI=Texas Instruments, To=Toshiba, Zy=Zylog.

1.820.751.00 SMPTE / EBU INTERFACE CM 86/06/1220

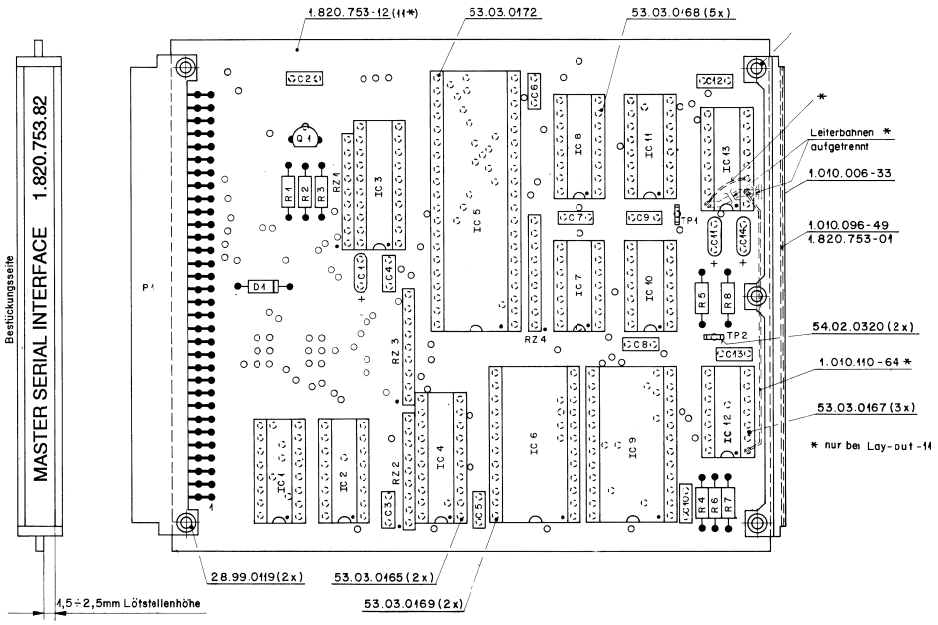
MASTER SERIAL INTERFACE 1.820.753.82



IC	5.0V	0.0V
HC 32, 393	14	7
HC 123, 139, 148/MC 3487	16	8
HC 541	20	10
MC 6821	20	1
MC 6852	12	1

0	18.12.84 PKE	19.09.89 HAESSIG	A 820 Logic Section	
STUDER	Master Serial Interface	ESE	SC 1.820.753.82	PAGE 1 OF 1

MASTER SERIAL INTERFACE 1.820.753.82



ESE-Warnschild 43.01.0108
nach Muster aufgeklebt

Ad	..POS..	...REF.No...	DESCRIPTION			MANUFACTURER
	C.....1	59.26.0470	47 uF	20%, 6.3V		Ph
	C.....2	59.06.0683	68 nF	20%		
	C.....3	59.06.0683	68 nF	20%		
	C.....4	59.06.0683	68 nF	20%		
	C.....5	59.06.0683	68 nF	20%		
	C.....6	59.06.0683	68 nF	20%		
	C.....7	59.06.0683	68 nF	20%		
	C.....8	59.06.0683	68 nF	20%		
	C.....9	59.06.0683	68 nF	20%		
	C....10	59.06.0683	68 nF	20%		
	C....11	59.26.1479	4.7 uF	20%, 6.3V		Ph
	C....12	59.06.0683	68 nF	20%		
	C....13	59.06.0683	68 nF	20%		
	C....14	59.26.1330	33 uF	20%, 6.3V		Ph
	D.....1	50.04.0512	1N 5818	1N 5819		Mot
	IC....1	50.15.0105	MC 3487 P	DS 3487 N		Sie
	IC....2	50.15.0105	MC 3487 P	DS 3487 N		Sie
	IC....3	50.17.1541	74 HC 541			Ph,Mot,NS,RCA,To
	IC....4	50.17.1541	74 HC 541			Ph,Mot,NS,RCA,To
	IC....5	50.16.0106	MC68 A21P	F 68 A21PC		Mot,AMI,Fc
	IC....6	50.16.0114	MC68 A52	HD68 A52, S68A52		Mot,AMI,Hi
	IC....7	50.17.1032	74 HC 32			Mot,Nat,To,Ph,RCA
	IC....8	50.17.1148	74 HC 148			TI,To
	IC....9	50.16.0114	MC68 A52	HD68 A52, S68A52		Mot,AMI,Hi
01	IC....9	00.00.0000	not used		see note 3	
	IC...10	50.17.1032	74 HC 32			Mot,Nat,To,Ph,RCA
	IC...11	50.17.1139	74 HC 139			Ph,Mot,NS,RCA,To
	IC...12	50.17.1393	74 HC 393			Ph,Mot,NS,RCA,To
	IC...13	50.17.1123	74 HC 123			Ph,SGS,RCA,To
	P.....1	54.11.2004		Plug	see note 2	
	Q.....1	50.03.0508	MPS 2369			Mot
	R.....1	57.11.4472	4.7 kOhm	5%		
	R.....2	57.11.4103	10 kOhm	5%		
	R.....3	57.11.4561	560 Ohm	5%		
	R.....4	57.11.4332	3.3 kOhm	10%		
	R.....5	57.11.4104	100 kOhm	5%		
	R.....6	57.11.4332	3.3 kOhm	10%		
	R.....7	57.11.4102	1.0 kOhm	5%		
	R.....8	57.11.4104	100 kOhm	5%		
	RZ....1	57.88.4332	3.3 kOhm	10%	see note 2	
	RZ....2	57.88.4332	3.3 kOhm	10%	see note 2	
	RZ....3	57.88.4332	3.3 kOhm	10%	see note 2	
	RZ....4	57.88.4332	3.3 kOhm	10%	see note 2	
	TP....1	54.02.0320		Testpoint		
	TP....2	54.02.0320		Testpoint		

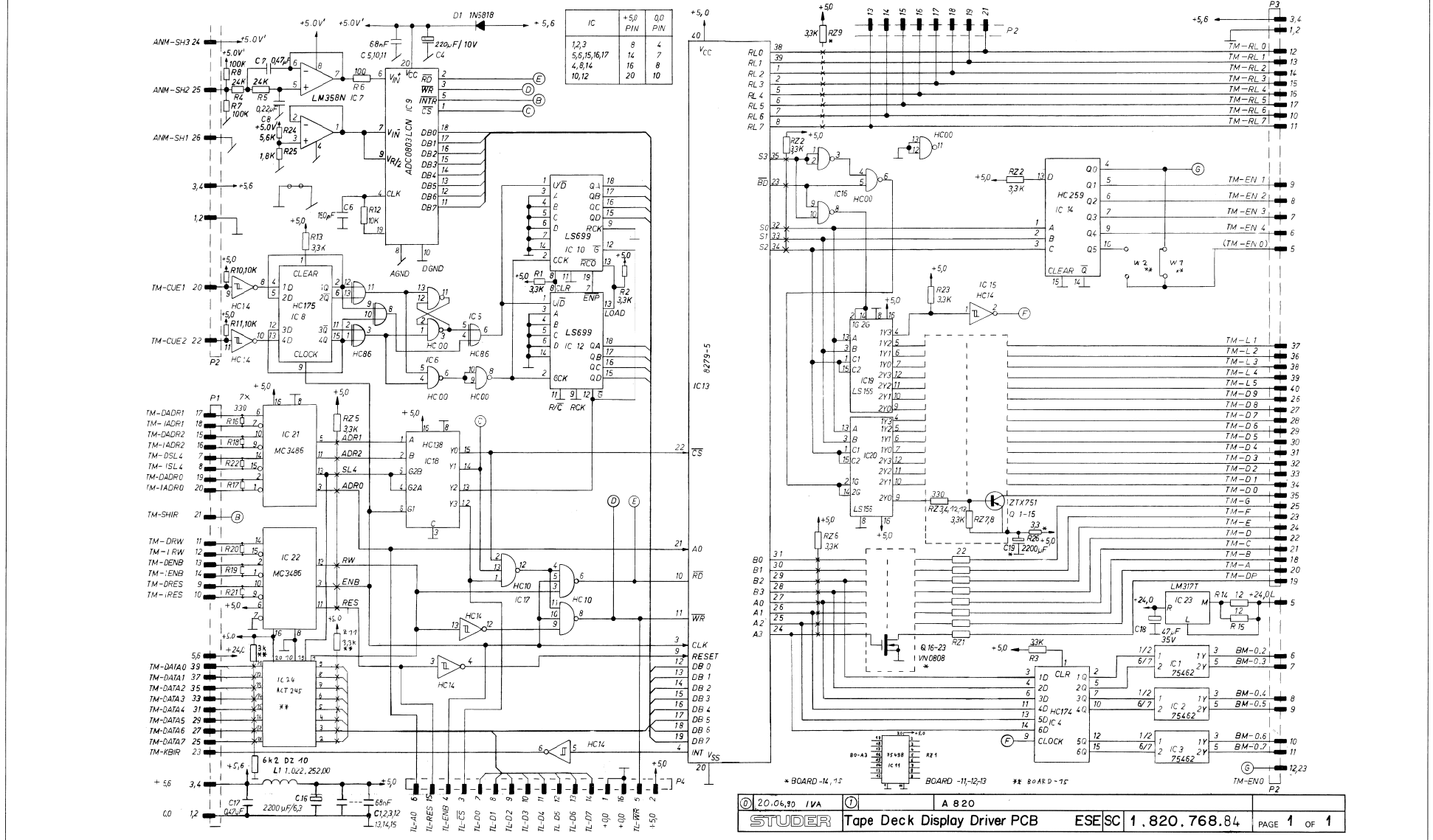
Note 1 - Plug : 2 * 32 Euro board
Burndy PI 64 B 20 P00 F00 Z0
Ernt 9722.563.191

Note 2 - Network : 8 * 3.3 kOhm, 5%, single line
Sicovend C09 X 3.3 K J
Ineltro R88 3.3 K 5%

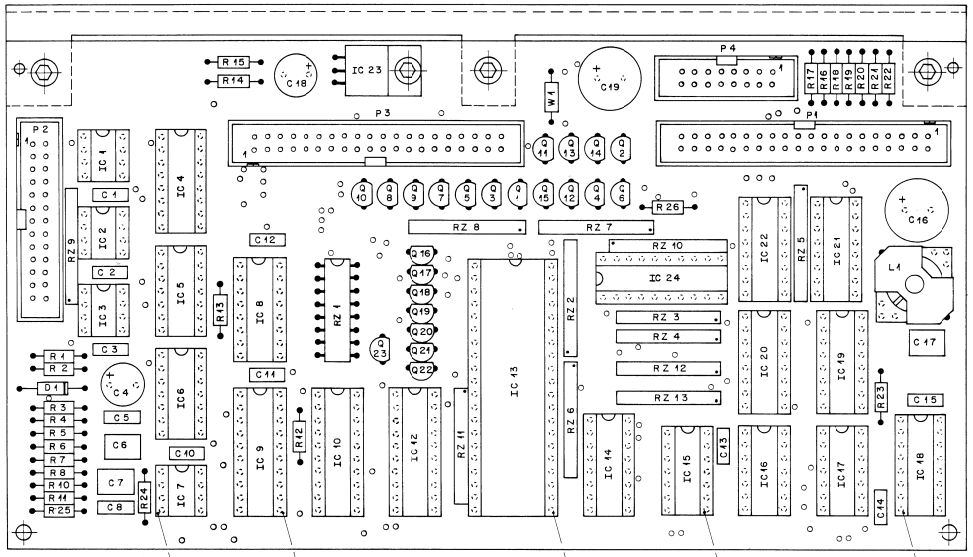
Manufacturer: AMI=American Microsystem Inc., Fc=Fairchild,
Hi=Hitachi, Mot=Motorola, Nat=National (Matsushita),
NS=National Semiconductors, Ph=Philips (incl. Valvo),
RCA=Radio Corporation of America, SGS=SGS/Ates,
Sie=Siemens, To=Toshiba.

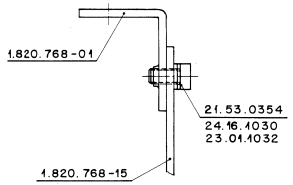
1.820.753.82 MASTER SERIAL INTERFACE HRH89/09/1900

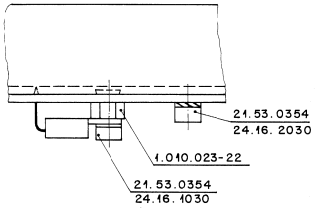
TAPE DECK DISPLAY DRIVER 1.820.768.84



TAPE DECK DISPLAY DRIVER 1.820.768.84







Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	C.....1	59.06.0683	68 nF	-10%, 63V, PETP	
	C.....2	59.06.0683	68 nF	-10%, 63V, PETP	
	C.....3	59.06.0683	68 nF	-10%, 63V, PETP	
	C.....4	59.22.3221	220 uF	-20%, 10V, El	
	C.....5	59.06.0683	68 nF	-10%, 63V, PETP	
	C.....6	59.05.2151	150 pF	2.5%, PP	
	C.....7	59.06.0474	470 nF	-20%, 63V, PETP	
	C.....8	59.06.0224	220 nF	-20%, 63V, PETP	
	C....10	59.06.0683	68 nF	-10%, 63V, PETP	
	C....11	59.06.0683	68 nF	-10%, 63V, PETP	
	C....12	59.06.0683	68 nF	-10%, 63V, PETP	
	C....13	59.06.0683	68 nF	-10%, 63V, PETP	
	C....14	59.06.0683	68 nF	-10%, 63V, PETP	
	C....15	59.06.0683	68 nF	-10%, 63V, PETP	
	C....16	59.22.2222	2200 uF	-20%, 6.3V, El	
	C....17	59.06.0474	470 nF	-10%, 63V, PETP	
	C....18	59.22.6470	47 uF	-10%, 40V, El	
	C....19	59.22.2222	2200 uF	-20%, 6.3V, El	
	D.....1	50.04.0512	1N 5818	1N 5819	Mot
	IC....1	50.05.0227	SN 75462P	SN 75462 JG, SN 75472P	TI
	IC....2	50.05.0227	SN 75462P	SN 75462 JG, SN 75472P	TI
	IC....3	50.05.0227	SN 75462P	SN 75462 JG, SN 75472P	TI
	IC....4	50.17.1174	74 HC 174		Mot,NS,Ph,RCA,SGS,TI,To
	IC....5	50.17.1086	74 HC 86		Mot,NS,Ph,RCA,TI,To
	IC....6	50.17.1000	74 HC 00		Mot,NS,Ph,RCA,TI,To
	IC....7	50.05.0286	LM 358 N	LM 358 P	Mot,NS,TI
	IC....8	50.17.1175	74 HC 175		Mot,NS,Ph,SGS,TI,To
	IC....9	50.07.0029	ADC0803LCN		Is,NS
	IC...10	50.06.0699	74 LS 699		Mot,NS,TI

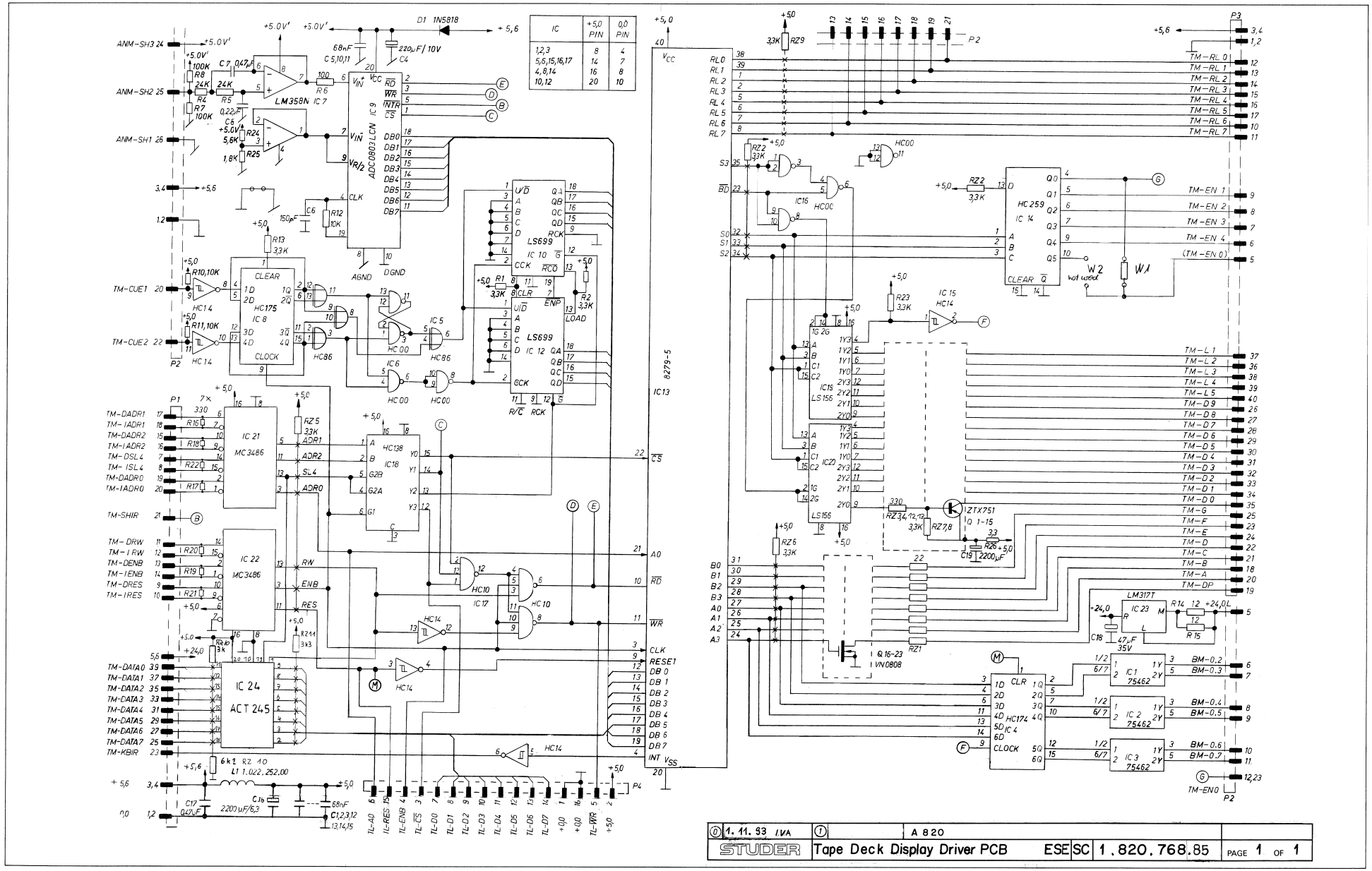
Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	IC...11	00.00.0000	not used		
	IC...12	50.06.0699	74 LS 699		Mot,NS,TI
	IC...13	50.16.0111	IP 8279-5	M 5 L 8279 P-5	It,Mi
	IC...14	50.17.1259	74 HC 259		Mot,NS,Ph,RCA,SGS,TI,To
	IC...15	50.17.1014	74 HC 14		Mot,NS,Ph,RCA,TI,To
	IC...16	50.17.1000	74 HC 00		Mot,NS,Ph,RCA,SGS,TI,To
	IC...17	50.17.1010	74 HC 10		Mot,NS,Ph,RCA,TI,To
	IC...18	50.17.1138	74 HC 138		Mot,NS,Ph,RCA,SGS,TI,To
	IC...19	50.06.0156	74 LS 156		Fc,NS,TI
	IC...20	50.06.0156	74 LS 156		Fc,NS,TI
	IC...21	50.15.0104	MC 3486 P	DS 3486 N	Mot,NS
	IC...22	50.15.0104	MC 3486 P	DS 3486 N	Mot,NS
	IC...23	50.10.0104	LM 317 T	...KC, ...SP	Mot,NS,SGS,Tho,TI
	IC...24	50.17.7245		.. 74 ACT 245	RCA,FA
	L.....1	1.022.252.00	0.32 mH	Filter Coil	St
	P.....1	54.14.2004	Connector	40 contacts, flat cable	
	P.....2	54.14.2003	Connector	26 contacts, flat cable	
	P.....3	54.14.2004	Connector	40 contacts, flat cable	
	P.....4	54.14.2002	Connector	16 contacts, flat cable	
	Q.....1	50.03.0352	ZTX 751 S		Fe
	Q.....2	50.03.0352	ZTX 751 S		Fe
	Q.....3	50.03.0352	ZTX 751 S		Fe
	Q.....4	50.03.0352	ZTX 751 S		Fe
	Q.....5	50.03.0352	ZTX 751 S		Fe
	Q.....6	50.03.0352	ZTX 751 S		Fe
	Q.....7	50.03.0352	ZTX 751 S		Fe
	Q.....8	50.03.0352	ZTX 751 S		Fe
	Q.....9	50.03.0352	ZTX 751 S		Fe
	Q....10	50.03.0352	ZTX 751 S		Fe
	Q....11	50.03.0352	ZTX 751 S		Fe
	Q....12	50.03.0352	ZTX 751 S		Fe
	Q....13	50.03.0352	ZTX 751 S		Fe
	Q....14	50.03.0352	ZTX 751 S		Fe
	Q....15	50.03.0352	ZTX 751 S		Fe
	Q....16	50.03.1505	VN 0808M		Fe,Six
	Q....17	50.03.1505	VN 0808M		Fe,Six
	Q....18	50.03.1505	VN 0808M		Fe,Six
	Q....19	50.03.1505	VN 0808M		Fe,Six
	Q....20	50.03.1505	VN 0808M		Fe,Six
	Q....21	50.03.1505	VN 0808M		Fe,Six
	Q....22	50.03.1505	VN 0808M		Fe,Six
	Q....23	50.03.1505	VN 0808M		Fe,Six
	R.....1	57.11.3332	3.3 kOhm	2%	
	R.....2	57.11.3332	3.3 kOhm	2%	
	R.....3	57.11.3332	3.3 kOhm	2%	
	R.....4	57.11.3243	24 kOhm	1%	
	R.....5	57.11.3243	24 kOhm	1%	
	R.....6	57.11.3101	100 Ohm	2%	
	R.....7	57.11.3104	100 kOhm	2%	
	R.....8	57.11.3104	100 kOhm	2%	
	R....10	57.11.3103	10 kOhm	2%	
	R....11	57.11.3103	10 kOhm	2%	
	R....12	57.11.3103	10 kOhm	2%	
	R....13	57.11.3332	3.3 kOhm	2%	
	R....14	57.11.3120	12 Ohm	2%	
	R....15	57.11.3120	12 Ohm	2%	
	R....16	57.11.3331	330 Ohm	2%	
	R....17	57.11.3331	330 Ohm	2%	
	R....18	57.11.3331	330 Ohm	2%	
	R....19	57.11.3331	330 Ohm	2%	
	R....20	57.11.3331	330 Ohm	2%	
	R....21	57.11.3331	330 Ohm	2%	
	R....22	57.11.3331	330 Ohm	2%	
	R....23	57.11.3332	3.3 kOhm	2%	
	R....24	57.11.3562	5.6 kOhm	1%	
	R....25	57.11.3182	1.8 kOhm	1%	
	R....26	57.11.3339	3.3 Ohm	2%	
	RZ....1	57.88.3220	Network,	8 * 22 Ohm, 2%, DIL 16	
	RZ....2	57.88.4332	Network,	8 * 3.3 kOhm, 5%, SIP 9	
	RZ....3	57.88.2331	Network,	4 * 330 Ohm, 2%, SIP 8	
	RZ....4	57.88.2331	Network,	4 * 330 Ohm, 2%, SIP 8	
	RZ....5	57.88.4332	Network,	8 * 3.3 kOhm, 5%, SIP 9	
	RZ....6	57.88.4332	Network,	8 * 3.3 kOhm, 5%, SIP 9	
	RZ....7	57.88.4332	Network,	8 * 3.3 kOhm, 5%, SIP 9	
	RZ....8	57.88.4332	Network,	8 * 3.3 kOhm, 5%, SIP 9	
	RZ....9	57.88.4332	Network,	8 * 3.3 kOhm, 5%, SIP 9	
	RZ...10	57.80.4007	Network,	8 * 3.0/6.2 kOhm 2%, SIP10	
	RZ...11	57.88.4332	Network,	8 * 3.3 kOhm, 2%, SIP 9	
	RZ...12	57.88.2331	Network,	4 * 330 Ohm, 2%, SIP 8	
	RZ...13	57.88.2331	Network,	4 * 330 Ohm, 2%, SIP 8	
	W.....1	57.11.3000		0 Ohm Resistor or insulated wire bridge	
	W.....2	57.00.0000	not used		

El=Electrolytic, PETP=Polyester, PP=Polypropylene

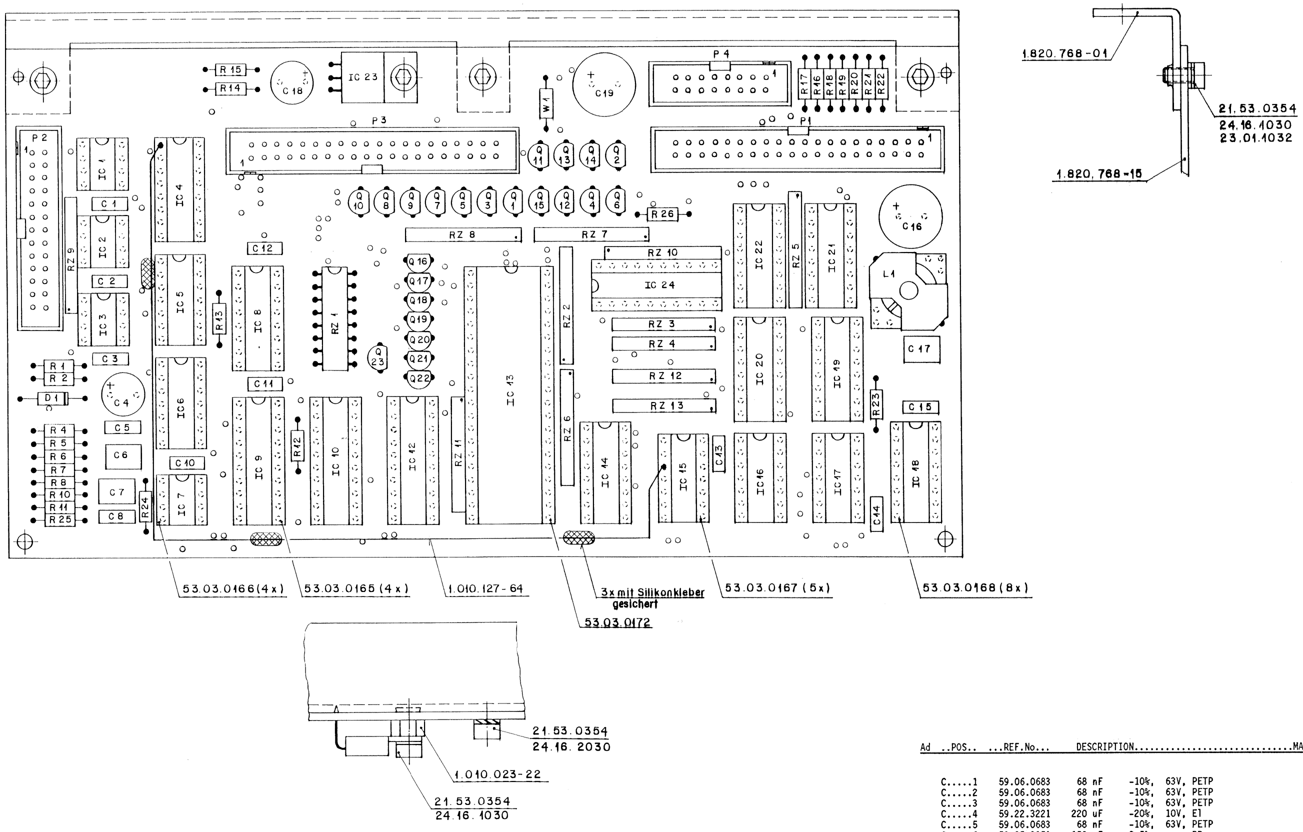
MANUFACTURERS: fc=Fairchild, Fe=Ferranti, Is=Intersil, It=Intel,
Mi=Mitsubishi, Mot=Motorola,
NS=National Semiconductors, Ph=Philips,
RCA=RCA Corporation, SGS=SGS/Ates, Six=Siliconix,
St=Studer, Tho=Thomson, TI=Texas Instruments,
To=Toshiba.

1.820.768.84 TAPE DECK DISPLAY DRIVER IVA90/06/2000

TAPE DECK DISPLAY DRIVER 1.820.768.85



TAPE DECK DISPLAY DRIVER 1.820.768.85



STUDER REGENSDORF ZÜRICH — TAPE DECK DISPLAY DRIVER ESE — 1.820.768-85 — 1.11.93

Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	C.....1	59.06.0683	68 nF	-10%, 63V, PETP	
	C.....2	59.06.0683	68 nF	-10%, 63V, PETP	
	C.....3	59.06.0683	68 nF	-10%, 63V, PETP	
	C.....4	59.22.3221	220 uF	-20%, 10V, El	
	C.....5	59.06.0683	68 nF	-10%, 63V, PETP	
	C.....6	59.05.2151	150 pF	2.5%, PP	
	C.....7	59.06.0474	470 nF	-20%, 63V, PETP	
	C.....8	59.06.0224	220 nF	-20%, 63V, PETP	
	C....10	59.06.0683	68 nF	-10%, 63V, PETP	
	C....11	59.06.0683	68 nF	-10%, 63V, PETP	
	C....12	59.06.0683	68 nF	-10%, 63V, PETP	
	C....13	59.06.0683	68 nF	-10%, 63V, PETP	
	C....14	59.06.0683	68 nF	-10%, 63V, PETP	
	C....15	59.06.0683	68 nF	-10%, 63V, PETP	
	C....16	59.22.2222	2200 uF	-20%, 6.3V, El	
	C....17	59.06.0474	470 nF	-10%, 63V, PETP	
	C....18	59.22.6470	47 uF	-10%, 40V, El	
	C....19	59.22.2222	2200 uF	-20%, 6.3V, El	
	D.....1	50.04.0512	1N 5818	1N 5819	Mot
	IC....1	50.05.0227	SN 75462P	SN 75462 JG, SN 75472P	TI
	IC....2	50.05.0227	SN 75462P	SN 75462 JG, SN 75472P	TI
	IC....3	50.05.0227	SN 75462P	SN 75462 JG, SN 75472P	TI
	IC....4	50.17.1174	74 HC 174		Mot,NS,Ph,RCA,SGS,TI,To
	IC....5	50.17.1086	74 HC 86		Mot,NS,Ph,RCA,TI,To
	IC....6	50.17.1000	74 HC 00		Mot,NS,Ph,RCA,TI,To
	IC....7	50.05.0286	LM 358 N	LM 358 P	Mot,NS,TI
	IC....8	50.17.1175	74 HC 175		Mot,NS,Ph,SGS,TI,To
	IC....9	50.07.0029	ADC0803LCN		Is,NS
	IC...10	50.06.0699	74 LS 699		Mot,NS,TI

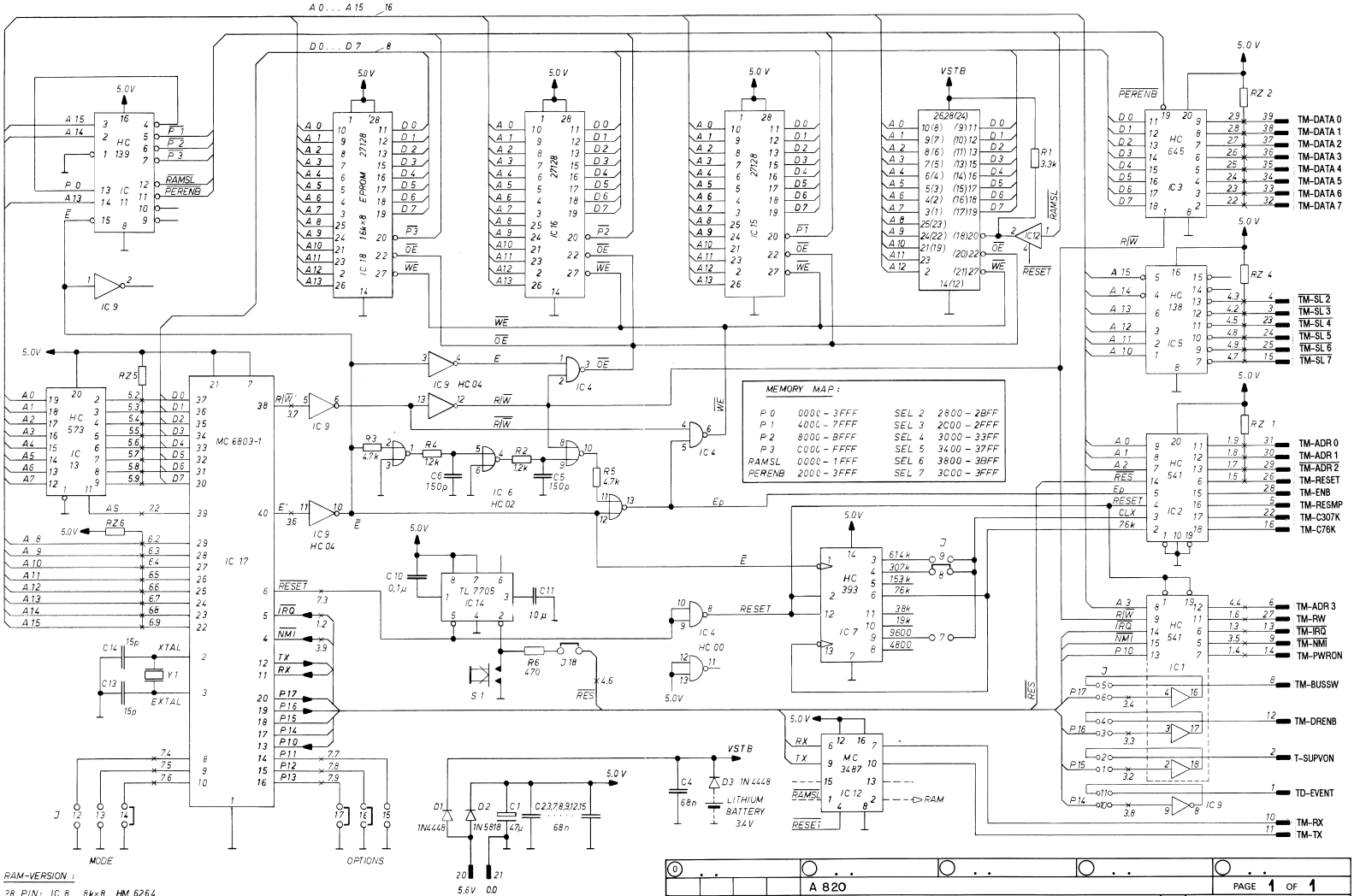
Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	IC...11	00.00.0000	not used		
	IC...12	50.06.0699	74 LS 699		Mot,NS,TI
	IC...13	50.16.0111	IP 8279-5	M 5 L 8279 P-5	It,Mi
	IC...14	50.17.1259	74 HC 259		Mot,NS,Ph,RCA,SGS,TI,To
	IC...15	50.17.1014	74 HC 14		Mot,NS,Ph,RCA,TI,To
	IC...16	50.17.1000	74 HC 00		Mot,NS,Ph,RCA,SGS,TI,To
	IC...17	50.17.1010	74 HC 10		Mot,NS,Ph,RCA,TI,To
	IC...18	50.17.1138	74 HC 138		Mot,NS,Ph,RCA,SGS,TI,To
	IC...19	50.06.0156	74 LS 156		Fc,NS,TI
	IC...20	50.06.0156	74 LS 156		Fc,NS,TI
	IC...21	50.15.0104	MC 3486 P	DS 3486 N	Mot,NS
	IC...22	50.15.0104	MC 3486 P	DS 3486 N	Mot,NS
	IC...23	50.10.0104	LM 317 T	...KC, ...SP	Mot,NS,SGS,Tho,TI
	IC...24	50.17.7245		.. 74 ACT 245	RCA,FA
	L.....1	1.022.252.00	0.32 mH	Filter Coil	St
	P.....1	54.14.2004	Connector	40 contacts, flat cable	
	P.....2	54.14.2003	Connector	26 contacts, flat cable	
	P.....3	54.14.2004	Connector	40 contacts, flat cable	
	P.....4	54.14.2002	Connector	16 contacts, flat cable	
	Q.....1	50.03.0352	ZTX 751 S		Fe
	Q.....2	50.03.0352	ZTX 751 S		Fe
	Q.....3	50.03.0352	ZTX 751 S		Fe
	Q.....4	50.03.0352	ZTX 751 S		Fe
	Q.....5	50.03.0352	ZTX 751 S		Fe
	Q.....6	50.03.0352	ZTX 751 S		Fe
	Q.....7	50.03.0352	ZTX 751 S		Fe
	Q.....8	50.03.0352	ZTX 751 S		Fe
	Q.....9	50.03.0352	ZTX 751 S		Fe
	Q....10	50.03.0352	ZTX 751 S		Fe
	Q....11	50.03.0352	ZTX 751 S		Fe
	Q....12	50.03.0352	ZTX 751 S		Fe
	Q....13	50.03.0352	ZTX 751 S		Fe
	Q....14	50.03.0352	ZTX 751 S		Fe
	Q....15	50.03.0352	ZTX 751 S		Fe
	Q....16	50.03.1505	VN 0808M		Fe,Six
	Q....17	50.03.1505	VN 0808M		Fe,Six
	Q....18	50.03.1505	VN 0808M		Fe,Six
	Q....19	50.03.1505	VN 0808M		Fe,Six
	Q....20	50.03.1505	VN 0808M		Fe,Six
	Q....21	50.03.1505	VN 0808M		Fe,Six
	Q....22	50.03.1505	VN 0808M		Fe,Six
	Q....23	50.03.1505	VN 0808M		Fe,Six
	R.....1	57.11.3332	3.3 kOhm	2%	
	R.....2	57.11.3332	3.3 kOhm	2%	
	R.....3	00.00.0000	not used		
	R.....4	57.11.3243	24 kOhm	1%	
	R.....5	57.11.3243	24 kOhm	1%	
	R.....6	57.11.3101	100 Ohm	2%	
	R.....7	57.11.3104	100 kOhm	2%	
	R.....8	57.11.3104	100 kOhm	2%	
	R....10	57.11.3103	10 kOhm	2%	
	R....11	57.11.3103	10 kOhm	2%	
	R....12	57.11.3103	10 kOhm	2%	
	R....13	57.11.3332	3.3 kOhm	2%	
	R....14	57.11.3120	12 Ohm	2%	
	R....15	57.11.3120	12 Ohm	2%	
	R....16	57.11.3331	330 Ohm	2%	
	R....17	57.11.3331	330 Ohm	2%	
	R....18	57.11.3331	330 Ohm	2%	
	R....19	57.11.3331	330 Ohm	2%	
	R....20	57.11.3331	330 Ohm	2%	
	R....21	57.11.3331	330 Ohm	2%	
	R....22	57.11.3331	330 Ohm	2%	
	R....23	57.11.3332	3.3 kOhm	2%	
	R....24	57.11.3562	5.6 kOhm	1%	
	R....25	57.11.3182	1.8 kOhm	1%	
	R....26	57.11.3339	3.3 Ohm	2%	
	RZ....1	57.88.3220	Network,	8 * 22 Ohm, 2%, DIL 16	
	RZ....2	57.88.4332	Network,	8 * 3.3 kOhm, 5%, SIP 9	
	RZ....3	57.88.2331	Network,	4 * 330 Ohm, 2%, SIP 8	
	RZ....4	57.88.2331	Network,	4 * 330 Ohm, 2%, SIP 8	
	RZ....5	57.88.4332	Network,	8 * 3.3 kOhm, 5%, SIP 9	
	RZ....6	57.88.4332	Network,	8 * 3.3 kOhm, 5%, SIP 9	
	RZ....7	57.88.4332	Network,	8 * 3.3 kOhm, 5%, SIP 9	
	RZ....8	57.88.4332	Network,	8 * 3.3 kOhm, 5%, SIP 9	
	RZ....9	57.88.4332	Network,	8 * 3.3 kOhm, 5%, SIP 9	
	RZ...10	57.80.4007	Network,	8 * 3.0/6.2 kOhm 2%, SIP10	
	RZ...11	57.88.4332	Network,	8 * 3.3 kOhm, 2%, SIP 9	
	RZ...12	57.88.2331	Network,	4 * 330 Ohm, 2%, SIP 8	
	RZ...13	57.88.2331	Network,	4 * 330 Ohm, 2%, SIP 8	
	W.....1	57.11.3000		0 Ohm Resistor or insulated wire bridge	
	W.....2	00.00.0000	not used		

El=Electrolytic, PETP=Polyester, PP=Polypropylene

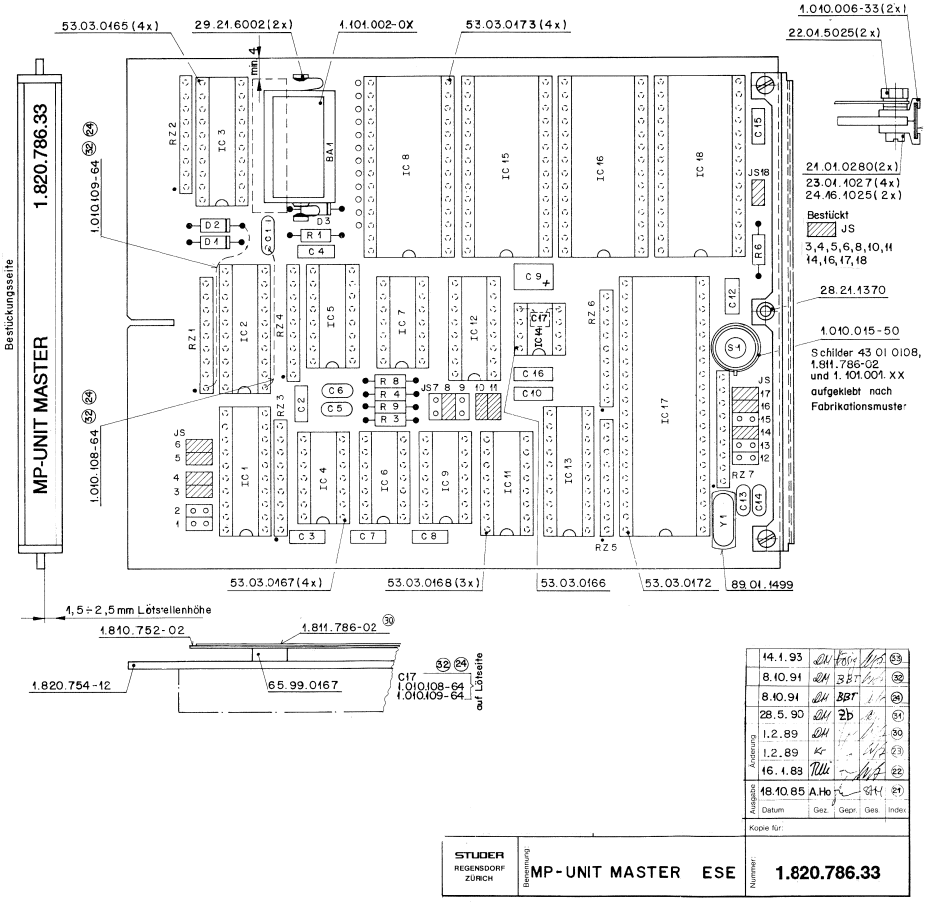
MANUFACTURERS: Fc=Fairchild, Fe=Ferranti, Is=Intersil, It=Intel, Mi=Mitsubishi, Mot=Motorola, NS=National Semiconductors, Ph=Philips, RCA=RCA Corporation, SGS=SGS/Ates, Six=Siliconix, St=Studer, Tho=Thomson, TI=Texas Instruments, To=Toshiba.

1.820.768.85 TAPE DECK DISPLAY DRIVER GP 93/11/0100

MP-UNIT MASTER 1.820.786.33



MP-UNIT MASTER 1.820.786.33



Änderung	14.1.93			33
	8.10.91			32
	8.10.91			24
	28.5.90			31
	1.2.89			30
	1.2.89			23
	16.1.88			22
Ausgabe	18.10.85	A.Ho		21
	Datum	Gez.	Gepr.	Ges.	Index

Kopie für:

STUDER REGENSDORF ZÜRICH	Benennung: MP-UNIT MASTER ESE	Nummer: 1.820.786.33

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
30	BA....1	89.01.0275	Batt, Lith., 3.6V, D 14.7*25.5	
30	C.....1	59.26.0470 47 uF	20%, 6.3V , Sal	Ph
30	C.....2	59.06.0683 68 nF	10%, 63V , PETP	
30	C.....3	59.06.0683 68 nF	10%, 63V , PETP	
30	C.....4	59.06.0683 68 nF	10%, 63V , PETP	
30	C.....5	59.34.7151 150 pF	2%, Ce	
30	C.....6	59.34.7151 150 pF	2%, Ce	
30	C.....7	59.06.0683 68 nF	10%, 63V , PETP	
30	C.....8	59.06.0683 68 nF	10%, 63V , PETP	
30	C.....9	59.06.0474 470 nF	10%, 63V , PETP	
31	C.....9	59.26.2100 10 uF	20%, 16V , Sal	
30	C....10	59.06.0683 68 nF	10%, 63V , PETP	
30	C....11	59.06.0104 100 nF	10%, 63V , PETP	
31	C....11	00.00.0000 not used		
30	C....12	59.06.0683 68 nF	10%, 63V , PETP	
30	C....13	59.34.1150 15 pF	5%, Ce	
31	C....13	59.34.2330 33 pF	5%, Ce	
30	C....14	59.34.1150 15 pF	5%, Ce	
31	C....14	59.34.2330 33 pF	5%, Ce	
30	C....15	59.06.0683 68 nF	10%, 63V , PETP	
30	C....16	59.06.0683 68 nF	10%, 63V , PETP	
31	C....16	59.06.0104 100 nF	10%, 63V , PETP	
32	C....17	59.06.0222 2.2 nF	10%, 63V , PETP	
30	D.....1	50.04.0125 1N 4448		Fc,ITT,Ph,Ses,Tf
30	D.....2	50.04.0512 1N 5818	1N 5819	Mot
30	D.....3	50.04.0125 1N 4448		Fc,ITT,PH,Ses,Tf
30	IC....1	50.17.1541 74 HC 541		Mot,NS,Ph,RCA,SGS,TI,To
30	IC....2	50.17.1541 74 HC 541		Mot,NS,Ph,RCA,SGS,TI,To
30	IC....3	50.17.1645 74 HC 645		Mot,NS,Ph,RCA,SGS,TI,To
30	IC....4	50.17.1000 74 HC 00		Mot,NS,Ph,RCA,SGS,TI,To
32	IC....4	50.17.1132 74 HC 132		Mot,NS,Ph,RCA,SGS,TI,To
30	IC....5	50.17.1138 74 HC 138		Mot,NS,Ph,RCA,SGS,TI,To
30	IC....6	50.17.1002 74 HC 02		Mot,NS,Ph,RCA,SGS,TI,To
30	IC....7	50.17.1393 74 HC 393		Mot,NS,Ph,RCA,SGS,TI,To
30	IC....8	50.14.0133 HM6264P-15	TC 5564-15	Hi,To
30	IC....9	50.17.0004 74 HCT 04		Mot,NS,Ph,RCA,SGS,TI,To
30	IC...10	00.00.0000 not used		
30	IC...11	50.17.1139 74 HC 139		Mot,NS,Ph,RCA,SGS,TI,To
30	IC...12	50.15.0105 MC 3487 P	DS 3487 N	Mot,NS
30	IC...13	50.17.1573 74 HC 573		Mot,NS,Ph,RCA,SGS,TI,To
30	IC...14	50.11.0122 TL7705ACP		TI
32	IC...14	50.11.0157 TL7705BCP		TI
30	IC...15	50.14.2001 27513	HN 4827513G-30	Hi,IT
30	IC...15	1.820.996.30	software 06/89, see note 1	
31	IC...15	1.820.996.31	software 22/90, see note 1	
33	IC...15	1.820.996.32	software 02/93, see note 1	
30	IC...16	50.14.0125 27128	HN 4827128G-30	Hi,IT
30	IC...16	1.820.996.30	software 06/89, see note 1	
31	IC...16	1.820.996.31	software 22/90, see note 1	
33	IC...16	1.820.996.32	software 02/93, see note 1	
30	IC...17	50.16.0107 MC6803P-1	6803?-L	Mot,Hi
30	IC...18	50.14.0125 27128	HN 4827128G-30	Hi,IT
30	IC...18	1.820.996.30	software 06/89, see note 1	
31	IC...18	1.820.996.31	software 22/90, see note 1	
33	IC...18	1.820.996.32	software 02/93, see note 1	
30	JS....1	. .	see note 2	
30	JS....2	. .	see note 2	
30	JS....3	. .	see note 2	
30	JS....4	. .	see note 2	
30	JS....5	. .	see note 2	
30	JS....6	. .	see note 2	
30	JS....7	. .	see note 2	
30	JS....8	. .	see note 2	
30	JS....9	. .	see note 2	
30	JS...10	. .	see note 2	
30	JS...11	. .	see note 2	
30	JS...12	. .	see note 2	
30	JS...13	. .	see note 2	
30	JS...14	. .	see note 2	
30	JS...15	. .	see note 2	
30	JS...16	. .	see note 2	
30	JS...17	. .	see note 2	
31	JS...18	. .	see note 2	
30	MP....1	29.21.6002		
30	MP....2	29.21.6002		
30	R.....1	57.11.3332 3.3 kOhm	5%	
30	R.....2	57.11.3333 33 kOhm	5%	
31	R.....2	00.00.0000 not used		
30	R.....3	57.11.3182 1.8 kOhm	5%	
31	R.....3	57.11.3122 1.2 kOhm	5%	
30	R.....4	57.11.3182 1.8 kOhm	5%	
31	R.....4	57.11.3122 1.2 kOhm	5%	
30	R.....5	57.11.3333 33 kOhm	5%	
31	R.....5	00.00.0000 not used		
30	R.....6	57.11.3471 470 Ohm	5%	
30	R.....7	57.11.3332 3.3 kOhm	5%	
31	R.....7	00.00.0000 not used		
31	R.....8	57.11.3472 4.7 kOhm	5%	
31	R.....9	57.11.3472 4.7 kOhm	5%	
30	RZ....1	57.88.4332	see note 3	
30	RZ....2	57.88.4332	see note 3	
30	RZ....3	57.88.4332	see note 3	
30	RZ....4	57.88.4332	see note 3	
30	RZ....5	57.88.4332	see note 3	
30	RZ....6	57.88.4332	see note 3	
30	RZ....7	57.88.4332	see note 3	

Ad	..POS..	..REF.No...	DESCRIPTION	MANUFACTURER
30	S.....1	55.03.0122	Chigago switch 34-550-001	
30	Y.....1	89.01.0553	4.9152 MHz, TD 18	
31	Y.....1	89.01.0560	4.9152 MHz, +-100 ppm	

(30) 89/02/01 Software 06/89 MK II.

(31) 90/05/28 Software 22/90 for A820-2/2 MR VU 0.5Z only.

(32) 92/06/22 Same software as 22/90 suffix (31), improved reset performance.

(33) 93/01/12 Software 02/93 for 0.25" through 1" (general master software).

Note 1 - IC15/16/18 : Software in set available only.

Note 2 - Contact pin: Studer Nr. 54.01.0020
Berg Nr. 75 160-102-36
Philips Nr. 2422 025 89303
Bridge: Studer Nr. 54.01.0021
Berg Nr. 65 474-001
Philips Nr. 2422 024 88003

Note 3 - Network: 8 * 3.3 kOhm, 5%
Sicovend Nr. C09 x 3.3 k J
Ineltro Nr. R88 3.3 k 5%

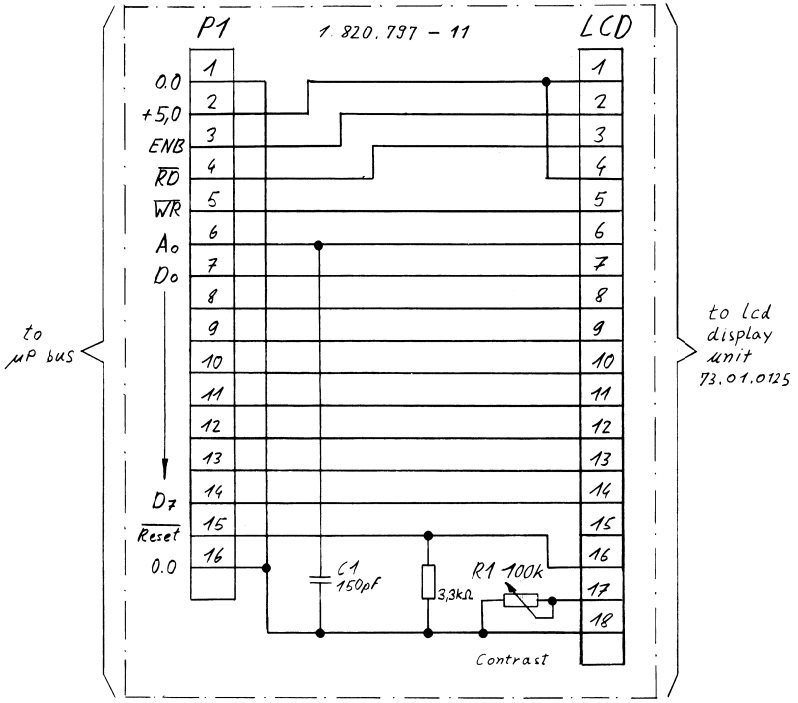
Ce=Ceramic, Sal=Solid Aluminium, PETP=Polyesterfilm.

MANUFACTURER: Fc=Fairchild, Hi=Hitachi, ITT=Intermetall, Mot=Motorola,
NS=National Semiconductors, OK=OKI, Ph=Philips,
Ses=Sescosem, Tf=Telefunken,TI=Texas Instruments.

1.820.786.30	MP-UNIT MASTER		BD 89/02/0130
1.820.786.31	MP-UNIT MASTER		GAE90/05/2831
1.820.786.32	MP-UNIT MASTER		BBT92/06/2232
1.820.786.33	MP-UNIT MASTER		GP 93/01/1233

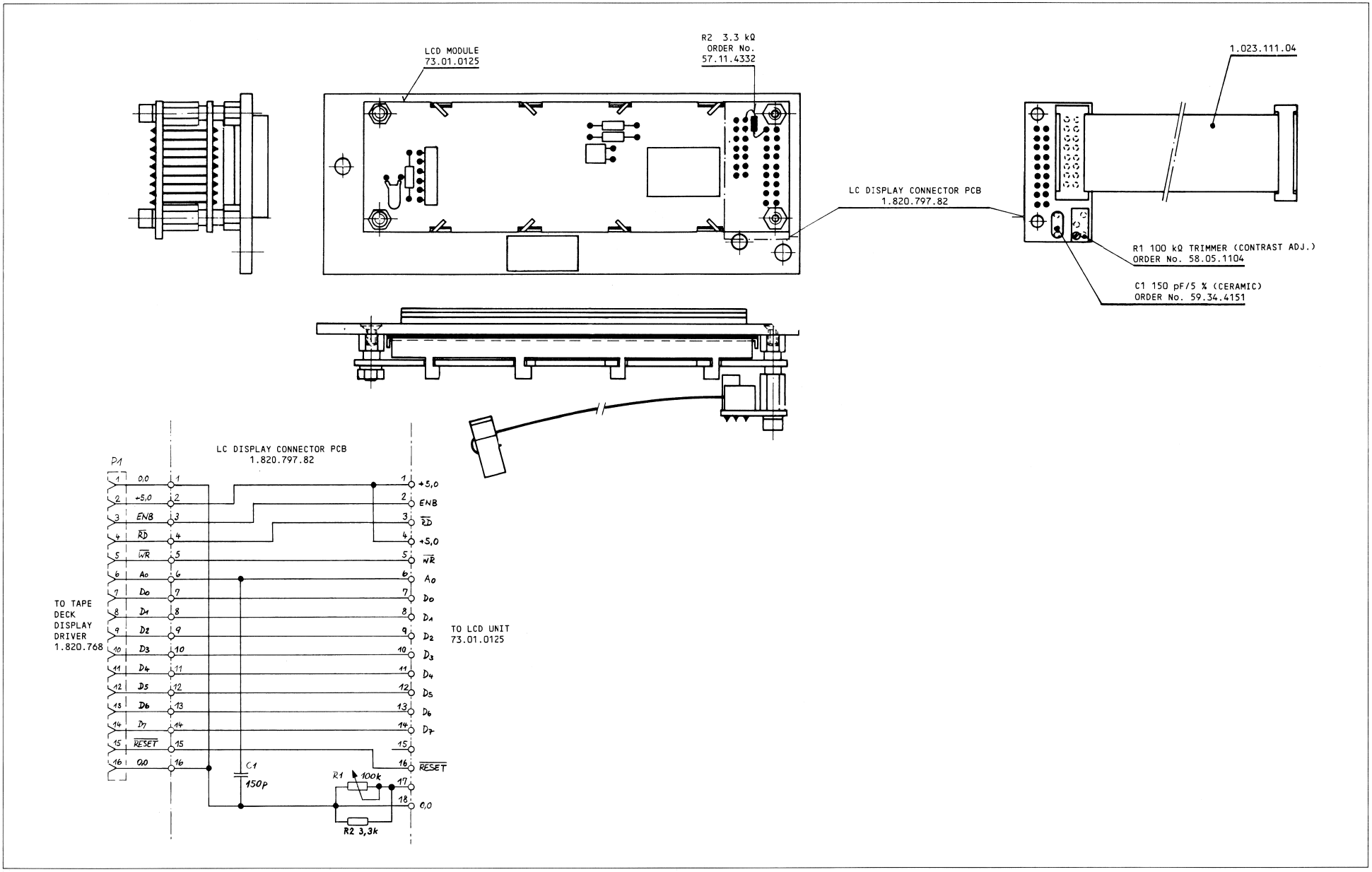
END
+

DISPLAY CONNECTION BOARD 1.820.233.83

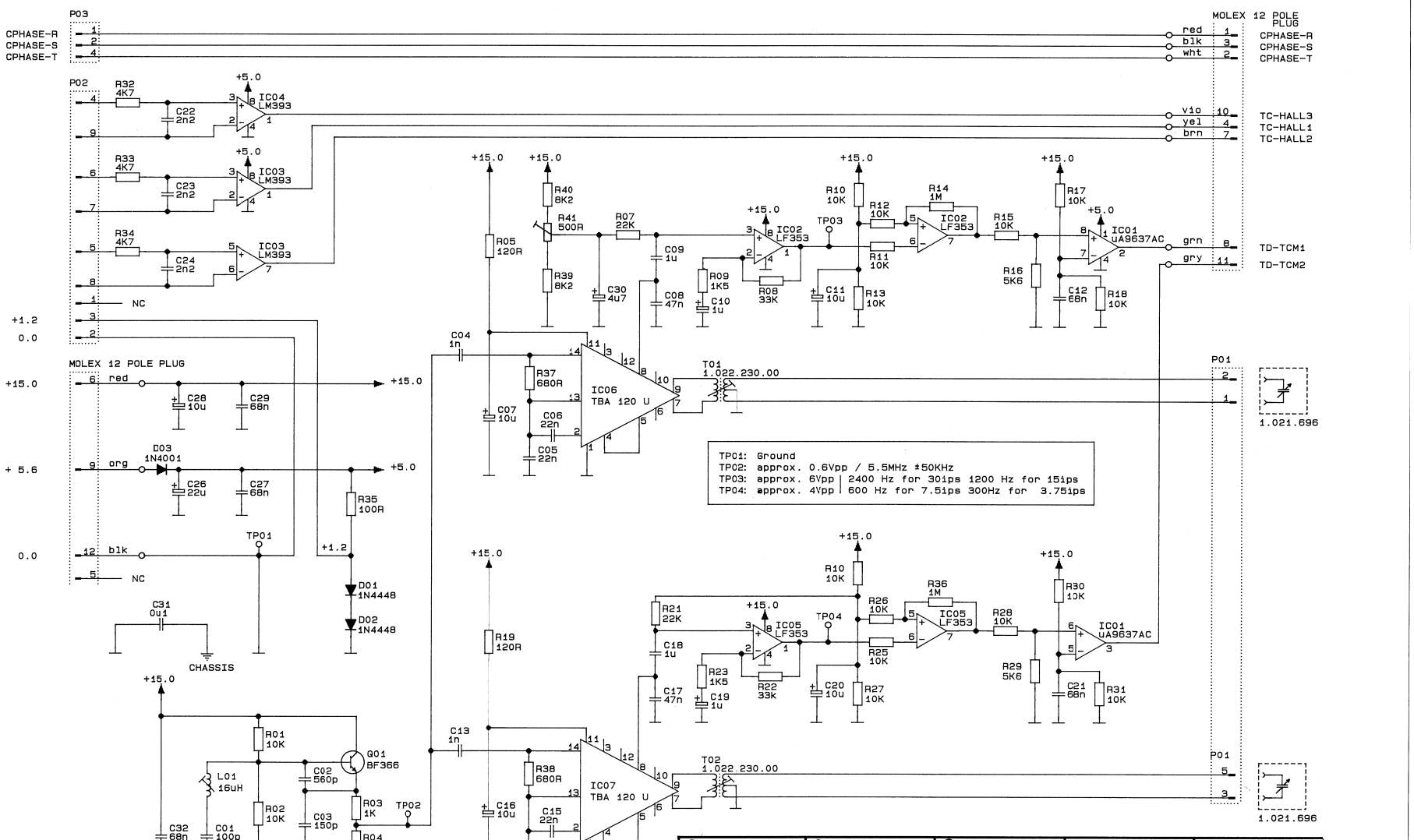


10.5.84 Fo		A820		
STUDER	Display Connection Board		1.820.233-83	PAGE 1 OF 1

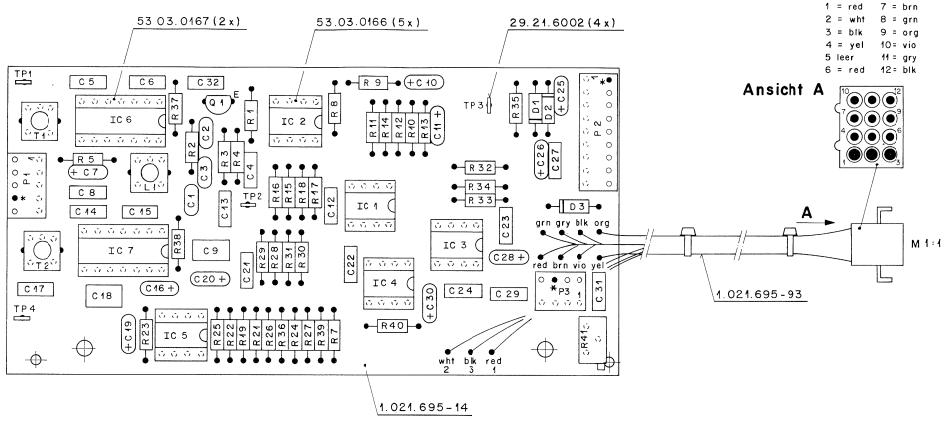
DISPLAY CONNECTION BOARD 1.820.233.83



TACHO SENSOR ELECTRONICS PCB 1.021.695.85



TACHO SENSOR ELECTRONICS PCB 1.021.695.85



* Codierung: Schaltdraht 64.01.0108 ø 0,8 x 8 mm
(muss 1mm vorstehen)

Änderung		
Ausgabe	5.11.94	
Datum	Gez.	Gebr. Ges. Index

Kopie für:

STUDER REGENSDORF ZÜRICH	Benennung: TACHO SENSOR EL. BOARD ESE	Nummer: 1.021.695-85

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	C.....1	59.34.4101	100 pF 5%, N750, CE	
	C.....2	59.34.5561	560 pF 5%, 63V, CE	
	C.....3	59.34.4151	150 pF 5%, N750, CE	
	C.....4	59.06.0102	1 nF 10%, 63V, PETP	
	C.....5	59.06.0223	22 nF 10%, 63V, PETP	
	C.....6	59.06.0223	22 nF 10%, 63V, PETP	
	C.....7	59.26.2100	10 uF 20%, 16V, EL	
	C.....8	59.06.0473	47 nF 10%, 63V, PETP	
	C.....9	59.06.0105	1 uF 10%, 63V, PETP	
	C....10	59.26.9109	1 uF 20%, 40V, EL	
	C....11	59.26.2100	10 uF 20%, 16V, EL	
	C....12	59.06.0683	68 nF 10%, 63V, PETP	
	C....13	59.06.0102	1 nF 10%, 63V, PETP	
	C....14	59.06.0223	22 nF 10%, 63V, PETP	
	C....15	59.06.0223	22 nF 10%, 63V, PETP	
	C....16	59.26.2100	10 uF 20%, 16V, EL	
	C....17	59.06.0473	47 nF 10%, 63V, PETP	
	C....18	59.06.0105	1 uF 10%, 63V, PETP	
	C....19	59.26.9109	1 uF 20%, 40V, EL	
	C....20	59.26.2100	10 uF 20%, 16V, EL	
	C....21	59.06.0683	68 nF 10%, 63V, PETP	
	C....22	59.06.0222	2.2 nF 10%, 63V, PETP	
	C....23	59.06.0222	2.2 nF 10%, 63V, PETP	
	C....24	59.06.0222	2.2 nF 10%, 63V, PETP	
	C....25	59.26.1220	22 uF 20%, 10V, EL	
	C....26	59.26.1220	22 uF 20%, 10V, EL	
	C....27	59.06.0683	68 nF 10%, 63V, PETP	
	C....28	59.26.2100	10 uF 20%, 16V, EL	
	C....29	59.06.0683	68 nF 10%, 63V, PETP	
	C....30	59.26.1479	4.7 uF 10%, 10V, EL	
	C....31	59.06.0104	100 nF 10%, 63V, PETP	
	C....32	59.06.0683	68 nF 10%, 63V, PETP	
	D.....1	50.04.0125	1N 4448	Fc,ITT,Ph,Sie,Tf
	D.....2	50.04.0125	1N 4448	Fc,ITT,Ph,Sie,Tf
	D.....3	50.04.0122	1N 4001 (to 4004)	Mot
	IC....1	50.15.0114	UA9637ACP 9637 ATC	Fc,TI
	IC....2	50.09.0101	LF 353 N TL 072 CP	NS,TI
	IC....3	50.05.0283	LM 393 N LM 393 P	NS,TI
	IC....4	50.05.0283	LM 393 N LM 393 P	NS,TI
	IC....5	50.09.0101	LF 353 N TL 072 CP	NS,TI
	IC....6	50.11.0151	TBA 120U	Ph,Sie
	IC....7	50.11.0151	TBA 120U	Ph,Sie
	L.....1	1.022.222.00	16 mH HF-COIL	St
	P.....1	54.01.0288	see Note 2	
	P.....2	54.01.0211	see Note 3	
	P.....3	54.01.0287	see Note 4	
	P.....3	54.01.0241	see Note 4	
	Q.....1	50.03.0514	BF 366	Mot
	R.....1	57.11.3103	10 kOhm 5%	
	R.....2	57.11.3103	10 kOhm 5%	
	R.....3	57.11.3102	1 kOhm 5%	
	R.....4	57.11.3121	120 Ohm 5%	
	R.....5	57.11.3121	120 Ohm 5%	
	R.....6	00.00.0000	not used	
	R.....7	57.11.3223	22 kOhm 5%	
	R.....8	57.11.3333	33 kOhm 5%	
	R.....9	57.11.3152	1.5 kOhm 5%	
	R....10	57.11.3103	10 kOhm 5%	
	R....11	57.11.3103	10 kOhm 5%	
	R....12	57.11.3103	10 kOhm 5%	
	R....13	57.11.3103	10 kOhm 5%	
	R....14	57.11.3105	1 MOhm 5%	
	R....15	57.11.3103	10 kOhm 5%	
	R....16	57.11.3562	5.6 kOhm 5%	
	R....17	57.11.3103	10 kOhm 5%	
	R....18	57.11.3103	10 kOhm 5%	
	R....19	57.11.3121	120 Ohm 5%	
	R....20	00.00.0000	not used	
	R....21	57.11.3223	22 kOhm 5%	
	R....22	57.11.3333	33 kOhm 5%	
	R....23	57.11.3152	1.5 kOhm 5%	
	R....24	57.11.3103	10 kOhm 5%	
	R....25	57.11.3103	10 kOhm 5%	
	R....26	57.11.3103	10 kOhm 5%	
	R....27	57.11.3103	10 kOhm 5%	
	R....28	57.11.3103	10 kOhm 5%	
	R....29	57.11.3562	5.6 kOhm 5%	
	R....30	57.11.3103	10 kOhm 5%	
	R....31	57.11.3103	10 kOhm 5%	
	R....32	57.11.3472	4.7 kOhm 5%	
	R....33	57.11.3472	4.7 kOhm 5%	
	R....34	57.11.3472	4.7 kOhm 5%	
	R....35	57.11.3101	100 Ohm 5%	
	R....36	57.11.3105	1 MOhm 5%	
	R....37	57.11.3681	680 Ohm 5%	
	R....38	57.11.3681	680 Ohm 5%	
	R....39	57.11.3822	8.2 kOhm 5%	
	R....40	57.11.3822	8.2 kOhm 5%	
	R....41	58.05.0501	500 Ohm 10% see Note 1	
	T.....1	1.022.230.00	Diskriminator X-former	St
	T.....2	1.022.230.00	Diskriminator X-former	St
	TP....1	29.21.6002	Testpoint	
	TP....2	29.21.6002	Testpoint	
	TP....3	29.21.6002	Testpoint	
	TP....4	29.21.6002	Testpoint	

Note 1: Pot: Bourns, Nr.: 3296 Z-1-501
Spectrol, Nr.: 64 Z 501 T 000
Murata, Nr.: Pot 3105 Z-1-501

Note 2: Plug: 5-Pin AMP, NR.: --163.680-3

Note 3: Plug: 9-Pin AMP, Nr.: --163.680-7

Note 4: Plug: 3-Pin AMP, Nr.: --163.680-1

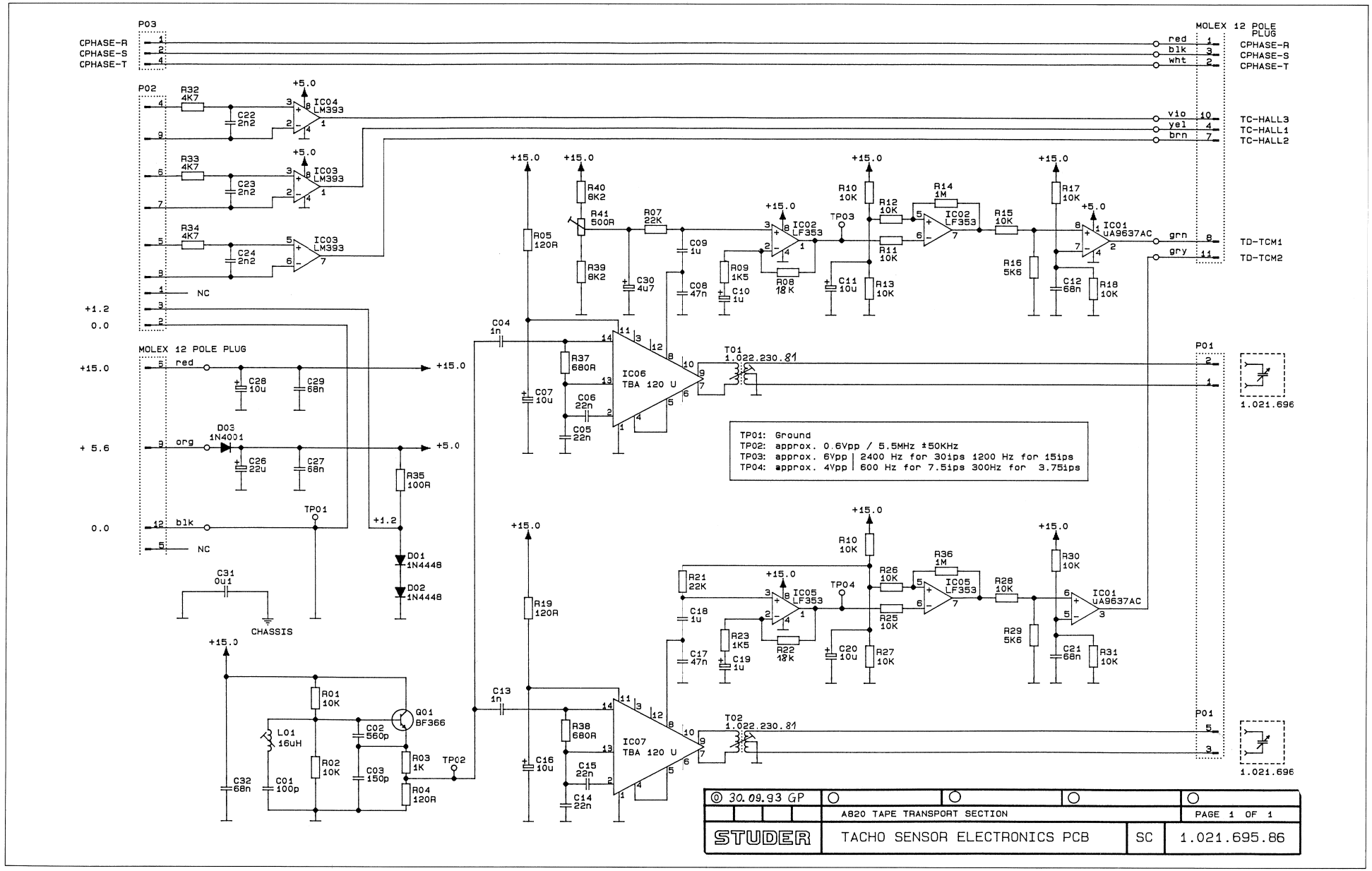
CE=Ceramic, EL=Electrolytic, PETP=Polyester Film

MANUFACTURER: Fc=Fairchild, GI=General Instruments, ITT=Intermetall,
Mot=Motorola, NS=National Semiconductors, Ph=Philips,
Sie=Siemens, St=Studer, TI=Texas Instruments

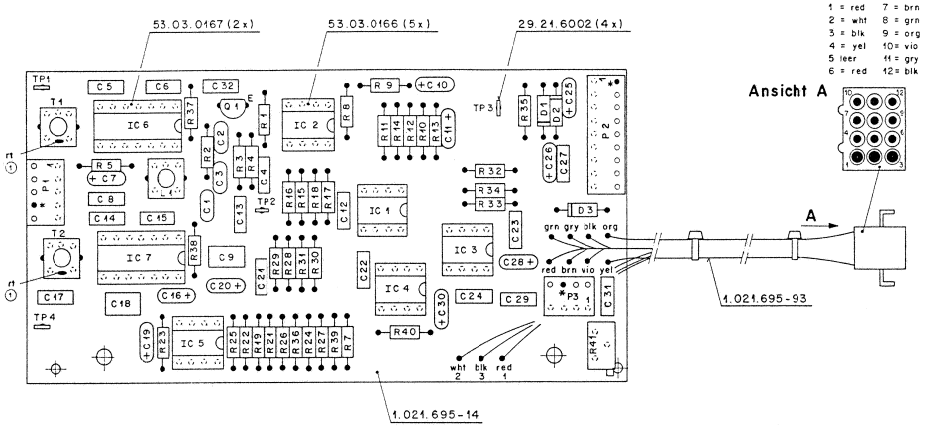
1.021.695.85 TACHO SENS. EL. BOARD ZAN91/11/0500

END

TACHO SENSOR ELECTRONICS PCB 1.021.695.86



TACHO SENSOR ELECTRONICS PCB 1.021.695.86



Änderung					
					3
					2
	10.7.96				1
Ausgabe	30.9.93				0
	Datum	Gez.	Gepr.	Ges.	Index

Kopie für:

STUDER REGENSDORF ZÜRICH	Benennung: TACHO SENSOR EL. BOARD ESE	Nummer: 1.021.695-86

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	C 1	59.34.4101		100p	CER 63V, 5%, N750
0	C 2	59.34.5561		560p	CER 63V, 5%, N1500
0	C 3	59.34.4151		150p	CER 63V, 5%, N750
0	C 4	59.06.0102		1n0	PETP, 63V, 10%, RM5
0	C 5	59.06.0223		22n	PETP, 63V, 10%, RM5
0	C 6	59.06.0223		22n	PETP, 63V, 10%, RM5
0	C 7	59.26.2100		10u	SAL, 20%, 16V
0	C 8	59.06.0473		47n	PETP, 63V, 10%, RM5
0	C 9	59.06.0105		1u0	PETP, 50V, 10%, RM5
0	C 10	59.26.9109		1u	SAL, 20%, 40V
0	C 11	59.26.2100		10u	SAL, 20%, 16V
0	C 12	59.06.0683		68n	PETP, 63V, 10%, RM5
0	C 13	59.06.0102		1n0	PETP, 63V, 10%, RM5
0	C 14	59.06.0223		22n	PETP, 63V, 10%, RM5
0	C 15	59.06.0223		22n	PETP, 63V, 10%, RM5
0	C 16	59.26.2100		10u	SAL, 20%, 16V
0	C 17	59.06.0473		47n	PETP, 63V, 10%, RM5
0	C 18	59.06.0105		1u0	PETP, 50V, 10%, RM5
0	C 19	59.26.9109		1u	SAL, 20%, 40V
0	C 20	59.26.2100		10u	SAL, 20%, 16V
0	C 21	59.06.0683		68n	PETP, 63V, 10%, RM5
0	C 22	59.06.0222		2n2	PETP, 63V, 10%, RM5
0	C 23	59.06.0222		2n2	PETP, 63V, 10%, RM5
0	C 24	59.06.0222		2n2	PETP, 63V, 10%, RM5
0	C 25	59.26.1220		22u	SAL, 20%, 10V
0	C 26	59.26.1220		22u	SAL, 20%, 10V
0	C 27	59.06.0683		68n	PETP, 63V, 10%, RM5
0	C 28	59.26.2100		10u	SAL, 20%, 16V
0	C 29	59.06.0683		68n	PETP, 63V, 10%, RM5
0	C 30	59.26.1479		4u7	SAL, 20%, 10V
0	C 31	59.06.0104		100n	PETP, 63V, 10%, RM5
0	C 32	59.06.0683		68n	PETP, 63V, 10%, RM5
0	D 1	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 2	50.04.0125		1N4448	75V, 150mA, 4ns, DO-35
0	D 3	50.04.0122		1N4001	1A, DO 41
0	IC 1	50.15.0114		9637	Dual diff Line Receiver
0	IC 2	50.09.0101		TL072	IC TL 072 CN ,A
0	IC 3	50.05.0283		LM393	Dual Comparator
0	IC 4	50.05.0283		LM393	Dual Comparator
0	IC 5	50.09.0101		TL072	IC TL 072 CN ,A
0	IC 6	50.11.0151		TBA120U	IC TBA 120 U/V5
0	IC 7	50.11.0151		TBA120U	IC TBA 120 U/V5
0	L 1	1.022.222.00		L16mH	HF-DROSSEL 16 MH
0	P 1	54.01.0288		5-P	J LEISTE 5 POL CIS AUFST.
0	P 2	54.01.0217		9-P	J LEISTE 9 POL CIS AUFST.
0	P 3	54.01.0241		4-P	J LEISTE 4 POL CIS AUFST.
0	Q 1	50.03.0514		BF366	BF 366 NPN
0	R 1	57.11.3103		10k	MF, 1%, 0207
0	R 2	57.11.3103		10k	MF, 1%, 0207
0	R 3	57.11.3102		1k0	MF, 1%, 0207
0	R 4	57.11.3121		120R	MF, 1%, 0207
0	R 5	57.11.3121		120R	MF, 1%, 0207
0	R 6	not used		not used	not used
0	R 7	57.11.3223		22k	MF, 1%, 0207
0	R 8	57.11.3183		18k	MF, 1%, 0207
0	R 9	57.11.3152		1k5	MF, 1%, 0207
0	R 10	57.11.3103		10k	MF, 1%, 0207
0	R 11	57.11.3103		10k	MF, 1%, 0207
0	R 12	57.11.3103		10k	MF, 1%, 0207
0	R 13	57.11.3103		10k	MF, 1%, 0207
0	R 14	57.11.3105		1M0	MF, 1%, 0207
0	R 15	57.11.3103		10k	MF, 1%, 0207
0	R 16	57.11.3562		5k6	MF, 1%, 0207
0	R 17	57.11.3103		10k	MF, 1%, 0207
0	R 18	57.11.3103		10k	MF, 1%, 0207
0	R 19	57.11.3121		12CR	MF, 1%, 0207
0	R 20	not used		not used	not used
0	R 21	57.11.3223		22k	MF, 1%, 0207
0	R 22	57.11.3183		18k	MF, 1%, 0207
0	R 23	57.11.3152		1k5	MF, 1%, 0207
0	R 24	57.11.3103		10k	MF, 1%, 0207
0	R 25	57.11.3103		10k	MF, 1%, 0207
0	R 26	57.11.3103		10k	MF, 1%, 0207
0	R 27	57.11.3103		10k	MF, 1%, 0207
0	R 28	57.11.3103		10k	MF, 1%, 0207
0	R 29	57.11.3562		5k6	MF, 1%, 0207
0	R 30	57.11.3103		10k	MF, 1%, 0207

Idx.	Pos.	Part No.	Qty.	Type/Val.	Description
0	R 31	57.11.3103		10k	MF, 1%, 0207
0	R 32	57.11.3472		4k7	MF, 1%, 0207
0	R 33	57.11.3472		4k7	MF, 1%, 0207
0	R 34	57.11.3472		4k7	MF, 1%, 0207
0	R 35	57.11.3101		100R	MF, 1%, 0207
0	R 36	57.11.3105		1M0	MF, 1%, 0207
0	R 37	57.11.3681		680R	MF, 1%, 0207
0	R 38	57.11.3681		680R	MF, 1%, 0207
0	R 39	57.11.3822		8k2	MF, 1%, 0207
0	R 40	57.11.3822		8k2	MF, 1%, 0207
0	R 41	56.05.0501		500R	10%, 0.5W, Cermet
1	T 1	1.022.230.82		Trafo	DISKRIMINATORTRAFO
1	T 2	1.022.230.82		Trafo	DISKRIMINATORTRAFO
0	TP 1	29.21.6002		1-P	LOETOESE
0	TP 2	29.21.6002		1-P	LOETOESE
0	TP 3	29.21.6002		1-P	LOETOESE
0	TP 4	29.21.6002		1-P	LOETOESE

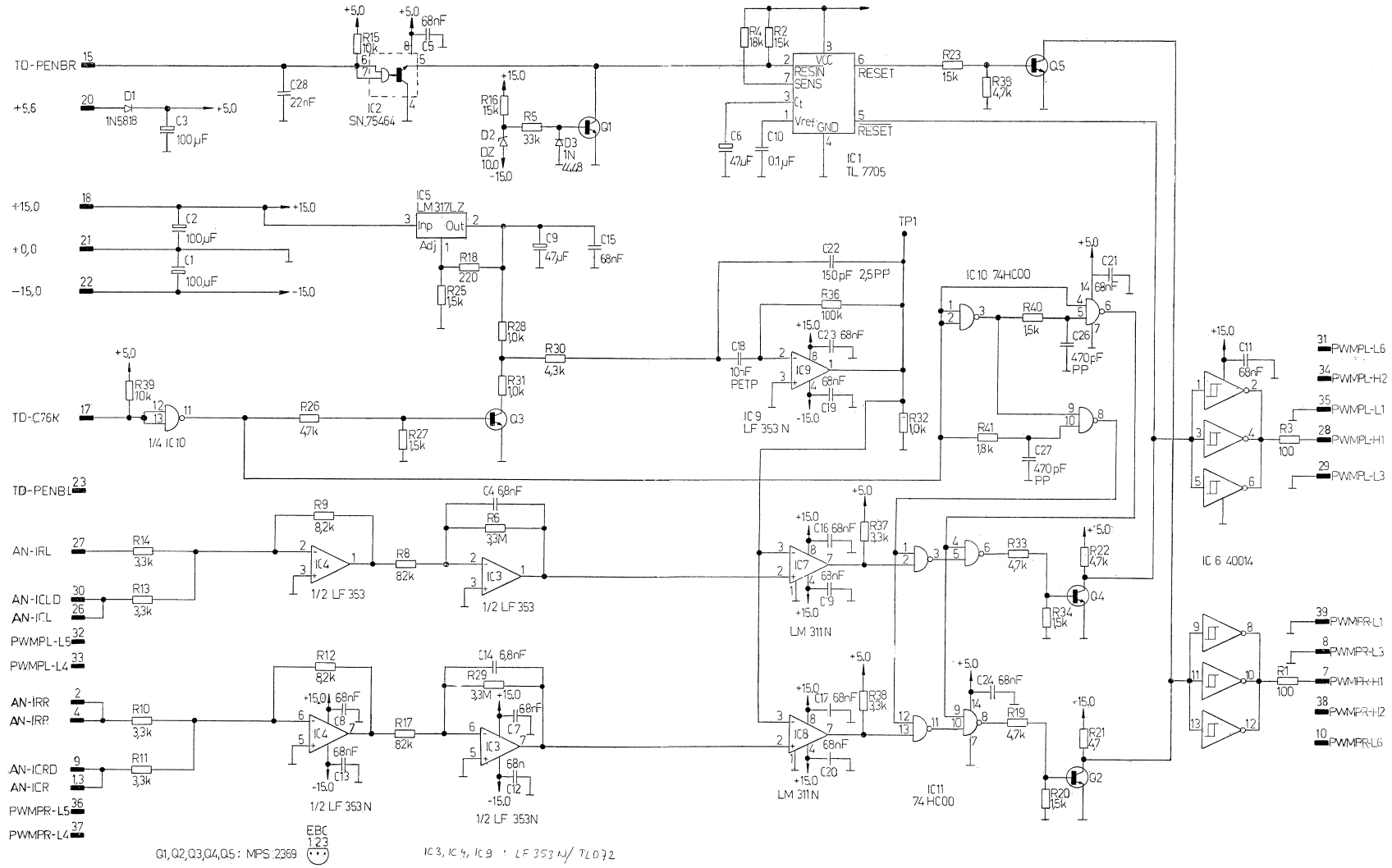
End of List

Comments:

* Note 1: Pot: Bourns, Nr.: 3296 Z-1-501
* Spectrol, Nr.: 64 Z 501 T 000
* Murata, Nr.: Pot 3105 Z-1-501
*
* Note 2: Plug: 5-Pin AMP, NR.: --163.680-3
*
* Note 3: Plug: 9-Pin AMP, Nr.: --163.680-7
*
* Note 4: Plug: 3-Pin AMP, Nr.: --163.680-1
*
* CE=Ceramic, EL=Electrolytic, PETP=Polyester Film
*
* MANUFACTURER: Fc=Fairchild, GI=General Instruments, ITT=Intermetall,
* Mot=Motorola, NS=National Semiconductors, Ph=Philips,
* Sie=Siemens, St=Studer, TI=Texas Instruments

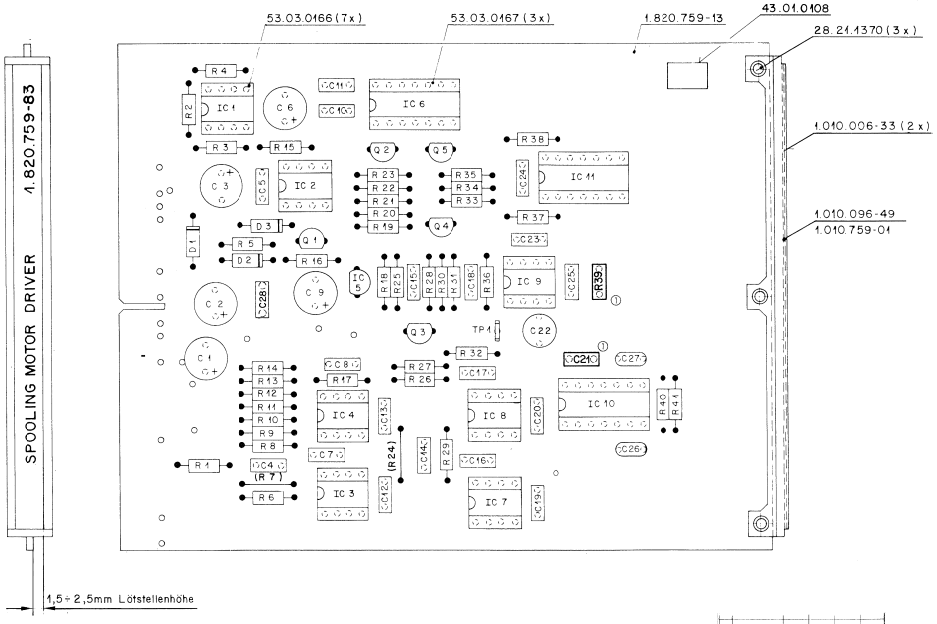
(o1) T1+T2 -81 changaed to -82

SPOOLING MOTOR DRIVER 1.820.759.83



0	3 14.10.86 ND		
	A820 Tape Transport Section		PAGE 1 OF 1
STUDER	Spooling Motor Driver	SC	1.820.759.83

SPOOLING MOTOR DRIVER 1.820.759.83



13.1.87		
23.10.86	A.Ho	

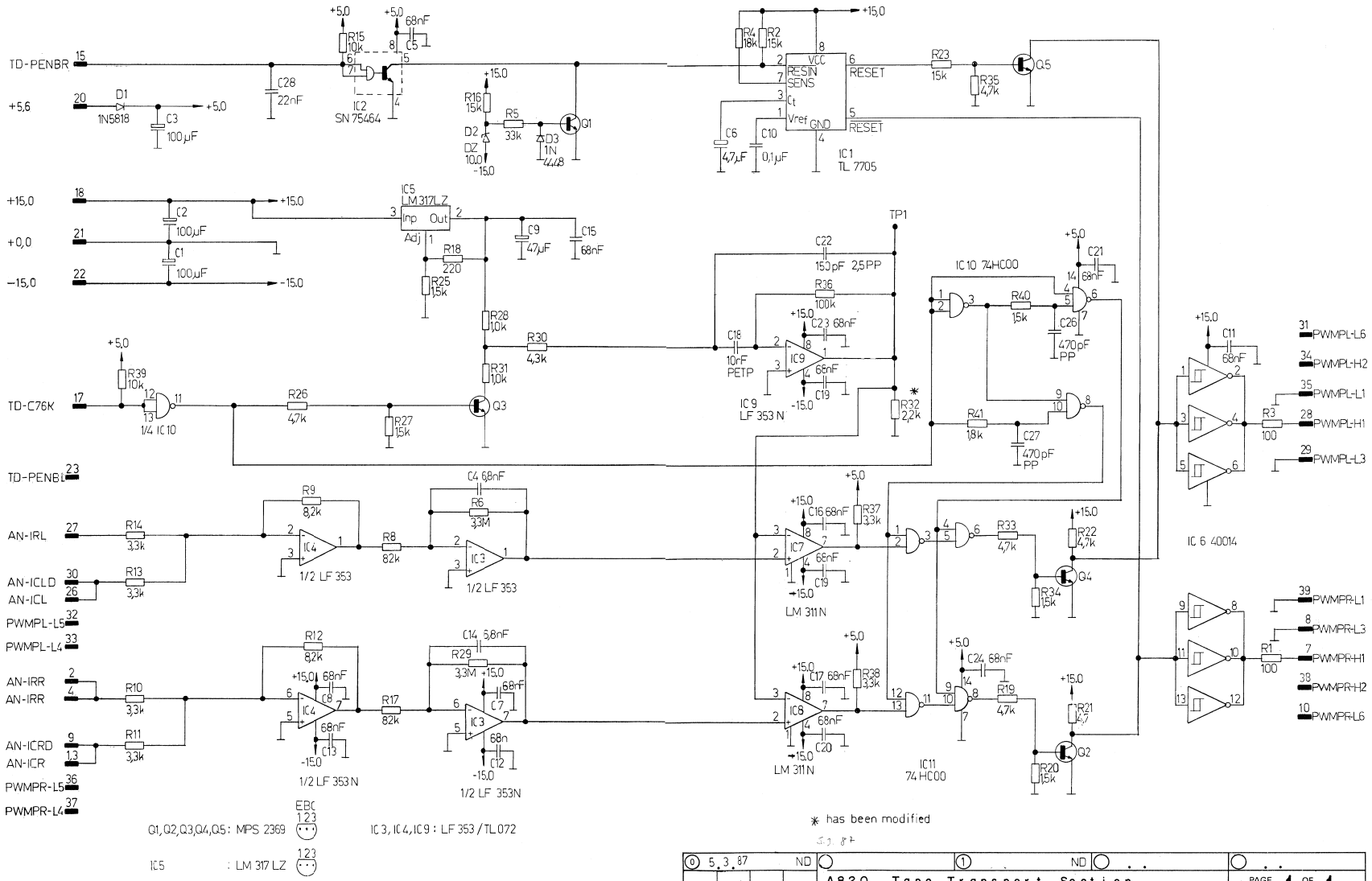
STUDER REGENSDORF ZURICH	SPOOLING MOTOR DRIVER ESE	1.820.759-83

Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	C.....1	59.22.5101	100 uF	25V, El	
	C.....2	59.22.5101	100 uF	25V, El	
	C.....3	59.22.5101	100 uF	El	
	C.....4	59.06.0682	6.8 nF	10%	
	C.....5	59.06.0683	68 nF		
	C.....6	59.22.5470	47 uF	25V, El	
	C.....7	59.06.0683	68 nF		
	C.....8	59.06.0683	68 nF		
	C.....9	59.22.5470	47 uF	25V, El	
	C....10	59.06.0104	100 nF		
	C....11	59.06.0683	68 nF		
	C....12	59.06.0683	68 nF		
	C....13	59.06.0683	68 nF		
	C....14	59.06.0682	6.8 nF	10%	
	C....15	59.06.0683	68 nF		
	C....16	59.06.0683	68 nF		
	C....17	59.06.0683	68 nF		
	C....18	59.06.0103	10 nF		
	C....19	59.06.0683	68 nF		
	C....20	59.06.0683	68 nF		
	C....21	59.06.0683	68 nF		
	C....22	59.05.2151	150 pF	5%	
	C....23	59.06.0683	68 nF		
	C....24	59.06.0683	68 nF		
	C....25	59.06.0683	68 nF		
	C....26	59.34.5471	470 pF	5%	
	C....27	59.34.5471	470 pF	5%	
	C....28	59.06.0223	22 nF		
	D.....1	50.04.0512	1N 5818	1N 5819	Mot
	D.....2	50.04.1114	10 V		ITT,Ses
	D.....3	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	IC....1	50.11.0122	TL 7705		TI
	IC....2	50.05.0204	SN 75464P	DS 75464 N	NS,TI
	IC....3	50.09.0101	TL 072 CP	LF 353 N	NS,TI
	IC....4	50.09.0101	TL 072 CP	LF 353 N	NS,TI
	IC....5	50.10.0108	LM 317 LZ		Mot,NS
	IC....6	50.07.0014	40014 BPC	MC14584 BPC	Mot,NS,Ph,To
	IC....7	50.11.0114	LM 311 N	LM 311 P	Mot,NS
	IC....8	50.11.0114	LM 311 N	LM 311 P	Mot,NS
	IC....9	50.09.0101	TL 072 CP	LF 353 N	NS,TI
	IC....10	50.17.1000	74 HC 00		Mot,NS,Ph,RCA,SGS,TI,To
	IC....11	50.17.1000	74 HC 00		Mot,NS,Ph,RCA,SGS,TI,To
	Q.....1	50.03.0508	MPS 2369		Mot
	Q.....2	50.03.0508	MPS 2369		Mot
	Q.....3	50.03.0508	MPS 2369		Mot
	Q.....4	50.03.0508	MPS 2369		Mot
	Q.....5	50.03.0508	MPS 2369		Mot
	R.....1	57.11.4101	100 Ohm		
	R.....2	57.11.4153	15 kOhm		
	R.....3	57.11.4101	100 Ohm		
	R.....4	57.11.4183	18 kOhm	5%	
	R.....5	57.11.4333	33 kOhm	5%	
	R.....6	57.11.5335	3.3 MOhm		
	R.....7	- . -	not used		(replaced by wire bridge)
	R.....8	57.11.4823	82 kOhm	5%	
	R.....9	57.11.4822	8.2 kOhm	5%	
	R....10	57.11.4332	3.3 kOhm	5%	
	R....11	57.11.4332	3.3 kOhm	5%	
	R....12	57.11.4822	8.2 kOhm	5%	
	R....13	57.11.4332	3.3 kOhm	5%	
	R....14	57.11.4332	3.3 kOhm	5%	
	R....15	57.11.4103	10 kOhm		
	R....16	57.11.4153	15 kOhm	5%	
	R....17	57.11.4823	82 kOhm	5%	
	R....18	57.11.4221	220 Ohm	2%	
	R....19	57.11.4472	4.7 kOhm	5%	
	R....20	57.11.4152	1.5 kOhm	5%	
	R....21	57.11.4472	4.7 kOhm	5%	
	R....22	57.11.4472	4.7 kOhm	5%	
	R....23	57.11.4153	15 kOhm	5%	
	R....24	- . -	not used		(replaced by wire bridge)
	R....25	57.11.4152	1.5 kOhm	2%	
	R....26	57.11.4472	4.7 kOhm	5%	
	R....27	57.11.4152	1.5 kOhm	5%	
	R....28	57.11.4102	1 kOhm	2%	
	R....29	57.11.5335	3.3 MOhm		
	R....30	57.11.3432	4.3 kOhm	1%	
	R....31	57.11.4102	1 kOhm	2%	
	R....32	57.11.4102	1 kOhm		
	R....33	57.11.4472	4.7 kOhm	5%	
	R....34	57.11.4152	1.5 kOhm	5%	
	R....35	57.11.4472	4.7 kOhm	5%	
	R....36	57.11.4104	100 kOhm		
	R....37	57.11.4332	3.3 kOhm	5%	
	R....38	57.11.4332	3.3 kOhm	5%	
	R....39	57.11.4103	10 kOhm		
	R....40	57.11.4152	1.5 kOhm	2%	
	R....41	57.11.4182	1.8 kOhm	2%	

El=Electrolytic
Manufacturer: Fc=Fairchild, ITT=Intermetall, Mot=Motorola,
NS=National Semiconductors, Ph=Philips,
RCA=RCA Corporation of America, Ses=Sescosem, SGS=SGS/Ates,
Tf=Telefunken, TI=Texas Instruments, To=Toshiba.

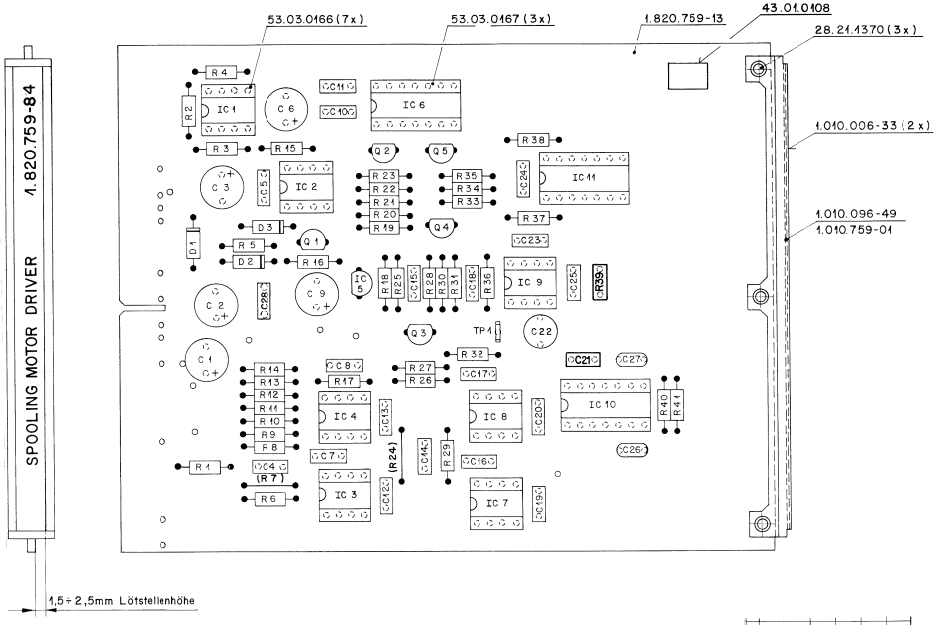
1.820.759.83 SPOOLING MOTOR DRIVER PE 86/08/2700

SPOOLING MOTOR DRIVER 1.820.759.84



0 5.3.87 ND	1 . ND . .	. .	
STUDER	A820 Tape Transport Section	PAGE 1 OF 1	
	Spooling Motor Driver	SC	1.820.759.84

SPOOLING MOTOR DRIVER 1.820.759.84



Änderung				
Ausgabe	12.3.87	A.Ho		
Datum	Gez	Gepr	Ges	Index
Kopie für				

STUDER REGENSDORF ZÜRICH	Benennung: SPOOLING MOTOR DRIVER ESE	Nummer: 1.820.759-84

Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	C.....1	59.22.5101	100 uF	25V, El	
	C.....2	59.22.5101	100 uF	25V, El	
	C.....3	59.22.5101	100 uF	El	
	C.....4	59.06.0682	6.8 nF	10%	
	C.....5	59.06.0683	68 nF		
	C.....6	59.26.5479	4,7 uF	25V, El	
	C.....7	59.06.0683	68 nF		
	C.....8	59.06.0683	68 nF		
	C.....9	59.22.5470	47 uF	25V, El	
	C....10	59.06.0104	100 nF		
	C....11	59.06.0683	68 nF		
	C....12	59.06.0683	68 nF		
	C....13	59.06.0683	68 nF		
	C....14	59.06.0682	6.8 nF	10%	
	C....15	59.06.0683	68 nF		
	C....16	59.06.0683	68 nF		
	C....17	59.06.0683	68 nF		
	C....18	59.06.0103	10 nF		
	C....19	59.06.0683	68 nF		
	C....20	59.06.0683	68 nF		
	C....21	59.06.0683	68 nF		
	C....22	59.05.2151	150 pF	5%	
	C....23	59.06.0683	68 nF		
	C....24	59.06.0683	68 nF		
	C....25	59.06.0683	68 nF		
	C....26	59.34.5471	470 pF	5%	
	C....27	59.34.5471	470 pF	5%	
	C....28	59.06.0223	22 nF		
	D.....1	50.04.0512	1N 5818	1N 5819	Mot
	D.....2	50.04.1114	10 V Z	BZX 55-C10	ITT,Mot,Ph,Tf,Tho
	D.....3	50.04.0125	1N 4448		Fc,ITT,Ph,SES,Tf
	IC....1	50.11.0122	TL 7705		TI
	IC....2	50.05.0204	SN 75464P	DS 75464 N	NS,TI
	IC....3	50.09.0101	TL 072 CP	LF 353 N	NS,TI
	IC....4	50.09.0101	TL 072 CP	LF 353 N	NS,TI
	IC....5	50.10.0108	LM 317 LZ		Mot,NS
	IC....6	50.07.0014	40014 BPC	MC14584 BPC	Mot,NS,Ph,To
	IC....7	50.11.0114	LM 311 N	LM 311 P	Mot,NS
	IC....8	50.11.0114	LM 311 N	LM 311 P	Mot,NS
	IC....9	50.09.0101	TL 072 CP	LF 353 N	NS,TI
	IC...10	50.17.1000	74 HC 00		Mot,NS,Ph,RCA,SGS,TI,To
	IC...11	50.17.1000	74 HC 00		Mot,NS,Ph,RCA,SGS,TI,To
	Q.....1	50.03.0508	MPS 2369		Mot
	Q.....2	50.03.0508	MPS 2369		Mot
	Q.....3	50.03.0508	MPS 2369		Mot
	Q.....4	50.03.0508	MPS 2369		Mot
	Q.....5	50.03.0508	MPS 2369		Mot
	R.....1	57.11.4101	100 Ohm		
	R.....2	57.11.4153	15 kOhm		
	R.....3	57.11.4101	100 Ohm		
	R.....4	57.11.4183	18 kOhm	5%	
	R.....5	57.11.4333	33 kOhm	5%	
	R.....6	57.11.5335	3.3 MOhm		
	R.....7	- . -	not used		(replaced by wire bridge)
	R.....8	57.11.4823	82 kOhm	5%	
	R.....9	57.11.4822	8.2 kOhm	5%	
	R....10	57.11.4332	3.3 kOhm	5%	
	R....11	57.11.4332	3.3 kOhm	5%	
	R....12	57.11.4822	8.2 kOhm	5%	
	R....13	57.11.4332	3.3 kOhm	5%	
	R....14	57.11.4332	3.3 kOhm	5%	
	R....15	57.11.4103	10 kOhm		
	R....16	57.11.4153	15 kOhm	5%	
	R....17	57.11.4823	82 kOhm	5%	
	R....18	57.11.4221	220 Ohm	2%	
	R....19	57.11.4472	4.7 kOhm	5%	
	R....20	57.11.4152	1.5 kOhm	5%	
	R....21	57.11.4472	4.7 kOhm	5%	
	R....22	57.11.4472	4.7 kOhm	5%	
	R....23	57.11.4153	15 kOhm	5%	
	R....24	- . -	not used		(replaced by wire bridge)
	R....25	57.11.4152	1.5 kOhm	2%	
	R....26	57.11.4472	4.7 kOhm	5%	
	R....27	57.11.4152	1.5 kOhm	5%	
	R....28	57.11.4102	1 kOhm	2%	
	R....29	57.11.5336	3.3 MOhm		
	R....30	57.11.3432	4.3 kOhm	1%	
	R....31	57.11.4102	1 kOhm	2%	
	R....32	57.11.4103	1 kOhm	5%	
01	R....32	57.11.4222	2.2 kOhm	5%	
	R....33	57.11.4472	4.7 kOhm	5%	
	R....34	57.11.4152	1.5 kOhm	5%	
	R....35	57.11.4472	4.7 kOhm	5%	
	R....36	57.11.4104	100 kOhm		
	R....37	57.11.4332	3.3 kOhm	5%	
	R....38	57.11.4332	3.3 kOhm	5%	
	R....39	57.11.4103	10 kOhm		
	R....40	57.11.4152	1.5 kOhm	2%	
	R....41	57.11.4182	1.8 kOhm	2%	

(01) 87.03.24 Reduced loading of IC 9.

El=Electrolytic

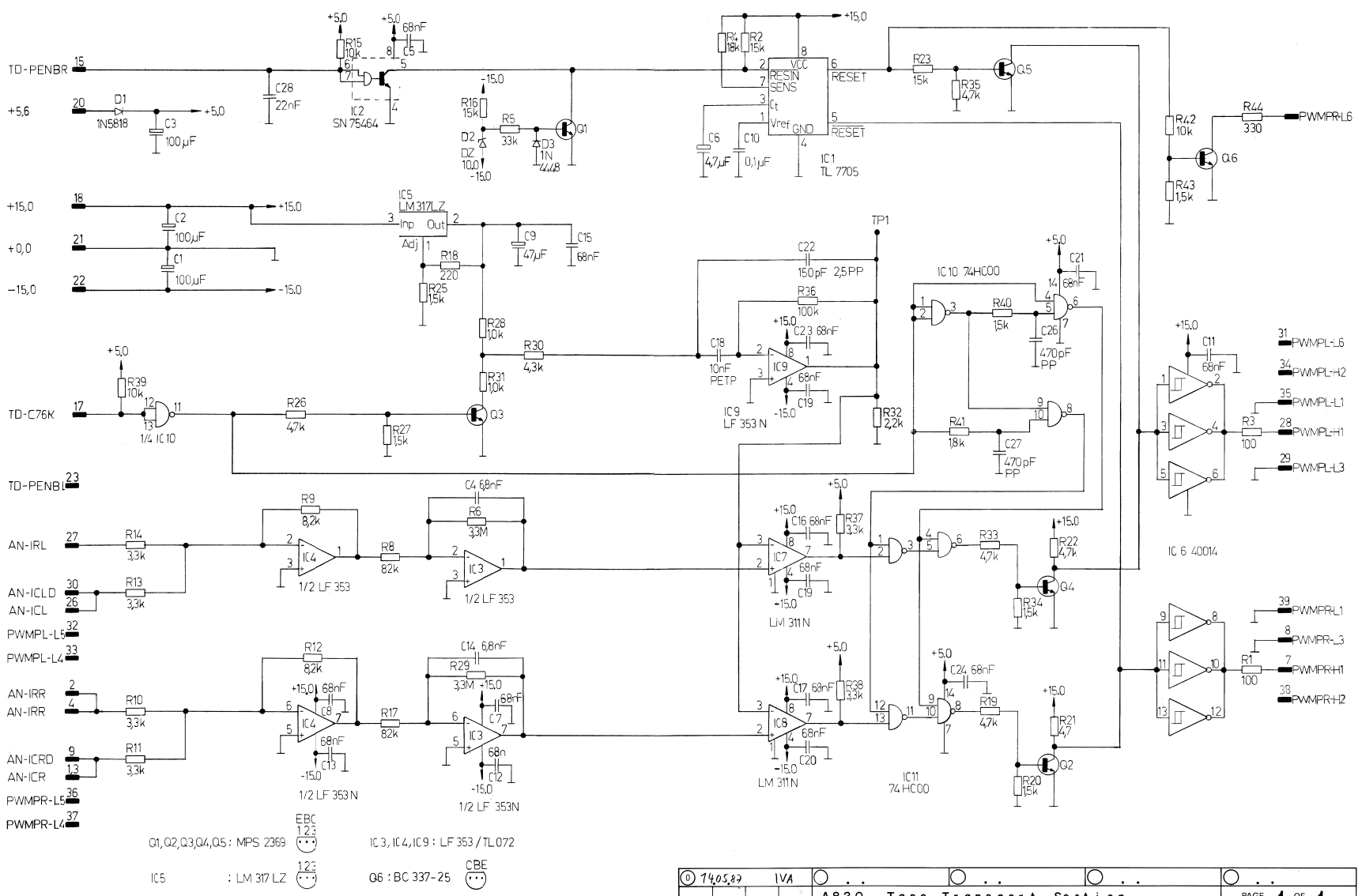
Manufacturer: Fc=Fairchild, ITT=Intermetall, Mot=Motorola, NS=National Semiconductors, Ph=Philips,

RCA=RCA Corporation of America, Ses=Sescosem, SGS=SGS/Ates, Tf=Telefunken, Tho=Thomson, TI=Texas Instruments, To=Toshiba.

1.820.759.84	SPOOLING MOTOR DRIVER	ND 87/03/2000
1.820.759.84	SPOOLING MOTOR DRIVER	BD 87/03/2401

END

SPOOLING MOTOR DRIVER 1.820.759.85



0 14.05.87 IVA				
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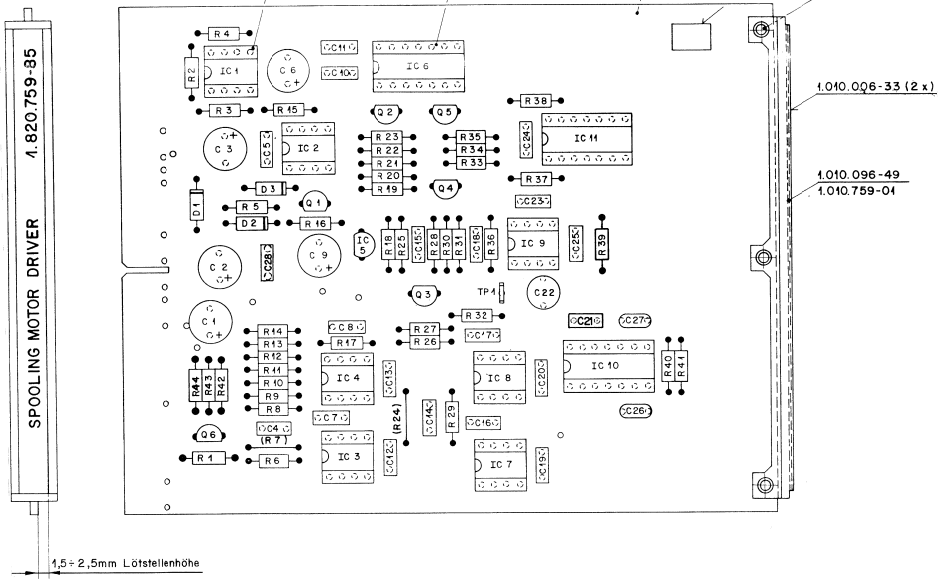
STUDER	Spooling Motor Driver		SC	1.820.759.85

SPOOLING MOTOR DRIVER 1.820.759.85



					3
					2
Änderung					
Ausgabe	14.5.87	Rüti	M		1
	Datum	Gez	Gepr	Ges	Index
Kopie für					

STUDER REGENSDORF ZURICH	Benennung: SPOOLING MOTOR DRIVER ESE	Nummer: 1.820.759-85

Ad	..POS..	...REF.No...	DESCRIPTION			MANUFACTURER
	C....1	59.22.5101	100 uF		25V, El	
	C....2	59.22.5101	100 uF		25V, El	
	C....3	59.22.5101	100 uF		El	
	C....4	59.06.0682	6.8 nF	10%		
	C....5	59.06.0683	68 nF			
	C....6	59.26.5479	4.7 uF		25V, El	
	C....7	59.06.0683	68 nF			
	C....8	59.06.0683	68 nF			
	C....9	59.22.5470	47 uF		25V, El	
	C....10	59.06.0104	100 nF			
	C....11	59.06.0683	68 nF			
	C....12	59.06.0683	68 nF			
	C....13	59.06.0683	68 nF			
	C....14	59.06.0682	6.8 nF	10%		
	C....15	59.06.0683	68 nF			
	C....16	59.06.0683	68 nF			
	C....17	59.06.0683	68 nF			
	C....18	59.06.0103	10 nF			
	C....19	59.06.0683	68 nF			
	C....20	59.06.0683	68 nF			
	C....21	59.06.0683	68 nF			
	C....22	59.05.2151	150 pF	5%		
	C....23	59.06.0683	68 nF			
	C....24	59.06.0683	68 nF			
	C....25	59.06.0683	68 nF			
	C....26	59.34.5471	470 pF	5%		
	C....27	59.34.5471	470 pF	5%		
	C....28	59.06.0223	22 nF			
	D....1	50.04.0512	1N 5818	1N 5819		Mot
	D....2	50.04.1114	10 V Z			ITT,Ses
	D....3	50.04.0125	1N 4448			Fc,ITT,Ph,Ses,Tf
	IC....1	50.11.0122	TL 7705			TI
	IC....2	50.05.0204	SN 75464P	DS 75464 N		NS,TI
	IC....3	50.09.0101	TL 072 CP	LF 353 N		NS,TI
	IC....4	50.09.0101	TL 072 CP	LF 353 N		NS,TI
	IC....5	50.10.0108	LM 317 LZ			Mot,NS
	IC....6	50.07.0014	40014 BPC	MC14584 BPC		Mot,NS,Ph,To
	IC....7	50.11.0114	LM 311 N	LM 311 P		Mot,NS
	IC....8	50.11.0114	LM 311 N	LM 311 P		Mot,NS
	IC....9	50.09.0101	TL 072 CP	LF 353 N		NS,TI
	IC....10	50.17.1000	74 HC 00			Mot,NS,Ph,RCA,SGS,TI,To
	IC....11	50.17.1000	74 HC 00			Mot,NS,Ph,RCA,SGS,TI,To
	Q....1	50.03.0508	MPS 2369			Mot
	Q....2	50.03.0508	MPS 2369			Mot
	Q....3	50.03.0508	MPS 2369			Mot
	Q....4	50.03.0508	MPS 2369			Mot
	Q....5	50.03.0508	MPS 2369			Mot
	Q....6	50.03.0340	BC 337-25			ITT,Ph,Sie
	R....1	57.11.4101	100 Ohm			
	R....2	57.11.4153	15 kOhm			
	R....3	57.11.4101	100 Ohm			
	R....4	57.11.4183	18 kOhm	5%		
	R....5	57.11.4333	33 kOhm	5%		
	R....6	57.11.5335	3.3 MOhm			
	R....7	00.00.0000	not used			(REPLACED BY WIRE BRIDGE)
	R....8	57.11.4823	82 kOhm	5%		
	R....9	57.11.4822	8.2 kOhm	5%		
	R....10	57.11.4332	3.3 kOhm	5%		
	R....11	57.11.4332	3.3 kOhm	5%		
	R....12	57.11.4822	8.2 kOhm	5%		
	R....13	57.11.4332	3.3 kOhm	5%		
	R....14	57.11.4332	3.3 kOhm	5%		
	R....15	57.11.4103	10 kOhm			
	R....16	57.11.4153	15 kOhm	5%		
	R....17	57.11.4823	82 kOhm	5%		
	R....18	57.11.4221	220 Ohm	2%		
	R....19	57.11.4472	4.7 kOhm	5%		
	R....20	57.11.4152	1.5 kOhm	5%		
	R....21	57.11.4472	4.7 kOhm	5%		
	R....22	57.11.4472	4.7 kOhm	5%		
	R....23	57.11.4153	15 kOhm	5%		
	R....24	00.00.0000	not used			(REPLACED BY WIRE BRIDGE)
	R....25	57.11.4152	1.5 kOhm	2%		
	R....26	57.11.4472	4.7 kOhm	5%		
	R....27	57.11.4152	1.5 kOhm	5%		
	R....28	57.11.4102	1 kOhm	2%		
	R....29	57.11.5335	3.3 MOhm			
	R....30	57.11.3432	4.3 kOhm	1%		
	R....31	57.11.4102	1 kOhm	2%		
	R....32	57.11.4222	2.2 kOhm	5%		
	R....33	57.11.4472	4.7 kOhm	5%		
	R....34	57.11.4152	1.5 kOhm	5%		
	R....35	57.11.4472	4.7 kOhm	5%		
	R....36	57.11.4104	100 kOhm			
	R....37	57.11.4332	3.3 kOhm	5%		
	R....38	57.11.4332	3.3 kOhm	5%		
	R....39	57.11.4103	10 kOhm			
	R....40	57.11.4152	1.5 kOhm	2%		
	R....41	57.11.4182	1.8 kOhm	2%		
	R....42	57.11.4103	10 kOhm	5%		
	R....43	57.11.4152	1.5 kOhm	5%		
	R....44	57.11.4331	330 Ohm	5%		

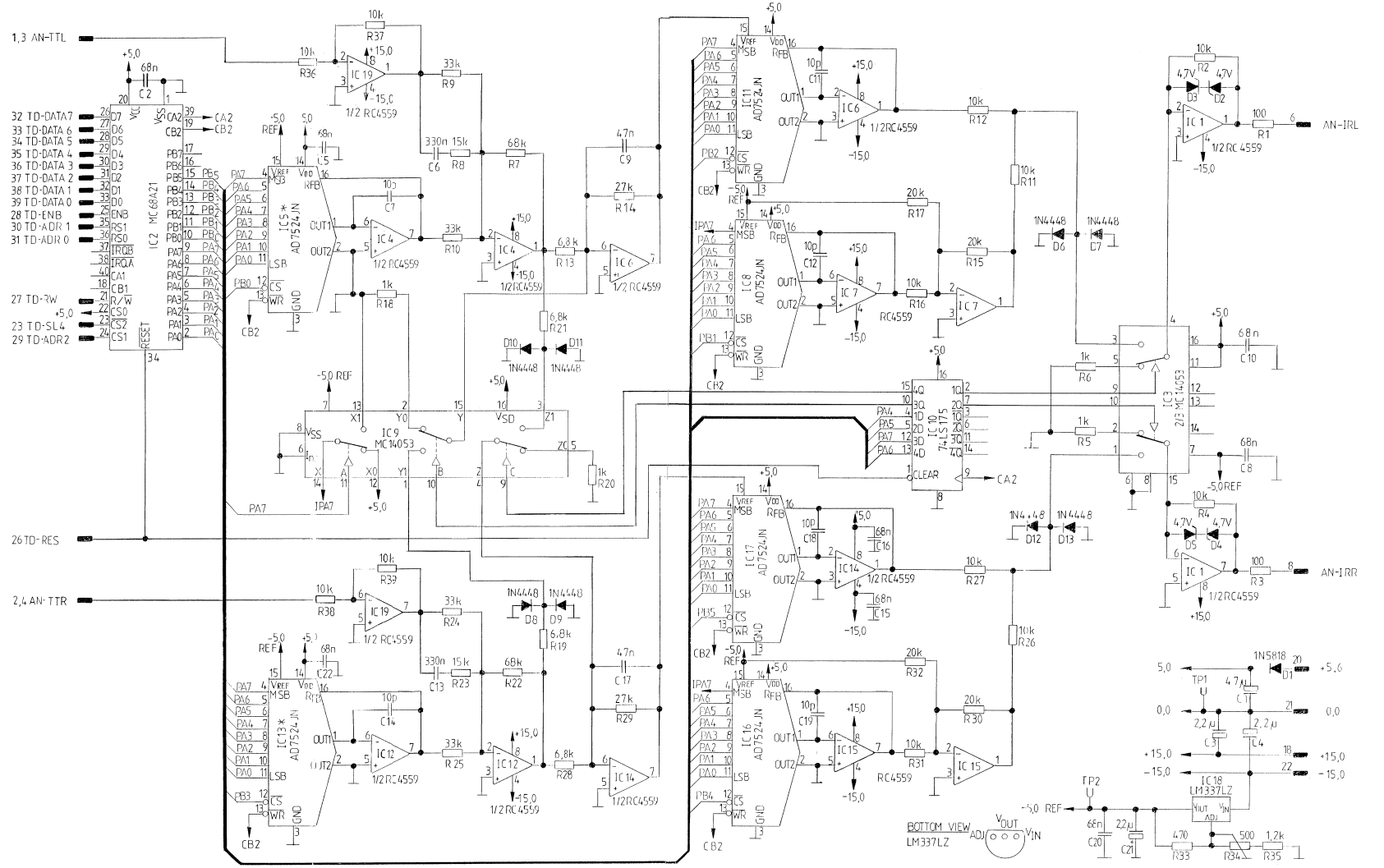
El=Electrolytic

Manufacturer: Fc=Fairchild, ITT=Intermetall, Mot=Motorola,
NS=National Semiconductors, Ph=Philips,
RCA=RCA Corporation of America, Ses=Sescosem, SGS=SGS/Ates,
Tf=Telefunken, TI=Texas Instruments, To=Toshiba.

1.820.759.85 SPOOLING MOTOR DRIVER BD 87/05/1400

END

SPOOLING MOTOR CONTROL 1.820.760.81



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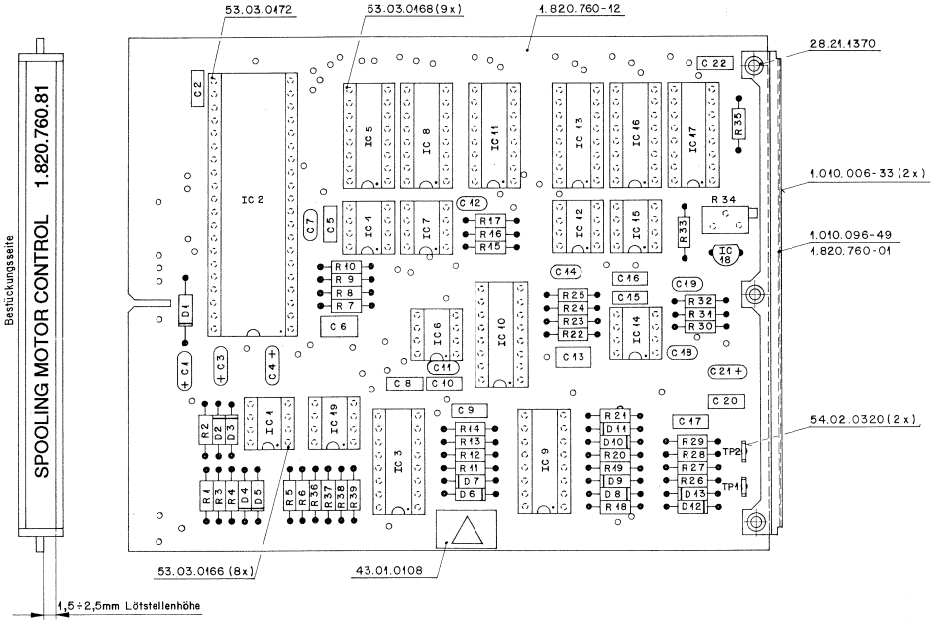
	A 820			PAGE 1 OF 1
STUDER	Spooling Motor Control		SC	1.820.760.81

SPOOLING MOTOR CONTROL 1.820.760.81



Änderung					
Ausgabe	5. 5. 86	A.Ho	A.D		
	Datum	Gez.	Gepr.	Ges.	Index

Kopie für:

STUDER REGENSDORF ZÜRICH

Benennung: SPOOLING MOTOR CONTROLLER ESE

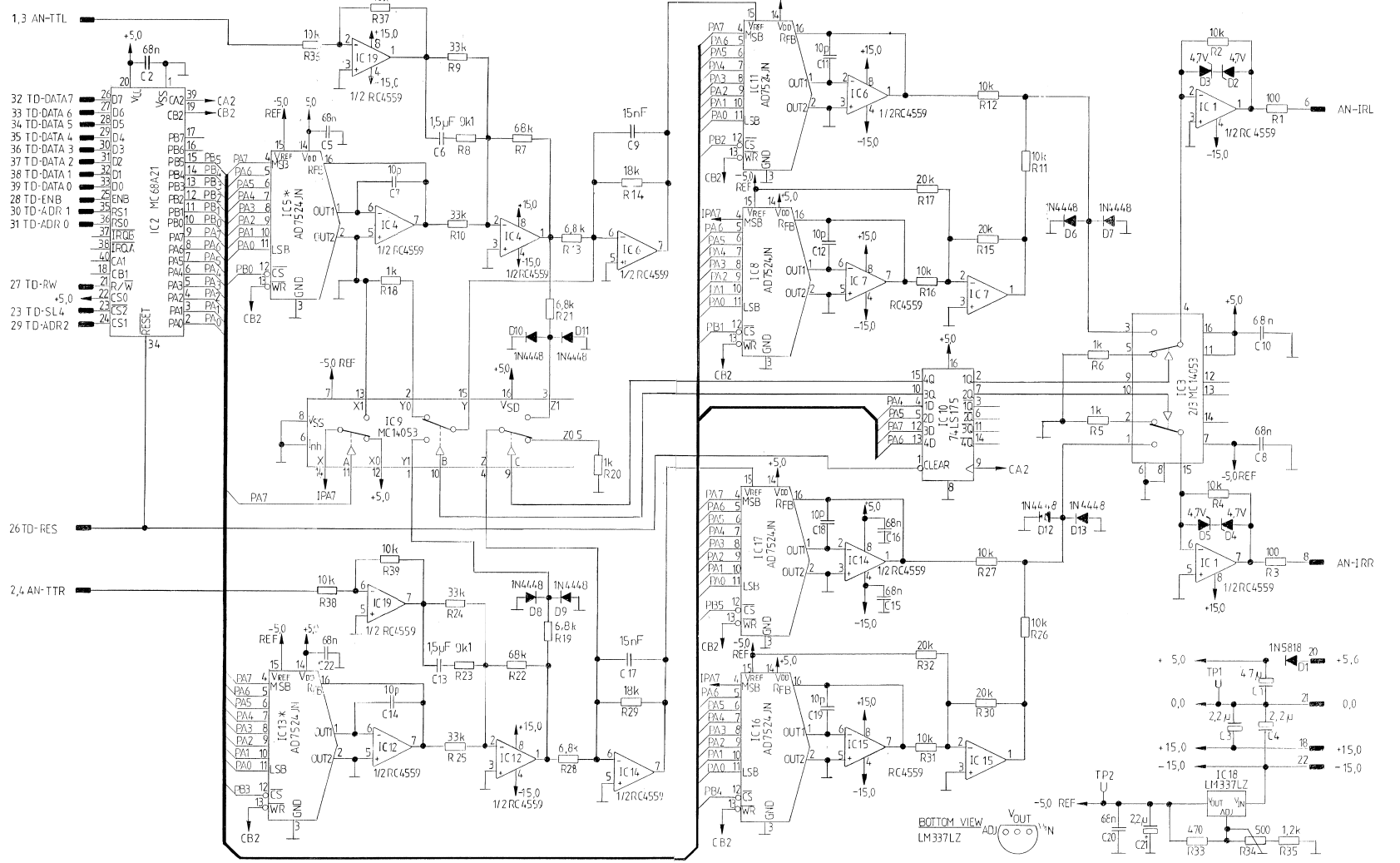
Nummer: 1.820.760-81

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	C....1	59.26.0470	47 uF 6.3V, Sal	
	C....2	59.06.0683	68 nF	
	C....3	59.26.5229	2.2 uF 25V, Sal	
	C....4	59.26.5229	2.2 uF 25V, Sal	
	C....5	59.06.0683	68 nF	
	C....6	59.06.0334	330 nF 10%	
	C....7	59.34.1100	10 pF Ce	
	C....8	59.06.0683	68 nF	
	C....9	59.06.0473	47 nF 10%	
	C....10	59.06.0683	68 nF	
	C....11	59.34.1100	10 pF Ce	
	C....12	59.34.1100	10 pF Ce	
	C....13	59.06.0334	330 nF 10%	
	C....14	59.34.1100	10 pF Ce	
	C....15	59.06.0683	68 nF	
	C....16	59.06.0683	68 nF	
	C....17	59.06.0473	47 nF 10%	
	C....18	59.34.1100	10 pF Ce	
	C....19	59.34.1100	10 pF Ce	
	C....20	59.06.0683	68 nF	
	C....21	59.26.5229	2.2 uF 25V, Sal	
	C....22	59.06.0683	68 nF	
	D....1	50.04.0512	1N 5818 1N 5819	Mot
	D....2	50.04.1123	4.7 V, Z BZX83C 4V7, BZX55C 4V7, ZPD 4.7	ITT,Ses
	D....3	50.04.1123	4.7 V, Z BZX83C 4V7, BZX55C 4V7, ZPD 4.7	ITT,Ses
	D....4	50.04.1123	4.7 V, Z BZX83C 4V7, BZX55C 4V7, ZPD 4.7	ITT,Ses
	D....5	50.04.1123	4.7 V, Z BZX83C 4V7, BZX55C 4V7, ZPD 4.7	ITT,Ses
	D....6	50.04.0125	1N 4448	
	D....7	50.04.0125	1N 4448	
	D....8	50.04.0125	1N 4448	
	D....9	50.04.0125	1N 4448	
	D....10	50.04.0125	1N 4448	
	D....11	50.04.0125	1N 4448	
	D....12	50.04.0125	1N 4448	
	D....13	50.04.0125	1N 4448	
	IC....1	50.09.0107	RC 4559 NB uPC 4559, slew rate min. 1.5 V/us	NEC,Ra
	IC....2	50.16.0106	MC68 A 21P S68 A 21P, F68 A 21P	AMI,Fc,Mot
	IC....3	50.07.0015	MC14053BCP ... 4053 ...	Mot,NS,Ph,RCA,To
	IC....4	50.09.0107	RC 4559 NB uPC 4559, slew rate min. 1.5 V/us	NEC,Ra
	IC....5	50.07.0002	AD 7524 JN MP 7524 JN	ADI,MPS
	IC....6	50.09.0107	RC 4559 NB uPC 4559, slew rate min. 1.5 V/us	NEC,Ra
	IC....7	50.09.0107	RC 4559 NB uPC 4559, slew rate min. 1.5 V/us	NEC,Ra
	IC....8	50.07.0002	AD 7524 JN MP 7524 JN	ADI,MPS
	IC....9	50.07.0015	MC14053BCP ... 4053 ...	Mot,NS,Ph,RCA,To
	IC....10	50.06.0175	74 LS 175 .. 74 LS 175 .	NSC,Sig,TI
	IC....11	50.07.0002	AD 7524 JN MP 7524 JN	ADI,MPS
	IC....12	50.09.0107	RC 4559 NB uPC 4559, slew rate min. 1.5 V/us	NEC,Ra
	IC....13	50.07.0002	AD 7524 JN MP 7524 JN	ADI,MPS
	IC....14	50.09.0107	RC 4559 NB uPC 4559, slew rate min. 1.5 V/us	NEC,Ra
	IC....15	50.09.0107	RC 4559 NB uPC 4559, slew rate min. 1.5 V/us	NEC,Ra
	IC....16	50.07.0002	AD 7524 JN MP 7524 JN	ADI,MPS
	IC....17	50.07.0002	AD 7524 JN MP 7524 JN	ADI,MPS
	IC....18	50.10.0109	LM 337 LZ	NS
	IC....19	50.09.0107	RC 4559 NB uPC 4559, slew rate min. 1.5 V/us	NEC,Ra
	TP....1	54.02.0320	Test point	
	TP....2	54.02.0320	Test point	
	R....1	57.11.4101	100 Ohm	
	R....2	57.11.4103	10 kOhm 5%	
	R....3	57.11.4101	100 Ohm 5%	
	R....4	57.11.4103	10 kOhm 5%	
	R....5	57.11.4102	1 kOhm 5%	
	R....6	57.11.4102	1 kOhm 5%	
	R....7	57.11.4683	68 kOhm 5%	
	R....8	57.11.4153	15 kOhm 5%	
	R....9	57.11.4333	33 kOhm 5%	
	R....10	57.11.4333	33 kOhm 5%	
	R....11	57.11.4103	10 kOhm 5%	
	R....12	57.11.4103	10 kOhm 5%	
	R....13	57.11.4682	6.8 kOhm 5%	
	R....14	57.11.4273	27 kOhm 5%	
	R....15	57.11.3203	20 kOhm 5%	
	R....16	57.11.4103	10 kOhm 5%	
	R....17	57.11.3203	20 kOhm 5%	
	R....18	57.11.4102	1 kOhm 5%	
	R....19	57.11.4682	6.8 kOhm 5%	
	R....20	57.11.4102	1 kOhm 5%	
	R....21	57.11.4682	6.8 kOhm 5%	
	R....22	57.11.4683	68 kOhm 5%	
	R....23	57.11.4153	15 kOhm 5%	
	R....24	57.11.4333	33 kOhm 5%	
	R....25	57.11.4333	33 kOhm 5%	
	R....26	57.11.4103	10 kOhm 5%	
	R....27	57.11.4103	10 kOhm 5%	
	R....28	57.11.4682	6.8 kOhm 5%	
	R....29	57.11.4273	27 kOhm 5%	
	R....30	57.11.3203	20 kOhm 5%	
	R....31	57.11.4103	10 kOhm 5%	
	R....32	57.11.3203	20 kOhm 5%	
	R....33	57.11.4471	470 Ohm 5%	
	R....34	58.05.0501	500 Ohm see note 1	
	R....35	57.11.4122	1.2 kOhm 5%	
	R....36	57.11.4103	10 kOhm 5%	
	R....37	57.11.4103	10 kOhm 5%	
	R....38	57.11.4103	10 kOhm 5%	
	R....39	57.11.4103	10 kOhm 5%	

Note 1 - Potentiometer 500 Ohm

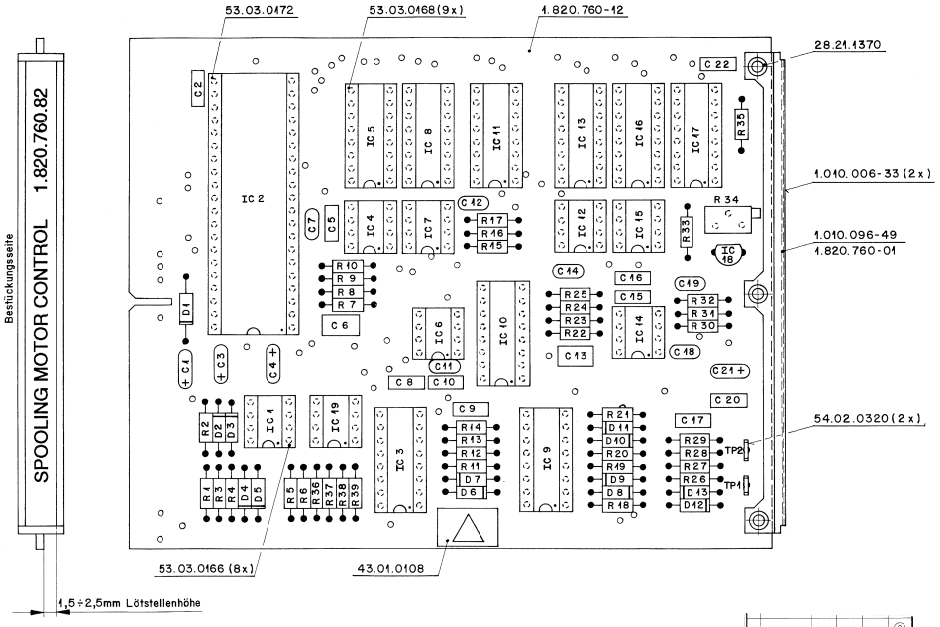
Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
			Bourns nr. 3296 Z - 1 - 501	
			Contelec nr. 183 XZ 501	
			Spectrol nr. 64 Z 501 T 000	
			Murata nr. POT 3105 Z - 1 - 501	
			Ce=Ceramic, Sal=Solid aluminium	
			MANUFACTURER: ADI=Analog Devices Inc., AMI=American Microsystem Inc., Fc=Fairchild, Mot=Motorola, MPS=Micropower Semicond., NEC=Nippon Electric Corp., NS=National Semiconductors, Ph=Philips, Ra=Raytheon, RCA=RCA Corp. of America, Sig=Signetics, TI=Texas Instruments	
			1.820.760.81 SPOOLING MOTOR CONTROLLER ND 86/05/0500	
			END	

SPOOLING MOTOR CONTROL 1.820.760.82



0 28.11.91 HIRT				
	A 820			PAGE 1 OF 1
STUDER	Spooling Motor Control		SC	1.820.760.82

SPOOLING MOTOR CONTROL 1.820.760.82



Änderung					
Ausgabe	28.11.94	A.Ho			0
	Datum	Gez.	Gepr.	Ges.	Index
Kopie für:					

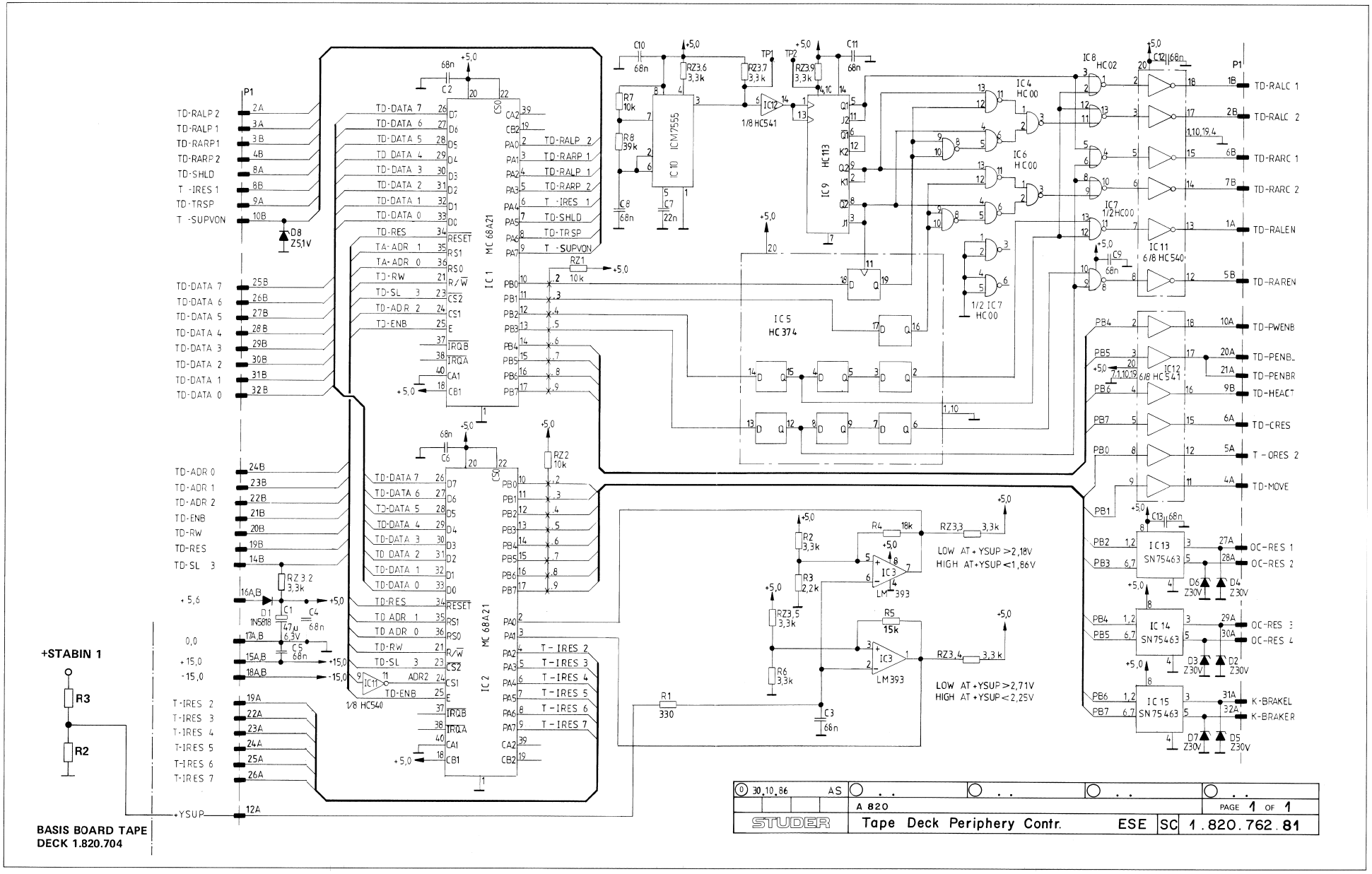
STUDER REGENSDORF ZÜRICH	Benennung: SPOOLING MOTOR CONTROLLER ESE	Nummer: 1.820.760-82

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	C.....1	59.26.0470	47 uF 6.3V, Sal	
	C.....2	59.06.0683	68 nF	
	C.....3	59.26.5229	2.2 uF 25V, Sal	
	C.....4	59.26.5229	2.2 uF 25V, Sal	
	C.....5	59.06.0683	68 nF	
	C.....6	59.06.5155	1.5 uF 5%	
	C.....7	59.34.1100	10 pF Ce	
	C.....8	59.06.0683	68 nF	
	C.....9	59.06.5153	15 nF 5%	
	C....10	59.06.0683	68 nF	
	C....11	59.34.1100	10 pF Ce	
	C....12	59.34.1100	10 pF Ce	
	C....13	59.06.5155	1.5 uF 5%	
	C....14	59.34.1100	10 pF Ce	
	C....15	59.06.0683	68 nF	
	C....16	59.06.0683	68 nF	
	C....17	59.06.5153	15 nF 5%	
	C....18	59.34.1100	10 pF Ce	
	C....19	59.34.1100	10 pF Ce	
	C....20	59.06.0683	68 nF	
	C....21	59.26.5229	2.2 uF 25V, Sal	
	C....22	59.06.0683	68 nF	
	D.....1	50.04.0512	1N 5818 1N 5819	Mot
	D.....2	50.04.1123	4.7 V, Z BZX83C 4V7, BZX55C 4V7, ZPD 4.7	ITT,Ses
	D.....3	50.04.1123	4.7 V, Z BZX83C 4V7, BZX55C 4V7, ZPD 4.7	ITT,Ses
	D.....4	50.04.1123	4.7 V, Z BZX83C 4V7, BZX55C 4V7, ZPD 4.7	ITT,Ses
	D.....5	50.04.1123	4.7 V, Z BZX83C 4V7, BZX55C 4V7, ZPD 4.7	ITT,Ses
	D.....6	50.04.0125	1N 4448	
	D.....7	50.04.0125	1N 4448	
	D.....8	50.04.0125	1N 4448	
	D.....9	50.04.0125	1N 4448	
	D....10	50.04.0125	1N 4448	
	D....11	50.04.0125	1N 4448	
	D....12	50.04.0125	1N 4448	
	D....13	50.04.0125	1N 4448	
	IC....1	50.09.0107	RC 4559 NB uPC 4559, slew rate min. 1.5 V/us	NEC,Ra
	IC....2	50.16.0106	MC68 A 21P S68 A 21P, F68 A 21P	AMI,Fc,Mot
	IC....3	50.07.0015	MC14053BCP ... 4053 ...	Mot,NS,Ph,RCA,To
	IC....4	50.09.0107	RC 4559 NB uPC 4559, slew rate min. 1.5 V/us	NEC,Ra
	IC....5	50.07.0002	AD 7524 JN MP 7524 JN	ADI,MPS
	IC....6	50.09.0107	RC 4559 NB uPC 4559, slew rate min. 1.5 V/us	NEC,Ra
	IC....7	50.09.0107	RC 4559 NB uPC 4559, slew rate min. 1.5 V/us	NEC,Ra
	IC....8	50.07.0002	AD 7524 JN MP 7524 JN	ADI,MPS
	IC....9	50.07.0015	MC14053BCP ... 4053 ...	Mot,NS,Ph,RCA,To
	IC....10	50.06.0175	74 LS 175 .. 74 LS 175 .	NSC,Sig,TI
	IC....11	50.07.0002	AD 7524 JN MP 7524 JN	ADI,MPS
	IC....12	50.09.0107	RC 4559 NB uPC 4559, slew rate min. 1.5 V/us	NEC,Ra
	IC....13	50.07.0002	AD 7524 JN MP 7524 JN	ADI,MPS
	IC....14	50.09.0107	RC 4559 NB uPC 4559, slew rate min. 1.5 V/us	NEC,Ra
	IC....15	50.09.0107	RC 4559 NB uPC 4559, slew rate min. 1.5 V/us	NEC,Ra
	IC....16	50.07.0002	AD 7524 JN MP 7524 JN	ADI,MPS
	IC....17	50.07.0002	AD 7524 JN MP 7524 JN	ADI,MPS
	IC....18	50.10.0109	LM 337 LZ	NS
	IC....19	50.09.0107	RC 4559 NB uPC 4559, slew rate min. 1.5 V/us	NEC,Ra
	R.....1	57.11.3101	100 Ohm 1%	
	R.....2	57.11.3103	10 kOhm 1%	
	R.....3	57.11.3101	100 Ohm 1%	
	R.....4	57.11.3103	10 kOhm 1%	
	R.....5	57.11.3102	1 kOhm 1%	
	R.....6	57.11.3102	1 kOhm 1%	
	R.....7	57.11.3683	68 kOhm 1%	
	R.....8	57.11.3912	9.1 kOhm 1%	
	R.....9	57.11.3333	33 kOhm 1%	
	R....10	57.11.3333	33 kOhm 1%	
	R....11	57.11.3103	10 kOhm 1%	
	R....12	57.11.3103	10 kOhm 1%	
	R....13	57.11.3682	6.8 kOhm 1%	
	R....14	57.11.3183	18 kOhm 1%	
	R....15	57.11.3203	20 kOhm 1%	
	R....16	57.11.3103	10 kOhm 1%	
	R....17	57.11.3203	20 kOhm 1%	
	R....18	57.11.3102	1 kOhm 1%	
	R....19	57.11.3682	6.8 kOhm 1%	
	R....20	57.11.3102	1 kOhm 1%	
	R....21	57.11.3682	6.8 kOhm 1%	
	R....22	57.11.3683	68 kOhm 1%	
	R....23	57.11.3912	9.1 kOhm 1%	
	R....24	57.11.3333	33 kOhm 1%	
	R....25	57.11.3333	33 kOhm 1%	
	R....26	57.11.3103	10 kOhm 1%	
	R....27	57.11.3103	10 kOhm 1%	
	R....28	57.11.3682	6.8 kOhm 1%	
	R....29	57.11.3183	18 kOhm 1%	
	R....30	57.11.3203	20 kOhm 1%	
	R....31	57.11.3103	10 kOhm 1%	
	R....32	57.11.3203	20 kOhm 1%	
	R....33	57.11.3471	470 Ohm 1%	
	R....34	58.05.0501	500 Ohm see note 1	
	R....35	57.11.3122	1.2 kOhm 1%	
	R....36	57.11.3103	10 kOhm 1%	
	R....37	57.11.3103	10 kOhm 1%	
	R....38	57.11.3103	10 kOhm 1%	
	R....39	57.11.3103	10 kOhm 1%	
	TP....1	54.02.0320	Test point	
	TP....2	54.02.0320	Test point	

Note 1 - Potentiometer 500 Ohm

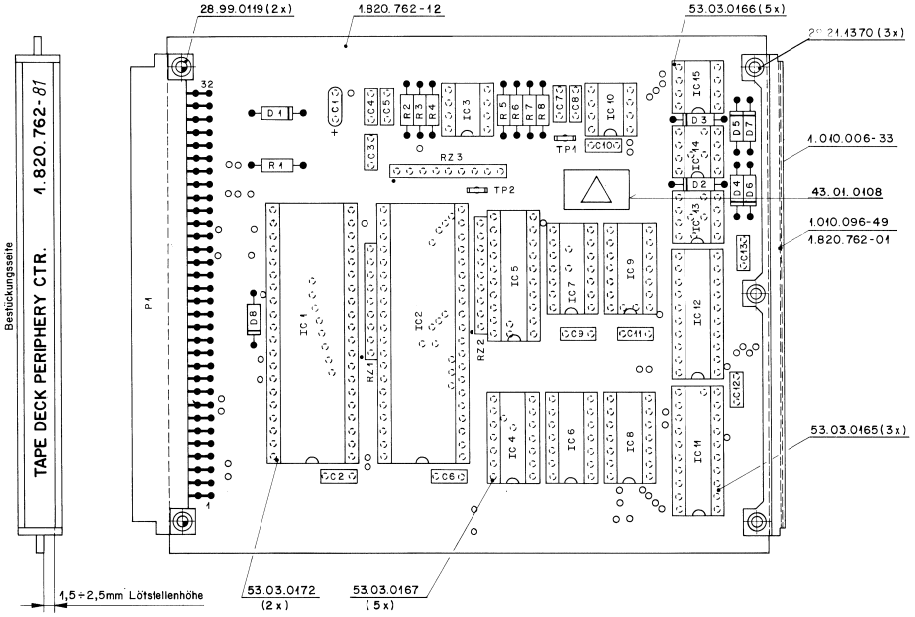
Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
			Bourns nr. 3296 Z - 1 - 501	
			Contelec nr. 183 XZ 501	
			Spectrol nr. 64 Z 501 T 000	
			Murata nr. POT 3105 Z - 1 - 501	
			Ce=Ceramic, Sal=Solid aluminium	
			MANUFACTURER: ADI=Analog Devices Inc., AMI=American Microsystem Inc., fc=Fairchild, Mot=Motorola, MPS=Micropower Semicond., NEC=Nippon Electric Corp., NS=National Semiconductors, Ph=Philips, Ra=Raytheon, RCA=RCA Corp. of America, Sig=Signetics, TI=Texas Instruments	
			1.820.760.82 SPOOLING MOTOR CONTROLLER GP 91/11/2800	
			END	

TAPE DECK PERIPHERY CONTROL 1.820.762.81



0 30.10.86 AS					
A 820					PAGE 1 OF 1
STUDER	Tape Deck Periphery Contr.	ESE	SC	1.820.762.81	

TAPE DECK PERIPHERY CONTROL 1.820.762.81



Ad	..POS..	...REF.No...	DESCRIPTION			MANUFACTURER
	C.....1	59.26.0470	47 uF	20%, 6.3V		
	C.....2	59.06.0683	68 nF	20%		
	C.....3	59.06.0683	68 nF	20%		
	C.....4	59.06.0683	68 nF	20%		
	C.....5	59.06.0683	68 nF	20%		
	C.....6	59.06.0683	68 nF	20%		
	C.....7	59.06.0223	22 nF	10%		
	C.....8	59.06.5683	68 nF	5%		
	C.....9	59.06.0683	68 nF	20%		
	C....10	59.06.0683	68 nF	20%		
	C....11	59.06.0683	68 nF	20%		
	C....12	59.06.0683	68 nF	20%		
	C....13	59.06.0683	68 nF	20%		
	D.....1	50.04.0512	1N 5818	1N 5819		Mot
	D.....2	50.04.1125	30 V Z	ZPD 30		ITT
	D.....3	50.04.1125	30 V Z	ZPD 30		ITT
	D.....4	50.04.1125	30 V Z	ZPD 30		ITT
	D.....5	50.04.1125	30 V Z	ZPD 30		ITT
	D.....6	50.04.1125	30 V Z	ZPD 30		ITT
	D.....7	50.04.1125	30 V Z	ZPD 30		ITT
	D.....8	50.04.1112	5.1 V Z	BZX83C 5V1, BZX55C 5V1, ZPD 5.1		ITT,Ses
	IC....1	50.16.0106	MC68 A 21P	S68 A 21P		AMI,Fc,Mot
	IC....2	50.16.0106	MC68 A 21P	S68 A 21P		AMI,Fc,Mot
	IC....3	50.05.0283	LM 393 N	LM 393 P		NS,TI
	IC....4	50.17.1000	74 HC 00	.. 74 HC 00 .		Mot,NS,TI
	IC....5	50.17.1374	74 HC 374	.. 74 HC 374 .		Mot,NS,TI
	IC....6	50.17.1000	74 HC 00	.. 74 HC 00 .		Mot,NS,TI
	IC....7	50.17.1000	74 HC 00	.. 74 HC 00 .		Mot,NS,TI
	IC....8	50.17.1002	74 HC 02	.. 74 HC 02 .		Mot,NS,TI
	IC....9	50.17.1113	74 HC 113	.. 74 HC 113 .		Mot,NS,TI
	IC...10	50.07.0036	ICM7555IPA			Is,Ma
	IC...11	50.17.1540	74 HC 540	.. 74 HC 540 .		Mot,NS,TI
	IC...12	50.17.1541	74 HC 541	.. 74 HC 541 .		Mot,NS,TI
	IC...13	50.05.0203	SN 75463 P	DS 3613 N		NS,TI
	IC...14	50.05.0203	SN 75463 P	DS 3613 N		NS,TI
	IC...15	50.05.0203	SN 75463 P	DS 3613 N		NS,TI
	P.....1	54.11.2004		2 * 32 contacts, see note 1		
	R.....1	57.11.4331	330 Ohm	10%		
	R.....2	57.11.4332	3.3 kOhm	5%		
	R.....3	57.11.4222	2.2 kOhm	5%		
	R.....4	57.11.4183	18 kOhm	5%		
	R.....5	57.11.4153	15 kOhm	5%		
	R.....6	57.11.4332	3.3 kOhm	5%		
	R.....7	57.11.4103	10 kOhm	5%		
	R.....8	57.11.4393	39 kOhm	5%		
	RZ....1	57.88.4103	10 kOhm	10%	See note 2	
	RZ....2	57.88.4103	10 kOhm	10%	See note 2	
	RZ....3	57.88.4332	3.3 kOhm	10%	See note 3	
	TP....1	54.02.0320	test pin			
	TP....2	54.02.0320	test pin			

Note 1 - Connector: 2 * 32 Euro Print
Burndy PI 64 B 20 P00 F00 Z0
Erni 9722.563.191

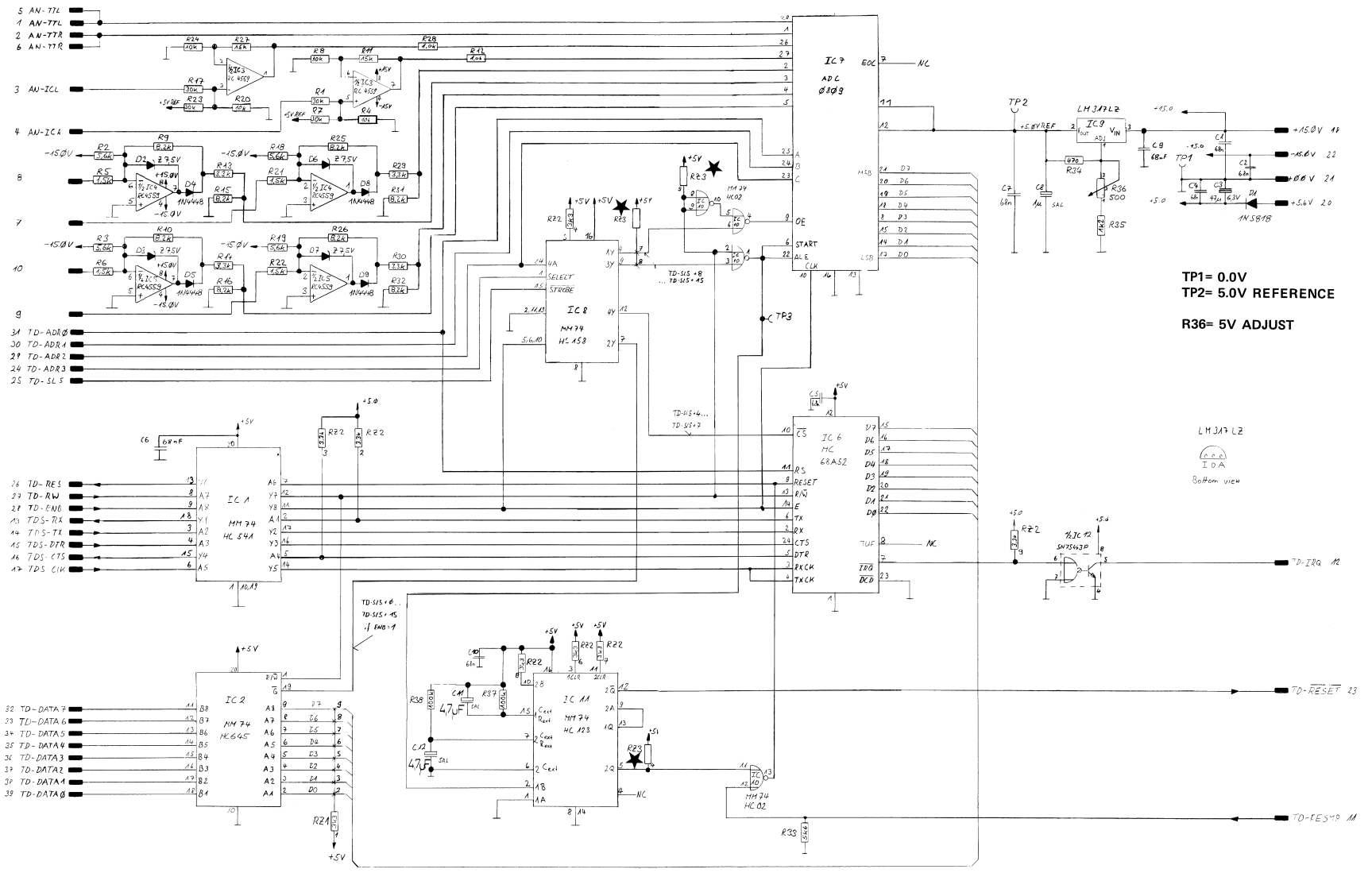
Note 2 - Network: 8 * 10 kOhm, 5%, single line
Bourns 4609 X - 101 - 103
Sprague 256 CJ 103 X 2 PD
Beckmann L - 09 - 1 - R 10 kJ
Matsushita F 9 E 10 k 5%
Tama MRG C 09 X 10 k J

Note 3 - Network: 8 * 3.3 kOhm, 5%, single line
Bourns 4609 X - 101 - 332
Sprague 256 CJ 332 X 2 PD
Beckmann L - 09 - 1 - R 3.3 k J
Matsushita F 9 E 3.3 k 5%
Tama MRG C 09 X 3.3 k J

Manufacturer: AMI=American Microsystem Inc., Fc=Fairchild,
Hi=Hitachi, ITT=Intermetall, Is=Intersil, Ma=Maxim,
Mot=Motorola, NS=National Semiconductors,
Ph=Philips, Ra=Raytheon, RCA=RCA Corporation of America,
Sig=Signetics, TI=Texas Instruments, To=Toshiba.

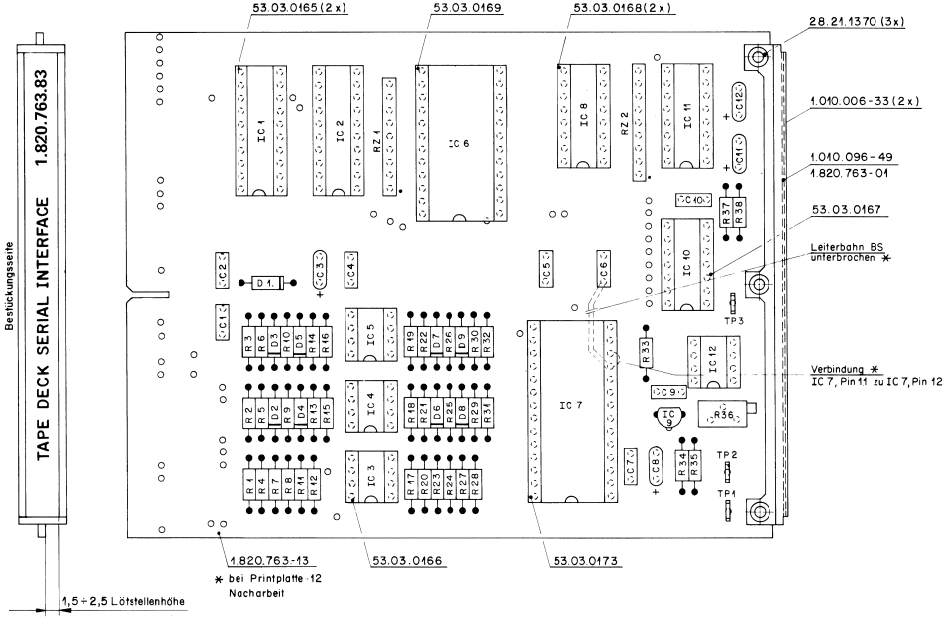
1.820.762.81 TAPE DECK PERIPHERY CONTR. BD 85/10/3000

TAPE DECK SERIAL INTERFACE 1.820.763.83



	30.11.87 IVA	19.09.89 HAESSIG	A820 Logic Section		
STUDER	Tape Deck Serial Interface	ESE	SC	1.820.763.83	PAGE 1 OF 1

TAPE DECK SERIAL INTERFACE 1.820.763.83



Ad	..POS..	...REF.No...	DESCRIPTION			MANUFACTURER
	C.....1	59.06.0683	68 nF	20%		NS,Mot
	C.....2	59.06.0683	68 nF	20%		NS,Mot
	C.....3	59.42.0470	47 uF	20%		Ph
	C.....4	59.06.0683	68 nF	20%		NS,Mot
	C.....5	59.06.0683	68 nF	20%		NS,Mot
	C.....6	59.06.0683	68 nF	20%		NS,Mot
	C.....7	59.06.0683	68 nF	20%		NS,Mot
	C.....8	59.26.9109	1.0 uF	20%		Ph
	C.....9	59.06.0683	68 nF	20%		NS,Mot
	C....10	59.06.0683	68 nF	20%		NS,Mot
	C....11	59.26.1479	4.7 uF	20%		Ph
	C....12	59.26.1479	4.7 uF	20%		Ph
	D.....1	50.04.0512	1N 5818	1N 5819		Mot
	D.....2	50.04.1103	7.5 V	5%, .40W,Z,planar		ITT,Ses
	D.....3	50.04.1103	7.5 V	5%, .40W,Z,planar		ITT,Ses
	D.....4	50.04.0125	1N 4448	SI		Fc,ITT,Ph,Ses,Tf
	D.....5	50.04.0125	1N 4448	SI		Fc,ITT,Ph,Ses,Tf
	D.....6	50.04.1103	7.5 V	5%, .40W,Z,planar		ITT,Ses
	D.....7	50.04.1103	7.5 V	5%, .40W,Z,planar		ITT,Ses
	D.....8	50.04.0125	1N 4448	SI		Fc,ITT,Ph,Ses,Tf
	D.....9	50.04.0125	1N 4448	SI		Fc,ITT,Ph,Ses,Tf
	IC....1	50.17.1541	74HC 541			Mot,NS,Ph,RCA,SGS,TI,To
	IC....2	50.17.1645	74HC 645			Mot,NS,Ph,RCA,SGS,TI,To
	IC....3	50.09.0107	RC4559 NB			NEC,Ra
	IC....4	50.09.0107	RC4559 NB			NEC,Ra
	IC....5	50.09.0107	RC4559 NB			NEC,Ra
	IC....6	50.16.0114	MC68A52P	HD68A52, S68A52		AMI,Hi,Mot
	IC....7	50.19.0101	ADC 0809	M 58990 P		NS
	IC....8	50.17.1158	74HC 158			Mot,Nat,Ph,RCA,SGS,TI,To
	IC....9	50.10.0108	LM317 LZ	V-Reg.		Mot,Nat
	IC...10	50.17.1002	74HC 02			Mot,Nat,Ph,RCA,SGS,TI,To
	IC...11	50.17.1123	74HC 123			Ph,RCA,SGS,To
	IC...12	50.05.0203	SN75463P	DS 3613 N		NS,TI
	R.....1	57.11.3303	30	kOhm	2%	
	R.....2	57.11.3562	5.6	kOhm	5%	
	R.....3	57.11.3562	5.6	kOhm	5%	
	R.....4	57.11.3103	10	kOhm	2%	
	R.....5	57.11.3152	1.5	kOhm	5%	
	R.....6	57.11.3152	1.5	kOhm	5%	
	R.....7	57.11.3303	30	kOhm	2%	
	R.....8	57.11.3103	10	kOhm	2%	
	R.....9	57.11.3822	8.2	kOhm	5%	
	R....10	57.11.3822	8.2	kOhm	5%	
	R....11	57.11.3153	15	kOhm	2%	
	R....12	57.11.3102	1.0	kOhm	5%	
	R....13	57.11.3332	3.3	kOhm	5%	
	R....14	57.11.3332	3.3	kOhm	5%	
	R....15	57.11.3822	8.2	kOhm	5%	
	R....16	57.11.3822	8.2	kOhm	5%	
	R....17	57.11.3303	30	kOhm	2%	
	R....18	57.11.3562	5.6	kOhm	5%	
	R....19	57.11.3562	5.6	kOhm	5%	
	R....20	57.11.3103	10	kOhm	2%	
	R....21	57.11.3152	1.5	kOhm	5%	
	R....22	57.11.3152	1.5	kOhm	5%	
	R....23	57.11.3303	30	kOhm	2%	
	R....24	57.11.3103	10	kOhm	2%	
	R....25	57.11.3822	8.2	kOhm	5%	
	R....26	57.11.3822	8.2	kOhm	5%	
	R....27	57.11.3153	15	kOhm	2%	
	R....28	57.11.3102	1.0	kOhm	5%	
	R....29	57.11.3332	3.3	kOhm	5%	
	R....30	57.11.3332	3.3	kOhm	5%	
	R....31	57.11.3822	8.2	kOhm	5%	
	R....32	57.11.3822	8.2	kOhm	5%	
	R....33	57.11.3562	5.6	kOhm	5%	
	R....34	57.11.3471	470	Ohm	2%	
	R....35	57.11.3122	1.2	kOhm	2%	
	R....36	58.05.0501	500	Ohm	Potentiometer	see note 1
	R....37	57.11.3104	100	kOhm	5%	
	R....38	57.11.3104	100	kOhm	5%	
	RZ....1	57.88.4332	8*3.3kOhm	10%		
	RZ....2	57.88.4332	8*3.3kOhm	10%		
	RZ....3	00.00.0000	not used			
	TP....1	54.02.0320	2.8* 0.8	soldering test pin		
	TP....2	54.02.0320	2.8* 0.8	soldering test pin		
	TP....3	54.02.0320	2.8* 0.8	soldering test pin		

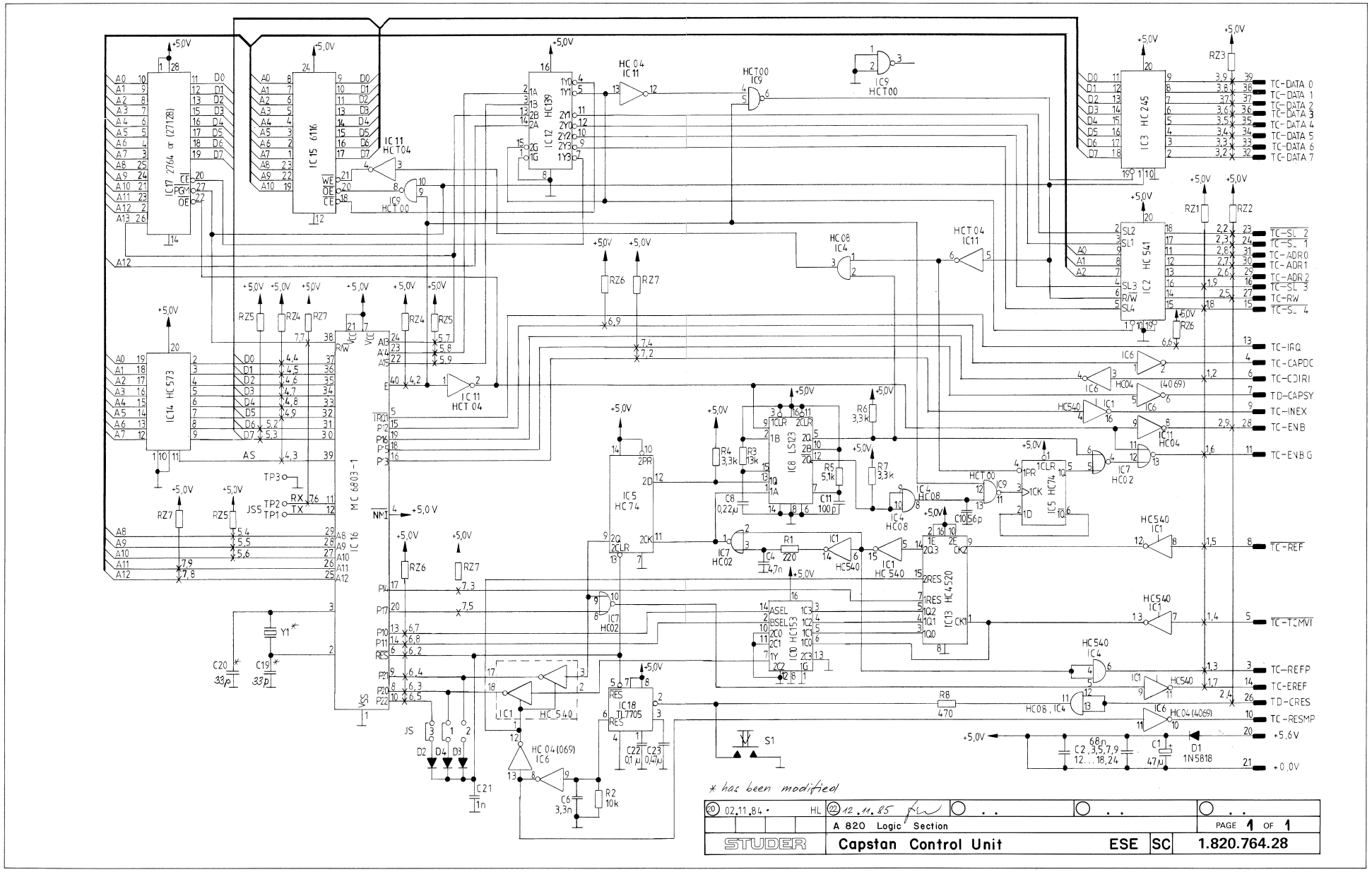
Note 1 - Potentiometer : 500 Ohm, 10%, .5W, PMG

Bourns	3296 Z - 1 - 501
Spectrol	64 Z 501 T 000
Murata	POT 3105 Z - 1 - 501
Contelec	183 XZ 501

Manufacturer: AMI=American Microsystem Inc., Fc=Fairchild,
Hi=Hitachi, Mot=Motorola, Nat=National (Matsushita),
NEC=Nippon Electric Corp., NS=National Semiconductors,
Ph=Philips (incl. Valvo), Ra=Raytheon,
RCA=Radio Corporation of America, Ses=Sescosem,
SGS=SGS/Ates, TI=Texas Instrument, To=Toshiba.

1.820.763.83 TAPE DECK SERIAL IF HRH89/09/1900

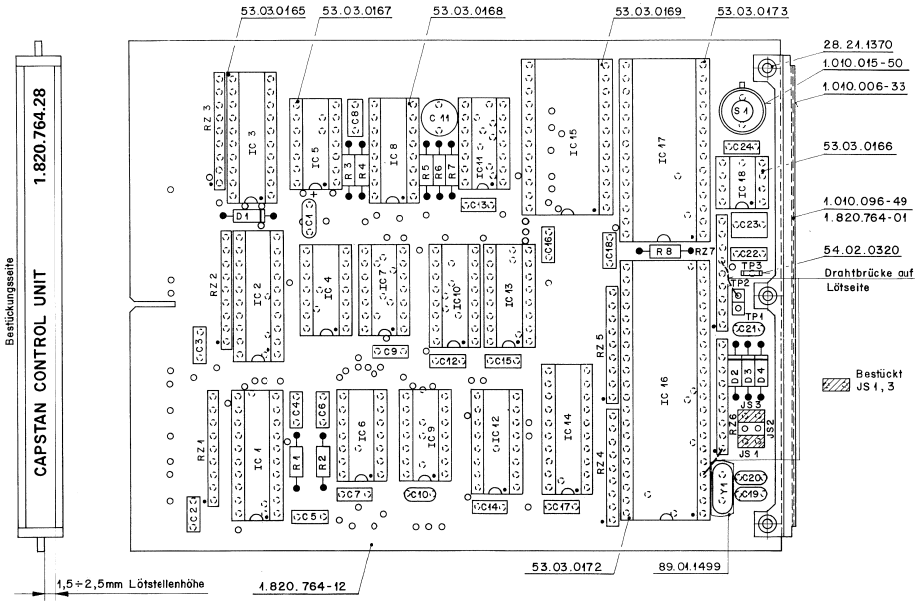
CAPSTAN CONTROL UNIT 1.820.764.28



* has been modified

20 02.11.84 HL	22 12.11.85				
	A 820 Logic Section				PAGE 1 OF 1
STUDER	Capstan Control Unit	ESE	SC	1.820.764.28	

CAPSTAN CONTROL UNIT 1.820.764.28



Schilder 43.01.0108
und 1.101.001.XX
aufgeklebt nach
Fabrikationsmuster

Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
20	C.....1	59.26.0470	47 uF	20%, 6.3V	Ph
20	C.....2	59.06.0683	68 nF	20%	
20	C.....3	59.06.0683	68 nF	20%	
20	C.....4	59.32.2472	4.7 nF	10%	
20	C.....5	59.06.0683	68 nF	20%	
20	C.....6	59.32.2332	3.3 nF	10%	
20	C.....7	59.06.0683	68 nF	20%	
20	C.....8	59.06.5224	220 nF	5%	
20	C.....9	59.06.0683	68 nF	20%	
20	C.....10	59.45.4560	56 pF	10%	
20	C.....11	59.05.1101	100 pF	1%	
20	C.....12	59.06.0683	68 nF	20%	
20	C.....13	59.06.0683	68 nF	20%	
20	C.....14	59.06.0683	68 nF	20%	
20	C.....15	59.06.0683	68 nF	20%	
20	C.....16	59.06.0683	68 nF	20%	
20	C.....17	59.06.0683	68 nF	20%	
20	C.....18	59.06.0683	68 nF	20%	
20	C.....19	59.45.1150	15 pF	5%	
22	C.....19	59.45.2330	33 pF	5%	
20	C.....20	59.45.1150	15 pF	5%	
22	C.....20	59.45.2330	33 pF	5%	
20	C.....21	59.32.4102	1 nF	20%	
20	C.....22	59.06.0104	100 nF	10%	
20	C.....23	59.06.0474	470 nF	10%	
20	C.....24	59.06.0683	68 nF	20%	
20	D.....1	50.04.0512	1N 5818	1N 5819	Mot
20	D.....2	50.04.0125	1N 4448		ITT,Ph,Ses,TI
20	D.....3	50.04.0125	1N 4448		ITT,Ph,Ses,TI
20	D.....4	50.04.0125	1N 4448		ITT,Ph,Ses,TI
20	IC....1	50.17.1540	74 HC 540		Ph,Mot,NS,RCA,To,TI
20	IC....2	50.17.1541	74 HC 541		Ph,Mot,NS,RCA,To,TI
20	IC....3	50.17.1245	74 HC 245		Mot,Ph,RCA,To,TI
20	IC....4	50.17.1008	74 HC 08		Ph,Mot,NS,RCA,To,TI
20	IC....5	50.17.1074	74 HC 74		Ph,Mot,NS,RCA,To,TI
20	IC....6	50.17.1004	74 HC 04		Ph,Mot,NS,RCA,To,TI
20	IC....7	50.17.1002	74 HC 02		Ph,Mot,NS,RCA,To,TI
20	IC....8	50.06.0123	74 LS 123		Mot,TI
20	IC....9	50.17.1000	74 HC 00		Ph,Mot,NS,RCA,To,TI
20	IC....10	50.17.1153	74 HC 153		Mot,Ph,RCA,To,TI
20	IC....11	50.17.0004	74 HCT 04		Ph,NS,RCA
20	IC....12	50.17.1139	74 HC 139		Ph,Mot,NS,RCA,SGS,To,TI
20	IC....13	50.07.0520	4520 BPC	HEF 4520	Ph,Fc
20	IC....14	50.17.1573	74 HC 573		Ph,Mot,NS,RCA,To,TI
20	IC....15	50.14.0107	HM6116LP-3	MSM5128-15	Hi,OKI
20	IC....16	50.16.0107	MC6803G-1	HD6803P-L	Hi,Mot
20	IC....17	00.00.0000	see note 1		
20	IC....17	1.820.994.20	Software 13/85, Capstan Control		St
21	IC....17	1.820.994.21	Software 35/85, Capstan Control		St
23	IC....17	1.820.994.22	Software 36/86, Capstan Control		St
24	IC....17	1.820.994.23	Software 17/87, Capstan Control		St
25	IC....17	1.820.994.24	Software 22/88, Capstan Control		St
26	IC....17	1.820.994.25	Software 35/88, Capstan Control		St
27	IC....17	1.820.994.26	Software 37/89, Capstan Control		St
28	IC....17	1.820.994.27	Software 10/92, Capstan Control		St
20	IC....18	50.11.0122	TL770SACP		TI
20	JS....1	00.00.0000	see note 2		
20	JS....2	00.00.0000	see note 2		
20	JS....3	00.00.0000	see note 2		
20	TP....1	00.00.0000	see note 2		
20	TP....2	00.00.0000	see note 2		
20	TP....3	54.02.0320	Testpoint		
20	R.....1	57.11.4221	220 Ohm	2%	
20	R.....2	57.11.4103	10 kOhm	10%	
20	R.....3	57.11.3133	13 kOhm	2%	
20	R.....4	57.11.4332	3.3 kOhm	10%	
20	R.....5	57.11.3512	5.1 kOhm	2%	
20	R.....6	57.11.4332	3.3 kOhm	10%	
20	R.....7	57.11.4332	3.3 kOhm	10%	
20	R.....8	57.11.4471	470 Ohm	10%	
20	RZ....1	57.88.4103	Network 8 * 10 kOhm (old part 1.010.014.57)		
20	RZ....2	57.88.4103	Network 8 * 10 kOhm (old part 1.010.014.57)		
20	RZ....3	57.88.4103	Network 8 * 10 kOhm (old part 1.010.014.57)		
20	RZ....4	57.88.4332	Network 8 * 3.3 kOhm		
20	RZ....5	57.88.4332	Network 8 * 3.3 kOhm		
20	RZ....6	57.88.4103	Network 8 * 10 kOhm (old part 1.010.014.57)		
20	RZ....7	57.88.4332	Network 8 * 3.3 kOhm		
20	S.....1	55.03.0122	Switch impuls, see note 3		
20	Y.....1	89.01.0553	4.9152 MHz, TD18		
22	Y.....1	89.01.0560	4.9152 MHz, +- 20 ppm.		

(21) 12.08.85 software 35/85 (EPROM 16k * 8)

(22) 12.11.85 Improved quartz accuracy.

(23) 18.09.86 Software 36/86

(24) 24.04.87 Software 17/87

(25) 10.06.88 Software 22/88

(26) 31.08.88 Software 35/88

(27) 15.03.89 Software 37/89

(28) 28.02.92 Software 10/92

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
			for Software 35/85 and future versions:	
			Studer	50.14.0125
			Fujitsu	MBM 27128-30
			Hitachi	HN 4827128 G-25/HN 4827128 G-30
			Intel	27128 250ns
		Note 2 - Contact pin:	Studer	54.01.0020
			Berg	75 160-102-36
			Philips	2422 025 89303
		Bridge:	Studer	54.01.0021
			Berg	65 474-001
			Philips	2422 024 88003
		Note 3 - Switch impuls:	Chicago Switch	34-550-001

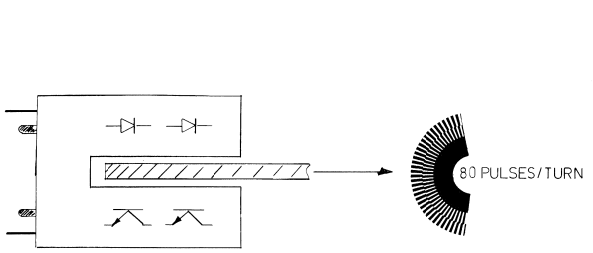
MANUFACTURER: Fc=Fairchild, ITT=Intermetall, Hi=Hitachi,
Mot=Motorola, NS=National Semiconductors,
OKI=OKI Semiconductors, Ph=Philips,
RCA=Radio Corporation of America, Ses=Sescosem,
SGS=SGS-Ates, St=Studer, TI=Texas Instruments,
To=Toshiba.

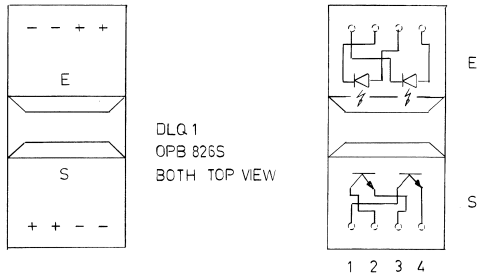
1.820.764.00	CAPSTAN CONTROL UNIT	WE 85/06/1000
1.820.764.00	CAPSTAN CONTROL UNIT	WE 85/06/1020
1.820.764.00	CAPSTAN CONTROL UNIT	WE 85/08/1221
1.820.764.00	CAPSTAN CONTROL UNIT	PB 85/11/1222
1.820.764.00	CAPSTAN CONTROL UNIT	BD 86/09/1823
1.820.764.00	CAPSTAN CONTROL UNIT	BD 87/04/2424
1.820.764.00	CAPSTAN CONTROL UNIT	BD 88/06/1025
1.820.764.00	CAPSTAN CONTROL UNIT	BD 88/08/3126
1.820.764.00	CAPSTAN CONTROL UNIT	BD 89/03/1527
1.820.764.00	CAPSTAN CONTROL UNIT	Wth92/02/2828

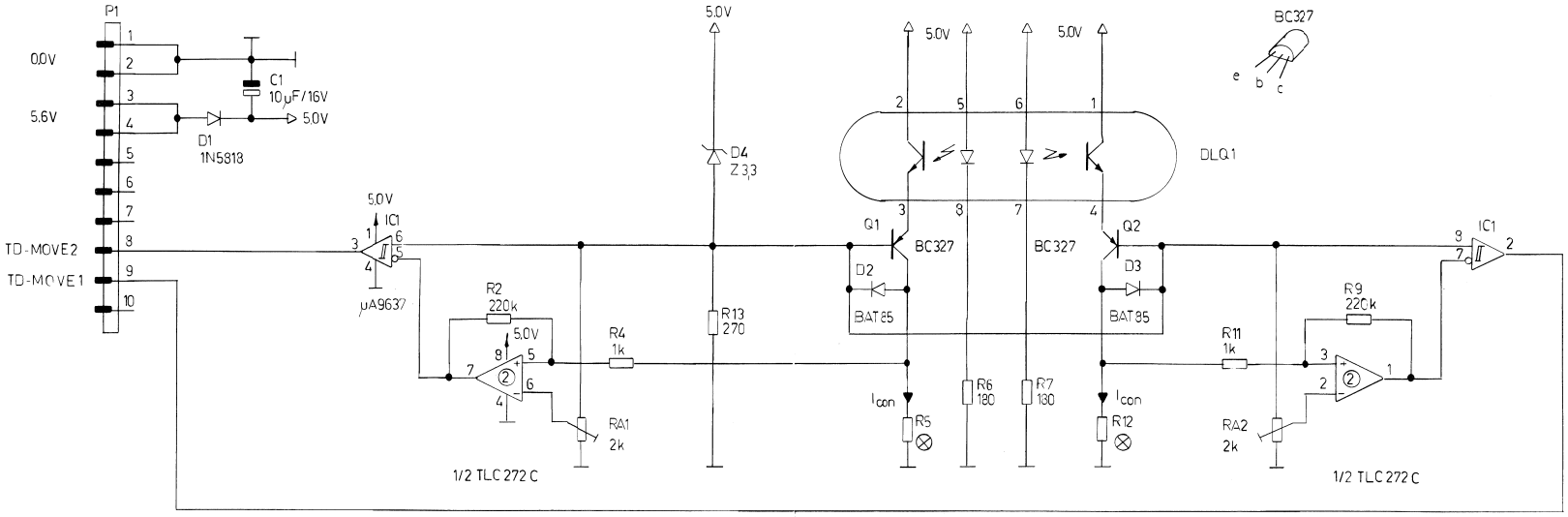
Note 1 - IC 17, for Software 13/85 only:

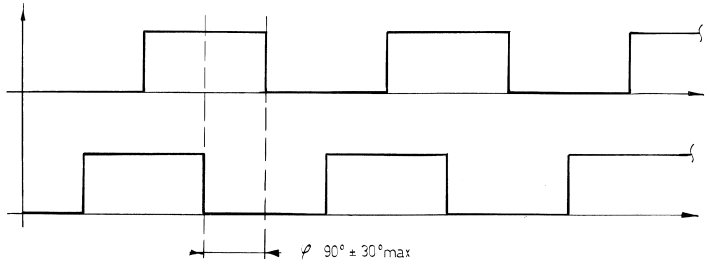
Studer	50.14.0113
Hitachi	HN 482764 G-3
Intel	D 2764-3
SGS/Ates	M 2764 F 1
Texas Instruments	TMS 2764-25 JL

MOVE SENSOR 1.820.770.82







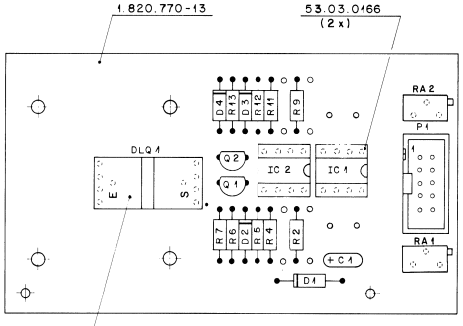


⊗ R5/R12 factory adjusted according to following table
coupling measured without tacho disk
I_{con} measurement R2/R4 replaced by digital miliamperemeter

I_{con}	250µA	360µA	520µA	720µA	1,07mA	1,55mA	2,2mA	3,1mA	4,6mA	6,5mA	10mA
R2/R4	7k5	5k1	3k6	2k4	1k6	1k2	820	560	390	270	

⓪ 15.11.89 ZOLLER	. .	. .	. .	. .
	A 820			PAGE 1 OF 1
STUDER	MOVE SENSOR		SC	1.820.770.82

MOVE SENSOR 1.820.770.82



DLQ1 satt auflegend
auf Bestückungsseite
montiert.

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	C.....1	59.26.2100	10 uF 20%, 16V, Sal	
	C.....2	00.00.0000	not used	
	C.....3	00.00.0000	not used	
	D.....1	50.04.0512	1N 5818 1N 5913	Mot
	D.....2	50.04.0127	BAT 42 BAT 85, BAS 40-02,	Ph,Sie,Tho
	D.....3	50.04.0127	BAT 42 BAT 85, BAS 40-02,	Ph,Sie,Tho
	D.....4	50.04.1107	3,3V Z BZX 55-C3V3	ITT,Mot,Ph,Tf,Tho
	DLQ...1	50.99.0166	OPB 826	Op
	IC....1	50.15.0114	uA9637ACP 9637 ATC	Fc,TI
	IC....2	50.05.0286	LM 358 N LM 358 P	NS,Mot,SGS,Ti
01	IC....2	50.09.0122	TLC 272 C TS 272 CN	SGS,Ti
	P.....1	54.14.2001	10 cont. see note 1	
	Q.....1	50.03.0351	BC 327-25	ITT,Ph,Sie
	Q.....2	50.03.0351	BC 327-25	ITT,Ph,Sie
	R.....1	00.00.0000	not used	
	R.....2	57.11.3224	220 kOhm 1%	
	R.....3	00.00.0000	not used	
	R.....4	57.11.3102	1 kOhm 1%	
	R.....5	00.00.0000	factory adjusted	
	R.....6	57.11.3181	180 Ohm 1%	
	R.....7	57.11.3181	180 Ohm 1%	
	R.....8	00.00.0000	not used	
	R.....9	57.11.3224	220 kOhm 1%	
	R....10	00.00.0000	not used	
	R....11	57.11.3102	1 kOhm 1%	
	R....12	00.00.0000	factory adjusted	
	R....13	57.11.3271	270 Ohm 1%	
	RA....1	58.05.0202	2 kOhm 10% multi turn	
	RA....2	58.05.0202	2 kOhm 10% multi turn	

(01) 11.01.90 Printout error

Note 1 - Connector 10 contacts:
Yamaichi nr. FAP-10-08-405S
Burndy nr. BPH 9 B10 B00 GS
3M nr. 7610-6002 VZ

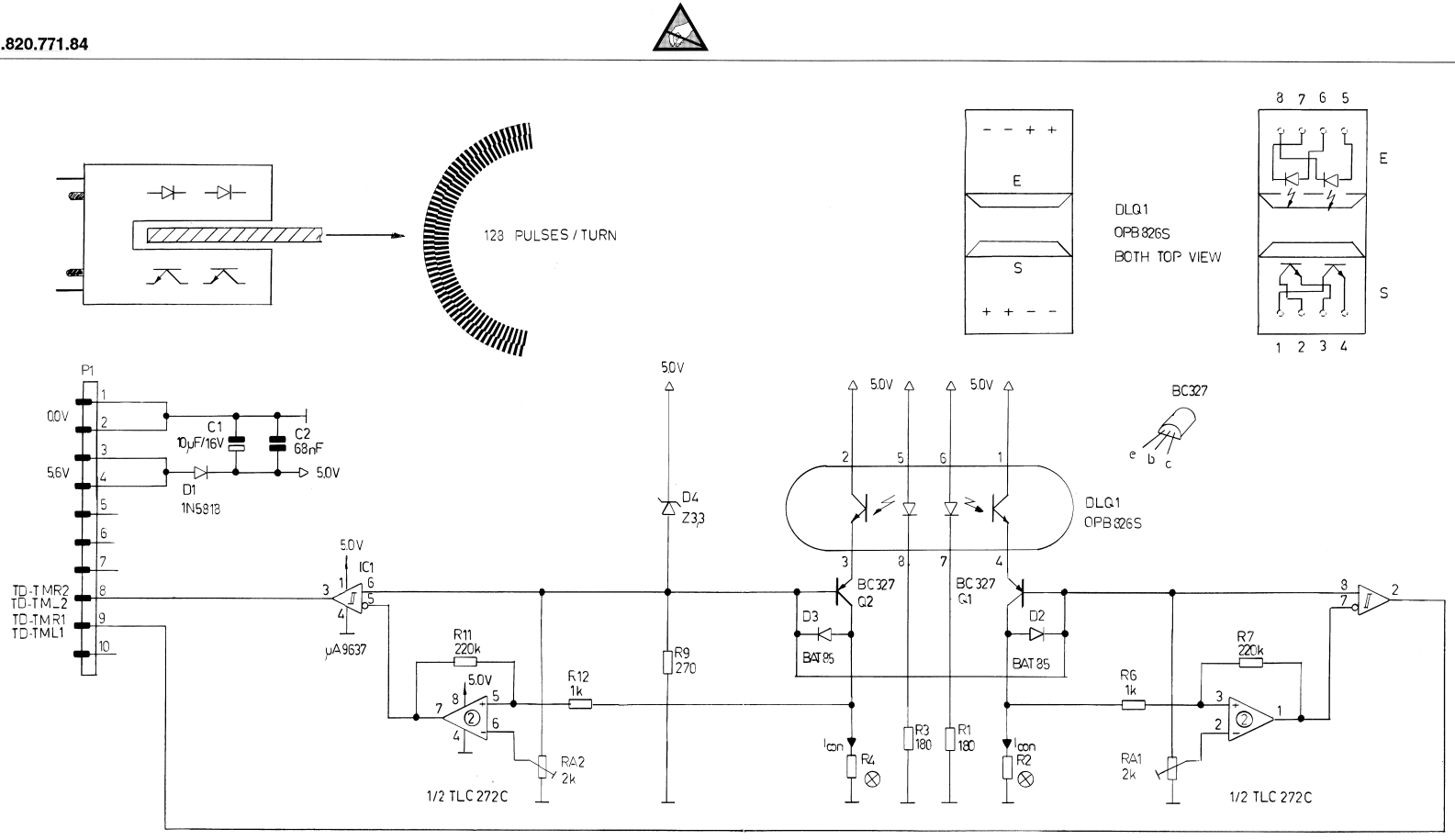
El=Electrolytic, Sal=Solid alumisium

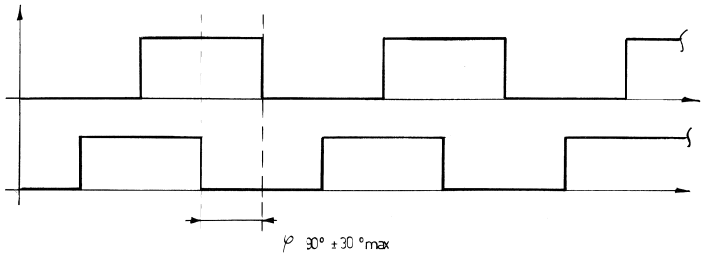
MANUFACTURER: Fc=Fairchild, ITT=Intermetall, Mot=Motorola, NS=National Semiconductor, Op=Optron, Ph=Philips, SGS=SGS/Ates, Sie=Siemens, Tf=Telefunken, Tho=Thomson, TI=Texas Instrument.

1.820.770.82 MOVE SENSOR PZ 89/11/1500

1.820.770.82 MOVE SENSOR PZ 90/01/1101

MOTOR TACHO 1.820.771.84



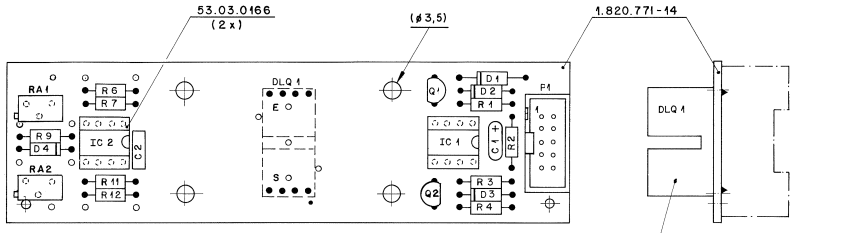


⊗ R2 / R4 factory adjusted according to following table
coupling measured without tacho disk
I_{con} measurement R2/R4 replaced by digital miliamperemeter

I_{con}	250µA	360µA	520µA	720µA	1,07mA	1,55mA	2,2mA	3,1mA	4,6mA	6,5mA	10mA
R2/R4	7k5	5k1	3k6	2k4	1k6	1k2	820	560	390	270	

⓪ 15.11.89 ZOLLER				
	A 820			PAGE 1 OF 1
STUDER	MOTOR TACHO		SC	1.820.771.84

MOTOR TACHO 1.820.771.84



DLQ1 satt aufliegend
auf Lötseite montiert.
Nach der Montage, beschichtet
mit Epoxid - Lack nach BV 682.
Hierbei 4 Bohrungen ø3,5 abgedeckt
mit Klebband (müssen frei bleiben
von Lack).

43.01.0108 und
Schild 1.820.771-01
aufgeklebt nach Fabrikationsmuster.

Änderung	Ausgabe	Datum	Gez.	Gepr.	Ges.	Index
						3
						2
						1
	10.3.92					0

Kopie für:

STUDER REGENSDORF ZÜRICH | Benennung: MOTOR TACHO BOARD ESE | Nummer: 1.820.771-84

Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	C.....1	59.26.2100	10 uF	20%, 16V, Sal	
	C.....2	59.06.0683	68 nF	10%, 63V, PETP	
	C.....3	00.00.0000	not used		
	C.....4	00.00.0000	not used		
	D.....1	50.04.0512	1N 5818	1N 5918	Mot
	D.....2	50.04.0127	BAT 42	BAT 85, BAS 40-02,	Ph,Sie,Tho
	D.....3	50.04.0127	BAT 42	BAT 85, BAS 40-02,	Ph,Sie,Tho
	D.....4	50.04.1107	3,3V Z	BZX 55-C3V3	ITT,Mot,Ph,Tf,Tho
	DLQ...1	50.99.0166	OPB 826		Op
	IC....1	50.15.0114	uA9637ACP	9637 ATC	Fc,TI
	IC....2	50.05.0286	LM 358 N	LM 358 P	NS,Mot,SGS,Ti
01	IC....2	50.09.0122	TLC 272 C	TS 272 CN	SGS,Ti
	P.....1	54.14.2001	10 cont.	see note 1	
	Q.....1	50.03.0351	BC 327-25		ITT,Ph,Sie
	Q.....2	50.03.0351	BC 327-25		ITT,Ph,Sie
	R.....1	57.11.3181	180 Ohm	1%	
	R.....2	00.00.0000	factory	adjusted	
	R.....3	57.11.3181	180 Ohm	1%	
	R.....4	00.00.0000	factory	adjusted	
	R.....5	00.00.0000	not used	1%	
	R.....6	57.11.3102	1 kOhm	1%	
	R.....7	57.11.3224	220 kOhm	1%	
	R.....8	00.00.0000	not used		
	R.....9	57.11.3271	270 Ohm	1%	
	R....10	00.00.0000	not used		
	R....11	57.11.3224	220 kOhm	1%	
	R....12	57.11.3102	1 kOhm	1%	
	R....13	00.00.0000	not used		
	RA....1	58.05.0202	2 kOhm	10%, multi turn	
	RA....2	58.05.0202	2 kOhm	10%, multi turn	

(01) 11.01.90 Printout error

Note 1 - Connector 10 contacts:
Yamaichi nr. FAP-10-08-40SS
Burndy nr. BPH 9 B10 B00 GS
3M nr. 7610-6002 VZ

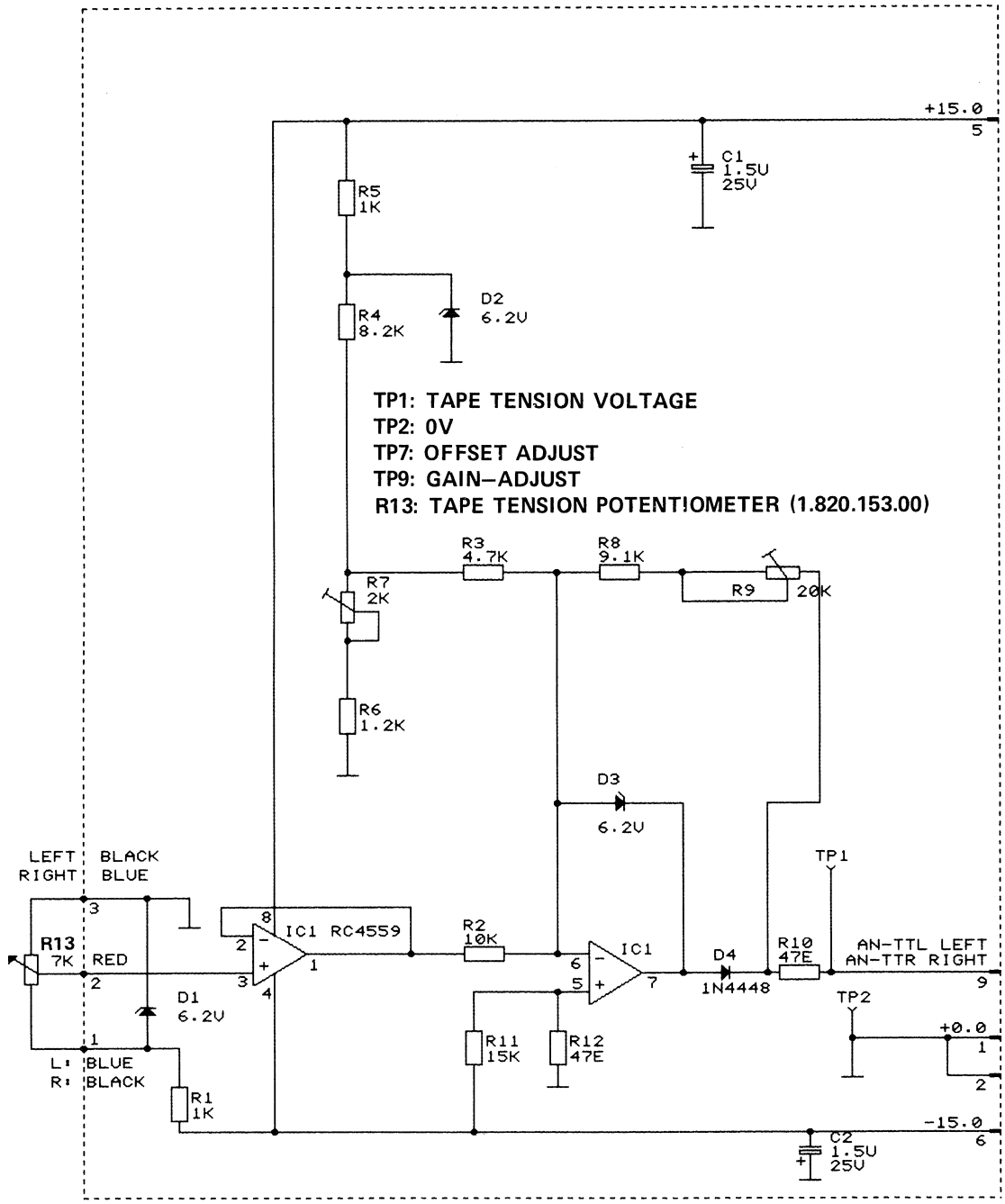
El=Electrolytic, Sal=Solid aluminium

MANUFACTURER: Fc=Fairchild, ITT=Intermetall, Mot=Motorola, NS=National Semiconductor, Op=Optron, Ph=Philips, SGS=SGS/Ates, Sie=Siemens, Tf=Telefunken, Tho=Thomson, TI=Texas Instrument.

1.820.771.83 MOTOR TACHO PZ 89/11/1500

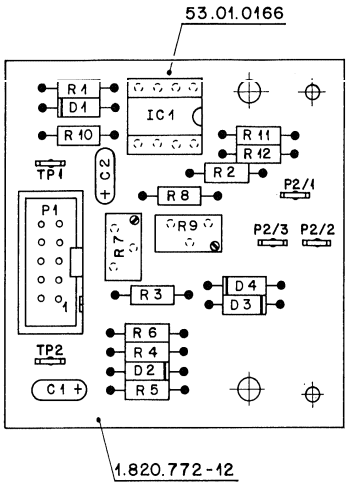
1.820.771.83 MOTOR TACHO PZ 90/01/1101

TAPE TENSION SENSOR PCB 1.820.772.81



17.10.1988 IVA			
	A820 TAPE TRANSPORT SECTION		PAGE 1 OF 1
STUDER	TAPE TENSION SENSOR PCB	SC	1.820.772.81

TAPE TENSION SENSOR PCB 1.820.772.81



Schild 1.820.772-01
aufgeklebt nach Fabrikationsmuster.

Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	C.....1	59.26.5159	1.5 uF	25V, Sal	Ph
	C.....2	59.26.5159	1.5 uF	25V, Sal	Ph
	D.....1	50.04.1118	6.2 V Z	BZX 55 C6V2	ITT,Mot,Ph,Tf,SGS,Tho
	D.....2	50.04.1102	6.8 V Z	BZX 55 C6V8	ITT,Mot,Ph,Tf,SGS,Tho
	D.....3	50.04.1118	6.2 V Z	BZX 55 C6V2	ITT,Mot,Ph,Tf,SGS,Tho
	D.....4	50.04.0125	1 N 4448		Fc,ITT,Ph,SES,Tf
	IC....1	50.09.0107	RC 4559 NB	uPC 4559	NEC,Ra
	P.....1	54.14.2001	10 cont.	see note 1	
	P.....2	54.02.0320			
	P.....2	54.02.0320			
	P.....2	54.02.0320			
	R.....1	57.11.4102	1 kOhm		
	R.....2	57.11.4103	10 kOhm		
	R.....3	57.11.4472	4.7 kOhm		
	R.....4	57.11.4822	8.2 kOhm		
	R.....5	57.11.4102	1 kOhm		
	R.....6	57.11.4122	1.2 kOhm		
	R.....7	58.05.1202	2 kOhm	see note 2	
	R.....8	57.11.3912	9.1 kOhm		
	R.....9	58.05.1203	20 kOhm	see note 3	
	R....10	57.11.4470	47 Ohm		
	R....11	57.11.3153	15 kOhm		
	R....12	57.11.3470	47 Ohm		
	TP....1	54.02.0320	Testpoint		
	TP....2	54.02.0320	Testpoint		

Note 1 - Connector

Burndy	BPH 7 B 10 B00 GS
Yamaichi	FAP-10-08//4

Note 2 - 2 kOhm Potentiometer, linear

Allan Bradley	E 2B 202
Bourns	386 F-1-202
Spectrol	63 M 202 T010

Note 3 - 20 kOhm Potentiometer, linear

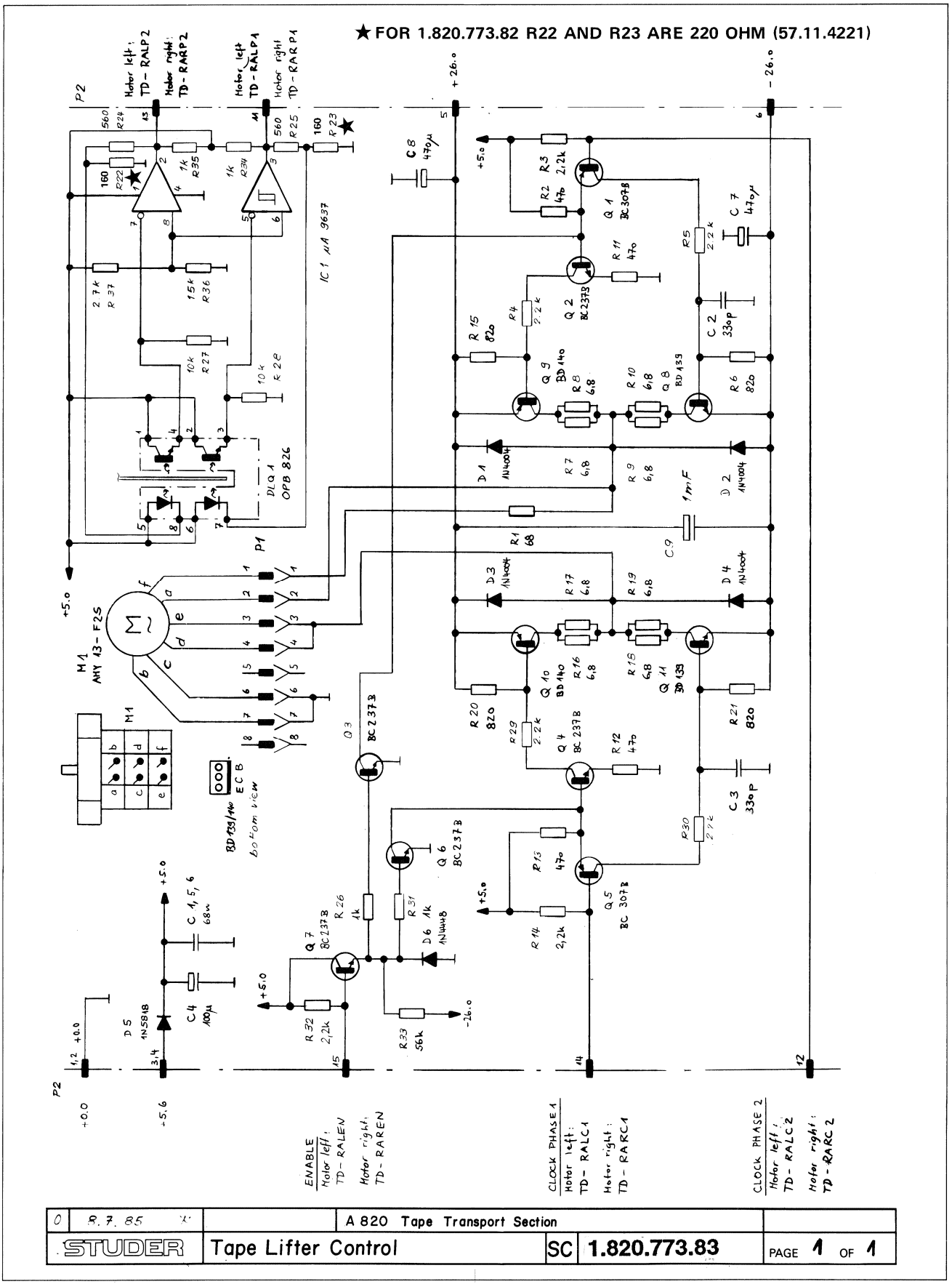
Allan Bradley	E 2B 203
Bourns	386 F-1-203
Spectrol	63 M 203 T010

Sal = Solid Aluminium.

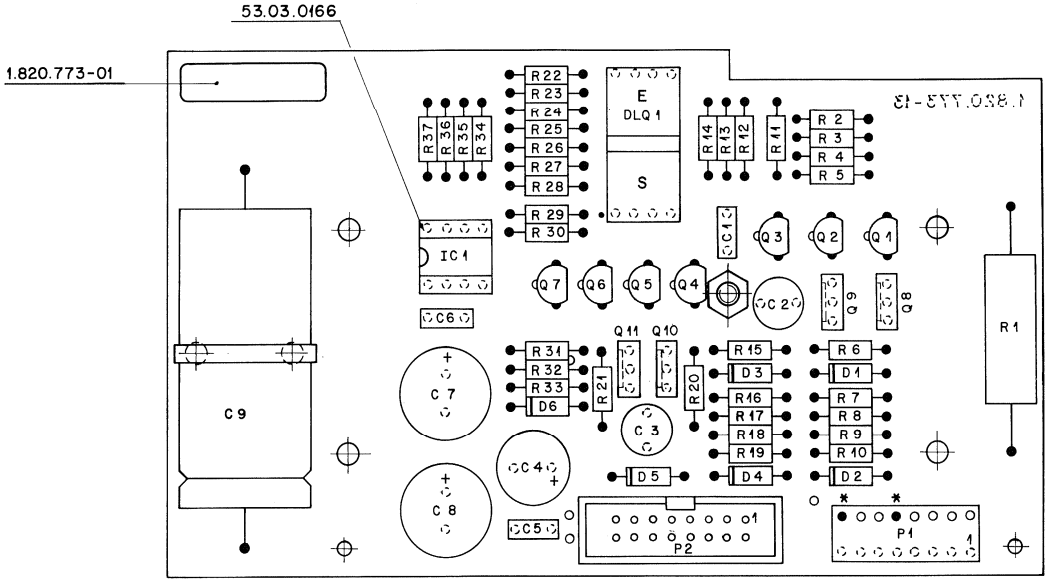
MANUFACTURER: Fc=Fairchild, ITT=Intermetall, Mot=Motorola, NEC= Nippon Electric Corp., Ph=Philips, Ra=Raytheon, SGS=SGS/Ates, Ses=Secosem, Tho=Thomson, Tf=Telefunken.

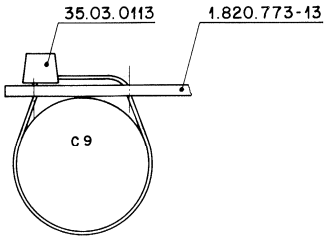
1.820.772.81 TAPE TENSION SENSOR BD 88/11/2900

TAPE LIFTER CONTROL 1.820.773.83



TAPE LIFTER CONTROL 1.820.773.83





* Codierung : Schaltdraht 64.01.0108 ⌀ 0,8 x 8mm
(muss 1mm vorstehen)

Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	C.....1	59.06.0683	68 nF	10%, 63V, PETP	
	C.....2	59.05.2331	330 pF	2.5%, 63V, PP	
	C.....3	59.05.2331	330 pF	2.5%, 63V, PP	
	C.....4	59.22.4101	100 uF	10%, 16V, El	
	C.....5	59.06.0683	68 nF	10%, 63V, PETP	
	C.....6	59.06.0683	68 nF	10%, 63V, PETP	
	C.....7	59.22.6471	470 uF	10%, 40V, El	
	C.....8	59.22.6471	470 uF	10%, 40V, El	
	C.....9	59.25.6102	1000 uF	63V, El	
	D.....1	50.04.0122	1N 4001	... 1N 4004	Mot
	D.....2	50.04.0122	1N 4001	... 1N 4004	Mot
	D.....3	50.04.0122	1N 4001	... 1N 4004	Mot
	D.....4	50.04.0122	1N 4001	... 1N 4004	Mot
	D.....5	50.04.0512	1N 5818	1N 5819	Mot
	D.....6	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	DLQ...1	50.99.0166	OPB 826S		Op
	IC....1	50.15.0114	uA 9637A		TI,Fc
	P.....1	54.01.0289		see note 1	
	P.....2	54.14.2002		see note 2	
	Q.....1	50.03.0515	BC 307 B	BC 251 B, BC 557 B	ITT,Mot,Ph
	Q.....2	50.03.0436	BC 237 B	BC 547 B, BC 550 B	ITT,Mot,Ph,Sie
	Q.....3	50.03.0436	BC 237 B	BC 547 B, BC 550 B	ITT,Mot,Ph,Sie
	Q.....4	50.03.0436	BC 237 B	BC 547 B, BC 550 B	ITT,Mot,Ph,Sie
	Q.....5	50.03.0515	BC 307 B	BC 251 B, BC 557 B	ITT,Mot,Ph
	Q.....6	50.03.0436	BC 237 B	BC 547 B, BC 550 B	ITT,Mot,Ph,Sie
	Q.....7	50.03.0436	BC 237 B	BC 547 B, BC 550 B	ITT,Mot,Ph,Sie
	Q.....8	50.03.0451	BD 139-10		Mot,Ph,SGS,Tf,To
	Q.....9	50.03.0452	BD 140-10		Mot,Ph,SGS,Tf,To
	Q....10	50.03.0452	BD 140-10		Mot,Ph,SGS,Tf,To
	Q....11	50.03.0451	BD 139-10		Mot,Ph,SGS,Tf,To
	R.....1	57.56.5680	68 Ohm	10%, 4 W	
	R.....2	57.11.4471	470 Ohm	2%	
	R.....3	57.11.4222	2.2 kOhm	2%	
	R.....4	57.11.4222	2.2 kOhm	2%	
	R.....5	57.11.4222	2.2 kOhm	2%	
	R.....6	57.11.4821	820 Ohm	2%	
	R.....7	57.11.4689	6.8 Ohm	5%	
	R.....8	57.11.4689	6.8 Ohm	5%	
	R.....9	57.11.4689	6.8 Ohm	5%	
	R....10	57.11.4689	6.8 Ohm	5%	

Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	R....11	57.11.4471	470 Ohm	2%	
	R....12	57.11.4471	470 Ohm	2%	
	R....13	57.11.4471	470 Ohm	2%	
	R....14	57.11.4222	2.2 kOhm	2%	
	R....15	57.11.4821	820 Ohm	2%	
	R....16	57.11.4689	6.8 Ohm	5%	
	R....17	57.11.4689	6.8 Ohm	5%	
	R....18	57.11.4689	6.8 Ohm	5%	
	R....19	57.11.4689	6.8 Ohm	5%	
	R....20	57.11.4821	820 Ohm	2%	
	R....21	57.11.4821	820 Ohm	2%	
	R....22	57.11.4161	160 Ohm	2%	
	R....23	57.11.4161	160 Ohm	2%	
	R....24	57.11.4561	560 Ohm	2%	
	R....25	57.11.4561	560 Ohm	2%	
	R....26	57.11.4102	1 kOhm	2%	
	R....27	57.11.4103	10 kOhm	2%	
	R....28	57.11.4103	10 kOhm	2%	
	R....29	57.11.4222	2.2 kOhm	2%	
	R....30	57.11.4222	2.2 kOhm	2%	
	R....31	57.11.4102	1 kOhm	2%	
	R....32	57.11.4222	2.2 kOhm	2%	
	R....33	57.11.4563	56 kOhm	2%	
	R....34	57.11.4102	1 kOhm	2%	
	R....35	57.11.4102	1 kOhm	2%	
	R....36	57.11.4152	1.5 kOhm	2%	
	R....37	57.11.4272	2.7 kOhm	2%	

Note 1 - Connector: AMP Nr. --163.680-6

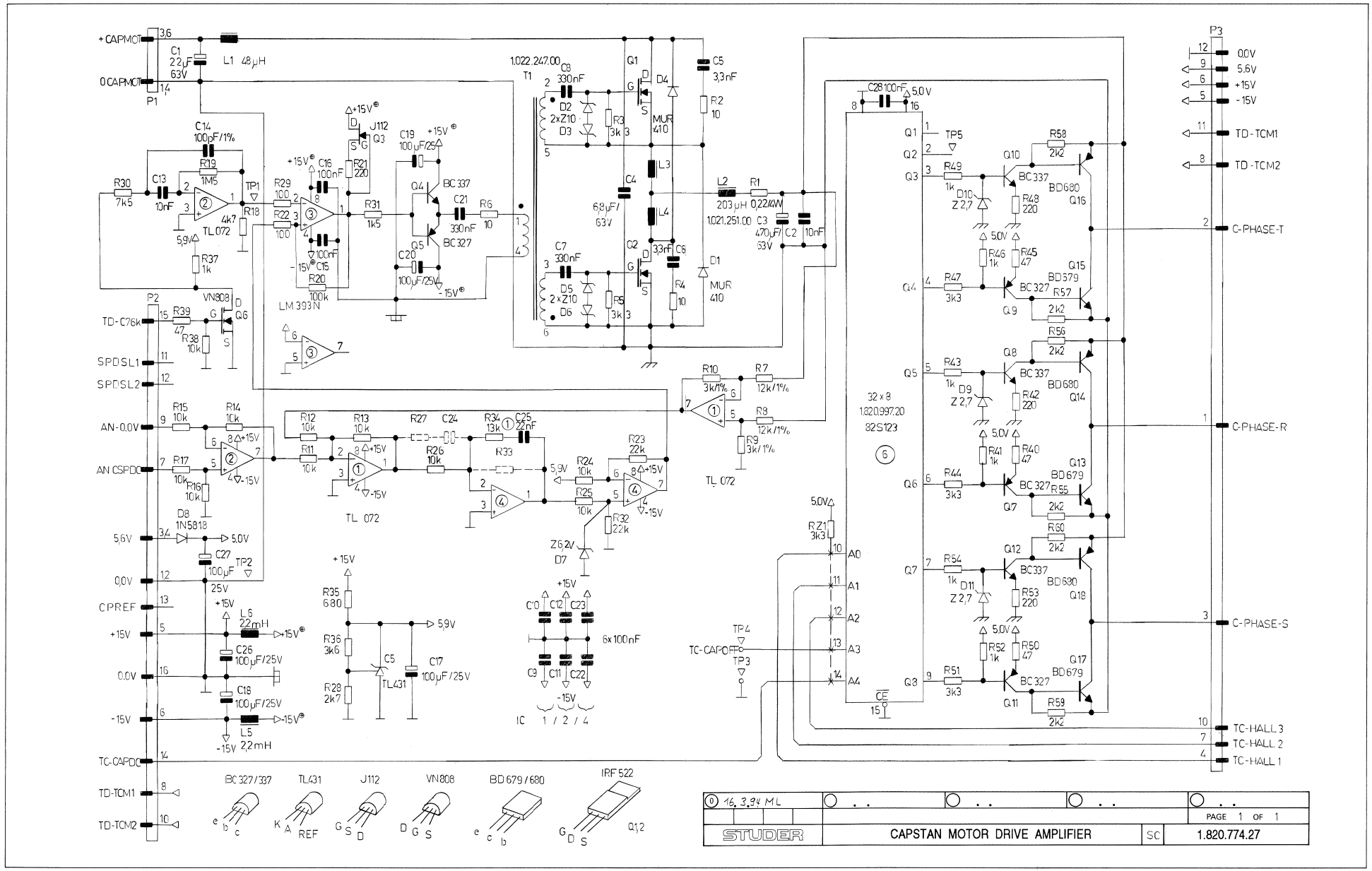
Note 2 - Connector: Yamaichi Nr. FAP-16-08//4
Burndy Nr. BPH 9 B 16 B00 GS

El=Electrolytic, PP=Polypropylene

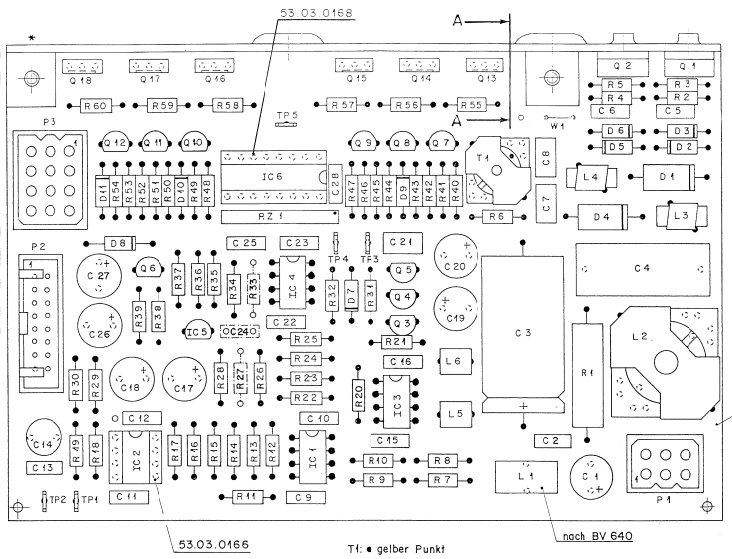
Manufacturer: Fc=Fairchild, ITT=Intermetall, Mot=Motorola, Op=Optron,
Ph=Philips, Ses=Sescosem, SGS=SGS/Ates, Sie=Siemens,
Tf=Telefunken, TI=Texas Instruments, To=Toshiba.

1.820.773.83 TAPE LIFTER CONTROL VF 91/03/2800

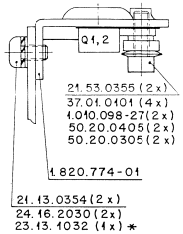
CAPSTAN MOTOR DRIVE AMPLIFIER 1.820.774.27



CAPSTAN MOTOR DRIVE AMPLIFIER 1.820.774.27



Ansicht A - A



Änderung					③
					②
					①
Ausgabe	4.3.94	JH	HP	HP	⓪
	Datum	Gez.	Gepr.	Gen.	Index

Kopie für:

STUDER REGENSDORF ZÜRICH	CAPSTAN MOTOR DRIVE AMPL. ESE	Nummer: 1.820.774-27

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	C.....1	59.22.8220	22 uF -20%, 63V, EL	
	C.....2	59.06.0103	10 nF 10%, 63V, PETP	
	C.....3	59.25.6471	470 uF -20%, 63V, EL	
	C.....4	59.02.0685	6.8 uF 5%, 63V, MPC	
	C.....5	59.06.0332	3.3 nF 10%, 63V, PETP	
	C.....6	59.06.0332	3.3 nF 10%, 63V, PETP	
	C.....7	59.06.0334	330 nF 10%, 63V, PETP	
	C.....8	59.06.0334	330 nF 10%, 63V, PETP	
	C.....9	59.06.0104	100 nF 10%, 63V, PETP	
	C....10	59.06.0104	100 nF 10%, 63V, PETP	
	C....11	59.06.0104	100 nF 10%, 63V, PETP	
	C....12	59.06.0104	100 nF 10%, 63V, PETP	
	C....13	59.06.0103	10 nF 10%, 63V, PETP	
	C....14	59.05.1101	100 pF 1%, 63V, PP	
	C....15	59.06.0104	100 nF 10%, 63V, PETP	
	C....16	59.06.0104	100 nF 10%, 63V, PETP	
	C....17	59.22.5101	100 uF -20%, 25V, EL	
	C....18	59.22.5101	100 uF -20%, 25V, EL	
	C....19	59.22.5101	100 uF -20%, 25V, EL	
	C....20	59.22.5101	100 uF -20%, 25V, EL	
	C....21	59.06.0334	330 nF 10%, 63V, PETP	
	C....22	59.06.0104	100 nF 10%, 63V, PETP	
	C....23	59.06.0104	100 nF 10%, 63V, PETP	
	C....24	00.00.0000	not used	
	C....25	59.06.0223	22 nF 10%, 63V, PETP	
	C....26	59.22.5101	100 uF -20%, 25V, EL	
	C....27	59.22.5101	100 uF -20%, 25V, EL	
	C....28	59.06.0104	100 nF 10%, 63V, PETP	
	D.....1	50.04.0521	MUR 410	Mot,Gi
	D.....2	50.04.1216	Z 10 V 5%, 1.3W	ITT,Mot,Ph,Tf,SGS
	D.....3	50.04.1216	Z 10 V 5%, 1.3W	ITT,Mot,Ph,Tf,SGS
	D.....4	50.04.0521	MUR 410	Mot,Gi
	D.....5	50.04.1216	Z 10 V 5%, 1.3W	ITT,Mot,Ph,Tf,SGS
	D.....6	50.04.1216	Z 10 V 5%, 1.3W	ITT,Mot,Ph,Tf,SGS
	D.....7	50.04.1118	Z 6.2 V 5%, .4OW	ITT,Mot,Ph,Tf,SGS
	D.....8	50.04.0512	1N 5818 1N 58:9	Mot
	D.....9	50.04.1106	Z 2.7 V 5%, .4OW	ITT,Mot,Ph,Tf,SGS
	D....10	50.04.1106	Z 2.7 V 5%, .4OW	ITT,Mot,Ph,Tf,SGS
	D....11	50.04.1106	Z 2.7 V 5%, .4OW	ITT,Mot,Ph,Tf,SGS
	IC....1	50.09.0101	TL 072 CP	Mot,Ti,NS
	IC....2	50.09.0101	TL 072 CP	Mot,Ti,NS
	IC....3	50.05.0283	LM 393 .. TDB 0193 DP	NS,Sig,Ti,Tho
	IC....4	50.09.0101	TL 072 CP	Mot,Ti,NS
	IC....5	50.10.0106	TL 431CLP	Mot,Ti
	IC....6	1.820.997.20	Commutation logic device	St
	L.....1	62.03.0010	48 uH 2 A, filter	
	L.....2	1.022.251.00	203 uH filtercoil	St
	L.....3	62.99.0113	1.0 uH	
	L.....4	62.99.0113	1.0 uH	
	L.....5	62.02.3222	2.2 mH 10%, Rad, RM 5	
	L.....6	62.02.3222	2.2 mH 10%, Rad, RM 5	
	P.....1	54.02.0418	Connector 6 contacts, MOLEX, see note 2	
	P.....2	54.14.2102	Connector 16 contacts, latch, flat cable	
	P.....3	54.02.0408	Connector 12 contacts, MOLEX, see note 1	
	Q.....1	50.03.1502	IRF 522 MTP 8N10	IR,Mot
	Q.....2	50.03.1502	IRF 522 MTP 8N10	IR,Mot
	Q.....3	50.03.0350	J-112	Mot
	Q.....4	50.03.0340	BC 337-25	ITT,Ph,Sie
	Q.....5	50.03.0351	BC 327-25	ITT,Ph,Sie
	Q.....6	50.03.1505	VN 0808 M ZVN 0108 A	Fe,Six
	Q.....7	50.03.0351	BC 327-25	ITT,Ph,Sie
	Q.....8	50.03.0340	BC 337-25	ITT,Ph,Sie
	Q.....9	50.03.0351	BC 327-25	ITT,Ph,Sie
	Q....10	50.03.0340	BC 337-25	ITT,Ph,Sie
	Q....11	50.03.0351	BC 327-25	ITT,Ph,Sie
	Q....12	50.03.0340	BC 337-25	ITT,Ph,Sie
	Q....13	50.03.0749	BD 679 see note 3	Ph
	Q....14	50.03.0799	BD 680 see note 3	Ph
	Q....15	50.03.0749	BD 679 see note 3	Ph
	Q....16	50.03.0799	BD 680 see note 3	Ph
	Q....17	50.03.0749	BD 679 see note 3	Ph
	Q....18	50.03.0799	BD 680 see note 3	Ph
	R.....1	57.56.5228	0.22 Ohm 10%, 4 W, WW	
	R.....2	57.11.3100	10 Ohm 10%	
	R.....3	57.11.3332	3.3 kOhm 10%	
	R.....4	57.11.3100	10 Ohm 10%	
	R.....5	57.11.3332	3.3 kOhm 10%	
	R.....6	57.11.3100	10 Ohm 10%	
	R.....7	57.11.3123	12 kOhm 1%	
	R.....8	57.11.3123	12 kOhm 1%	
	R.....9	57.11.3302	3 kOhm 1%	
	R....10	57.11.3302	3 kOhm 1%	
	R....11	57.11.3103	10 kOhm 10%	
	R....12	57.11.3103	10 kOhm 10%	
	R....13	57.11.3103	10 kOhm 10%	
	R....14	57.11.3103	10 kOhm 10%	
	R....15	57.11.3103	10 kOhm 10%	
	R....16	57.11.3103	10 kOhm 10%	
	R....17	57.11.3103	10 kOhm 10%	
	R....18	57.11.3472	4.7 kOhm 10%	
	R....19	57.11.5155	1.5 MOhm 10%	
	R....20	57.11.3104	100 kOhm 10%	
	R....21	57.11.3221	220 Ohm 10%	
	R....22	57.11.3101	100 Ohm 10%	
	R....23	57.11.3223	22 kOhm 10%	
	R....24	57.11.3103	10 kOhm 10%	
	R....25	57.11.3103	10 kOhm 10%	
	R....26	57.11.3103	10 kOhm 10%	
	R....27	00.00.0000	not used	
	R....28	57.11.3272	2.7 kOhm 1%	
	R....29	57.11.3101	100 Ohm 10%	
	R....30	57.11.3752	7.5 kOhm 1%	
	R....31	57.11.3152	1.5 kOhm 10%	
	R....32	57.11.3223	22 kOhm 10%	
	R....33	00.00.0000	not used	
	R....34	57.11.3133	13 kOhm 1%	
	R....35	57.11.3681	680 Ohm 10%	
	R....36	57.11.3362	3.6 kOhm 1%	
	R....37	57.11.3102	1 kOhm 10%	
	R....38	57.11.3103	10 kOhm 10%	
	R....39	57.11.3470	47 Ohm 10%	
	R....40	57.11.3470	47 Ohm 10%	
	R....41	57.11.3102	1 kOhm 10%	
	R....42	57.11.3221	220 Ohm 10%	
	R....43	57.11.3102	1 kOhm 10%	
	R....44	57.11.3332	3.3 kOhm 10%	
	R....45	57.11.3470	47 Ohm 10%	
	R....46	57.11.3102	1 kOhm 10%	
	R....47	57.11.3332	3.3 kOhm 10%	
	R....48	57.11.3221	220 Ohm 10%	
	R....49	57.11.3102	1 kOhm 10%	
	R....50	57.11.3470	47 Ohm 10%	
	R....51	57.11.3332	3.3 kOhm 10%	
	R....52	57.11.3102	1 kOhm 10%	
	R....53	57.11.3221	220 Ohm 10%	
	R....54	57.11.3102	1 kOhm 10%	
	R....55	57.11.3222	2.2 kOhm 10%	
	R....56	57.11.3222	2.2 kOhm 10%	
	R....57	57.11.3222	2.2 kOhm 10%	
	R....58	57.11.3222	2.2 kOhm 10%	
	R....59	57.11.3222	2.2 kOhm 10%	
	R....60	57.11.3222	2.2 kOhm 10%	
	RZ....1	57.88.4332	Network, 8 * 3.3 KOhm, 2%, SIP 9	
	T.....1	1.022.247.00	Drive Transformer	St
	TP....1	54.02.0320	Connector 1 contact , 2.8*0.8, flat	
	TP....2	54.02.0320	Connector 1 contact , 2.8*0.8, flat	
	TP....3	54.02.0320	Connector 1 contact , 2.8*0.8, flat	
	TP....4	54.02.0320	Connector 1 contact , 2.8*0.8, flat	
	TP....5	54.02.0320	Connector 1 contact , 2.8*0.8, flat	
	W.....1	1.010.321.64	Wire bridge	

Note 1 - Connector,
Case: Studer Nr. 54.02.0408
Molex Nr. 03-06-2121
Contact pin: Studer Nr. 54.02.0406
Molex Nr. 02-06-8103

Note 2 - Connector,
Case: Studer Nr. 54.02.0418
Molex Nr. 03-06-2061
Contact pin: Studer Nr. 54.02.0406
Molex Nr. 02-06-8103

Note 3 - For excellent wow and flutter values at 3.75 ips the NPN - respective the PNP - Transistors should be from the same type and manufacturer.

Ce=Ceramic, El=Electrolytic, PETP=Polyester Film, PP=Polypropylen

MANUFACTURER: Ex=Exar, Fe=Ferranti, GI=General Instruments,
ITT=Intermetall, IPS=Integrated Power Semiconductors Ltd.,
MM=Monolitic Memorie Inc., Mot=Motorola,
NS=National Semiconductors, Ph=Philips, Ra=Raytheon,
RCA=Radio Corporation of America, Sie=Siemens, Sig=Signetics,
Ses=Sescosem, Six=Siliconix, SGS=SGS-Ates, St=Studer,
Tf=Telefunken, TI=Texas Instruments, To=Toshiba.

1.820.774.27 CAP. MOT. DRIVE AMP. BOARD ML 94/02/2400

.END
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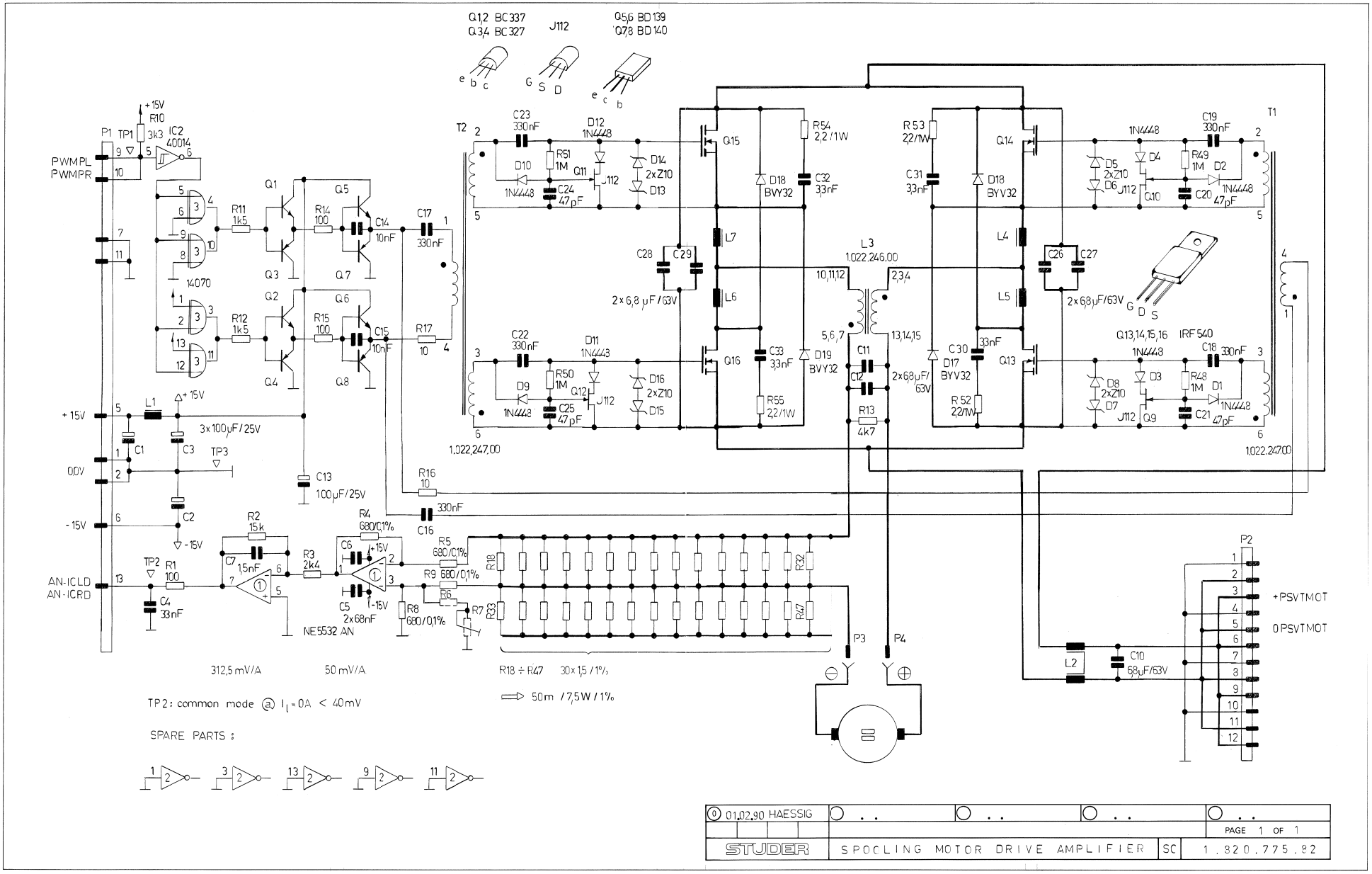
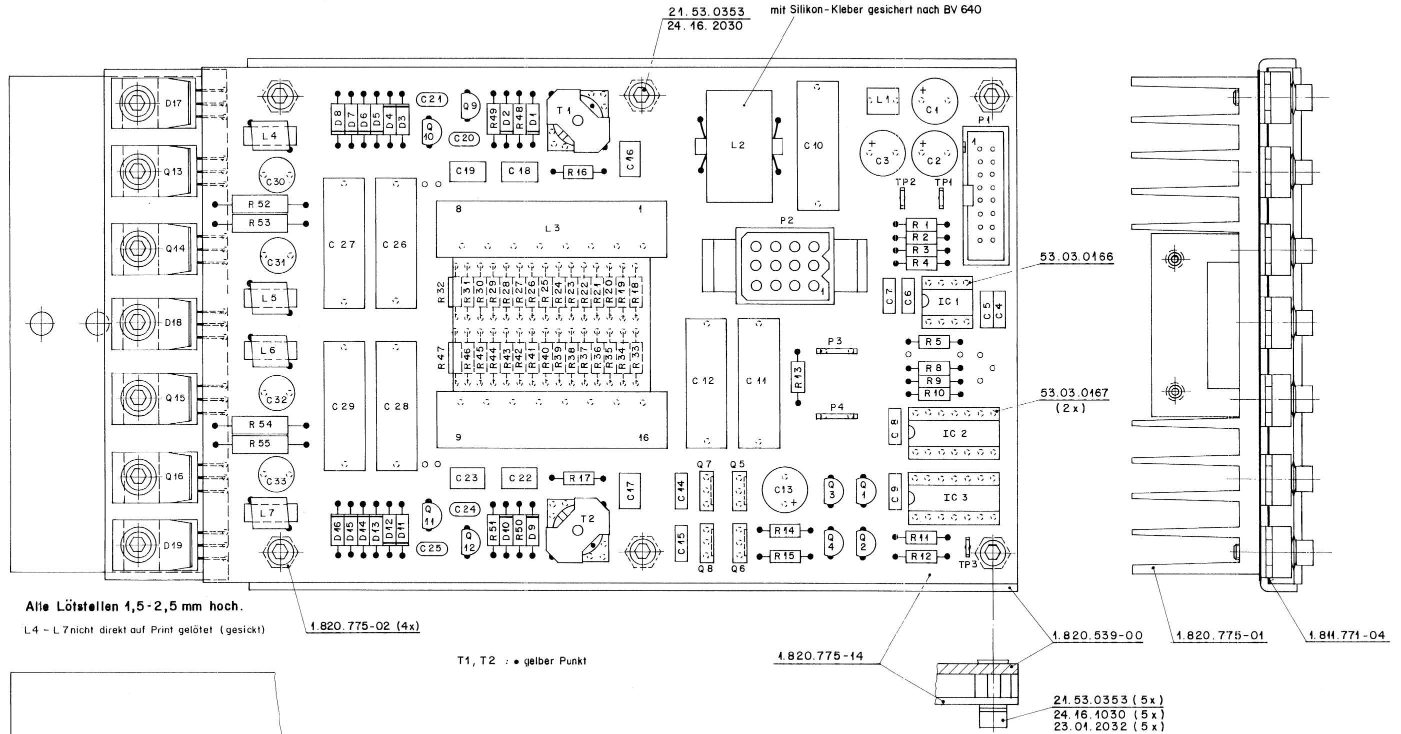
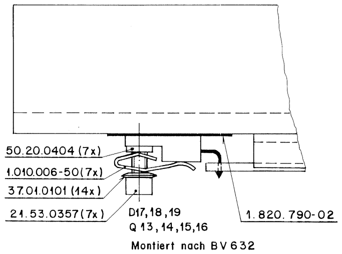
SPOOLING MOTOR DRIVE AMPLIFIER 1.820.775.82



SPOOLING MOTOR DRIVE AMPLIFIER 1.820.775.82





Datum	Gez	Gepr	Ges	Index
1.2.90				0

STUDER REGENSDORF ZÜRICH — SPOOLING MOTOR DRIVE AMPL. ESE — 1.820.775-82

Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	C.....1	59.22.5101	100 uF	20%, 25V, EL	
	C.....2	59.22.5101	100 uF	20%, 25V, El	
	C.....3	59.22.5101	100 uF	20%, 25V, El	
	C.....4	59.06.0333	33 nF	10%, 63V, PETP	
	C.....5	59.06.0683	68 nF	10%, 63V, PETP	
	C.....6	59.06.0683	68 nF	10%, 63V, PETP	
	C.....7	59.06.0152	1,5 nF	10%, 63V, PETP	
	C.....8	59.06.0683	68 nF	10%, 63V, PETP	
	C.....9	59.06.0683	68 nF	10%, 63V, PETP	
	C....10	59.99.0268	6,8 uF	10%, 63V, PETP	
	C....11	59.99.0268	6,8 uF	10%, 63V, PETP	
	C....12	59.99.0268	6,8 uF	10%, 63V, PETP	
	C....13	59.22.5101	100 uF	20%, 25V, El	
	C....14	59.06.0103	10 nF	10%, 63V, PETP	
	C....15	59.06.0103	10 nF	10%, 63V, PETP	
	C....16	59.06.0334	330 nF	10%, 63V, PETP	
	C....17	59.06.0334	330 nF	10%, 63V, PETP	
	C....18	59.06.0334	330 nF	10%, 63V, PETP	
	C....19	59.06.0334	330 nF	10%, 63V, PETP	
	C....20	59.34.2470	47 pF	5%, N150, CER	
	C....21	59.34.2470	47 pF	5%, N150, CER	
	C....22	59.06.0334	330 nF	10%, 63V, PETP	
	C....23	59.06.0334	330 nF	10%, 63V, PETP	
	C....24	59.34.2470	47 pF	5%, N150, CER	
	C....25	59.34.2470	47 pF	5%, N150, CER	
	C....26	59.99.0268	6,8 uF	10%, 63V, PETP	
	C....27	59.99.0268	6,8 uF	10%, 63V, PETP	
	C....28	59.99.0268	6,8 uF	10%, 63V, PETP	
	C....29	59.99.0268	6,8 uF	10%, 63V, PETP	
	C....30	59.47.2332	3,3 nF	2,5%, 160V, PP	
	C....31	59.47.2332	3,3 nF	2,5%, 160V, PP	
	C....32	59.47.2332	3,3 nF	2,5%, 160V, PP	
	C....33	59.47.2332	3,3 nF	2,5%, 160V, PP	
	D.....1	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	D.....2	50.04.0125	1N 4448		Fc.ITT.Ph.Ses.Tf

Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	D.....3	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	D.....4	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	D.....5	50.04.1216	Z 10V	1,3W	ITT,Mot,Ph,Tf,Tho
	D.....6	50.04.1216	Z 10V	1,3W	ITT,Mot,Ph,Tf,Tho
	D.....7	50.04.1216	Z 10V	1,3W	ITT,Mot,Ph,Tf,Tho
	D.....8	50.04.1216	Z 10V	1,3W	ITT,Mot,Ph,Tf,Tho
30	D.....9	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	D....10	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	D....11	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	D....12	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	D....13	50.04.1216	Z 10V	1,3W	ITT,Mot,Ph,Tf,Tho
	D....14	50.04.1216	Z 10V	1,3W	ITT,Mot,Ph,Tf,Tho
	D....15	50.04.1216	Z 10V	1,3W	ITT,Mot,Ph,Tf,Tho
	D....16	50.04.1216	Z 10V	1,3W	ITT,Mot,Ph,Tf,Tho
	D....17	50.04.0517	BYV 32		Mot,Ph
	D....18	50.04.0517	BYV 32		Mot,Ph
	D....19	50.04.0517	BYV 32		Mot,Ph
	IC....1	50.09.0106	NE 5532AN	XR 5532AN	EX,SIG
	IC....2	50.07.0014	MC40106BCP	..14584..	Mot,NS,Ph,RCA,To
	IC....3	50.07.0070	MC14070BCP	HEF4070BP, CD4070BE	Mot,Ph,RCA
	L.....1	62.02.3101	100 uH	Filter coil	TDK
	L.....2	62.99.0112	>1 mH	Filter coil	Tokin
	L.....3	1.022.246.00		Choke coil	St
	L.....4	62.99.0113	1 uH	Filter coil	Vo
	L.....5	62.99.0113	1 uH	Filter coil	Vo
	L.....6	62.99.0113	1 uH	Filter coil	Vo
	L.....7	62.99.0113	1 uH	Filter coil	Vo
	P.....1	54.14.2002	16 cont.	see note 1	
	P.....2	54.02.0408	12 cont.	see note 2	
	P.....3	54.02.0335			
	P.....4	54.02.0335			
	Q.....1	50.03.0340	BC 337-25		ITT,NS,Ph,Sie
	Q.....2	50.03.0340	BC 337-25		ITT,NS,Ph,Sie
	Q.....3	50.03.0351	BC 327-25		ITT,Ph,Sie

Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	Q.....4	50.03.0351	BC 327-25		ITT,Ph,Sie
	Q.....5	50.03.0451	BD 139		Mot,Ph,SGS,Tf,To
	Q.....6	50.03.0451	BD 139		Mot,Ph,SGS,Tf,To
	Q.....7	50.03.0452	BD 140		Mot,Ph,SGS,Tf,To
	Q.....8	50.03.0452	BD 140		Mot,Ph,SGS,Tf,To
	Q.....9	50.03.0350	J 112		Mot
	Q....10	50.03.0350	J 112		Mot
	Q....11	50.03.0350	J 112		Mot
	Q....12	50.03.0350	J 112		Mot
	Q....13	50.03.1609	IRF 540	see note 3	IR
	Q....14	50.03.1609	IRF 540	see note 3	IR
	Q....15	50.03.1609	IRF 540	see note 3	IR
	Q....16	50.03.1609	IRF 540	see note 3	IR
	R.....1	57.11.3101	100 Ohm	1%	
	R.....2	57.11.3153	15 kOhm	1%	
	R.....3	57.11.3242	2.4 kOhm	1%	
	R.....4	57.99.0199	680 Ohm	0.1%	
	R.....5	57.99.0199	680 Ohm	0.1%	
	R.....6	00.00.0000	not used		
	R.....7	00.00.0000	not used		
	R.....8	57.99.0199	680 Ohm	0.1%	
	R.....9	57.99.0199	680 Ohm	0.1%	
	R....10	57.11.3332	3.3 kOhm	1%	
	R....11	57.11.3152	1.5 kOhm	1%	
	R....12	57.11.3152	1.5 kOhm	1%	
	R....13	57.11.3472	4.7 kOhm	1%	
	R....14	57.11.3101	100 Ohm	1%	
	R....15	57.11.3101	100 Ohm	1%	
	R....16	57.11.3100	10 Ohm	1%	
	R....17	57.11.3100	10 Ohm	1%	
	R....18	57.11.3159	1.5 Ohm	1%	
	R....19	57.11.3159	1.5 Ohm	1%	
	R....20	57.11.3159	1.5 Ohm	1%	
	R....21	57.11.3159	1.5 Ohm	1%	
	R....22	57.11.3159	1.5 Ohm	1%	
	R....23	57.11.3159	1.5 Ohm	1%	
	R....24	57.11.3159	1.5 Ohm	1%	
	R....25	57.11.3159	1.5 Ohm	1%	
	R....26	57.11.3159	1.5 Ohm	1%	
	R....27	57.11.3159	1.5 Ohm	1%	
	R....28	57.11.3159	1.5 Ohm	1%	
	R....29	57.11.3159	1.5 Ohm	1%	
	R....30	57.11.3159	1.5 Ohm	1%	
	R....31	57.11.3159	1.5 Ohm	1%	
	R....32	57.11.3159	1.5 Ohm	1%	
	R....33	57.11.3159	1.5 Ohm	1%	
	R....34	57.11.3159	1.5 Ohm	1%	
	R....35	57.11.3159	1.5 Ohm	1%	
	R....36	57.11.3159	1.5 Ohm	1%	
	R....37	57.11.3159	1.5 Ohm	1%	
	R....38	57.11.3159	1.5 Ohm	1%	
	R....39	57.11.3159	1.5 Ohm	1%	
	R....40	57.11.3159	1.5 Ohm	1%	
	R....41	57.11.3159	1.5 Ohm	1%	
	R....42	57.11.3159	1.5 Ohm	1%	
	R....43	57.11.3159	1.5 Ohm	1%	
	R....44	57.11.3159	1.5 Ohm	1%	
	R....45	57.11.3159	1.5 Ohm	1%	
	R....46	57.11.3159	1.5 Ohm	1%	
	R....47	57.11.3159	1.5 Ohm	1%	
	R....48	57.11.3105	1.0 MOhm	1%	
	R....49	57.11.3105	1.0 MOhm	1%	
	R....50	57.11.3105	1.0 MOhm	1%	
	R....51	57.11.3105	1.0 MOhm	1%	
	R....52	57.13.4229	2.2 Ohm	2%	
	R....53	57.13.4229	2.2 Ohm	2%	
	R....54	57.13.4229	2.2 Ohm	2%	
	R....55	57.13.4229	2.2 Ohm	2%	
	T.....1	1.022.247.00		Impulse transformer	St
	T.....2	1.022.247.00		Impulse transformer	St
	TP....1	54.02.0320		Test point	
	TP....2	54.02.0320		Test point	
	TP....3	54.02.0320		Test point	

Note 1 - Plug : 16 Pol
Yamaichi FAP-16-08//4
Burndy BPH 9 B 16 BOO GS

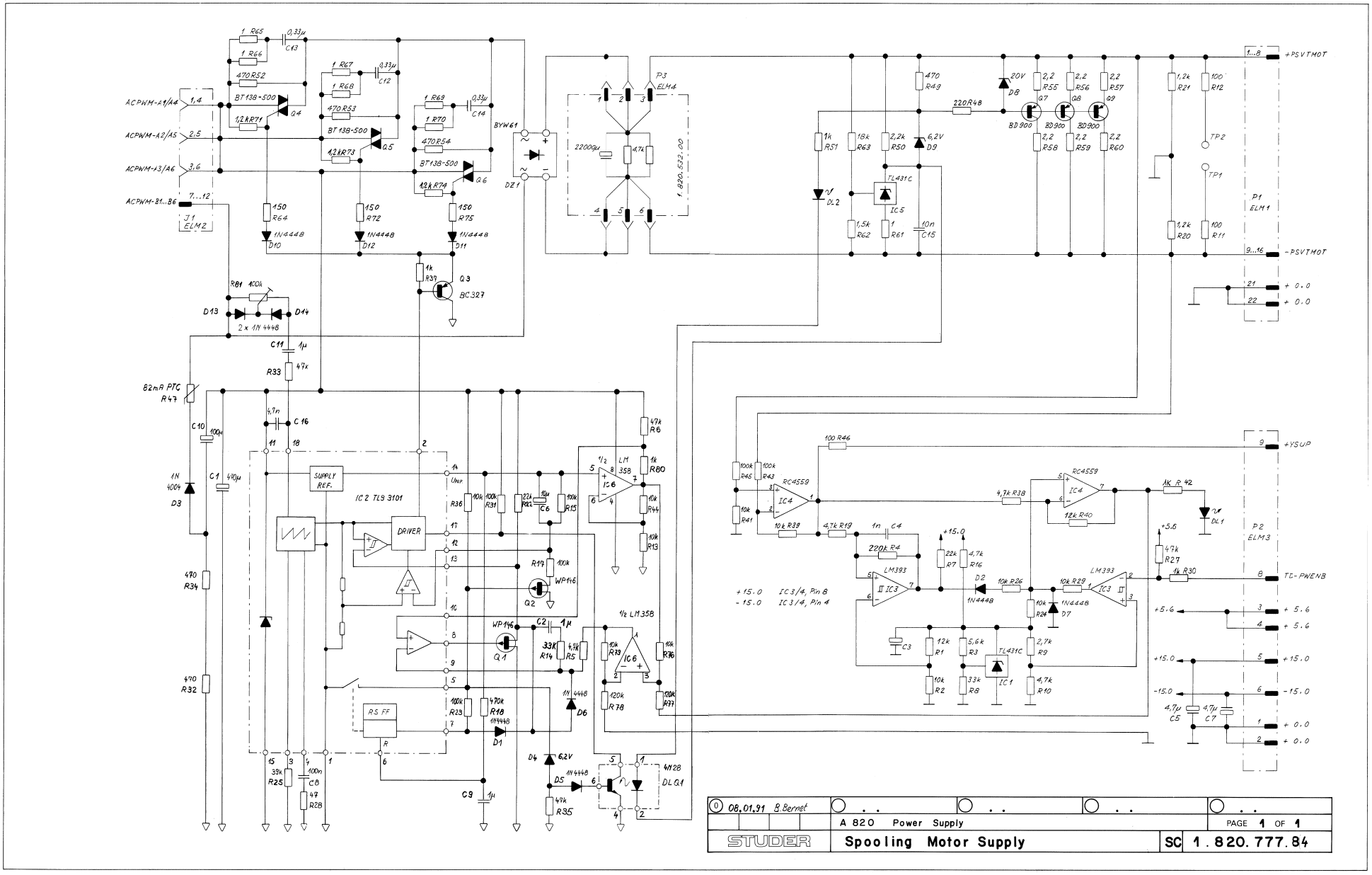
Note 2 - Molex plug : with 12 pins — Studer 54.02.0408; Studer 54.02.0406

Note 3 - All power transistors must be from the same type and manufacturer.

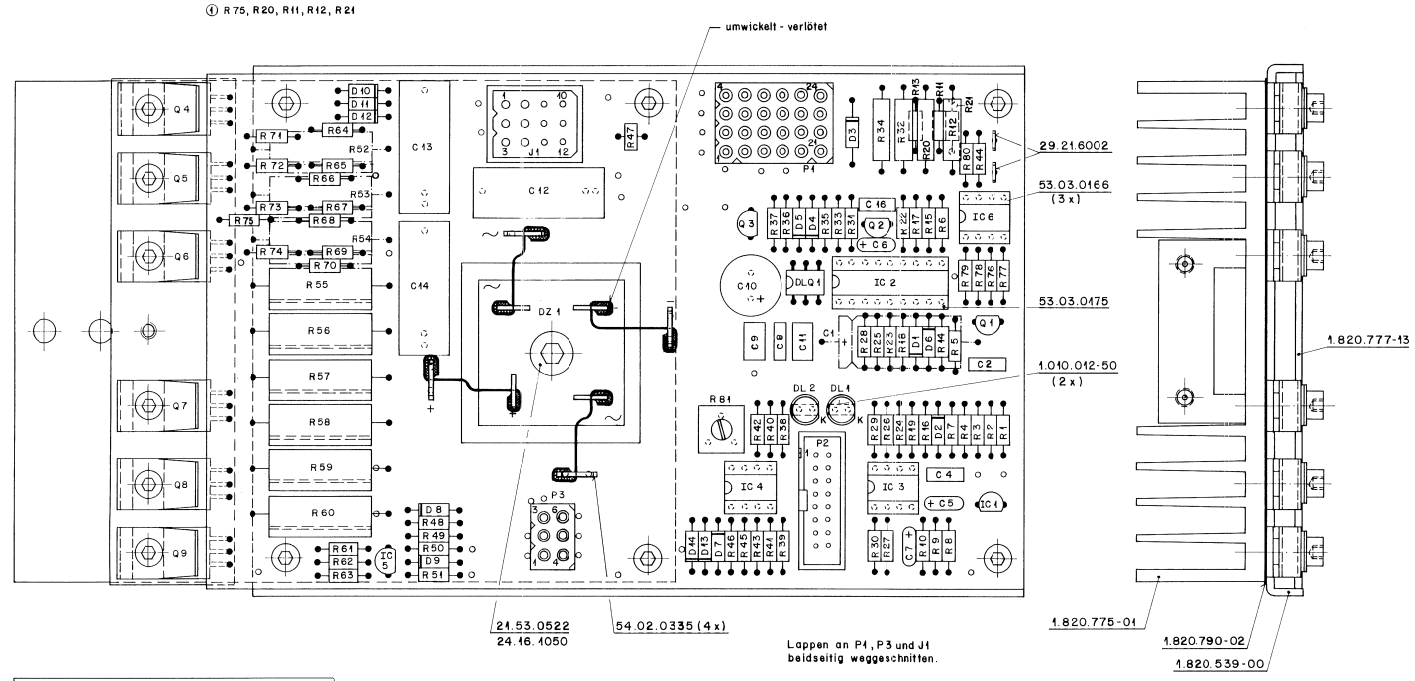
Manufacturer: Ex=Exar, Fc=Fairchild, IR=International Rectifier, ITT=Intermetal, Mot=Motorola, NS=National Semiconductors, Ph=Philips (incl.Valvo), RCA=Radio Corporation of America, Ses=Sescosem, SGS=SGS/Ates, Sig=Signetics, Sie=Siemens, St=Studer, Tf=Telefunken, Tho=Thomson, To=Toshiba, Vo=Vogt & Co.

1.820.775.82 SPOOLING MOTOR DRIVE AMPLIFIE RPZ 90/02/0100

SPOOLING MOTOR SUPPLY 1.820.777.84



SPOOLING MOTOR SUPPLY 1.820.777.84



Änderung	Ausgabe	Datum	Gez.	Gepr.	Ges.	Index
	8.1.91					①

Kopie für:

STUDER REGENSDORF ZÜRICH	Benennung: SPOOLING MOTOR SUPPLY BOARD ESE	Nummer: 1.820.777-84

Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	C.....1	59.25.3471	470 uF	-20%, 16V, El	
	C.....2	59.06.5105	1 uF	10%, 63V, PETP	
	C.....3	. .	not used		
	C.....4	59.06.0102	1 nF	10%, 63V, PETP	
	C.....5	59.26.5479	4.7 uF	20%, 25V, Sal	Ph
	C.....6	59.26.2100	10 uF	20%, 16V, Sal	Ph
	C.....7	59.26.5479	4.7 uF	20%, 25V, Sal	Ph
	C.....8	59.06.5104	100 nF	5%, 63V, PETP	
	C.....9	59.06.5105	1 uF	5%, 50V, PETP	
	C....10	59.22.8101	100 uF	-20%, 63V, El	
	C....11	59.06.5105	1 uF	5%, 50V, PETP	
	C....12	59.05.6334	330 nF	10%, 400V, PP	
	C....13	59.05.6334	330 nF	10%, 400V, PP	
	C....14	59.05.6334	330 nF	10%, 400V, PP	
	C....15	. .	not used		
	C....16	59.06.0472	4.7 nF	10%, 63V, PETP	
	D.....1	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	D.....2	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	D.....3	50.04.0105	1N 4004	...1N 4007	:ITT,Mot
	D.....4	50.04.1118	6.2 V Z	BZX83C6V2, BZX55C6V2, ZPD6.2	:ITT,Ses
	D.....5	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	D.....6	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	D.....7	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	D.....8	50.04.1109	20 V Z	BZX83C20V, BZX55C20V, ZPD20	:ITT,Ses
	D.....9	50.04.1118	6.2 V Z	BZX83C6V2, BZX55C6V2, ZPD6.2	:ITT,Ses
	D....10	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	D....11	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	D....12	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	D....13	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	D....14	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	DL....1	50.04.2112	MV 5353	CM 4-584 B, HLMP-3401	G:,CM,HP
	DL....2	50.04.2111	MV 5753	CM 4-584 B, HLMP-3301	G:,CM,HP
	DLQ...1	50.99.0126	4N 28	4N 26	Mot
	DZ....1	70.01.0232	KBPC 3502	1583-20	Symbol,IR
	IC....1	50.10.0106	TL431CLP		Mot,TI
	IC....2	50.11.0130	TLB 3101	TLE 3101	Sie
	IC....3	50.05.0283	LM 393 N	...P, ...DP	NS,Tho,TI
	IC....4	50.09.0107	RC4559NB	uPC4559	Ra,NEC
	IC....5	50.10.0106	TL431CLP		Mot,TI
	IC....6	50.05.0286	LM 358 N	LM 358 P	NS,Tho,TI
	J.....1	. .		see note 1	
	P.....1	. .		see note 2	
	P.....2	. .		see note 3	
	P.....3	. .		see note 4	
	Q.....1	50.03.0329	WP 146		Six
	Q.....2	50.03.0329	WP 146		Six
	Q.....3	50.03.0351	BC 327-25		ITT,Ph,Sie
	Q.....4	50.99.0106	BT138-500	T2800	Ph,RCA
	Q.....5	50.99.0106	BT138-500	T2800	Ph,RCA
	Q.....6	50.99.0106	BT138-500	T2800	Ph,RCA
	Q.....7	50.03.0513	BD 900 A	BDW 94 B	Mot,SGS
	Q.....8	50.03.0513	BD 900 A	BDW 94 B	Mot,SGS
	Q.....9	50.03.0513	BD 900 A	BDW 94 B	Mot,SGS
	R.....1	57.11.3123	12 kOhm	1%	
	R.....2	57.11.3103	10 kOhm	1%	
	R.....3	57.11.3562	5.6 kOhm	1%	
	R.....4	57.11.3224	220 kOhm	5%	
	R.....5	57.11.3472	4.7 kOhm	2%	
	R.....6	57.11.3473	47 kOhm	2%	
	R.....7	57.11.3223	22 kOhm	5%	
	R.....8	57.11.3333	33 kOhm	1%	
	R.....9	57.11.3272	2.7 kOhm	5%	
	R....10	57.11.3472	4.7 kOhm	5%	
	R....11	57.19.0101	100 Ohm	5%, Philips Nr. 2322 205 13101	
	R....12	57.19.0101	100 Ohm	5%, Philips Nr. 2322 205 13101	
	R....13	57.11.3103	10 kOhm	1%	
	R....14	57.11.3333	33 kOhm	2%	
	R....15	57.11.3104	100 kOhm	1%	
	R....16	57.11.3472	4.7 kOhm	5%	
	R....17	57.11.3104	100 kOhm	1%	
	R....18	57.11.3474	470 kOhm	5%	
	R....19	57.11.3472	4.7 kOhm	5%	
	R....20	57.13.4122	1.2 kOhm	2%, 0.5 W	
	R....21	57.13.4122	1.2 kOhm	2%, 0.5 W	
	R....22	57.11.3223	22 kOhm	5%	
	R....23	57.11.3104	100 kOhm	5%	
	R....24	57.11.3103	10 kOhm	5%	
	R....25	57.11.3393	39 kOhm	2%	
	R....26	57.11.3103	10 kOhm	5%	
	R....27	57.11.3473	47 kOhm	5%	
	R....28	57.11.3470	47 Ohm	5%	
	R....29	57.11.3103	10 kOhm	5%	
	R....30	57.11.3102	1 kOhm	5%	
	R....31	57.11.3104	100 kOhm	2%	
	R....32	57.13.4471	470 Ohm	5%	
	R....33	57.11.3473	47 kOhm	2%	
	R....34	57.13.4471	470 Ohm	5%	
	R....35	57.11.3473	47 kOhm	5%	
	R....36	57.11.3103	10 kOhm	5%	
	R....37	57.11.3102	1 kOhm	5%	
	R....38	57.11.3472	4.7 kOhm	2%	
	R....39	57.11.3103	10 kOhm	1%	
	R....40	57.11.3123	12 kOhm	2%	

SPOOLING MOTOR SUPPLY 1.820.777.84

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	R....41	57.11.3103	10 kOhm 1%	
	R....42	57.11.3102	1 kOhm 5%	
	R....43	57.11.3104	100 kOhm 1%	
	R....44	57.11.3103	10 kOhm 1%	
	R....45	57.11.3104	100 kOhm 1%	
	R....46	57.11.3101	100 Ohm 5%	
	R....47	57.92.1820	82 mA	PTC-Resistor, Philips nr. 2322 660 18291
	R....48	57.11.3221	220 Ohm 5%	
	R....49	57.11.3471	470 Ohm 5%	
	R....50	57.11.3222	2.2 kOhm 5%	
	R....51	57.11.3102	1 kOhm 5%	
	R....52	57.56.4471	470 Ohm 5%, 4 W	
	R....53	57.56.4471	470 Ohm 5%, 4 W	
	R....54	57.56.4471	470 Ohm 5%, 4 W	
	R....55	57.56.5229	2.2 Ohm 10%, 4 W	
	R....56	57.56.5229	2.2 Ohm 10%, 4 W	
	R....57	57.56.5229	2.2 Ohm 10%, 4 W	
	R....58	57.56.5229	2.2 Ohm 10%, 4 W	
	R....59	57.56.5229	2.2 Ohm 10%, 4 W	
	R....60	57.56.5229	2.2 Ohm 10%, 4 W	
	R....61	57.11.3109	1 Ohm 5%	
	R....62	57.11.3152	1.5 kOhm 1%	
	R....63	57.11.3183	18 kOhm 1%	
	R....64	57.11.3151	150 Ohm 5%	
	R....65	57.11.3109	1 Ohm 5%	
	R....66	57.11.3109	1 Ohm 5%	
	R....67	57.11.3109	1 Ohm 5%	
	R....68	57.11.3109	1 Ohm 5%	
	R....69	57.11.3109	1 Ohm 5%	
	R....70	57.11.3109	1 Ohm 5%	
	R....71	57.11.3122	1.2 kOhm 5%	
	R....72	57.11.3151	150 Ohm 5%	
	R....73	57.11.3122	1.2 kOhm 5%	
	R....74	57.11.3122	1.2 kOhm 5%	
	R....75	57.11.3151	150 Ohm 5%	
	R....76	57.11.3103	10 kOhm 1%	
	R....77	57.11.3124	120 kOhm 1%	
	R....78	57.11.3124	120 kOhm 1%	
	R....79	57.11.3103	10 kOhm 1%	
	R....80	57.11.3102	1 kOhm 1%	
	R....81	58.01.8104	100 kOhm 10%	

Note 1 - Case for 12 contacts: Studer Nr. 54.02.0408, Molex Nr. 03-06-2121
Contact pin (6 pieces): Studer Nr. 54.02.0406, Molex Nr. 02-06-8103
Socket (6 pieces): Studer Nr. 54.02.0407, Molex Nr. 02-06-7103

Note 2 - Case for 24 contacts: Studer Nr. 54.02.0416, Molex Nr. 03-06-1241
Contact pin (24 pieces): Studer Nr. 54.02.0406, Molex Nr. 02-06-8103

Note 3 - Connector 16 contacts: Studer Nr. 54.14.2002, Yamaichi Nr. FAP-16-08//4, Burndy Nr. BPH 9 B 16 BO GS

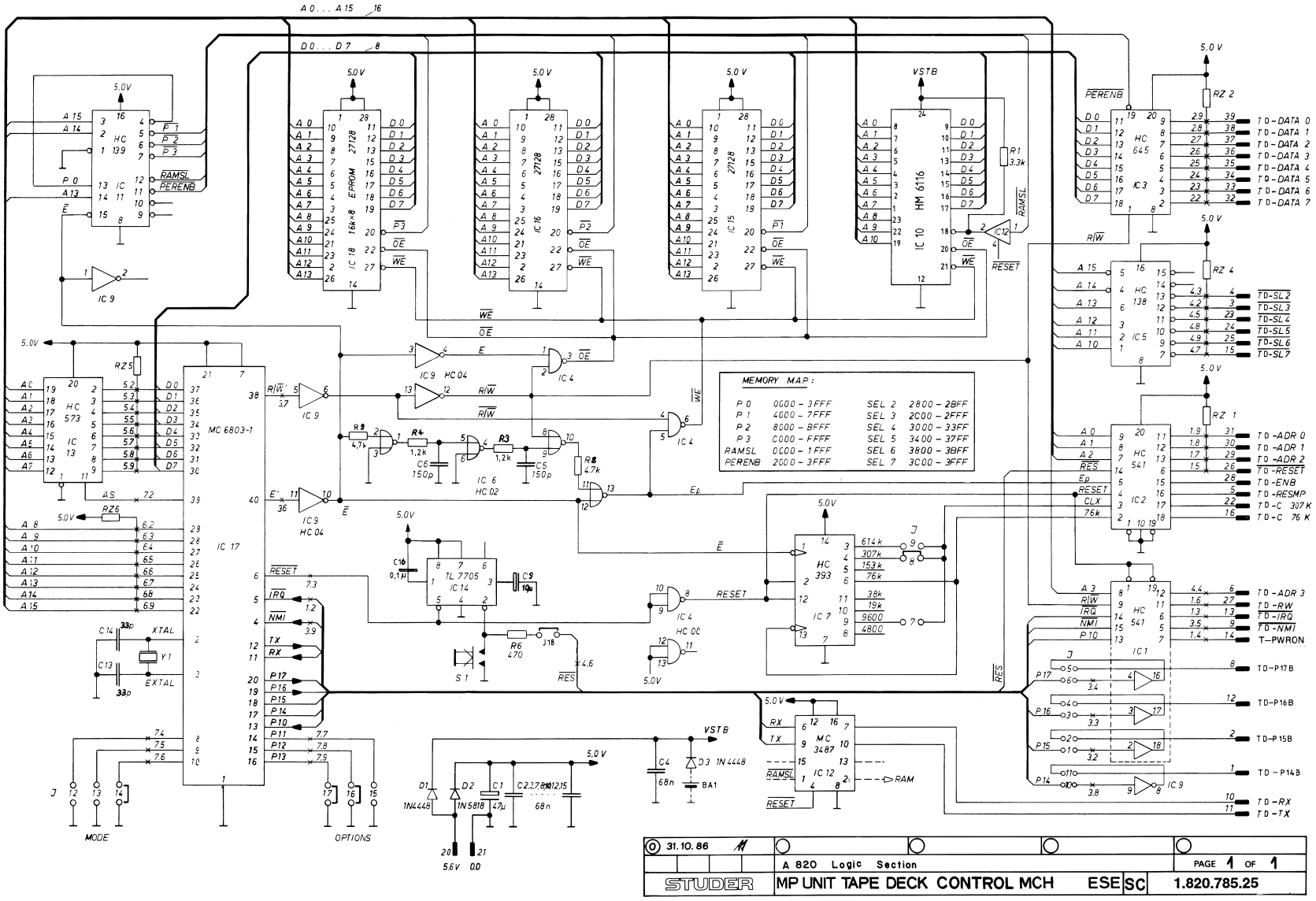
Note 4 - Case for 6 contacts: Studer Nr. 54.02.0417, Molex Nr. 03-06-1061
Sockets (6 pieces): Studer Nr. 54.02.0407, Molex Nr. 02-06-7103

El=Electrolytic, Sal=Solid aluminium,
PETP=Polyesterfilm, PP=Polypropylen.

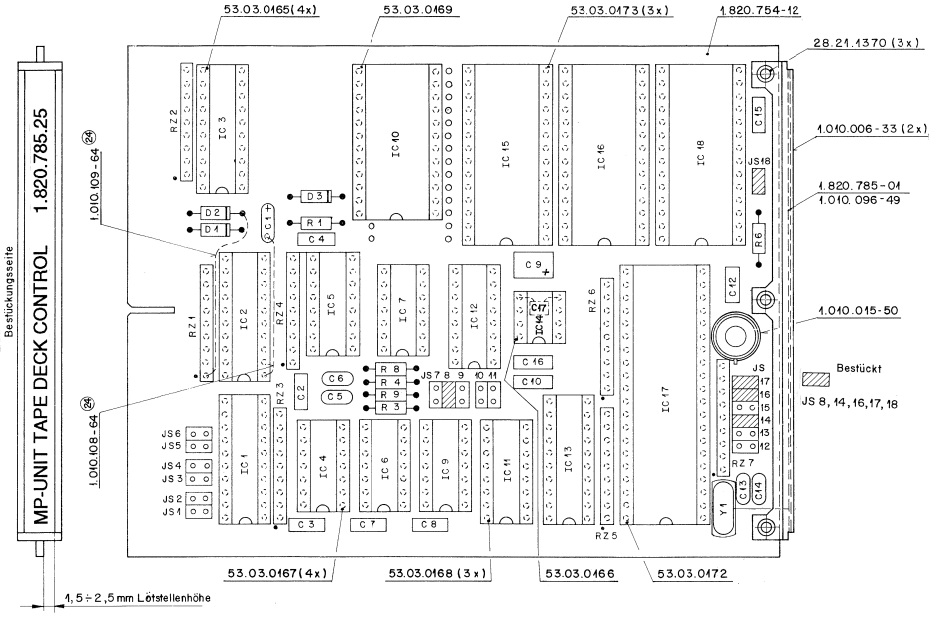
MANUFACTURER: CM=Chicago Miniatur, Fc=Fairchild,
GI=General Instruments, HP=Hewlett Packard,
IR=International Rectifier, ITT=Intermetall,
Mot=Motorola, NEC=Nippon Electric Corporation,
NS=National Semiconductors, Ph=Philips, Ra=Raytheon,
RCA=Radio Corporation of America, Ses=Sescosem,
SGS=SGS/Ates, Sie=Siemens, Six=Siliconix, Tf=Telefunken,
Tho=Thomson, TI=Texas Instruments,

1.820.777.84 SPOOLING MOTOR SUPPLY VF 91/01/0800

MP UNIT TAPE DECK CONTROL MCH 1.820.785.25



MP UNIT TAPE DECK CONTROL MCH 1.820.785.25



Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	C.....1	59.26.0470	47 uF 20%, 6.3V , Sal	Ph
	C.....2	59.06.0683	68 nF 10%, 63V , PETP	
	C.....3	59.06.0683	68 nF 10%, 63V , PETP	
	C.....4	59.06.0683	68 nF 10%, 63V , PETP	
	C.....5	59.34.7151	150 pF 2%, Ce	
	C.....6	59.34.7151	150 pF 2%, Ce	
	C.....7	59.06.0683	68 nF 10%, 63V , PETP	
	C.....8	59.06.0683	68 nF 10%, 63V , PETP	
	C.....9	59.06.0474	470 nF 10%, 63V , PETP	
21	C.....9	59.26.2100	10 uF 20%, 16V , Sal	
	C.....10	59.06.0683	68 nF 10%, 63V , PETP	
	C.....11	59.06.0104	100 nF 10%, 63V , PETP	
21	C.....11	00.00.0000	not used	
	C.....12	59.06.0683	68 nF 10%, 63V , PETP	
	C.....13	59.34.1150	15 pF 5%, Ce	
21	C.....13	59.34.2330	33 pF 5%, Ce	
	C.....14	59.34.1150	15 pF 5%, Ce	
21	C.....14	59.34.2330	33 pF 5%, Ce	
	C.....15	59.06.0683	68 nF 10%, 63V , PETP	
20	C.....16	59.06.0683	68 nF 10%, 63V , PETP	
21	C.....16	59.06.0104	100 nF 10%, 63V , PETP	
24	C.....17	59.06.0222	2.2 nF 10%, 63V , PETP	
	D.....1	50.04.0125	1N 4448	Fc,ITT,Ph,Ses,Tf
	D.....2	50.04.0512	1N 5818 1N 5819	Mot
	D.....3	50.04.0125	1N 4448	Fc,ITT,Ph,Ses,Tf
	IC....1	50.17.1541	74 HC 541	Mot,NS,Ph,RCA,SGS,TI,To
	IC....2	50.17.1541	74 HC 541	Mot,NS,PH,RCA,SGS,TI,To
	IC....3	50.17.1645	74 HC 645	Mot,NS,Ph,RCA,SGS,TI,To
	IC....4	50.17.1000	74 HC 00	Mot,NS,Ph,RCA,SGS,TI,To
24	IC....4	50.17.1132	74 HC 132	Mot,NS,PH,RCA,SGS,TI,To
	IC....5	50.17.1138	74 HC 138	Mot,NS,Ph,RCA,SGS,TI,To
	IC....6	50.17.1002	74 HC 02	Mot,NS,Ph,RCA,SGS,TI,To
	IC....7	50.17.1393	74 HC 393	Mot,NS,Ph,RCA,SGS,TI,To
	IC....8	00.00.0000	not used	
	IC....9	50.17.0004	74 HCT 04	Mot,NS,PH,RCA,SGS,TI,To
	IC....10	50.14.0107	HM6116LP-4 MSM 5128-15	Hi,OKI
	IC....11	50.17.1139	74 HC 139	Mot,NS,Ph,RCA,SGS,TI,To
	IC....12	50.15.0106	MC 3487 P DS 3487 N	Mot,NS
	IC....13	50.17.1573	74 HC 573	Mot,NS,Ph,RCA,SGS,TI,To
	IC....14	50.11.0122	TL7705ACP	TI
24	IC....14	50.11.0157	TL7705BCP	TI
	IC....15	00.00.0000	not used	
	IC....16	50.14.0125	27128 HN 4827128G-30	Hi,It
20	IC....16	1.820.995.20	Software 38/86, see note 1	
21	IC....16	1.820.995.21	Software 38/88, see note 1	
25	IC....16	1.820.995.23	Software 02/93, see note 1	
	IC....17	50.16.0107	MC6803P-1 6803P-L	Mot,Hi
	IC....18	50.14.0125	27128 HN 4827128G-30	Hi,It
20	IC....18	1.820.995.20	Software 38/86, see note 1	
21	IC....18	1.820.995.21	Software 38/88, see note 1	
25	IC....18	1.820.995.23	Software 02/93, see note 1	
	JS....1	. .	see note 2	
	JS....2	. .	see note 2	
	JS....3	. .	see note 2	
	JS....4	. .	see note 2	
	JS....5	. .	see note 2	
	JS....6	. .	see note 2	
	JS....7	. .	see note 2	
	JS....8	. .	see note 2	
	JS....9	. .	see note 2	
	JS....10	. .	see note 2	
	JS...11	. .	see note 2	
	JS...12	. .	see note 2	
	JS...13	. .	see note 2	
	JS...14	. .	see note 2	
	JS...15	. .	see note 2	
	JS...16	. .	see note 2	
	JS...17	. .	see note 2	
21	JS...18	. .	see note 2	
	R.....1	57.11.3332	3.3 kOhm 5%	
	R.....2	57.11.3333	33 kOhm 5%	
21	R.....2	00.00.0000	not used	
	R.....3	57.11.3182	1.8 kOhm 5%	
21	R.....3	57.11.3122	1.2 kOhm 5%	
	R.....4	57.11.3182	1.8 kOhm 5%	
21	R.....4	57.11.3122	1.2 kOhm 5%	
	R.....5	57.11.3333	33 kOhm 5%	
21	R.....5	00.00.0000	not used	
	R.....6	57.11.3471	470 Ohm 5%	
	R.....7	57.11.3332	3.3 kOhm 5%	
21	R.....7	00.00.0000	not used	
21	R.....8	57.11.3472	4.7 kOhm 5%	
21	R.....9	57.11.3472	4.7 kOhm 5%	
	RZ....1	57.88.4332	see note 3	
	RZ....2	57.88.4332	see note 3	
	RZ....3	57.88.4332	see note 3	
	RZ....4	57.88.4332	see note 3	
	RZ....5	57.88.4332	see note 3	
	RZ....6	57.88.4332	see note 3	
	RZ....7	57.88.4332	see note 3	
	S.....1	55.03.0122	Chicago Switch 34-550-001	
	Y.....1	89.01.0553	4.9152 MHZ, TD 18	
21	Y.....1	89.01.0560	4.9152 MHz, +-100 ppm	

(24) 91/10/08 Same software as 38/88 suffix (22), improved reset performance.

(25) 93/01/12 Software 02/93.

Note 1 - IC 16/18 : Software in set available only.

Note 2 - Contact pin:
	Studer	Nr. 54.01.0020
	Berg	Nr. 75 160-102-36
	Philips	Nr. 2422 025 89303
Bridge:	Studer	Nr. 54.01.0021
	Berg	Nr. 65 474-001
	Philips	Nr. 2422 024 88003

Note 3 - Network: 8 * 3.3 kOhm, 5%
Sicovend Nr. C09 x 3.3 k J
Ineltro Nr. R88 3.3 k 5%

Ce=Ceramic, Sal=Solid Aluminium, PETP=Polyesterfilm.

MANUFACTURER: Fc=Fairchild, Hi=Hitachi, ITT=Intermetall, Mot=Motorola, NS=National Semiconductors, OK=OKI, Ph=Philips, Ses=Sescosem, Tf=Telefunken,TI=Texas Instruments.

1.820.785.00	MP-UNIT TD CONTROL	CK 85/06/1000
1.820.785.00	MP-UNIT TD CONTROL	CK 85/06/1020
1.820.785.00	MP-UNIT TD CONTROL	PB 85/10/1821
1.820.785.00	MP-UNIT TD CONTROL	BD 88/10/1322
1.820.785.00	MP-UNIT TD CONTROL	BBT91/10/0823
1.820.785.00	MP-UNIT TD CONTROL	BBT91/10/0824
1.820.785.00	MP-UNIT TD CONTROL	GP 93/01/1225

(20) 85/06/10 PCB lay-out -11.

(21) 85/10/18 Improved noise suppression of reset circuit and improved timing of E-pulse (PCB lay-out -12).

(22) 88/10/13 Software 38/88.

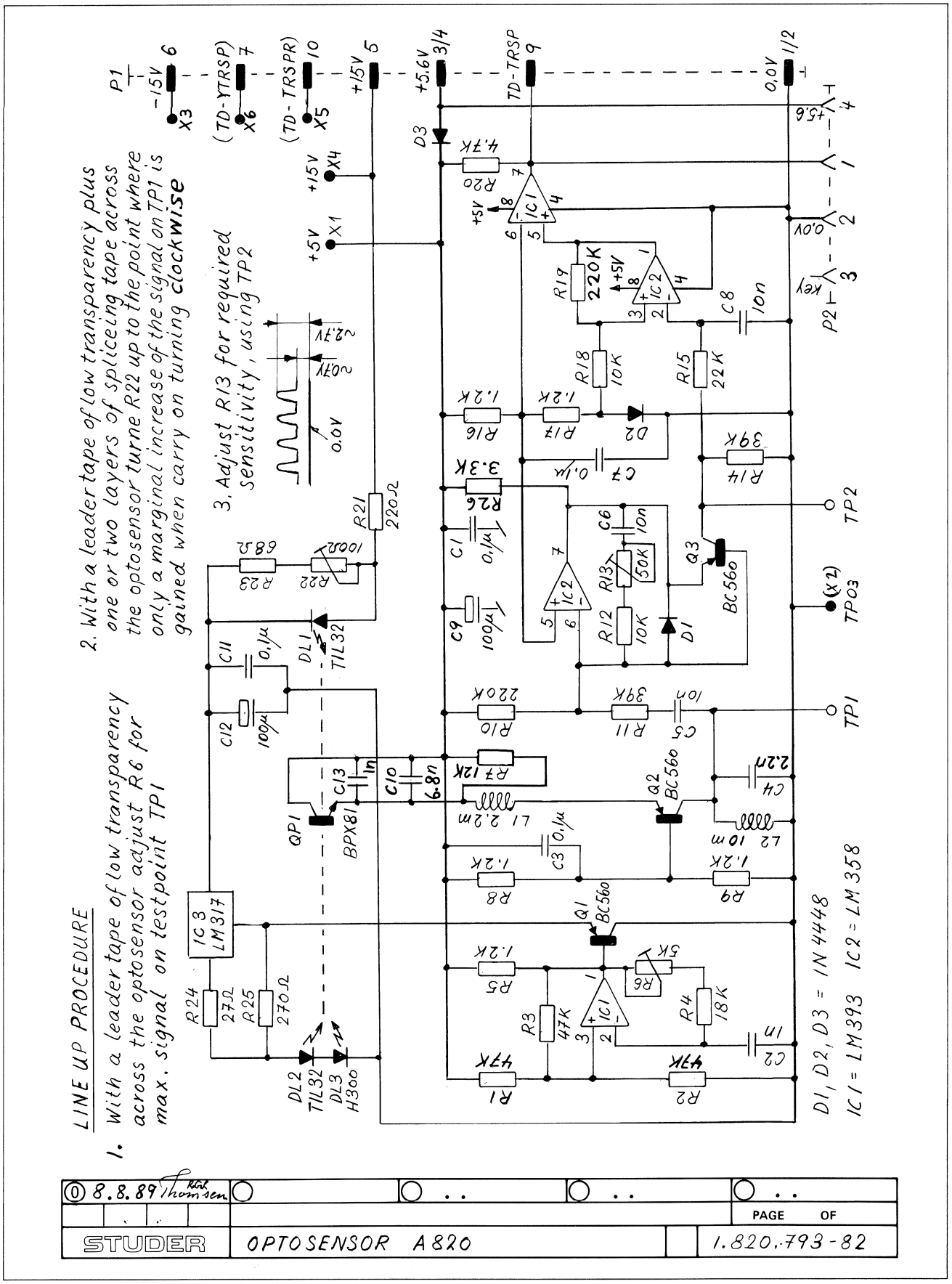
(23) 91/10/08 Allready occupied to 1.820.785.23 0.5" MR, suffix (23) no longer needed, (number has changed to 1.820.885.20 & up).

Änderung	Datum	Gez.	Gepr.	Ges.	Index
	14.1.93	DH	Eby		(25)
	8.10.91	DH	BST		(24)
	28.5.90	DH	Zb		(23)
	13.10.88	Kn			(22)
Ausgabe	18.10.85	A.Ho			(21)

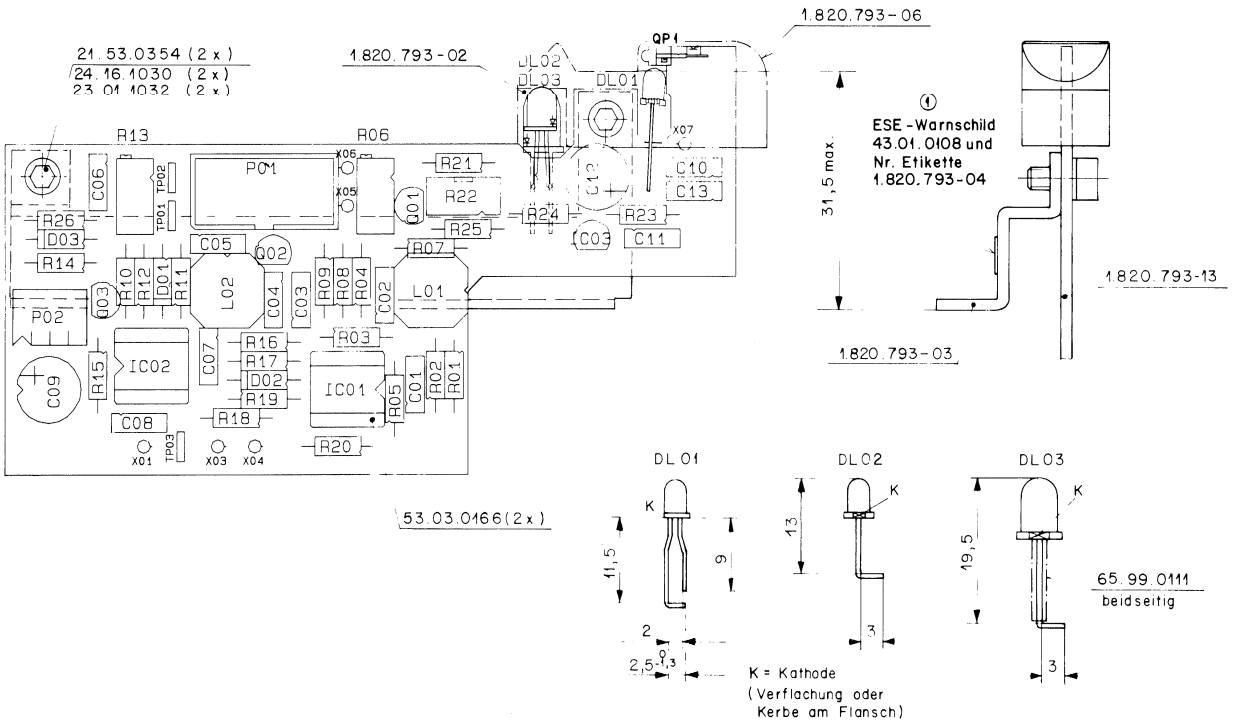
Kopie für:

STUDER REGENSDORF ZÜRICH | Benennung: ESE MP-UNIT TD CONTROL | Nummer: 1.820.785.25

OPTO SENSOR 1.820.793.82



OPTO SENSOR 1.820.793.82



Ad	..POS..	...REF.No...	DESCRIPTION			MANUFACTURER
	C.....1	59.06.0104	0.1 uF	10%,	63V , PETP	
	C.....2	59.06.0102	1 nF	10%,	63V , PETP	
	C.....3	59.06.0104	0.1 uF	10%,	63V , PETP	
	C.....4	59.06.5222	2.2 nF	5%,	63V , PETP	
	C.....5	59.06.0103	10 nF	10%,	63V , PETP	
	C.....6	59.06.0103	10 nF	10%,	63V , PEPT	
	C.....7	59.06.0104	0.1 uF	10%,	63V , PETP	
	C.....8	59.06.0103	10 nF	10%,	63V , PETP	
	C.....9	59.22.3101	100 uF	20%,	10V , EL	
	C....10	59.06.5682	6.8 nF	5%,	63V , PETP	
	C....11	59.06.0104	0.1 uF	10%,	63V , PETP	
	C....12	59.22.3101	100 uF	20%,	10V , EL	
	C....13	59.06.0102	1 nF	10%,	63V , PETP	
	D.....1	50.04.0125	1N4448			R-OHM,Fc,ITT,Ph,Tf,Mot
	D.....2	50.04.0125	1N4448			R-OHM,Fc,ITT,Ph,Tf,Mot
	D.....3	50.04.0125	1N4448			R-OHM,Fc,ITT,Ph,Tf,Mot
	DL....1	50.04.2110	OP165SL	LED,IR	TIL32	Op,TI
02	DL....1	50.04.2950	OP165A	LED,IR	TIL32	Op,TI
	DL....2	50.04.2110	OP165SL	LED,IR	TIL32	Op,TI
02	DL....2	50.04.2950	OP165A	LED,IR	TIL32	Op,TI
	DL....3	50.04.2155	ER300	LED,RED		STY
	IC....1	50.05.0283	LM 393 N	LM 393 P		Tho,NS,TI
	IC....2	50.05.0286	LM 358 M			Mot,NS,SGS,Sig,TI
	IC....3	50.10.0108	LM 317 LZ			Mot,NS
	L.....1	62.02.3222	2.2mH			TDK
	L.....2	62.02.3103	10mH			TDK
	P.....1	54.14.2001	Connector	10 contacts, flat cable		
	P.....2	54.01.0304	Connector	4 contacts, CIS		
	Q.....1	54.03.0496	BC 560			Sie
	Q.....2	54.03.0496	BC 560			Sie
	Q.....3	54.03.0496	BC 560			Sie
	QP....1	50.04.5001	BPX 81			Sie
	R.....1	57.11.3473	47 kOhm	1%		
	R.....2	57.11.3473	47 kOhm	1%		
	R.....3	57.11.3473	47 kOhm	1%		
	R.....4	57.11.3183	18 kOhm	1%		
	R.....5	57.11.3122	1.2 kOhm	1%		
	R.....6	58.05.0502	5 kOhm	10% potentiometer		
	R.....7	57.11.3123	12 kOhm	1%		
	R.....8	57.11.3122	1.2 kOhm	1%		
	R.....9	57.11.3122	1.2 kOhm	1%		
	R....10	57.11.3224	220 kOhm	1%		
01	R....10	57.11.3184	180 kOhm	1%		
	R....11	57.11.3393	39 kOhm	1%		
	R....12	57.11.3103	10 Ohm	1%		
	R....13	58.05.0503	50 kOhm	10% Potentiometer		
	R....14	57.11.3393	39 kOhm	1%		
	R....15	57.11.3223	22 kOhm	1%		
	R....16	57.11.3122	1.2 kOhm	1%		
	R....17	57.11.3122	1.2 kOhm	1%		
	R....18	57.11.3103	10 kOhm	1%		
	R....19	57.11.3224	220 kOhm	1%		
	R....20	57.11.3472	4.7 kOhm	1%		
	R....21	57.11.3221	220 Ohm	1%		
	R....22	58.01.9101	100 Ohm	10% Potentiometer		
	R....23	57.11.3680	68 Ohm	1%		
	R....24	57.11.3270	27 Ohm	1%		
01	R....24	57.11.3330	33 Ohm	1%		
	R....25	57.11.3271	270 Ohm	1%		
	R....26	57.11.3332	3.3 kOhm	1%		
	TP....1	54.02.0320			test pin	
	TP....2	54.02.0320			test pin	
	TP....3	54.02.0320			test pin	

(01) 05.12.89 Sensitivity correction.

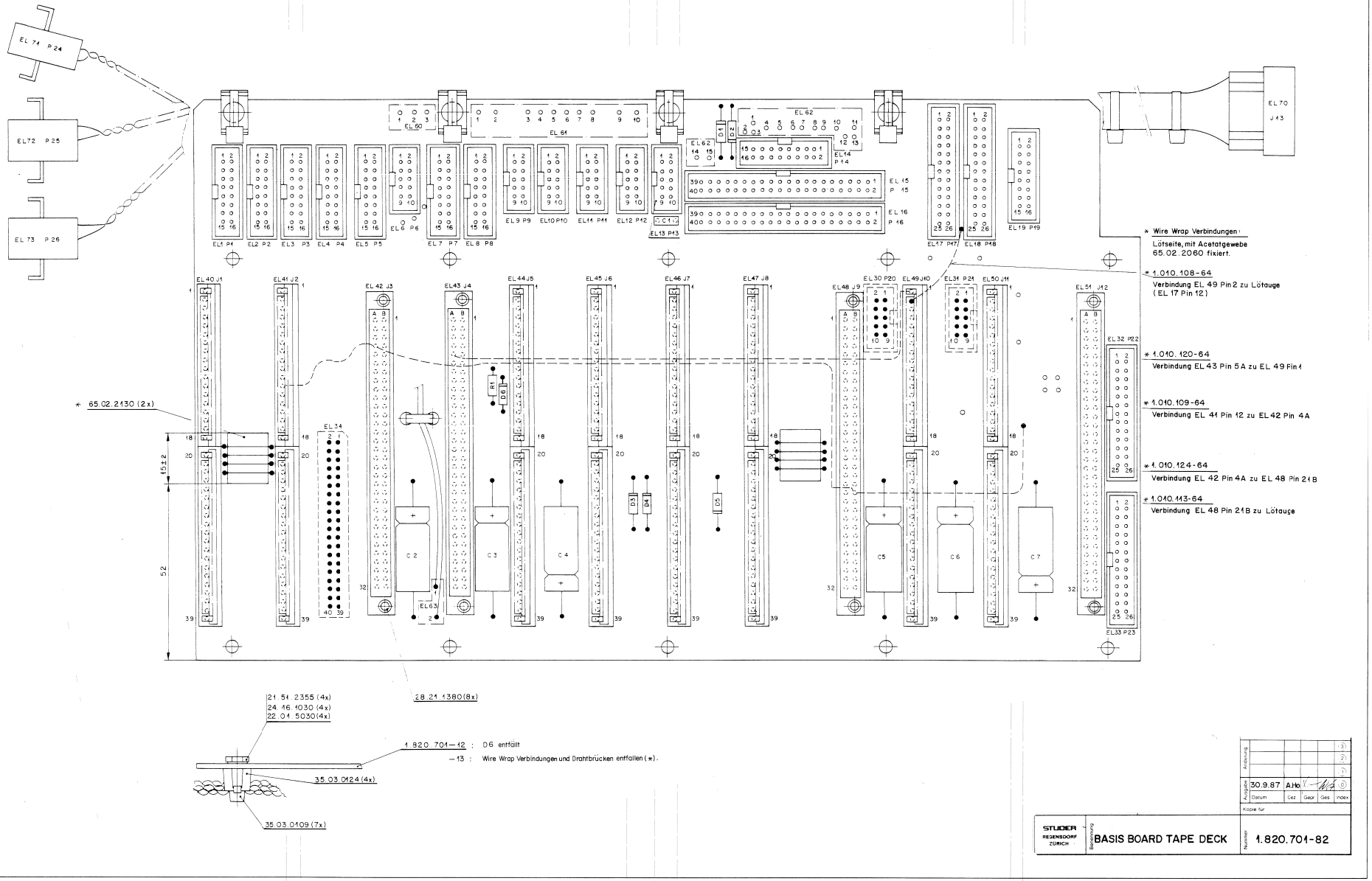
(02) 18.04.91 Change of component number.

CER=Ceramic, EL=Electrolytic, PETP=Polyester, SAL=Solid Aluminum

Manufacturers: Fc=Fairchild, ITT=Intermetall, Mot=Motorola
NS=National Semiconductors, Op=Optron, Ph=Philips
Ra=Raytheon, Ses=Sescosem, Sie=Siemens, Sig=Signetics
Sty=Stanley, Tf=Telefunken, Tho=Thomson, TI=Texas Instruments

1.820.793.82	OPTO SENSOR	RGR89/08/3000
1.820.793.82	OPTO SENSOR	RGR89/12/0501
1.820.793.82	OPTO SENSOR	RGR91/04/1802

BASIS BOARD TAPE DECK 1.820.701.82



* Wire Wrap Verbindungen:
Lötseite, mit Acetatgewebe 65.02.2060 fixiert.

* 1.010.108-64
Verbindung EL 49 Pin 2 zu Lötauge (EL 17 Pin 12)

* 1.010.120-64
Verbindung EL 43 Pin 5A zu EL 49 Pin 1

* 1.010.109-64
Verbindung EL 41 Pin 12 zu EL 42 Pin 4A

* 1.010.124-64
Verbindung EL 42 Pin 4A zu EL 48 Pin 21B

* 1.010.113-64
Verbindung EL 48 Pin 21B zu Lötauge

1.820.701-12 : D6 entfällt
-13 : Wire Wrap Verbindungen und Drahtbrücken entfallen (*).

Änderung					
					3
					2
					1
Ausgabe	30.9.87	A.Ho			0
	Datum	Gez	Gepr	Ges	Index

Kopie für

STUDER REGENSDORF ZÜRICH | Benennung: BASIS BOARD TAPE DECK | Nummer: 1.820.701-82

BASIS BOARD TAPE DECK 1.820.701.82

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	C.....1	59.06.0683	68 nF 20%, PETP	
	C.....2	59.25.1102	1000 uF -10%, 6.3V, El	
	C.....3	59.25.3471	470 uF -10%, 16V, El	
	C.....4	59.25.3471	470 uF -10%, 16V, El	
	C.....5	59.25.1102	1000 uF -10%, 6.3V, El	
	C.....6	59.25.3471	470 uF -10%, 16V, El	
	C.....7	59.25.3471	470 uF -10%, 16V, El	
	D.....1	50.04.0122	1N 4001 ...1N 4004	ITT,Mot
	D.....2	50.04.0122	1N 4001 ...1N 4004	ITT,Mot
	D.....3	50.04.0122	1N 4001 ...1N 4004	ITT,Mot
	D.....4	50.04.1503	7.5 V Z BZX 85 C 7V5	Ses
	D.....5	50.04.0122	1N 4001 ...1N 4004	ITT,Mot
	D.....6	50.04.0125	1N 4448 see note 10	Fc,ITT,Ph,Ses,Tf
	J.....1	00.00.0000	18 + 20 contacts, see note 1	
	J.....2	00.00.0000	18 + 20 contacts, see note 1	
	J.....3	00.00.0000	2 * 32 contacts, see note 2	
	J.....4	00.00.0000	2 * 32 contacts, see note 2	
	J.....5	00.00.0000	18 + 20 contacts, see note 1	
	J.....6	00.00.0000	18 + 20 contacts, see note 1	
	J.....7	00.00.0000	18 + 20 contacts, see note 1	
	J.....8	00.00.0000	18 + 20 contacts, see note 1	
	J.....9	00.00.0000	2 * 32 contacts, see note 2	
	J....10	00.00.0000	18 + 20 contacts, see note 1	
	J....11	00.00.0000	18 + 20 contacts, see note 1	
	J....12	00.00.0000	2 * 32 contacts, see note 2	
	J....13	00.00.0000	24 contacts, see note 3	
	P.....1	00.00.0000	16 contacts, see note 4	
	P.....2	00.00.0000	16 contacts, see note 4	
	P.....3	00.00.0000	16 contacts, see note 4	
	P.....4	00.00.0000	16 contacts, see note 4	
	P.....5	00.00.0000	16 contacts, see note 4	
	P.....6	00.00.0000	10 contacts, see note 5	
	P.....7	00.00.0000	16 contacts, see note 4	
	P.....8	00.00.0000	16 contacts, see note 4	
	P.....9	00.00.0000	10 contacts, see note 5	
	P....10	00.00.0000	10 contacts, see note 5	
	P....11	00.00.0000	10 contacts, see note 5	
	P....12	00.00.0000	10 contacts, see note 5	
	P....13	00.00.0000	10 contacts, see note 5	
	P....14	00.00.0000	16 contacts, see note 4	
	P....15	00.00.0000	40 contacts, see note 6	
	P....16	00.00.0000	40 contacts, see note 6	
	P....17	00.00.0000	26 contacts, see note 7	
	P....18	00.00.0000	26 contacts, see note 7	
	P....19	00.00.0000	16 contacts, see note 4	
	P....20	00.00.0000	10 contacts, see note 5	
	P....21	00.00.0000	10 contacts, see note 5	
	P....22	00.00.0000	26 contacts, see note 7	
	P....23	00.00.0000	26 contacts, see note 7	
	P....24	00.00.0000	6 contacts, see note 8	
	P....25	00.00.0000	3 contacts, see note 9	
	P....26	00.00.0000	3 contacts, see note 9	
	R.....1	57.11.4332	3.3 kOhm	

Note 1 - 2 connectors:
18 contacts, Studer Nr. 54.10.2015
Burndy Nr. GCSB 18 S0 19 V1 K9
20 contacts, Studer Nr. 54.10.2026
Burndy Nr. GCSB 20 S0 V1 K9

Note 2 - connector, 2 * 32 contacts:
Studer Nr. 54.11.2005
Burndy Nr. PI 64 B 20 R00 A00 Z0
Philips Nr. 2422 025 89297
Erni Nr. 9722.543.616

Note 3 - connector:
case, 24 circuits, Studer Nr. 54.02.0415
Molex Nr. 03-06-2242
19 contacts, Studer Nr. 54.02.0413
Molex Nr. 02-06-1101
5 contacts, Studer Nr. 54.02.0412
Molex Nr. 02-06-1131

Note 4 - connector, 16 contacts:
Studer Nr. 54.14.2002
Yamaichi Nr. FAP-16-08/4
Burndy Nr. BPH 9 B 16 B00 GS

Note 5 - connector, 10 contacts:
Studer Nr. 54.14.2001
Yamaichi Nr. FAP-10-08/4
Burndy Nr. BPH 7 B 10 B00 GS

Note 6 - connector, 40 contacts:
Studer Nr. 54.14.2004
Yamaichi Nr. FAP-40-08/4
Burndy Nr. BPH 9 B 40 B00 GS

Note 7 - connector, 26 contacts:
Studer Nr. 54.14.2003
Yamaichi Nr. FAP-26-08/4
Burndy Nr. BPH 9 B 26 B00 GS

Note 8 - connector:
case, 6 circuits, Studer Nr. 54.02.0411
Molex Nr. 03-06-1061
2 contacts, Studer Nr. 54.02.0413
Molex Nr. 02-06-1101

Note 9 - connector:
case, 3 circuits, Studer Nr. 54.02.0401
Molex Nr. 03-06-1031
2 contacts, Studer Nr. 54.02.0412
Molex Nr. 02-06-1131

Note10 - PCB lay-out -13 only

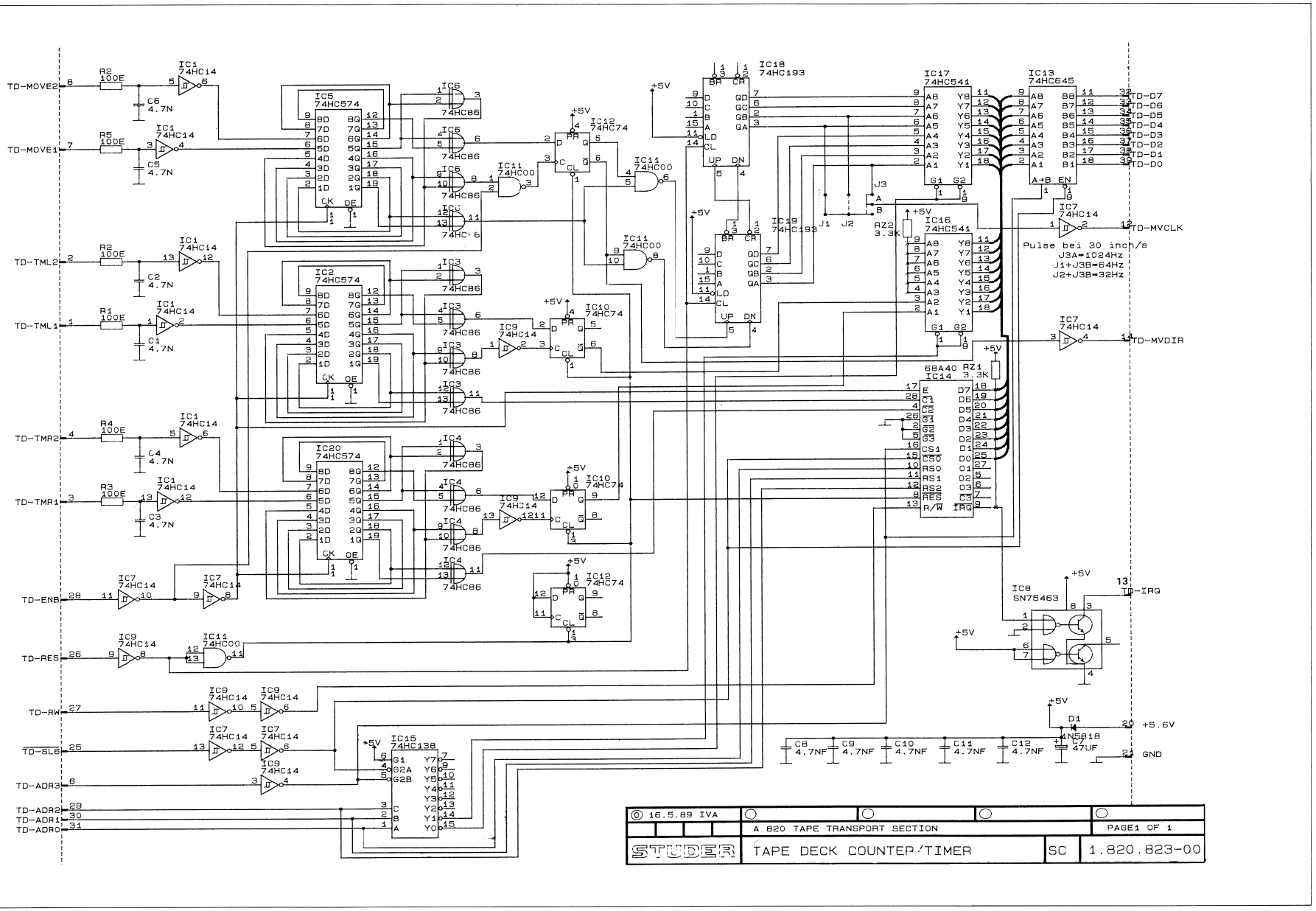
El=Electrolytic, PETP=Polyesterfilm

MANUFACTURER: Fc=Fairchild, ITT=Intermetall, Mot=Motorola, Ph=Philips,
Ses=Sescosem, Tf=Telefunken.

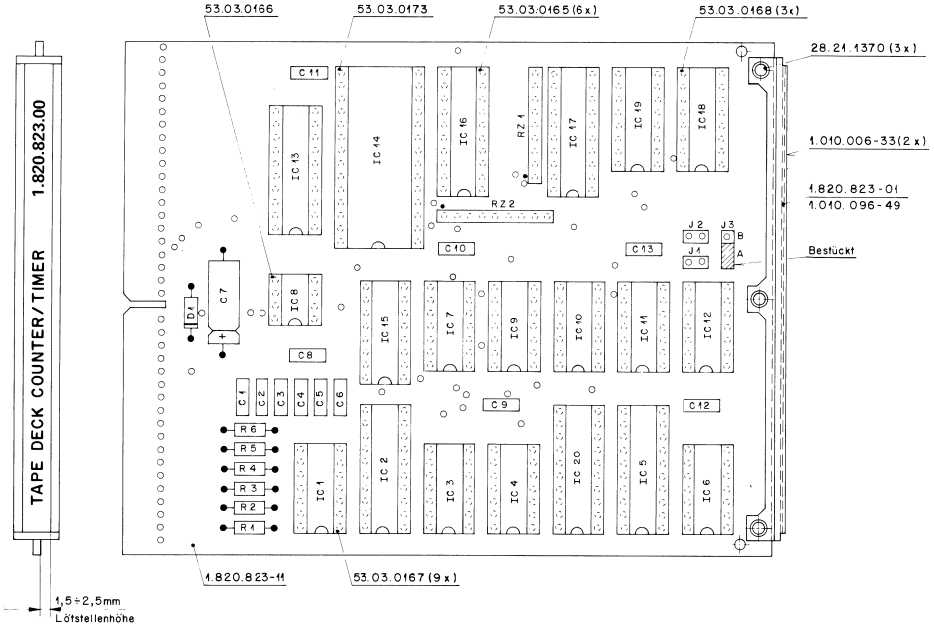
1.820.701.82 BASIS BOARD TAPE DECK BD 87/09/3000

END

TAPE DECK COUNTER / TIMER 1.820.823.00



TAPE DECK COUNTER / TIMER 1.820.823.00



Ad	..POS..	...REF.No...	DESCRIPTION.....		MANUFACTURER
	D.....1	50.04.0512	1N 5818	1N 5819	Mot
	C.....1	59.06.0472	4.7 nF	10%, 63V, PETP	
	C.....2	59.06.0472	4.7 nF	10%, 63V, PETP	
	C.....3	59.06.0472	4.7 nF	10%, 63V, PETP	
	C.....4	59.06.0472	4.7 nF	10%, 63V, PETP	
	C.....5	59.06.0472	4.7 nF	10%, 63V, PETP	
	C.....6	59.06.0472	4.7 nF	10%, 63V, PETP	
	C.....7	59.25.3470	47 uF	16V, El	
	C.....8	59.06.0683	68 nF	10%, 63V, PETP	
	C.....9	59.06.0683	68 nF	10%, 63V, PETP	
	C....10	59.06.0683	68 nF	10%, 63V, PETP	
	C....11	59.06.0683	68 nF	10%, 63V, PETP	
	C....12	59.06.0683	68 nF	10%, 63V, PETP	
	C....13	59.06.0683	68 nF	10%, 63V, PETP	
	IC....1	50.17.1014	74 HC 14	.. 74 HC 14 .	Mot,NS,Ph,RCA,TI,To
	IC....2	50.17.1574	74 HC 574	.. 74 HC 574 .	Mot,NS,Ph,RCA,SGS,TI,To
	IC....3	50.17.1086	74 HC 86	.. 74 HC 86 .	Mot,NS,Ph,RCA,SGS,TI,To
	IC....4	50.17.1086	74 HC 86	.. 74 HC 86 .	Mot,NS,Ph,RCA,SGS,TI,To
	IC....5	50.17.1574	74 HC 574	.. 74 HC 574 .	Mot,NS,Ph,RCA,SGS,TI,To
	IC....6	50.17.1086	74 HC 86	.. 74 HC 86 .	Mot,NS,Ph,RCA,SGS,TI,To
	IC....7	50.17.1014	74 HC 14	.. 74 HC 14 .	Mot,NS,Ph,RCA,TI,To
	IC....8	50.05.0203	SN 75463 P	SN 75463 JG, SN 55463 JG, DS 3613 N	NS,TI
	IC....9	50.17.1014	74 HC 14	.. 74 HC 14 .	Mot,NS,Ph,RCA,TI,To
	IC...10	50.17.1074	74 HC 74	.. 74 HC 74 .	Mot,NS,Ph,RCA,SGS,TI,To
	IC...11	50.17.1000	74 HC 00	.. 74 HC 00 .	Mot,NS,Ph,RCA,SGS,TI,To
	IC...12	50.17.1074	74 HC 74	.. 74 HC 74 .	Mot,NS,Ph,RCA,SGS,TI,To
	IC...13	50.17.1645	74 HC 645	.. 74 HC 645 .	Mot,NS,Ph,RCA,SGS,TI,To
	IC...14	50.16.0113	MC 68A 40P	HD 68A 40P	Hi,Mot
	IC...15	50.17.1138	74 HC 138	.. 74 HC 138 .	Mot,NS,Ph,RCA,SGS,TI,To
	IC...16	50.17.1541	74 HC 541	.. 74 HC 541 .	Mot,NS,Ph,RCA,SGS,TI,To
	IC...17	50.17.1541	74 HC 541	.. 74 HC 541 .	Mot,NS,Ph,RCA,SGS,TI,To
	IC...18	50.17.1193	74 HC 193	.. 74 HC 193 .	Mot,NS,Ph,RCA,SGS,TI,To
	IC...19	50.17.1193	74 HC 193	.. 74 HC 193 .	Mot,NS,Ph,RCA,SGS,TI,To
	IC...20	50.17.1574	74 HC 574	.. 74 HC 574 .	Mot,NS,Ph,RCA,SGS,TI,To
	J.....1	00.00.0000	note used		
	J.....2	00.00.0000	note used		
	J.....3	00.00.0000	see note 1		
	R.....1	57.11.3101	100 Ohm	1%	
	R.....2	57.11.3101	100 Ohm	1%	
	R.....3	57.11.3101	100 Ohm	1%	
	R.....4	57.11.3101	100 Ohm	1%	
	R.....5	57.11.3101	100 Ohm	1%	
	R.....6	57.11.3101	100 Ohm	1%	
	RZ....1	57.88.4332		Network, 8 * 3.3 kOhm, 5%, single line	
	RZ....2	57.88.4332		Network, 8 * 3.3 kOhm, 5%, single line	

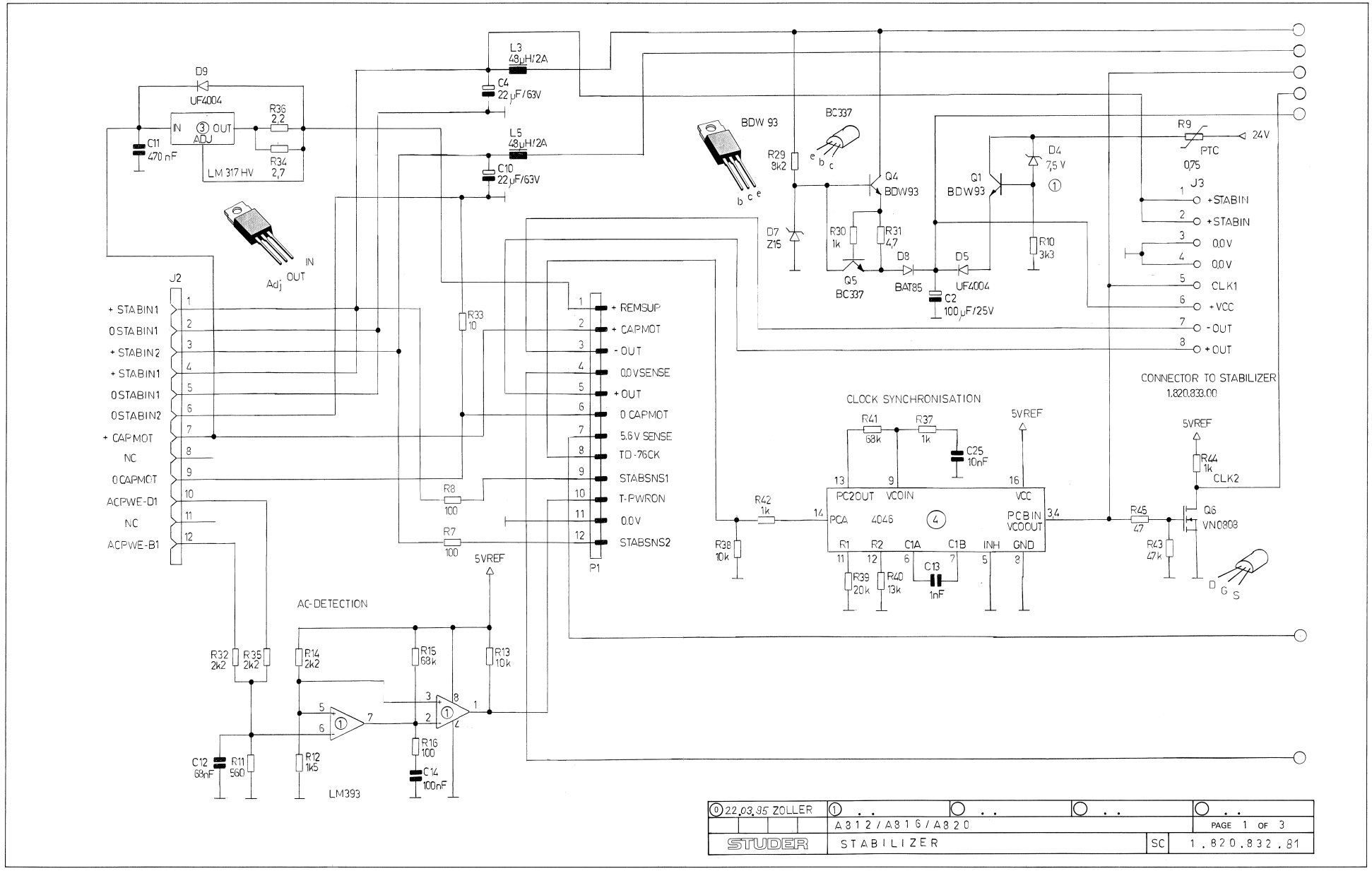
Note 1 - Contact pin: Studer Nr. 54.01.0020
Berg Nr. 75 160-102-36
Philips Nr. 2422 025 89303
Bridge: Studer Nr. 54.01.0021
Berg Nr. 65 474-001
Philips Nr. 2422 024 88003

PETP=Polyesterfilm, El=Electrolytic

MANUFACTURER: Hi=Hitachi, Mot=Motorola, NS=National Semiconductors,
Ph=Philips, RCA=RCA Corporation, SGS=SGS/Ates,
TI=Texas Instruments, To=Toshiba.

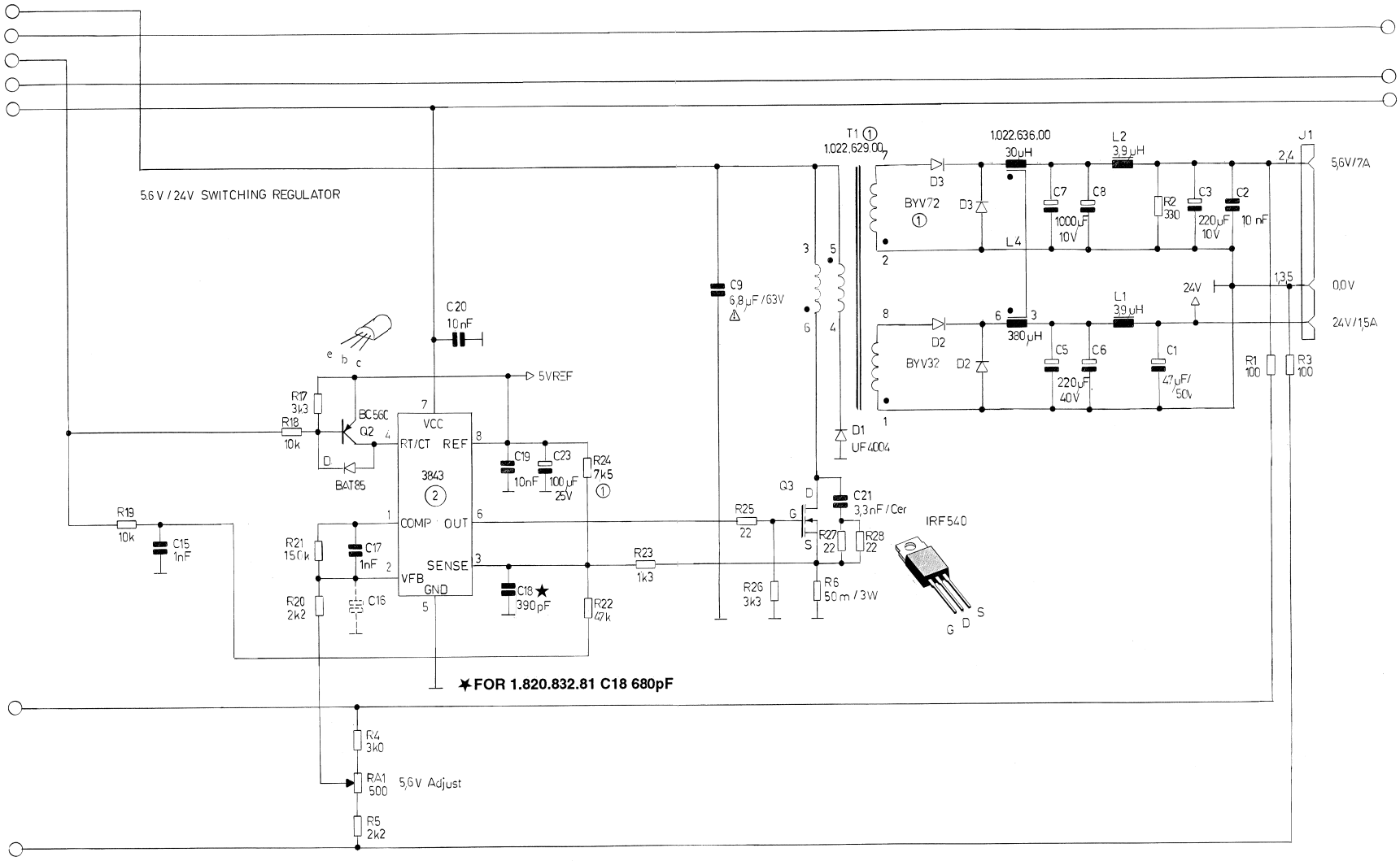
1.820.823.00 TAPE DECK COUNTER/TIMER BD 88/10/2700

STABILIZER 1.820.832.00 / 1.820.832.81



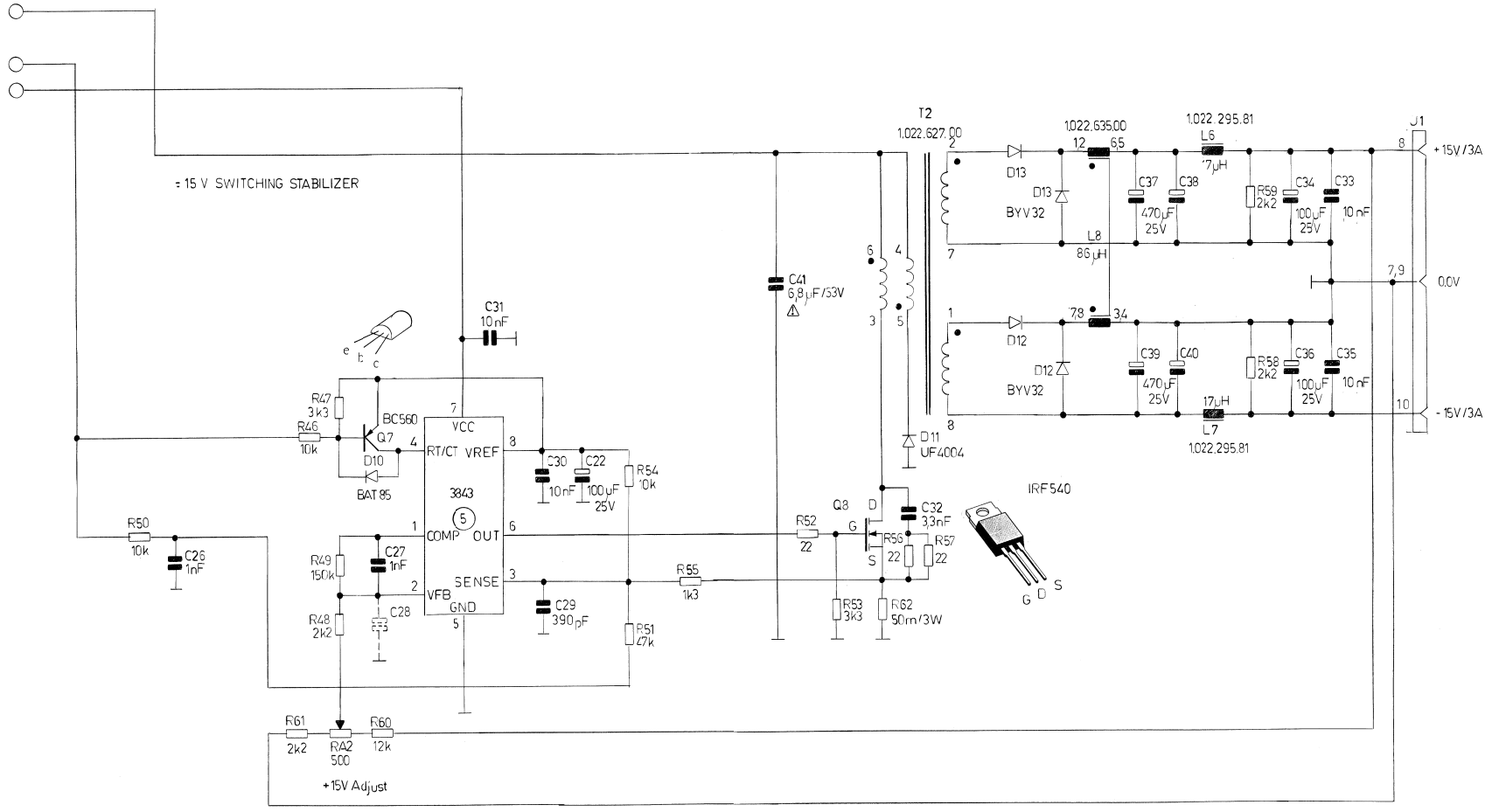
0 22.03.95 ZOLLER	1 . .	. .	. .	. .
	A812/A816/A820			PAGE 1 OF 3
STUDER	STABILIZER		SC	1.820.832.81

STABILIZER 1.820.832.00 / 1.820.832.81



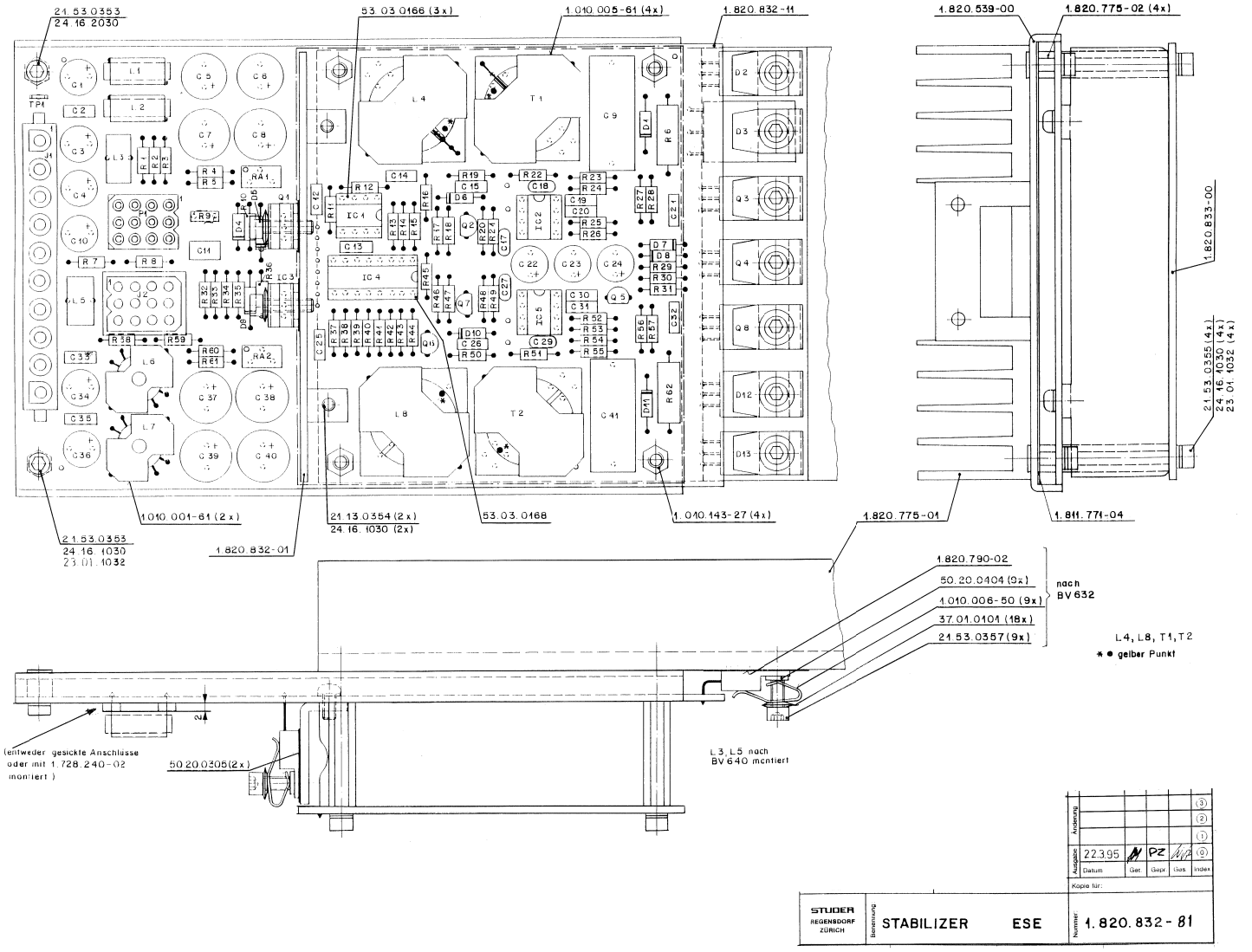
0 22.03.95 ZOLLER	1 . .	. .	. .	. .
	A812/A816/A820			PAGE 2 OF 3
STUDER	STABILIZER		SC	1.820.832.81

STABILIZER 1.820.832.00 / 1.820.832.81



0 22.03.95 ZOLLER	1 . .	. .	. .	. .
	A812/A816/A820			PAGE 3 OF 3
STUDER	STABILIZER		SC	1.820.832.81

STABILIZER 1.820.832.00 / 1.820.832.81



STABILIZER 1.820.832.00

Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	A.....1	1.820.833.00	Stabilizer +/-26V		
	C.....1	59.22.6470	47 uF	-20%, 40V, EL	
	C.....2	59.06.0103	10 nF	10%, 63V, PETP	
	C.....3	59.22.3221	220 uF	-20%, 10V, EL	
	C.....4	59.22.8220	22 uF	-20%, 63V, EL	
	C.....5	59.22.6221	220 uF	-20%, 40V, EL	
	C.....6	59.22.6221	220 uF	-20%, 40V, EL	
	C.....7	59.22.3102	1000 uF	-20%, 10V, EL	
	C.....8	59.22.3102	1000 uF	-20%, 10V, EL	
	C.....9	59.31.5685	6.8 uF	10%, 63V, PETP	
02	C.....9	59.02.0685	6.8 uF	10%, 63V, MPC	
	C....10	59.22.8220	22 uF	-20%, 63V, EL	
	C....11	59.06.0474	470 nF	10%, 63V, PETP	
	C....12	59.06.0683	68 nF	10%, 63V, PETP	
	C....13	59.06.5102	1 nF	5%, 63V, PETP	
	C....14	59.06.5104	100 nF	5%, 63V, PETP	
	C....15	59.06.5102	1 nF	5%, 63V, PETP	
	C....16	00.00.0000	not used		
	C....17	59.32.4102	1 nF	20%, 63V, CER	
	C....18	59.34.5391	390 pF	5%, 63V, CER	
	C....19	59.06.0103	10 nF	10%, 63V, PETP	
	C....20	59.06.0103	10 nF	10%, 63V, PETP	
	C....21	59.06.0332	3.3 nF	10%, 63V, PETP	
	C....22	59.22.5101	100 uF	-20%, 25V, EL	
	C....23	59.22.5101	100 uF	-20%, 25V, EL	
	C....24	59.22.5101	100 uF	-20%, 25V, EL	
	C....25	59.06.0103	10 nF	10%, 63V, PETP	
	C....26	59.06.5102	1 nF	5%, 63V, PETP	
	C....27	59.32.4102	1 nF	20%, 63V, CER	
	C....28	00.00.0000	not used		
	C....29	59.34.5391	390 pF	5%, 63V, CER	
	C....30	59.06.0103	10 nF	10%, 63V, PETP	
	C....31	59.06.0103	10 nF	10%, 63V, PETP	
	C....32	59.06.0332	3.3 nF	10%, 63V, PETP	
	C....33	59.06.0103	10 nF	10%, 63V, PETP	
	C....34	59.22.5101	100 uF	-20%, 25V, EL	
	C....35	59.06.0103	10 nF	10%, 63V, PETP	
	C....36	59.22.5101	100 uF	-20%, 25V, EL	
	C....37	59.22.5471	470 uF	-20%, 25V, EL	
	C....38	59.22.5471	470 uF	-20%, 25V, EL	
	C....39	59.22.5471	470 uF	-20%, 25V, EL	
	C....40	59.22.5471	470 uF	-20%, 25V, EL	
	C....41	59.31.5685	6.8 uF	10%, 63V, PETP	
02	C....41	59.02.0685	6.8 uF	10%, 63V, MPC	
	D.....1	50.04.0138	UF 4004	BYT 01-400, UES 1106	GI,Tho,Un
	D.....2	50.04.0517	BYV 32		Mot,Ph
	D.....3	50.04.0520	BYV 73	MBR 3045 PT	Mot,Ph
01	D.....3	50.04.0522	BYV 72	BYW 99 P - 100	Mot,Ph
	D.....4	50.04.1102	Z 6.8 V		ITT,Mot,Ph,Tf,SGS,Tho
01	D.....4	50.04.1103	Z 7.5 V		ITT,Mot,Ph,Tf,SGS,Tho
	D.....5	50.04.0138	UF 4004	BYT 01-400, UES 1106	GI,Tho,Un
	D.....6	50.04.0127	BAT 85	BAT 42	Ph,SGS,Tho
	D.....7	50.04.1119	Z 15 V		ITT,Mot,Ph,Tf,SGS,Tho
	D.....8	50.04.0127	BAT 85	BAT 42	Ph,SGS,Tho
	D.....9	50.04.0138	UF 4004	BYT 01-400, UES 1106	GI,Tho,Un
	D....10	50.04.0127	BAT 85	BAT 42	Ph,SGS,Tho
	D....11	50.04.0138	UF 4004	BYT 01-400, UES 1106	GI,Tho,Un
	D....12	50.04.0517	BYV 32		Mot,Ph
	D....13	50.04.0517	BYV 32		Mot,Ph
	IC....1	50.05.0283	LM 393 N	LM 393 P, LM 393 DP	Sig,TI,NS,Thc
	IC....2	50.10.0113	IP3843 N	UC 3843 N	IPS,Un
	IC....3	50.10.0116	LM317HVT		Seagate,SG
	IC....4	50.07.0046	CD4046BE	HCF 4046 BE	SGS,RCA
	IC....5	50.10.0113	IP3843 N	UC 3843 N	IPS,Un
	J.....1	54.25.0010		see note 1	
	J.....2	54.02.0409		see note 2	
	L.....1	62.99.0111	3.9 uH		Vo
	L.....2	62.99.0111	3.9 uH		Vo
	L.....3	62.03.0010	48 uH		Tokin
	L.....4	1.022.636.00	30 uH		St
	L.....5	62.03.0010	48 uH		Tokin
	L.....6	1.022.295.81	17 uH		St
	L.....7	1.022.295.81	17 uH		St
	L.....8	1.022.635.00	86 uH		St
	P.....1	54.02.0408		see note 3	
	Q.....1	50.03.0512	BDW 93 B	BD 899 A	Mot,SGS,Tho
	Q.....2	50.03.0496	BC 560		Sie
	Q.....3	50.03.1609	IRF 540		IR
	Q.....4	50.03.0512	BDW 93 B	BD 899 A	Mot,SGS,Tho
	Q.....5	50.03.0340	BC 337-25		ITT,NS,Ph,Sie
	Q.....6	50.03.1505	VN 0808 M	ZVN 0108 A	Fe,Six
	Q.....7	50.03.0496	BC 560		Sie
	Q.....8	50.03.1609	IRF 540		IR
	R.....1	57.11.3101	100 Ohm	5%	
	R.....2	57.11.3331	330 Ohm	5%	
	R.....3	57.11.3101	100 Ohm	5%	
	R.....4	57.11.3302	3.0 kOhm	5%	
	R.....5	57.11.3222	2.2 kOhm	5%	
	R.....6	57.56.2050	50 mOhm	3%, 3W	
	R.....7	57.19.0101	100 Ohm	5%, Fuse	
	R.....8	57.19.0101	100 Ohm	5%, Fuse	
	R.....9	57.92.7013	0.75 Ohm	PTC	
	R....10	57.11.3332	3.3 kOhm	5%	

Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	R....11	57.11.3561	560 Ohm	1%	
	R....12	57.11.3152	1.5 kOhm	1%	
	R....13	57.11.3103	10 kOhm	5%	
	R....14	57.11.3222	2.2 kOhm	1%	
	R....15	57.11.3683	68 kOhm	1%	
	R....16	57.11.3101	100 Ohm	1%	
	R....17	57.11.3332	3.3 kOhm	5%	
	R....18	57.11.3103	10 kOhm	5%	
	R....19	57.11.3103	10 kOhm	1%	
	R....20	57.11.3222	2.2 kOhm	5%	
	R....21	57.11.3154	150 kOhm	5%	
	R....22	57.11.3473	47 kOhm	1%	
	R....23	57.11.3132	1.3 kOhm	1%	
	R....24	57.11.3103	10 kOhm	1%	
01	R....24	57.11.3752	7.5 KOhm	1%	
	R....25	57.11.3220	22 Ohm	5%	
	R....26	57.11.3332	3.3 kOhm	5%	
	R....27	57.11.3220	22 Ohm	5%	
	R....28	57.11.3220	22 Ohm	5%	
	R....29	57.11.3822	8.2 kOhm	5%	
	R....30	57.11.3102	1 kOhm	5%	
	R....31	57.11.3479	4.7 Ohm	5%	
	R....32	57.11.3222	2.2 kOhm	1%	
	R....33	57.11.3100	10 Ohm	5%	
	R....34	57.11.3279	2.7 Ohm	5%	
	R....35	57.11.3222	2.2 kOhm	1%	
	R....36	57.11.3229	2.2 Ohm	5%	
	R....37	57.11.3102	1 kOhm	1%	
	R....38	57.11.3103	10 kOhm	5%	
	R....39	57.11.3203	20 kOhm	1%	
	R....40	57.11.3133	13 kOhm	1%	
	R....41	57.11.3683	68 kOhm	5%	
	R....42	57.11.3102	1 kOhm	5%	
	R....43	57.11.3473	47 kOhm	5%	
	R....44	57.11.3102	1 kOhm	5%	
	R....45	57.11.3470	47 Ohm	5%	
	R....46	57.11.3103	10 kOhm	5%	
	R....47	57.11.3332	3.3 kOhm	5%	
	R....48	57.11.3222	2.2 kOhm	5%	
	R....49	57.11.3154	150 kOhm	5%	
	R....50	57.11.3103	10 kOhm	1%	
	R....51	57.11.3473	47 kOhm	1%	
	R....52	57.11.3220	22 Ohm	5%	
	R....53	57.11.3332	3.3 kOhm	5%	
	R....54	57.11.3103	10 kOhm	1%	
	R....55	57.11.3132	1.3 kOhm	1%	
	R....56	57.11.3220	22 Ohm	5%	
	R....57	57.11.3220	22 Ohm	5%	
	R....58	57.11.3222	2.2 kOhm	5%	
	R....59	57.11.3222	2.2 kOhm	5%	
	R....60	57.11.3123	12 kOhm	5%	
	R....61	57.11.3222	2.2 kOhm	5%	
	R....62	57.56.2050	50 mOhm	3%, 3W	
	RA....1	58.05.1501	500 Ohm	10%, multi turn	
	RA....2	58.05.1501	500 Ohm	10%, multi turn	
	T.....1	1.022.629.00		Switching Transformer	St
	T.....2	1.022.627.00		Switching Transformer	St
	TP....1	54.02.0320		Test Point	

(01) 06.08.90 System improvement.
(02) 03.10.91 Improved high frequency behaviour.

Note 1 - Connector:
10 contacts, AMP Nr. 826 852-3

Note 2 - Connector:

case,	Studer Nr.	54.02.0409
	Molex Nr.	03-06-1121
12 contacts,	Studer Nr.	54.02.0407
	Molex Nr.	02-06-7103

Note 3 - Connector:

case,	Studer Nr.	54.02.0408
	Molex Nr.	03-06-2121
12 contacts,	Studer Nr.	54.02.0406
	Molex Nr.	02-06-8103

Ce=Ceramic, El=Electrolytic, MPETP=Metallized Polyesterfilm, PETP=Polyesterfilm, MPC=Metallized Polycarbonate film.

MANUFACTURER: Fe=Ferranti, GI=General Instruments, IPS=Integrated Power Semiconductor, ITT=Intermetall, IR=International Rectifier, Mot=Motorola, NS=National Semiconductors, Ph=Philips, RCA=RCA Corporation, Ses=Sescosem, SGS=SGS/Ates, SG=Silicon General, Sie=Siemens, Sig=Signetics, Six=Siliconix, St=Studer, Tf=Telefunken, Tho=Thomson, Ti=Texas Instruments, Un=Unitrode, Vo=Vogt & Co.

1.820.832.00	STABILIZER	PZ 90/03/2100
1.820.832.00	STABILIZER	PZ 90/08/0601
1.820.832.00	STABILIZER	PZ 91/10/0302

STABILIZER 1.820.832.81

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	A.....1	1.820.833.00	Stabilizer +/-26V	
	C.....1	59.22.6470	47 uF -20%, 40V, EL	
	C.....2	59.06.0103	10 nF 10%, 63V, PETP	
	C.....3	59.22.3221	220 uF -20%, 10V, EL	
	C.....4	59.22.8220	22 uF -20%, 63V, EL	
	C.....5	59.22.6221	220 uF -20%, 40V, EL	
	C.....6	59.22.6221	220 uF -20%, 40V, EL	
	C.....7	59.22.3102	1000 uF -20%, 10V, EL	
	C.....8	59.22.3102	1000 uF -20%, 10V, EL	
	C.....9	59.02.0685	6.8 uF 10%, 63V, MPC, /!\	
	C....10	59.22.8220	22 uF -20%, 63V, EL	
	C....11	59.06.0474	470 nF 10%, 63V, PETP	
	C....12	59.06.0683	68 nF 10%, 63V, PETP	
	C....13	59.06.5102	1 nF 5%, 63V, PETP	
	C....14	59.06.5104	100 nF 5%, 63V, PETP	
	C....15	59.06.5102	1 nF 5%, 63V, PETP	
	C....16	00.00.0000	not used	
	C....17	59.32.4102	1 nF 20%, 63V, CER	
	C....18	59.32.1681	680 pF 10%, 400V, CER	
	C....19	59.06.0103	10 nF 10%, 63V, PETP	
	C....20	59.06.0103	10 nF 10%, 63V, PETP	
	C....21	59.06.0332	3.3 nF 10%, 63V, PETP	
	C....22	59.22.5101	100 uF -20%, 25V, EL	
	C....23	59.22.5101	100 uF -20%, 25V, EL	
	C....24	59.22.5101	100 uF -20%, 25V, EL	
	C....25	59.06.0103	10 nF 10%, 63V, PETP	
	C....26	59.06.5102	1 nF 5%, 63V, PETP	
	C....27	59.32.4102	1 nF 20%, 63V, CER	
	C....28	00.00.0000	not used	
	C....29	59.34.5391	390 pF 5%, 63V, CER	
	C....30	59.06.0103	10 nF 10%, 63V, PETP	
	C....31	59.06.0103	10 nF 10%, 63V, PETP	
	C....32	59.06.0332	3.3 nF 10%, 63V, PETP	
	C....33	59.06.0103	10 nF 10%, 63V, PETP	
	C....34	59.22.5101	100 uF -20%, 25V, EL	
	C....35	59.06.0103	10 nF 10%, 63V, PETP	
	C....36	59.22.5101	100 uF -20%, 25V, EL	
	C....37	59.22.5471	470 uF -20%, 25V, EL	
	C....38	59.22.5471	470 uF -20%, 25V, EL	
	C....39	59.22.5471	470 uF -20%, 25V, EL	
	C....40	59.22.5471	470 uF -20%, 25V, EL	
	C....41	59.02.0685	6.8 uF 10%, 63V, MPC, /!\	
	D.....1	50.04.0138	UF 4004 BYT 01-400, UES 1106	GI,Tho,Un
	D.....2	50.04.0517	BYV 32	Mot,Ph
	D.....3	50.04.0522	BYV 72 BYW 99 P - 100	Mot,Ph
	D.....4	50.04.1103	Z 7.5 V	ITT,Mot,Ph,Tf,SGS,Tho
	D.....5	50.04.0138	UF 4004 BYT 01-400, UES 1106	GI,Tho,Un
	D.....6	50.04.0127	BAT 85 BAT 42	Ph,SGS,Tho
	D.....7	50.04.1119	Z 15 V	ITT,Mot,Ph,Tf,SGS,Tho
	D.....8	50.04.0127	BAT 85 BAT 42	Ph,SGS,Tho
	D.....9	50.04.0138	UF 4004 BYT 01-400, UES 1106	GI,Tho,Un
	D....10	50.04.0127	BAT 85 BAT 42	Ph,SGS,Tho
	D....11	50.04.0138	UF 4004 BYT 01-400, UES 1106	GI,Tho,Un
	D....12	50.04.0517	BYV 32	Mot,Ph
	D....13	50.04.0517	BYV 32	Mot,Ph
	IC....1	50.05.0283	LM 393 N LM 393 P, LM 393 DP	Sig,TI,NS,Tho
	IC....2	50.10.0113	IP3843 N UC 3843 N	IPS,Un
	IC....3	50.10.0116	LM317HVT	Seagate,SG
	IC....4	50.07.0046	CD4046BE HCF 4046 BE	SGS,RCA
	IC....5	50.10.0113	IP3843 N UC 3843 N	IPS,Un
	J.....1	54.25.0010	see note 1	
	J.....2	54.02.0409	see note 2	
	L.....1	62.99.0111	3.9 uH	Vo
	L.....2	62.99.0111	3.9 uH	Vo
	L.....3	62.03.0010	48 uH	Tokin
	L.....4	1.022.636.00	30 uH	St
	L.....5	62.03.0010	48 uH	Tokin
	L.....6	1.022.295.81	17 uH	St
	L.....7	1.022.295.81	17 uH	St
	L.....8	1.022.635.00	86 uH	St
	P.....1	54.02.0408	see note 3	
	Q.....1	50.03.0512	BDW 93 B BD 899 A	Mot,SGS,Tho
	Q.....2	50.03.0496	BC 560	Sie
	Q.....3	50.03.1609	IRF 540	IR
	Q.....4	50.03.0512	BDW 93 B BD 899 A	Mot,SGS,Tho
	Q.....5	50.03.0340	BC 337-25	ITT,NS,Ph,Sie
	Q.....6	50.03.1505	VN 0808 M ZVN 0108 A	Fe,Six
	Q.....7	50.03.0496	BC 560	Sie
	Q.....8	50.03.1609	IRF 540	IR
	R.....1	57.11.3101	100 Ohm 5%	
	R.....2	57.11.3331	330 Ohm 5%	
	R.....3	57.11.3101	100 Ohm 5%	
	R.....4	57.11.3302	3.0 kOhm 5%	
	R.....5	57.11.3222	2.2 kOhm 5%	
	R.....6	57.56.2050	50 mOhm 3%, 3W	
	R.....7	57.19.0101	100 Ohm 5%, Fuse	
	R.....8	57.19.0101	100 Ohm 5%, Fuse	
	R.....9	57.92.7013	0.75 Ohm PTC	
	R....10	57.11.3332	3.3 kOhm 5%	
	R....11	57.11.3561	560 Ohm 1%	
	R....12	57.11.3152	1.5 kOhm 1%	
	R....13	57.11.3103	10 kOhm 5%	
	R....14	57.11.3222	2.2 kOhm 1%	
	R....15	57.11.3683	68 kOhm 1%	
	R....16	57.11.3101	100 Ohm 1%	
	R....17	57.11.3332	3.3 kOhm 5%	
	R....18	57.11.3103	10 kOhm 5%	
	R....19	57.11.3103	10 kOhm 1%	
	R....20	57.11.3222	2.2 kOhm 5%	
	R....21	57.11.3154	150 kOhm 5%	
	R....22	57.11.3473	47 kOhm 1%	
	R....23	57.11.3132	1.3 kOhm 1%	
	R....24	57.11.3752	7.5 KOhm 1%	
	R....25	57.11.3220	22 Ohm 5%	
	R....26	57.11.3332	3.3 kOhm 5%	
	R....27	57.11.3220	22 Ohm 5%	
	R....28	57.11.3220	22 Ohm 5%	
	R....29	57.11.3822	8.2 kOhm 5%	
	R....30	57.11.3102	1 kOhm 5%	
	R....31	57.11.3479	4.7 Ohm 5%	
	R....32	57.11.3222	2.2 kOhm 1%	
	R....33	57.11.3100	10 Ohm 5%	
	R....34	57.11.3279	2.7 Ohm 5%	
	R....35	57.11.3222	2.2 kOhm 1%	
	R....36	57.11.3229	2.2 Ohm 5%	
	R....37	57.11.3102	1 kOhm 1%	
	R....38	57.11.3103	10 kOhm 5%	
	R....39	57.11.3203	20 kOhm 1%	
	R....40	57.11.3133	13 kOhm 1%	
	R....41	57.11.3683	68 kOhm 5%	
	R....42	57.11.3102	1 kOhm 5%	
	R....43	57.11.3473	47 kOhm 5%	
	R....44	57.11.3102	1 kOhm 5%	
	R....45	57.11.3470	47 Ohm 5%	
	R....46	57.11.3103	10 kOhm 5%	
	R....47	57.11.3332	3.3 kOhm 5%	
	R....48	57.11.3222	2.2 kOhm 5%	
	R....49	57.11.3154	150 kOhm 5%	
	R....50	57.11.3103	10 kOhm 1%	
	R....51	57.11.3473	47 kOhm 1%	
	R....52	57.11.3220	22 Ohm 5%	
	R....53	57.11.3332	3.3 kOhm 5%	
	R....54	57.11.3103	10 kOhm 1%	
	R....55	57.11.3132	1.3 kOhm 1%	
	R....56	57.11.3220	22 Ohm 5%	
	R....57	57.11.3220	22 Ohm 5%	
	R....58	57.11.3222	2.2 kOhm 5%	
	R....59	57.11.3222	2.2 kOhm 5%	
	R....60	57.11.3123	12 kOhm 5%	
	R....61	57.11.3222	2.2 kOhm 5%	
	R....62	57.56.2050	50 mOhm 3%, 3W	
	RA....1	58.05.1501	500 Ohm 10%, multi turn	
	RA....2	58.05.1501	500 Ohm 10%, multi turn	
	T.....1	1.022.629.00	Switching Transformer	St
	T.....2	1.022.627.00	Switching Transformer	St
	TP....1	54.02.0320	Test Point	

/!\ = Increasing of safety relative to risk of fire.

Note 1 - Connector:
10 contacts, AMP Nr. 826 852-3

Note 2 - Connector:
case, Studer Nr. 54.02.0409
Molex Nr. 03-06-1121
12 contacts, Studer Nr. 54.02.0407
Molex Nr. 02-06-7103

Note 3 - Connector:
case, Studer Nr. 54.02.0408
Molex Nr. 03-06-2121
12 contacts, Studer Nr. 54.02.0406
Molex Nr. 02-06-8103

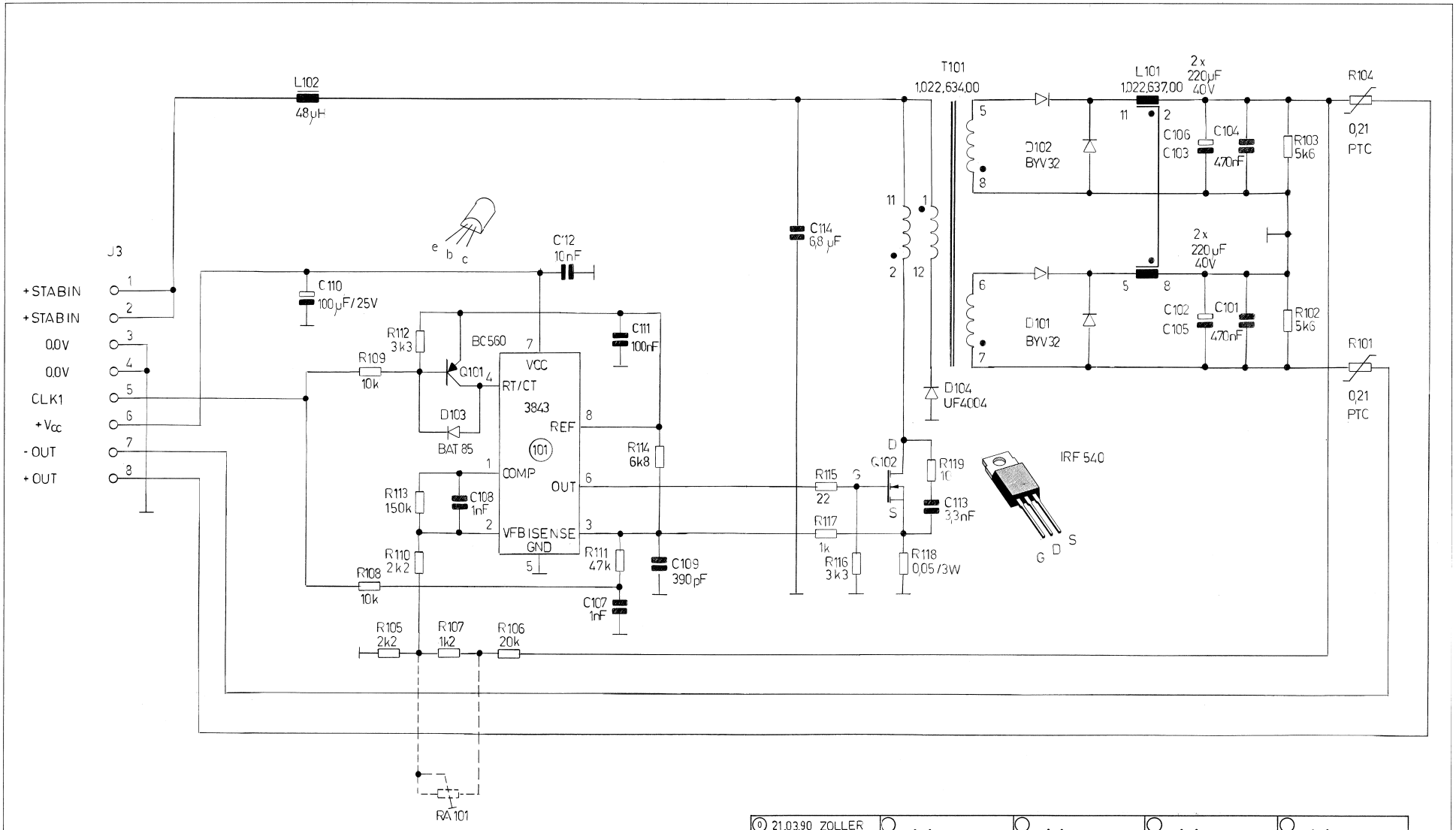
Ce=Ceramic, El=Electrolytic, MPETP=Metallized Polyesterfilm, PETP=Polyesterfilm, MPC=Metallized Polycarbonate film.

MANUFACTURER: Fe=Ferranti, GI=General Instruments, IPS=Integrated Power Semiconductor, ITT=Intermetall, IR=International Rectifier, Mot=Motorola, NS=National Semiconductors, Ph=Philips, RCA=RCA Corporation, Ses=Sescosem, SGS=SGS/Ates, SG=Silicon General, Sie=Siemens, Sig=Signetics, Six=Siliconix, St=Studer, Tf=Telefunken, Tho=Thomson, Ti=Texas Instruments, Un=Unitrode, Vo=Vogt & Co.

1.820.832.81 STABILIZER GP 95/03/2200

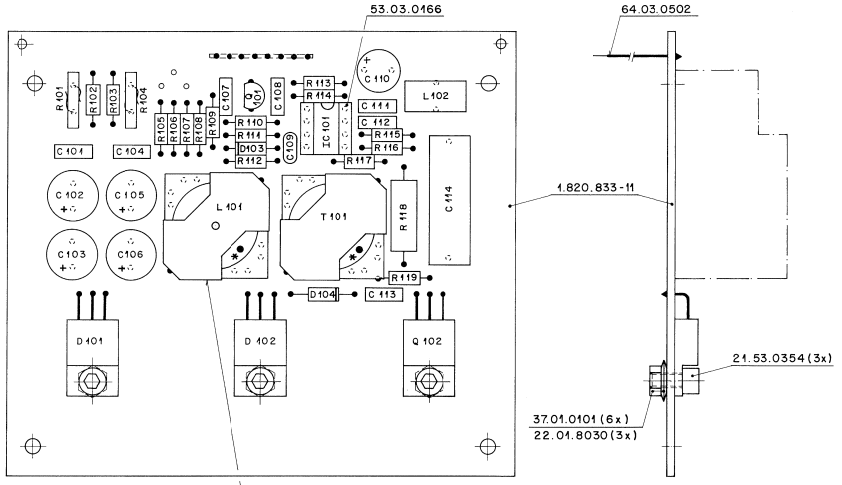
END

STABILIZER + / -26V / 1A 1.820.833.00



0 21.03.90 ZOLLER				
	A820			PAGE 1 OF 1
STUDER	STABILIZER ±26V/1A		SC	1.820.833.00

STABILIZER + / -26V / 1A 1.820.833.00



Nr. Etikette / ESE-Warnschild aufgeklebt nach Fabrikationsmuster.

* ● gelber Punkt

Änderung	Ausgabe	Datum	Gez.	Gepr.	Ges.	Index
						③ ② ①
	21.3.90		RZ			⓪

Kopie für:

STUDER REGENSDORF ZÜRICH	Benennung: STABILIZER +/- 26 V ESE	Nummer: 1.820.833-00

Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	C...101	59.06.0103	10 nF	10%, 63V, PETP	
	C...102	59.22.6221	220 uF	-20%, 40V, EL	
	C...103	59.22.6221	220 uF	-20%, 40V, EL	
	C...104	59.06.0103	10 nF	10%, 63V, PETP	
	C...105	59.22.6221	220 uF	-20%, 40V, EL	
	C...106	59.22.6221	220 uF	-20%, 40V, EL	
	C...107	59.06.0102	1 nF	10%, 63V, PETP	
	C...108	59.06.0102	1 nF	10%, 63V, PETP	
	C...109	59.32.2681	680 pF	5%, 63V, CER	
	C...110	59.22.5101	100 uF	-20%, 25V, EL	
	C...111	59.06.0104	100 nF	10%, 63V, PETP	
	C...112	59.06.0103	10 nF	10%, 63V, PETP	
	C...113	59.06.0332	3.3 nF	10%, 63V, PETP	
	C...114	59.31.5685	6.8 uF	10%, 63V, PETP	
01	C...114	59.02.0685	6.8 uF	10%, 63V, MPC	
	D...101	50.04.0517	BYV 32		Mot,Ph
	D...102	50.04.0517	BYV 32		Mot,Ph
	D...103	50.04.0127	BAT 85	BAT 42	Ph,SGS,Tho
	D...104	50.04.0138	UF 4004	BYT 01-400, UES 1106	GI,Tho,Un
	IC..101	50.10.0113	IP3843 N	UC 3843 N	IPS,Un
	L...101	1.022.637.00	403 uH		St
	L...102	62.03.0010	68 uH		Tokin
	Q...101	50.03.0496	BC 560		Sie
	Q...102	50.03.1609	IRF 540		IR
	R...101	57.92.7015	0.21 Ohm	PTC	
	R...102	57.11.3562	5.6 kOhm	5%	
	R...103	57.11.3562	5.6 kOhm	5%	
	R...104	57.92.7015	0.21 Ohm	PTC	
	R...105	57.11.3222	2.2 kOhm	1%	
	R...106	57.11.3203	20 kOhm	1%	
	R...107	57.11.3122	1.2 kOhm	1%	
	R...108	57.11.3103	10 kOhm	1%	
	R...109	57.11.3103	10 kOhm	1%	
	R...110	57.11.3222	2.2 kOhm	1%	
	R...111	57.11.3473	47 kOhm	1%	
	R...112	57.11.3332	3.3 kOhm	1%	
	R...113	57.11.3154	150 kOhm	1%	
	R...114	57.11.3682	6.8 kOhm	1%	
	R...115	57.11.3220	22 Ohm	1%	
	R...116	57.11.3332	3.3 kOhm	1%	
	R...117	57.11.3132	1.3 kOhm	1%	
	R...118	57.56.2050	50 mOhm	3%, 3W	
	R...119	57.11.3100	10 Ohm	1%	
	RA..101	00.00.0000	not used		
	T...101	1.022.634.00	Switching Transformer		St

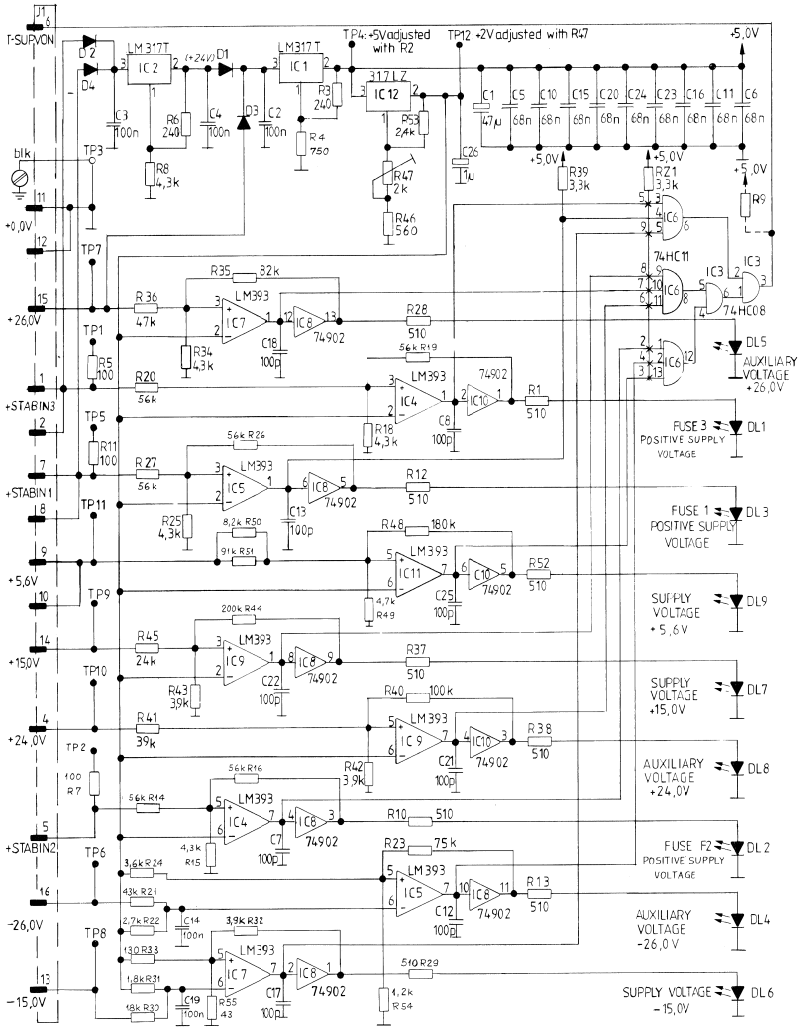
(01) 03.10.91 Improved high frequency behaviour.

Ce=Ceramic, El=Electrolytic, MPETP=Metallized Polyesterfilm, PETP=Polyesterfilm, MPC=Metallized Polycarbonate film.

MANUFACTURER: GI=General Instruments, IPS=Integrated Power Semiconductor, IR=International Rectifier, Mot=Motorola, Ph=Philips, SGS=SGS/Ates, Sie=Siemens, St=Studer, Tho=Thomson, Un=Unitrode,

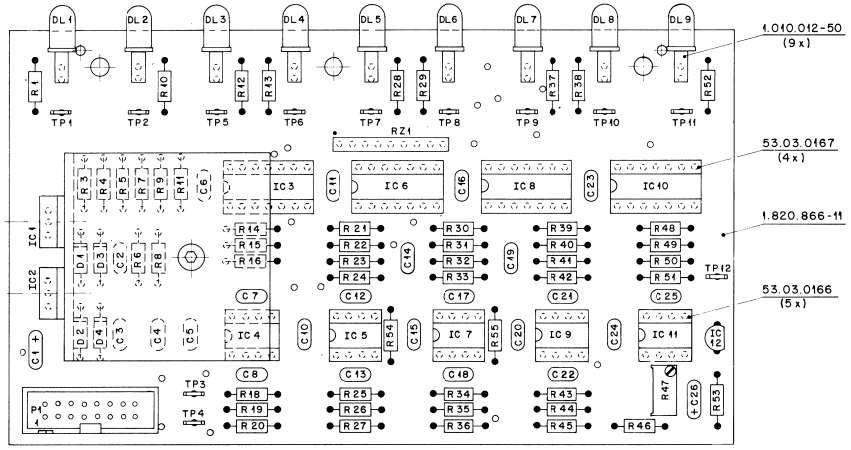
1.820.833.00	STABILIZER +/- 26 V	PZ 90/03/2100
1.820.833.00	STABILIZER +/- 26 V	PZ 91/10/0301

FUSE SUPPLY FAILURE DETECTOR 1.820.866.00

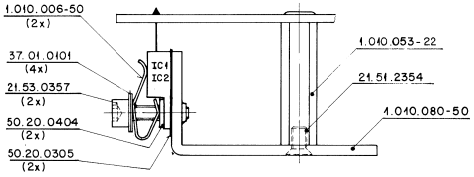


0 7.10.86 Buchegger				
	A 820			PAGE 1 OF 1
STUDER	Fuse / Supply Failure Detector	SC	1.820.866.00	

FUSE SUPPLY FAILURE DETECTOR 1.820.866.00



④ Etiketten 1.820.866-01 und 43.01.0108 nach Muster aufgeklebt.



Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	C.....1	59.26.0470	47 uF 20%, 6.3 V, Sal	Ph,Ri
	C.....2	59.06.0104	100 nF 10%, PETP	
	C.....3	59.06.0104	100 nF 10%, PETP	
	C.....4	59.06.0104	100 nF 10%, PETP	
	C.....5	59.06.0683	68 nF 20%, PETP	
	C.....6	59.06.0683	68 nF 20%, PETP	
	C.....7	59.34.4101	100 pF 10%, Cer	
	C.....8	59.34.4101	100 pF 10%, Cer	
	C.....9	. .	not used	
	C.....10	59.06.0683	68 nF 20%, PETP	
	C.....11	59.06.0683	68 nF 20%, PETP	
	C.....12	59.34.4101	100 pF 10%, Cer	
	C.....13	59.34.4101	100 pF 10%, Cer	
	C.....14	59.06.0104	100 nF 10%, PETP	
	C.....15	59.06.0683	68 nF 20%, PETP	
	C.....16	59.06.0683	68 nF 20%, PETP	
	C.....17	59.34.4101	100 pF 10%, Cer	
	C.....18	59.34.4101	100 pF 10%, Cer	
	C.....19	59.06.0104	100 nF 10%, PETP	
	C.....20	59.06.0683	68 nF 20%, PETP	
	C.....21	59.34.4101	100 pF 10%, Cer	
	C.....22	59.34.4101	100 pF 10%, Cer	
	C.....23	59.06.0683	68 nF 20%, PETP	
	C.....24	59.06.0683	68 nF 20%, PETP	
	C.....25	59.34.4101	100 pF 10%, Cer	
	C.....26	59.26.9109	1 uF 20%, 6.3 V, Sal	Ph,Ri
	D.....1	50.04.0122	1N 4001 ... 1N 4004	GI,Mot
	D.....2	50.04.0122	1N 4001 ... 1N 4004	GI,Mot
	D.....3	50.04.0122	1N 4001 ... 1N 4004	GI,Mot
	D.....4	50.04.0122	1N 4001 ... 1N 4004	GI,Mot
	DL....1	50.04.2113	MV 5453 CM 4-384 B, HLMP-3507	Ms,CM,HP
	DL....2	50.04.2113	MV 5453 CM 4-384 B, HLMP-3507	Ms,CM,HP
	DL....3	50.04.2113	MV 5453 CM 4-384 B, HLMP-3507	Ms,CM,HP
	DL....4	50.04.2113	MV 5453 CM 4-384 B, HLMP-3507	Ms,CM,HP
	DL....5	50.04.2113	MV 5453 CM 4-384 B, HLMP-3507	Ms,CM,HP
	DL....6	50.04.2113	MV 5453 CM 4-384 B, HLMP-3507	Ms,CM,HP
	DL....7	50.04.2113	MV 5453 CM 4-384 B, HLMP-3507	Ms,CM,HP
	DL....8	50.04.2113	MV 5453 CM 4-384 B, HLMP-3507	Ms,CM,HP
	DL....9	50.04.2113	MV 5453 CM 4-384 B, HLMP-3507	Ms,CM,HP
	IC....1	50.10.0104	LM 317 T ... KC, ... SP	NS,Mot,SGS,Tho,TI
	IC....2	50.10.0104	LM 317 T ... KC, ... SP	NS,Mot,SGS,Tho,TI
	IC....3	50.17.1008	74 HC 08	Ph,Mot,NS,RCA,To,TI
	IC....4	50.05.0283	LM 393 N LM 393 P	TI,NS
	IC....5	50.05.0283	LM 393 N LM 393 P	TI,NS
	IC....6	50.17.1011	74 HC 11	Ph,Mot,NS,RCA,To,TI
	IC....7	50.05.0283	LM 393 N LM 393 P	TI,NS
	IC....8	50.07.0902	74 C902 N	NS
	IC....9	50.05.0283	LM 393 N LM 393 P	TI,NS
	IC....10	50.07.0902	74 C902 N	NS
	IC....11	50.05.0283	LM 393 N LM 393 P	TI,NS
	IC....12	50.10.0108	LM 317 LZ	NS,Mot
	P.....1	54.14.2002	see note 1	
	R.....1	57.11.3511	510 Ohm 2%	
	R.....2	00.00.0000	not used	
	R.....3	57.11.3241	240 Ohm 2%	
	R.....4	57.11.3751	750 Ohm 2%	
	R.....5	57.19.0101	100 Ohm 10%	
	R.....6	57.11.3241	240 Ohm 2%	
	R.....7	57.19.0101	100 Ohm 10%	
	R.....8	57.11.3432	4.3 kOhm 2%	
	R.....9	00.00.0000	not used	
	R....10	57.11.3511	510 Ohm 2%	
	R....11	57.19.0101	100 Ohm 10%	
	R....12	57.11.3511	510 Ohm 2%	
	R....13	57.11.3511	510 Ohm 2%	
	R....14	57.11.3623	62 kOhm 2%	
01	R....14	57.11.3563	56 kOhm 2%	
	R....15	57.11.3432	4.3 kOhm 2%	
	R....16	57.11.3913	91 kOhm 2%	
01	R....16	57.11.3563	56 kOhm 2%	
	R....17	00.00.0000	not used	
	R....18	57.11.3432	4.3 kOhm 2%	
	R....19	57.11.3913	91 kOhm 2%	
01	R....19	57.11.3563	56 kOhm 2%	
	R....20	57.11.3623	62 kOhm 2%	
01	R....20	57.11.3563	56 kOhm 2%	
	R....21	57.11.3433	43 kOhm 2%	
	R....22	57.11.3272	2.7 kOhm 2%	
	R....23	57.11.3753	75 kOhm 2%	
	R....24	57.11.3362	3.6 kOhm 2%	
	R....25	57.11.3432	4.3 kOhm 2%	
	R....26	57.11.3913	91 kOhm 2%	
01	R....26	57.11.3563	56 kOhm 2%	
	R....27	57.11.3623	62 kOhm 2%	
01	R....27	57.11.3563	56 kOhm 2%	
	R....28	57.11.3511	510 Ohm 2%	
	R....29	57.11.3511	510 Ohm 2%	
	R....30	57.11.3183	18 kOhm 1%	
	R....31	57.11.3182	1.8 kOhm 1%	
	R....32	57.11.3682	6.8 kOhm 1%	
01	R....32	57.11.3392	3.9 kOhm 1%	
	R....33	57.11.3131	130 Ohm 1%	
	R....34	57.11.3432	4.3 kOhm 2%	
	R....35	57.11.4823	82 kOhm 2%	
	R....36	57.11.4473	47 kOhm 2%	
	R....37	57.11.3511	510 Ohm 2%	
	R....38	57.11.3511	510 Ohm 2%	
	R....39	57.11.3332	3.3 kOhm 10%	
01	R....39	57.11.4332	3.3 kOhm 10%	
	R....40	57.11.4104	100 kOhm 2%	
	R....41	57.11.4393	39 kOhm 2%	
	R....42	57.11.3392	3.9 kOhm 2%	
	R....43	57.11.3392	3.9 kOhm 1%	
	R....44	57.11.3184	180 kOhm 1%	
01	R....44	57.11.3204	200 kOhm 1%	
	R....45	57.11.3243	24 kOhm 1%	
	R....46	57.11.4561	560 Ohm 2%	
	R....47	58.05.1202	2 kOhm see note 2	
	R....48	57.11.3184	180 kOhm 1%	
	R....49	57.11.3432	4.3 kOhm 1%	
01	R....49	57.11.3472	4.7 kOhm 1%	
	R....50	57.11.3333	33 kOhm 1%	
01	R....50	57.11.3822	8.2 kOhm 1%	
	R....51	57.11.3912	9.1 kOhm 1%	
01	R....51	57.11.3913	91 kOhm 1%	
	R....52	57.11.3511	510 Ohm 2%	
	R....53	57.11.3242	2.4 kOhm 2%	
	R....54	57.11.3122	1.2 kOhm 1%	
	R....55	57.11.3430	43 Ohm 1%	
	RZ....1	57.88.4332	see note 3	
	TP....1	54.02.0320	Testpoint	
	TP....2	54.02.0320	Testpoint	
	TP....3	54.02.0320	Testpoint	
	TP....4	54.02.0320	Testpoint	
	TP....5	54.02.0320	Testpoint	
	TP....6	54.02.0320	Testpoint	
	TP....7	54.02.0320	Testpoint	
	TP....8	54.02.0320	Testpoint	
	TP....9	54.02.0320	Testpoint	
	TP...10	54.02.0320	Testpoint	
	TP...11	54.02.0320	Testpoint	
	TP...12	54.02.0320	Testpoint	

(01) 15.12.86 Improved accuracy of voltage measurement.

Note 1 - Plug, 16 contacts: Yamaichi nr. FAP-16-08//4
Burndy nr. BPH 9 B 16 B00 GS

Note 2 - 2 kOhm Potentiometer: Bourns nr. 3296 Y-1-202
Spectrol nr. 64 Y 202 T 000
Contelec nr. 183 WZ 202
Murata nr. POT 3105 Y - 1 - 202

Note 3 - 8 * 3.3 kOhm Network: Sicovend nr. CO9 X 3.3 K J
Ineltro nr. R88 3.3 K 5%

Cer=Ceramic, PETP=Polyesterfilm, Sal=Solid aluminium.

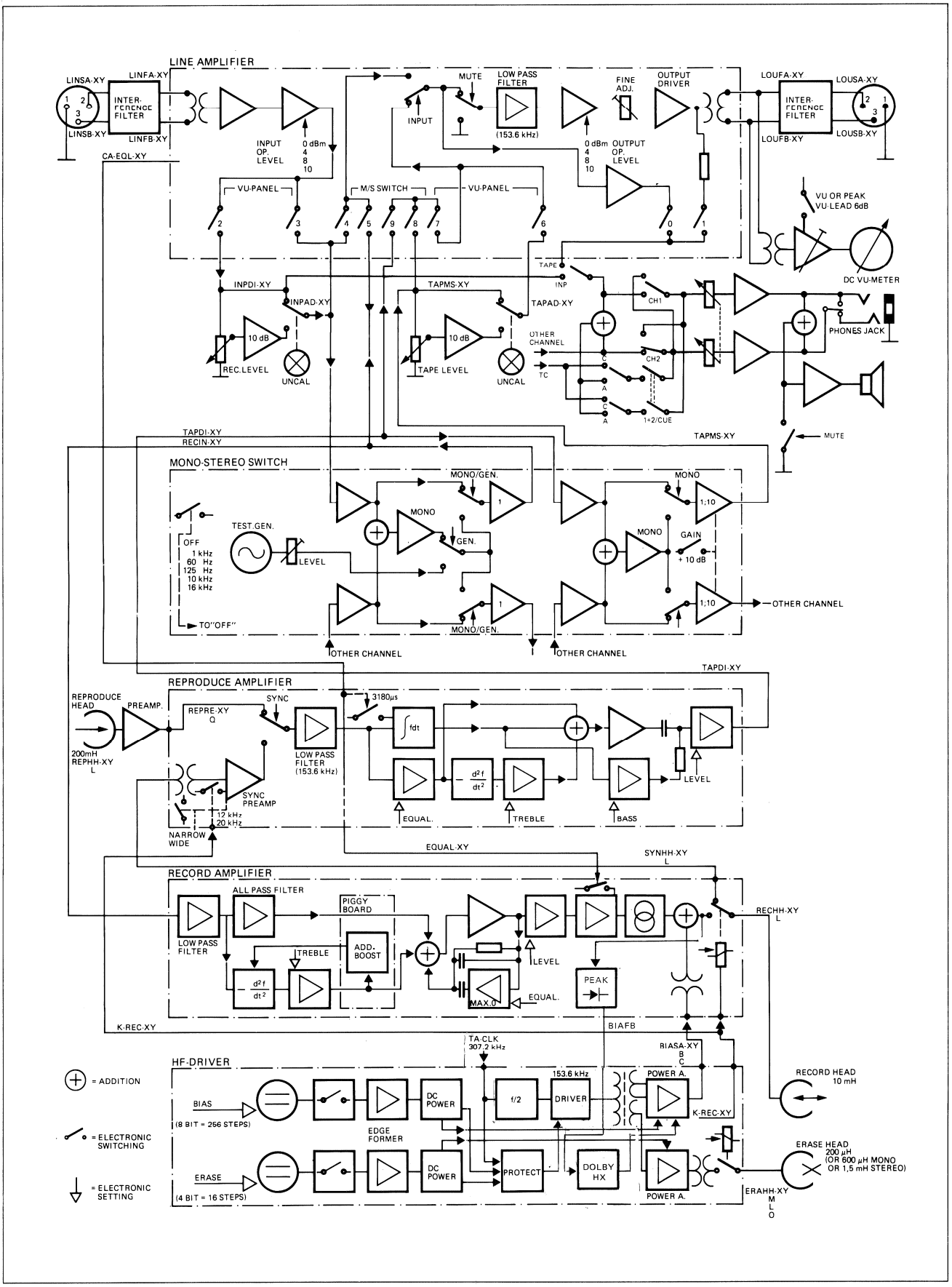
MANRFACTURER: CM=Chicago Miniatur, GI=General Instruments,
HP=Hewlet Packard, ITT=Intermetall, Mot=Motorola,
Ms=Monsanto, NS=National Semiconductors, Ph=Philips,
RCA=RCA Corporation of America, Ri=Rifa, SGS=SGS / Ates,
Sie=Siemens, Tho=Thomsen CSF, TI=Texas Instruments,
To=Toshiba.

1.820.866.00 FUSE/SUPPLY FAILURE DETECTOR PB 86/07/1700

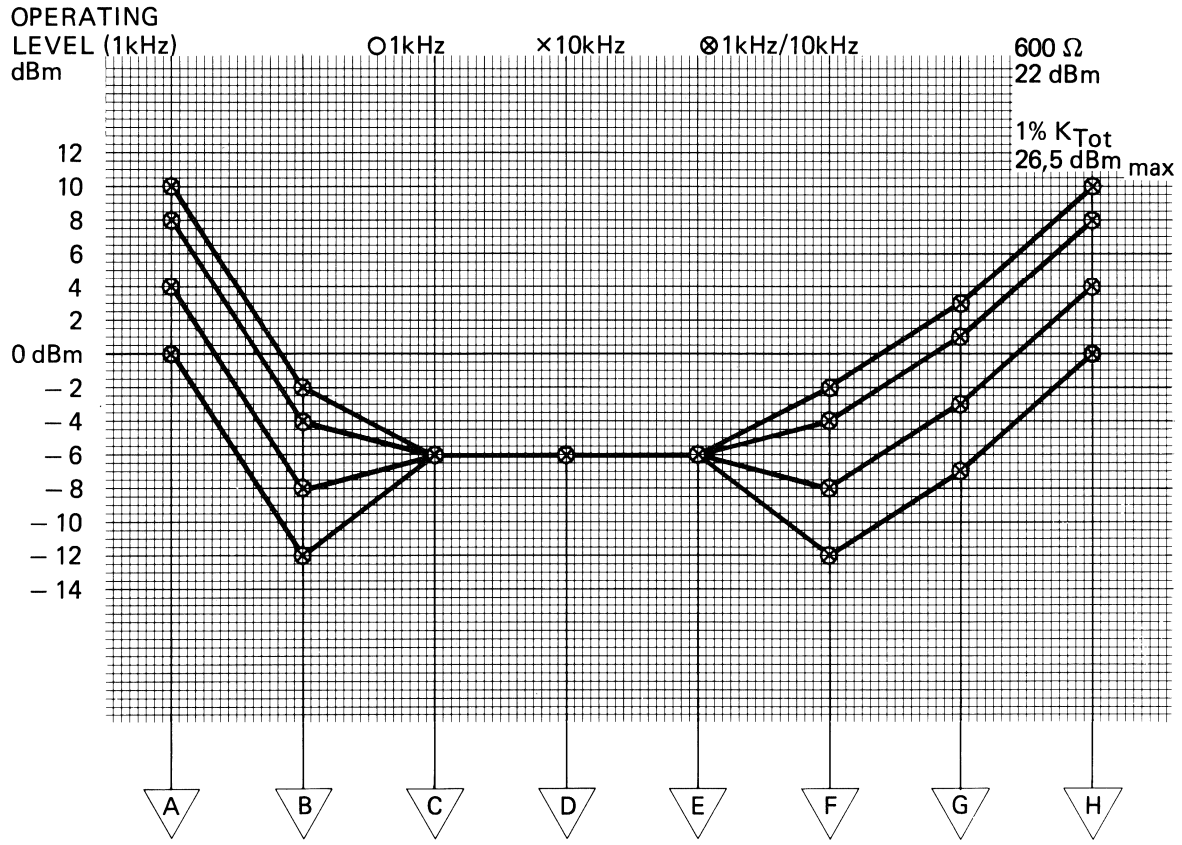
1.820.866.00 FUSE/SUPPLY FAILURE DETECTOR BD 86/12/1501

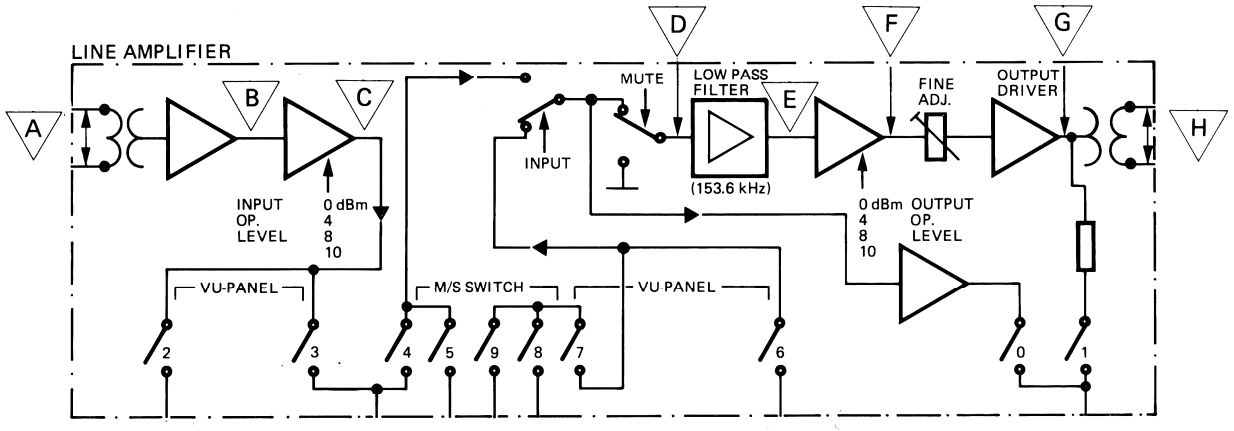
END

AUDIO BLOCK DIAGRAM

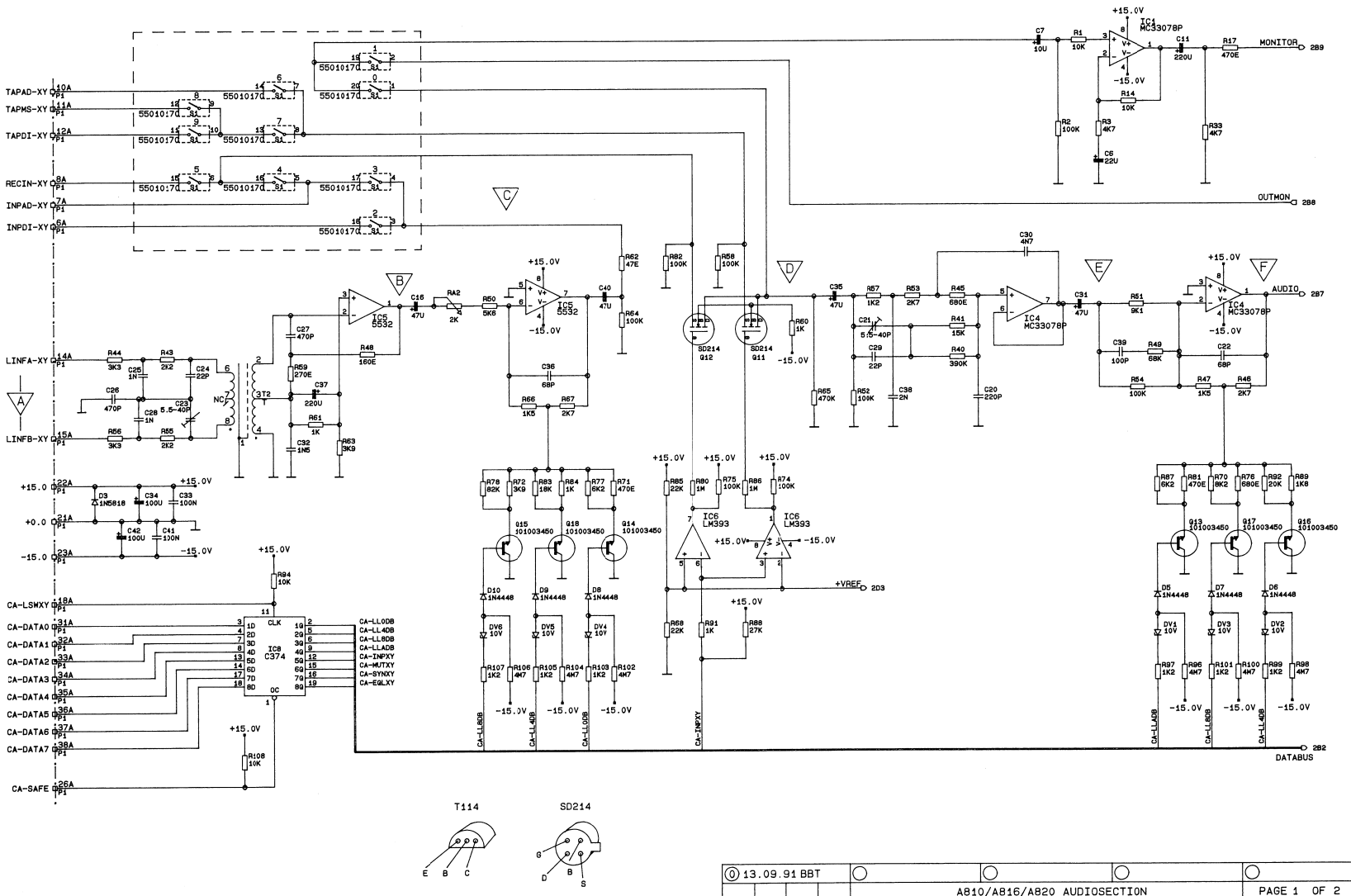


LEVEL DIAGRAMS, LINE AMPLIFIER



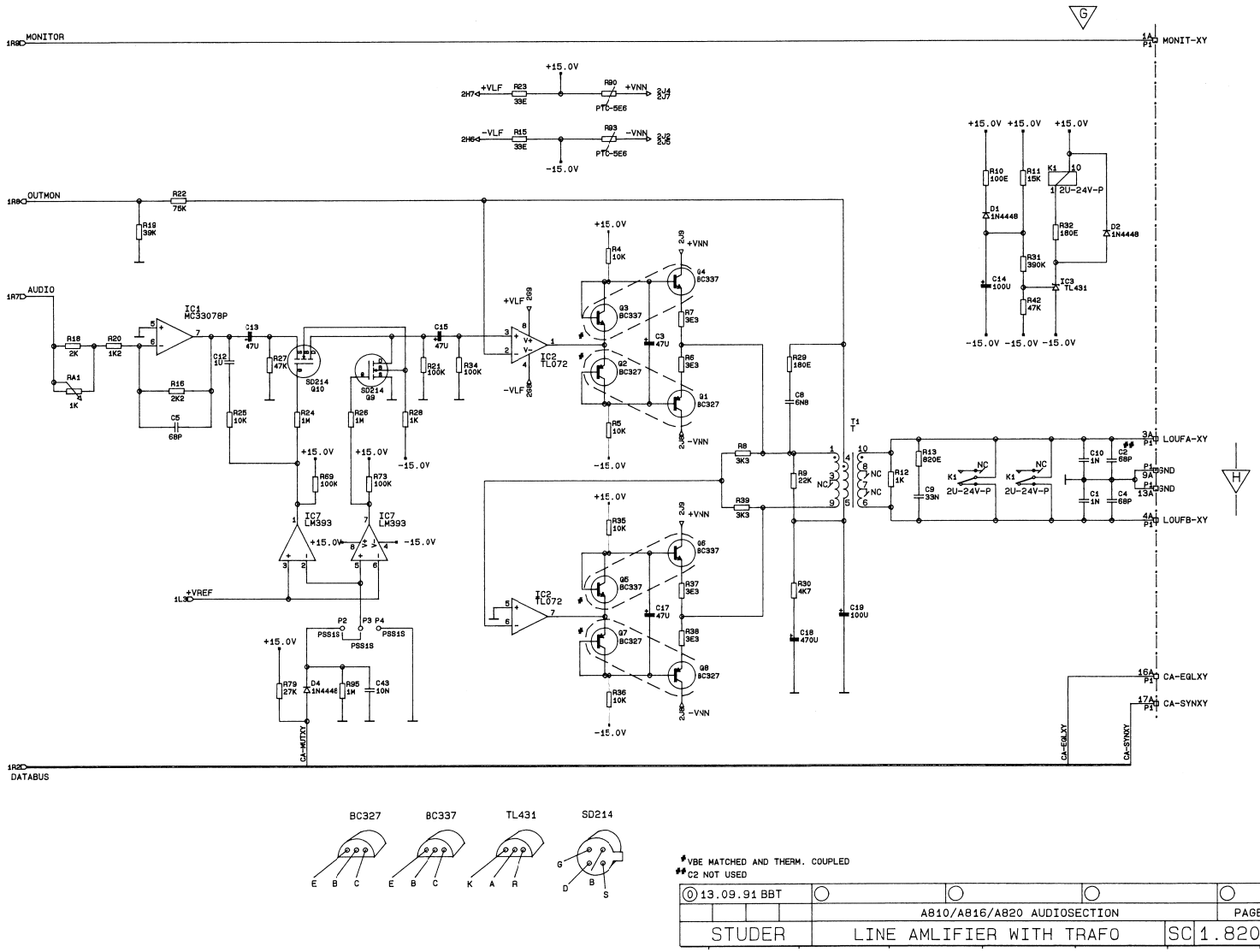


LINE AMPLIFIER WITH TRAFO 1.820.814.81



0 13.09.91 BBT				
	A810/A816/A820 AUDIOSECTION			PAGE 1 OF 2
STUDER	LINE AMPLIFIER WITH TRAFO		SC	1.820.814-81

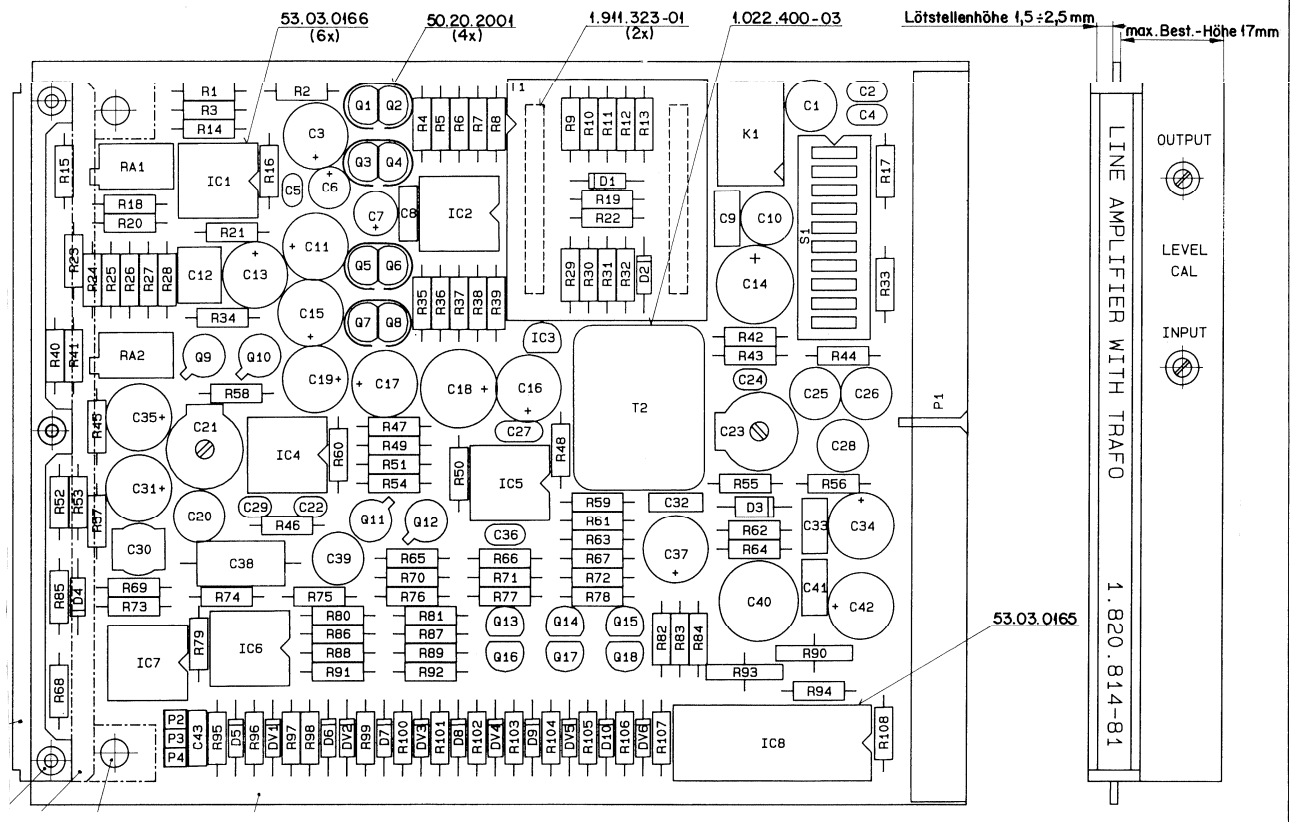
LINE AMPLIFIER WITH TRAFO 1.820.814.81



VBE MATCHED AND THERM. COUPLED
C2 NOT USED

0 13.09.91 BBT				
	A810/A816/A820 AUDIOSECTION			PAGE 2 OF 2
STUDER	LINE AMLIFIER WITH TRAFO	SC	1.820.814-81	

LINE AMPLIFIER WITH TRAFO 1.820.814.81



Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	C.....1	59.05.1102	1 nF 1%, 630V , PP	
	C.....2	00.00.0000	not used	
	C.....3	59.22.4470	47 uF -20%, 16V , EL	
	C.....4	59.34.2680	68 pF 5%, CER	
	C.....5	59.34.4680	68 pF 5%, CER	
	C.....6	59.22.5220	22 uF -20%, 25V , EL	
	C.....7	59.22.6100	10 uF -20%, 35V , EL	
	C.....8	59.06.0682	6.8 nF 10%, 63V , PETP	
	C.....9	59.06.0333	33 nF 10%, 63V , PETP	
	C....10	59.05.1102	1 nF 1%, 630V , PP	
	C....11	59.22.3221	220 uF -20%, 10V , EL	
01	C....12	00.00.0000	not used	
	C....13	59.22.4470	47 uF -20%, 16V , EL	
	C....14	59.22.6101	100 uF -20%, 40V , EL	
	C....15	59.22.4470	47 uF -20%, 16V , EL	
	C....16	59.22.4470	47 uF -20%, 16V , EL	
	C....17	59.22.4470	47 uF -20%, 16V , EL	
	C....18	59.22.2471	470 uF -20%, 6.3V , EL	
	C....19	59.22.4101	100 uF -20%, 16V , EL	
	C....20	59.05.1221	220 pF 1%, 630V , PP	
	C....21	59.18.0108	5.5--40 pF 100V , TRI	
	C....22	59.34.4680	68 pF 5%, CER	
	C....23	59.18.0108	5.5--40 pF 100V , TRI	
	C....24	59.34.2220	22 pF 5%, CER	
	C....25	59.05.1102	1 nF 1%, 630V , PP	
	C....26	59.05.2471	470 pF 2.5%, 630V , PP	
	C....27	59.34.5471	470 pF 5%, CER	
	C....28	59.05.1102	1 nF 1%, 630V , PP	
	C....29	59.34.2220	22 pF 5%, CER	
	C....30	59.05.1472	4.7 nF 1%, 63V , PP	
	C....31	59.22.4470	47 uF -20%, 16V , EL	
	C....32	59.06.0152	1.5 nF 10%, 63V , PETP	
	C....33	59.06.0104	100 nF 10%, 63V , PETP	
	C....34	59.22.5101	100 uF -20%, 25V , EL	
	C....35	59.22.4470	47 uF -20%, 16V , EL	
	C....36	59.34.2680	68 pF 5%, CER	
	C....37	59.22.3221	220 uF -20%, 10V , EL	
	C....38	59.12.7202	2 nF 1%, 63V , PS	
	C....39	59.05.1101	100 pF 1%, 630V , PP	
	C....40	59.99.0401	47 uF -10%, 16V , ELBIP	
	C....41	59.06.0104	100 nF 10%, 63V , PETP	
	C....42	59.22.5101	100 uF -20%, 25V , EL	
	C....43	59.06.5103	10 nF 5%, 63V , PETP	

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	D.....1	50.04.0125	1N 4448	Fc,ITT,Ph,Tf
	D.....2	50.04.0125	1N 4448	Fc,ITT,Ph,Tf
	D.....3	50.04.0512	1N 5818 1N 5819	Mot
	D.....4	50.04.0125	1N 4448	Fc,ITT,Ph,Tf
	D.....5	50.04.0125	1N 4448	Fc,ITT,Ph,Tf
	D.....6	50.04.0125	1N 4448	Fc,ITT,Ph,Tf
	D.....7	50.04.0125	1N 4448	Fc,ITT,Ph,Tf
	D.....8	50.04.0125	1N 4448	Fc,ITT,Ph,Tf
	D.....9	50.04.0125	1N 4448	Fc,ITT,Ph,Tf
	D....10	50.04.0125	1N 4448	Fc,ITT,Ph,Tf
	DV....1	50.04.1114	10 V 5%, 0.4 W, Z	ITT,Mot,Ph,Tf,SGS
	DV....2	50.04.1114	10 V 5%, 0.4 W, Z	ITT,Mot,Ph,Tf,SGS
	DV....3	50.04.1114	10 V 5%, 0.4 W, Z	ITT,Mot,Ph,Tf,SGS
	DV....4	50.04.1114	10 V 5%, 0.4 W, Z	ITT,Mot,Ph,Tf,SGS
	DV....5	50.04.1114	10 V 5%, 0.4 W, Z	ITT,Mot,Ph,Tf,SGS
	DV....6	50.04.1114	10 V 5%, 0.4 W, Z	ITT,Mot,Ph,Tf,SGS
	IC....1	50.09.0117	MC 33078P	Mot
	IC....2	50.09.0101	TL 072 CP	Mot,Ti,NS,SGS
	IC....3	50.10.0106	TL 431CLP	Mot,Ti
	IC....4	50.09.0117	MC 33078P	Mot
	IC....5	50.09.0106	NE 5532AN XR 5532 AN	Ex,Sig,Ra
	IC....6	50.05.0283	LM 393 .. TDB 0193 DP	Fa,Sig
	IC....7	50.05.0283	LM 393 .. TDB 0193 DP	Fa,Sig
	IC....8	50.07.0003	MM74C374N	NS
	J.....1	54.01.0021	Jumper	
	K.....1	56.04.0197	24 V 2*U 125V/ 2 A , AG/AU	SDS
	P.....2	54.01.0020	Connector contact pin .63*.63, H=5.8/3.4	
	P.....3	54.01.0020	Connector contact pin .63*.63, H=5.8/3.4	
	P.....4	54.01.0020	Connector contact pin .63*.63, H=5.8/3.4	
	Q.....1	50.03.0625	BC 327 E 6310, see note 2	Sie
	Q.....2	50.03.0625	BC 327 E 6310, see note 2	Sie
	Q.....3	50.03.0516	BC 337 E 6310, see note 2	Sie
	Q.....4	50.03.0516	BC 337 E 6310, see note 2	Sie
	Q.....5	50.03.0516	BC 337 E 6310, see note 2	Sie
	Q.....6	50.03.0516	BC 337 E 6310, see note 2	Sie
	Q.....7	50.03.0625	BC 327 E 6310, see note 2	Sie
	Q.....8	50.03.0625	BC 327 E 6310, see note 2	Sie
	Q.....9	50.11.0106	SD 214-DE	Ph,Six
	Q....10	50.11.0106	SD 214-DE	Ph,Six

LINE AMPLIFIER WITH TRAFO 1.820.814.81

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	Q....11	50.11.0106	SD 214-DE	Ph,Six
	Q....12	50.11.0106	SD 214-DE	Ph,Six
	Q....13	1.010.034.50	Q, NPN see note 1	
	Q....14	1.010.034.50	Q, NPN see note 1	
	Q....15	1.010.034.50	Q, NPN see note 1	
	Q....16	1.010.034.50	Q, NPN see note 1	
	Q....17	1.010.034.50	Q, NPN see note 1	
	Q....18	1.010.034.50	Q, NPN see note 1	
	R.....1	57.11.3103	10 kOhm 5%, 0207 , MF	
	R.....2	57.11.3104	100 kOhm 1%, 0207 , MF	
	R.....3	57.11.3472	4.7 kOhm 1%, 0207 , MF	
	R.....4	57.11.3103	10 kOhm 5%, 0207 , MF	
	R.....5	57.11.3103	10 kOhm 5%, 0207 , MF	
	R.....6	57.11.3339	3.3 Ohm 1%, 0207 , MF	
	R.....7	57.11.3339	3.3 Ohm 1%, 0207 , MF	
	R.....8	57.11.3332	3.3 kOhm 1%, 0207 , MF	
	R.....9	57.11.3223	22 kOhm 1%, 0207 , MF	
	R....10	57.11.3101	100 Ohm 5%, 0207 , MF	
	R....11	57.11.3153	15 kOhm 5%, 0207 , MF	
	R....12	57.11.3102	1 kOhm 5%, 0207 , MF	
	R....13	57.11.3821	820 Ohm 5%, 0207 , MF	
	R....14	57.11.3103	10 kOhm 1%, 0207 , MF	
	R....15	57.11.3330	33 Ohm 5%, 0207 , MF	
	R....16	57.11.3222	2.2 kOhm 5%, 0207 , MF	
	R....17	57.11.3471	470 Ohm 5% 0207 , MF	
	R....18	57.11.3202	2 kOhm 1%, 0207 , MF	
	R....19	57.11.3393	39 kOhm 1%, 0207 , MF	
	R....20	57.11.3122	1.2 kOhm 5%, 0207 , MF	
	R....21	57.11.3104	100 kOhm 5%, 0207 , MF	
	R....22	57.11.3753	75 kOhm 1%, 0207 , MF	
	R....23	57.11.3330	33 Ohm 5%, 0207 , MF	
	R....24	57.11.3105	1 MOhm 10%, 0207 , MF	
01	R....25	00.00.0000	not used	
	R....26	57.11.3105	1 MOhm 10%, 0207 , MF	
	R....27	57.11.3473	47 kOhm 5%, 0207 , MF	
	R....28	57.11.3102	1 kOhm 10%, 0207 , MF	
	R....29	57.11.3181	180 Ohm 5%, 0207 , MF	
	R....30	57.11.3472	4.7 kOhm 5%, 0207 , MF	
	R....31	57.11.3394	390 kOhm 10%, 0207 , MF	
	R....32	57.11.3181	180 Ohm 10%, 0207 , MF	
	R....33	57.11.3472	4.7 kOhm 5%, 0207 , MF	
	R....34	57.11.3104	100 kOhm 5%, 0207 , MF	
	R....35	57.11.3103	10 kOhm 5%, 0207 , MF	
	R....36	57.11.3103	10 kOhm 5%, 0207 , MF	
	R....37	57.11.3339	3.3 Ohm 1%, 0207 , MF	
	R....38	57.11.3339	3.3 Ohm 1%, 0207 , MF	
	R....39	57.11.3332	3.3 kOhm 1%, 0207 , MF	
	R....40	57.11.3394	390 kOhm 1%, 0207 , MF	
	R....41	57.11.3153	15 kOhm 1%, 0207 , MF	
	R....42	57.11.3473	47 kOhm 10%, 0207 , MF	
	R....43	57.11.3222	2.2 kOhm 1%, 0207 , MF	
	R....44	57.11.3332	3.3 kOhm 1%, 0207 , MF	
	R....45	57.11.3681	680 Ohm 1%, 0207 , MF	
	R....46	57.11.3272	2.7 kOhm 1%, 0207 , MF	
	R....47	57.11.3152	1.5 kOhm 1%, 0207 , MF	
	R....48	57.11.3161	160 Ohm 5%, 0207 , MF	
	R....49	57.11.3683	68 kOhm 1%, 0207 , MF	
	R....50	57.11.3562	5.6 kOhm 5%, 0207 , MF	
	R....51	57.11.3912	9.1 kOhm 1%, 0207 , MF	
	R....52	57.11.3104	100 kOhm 1%, 0207 , MF	
	R....53	57.11.3272	2.7 kOhm 1%, 0207 , MF	
	R....54	57.11.3104	100 kOhm 5%, 0207 , MF	
	R....55	57.11.3222	2.2 kOhm 1%, 0207 , MF	
	R....56	57.11.3332	3.3 kOhm 1%, 0207 , MF	
	R....57	57.11.3122	1.2 kOhm 1%, 0207 , MF	
	R....58	57.11.3104	100 kOhm 10%, 0207 , MF	
	R....59	57.11.3271	270 Ohm 5%, 0207 , MF	
	R....60	57.11.3102	1 kOhm 10%, 0207 , MF	
	R....61	57.11.3102	1 kOhm 5%, 0207 , MF	
	R....62	57.11.3470	47 Ohm 10%, 0207 , MF	
	R....63	57.11.3392	3.9 kOhm 5%, 0207 , MF	
	R....64	57.11.3104	100 kOhm 10%, 0207 , MF	
	R....65	57.11.3474	470 kOhm 10%, 0207 , MF	
	R....66	57.11.3152	1.5 kOhm 1%, 0207 , MF	
	R....67	57.11.3272	2.7 kOhm 1%, 0207 , MF	
	R....68	57.11.3223	22 kOhm 10%, 0207 , MF	
	R....69	57.11.3104	100 kOhm 10%, 0207 , MF	
	R....70	57.11.3822	8.2 kOhm 5%, 0207 , MF	
	R....71	57.11.3471	470 Ohm 1% 0207 , MF	
	R....72	57.11.3392	3.9 kOhm 1%, 0207 , MF	
	R....73	57.11.3104	100 kOhm 10%, 0207 , MF	
	R....74	57.11.3104	100 kOhm 10%, 0207 , MF	
	R....75	57.11.3104	100 kOhm 10%, 0207 , MF	
	R....76	57.11.3681	680 Ohm 1%, 0207 , MF	
	R....77	57.11.3622	6.2 kOhm 5%, 0207 , MF	
	R....78	57.11.3823	82 kOhm 5%, 0207 , MF	
	R....79	57.11.3273	27 kOhm 10%, 0207 , MF	
	R....80	57.11.3105	1 MOhm 10%, 0207 , MF	
	R....81	57.11.3471	470 Ohm 1% 0207 , MF	
	R....82	57.11.3104	100 kOhm 10%, 0207 , MF	
	R....83	57.11.3183	18 kOhm 5%, 0207 , MF	
	R....84	57.11.3102	1 kOhm 1%, 0207 , MF	
	R....85	57.11.3223	22 kOhm 10%, 0207 , MF	
	R....86	57.11.3105	1 MOhm 10%, 0207 , MF	
	R....87	57.11.3622	6.2 kOhm 5%, 0207 , MF	
	R....88	57.11.3273	27 kOhm 10%, 0207 , MF	
	R....89	57.11.3182	1.8 kOhm 1%, 0207 , MF	
	R....90	57.99.0209	5.6 Ohm PTC	
	R....91	57.11.3102	1 kOhm 10%, 0207 , MF	
	R....92	57.11.3203	20 kOhm 5%, 0207 , MF	
	R....93	57.99.0209	5.6 Ohm PTC	
	R....94	57.11.3103	10 kOhm 10%, 0207 , MF	
	R....95	57.11.3105	1 MOhm 10%, 0207 , MF	
	R....96	57.11.5475	4.7 MOhm 10%, 0207 , MF	
	R....97	57.11.3122	1.2 kOhm 10%, 0207 , MF	
	R....98	57.11.5475	4.7 MOhm 10%, 0207 , MF	
	R....99	57.11.3122	1.2 kOhm 10%, 0207 , MF	
	R...100	57.11.5475	4.7 MOhm 10%, 0207 , MF	
	R...101	57.11.3122	1.2 kOhm 10%, 0207 , MF	
	R...102	57.11.5475	4.7 MOhm 10%, 0207 , MF	
	R...103	57.11.3122	1.2 kOhm 10%, 0207 , MF	
	R...104	57.11.5475	4.7 MOhm 10%, 0207 , MF	
	R...105	57.11.3122	1.2 kOhm 10%, 0207 , MF	
	R...106	57.11.5475	4.7 MOhm 10%, 0207 , MF	
	R...107	57.11.3122	1.2 kOhm 10%, 0207 , MF	
	R...108	57.11.3103	10 kOhm 10%, 0207 , MF	
	RA....1	58.05.0102	1 kOhm 10%, .5 W , PMG	
	RA....2	58.05.0202	2 kOhm 10%, .5 W , PMG	
	S.....1	55.01.0170	DIL-Switch 10*A, Print	
	T.....1	1.022.362.00	LINE OUTPUT TRAFO 1:1,46	
	T.....2	1.022.454.00	INPUT TRAFO 1:0,175	

(01) 90/02/03 Removed R*C network for faster mute switching.

Note 1 - BC 337 E selected for inverse mode (IBC = 3 mA)
UCE < 0.7 mV, IE 0 mA. UCE < 25 mV, IE 4 mA.

Note 2 - Q1-Q2, Q3-Q4, Q5-Q6, Q7-Q8 matched and thermically coupled with 50.20.2001.

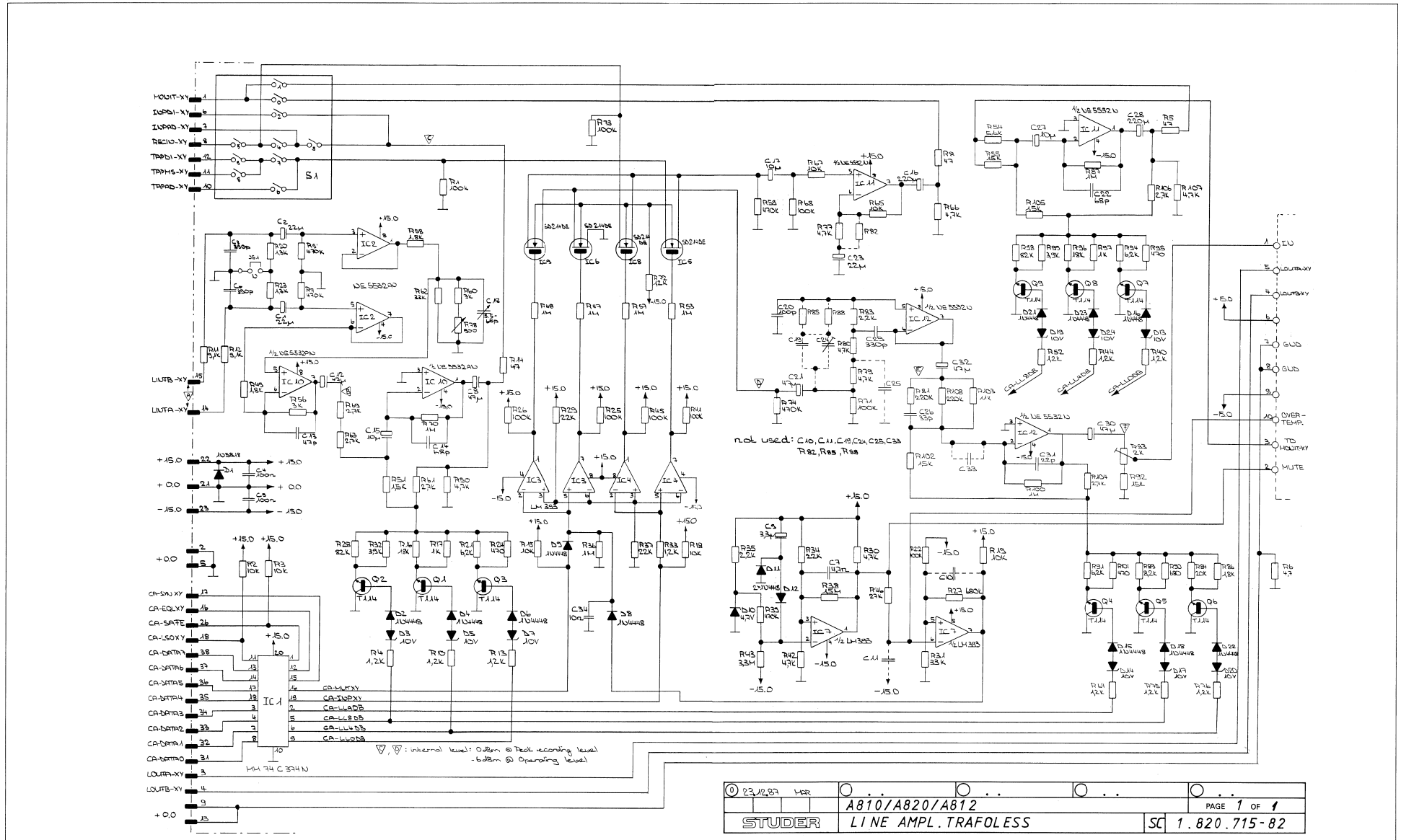
Cer=Ceramic, ElBip=Electrolytic Bipolar,
El=Electrolytic, Sal=Solid aluminum.

MANUFACTURER: Ex=Exar,Fas=Faselec, Fc=Fairchild, GI=General Instruments, ITT=Intermetall, Mot=Motorola, NS=National Semicond., Ph=Philips, Ra=Raytheon, RCA=Radio Corp. of America, Ses=Sescosem, Sie=Siemens, Sig=Signetics, SGS=SGS/Ates, St=Studer, Six=Siliconix, TS=Teledyne Semiconductors, Tf=Telefunken, TI=Texas Instruments.

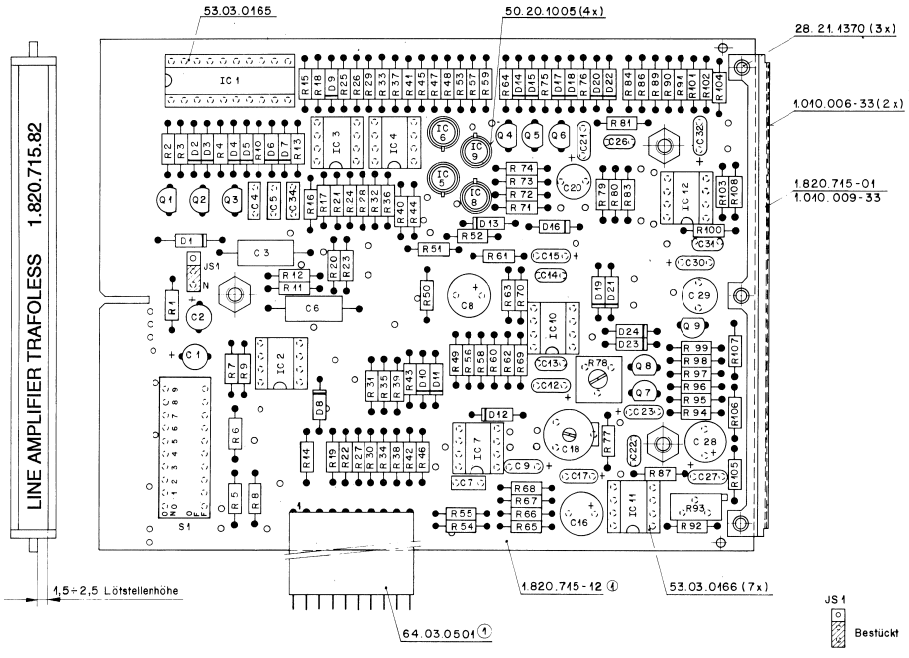
1.820.814.81 LINE AMPLIFIER WITH TRAFO BBT91/10/0200

1.820.814.81 LINE AMPLIFIER WITH TRAFO BBT92/02/0301

LINE AMPLIFIER TRAFOLESS 1.820.715.82



LINE AMPLIFIER TRAFOLESS 1.820.715.82



Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	A.....1	1.820.862.00	Line Output Amplifier	St
	C.....1	59.22.5220	22 uF 35V, EL	
	C.....2	59.22.5220	22 uF 35V, EL	
	C.....3	59.12.7391	390 pF 1%, PS	
	C.....4	59.06.0104	100 nF 20%, PETP	
	C.....5	59.06.0104	100 nF 20%, PETP	
	C.....6	59.12.7391	390 pF 1%, PS	
	C.....7	59.06.0472	4.7 nF 20%, PETP	
	C.....8	59.22.3470	47 uF 20%, 10V, El	
	C.....9	59.26.2339	3.3 uF 16 V, SAL	
	C....10	00.00.0000	not used	
	C....11	00.00.0000	not used	
	C....12	59.26.0470	47 uF SAL	Ph
	C....13	59.34.2470	47 pF Ce	
	C....14	59.34.2680	68 pF 5%, N150, Ce	
	C....15	59.26.2100	10 uF 20%, 16V, Sal	Ph
	C....16	59.22.2221	220 uF -10%, 6V, El	
	C....17	59.26.2100	10 uF 20%, 16V, Sal	Ph
	C....18	59.18.0102	5,5-65pF	
	C....19	00.00.0000	not used	
	C....20	59.05.1101	100 pF 1%,	
	C....21	59.26.0470	47 uF 20%, 6.3V, Sal	Ph
	C....22	59.34.2680	68 pF 5%, N150, Ce	
	C....23	59.26.1220	22 uF 20%, 10V, Sal	Ph
	C....24	00.00.0000	not used	
	C....25	00.00.0000	not used	
	C....26	59.34.2330	33 pF Ce	
	C....27	59.26.2100	10 uF 20%, 16V, Sal	Ph
	C....28	59.22.2221	220 uF -10%, 6V, El	
	C....29	59.05.1331	330 pF 1%, PP	
	C....30	59.26.0470	47 uF 20%, 6.3V, Sal	Ph
	C....31	59.34.2220	22 pF Ce	
	C....32	59.26.0470	47 uF 20%, 6.3V, Sal	Ph
	C....33	00.00.0000	not used	
	C....34	59.06.5103	10 nF 5%, 63V , PETP	

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	D.....1	50.04.0512	1N5818	Mot
	D.....2	50.04.0125	1N4448	ITT,Ph,Ses
	D.....3	50.04.1114	10V Z 5%	ITT,Ses
	D.....4	50.04.0125	1N4448	ITT,Ph,Ses
	D.....5	50.04.1114	10V Z 5%	ITT,Ses
	D.....6	50.04.0125	1N4448	ITT,Ph,Ses
	D.....7	50.04.1114	10V Z 5%	ITT,Ses
	D.....8	50.04.0125	1N4448	ITT,Ph,Ses
	D.....9	50.04.0125	1N4448	ITT,Ph,Ses
	D....10	50.04.1123	4.7V Z	Mot
	D....11	50.04.0125	1N4448	ITT,Ph,Ses
	D....12	50.04.0125	1N4448	ITT,Ph,Ses
	D....13	50.04.1114	10V Z 5%	ITT,Ses
	D....14	50.04.1114	10V Z 5%	ITT,Ses
	D....15	50.04.0125	1N4448	ITT,Ph,Ses
	D....16	50.04.0125	1N4448	ITT,Ph,Ses
	D....17	50.04.1114	10V Z 5%	ITT,Ses
	D....18	50.04.0125	1N4448	ITT,Ph,Ses
	D....19	50.04.1114	10V Z 5%	ITT,Ses
	D....20	50.04.1114	10V Z 5%	ITT,Ses
	D....21	50.04.0125	1N4448	ITT,Ph,Ses
	D....22	50.04.0125	1N4448	ITT,Ph,Ses
	D....23	50.04.0125	1N4448	ITT,Ph,Ses
	D....24	50.04.1114	10V Z 5%	ITT,Ses
	IC....1	50.07.0003	MM74C374N	NS
	IC....2	50.09.0106	NE5532AN XR5532ANB, 5532ANB	Sig,Ex,Ra
	IC....3	50.05.0283	LM393N	TI,NS
	IC....4	50.05.0283	LM393N	TI,NS
	IC....5	50.11.0106	SD 214 DE BSD 214	Ph,Six
	IC....6	50.11.0106	SD 214 DE BSD 214	Ph,Six
	IC....7	50.05.0283	LM393N	TI,NS
	IC....8	50.11.0106	SD 214 DE BSD 214	Ph,Six
	IC....9	50.11.0106	SD 214 DE BSD 214	Ph,Six
	IC....10	50.09.0106	NE5532AN XR5532AN, 5532ANB	Sig,Ex,Ra
	IC....11	50.09.0105	NE5532N XR5532N, 5532NB	Sig,Ex,Ra
	IC....12	50.09.0106	NE5532AN XR5532AN, 5532ANB	Sig,Ex,Ra
	JS....1	54.01.0020	3 cont. Philips Nr. 2422 025 89303 See note 1	
	Q.....1	1.010.034.50	See Note 2	
	Q.....2	1.010.034.50	See Note 2	
	Q.....3	1.010.034.50	See Note 2	
	Q.....4	1.010.034.50	See Note 2	
	Q.....5	1.010.034.50	See Note 2	
	Q.....6	1.010.034.50	See Note 2	
	Q.....7	1.010.034.50	See Note 2	
	Q.....8	1.010.034.50	See Note 2	
	Q.....9	1.010.034.50	See Note 2	
	R.....1	57.11.4104	100 kOhm 5%	
	R.....2	57.11.4103	10 kOhm 5%	
	R.....3	57.11.4103	10 kOhm 5%	
	R.....4	57.11.4122	1.2 kOhm 5%	
	R.....5	57.11.4470	47 Ohm 5%	
	R.....6	57.11.4479	4.7 Ohm 5%	
	R.....7	57.11.4474	470 kOhm 5%	
	R.....8	57.11.4470	47 Ohm 5%	
	R.....9	57.11.4474	470 kOhm 5%	
	R....10	57.11.4122	1.2 kOhm 5%	
	R....11	57.11.3912	9.1 kOhm 1%	
	R....12	57.11.3912	9.1 kOhm 1%	
	R....13	57.11.4122	1.2 kOhm 5%	
	R....14	57.11.4470	47 Ohm 5%	
	R....15	57.11.4103	10 kOhm 5%	
	R....16	57.11.4183	18 kOhm 5%	
	R....17	57.11.3102	1 kOhm 1%	
	R....18	57.11.4103	10 kOhm 5%	
	R....19	57.11.4103	10 kOhm 5%	
	R....20	57.11.3132	1.3 kOhm 1%	
	R....21	57.11.3622	6.2 kOhm 1%	
	R....22	57.11.4104	100 kOhm 5%	
	R....23	57.11.3132	1.3 kOhm 1%	
	R....24	57.11.3471	470 Ohm 1%	
	R....25	57.11.4104	100 kOhm 5%	
	R....26	57.11.4104	100 kOhm 5%	
	R....27	57.11.4684	680 kOhm 5%	
	R....28	57.11.4823	82 kOhm 5%	
	R....29	57.11.4223	22 kOhm 5%	
	R....30	57.11.4472	4.7 kOhm 5%	
	R....31	57.11.4333	33 kOhm 5%	
	R....32	57.11.3392	3.9 kOhm 1%	
	R....33	57.11.4122	1.2 kOhm 5%	
	R....34	57.11.4223	22 kOhm 5%	
	R....35	57.11.4222	2.2 kOhm 5%	
	R....36	57.11.4105	1 MOhm 5%	
	R....37	57.11.4223	22 kOhm 5%	
	R....38	57.11.5155	1.5 MOhm 5%	
	R....39	57.11.4474	470 kOhm 5%	
	R....40	57.11.4122	1.2 kOhm 5%	
	R....41	57.11.4104	100 kOhm 5%	
	R....42	57.11.4472	4.7 kOhm 5%	
	R....43	57.11.5335	3.3 kOhm 5%	
	R....44	57.11.4122	1.2 kOhm 5%	
	R....45	57.11.4104	100 kOhm 5%	
	R....46	57.11.4273	27 kOhm 5%	
	R....47	57.11.4105	1 MOhm 5%	
	R....48	57.11.4105	1 MOhm 5%	
	R....49	57.11.3182	1.8 kOhm 1%	
	R....50	57.11.4472	4.7 kOhm 5%	

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	R....51	57.11.3152	1.5 kOhm 1%	
	R....52	57.11.4122	1.2 kOhm 5%	
	R....53	57.11.4105	1 MOhm 5%	
	R....54	57.11.3562	5.6 kOhm 5%	
	R....55	57.11.4153	15 kOhm 2%	
	R....56	57.11.3302	3 kOhm 1%	
	R....57	57.11.4105	1 MOhm 5%	
	R....58	57.11.3182	1.8 kOhm 1%	
	R....59	57.11.4474	470 kOhm 5%	
	R....60	57.11.3302	3 kOhm 1%	
	R....61	57.11.3272	2.7 kOhm 1%	
	R....62	57.11.4333	33 kOhm 2%	
	R....63	57.11.3272	2.7 kOhm 1%	
	R....64	57.11.4122	1.2 kOhm 5%	
	R....65	57.11.4103	10 kOhm 2%	
	R....66	57.11.4472	4.7 kOhm 5%	
	R....67	57.11.4103	10 kOhm 5%	
	R....68	57.11.4104	100 kOhm 5%	
	R....69	57.11.3272	2.7 kOhm 1%	
	R....70	57.11.4105	1 MOhm 5%	
	R....71	57.11.4104	100 kOhm 5%	
	R....72	57.11.4122	1.2 kOhm 5%	
	R....73	57.11.4104	100 kOhm 5%	
	R....74	57.11.4474	470 kOhm 5%	
	R....75	57.11.4122	1.2 kOhm 5%	
	R....76	57.11.4122	1.2 kOhm 5%	
	R....77	57.11.4472	4.7 kOhm 2%	
	R....78	58.01.8501	500 Ohm See note 3	
	R....79	57.11.4472	4.7 kOhm 2%	
	R....80	57.11.4472	4.7 kOhm 2%	
	R....81	57.11.4224	220 kOhm 2%	
	R....82	00.00.0000	not used	
	R....83	57.11.4222	2.2 kOhm 2%	
	R....84	57.11.3203	20 kOhm 5%	
	R....85	00.00.0000	not used	
	R....86	57.11.3182	1.8 kOhm 1%	
	R....87	57.11.4105	1 MOhm 5%	
	R....88	00.00.0000	not used	
	R....89	57.11.4822	8.2 kOhm 5%	
	R....90	57.11.3681	680 Ohm 1%	
	R....91	57.11.3622	6.2 kOhm 5%	
	R....92	57.11.4153	15 kOhm 5%	
	R....93	58.05.0202	2 kOhm See note 4	
	R....94	57.11.3622	6.2 kOhm 5%	
	R....95	57.11.3471	470 Ohm 1%	
	R....96	57.11.4183	18 kOhm 5%	
	R....97	57.11.3102	1 kOhm 1%	
	R....98	57.11.4823	82 kOhm 5%	
	R....99	57.11.3392	3.9 kOhm 1%	
	R...100	57.11.4105	1 MOhm 5%	
	R...101	57.11.3471	470 Ohm 1%	
	R...102	57.11.3152	1.5 kOhm 1%	
	R...103	57.11.3113	11 kOhm 1%	
	R...104	57.11.3272	2.7 kOhm 1%	
	R...105	57.11.3152	1.5 kOhm 1%	
	R...106	57.11.3272	2.7 kOhm 1%	
	R...107	57.11.4472	4.7 kOhm 5%	
	R...108	57.11.4224	220 kOhm 5%	
	S.....1	55.01.0170	SAE-Nr. 1010-692	

Note 1 - Bridge Studer Nr. 54.01.0021
Philips Nr. 2422 024 88003

Note 2 - BC 237 B sel. for invers mode (iBC = 3 mA)
VCE < 0.7 mV, iE 0 mA. VCE < 25 mV, iE 4 mA

Note 3 - 500 Ohm Potentiometer lin., 10%
Allen Bradly Nr. E 28 501
Bourns Nr. 3386 F-1- 501
Spectrol Nr. 63 M 501 T010

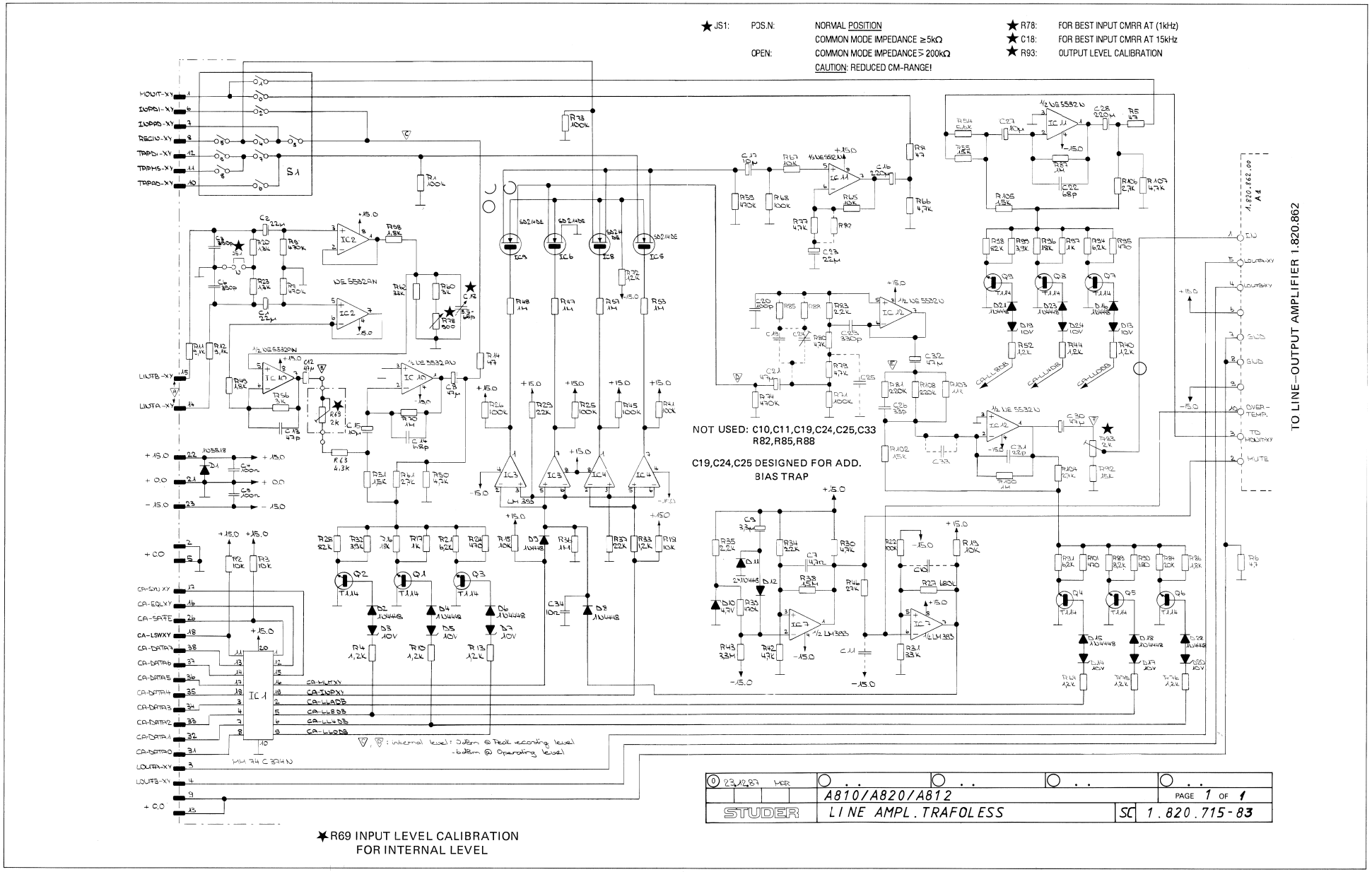
Note 4 - 2 kOhm Potentiometer lin., 10%
Bourns Nr. 3296 Z - 1 - 202
Spectrol Nr. 64 Z 202 T 000
Murata Nr. POT 3105 Z - 1 - 202
Contelec Nr. 183 XZ 202

Ce=Ceramic, El=Electrolytic, PETP=Polyester, PP=Polypropylen
Sal=Solid aluminium.

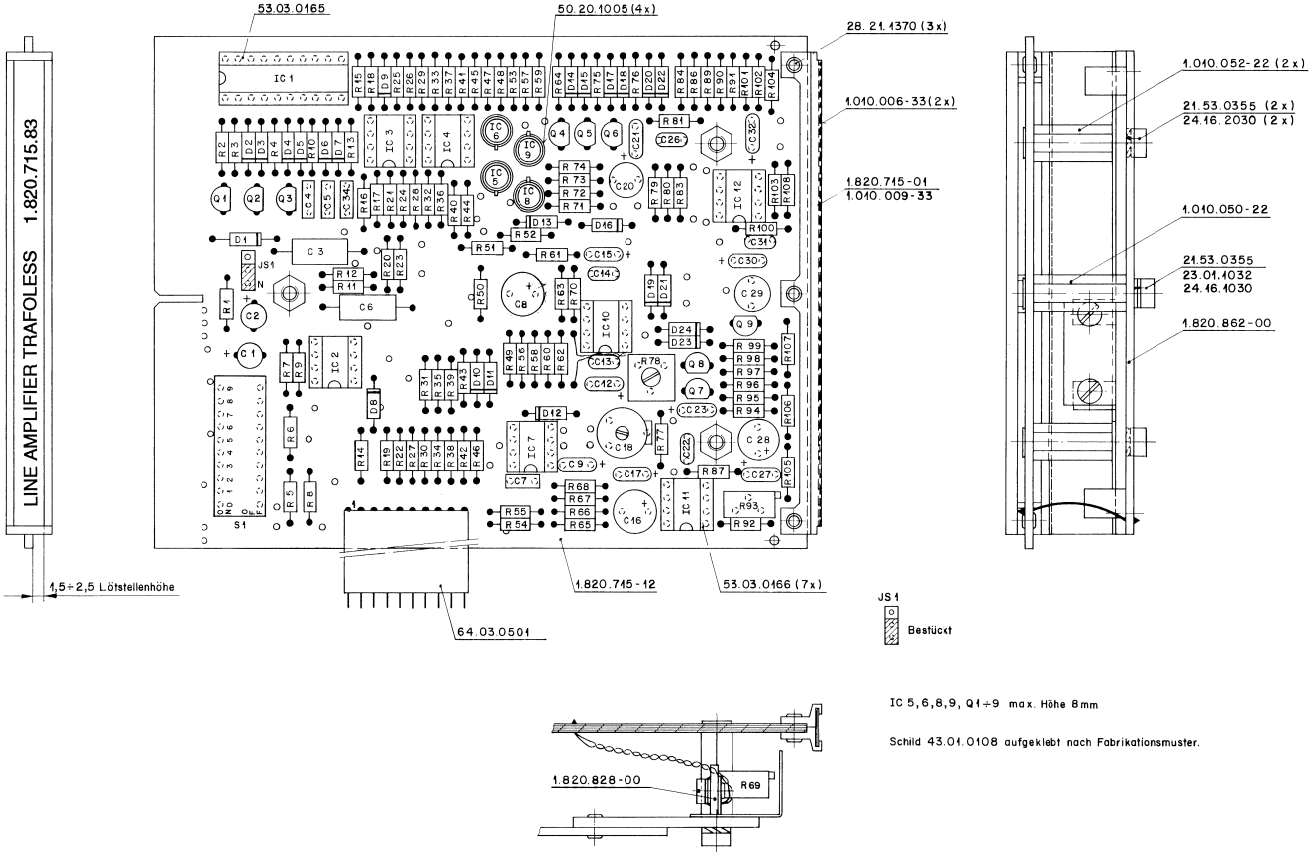
MANUFACTURER: Ex=Exar, ITT=Intermetall, Mot=Motorola,
NS=National Semiconductor, Ph=Philips, Ra=Raytheon,
Ses=Sescosem, Sie=Siemens, Sig=Signetics, Six=Siliconix,
St=Studer, Tf=Telefunken, TI=Texas Instruments.

1.820.715.82 LINE AMPLIFIER TRAFOLESS BD 87/08/3100

LINE AMPLIFIER TRAFOLESS 1.820.715.83



LINE AMPLIFIER TRAFOLESS 1.820.715.83



IC 5,6,8,9, Q1÷9 max. Höhe 8mm

Schild 43.01.0108 aufgeklebt nach Fabrikationsmuster.

Ad	..POS..	...REF.No...	DESCRIPTION			MANUFACTURER
A	1	1.820.862.00	Line Output Amplifier			St
C	1	59.22.6220	22 uF		35V, EL	
C	2	59.22.6220	22 uF		35V, EL	
C	3	59.12.7391	390 pF	1%	PS	
C	4	59.06.0104	100 nF	20%	PETP	
C	5	59.06.0104	100 nF	20%	PETP	
C	6	59.12.7391	390 pF	1%	PS	
C	7	59.06.0472	4.7 nF	20%	PETP	
C	8	59.22.3470	47 uF	20%	10V, El	
C	9	59.26.2339	3.3 uF		16 V, SAL	
C	10	00.00.0000	not used			
C	11	00.00.0000	not used			
C	12	59.26.0470	47 uF		SAL	Ph
C	13	59.34.2470	47 pF		Ce	
C	14	59.34.2680	68 pF	5%	N150, Ce	
C	15	59.26.2100	10 uF	20%	16V, Sal	Ph
C	16	59.22.2221	220 uF	-10%	6V, El	
C	17	59.26.2100	10 uF	20%	16V, Sal	Ph
C	18	59.18.0102	5,5-65pF			
C	19	00.00.0000	not used			
C	20	59.05.1101	100 pF	1%		
C	21	59.26.0470	47 uF	20%	6.3V, Sal	Ph
C	22	59.34.2680	68 pF	5%	N150, Ce	
C	23	59.26.1220	22 uF	20%	10V, Sal	Ph
C	24	00.00.0000	not used			
C	25	00.00.0000	not used			
C	26	59.34.2330	33 pF		Ce	
C	27	59.26.2100	10 uF	20%	16V, Sal	Ph
C	28	59.22.2221	220 uF	-10%	6V, El	
C	29	59.05.1331	330 pF	1%	PP	
C	30	59.26.0470	47 uF	20%	6.3V, Sal	Ph
C	31	59.34.2220	22 pF		Ce	
C	32	59.26.0470	47 uF	20%	6.3V, Sal	Ph
C	33	00.00.0000	not used			
C	34	59.06.5103	10 nF	5%	63V , PETP	
D	1	50.04.0512	1N5818			Mot
D	2	50.04.0125	1N4448			ITT,Ph,Ses
D	3	50.04.1114	10V Z	5%		ITT,Ses
D	4	50.04.0125	1N4448			ITT,Ph,Ses
D	5	50.04.1114	10V Z	5%		ITT,Ses
D	6	50.04.0125	1N4448			ITT,Ph,Ses
D	7	50.04.1114	10V Z	5%		ITT,Ses
D	8	50.04.0125	1N4448			ITT,Ph,Ses
D	9	50.04.0125	1N4448			ITT,Ph,Ses
D	10	50.04.1123	4.7V Z			Mot
D	11	50.04.0125	1N4448			ITT,Ph,Ses
D	12	50.04.0125	1N4448			ITT,Ph,Ses
D	13	50.04.1114	10V Z	5%		ITT,Ses
D	14	50.04.1114	10V Z	5%		ITT,Ses
D	15	50.04.0125	1N4448			ITT,Ph,Ses
D	16	50.04.0125	1N4448			ITT,Ph,Ses
D	17	50.04.1114	10V Z	5%		ITT,Ses
D	18	50.04.0125	1N4448			ITT,Ph,Ses
D	19	50.04.1114	10V Z	5%		ITT,Ses
D	20	50.04.1114	10V Z	5%		ITT,Ses
D	21	50.04.0125	1N4448			ITT,Ph,Ses
D	22	50.04.0125	1N4448			ITT,Ph,Ses
D	23	50.04.0125	1N4448			ITT,Ph,Ses
D	24	50.04.1114	10V Z	5%		ITT,Ses
IC	1	50.07.0003	MM74C374N			NS
IC	2	50.09.0106	NE5532AN	XR5532ANB, 5532ANB		Sig,Ex,Ra
IC	3	50.05.0283	LM393N			TI,NS
IC	4	50.05.0283	LM393N			TI,NS
IC	5	50.11.0106	SD 214 DE	BSD 214		Ph,Six
IC	6	50.11.0106	SD 214 DE	BSD 214		Ph,Six
IC	7	50.05.0283	LM393N			TI,NS
IC	8	50.11.0106	SD 214 DE	BSD 214		Ph,Six
IC	9	50.11.0106	SD 214 DE	BSD 214		Ph,Six
IC	10	50.09.0106	NE5532AN	XR5532AN, 5532ANB		Sig,Ex,Ra
IC	11	50.09.0105	NE5532N	XR5532N, 5532NB		Sig,Ex,Ra
IC	12	50.09.0106	NE5532AN	XR5532AN, 5532ANB		Sig,Ex,Ra
JS	1	54.01.0020	3 cont.	Philips Nr. 2422 025 89303 see note 1		
Q	1	1.010.034.50	see note 2			
Q	2	1.010.034.50	see note 2			
Q	3	1.010.034.50	see note 2			
Q	4	1.010.034.50	see note 2			
Q	5	1.010.034.50	see note 2			
Q	6	1.010.034.50	see note 2			
Q	7	1.010.034.50	see note 2			
Q	8	1.010.034.50	see note 2			
Q	9	1.010.034.50	see note 2			
R	1	57.11.4104	100 kOhm	5%		
R	2	57.11.4103	10 kOhm	5%		
R	3	57.11.4103	10 kOhm	5%		
R	4	57.11.4122	1.2 kOhm	5%		
R	5	57.11.4470	47 Ohm	5%		
R	6	57.11.4479	4.7 Ohm	5%		
R	7	57.11.4474	470 kOhm	5%		
R	8	57.11.4470	47 Ohm	5%		
R	9	57.11.4474	470 kOhm	5%		
R	10	57.11.4122	1.2 kOhm	5%		
R	11	57.11.3912	9.1 kOhm	1%		
R	12	57.11.3912	9.1 kOhm	1%		
R	13	57.11.4122	1.2 kOhm	5%		

LINE AMPLIFIER TRAFOLESS 1.820.715.83

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	R....14	57.11.4470	47 Ohm 5%	
	R....15	57.11.4103	10 kOhm 5%	
	R....16	57.11.4183	18 kOhm 5%	
	R....17	57.11.3102	1 kOhm 1%	
	R....18	57.11.4103	10 kOhm 5%	
	R....19	57.11.4103	10 kOhm 5%	
	R....20	57.11.3132	1.3 kOhm 1%	
	R....21	57.11.3622	6.2 kOhm 1%	
	R....22	57.11.4104	100 kOhm 5%	
	R....23	57.11.3132	1.3 kOhm 1%	
	R....24	57.11.3471	470 Ohm 1%	
	R....25	57.11.4104	100 kOhm 5%	
	R....26	57.11.4104	100 kOhm 5%	
	R....27	57.11.4684	680 kOhm 5%	
	R....28	57.11.4823	82 kOhm 5%	
	R....29	57.11.4223	22 kOhm 5%	
	R....30	57.11.4472	4.7 kOhm 5%	
	R....31	57.11.4333	33 kOhm 5%	
	R....32	57.11.3392	3.9 kOhm 1%	
	R....33	57.11.4122	1.2 kOhm 5%	
	R....34	57.11.4223	22 kOhm 5%	
	R....35	57.11.4222	2.2 kOhm 5%	
	R....36	57.11.4105	1 MOhm 5%	
	R....37	57.11.4223	22 kOhm 5%	
	R....38	57.11.5155	1.5 MOhm 5%	
	R....39	57.11.4474	470 kOhm 5%	
	R....40	57.11.4122	1.2 kOhm 5%	
	R....41	57.11.4104	100 kOhm 5%	
	R....42	57.11.4472	4.7 kOhm 5%	
	R....43	57.11.5335	3.3 kOhm 5%	
	R....44	57.11.4122	1.2 kOhm 5%	
	R....45	57.11.4104	100 kOhm 5%	
	R....46	57.11.4273	27 kOhm 5%	
	R....47	57.11.4105	1 MOhm 5%	
	R....48	57.11.4105	1 MOhm 5%	
	R....49	57.11.3182	1.8 kOhm 1%	
	R....50	57.11.4472	4.7 kOhm 5%	
	R....51	57.11.3152	1.5 kOhm 1%	
	R....52	57.11.4122	1.2 kOhm 5%	
	R....53	57.11.4105	1 MOhm 5%	
	R....54	57.11.3562	5.6 kOhm 5%	
	R....55	57.11.4153	15 kOhm 2%	
	R....56	57.11.3302	3 kOhm 1%	
	R....57	57.11.4105	1 MOhm 5%	
	R....58	57.11.3182	1.8 kOhm 1%	
	R....59	57.11.4474	470 kOhm 5%	
	R....60	57.11.3302	3 kOhm 1%	
	R....61	57.11.3272	2.7 kOhm 1%	
	R....62	57.11.4333	33 kOhm 2%	
	R....63	57.11.3432	4.3 kOhm 2%	
	R....64	57.11.4122	1.2 kOhm 5%	
	R....65	57.11.4103	10 kOhm 2%	
	R....66	57.11.4472	4.7 kOhm 5%	
	R....67	57.11.4103	10 kOhm 5%	
	R....68	57.11.4104	100 kOhm 5%	
	R....69	58.05.1202	2 kOhm see note 5	
	R....70	57.11.4105	1 MOhm 5%	
	R....71	57.11.4104	100 kOhm 5%	
	R....72	57.11.4122	1.2 kOhm 5%	
	R....73	57.11.4104	100 kOhm 5%	
	R....74	57.11.4474	470 kOhm 5%	
	R....75	57.11.4122	1.2 kOhm 5%	
	R....76	57.11.4122	1.2 kOhm 5%	
	R....77	57.11.4472	4.7 kOhm 2%	
	R....78	58.01.8501	500 Ohm see note 3	
	R....79	57.11.4472	4.7 kOhm 2%	
	R....80	57.11.4472	4.7 kOhm 2%	
	R....81	57.11.4224	220 kOhm 2%	
	R....82	00.00.0000	not used	
	R....83	57.11.4222	2.2 kOhm 2%	
	R....84	57.11.3203	20 kOhm 5%	
	R....85	00.00.0000	not used	
	R....86	57.11.3182	1.8 kOhm 1%	
	R....87	57.11.4105	1 MOhm 5%	
	R....88	00.00.0000	not used	
	R....89	57.11.4822	8.2 kOhm 5%	
	R....90	57.11.3681	680 Ohm 1%	
	R....91	57.11.3622	6.2 kOhm 5%	
	R....92	57.11.4153	15 kOhm 5%	
	R....93	58.05.0202	2 kOhm see note 4	
	R....94	57.11.3622	6.2 kOhm 5%	
	R....95	57.11.3471	470 Ohm 1%	
	R....96	57.11.4183	18 kOhm 5%	
	R....97	57.11.3102	1 kOhm 1%	
	R....98	57.11.4823	82 kOhm 5%	
	R....99	57.11.3392	3.9 kOhm 1%	
	R...100	57.11.4105	1 MOhm 5%	
	R...101	57.11.3471	470 Ohm 1%	
	R...102	57.11.3152	1.5 kOhm 1%	
	R...103	57.11.3113	11 kOhm 1%	
	R...104	57.11.3272	2.7 kOhm 1%	
	R...105	57.11.3152	1.5 kOhm 1%	
	R...106	57.11.3272	2.7 kOhm 1%	
	R...107	57.11.4472	4.7 kOhm 5%	
	R...108	57.11.4224	220 kOhm 5%	
	S.....1	55.01.0170	SAE-Nr. 1010-692	

Note 1 - Bridge Studer Nr. 54.01.0021
Philips Nr. 2422 024 88003

Note 2 - DC 237 B sel. for invers mode (iBC = 3 mA)
VCE < 0.7 mV, iE 0 mA. VCE < 25 mV, iE 4 mA

Note 3 - 500 Ohm Potentiometer lin., 10%
Allen Bradly nr. E 2B 501
Bourns nr. 3386 F-1- 501
Spectrol nr. 63 M 501 T010

Note 4 - 2 kOhm Potentiometer lin., 10%
Bourns nr. 3296 Z - 1 - 202
Spectrol nr. 64 Z 202 T 000
Murata nr. POT 3105 Z - 1 - 202
Contelec nr. 183 XZ 202

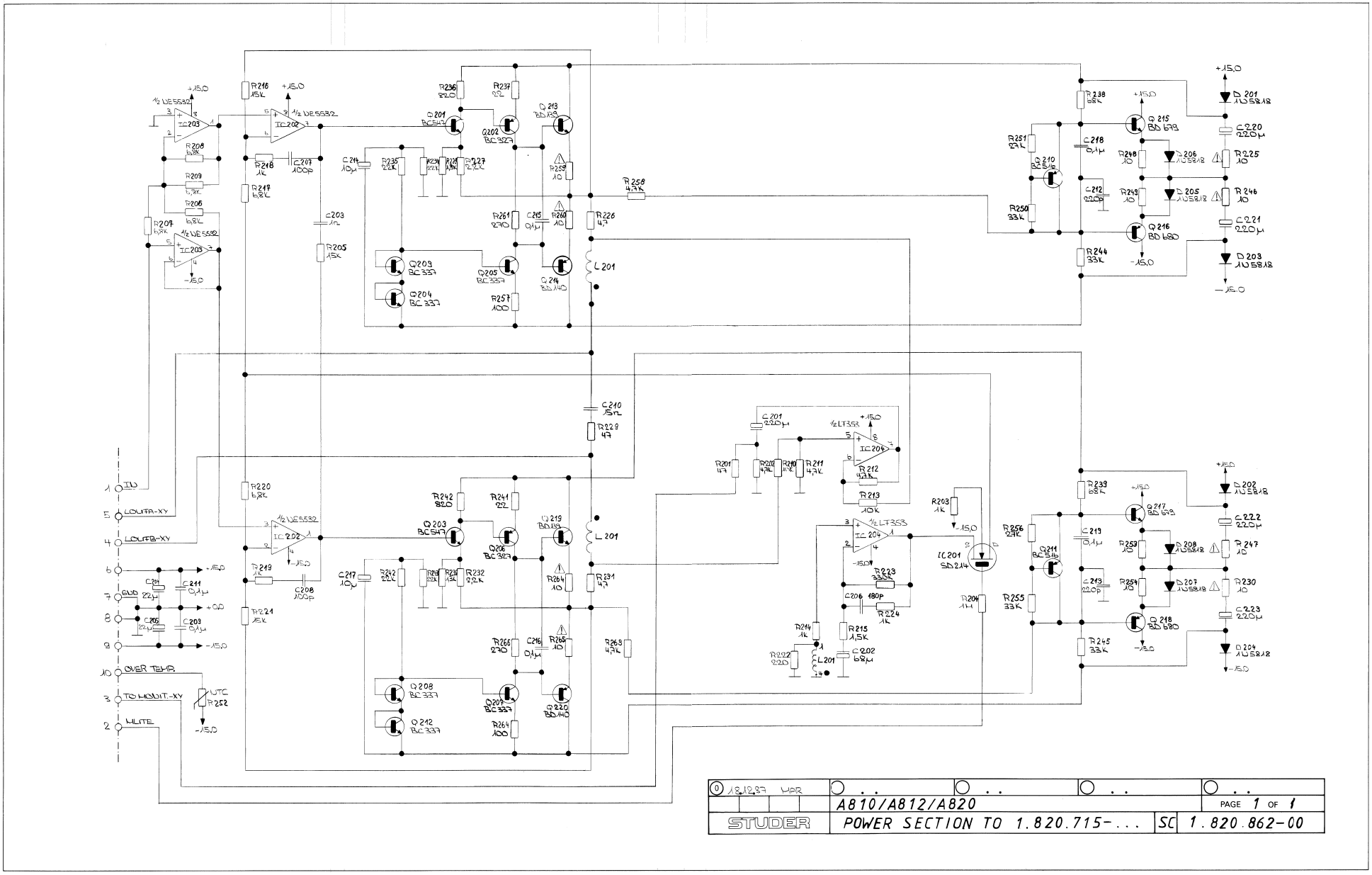
Note 5 - 2 kOhm Potentiometer lin., 10%
Bourns nr. 3296 Y - 1 - 202
Spectrol nr. 64 Y 202 T 000
Murata nr. POT 3105 Y - 1 - 202
Contelec nr. 183 WZ 202

Ce=Ceramic, El=Electrolytic, PETP=Polyester, PP=Polypropylen
Sal=Solid aluminium.

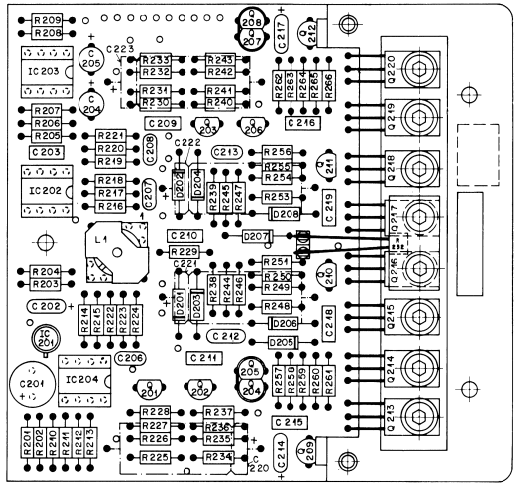
MANUFACTURER: Ex=Exar, ITT=Intermetall, Mot=Motorola,
NS=National Semiconductor, Ph=Philips, Ra=Raytheon,
Ses=Sescosem, Sie=Siemens, Sig=Signetics, Six=Siliconix,
St=Studer, Tf=Telefunken, TI=Texas Instruments.

1.820.715.83 LINE AMPLIFIER TRAFOLESS BD 88/08/3100

LINE OUTPUT AMPLIFIER PCB 1.820.862.00



LINE OUTPUT AMPLIFIER PCB 1.820.862.00



Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	C...201	59.22.3221	220 uF -20%, 10V , El	
	C...202	59.26.0680	68 uF -20%, 6.3V , Sal	Ph
	C...203	59.06.0102	1 nF 10%, 63V , PETP	
	C...204	59.22.6223	22 uF -20%, 35V , El	
	C...205	59.22.6223	22 uF -20%, 35V , El	
	C...206	59.34.2181	180 pF 5%, 63V , Cer	
	C...207	59.34.4101	100 pF 5%, 63V , Cer	
	C...208	59.34.4101	100 pF 5%, 63V , Cer	
	C...209	59.06.0104	0.1 uF 10%, 63V , PETP	
	C...210	59.06.0153	15 nF 10%, 63V , PETP	
	C...211	59.06.0104	0.1 uF 10%, 63V , PETP	
	C...212	59.34.4221	220 pF 5%, 63V , Cer	
	C...213	59.34.4221	220 pF 5%, 63V , Cer	
	C...214	59.26.2100	10 u -20%, 16V , Sal	Ph
	C...215	59.06.0104	0.1 uF 10%, 63V , PETP	
	C...216	59.06.0104	0.1 uF 10%, 63V , PETP	
	C...217	59.26.2100	10 uF -20%, 16V , Sal	Ph
	C...218	59.06.0104	0.1 uF 10%, 63V , PETP	
	C...219	59.06.0104	0.1 uF 10%, 63V , PETP	
	C...220	59.25.5221	220 uF -10%, 40V , El	
	C...221	59.25.5221	220 uF -10%, 40V , El	
	C...222	59.25.5221	220 uF -10%, 40V , El	
	C...223	59.25.5221	220 uF -10%, 40V , El	
	D...201	50.04.0512	1N 5818 1N 5619	Mot
	D...202	50.04.0512	1N 5818 1N 5619	Mot
	D...203	50.04.0512	1N 5818 1N 5619	Mot
	D...204	50.04.0512	1N 5818 1N 5619	Mot
	D...205	50.04.0512	1N 5818 1N 5619	Mot
	D...206	50.04.0512	1N 5818 1N 5619	Mot
	D...207	50.04.0512	1N 5818 1N 5619	Mot
	D...208	50.04.0512	1N 5818 1N 5619	Mot
	IC..201	50.11.0106	SD214-DE BSD214	Sig,Ph
	IC..202	50.09.0105	NE5532 N XR 5532 N, 5532 NB	Sig,Ex,Ra
	IC..203	50.09.0105	NE5532 N XR 5532 N, 5532 NB	Sig,Ex,Ra
	IC..204	50.09.0101	LF 353 N TL 072 CP	NS,TI
	L...201	1.022.273.00	3*150 mH	St
	Q...201	50.03.0436	BC 237 B BC 547 B	Mot,Ph,Sie,Tf
	Q...202	50.03.0351	BC 327-25	Sie,Mot
	Q...203	50.03.0436	BC 237 B BC 547 B	Mot,Ph,Sie,Tf
	Q...204	50.03.0516	BC 337 See Note 1	Sie
	Q...205	50.03.0516	BC 337 See Note 1	Sie
	Q...206	50.03.0351	BC 327-25	Sie,Mot
	Q...207	50.03.0516	BC 337 See Note 1	Sie
	Q...208	50.03.0516	BC 337 See Note 1	Sie
	Q...209	50.03.0516	BC 337 See Note 1	Sie
	Q...210	50.03.0448	BC 516	Sie,TI
	Q...211	50.03.0448	BC 516	Sie,TI
	Q...212	50.03.0516	BC 337 See Note 1	Sie
	Q...213	50.03.0451	BD 139	Ph
	Q...214	50.03.0452	BD 140	Ph
	Q...215	50.03.0504	BD 679	SGS,Ph
	Q...216	50.03.0505	BD 680	SGS,Ph
	Q...217	50.03.0504	BD 679	SGS,Ph
	Q...218	50.03.0505	BD 680	SGS,Ph
	Q...219	50.03.0451	BD 139	Ph
	Q...220	50.03.0452	BD 140	Ph
	R...201	57.11.4470	47 Ohm 5%	
	R...202	57.11.4472	4.7 kOhm 5%	
	R...203	57.11.4102	1 kOhm 5%	
	R...204	57.11.4105	1 MOhm 5%	
	R...205	57.11.4152	1.5 kOhm 5%	
	R...206	57.11.3682	6.8 kOhm 1%	
	R...207	57.11.3682	6.8 kOhm 1%	
	R...208	57.11.3682	6.8 kOhm 1%	
	R...209	57.11.3682	6.8 kOhm 1%	
	R...210	57.11.3103	10 kOhm 1%	
	R...211	57.11.3472	4.7 kOhm 1%	
	R...212	57.11.3472	4.7 kOhm 1%	
	R...213	57.11.3103	10 kOhm 1%	
	R...214	57.11.4102	1 kOhm 5%	
	R...215	57.11.4152	1.5 kOhm 5%	
	R...216	57.11.3153	15 kOhm 1%	
	R...217	57.11.3682	6.8 kOhm 1%	
	R...218	57.11.4102	1 kOhm 5%	
	R...219	57.11.4102	1 kOhm 5%	
	R...220	57.11.3682	6.8 kOhm 1%	
	R...221	57.11.3153	15 kOhm 1%	
	R...222	57.11.4221	220 Ohm 5%	
	R...223	57.11.4334	330 kOhm 5%	
	R...224	57.11.4102	1 kOhm 5%	
	R...225	57.19.0100	10 Ohm 5% See Note 2	
	R...226	57.11.4479	4.7 Ohm 5%	
	R...227	57.11.3222	2.2 kOhm 1%	
	R...228	57.11.3132	1.3 kOhm 1%	
	R...229	57.11.4470	47 Ohm 5%	
	R...230	57.19.0100	10 Ohm 5% See Note 2	
	R...231	57.11.4479	4.7 Ohm 5%	
	R...232	57.11.3222	2.2 kOhm 1%	
	R...233	57.11.3132	1.3 kOhm 1%	
	R...234	57.11.4223	22 kOhm 5%	
	R...235	57.11.4223	22 kOhm 5%	
	R...236	57.11.4821	820 Ohm 5%	
	R...237	57.11.4220	22 Ohm 5%	
	R...238	57.11.4683	68 kOhm 5%	
	R...239	57.11.4683	68 kOhm 5%	
	R...240	57.11.4821	820 Ohm 5%	
	R...241	57.11.4220	22 Ohm 5%	
	R...242	57.11.4223	22 kOhm 5%	
	R...243	57.11.4223	22 kOhm 5%	
	R...244	57.11.4333	33 kOhm 5%	
	R...245	57.11.4333	33 kOhm 5%	
	R...246	57.19.0100	10 Ohm 5% See Note 2	
	R...247	57.19.0100	10 Ohm 5% See Note 2	
	R...248	57.11.4100	10 Ohm 5%	
	R...249	57.11.4100	10 Ohm 5%	
	R...250	57.11.4333	33 kOhm 5%	
	R...251	57.11.4273	27 kOhm 5%	
	R...252	57.99.0208	11.2 kOhm See Note 3	
	R...253	57.11.4100	10 Ohm 5%	
	R...254	57.11.4100	10 Ohm 5%	
	R...255	57.11.4333	33 kOhm 5%	
	R...256	57.11.4273	27 kOhm 5%	
	R...257	57.11.4101	100 Ohm 5%	
	R...258	57.11.4472	4.7 kOhm 5%	
	R...259	57.19.0100	10 Ohm 5% See Note 2	
	R...260	57.19.0100	10 Ohm 5% See Note 2	
	R...261	57.11.4271	270 Ohm 5%	
	R...262	57.11.4101	100 Ohm 5%	
	R...263	57.11.4472	4.7 kOhm 5%	
	R...264	57.19.0100	10 Ohm 5% See Note 2	
	R...265	57.19.0100	10 Ohm 5% See Note 2	
	R...266	57.11.4271	270 Ohm 5%	

Note 1 - Should be replaced as set. (Q4, Q5, Q9 matched) or (Q7, Q8, Q12 matched)

Note 2 - Has to be replaced by Originaltype or Philips-Type Nr. 2322 205 13109

Note 3 - NTC Thermistor Philips-Nr. 2322 640 98005

Cer=Ceramic, El=Electrolytic, PETP=Polyesterfilm, Sal=Solid-Aluminium.

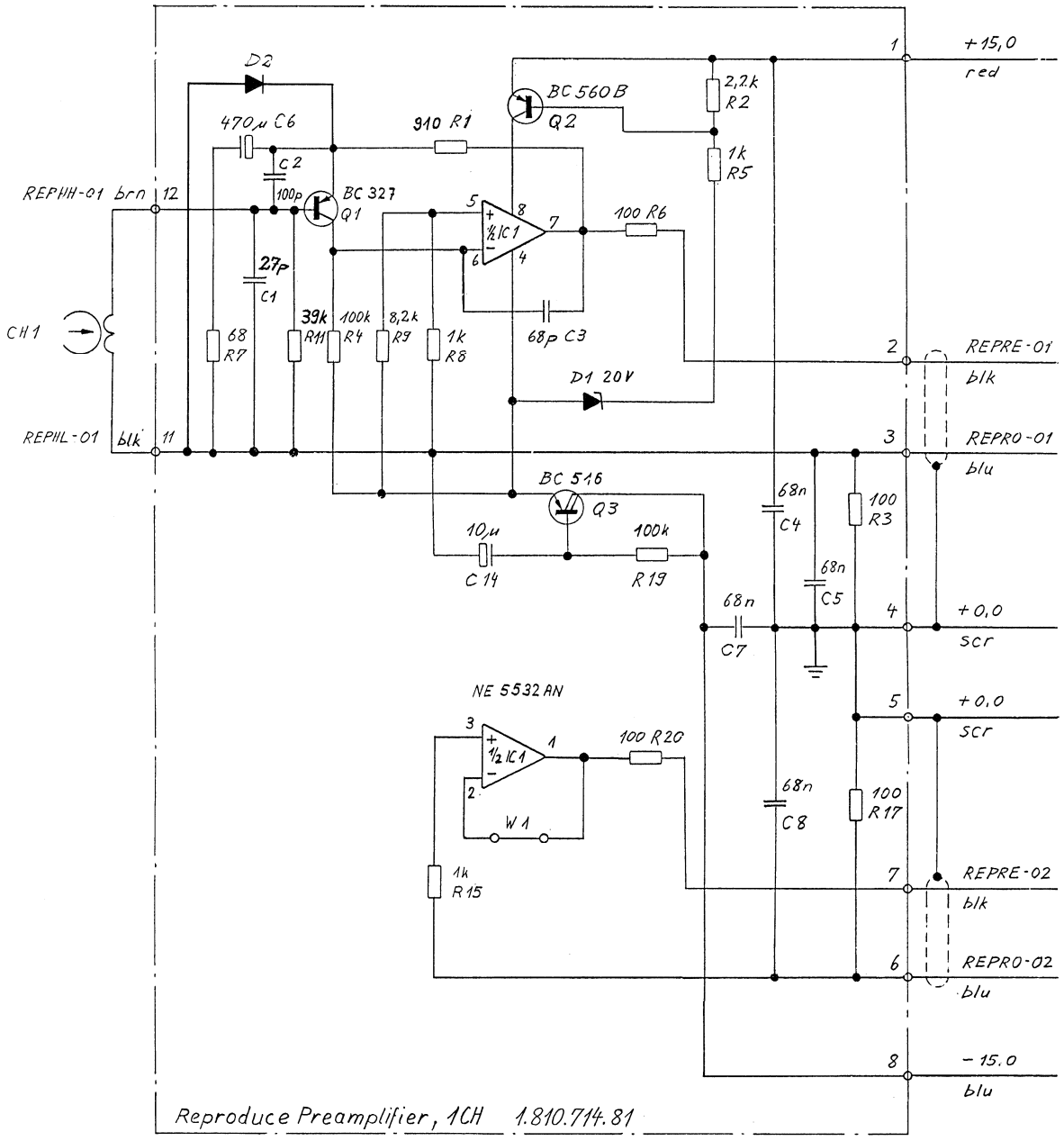
MANUFACTURER: EX=Exar, Mot=Motorola, NS=National Semiconductor, Ph=Philips, Ra=Raytheon, SGS=SGS/Ates, Sig=Signetics, St=Studer, Tf=Telefunken, TI=Texas Instruments.

1.820.862.00 LINE OUTPUT AMPLIFIER BBT85/04/0900

1.820.862.00 LINE OUTPUT AMPLIFIER BD 86/11/2701

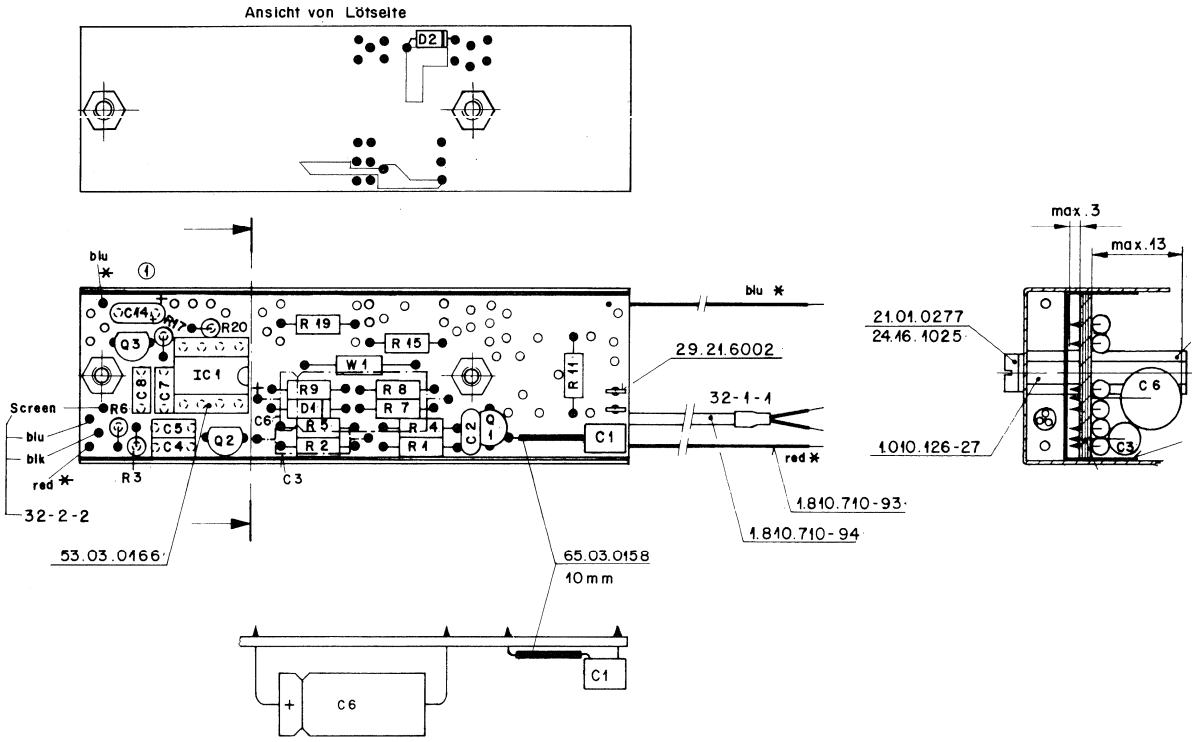
END

REPRODUCE PREAMPLIFIER 1CH 1.810.714.81



6.2.90	Gämperle	Audio Section			
STUDER	Reproduce Preamplifier 1CH		SC	1.810.714-81	PAGE 1 OF 1

REPRODUCE PREAMPLIFIER 1CH 1.810.714.81



Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	C.....1	59.99.0612	27 pF	5%, Ce	
	C.....2	59.99.0622	100 pF	Ce	
	C.....3	59.04.9680	68 pF	PP	ERO,NSF,Sie
	C.....4	59.99.0205	68 nF	Ce	
	C.....5	59.99.0205	68 nF	Ce	
	C.....6	59.99.1704	470 uF	105 Grad C., 6.3V, El	
	C.....7	59.99.0205	68 nF	Ce	
	C.....8	59.99.0205	68 nF	Ce	
	C....14	59.26.2100	10 uF	16V, Sal	Ph
	D.....1	50.04.1109	20 V Z	BZX83C 20, BZX55C 20, ZPD 20	ITT,Ses
	D.....2	50.04.0125	1N 4448		Fe,ITT,Ph,Ses,Tf
	IC....1	50.09.0106	NE5532AN	XR5532AN, 5532ANB	Ex,Ra,Sig
	Q.....1	50.03.0625	BC327		Sie
	Q.....2	50.03.0515	BC307B	BC251B, BC557B, BC560B	ITT,Mot,Ph,Tf,TI
	Q.....3	50.03.0448	BC516		Sie,TI
	R.....1	57.11.3911	910 Ohm		
	R.....2	57.11.3222	2.2 kOhm		
	R.....3	57.11.3101	100 Ohm		
	R.....4	57.11.3104	100 kOhm		
	R.....5	57.11.3102	1 kOhm		
	R.....6	57.11.3101	100 Ohm		
	R.....7	57.11.3680	68 Ohm		
	R.....8	57.11.3102	1 kOhm		
	R.....9	57.11.3822	8.2 kOhm		
	R....11	57.11.3393	39 kOhm		
	R....15	57.11.3102	1 kOhm		
	R....17	57.11.3101	100 Ohm		
	R....19	57.11.3104	100 kOhm		
	R....20	57.11.3101	100 Ohm		
	W.....1	57.11.3000	0 Ohm	Resistor or insulated wire bridge	

Following components are not used:

C 0009, 0010, 0011, 0012, 0013.

Q 0004, 0005.

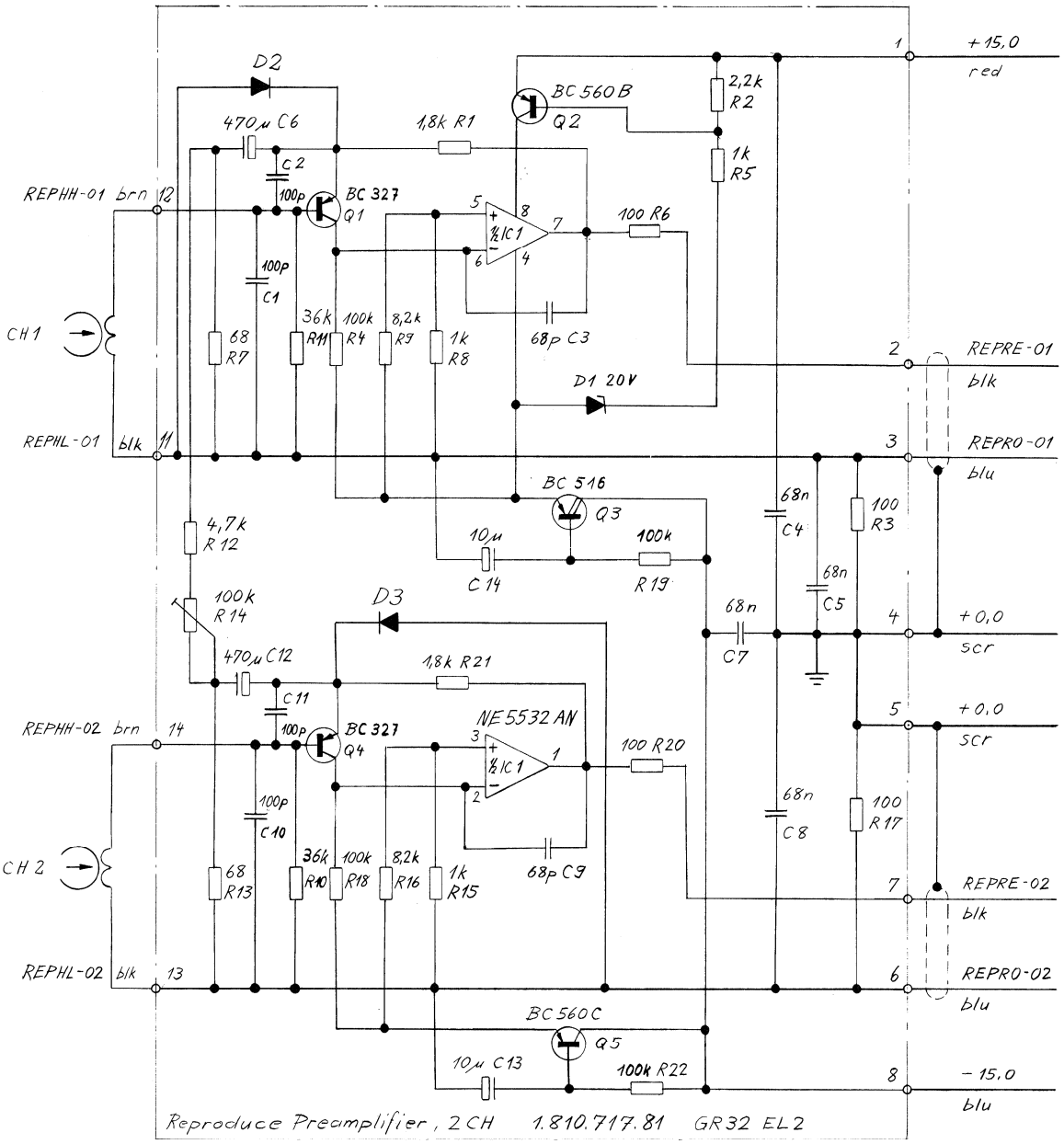
R 0010, 0012, 0013, 0014, 0016, 0018, 0021, 0022.

Ce=Ceramic, El=Electrolytic, PP=Polypropylen, Sal=Solid aluminum

MANUFACTURER: ERO=E. Roederstein, Ex=Exar, ITT=Intermetall,
NSF=AEG-Telefunken-NSF, Mot=Motorola, Ph=Philips,
Ra=Raytheon, Ses=Sescosem, Sie=Siemens, Sig=Signetics,
Tf=Telefunken, TI=Texas Instruments

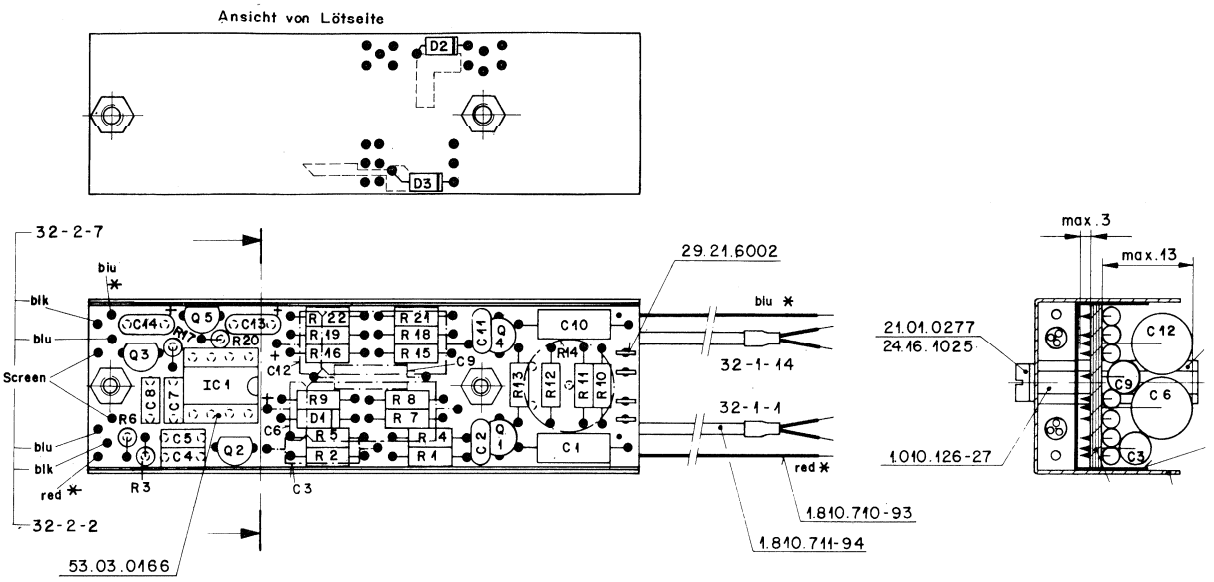
1.810.714.81 REPRODUCE PREAMPLIFIER, 1 CH GAE90/02/0600

REPRODUCE PREAMPLIFIER 2CH 1.810.717.81



8.2.90	Gämperle	A 810 Audio Section			Part of GR 32
STUDER	Reproduce Preamplifier 2 CH		SC	1.810.717-81	PAGE 1 OF 1

REPRODUCE PREAMPLIFIER 2CH 1.810.717.81



Ad	..POS..	...REF.No...	DESCRIPTION		.....MANUFACTURER
	C.....1	59.04.9560	56 pF	5%, PP	
	C.....2	59.99.0622	100 pF	Ce	
	C.....3	59.04.968	68 pF	PP	
	C.....4	59.99.0205	68 nF	Ce	
	C.....5	59.99.0205	68 nF	Ce	
	C.....6	59.99.1704	470 uF	105 Grad C., 6.3V, El	
	C.....7	59.99.0205	68 nF	Ce	
	C.....8	59.99.0205	68 nF	Ce	
	C.....9	59.04.968	68 pF	PP	
	C....10	59.04.9560	56 pF	5%, PP	
	C....11	59.99.0622	100 pF	Ce	
	C....12	59.25.1471	470 uF	6V, El	
	C....13	59.26.2100	10 uF	16V, Sal	Ph
	C....14	59.26.2100	10 uF	16V, Sal	Ph
	D.....1	50.04.1109	20 V Z	BZX83C 20, BZX55C 20, ZPD 20	ITT,Ses
	D.....2	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
	D.....3	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
	IC....1	50.09.0106	NE5532AN	XR5532AN, 5532ANB	Ex,Ra,Sig
	Q.....1	50.03.0625	BC327		Sie
	Q.....2	50.03.0515	BC307B	BC251B, BC557B, BC560B	ITT,Mot,Ph,Tf,TI
	Q.....3	50.03.0448	BC516		Sie,TI
	Q.....4	50.03.0625	BC327		Sie
	Q.....5	50.03.0496	BC560C		Mot,Ph,Sie,Tf
	R.....1	57.11.3182	1.8 kOhm		
	R.....2	57.11.3222	2.2 kOhm		
	R.....3	57.11.3101	100 Ohm		
	R.....4	57.11.3104	100 kOhm		
	R.....5	57.11.3102	1 kOhm		
	R.....6	57.11.3101	100 Ohm		
	R.....7	57.11.3680	68 Ohm		
	R.....8	57.11.3102	1 kOhm		
	R.....9	57.11.3822	8.2 kOhm		
	R....10	57.11.3363	36 kOhm	1%,	
	R....11	57.11.3363	36 kOhm	1%,	
	R....12	57.11.3472	4.7 kOhm		
	R....13	57.11.3680	68 Ohm		
	R....14	58.01.4104	100 kOhm	see note 1	
	R....15	57.11.3102	1 kOhm		
	R....16	57.11.3822	8.2 kOhm		
	R....17	57.11.3101	100 Ohm		
	R....18	57.11.3104	100 kOhm		
	R....19	57.11.3104	100 kOhm		
	R....20	57.11.3101	100 Ohm		
	R....21	57.11.3182	1.8 kOhm		
	R....22	57.11.3104	100 kOhm		

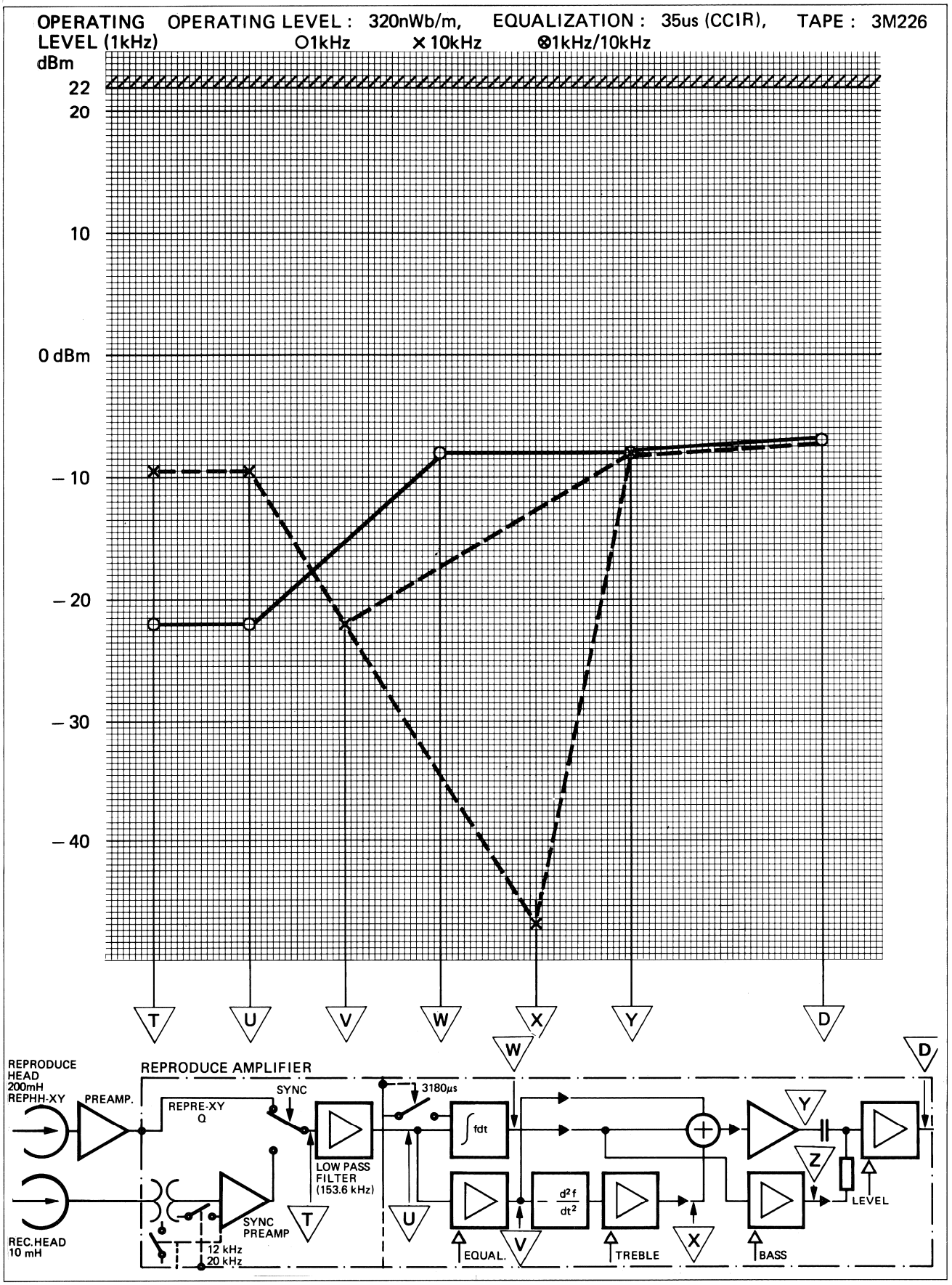
Note 1 - 100 kOhm Potentiometer +log. 10%
Allen Bradley Nr. YR 104 A

Ce=Ceramic, El=Electrolytic, PP=Polypropylen, Sal=Solid aluminium

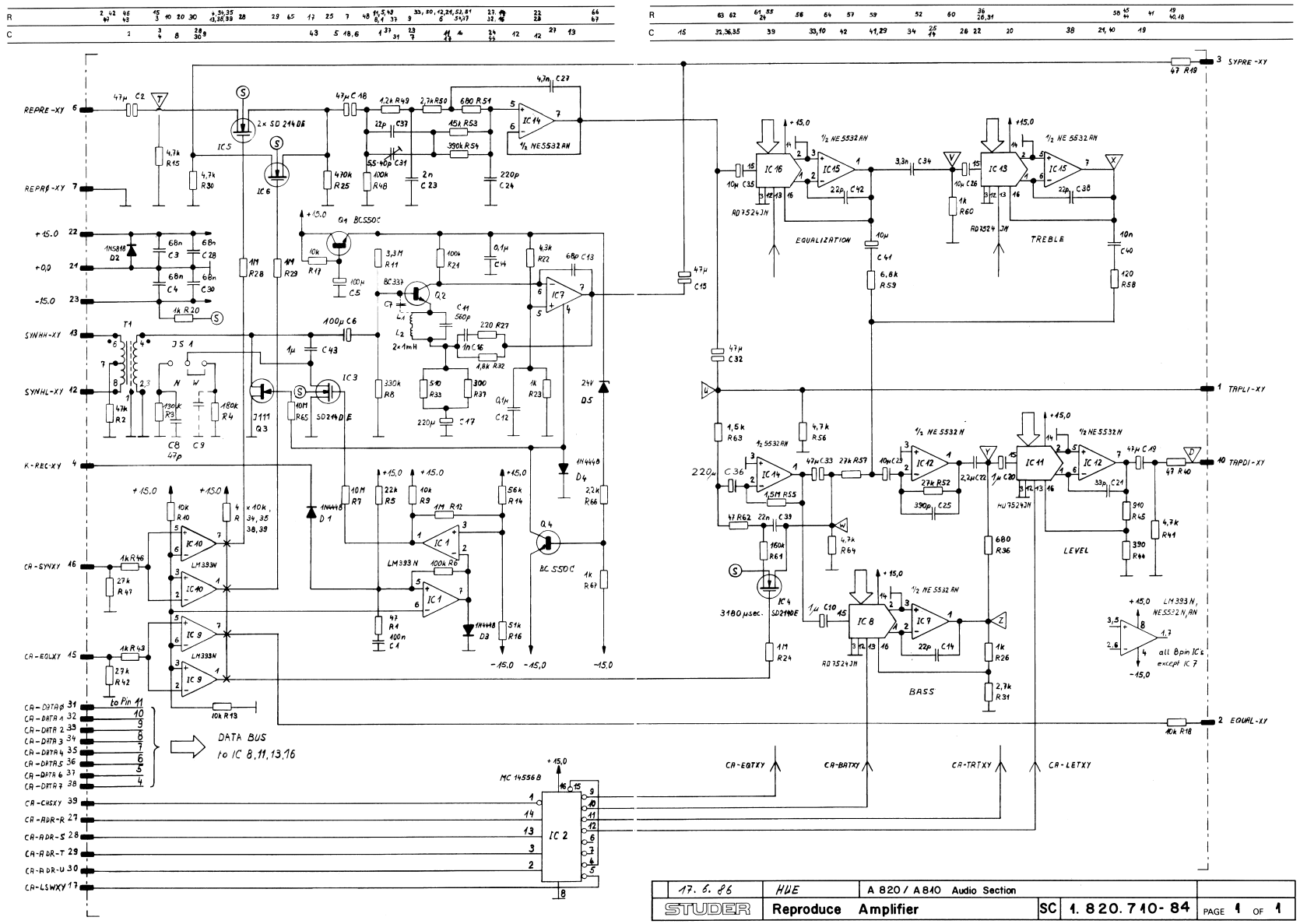
MANUFACTURER: Ex=Exar, ITT=Intermetall, Mot=Motorola, Ph=Philips,
Ra=Raytheon, Ses=Sescosem, Sie=Siemens, Sig=Signetics,
Tf=Telefunken, TI=Texas Instruments

1.810.717.81 REPRODUCE PREAMPLIFIER, 2 CH GAE90/02/0800

LEVEL DIAGRAMS, REPRODUCE AMPLIFIER

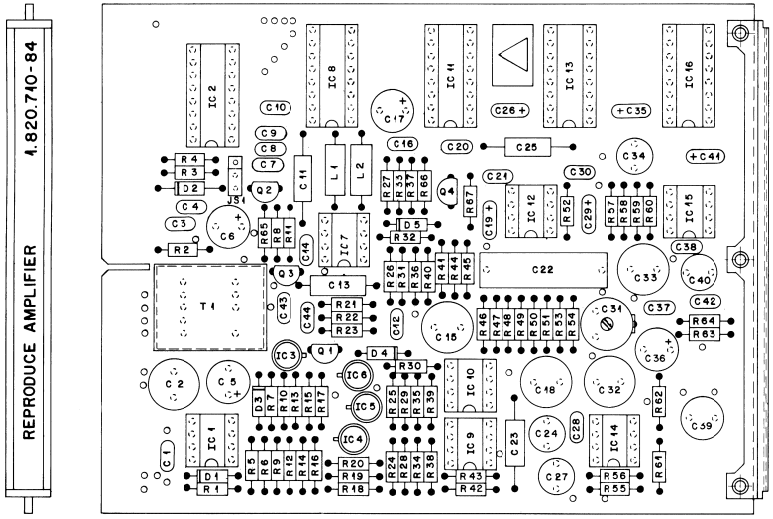


REPRODUCE AMPLIFIER 1.820.710.84



17. 6. 86	HUE	A 820 / A 810 Audio Section		
STUDER	Reproduce Amplifier	SC	1. 820. 710- 84	PAGE 1 OF 1

REPRODUCE AMPLIFIER 1.820.710.84



Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	C.....1	59.06.5104	0.1 uF 5%, 63V , PETP	
	C.....2	59.99.0401	47 uF -20%, 16V , El bipolar	
	C.....3	59.06.0683	68 nF 10%, 63V , PETP	
	C.....4	59.06.0683	68 nF 10%, 63V , PETP	
	C.....5	59.22.5101	100 uF -20%, 25V , El	
	C.....6	59.22.5101	100 uF -20%, 25V , El	
	C.....7	00.00.0000	not used	
	C.....8	59.34.2470	47 pF 2%, N150 , Cer	
	C.....9	00.00.0000	not used	
	C....10	59.06.5105	1 uF 5%, PETP	
	C....11	59.12.7561	560 pF 1%, 63V , PS	
	C....12	59.06.5104	0.1 uF 5%, 63V , PETP	
	C....13	59.04.9680	68 pF 5%, 63V , PP	
	C....14	59.34.2220	22 pF 5%, N150 , Cer	
	C....15	59.99.0401	47 uF -20%, 16V , El bipolar	
	C....16	59.06.0102	1 nF 10%, 63V , PETP	
	C....17	59.22.2221	220 uF -10%, 6V , El	
	C....18	59.99.0401	47 uF -20%, 16V , El bipolar	
	C....19	59.26.0470	47 uF -20%, 5.3V , Sal	Ph
	C....20	59.06.5105	1 uF 5%, 50V PETP	
	C....21	59.34.2330	33 pF 5%, N150 , Cer	
	C....22	59.02.2225	2.2 uF 5% 63V , MPC	
	C....23	59.12.7202	2 nF 1%, 63V , PS	
	C....24	59.05.1221	220 pF 1%, 63V , PP	
	C....25	59.12.7391	390 pF 1%, 63V , PS	
	C....26	59.26.2100	10 uF -20%, 16V , Sal	Ph
	C....27	59.05.1472	4.7 nF 1%, 63V , PP	
	C....28	59.06.0683	68 nF 10%, 63V , PETP	
	C....29	59.26.2100	10 uF -20%, 16V , Sal	Ph
	C....30	59.06.0683	68 nF 10%, 63V , PETP	
	C....31	59.18.0108	40 pF Trimmer capacitor, Philips Nr 2222.808.32409	
	C....32	59.99.0401	47 uF -20%, 16V , El bipolar	
	C....33	59.99.0401	47 uF -20%, 16V , El bipolar	
	C....34	59.05.1332	3.3 nF 1%, 63V , PP	
	C....35	59.26.2100	10 uF -20%, 16V , Sal	Ph
	C....36	59.22.3221	220 uF -20%, 10V , El	
	C....37	59.34.2220	22 pF 5%, N150 , Cer	
	C....38	59.34.2220	22 pF 5%, N150 , Cer	
	C....39	59.05.1223	22 nF 1%, 63V , PP	
	C....40	59.05.1103	10 nF 1%, 63V , PP	
	C....41	59.26.2100	10 uF -20%, 16V , Sal	Ph
	C....42	59.34.2220	22 pF 5%, N150 , Cer	
	C....43	59.06.5105	1 uF 5%, 50V , PETP	
	C....44	59.06.0104	0.1 uF 10%, 50V , PETP	
	D.....1	50.04.0125	1N 4448	
	D.....2	50.04.0512	1N 5818 1N5819	Mot
	D.....3	50.04.0125	1N 4448	
	D.....4	50.04.0125	1N 4448	
	D.....5	50.04.1121	24 V 5% 0.4W	
	IC....1	50.05.0283	LM393N	NS,TI
	IC....2	50.07.0004	CD4556B MC 14 556B, 4556B	RCA,Mot,Fc
	IC....3	50.11.0106	SD 214 DE BSD 214	Ph,Six
	IC....4	50.11.0106	SD 214 DE BSD 214	Ph,Six
	IC....5	50.11.0106	SD 214 DE BSD 214	Ph,Six
	IC....6	50.11.0106	SD 214 DE BSD 214	Ph,Six
	IC....7	50.09.0106	NE5532AN XR5532AN, 5532ANB	Sig,Ex,Ra
	IC....8	50.07.0002	AD7524JN MP 7524 JN	ADI,MpS
	IC....9	50.05.0283	LM393N	NS,TI
	IC....10	50.05.0283	LM393N	NS,TI
	IC....11	50.07.0002	AD7524JN MP 7524 JN	ADI,MpS
	IC....12	50.09.0105	NE5532N XR 5532 N, 5532 NB	Sig,Ex,Ra
	IC....13	50.07.0002	AD7524JN MP 7524 JN	ADI,MpS
	IC....14	50.09.0106	NE5532AN XR 5532AN, 5532ANB	Sig,Ex,Ra
	IC....15	50.09.0106	NE5532AN XR 5532AN, 5532ANB	Sig,Ex,Ra
	IC....16	50.07.0002	AD7524JN MP 7524 JN	ADI,MpS
	JS....1	00.00.0000	See note 1	
	L.....1	62.01.0128	1 mH Gowanda Nr. 17-104, Delevan Nr. 1641-105	
	L.....2	62.01.0128	1 mH Gowanda Nr. 17-104, Delevan Nr. 1641-105	
	Q.....1	50.03.0407	BC550C	Sie,Ph
	Q.....2	50.03.0516	BC337	Sie
	Q.....3	50.03.0216	J 111	Six
	Q.....4	50.03.0407	BC550C	Sie,Ph
	R.....1	57.11.4470	47 Ohm 5%	
	R.....2	57.11.4473	47 kOhm 5%	
	R.....3	57.11.3134	130 kOhm 2%	
	R.....4	57.11.4184	180 kOhm 2%	
	R.....5	57.11.4223	22 kOhm 2%	
	R.....6	57.11.4104	100 kOhm 5%	
	R.....7	57.11.4106	10 MOhm 5%	
	R.....8	57.11.4334	330 kOhm 2%	
	R.....9	57.11.4103	10 kOhm 5%	
	R....10	57.11.4103	10 kOhm 5%	
	R....11	57.11.4335	3.3 MOhm 2%	
	R....12	57.11.4105	1 MOhm 5%	
	R....13	57.11.4103	10 kOhm 5%	
	R....14	57.11.4563	56 kOhm 2%	
	R....15	57.11.4472	4.7 kOhm 5%	
	R....16	57.11.3513	51 kOhm 1%	
	R....17	57.11.4103	10 kOhm 5%	
	R....18	57.11.4103	10 kOhm 5%	
	R....19	57.11.4470	47 Ohm 5%	
	R....20	57.11.4102	1 kOhm 5%	
	R....21	57.11.4104	100 kOhm 2%	
	R....22	57.11.3432	4.3 kOhm 1%	

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	R....23	57.11.4102	1 kOhm 2%	
	R....24	57.11.4105	1 MOhm 5%	
	R....25	57.11.4474	470 kOhm 5%	
	R....26	57.11.4102	1 kOhm 2%	
	R....27	57.11.4221	220 Ohm 5%	
	R....28	57.11.4105	1 MOhm 5%	
	R....29	57.11.4105	1 MOhm 5%	
	R....30	57.11.4472	4.7 kOhm 5%	
	R....31	57.11.4272	2.7 kOhm 2%	
	R....32	57.11.4182	1.8 kOhm 2%	
	R....33	57.11.3511	510 Ohm 2%	
	R....34	57.11.4103	10 kOhm 5%	
	R....35	57.11.4103	10 kOhm 5%	
	R....36	57.11.4681	680 Ohm 2%	
	R....37	57.11.3301	300 Ohm 2%	
	R....38	57.11.4103	10 kOhm 5%	
	R....39	57.11.4103	10 kOhm 5%	
	R....40	57.11.4470	47 Ohm 5%	
	R....41	57.11.4472	4.7 kOhm 5%	
	R....42	57.11.4273	27 kOhm 2%	
	R....43	57.11.4102	1 kOhm 5%	
	R....44	57.11.4391	390 Ohm 2%, See note 2	
	R....45	57.11.3911	910 Ohm 1%	
	R....46	57.11.4102	1 kOhm 5%	
	R....47	57.11.4273	27 kOhm 5%	
	R....48	57.11.4104	100 kOhm 5%	
	R....49	57.11.3122	1.2 kOhm 1%	
	R....50	57.11.3272	2.7 kOhm 1%	
	R....51	57.11.3681	680 Ohm 1%	
	R....52	57.11.4273	27 kOhm 2%	
	R....53	57.11.3153	15 kOhm 1%	
	R....54	57.11.4394	390 kOhm 5%	
	R....55	57.11.5155	1.5 MOhm 5%	
	R....56	57.11.4472	4.7 kOhm 5%	
	R....57	57.11.4273	27 kOhm 2%	
	R....58	57.11.4121	120 Ohm 2%	
	R....59	57.11.4682	6.8 kOhm 2%	
	R....60	57.11.4102	1 kOhm 5%	
	R....61	57.11.3164	160 kOhm 1%	
	R....62	57.11.4470	47 Ohm 5%	
	R....63	57.11.3152	1.5 kOhm 1%	
	R....64	57.11.4472	4.7 kOhm 5%	
	R....65	57.11.5106	10 MOhm 5%	
	R....66	57.11.4222	2.2 kOhm 5%	
	R....67	57.11.4102	1.0 kOhm 5%	

Note 1 - Contact pin: Studer 54.01.0020, Berg 75 160-102-36
Bridge: Studer 54.01.0021, Philips 2422 024 88003

Note 2 - Reproduce Amplifier LF (Low Flux) 1.820.711.00.
R 44 : 220 Ohm 57.11.4221, (3.75 dB higher Gain of Amplifier).

PETP=Polyesterfilm, Sal=Solid-Aluminium, Cer=Ceramic
PS=Polystyrol, PP=Polypropylen, El=Electrolytic
MPC=Metalized Polycarbonate

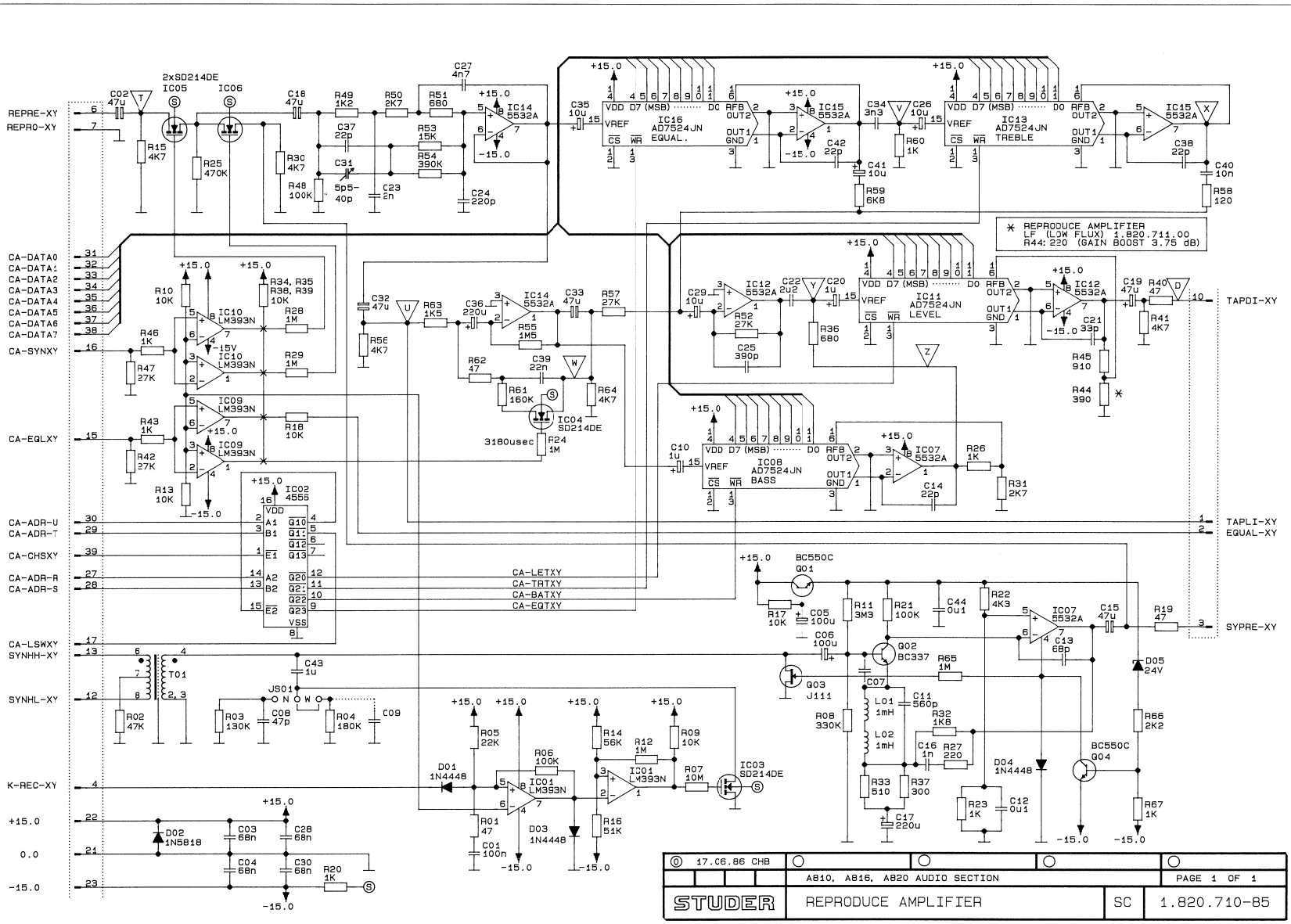
MANUFACTURER: ADI=Analog Decices Inc., Ex=Exar, Fc=Fairchild,
Mot=Motorola, MpS=Micropower Semiconductors,
NS=National Semiconductors, Ph=Philips, Ra=Raytheon,
RCA=Radio corp. of America, Sie=Siemens, Sig=Signetics,
Six=Siliconix, Tf=Telefunken, Tho-CSF=Thomson Semiconductor,
TI=Texas Instruments.

REPRODUCE AMPLIFIER LF 1.820.711.00 see note 2.

1.820.710.84 REPRODUCE AMPLIFIER BD 86/06/1700

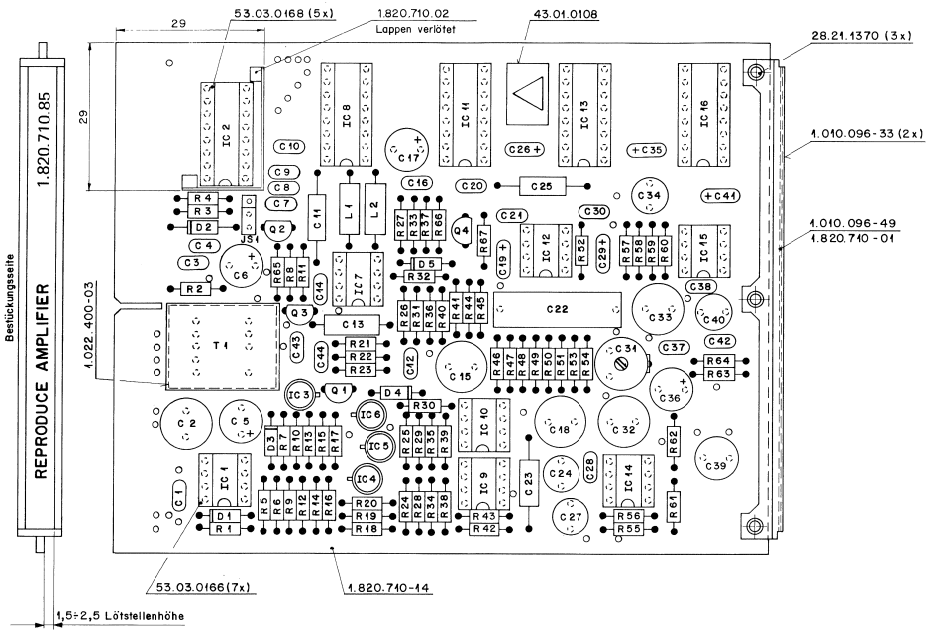
END

REPRODUCE AMPLIFIER 1.820.710.85



⓪ 17.06.86 CHB				
	A810, A816, A820 AUDIO SECTION			PAGE 1 OF 1
STUDER	REPRODUCE AMPLIFIER		SC	1.820.710-85

REPRODUCE AMPLIFIER 1.820.710.85



Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	C.....1	59.06.5104	0.1 uF 5%, 63V , PETP	
	C.....2	59.99.0401	47 uF -20%, 16V , El bipolar	
	C.....3	59.06.0683	68 nF 10%, 63V , PETP	
	C.....4	59.06.0683	68 nF 10%, 63V , PETP	
	C.....5	59.22.5101	100 uF -20%, 25V , El	
	C.....6	59.22.5101	100 uF -20%, 25V , El	
	C.....7	00.00.0000	not used	
	C.....8	59.34.2470	47 pF 2%, N150 , Cer	
	C.....9	00.00.0000	not used	
	C.....10	59.06.5105	1 uF 5%, PETP	
	C.....11	59.12.7561	560 pF 1%, 63V , PS	
	C.....12	59.06.5104	0.1 uF 5%, 63V , PETP	
	C.....13	59.04.9680	68 pF 5%, 63V , PP	
	C.....14	59.34.2220	22 pF 5%, N150 , Cer	
	C.....15	59.99.0401	47 uF -20%, 16V , El bipolar	
	C.....16	59.06.0102	1 nF 10%, 63V , PETP	
	C.....17	59.22.2221	220 uF -10%, 6V , El	
	C.....18	59.99.0401	47 uF -20%, 16V , El bipolar	
	C.....19	59.26.0470	47 uF -20%, 6.3V , Sal	Ph
	C.....20	59.06.5105	1 uF 5%, 50V PETP	
	C.....21	59.34.2330	33 pF 5%, N150 , Cer	
	C.....22	59.02.2225	2.2 uF 5% 63V , MPC	
	C.....23	59.12.7202	2 nF 1%, 63V , PS	
	C.....24	59.05.1221	220 pF 1%, 63V , PP	
	C.....25	59.12.7391	390 pF 1%, 63V , PS	
	C.....26	59.26.2100	10 uF -20%, 16V , Sal	Ph
	C.....27	59.05.1472	4.7 nF 1%, 63V , PP	
	C.....28	59.06.0683	68 nF 10%, 63V , PETP	
	C.....29	59.26.2100	10 uF -20%, 16V , Sal	Ph
	C.....30	59.06.0683	68 nF 10%, 63V , PETP	
	C.....31	59.18.0108	40 pF Trimmer capacitor, Philips Nr 2222.808.32409	
	C.....32	59.99.0401	47 uF -20%, 16V , El bipolar	
	C.....33	59.99.0401	47 uF -20%, 16V , El bipolar	
	C.....34	59.05.1332	3.3 nF 1%, 63V , PP	
	C.....35	59.26.2100	10 uF -20%, 16V , Sal	Ph
	C.....36	59.22.3221	220 uF -20%, 10V , El	
	C.....37	59.34.2220	22 pF 5%, N150 , Cer	
	C.....38	59.34.2220	22 pF 5%, N150 , Cer	
	C.....39	59.05.1223	22 nF 1%, 63V , PP	
	C.....40	59.05.1103	10 nF 1%, 63V , PP	
	C.....41	59.26.2100	10 uF -20%, 16V , Sal	Ph
	C.....42	59.34.2220	22 pF 5%, N150 , Cer	
	C.....43	59.06.5106	1 uF 5%, 50V , PETP	
	C.....44	59.06.0104	0.1 uF 10%, 50V , PETP	
	D.....1	50.04.0125	1N 4448	
	D.....2	50.04.0512	1N 5818 1N5819	Mot
	D.....3	50.04.0125	1N 4448	
	D.....4	50.04.0125	1N 4448	
	D.....5	50.04.1121	24 V 5% 0.4W	
	IC....1	50.05.0283	LM393N	NS,TI
	IC....2	50.07.0004	CD4556B MC 14 556B, 4556B	RCA,Mot,Fc
	IC....3	50.11.0106	SD 214 DE BSD 214	Ph,Six
	IC....4	50.11.0106	SD 214 DE BSD 214	Ph,Six
	IC....5	50.11.0106	SD 214 DE BSD 214	Ph,Six
	IC....6	50.11.0106	SD 214 DE BSD 214	Ph,Six
	IC....7	50.09.0106	NE5532AN XR5532AN, 5532ANB	Sig,Ex,Ra
	IC....8	50.07.0002	AD7524JN MP 7524 JN	ADI,MpS
	IC....9	50.05.0283	LM393N	NS,TI
	IC....10	50.05.0283	LM393N	NS,TI
	IC....11	50.07.0002	AD7524JN MP 7524 JN	ADI,MpS
	IC....12	50.09.0105	NE5532N XR 5532 N, 5532 NB	Sig,Ex,Ra
	IC....13	50.07.0002	AD7524JN MP 7524 JN	ADI,MpS
	IC....14	50.09.0106	NE5532AN XR 5532AN, 5532ANB	Sig,Ex,Ra
	IC....15	50.09.0106	NE5532AN XR 5532AN, 5532ANB	Sig,Ex,Ra
	IC....16	50.07.0002	AD7524JN MP 7524 JN	ADI,MpS
	JS....1	00.00.0000	See note 1	
	L.....1	62.01.0128	1 mH Gowanda Nr. 17-104, Delevan Nr. 1641-105	
	L.....2	62.01.0128	1 mH Gowanda Nr. 17-104, Delevan Nr. 1641-105	
	Q.....1	50.03.0407	BC550C	Sie,Ph
	Q.....2	50.03.0516	BC337	Sie
	Q.....3	50.03.0216	J 111	Six
	Q.....4	50.03.0407	BC550C	Sie,Ph
	R.....1	57.11.3470	47 Ohm 5%	
	R.....2	57.11.3473	47 kOhm 5%	
	R.....3	57.11.3134	130 kOhm 2%	
	R.....4	57.11.3184	180 kOhm 2%	
	R.....5	57.11.3223	22 kOhm 2%	
	R.....6	57.11.3104	100 kOhm 5%	
	R.....7	57.11.3106	10 MOhm 5%	
	R.....8	57.11.3334	330 kOhm 2%	
	R.....9	57.11.3103	10 kOhm 5%	
	R....10	57.11.3103	10 kOhm 5%	
	R....11	57.11.3335	3.3 MOhm 2%	
	R....12	57.11.3105	1 MOhm 5%	
	R....13	57.11.3103	10 kOhm 5%	
	R....14	57.11.3563	56 kOhm 2%	
	R....15	57.11.3472	4.7 kOhm 5%	
	R....16	57.11.3513	51 kOhm 1%	
	R....17	57.11.3103	10 kOhm 5%	
	R....18	57.11.3103	10 kOhm 5%	
	R....19	57.11.3470	47 Ohm 5%	
	R....20	57.11.3102	1 kOhm 5%	
	R....21	57.11.3104	100 kOhm 2%	
	R....22	57.11.3432	4.3 kOhm 1%	

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	R....23	57.11.3102	1 kOhm 2%	
	R....24	57.11.3105	1 MOhm 5%	
	R....25	57.11.3474	470 kOhm 5%	
	R....26	57.11.3102	1 kOhm 2%	
	R....27	57.11.3221	220 Ohm 5%	
	R....28	57.11.3105	1 MOhm 5%	
	R....29	57.11.3105	1 MOhm 5%	
	R....30	57.11.3472	4.7 kOhm 5%	
	R....31	57.11.3272	2.7 kOhm 2%	
	R....32	57.11.3182	1.8 kOhm 2%	
	R....33	57.11.3511	510 Ohm 2%	
	R....34	57.11.3103	10 kOhm 5%	
	R....35	57.11.3103	10 kOhm 5%	
	R....36	57.11.3681	680 Ohm 2%	
	R....37	57.11.3301	300 Ohm 2%	
	R....38	57.11.3103	10 kOhm 5%	
	R....39	57.11.3103	10 kOhm 5%	
	R....40	57.11.3470	47 Ohm 5%	
	R....41	57.11.3472	4.7 kOhm 5%	
	R....42	57.11.3273	27 kOhm 5%	
	R....43	57.11.3102	1 kOhm 5%	
	R....44	57.11.3391	390 Ohm 2%	
	R....45	57.11.3911	910 Ohm 1%	
	R....46	57.11.3102	1 kOhm 5%	
	R....47	57.11.3273	27 kOhm 5%	
	R....48	57.11.3104	100 kOhm 5%	
	R....49	57.11.3122	1.2 kOhm 1%	
	R....50	57.11.3272	2.7 kOhm 1%	
	R....51	57.11.3681	680 Ohm 1%	
	R....52	57.11.3273	27 kOhm 2%	
	R....53	57.11.3153	15 kOhm 1%	
	R....54	57.11.3394	390 kOhm 5%	
	R....55	57.11.5155	1.5 MOhm 5%	
	R....56	57.11.3472	4.7 kOhm 5%	
	R....57	57.11.3273	27 kOhm 2%	
	R....58	57.11.3121	120 Ohm 2%	
	R....59	57.11.3682	6.8 kOhm 2%	
	R....60	57.11.3102	1 kOhm 5%	
	R....61	57.11.3164	160 kOhm 1%	
	R....62	57.11.3470	47 Ohm 5%	
	R....63	57.11.3152	1.5 kOhm 1%	
	R....64	57.11.3472	4.7 kOhm 5%	
	R....65	57.11.5106	10 MOhm 5%	
	R....66	57.11.3222	2.2 kOhm 5%	
	R....67	57.11.3102	1.0 kOhm 5%	

Note 1 - Contact pin: Studer 54.01.0020, Berg 75 160-102-36
Bridge: Studer 54.01.0021, Philips 2422 024 88003

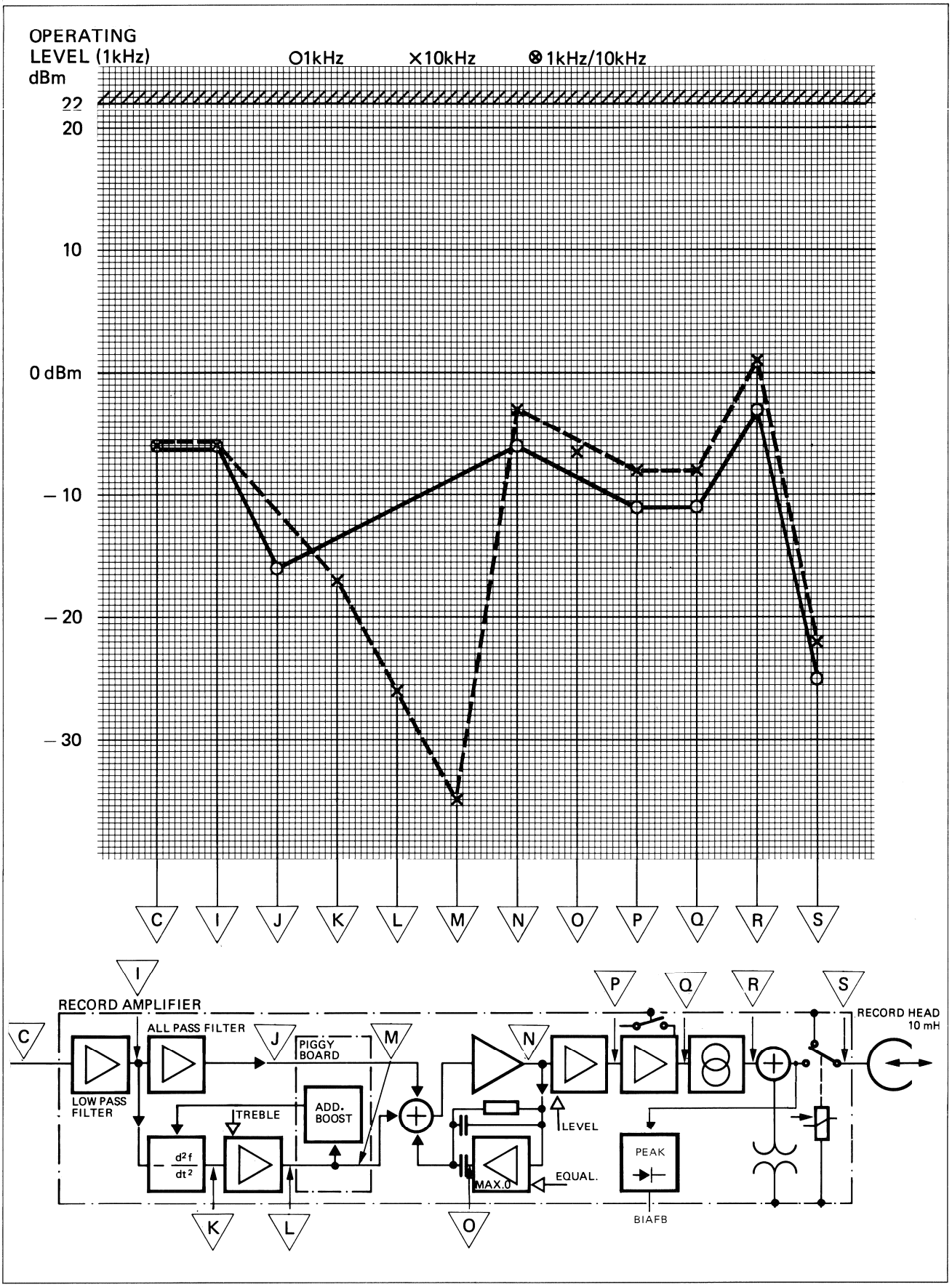
FETP=Polyesterfilm, Sal=Solid-Aluminium, Cer=Ceramic
PS=Polystyrol, PP=Polypropylen, El=Electrolytic
MPC=Metalized Polycarbonate

MANUFACTURER: ADI=Analog Decices Inc., Ex=Exar, Fc=Fairchild,
Mot=Motorola, MpS=Micropower Semiconductors,
NS=National Semiconductors, Ph=Philips, Ra=Raytheon,
RCA=Radio corp. of America, Sie=Siemens, Sig=Signetics,
Six=Siliconix, Tf=Telefunken, Tho-CSF=Thomson Semiconductor,
TI=Texas Instruments.

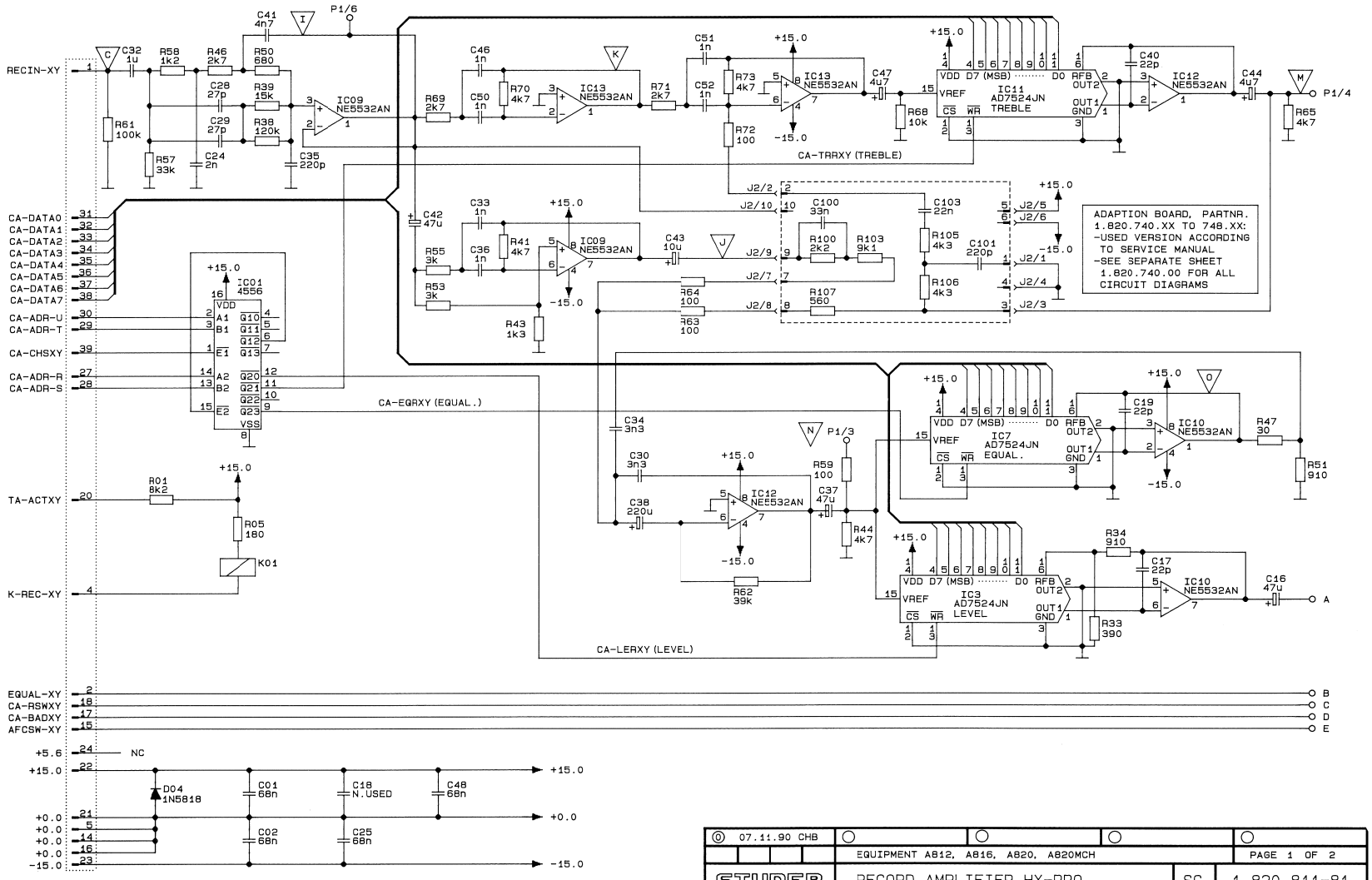
1.820.710.85 REPRODUCE AMPLIFIER BD 88/10/2600

END

LEVEL DIAGRAMS, RECORD AMPLIFIER

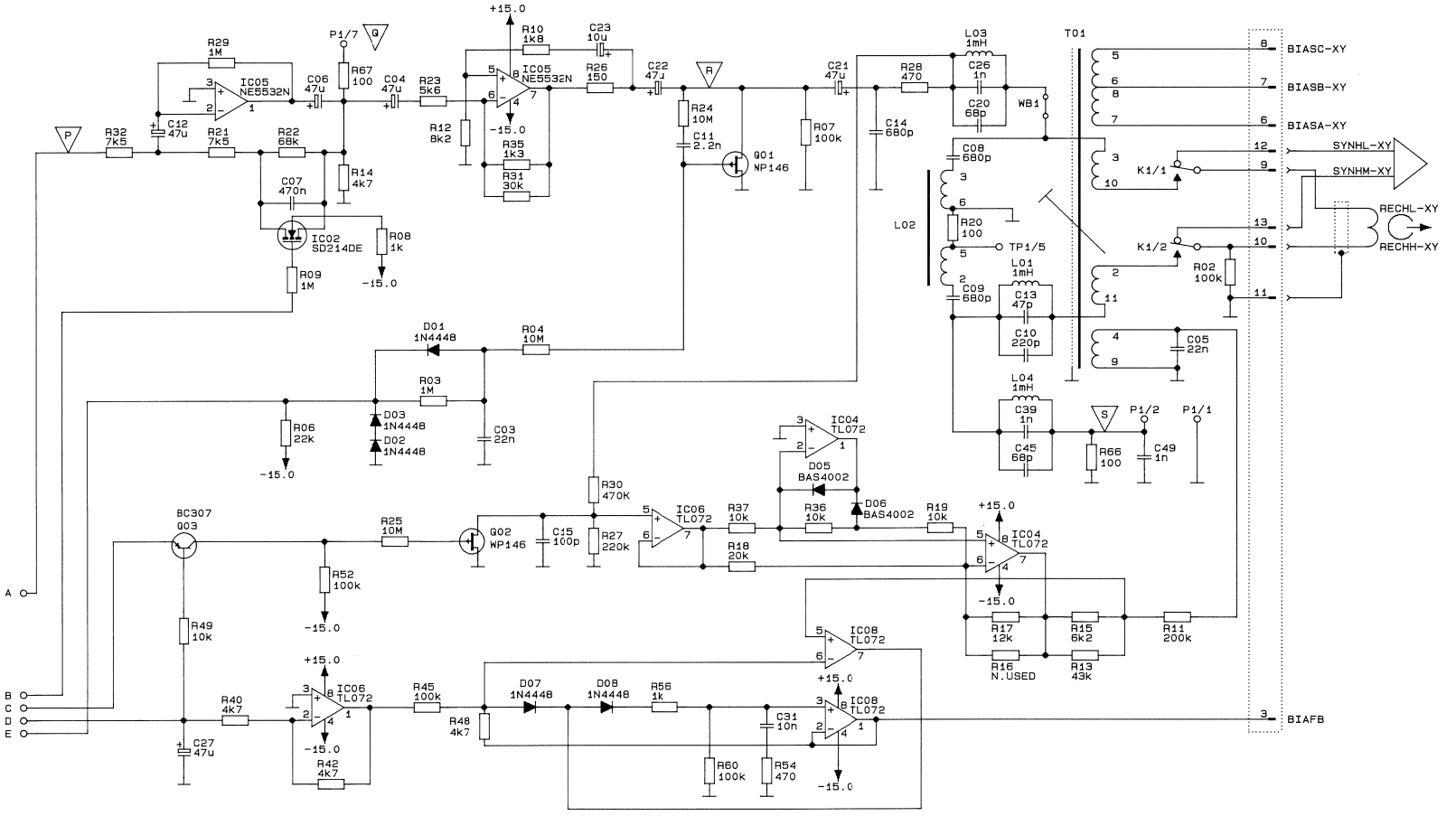


RECORD AMPLIFIER HX-PRO 1.820.811.81



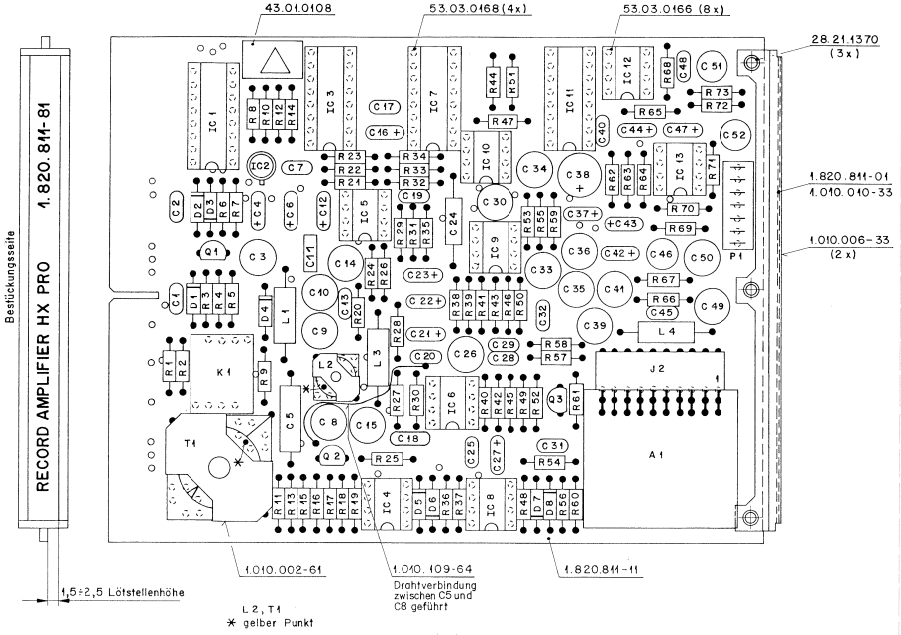
⓪ 07.11.90 CHB	○	○	○	○	
	EQUIPMENT A812, A816, A820, A820MCH			PAGE 1 OF 2	
STUDER	RECORD AMPLIFIER HX-PRO		SC	1.820.811-81	

RECORD AMPLIFIER HX-PRO 1.820.811.81



⓪ 07.11.90 CHB	○	○	○	○
	EQUIPMENT A812, A816, A820, A820MCH			PAGE 2 OF 2
STUDER	RECORD AMPLIFIER HX-PRO		SC	1.820.811-81

RECORD AMPLIFIER HX-PRO 1.820.811.81



Ad	..POS..	...REF.No...	DESCRIPTION			MANUFACTURER
	A.....1	00.00.0000	see note 1	Adaptation Board		S
	C.....1	59.06.0683	68 nF	20%,	PETP	
	C.....2	59.06.0683	68 nF	20%,	PETP	
	C.....3	59.05.1223	22 nF	1%,	PP	
	C.....4	59.26.0470	47 uF	20%, 6.3 V,	Sal	Ph
	C.....5	59.12.9222	2.2 nF	1%, 500 V,	PS	
	C.....6	59.26.0470	47 uF	20%, 6.3 V,	Sal	Ph
	C.....7	59.06.5474	470 nF	5%,	PETP	
	C.....8	59.05.1681	680 pF	1%,	PP	
	C.....9	59.05.1681	680 pF	1%,	PP	
	C....10	59.05.1221	220 pF	1%,	PP	
	C....11	59.06.0222	2.2 nF	10%,	PETP	
	C....12	59.26.0470	47 uF	20%, 6.3 V,	Sal	Ph
	C....13	59.34.2470	47 pF	5%,	Cer	
	C....14	59.05.1681	680 pF	1%,	PP	
	C....15	59.05.1101	100 pF	1%,	PP	
	C....16	59.26.0470	47 uF	20%, 6.3 V,	Sal	Ph
	C....17	59.34.2220	22 pF	5%,	Cer	
	C....18	00.00.0000	not used			
	C....19	59.34.2220	22 pF	5%,	Cer	
	C....20	59.34.4680	68 pF	5%,	Cer	
	C....21	59.26.0470	47 uF	20%, 6.3 V,	Sal	Ph
	C....22	59.26.0470	47 uF	20%, 6.3 V,	Sal	Ph
	C....23	59.26.2100	10 uF	20%, 16 V,	Sal	Ph
	C....24	59.12.7202	2 nF	1%,	PS	
	C....25	59.06.0683	68 nF	20%,	PETP	
	C....26	59.05.1102	1 nF	1%,	PP	
	C....27	59.26.0470	47 uF	20%, 6.3 V,	Sal	Ph
	C....28	59.34.2270	27 pF	5%,	Cer	
	C....29	59.34.2270	27 pF	5%,	Cer	
	C....30	59.05.1332	3.3 nF	1%,	PP	
	C....31	59.06.5103	10 nF	5%,	PETP	
	C....32	59.06.5105	1 uF	5%,	PETP	
	C....33	59.05.1102	1 nF	1%,	PP	
	C....34	59.05.1332	3.3 nF	1%,	PP	
	C....35	59.05.1221	220 pF	1%,	PP	
	C....36	59.05.1102	1 nF	1%,	PP	
	C....37	59.26.0470	47 uF	20%, 6.3 V	Sal	Ph
	C....38	59.22.3221	220 uF	20%, 10 V,	El	
	C....39	59.05.1102	1 nF	1%,	PP	
	C....40	59.34.2220	22 pF	5%,	Cer	
	C....41	59.05.1472	4.7 nF	1%,	PP	
	C....42	59.26.0470	47 uF	20%, 6.3 V,	Sal	Ph
	C....43	59.26.2100	10 uF	20%, 16 V,	Sal	Ph
	C....44	59.26.5479	4.7 uF	20%,	Sal	Ph
	C....45	59.34.4680	68 pF	5%,	Cer	
	C....46	59.05.1102	1 nF	1%,	PP	
	C....47	59.26.5479	4.7 uF	20%,	Sal	Ph
	C....48	59.06.0683	68 nF	20%,	PETP	
	C....49	59.05.1102	1 nF	1%,	PP	
	C....50	59.05.1102	1 nF	1%,	PP	
	C....51	59.05.1102	1 nF	1%,	PP	
	C....52	59.05.1102	1 nF	1%,	PP	
	D.....1	50.04.0125	1N4448			ITT,Ph,Ses,TI
	D.....2	50.04.0125	1N4448			ITT,Ph,Ses,TI
	D.....3	50.04.0125	1N4448			ITT,Ph,Ses,TI
	D.....4	50.04.0512	1N5818	1N5819		Mot
	D.....5	50.04.0127	BAT 42	BAT 85, BAS 40-02		Ph,Sie,Tho-CSF
	D.....6	50.04.0127	BAT 42	BAT 85, BAS 40-02		Ph,Sie,Tho-CSF
	D.....7	50.04.0125	1N4448			ITT,Ph,Ses,TI
	D.....8	50.04.0125	1N4448			ITT,Ph,Ses,TI
	IC....1	50.07.0004	MC14556BCP	CD4556BE, 4556B PC		Mot,RCA,Fc
	IC....2	50.11.0106	SD 214 DE	BSD214		Six,Ph
	IC....3	50.07.0002	AD7524JN	MP7524JN		ADI,MpS
	IC....4	50.09.0101	TL072CP	LF 353 N		NS,TI,Tho
	IC....5	50.09.0105	NE5532N	XR5532N, 5532NB		Sig,Ex,Ra
	IC....6	50.09.0101	TL072CP	LF 353 N		NS,TI,Tho
	IC....7	50.07.0002	AD7524JN	MP7524JN		ADI,MpS
	IC....8	50.09.0101	TL072CP	LF 353 N		NS,TI,Tho
	IC....9	50.09.0106	NE5532AN	XR5532AN, 5532ANB		Sig,Ex,Ra
	IC...10	50.09.0105	NE5532N	XR5532N, 5532NB		Sig,Ex,Ra
	IC...11	50.07.0002	AD7524JN	MP7524JN		ADI,MpS
	IC...12	50.09.0106	NE5532AN	XR5532AN, 5532ANB		Sig,Ex,Ra
	IC...13	50.09.0106	NE5532AN	XR5532AN, 5532ANB		Sig,Ex,Ra
	J.....1	54.01.0307	10 cont.	AMP Nr. 163.683-8		
	K.....1	56.04.0171	SM D1012			ITT
	L.....1	62.01.0128	1 mH	Gowanda 16-104 or Delevan 2307-105		
	L.....2	1.022.214.00		Filter coil, 150 kHz		St
	L.....3	62.01.0128	1 mH	Gowanda 16-104 or Delevan 2307-105		
	L.....4	62.01.0128	1 mH	Gowanda 16-104 or Delevan 2307-105		

Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	P.....1	54.12.0007	7 cont.	AMP Mini Match System, Nr. 164 713-7	
	Q.....1	50.03.0329	P1228E	WP146	Six,TS
	Q.....2	50.03.0329	P1228E	WP146	Six,TS
	Q.....3	50.03.0515	BC 307	BC 557 B	ITT,Mot,Ph
	R.....1	57.11.4822	8.2 kOhm	5%	
	R.....2	57.11.4104	100 kOhm	5%	
	R.....3	57.11.4105	1 MOhm	5%	
	R.....4	57.11.5106	10 MOhm	10%	
	R.....5	57.11.4181	180 Ohm	5%	
	R.....6	57.11.4223	22 kOhm	5%	
	R.....7	57.11.4104	100 kOhm	5%	
	R.....8	57.11.4102	1 kOhm	5%	
	R.....9	57.11.4105	1 MOhm	10%	
	R....10	57.11.4182	1.8 kOhm	2%	
	R....11	57.11.3204	200 kOhm	1%	
	R....12	57.11.4822	8.2 kOhm	2%	
	R....13	57.11.3433	43 kOhm	2%	
	R....14	57.11.4472	4.7 kOhm	5%	
	R....15	57.11.3622	6.2 kOhm	1%	
	R....16	00.00.0000	not used		
	R....17	57.11.3123	12 kOhm	1%	
	R....18	57.11.3203	20 kOhm	1%	
	R....19	57.11.4103	10 kOhm	2%	
	R....20	57.11.4101	100 Ohm	2%	
	R....21	57.11.3752	7.5 kOhm	1%	
	R....22	57.11.3683	68 kOhm	1%	
	R....23	57.11.3562	5.6 kOhm	1%	
	R....24	57.11.5106	10 MOhm	10%	
	R....25	57.11.5106	10 MOhm	10%	
	R....26	57.11.4151	150 Ohm	2%	
	R....27	57.11.3224	220 kOhm	1%	
	R....28	57.11.4471	470 Ohm	2%	
	R....29	57.11.4105	1 MOhm	5%	
	R....30	57.11.4474	470 kOhm	2%	
	R....31	57.11.3303	30 kOhm	5%	
	R....32	57.11.3752	7.5 kOhm	1%	
	R....33	57.11.3391	390 Ohm	1%	
	R....34	57.11.3911	910 Ohm	1%	
	R....35	57.11.3132	1.3 kOhm	1%	
	R....36	57.11.4103	10 kOhm	2%	
	R....37	57.11.4103	10 kOhm	2%	
	R....38	57.11.4124	120 kOhm	5%	
	R....39	57.11.4153	15 kOhm	2%	
	R....40	57.11.3472	4.7 kOhm	1%	
	R....41	57.11.3472	4.7 kOhm	1%	
	R....42	57.11.3472	4.7 kOhm	1%	
	R....43	57.11.3132	1.3 kOhm	1%	
	R....44	57.11.4472	4.7 kOhm	5%	
	R....45	57.11.4104	100 kOhm	2%	
	R....46	57.11.3272	2.7 kOhm	2%	
	R....47	57.11.3300	30 Ohm	1%	
	R....48	57.11.3472	4.7 kOhm	1%	
	R....49	57.11.4103	10 kOhm	5%	
	R....50	57.11.4681	680 Ohm	2%	
	R....51	57.11.3911	910 Ohm	1%	
	R....52	57.11.4104	100 kOhm	5%	
	R....53	57.11.3302	3 kOhm	1%	
	R....54	57.11.4471	470 Ohm	5%	
	R....55	57.11.3302	3 kOhm	1%	
	R....56	57.11.4102	1 kOhm	5%	
	R....57	57.11.4333	33 kOhm	5%	
	R....58	57.11.4122	1.2 kOhm	2%	
	R....59	57.11.4101	100 Ohm	5%	
	R....60	57.11.4104	100 kOhm	5%	
	R....61	57.11.4104	100 kOhm	5%	
	R....62	57.11.4393	39 kOhm	2%	
	R....63	57.11.4101	100 Ohm	5%	
	R....64	57.11.4101	100 Ohm	5%	
	R....65	57.11.4472	4.7 kOhm	5%	
	R....66	57.11.4101	100 Ohm	2%	
	R....67	57.11.4101	100 Ohm	5%	
	R....68	57.11.4103	10 kOhm	5%	
	R....69	57.11.3272	2.7 kOhm	1%	
	R....70	57.11.3472	4.7 kOhm	1%	
	R....71	57.11.3272	2.7 kOhm	1%	
	R....72	57.11.4101	100 Ohm	5%	
	R....73	57.11.3472	4.7 kOhm	1%	
	T.....1	1.022.213.00		Bias Transformer, 150 kHz	St

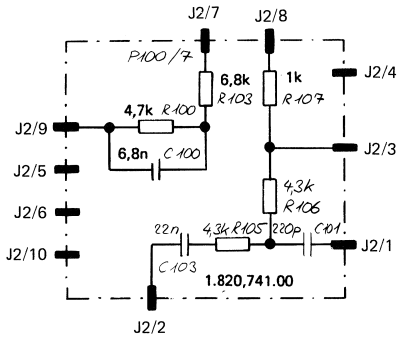
Note 1: Actual use of Adaptation Board (Studer nr. 1.820.740.00 up to 1.820.748.00) according to Service Manual.

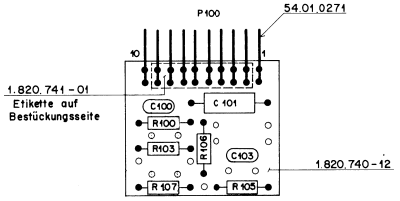
Cer=Ceramic, PETP=Polyester, PP=Polypropylen, PS=Polystyrol, Sal=Solid aluminium

MANUFACTURER: ADI=Analog Devices Inc., Ex=Exar, Fc=Fairchild, ITT=Intermetall, Mot=Motorola, MpS=Micropower Semiconductors, Ph=Philips, Ra=Raytheon, RCA=Radio Corp. of America, Ses=Sescosem, Sig=Signetics, St=Studer, Six=Siliconix, TS=Teledyne Semiconductors, TI=Texas Instruments.

1.820.811.81 RECORD AMP HX PRO BD 87/08/2800

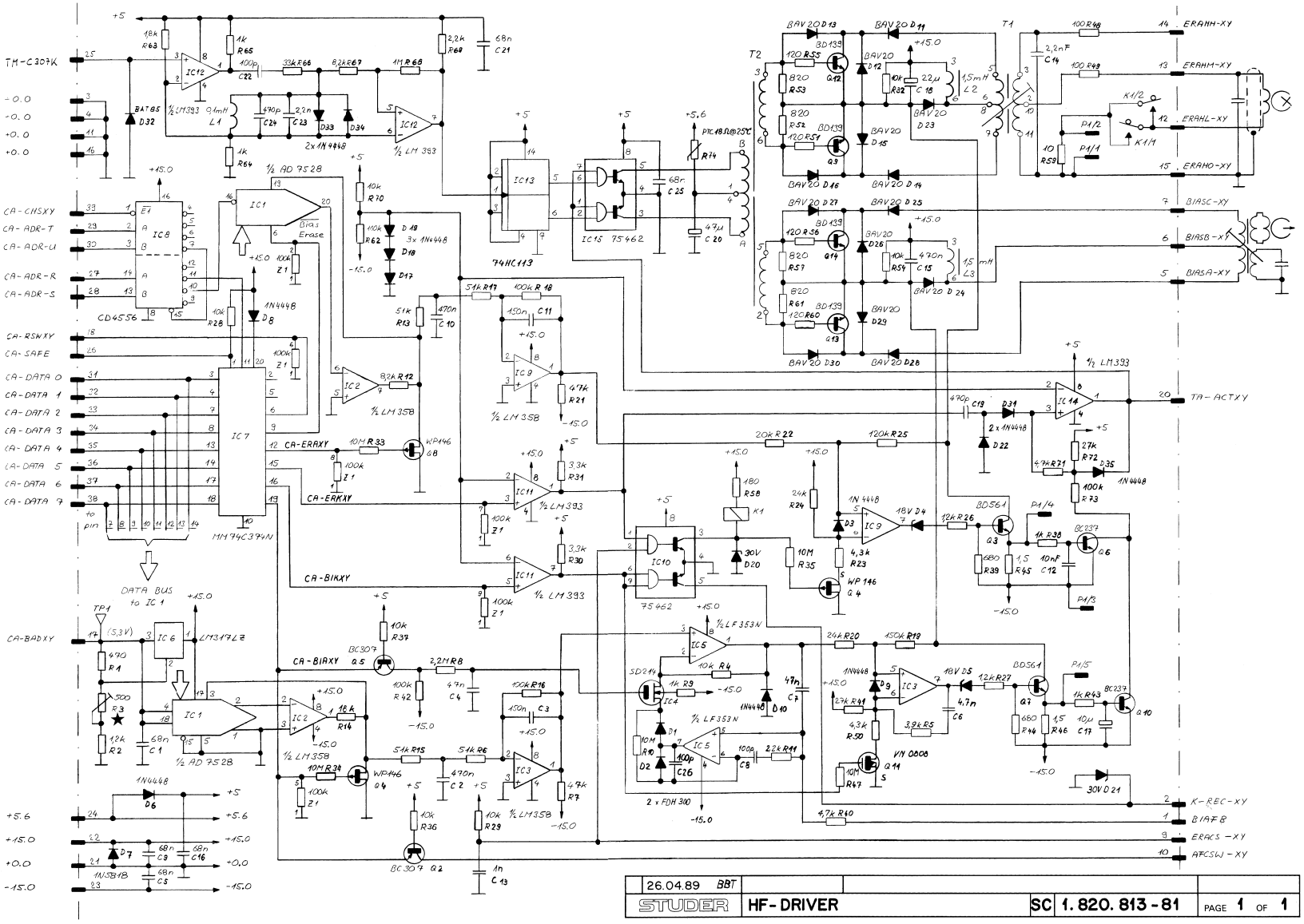
ADAPTION BOARD 1.820.741.00 FOR 1.318... HEADS



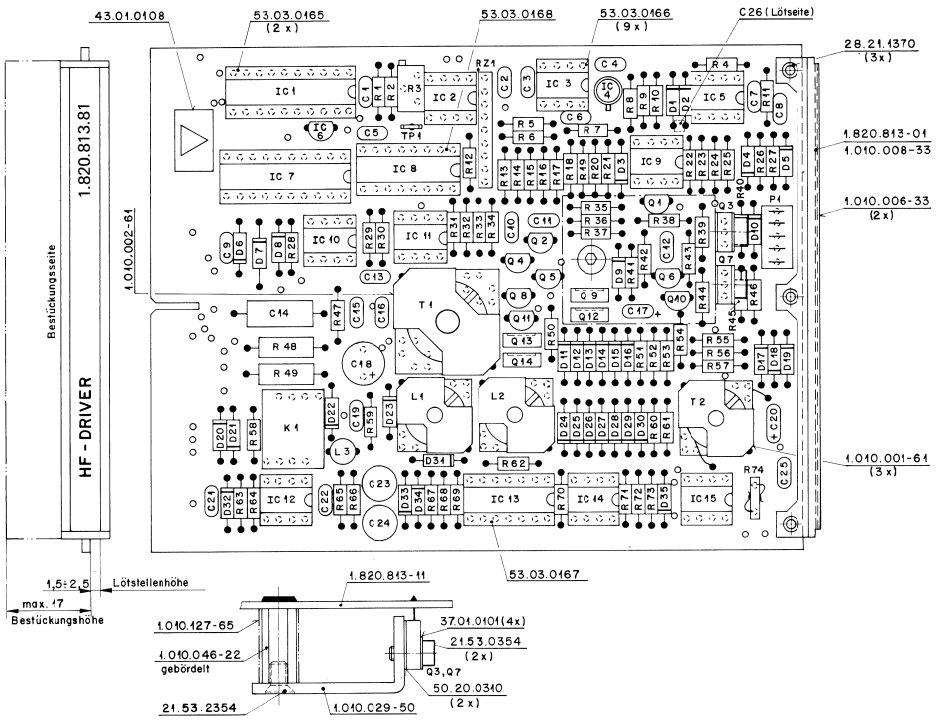


Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	C...100	59.06.5682	6.8 nF 5%	
	C...101	59.04.8221	220 pF 5%	
	C...102	. .	not used	
	C...103	59.06.5223	22 nF 5%	
	C...104	. .	not used	
	C...105	. .	not used	
	P...100	54.01.0271	10 cont.	AMP-Nr. 163.740-8
	R...100	57.11.4472	4.7 kOhm 2%	
	R...101	. .	not used	
	R...102	. .	not used	
	R...103	57.11.4682	6.8 kOhm 2%	
	R...104	. .	not used	
	R...105	57.11.3432	4.3 kOhm 1%	
	R...106	57.11.3432	4.3 kOhm 1%	
	R...107	57.11.4102	1.0 kOhm 2%	
		1.820.741.00	ADAPTATION BOARD	BD 87/04/1300

HF DRIVER 1.820.813.81



HF DRIVER 1.820.813.81



Ad	..POS..	...REF.No...	DESCRIPTION			MANUFACTURER
	)....11	50.04.0133	BAV20			ITT,Ph
	)....12	50.04.0133	BAV20			ITT,Ph
	)....13	50.04.0133	BAV20			ITT,Ph
	)....14	50.04.0133	BAV20			ITT,Ph
	)....15	50.04.0133	BAV20			ITT,Ph
	)....16	50.04.0133	BAV20			ITT,Ph
	)....17	50.04.0125	1N4448			Fc,ITT,Ph,Ses,Tf
	)....18	50.04.0125	1N4448			Fc,ITT,Ph,Ses,Tf
	)....19	50.04.0125	1N4448			Fc,ITT,Ph,Ses,Tf
	)....20	50.04.1125	30 V Z	BZX55 C 30		ITT,Mot,Ph,Tf,Tho
	)....21	50.04.1125	30 V Z	BZX55 C 30		ITT,Mot,Ph,Tf,Tho
	)....22	50.04.0125	1N4448			Fc,ITT,Ph,Ses,Tf
	)....23	50.04.0133	BAV20			ITT,Ph
	)....24	50.04.0133	BAV20			ITT,Ph
	)....25	50.04.0133	BAV20			ITT,Ph
	)....26	50.04.0133	BAV20			ITT,Ph
	)....27	50.04.0133	BAV20			ITT,Ph
	)....28	50.04.0133	BAV20			ITT,Ph
	)....29	50.04.0133	BAV20			ITT,Ph
	)....30	50.04.0133	BAV20			ITT,Ph
	D....31	50.04.0125	1N4448			Fc,ITT,Ph,Ses,Tf
	D....32	50.04.0127	BAT 42	BAT 85, BAS 40-02		Ph,Sie,Tho
	D....33	50.04.0125	1N4448			Fc,ITT,Ph,Ses,Tf
	D....34	50.04.0125	1N4448			Fc,ITT,Ph,Ses,Tf
	D....35	50.04.0125	1N4448			Fc,ITT,Ph,Ses,Tf
	IC....1	50.07.0026	AD7528JN	MP 7528 JN		ADI,MPS
	IC....2	50.05.0286	LM358N	LM358P		Mot,NS,SGS,TI
	IC....3	50.05.0286	LM358N	LM358P		Mot,NS,SGS,TI
	IC....4	50.11.0106	SD 214-DE	BSD 214		Ph,Six
	IC....5	50.09.0101	TL 072 CP	TDB C353 DP		Tho,TI
	IC....6	50.10.0108	LM 317 LZ			Mot,NS
	IC....7	50.07.0003	MM74C374N			NS
	IC....8	50.07.0004	CD4556BE	...4556.., MC14556BCP		Mot,Ph,RCA,To
	IC....9	50.05.0286	LM358N	LM358P		Mot,NS,SGS,TI
	IC....10	50.05.0227	SN75462P	SN75462JG, SN75472P		TI
	IC....11	50.05.0283	LM 393 N	LM 393 DP, LM 393 P		NS,Tho,TI
	IC....12	50.05.0283	LM 393 N	LM 393 DP, LM 393 P		NS,Tho,TI
	IC....13	50.17.1111	.. 74 HC 113..	.. 74 HC 113..	Mot,NS,Ph,RCA,SGS,TI	To
	IC....14	50.05.0283	LM 393 N	LM 393 DP, LM 393 P		NS,Tho,TI
	IC....15	50.05.0227	SN75462P	SN75462JG, SN75472N		TI
	K....1	56.04.0171	SM D1012			ITT
	L....1	1.022.197.00	1.5 mH			St
	L....2	1.022.197.00	1.5 mH			St
	L....3	62.02.3101	100 uH	TDK rr. EL 0606 SKI - 101 K		
	P....1	54.12.0005	5 cont.	AMP Mini Match System, Nr. 164 713-5AMP		
	Q....1	50.03.0329	WP146	U pirch-off < 4.0 V		Six
	Q....2	50.03.0515	BC 251 B	BC 307 B, BC 557 B		ITT,Mot,Ph
	Q....3	50.03.0493	BD 561	BD 437		Mot,Ph,Mem
	Q....4	50.03.0329	WP146	U pirch-off < 4.0 V		Six
	Q....5	50.03.0515	BC 251 B	BC 307 B, BC 557 B		ITT,Mot,Ph
	Q....6	50.03.0436	BC 237 B	BC 550 B, BC 547 B		ITT,Mot,Ph,Sie
	Q....7	50.03.0493	BD 437	BD 439		Mot,Ph
	Q....8	50.03.0329	WP146	U pirch-off < 4.0 V		Six
	Q....9	50.03.0451	BD 139-10	...-F, ...-J, ...-K		Mot,Ph,SGS,Tf,To
	Q....10	50.03.0436	BC 237 B	BC 550 B, BC 547 B		ITT,Mot,Ph,Sie
	Q....11	50.03.1505	VN 0808 M	VN 0808 MTR, ZVN 0108 A		Fe,Six
	Q....12	50.03.0451	BD 139-10	...-F, ...-J, ...-K		Mot,Ph,SGS,Tf,To
	Q....13	50.03.0451	BD 139-10	...-F, ...-J, ...-K		Mot,Ph,SGS,Tf,To
	Q....14	50.03.0451	BD 139-10	...-F, ...-J, ...-K		Mot,Ph,SGS,Tf,To
	R....1	57.11.4471	470 Ohm	2%		
	R....2	57.11.4122	1.2 kOhm	2%		
	R....3	58.05.0501	500 Ohm	See Note 1		
	R....4	57.11.4103	10 kOhm	2%		
	R....5	57.11.4392	3.9 kOhm	5%		
	R....6	57.11.3513	51 kOhm	2%		
	R....7	57.11.4473	47 kOhm	5%		
02	R....7	57.11.3274	270 kOhm	5%		
	R....8	57.11.5225	2.2 MOhm	10%		
	R....9	57.11.4102	1 kOhm	10%		
	R....10	57.11.5106	10 MOhm	10%		
	R....11	57.11.4222	2.2 kOhm	5%		
	R....12	57.11.4822	8.2 kOhm	5%		
	R....13	57.11.3513	51 kOhm	2%		
	R....14	57.11.4822	8.2 kOhm	5%		
01	R....14	57.11.4182	18 kOhm	5%		
	R....15	57.11.3513	51 kOhm	2%		
	R....16	57.11.4104	100 kOhm	2%		
	R....17	57.11.3513	51 kOhm	2%		
	R....18	57.11.4104	100 kOhm	2%		
	R....19	57.11.4154	150 kOhm	2%		
	R....20	57.11.3243	24 kOhm	2%		
	R....21	57.11.4473	47 kOhm	5%		
	R....22	57.11.3203	20 kOhm	2%		
	R....23	57.11.3432	4.3 kOhm	2%		
	R....24	57.11.3243	24 kOhm	2%		
	R....25	57.11.4124	120 kOhm	2%		
	R....26	57.11.4122	1.2 kOhm	5%		
	R....27	57.11.4122	1.2 kOhm	5%		
	R....28	57.11.4103	10 kOhm	5%		
	R....29	57.11.4103	10 kOhm	5%		
	R....30	57.11.4332	3.3 kOhm	5%		

Ad	..POS..	...REF.No...	DESCRIPTION			MANUFACTURER
	R....31	57.11.4332	3.3 kOhm	5%		
	R....32	57.11.4103	10 kOhm	10%		
	R....33	57.11.5106	10 MOhm	10%		
	R....34	57.11.5106	10 MOhm	10%		
	R....35	57.11.5106	10 MOhm	10%		
	R....36	57.11.4103	10 kOhm	10%		
	R....37	57.11.4103	10 kOhm	10%		
	R....38	57.11.4102	1 kOhm	2%		
	R....39	57.11.4681	680 Ohm	5%		
	R....40	57.11.4472	4.7 kOhm	2%		
	R....41	57.11.4273	27 kOhm	2%		
	R....42	57.11.4104	100 kOhm	10%		
	R....43	57.11.4102	1 kOhm	2%		
	R....44	57.11.4681	680 Ohm	2%		
	R....45	57.11.4159	1.5 Ohm	2%		
	R....46	57.11.4159	1.5 Ohm	2%		
	R....47	57.11.5106	10 MOhm	10%		
	R....48	57.13.4101	100 Ohm	5%, 0.5W		
	R....49	57.13.4101	100 Ohm	5%, 0.5W		
	R....50	57.11.3432	4.3 kOhm	2%		
	R....51	57.11.4121	120 Ohm	5%		
	R....52	57.11.4821	820 Ohm	5%		
	R....53	57.11.4821	820 Ohm	5%		
	R....54	57.11.4103	10 kOhm	10%		
	R....55	57.11.4121	120 Ohm	5%		
	R....56	57.11.4121	120 Ohm	5%		
	R....57	57.11.4821	820 Ohm	5%		
	R....58	57.11.4181	180 Ohm	5%		
	R....59	57.11.4100	10 Ohm	2%		
	R....60	57.11.4121	120 Ohm	5%		
	R....61	57.11.4821	820 Ohm	5%		
	R....62	57.11.4104	100 kOhm	5%		
	R....63	57.11.4182	1.8 kOhm	2%		
	R....64	57.11.4102	1 kOhm	2%		
	R....65	57.11.4102	1 kOhm	5%		
	R....66	57.11.4333	33 kOhm	5%		
	R....67	57.11.4822	8.2 kOhm	5%		
	R....68	57.11.4105	1 MOhm	10%		
	R....69	57.11.4222	2.2 kOhm	5%		
	R....70	57.11.4103	10 kOhm	5%		
	R....71	57.11.4472	4.7 kOhm	5%		
	R....72	57.11.4273	27 kOhm	5%		
	R....73	57.11.4104	100 kOhm	5%		
	R....74	57.92.1151	18 Ohm	0 25 Degrees C, Philips nr. 2322 661 11511		
	RZ....1	57.88.4104		See Note 2		
	T.....1	1.022.212.00		Erase Transformer, 150kHz		St
	T.....2	1.022.211.00		Driver Transformer, 150kHz		St
	TP....1	54.02.0320		Test-Pin Lupot-Nr. E184 / 8LE		

(01) 87/04/07 Drop-In Improvement
(02) 91/05/06 R7 modified to prevent latch-up of IC3.

Note 1 - Potentiometer, 500 Ohm, 10%:

Bourns nr.	3296 Z - 1 - 501
Contelec nr.	183 XZ 501
Murata nr.	POT 3105 Z - 1 - 501
Spectrol nr.	64 Z 501 T 000

Note 2 - Network, 8 * 100 kOhm, 5%:

Beckmann nr.	L - 09 - 1 - R 100 k
Bourns nr.	4609 X - 101 - 104
Sprague nr.	256 C J 104 X2 PD
Tama nr.	MRG C 09 X 100 k J
Vitrom	F 9 E 100 kOhm 2%

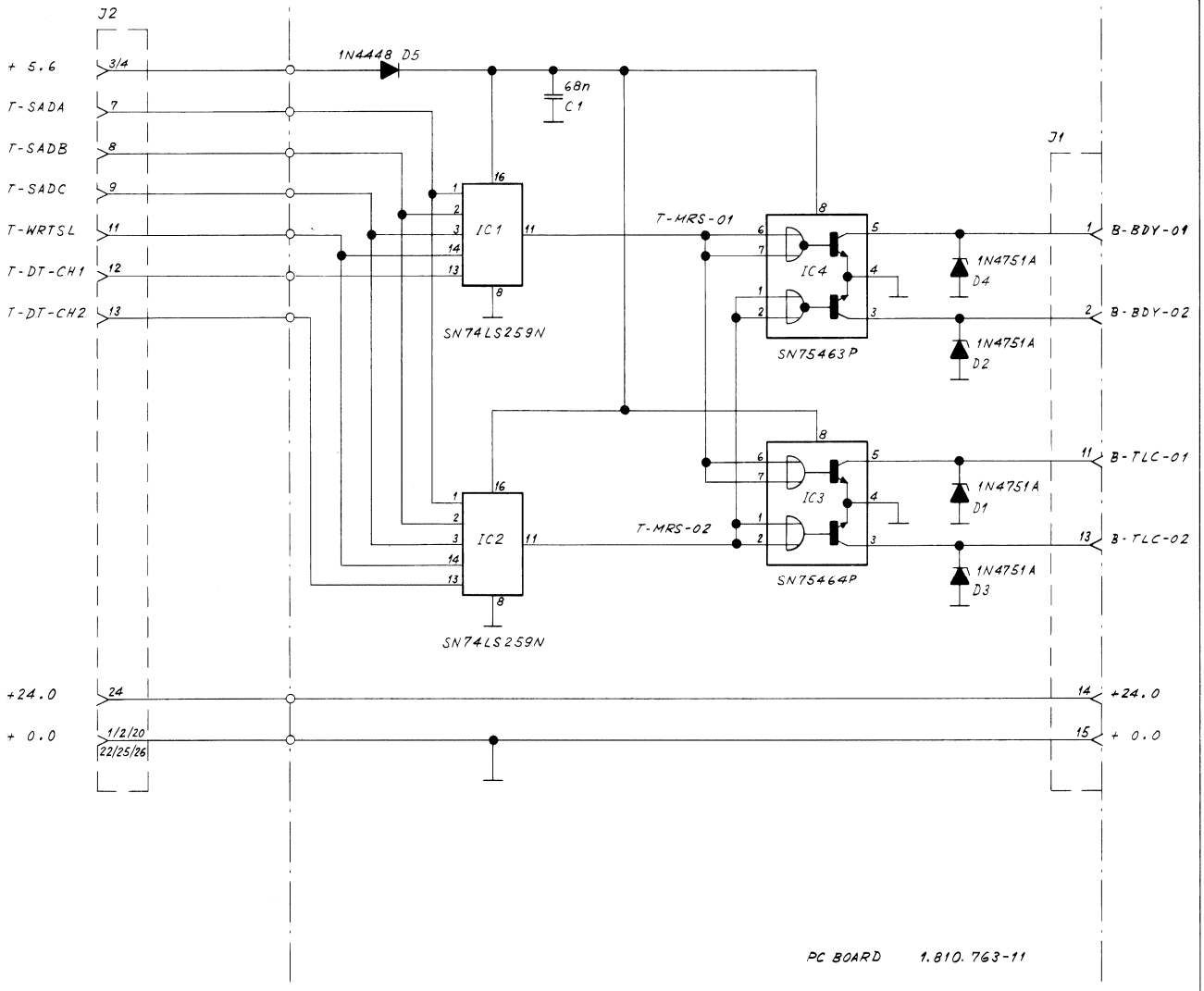
Cer=Ceramic, El=Electrolytic, PP=Polipropylene, Sal=Solid aluminium

Manufacturer: ADI=Analog Devices Inc., Fc=Fairchild, ITT=Intermetall, Mem=Memotek, Mot=Motorola, MPS=Micropower Semiconductor NS=National Semiconductors, Ph=Philips, RCA=Radio Corporation of America, Ri=Rifa, Ses=Sescosem, SGS=SGS-Ates, Sie=Siemens, Six=Siliconix, St=Studer, Tf=Telefunken, Tho=Thomson CSF, TI=Texas Instruments, To=Toshiba.

1.820.813.81	HF - DRIVER	BBT86/05/2200
1.820.813.81	HF - DRIVER	BBT87/04/0701
1.820.813.81	HF - DRIVER	BBT91/05/0602

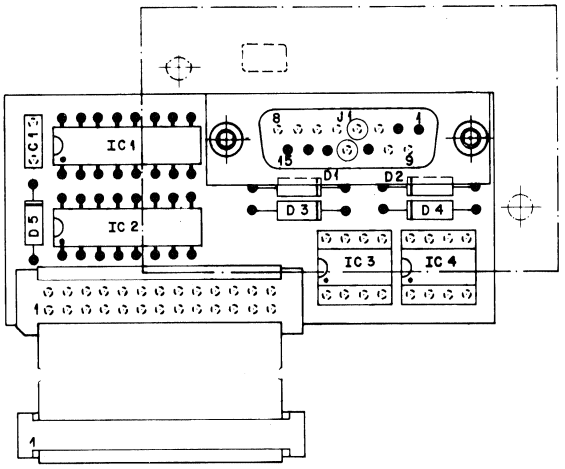
	..POS..	...REF.No...	DESCRIPTION			MANUFACTURER
	C....1	59.06.0683	68 nF	20%,		PETP
	C....2	59.06.5474	470 nF	5%,		PETP
	C....3	59.06.5154	150 nF	5%,		PETP
	C....4	59.06.5473	47 nF	5%,		PETP
	C....5	59.06.0683	68 nF	20%,		PETP
	C....6	59.32.2472	4.7 nF	10%,		Cer
	C....7	59.06.5473	47 nF	5%,		PETP
	C....8	59.34.4101	100 pF	10%,		Cer
	C....9	59.06.0683	68 nF	20%,		PETP
	C....10	59.06.5474	470 nF	5%,		PETP
	C....11	59.06.5154	150 nF	5%,		PETP
	C....12	59.06.0103	10 nF	10%,		PETP
	C....13	59.32.4102	1 nF	20%,		Cer
	C....14	59.12.9222	2.2 nF	1%,		PP
	C....15	59.06.5474	470 nF	5%,		PETP
	C....16	59.06.0683	68 nF	20%,		PETP
	C....17	59.26.2100	10 uF	20%,	16V, Sal	Ph,Ri
	C....18	59.22.8220	22 uF	20%,	40V, El	
	C....19	59.34.3471	470 pF	5%,	Cer	
	C....20	59.26.0470	47 uF	20%,	6.3V, Sal	Ph,Ri
	C....21	59.06.0683	68 nF	20%,		PETP
	C....22	59.34.4101	100 pF	5%,		Cer
	C....23	59.05.2222	2.2 nF	2.5%,		PP
	C....24	59.05.1471	470 pF	2.5%,		PP
	C....25	59.06.0683	68 nF	20%,		PETP
	C....26	59.60.0101	100 pF	5%,		Cer
	D....1	50.04.0134	1N3595DHD	FDH300		Fc
	D....2	50.04.0134	1N3595DHD	FDH300		Fc
	D....3	50.04.0125	1N4448			Fc,ITT,Ph,Ses,Tf
	D....4	50.04.1122	18 V Z	BZX55C 18		ITT,Mot,Ph,Tf,Tho
	D....5	50.04.1122	18 V Z	BZX55C 18		ITT,Mot,Ph,Tf,Tho
	D....6	50.04.0125	1N4448			Fc,ITT,Ph,Ses,Tf
	D....7	50.04.0512	1N5818	1N5819		Mot
	D....8	50.04.0125	1N4448			Fc,ITT,Ph,Ses,Tf
	D....9	50.04.0125	1N4448			Fc,ITT,Ph,Ses,Tf
	D....10	50.04.0125	1N4448			Fc,ITT,Ph,Ses,Tf

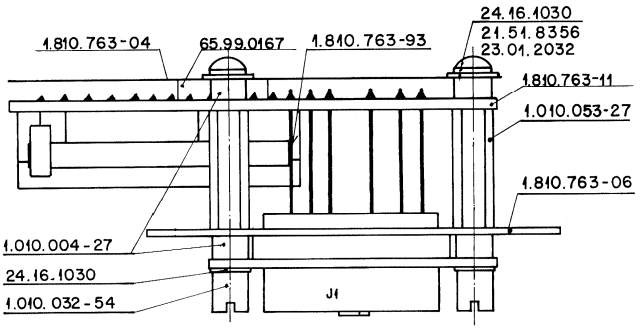
NOISE REDUCTION SYSTEM CONTROL 1.810.763.82



	22.04.83	Buchegger	A 810 Logic Section		
STUDER	Noise Reduction System Control		SC	1.810.763.82	PAGE 1 OF 1

NOISE REDUCTION SYSTEM CONTROL 1.810.763.82





1.810.763.05 nach Muster aufgeklebt

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	C.....1	59.99.0205	68 nF -20%, Ce	
	D.....1	50.04.1506	30 V Z BZX 85-C30	ITT,Mot,Ph,Tf,Tho
	D.....2	50.04.1506	30 V Z BZX 85-C30	ITT,Mot,Ph,Tf,Tho
	D.....3	50.04.1506	30 V Z BZX 85-C30	ITT,Mot,Ph,Tf,Tho
	D.....4	50.04.1506	30 V Z BZX 85-C30	ITT,Mot,Ph,Tf,Tho
	D.....5	50.04.0125	1N4448	Fc,ITT,Ph,Ses,Tf
	IC....1	50.06.0259	SN74LS259N 74 LS 259 PC	Fc,Mot,TI
	IC....2	50.06.0259	SN74LS259N 74 LS 259 PC	Fc,Mot,TI
	IC....3	50.05.0204	SN75464P DS 75464	NS,TI
	IC....4	50.05.0203	SN75463P SN 75463 JG,SN 55463 JG,DS 75463	NS,TI
	J.....1	54.02.0183	15 cont. See note 1	
	J.....2	54.14.5022	26 cont. See note 2	
Note 1 - Jack:			TRW Nr. DA-15 S (Cannon)	
Note 2 - Jack:			Yamaichi Nr. FAS-26-17	
			Burndy Nr. FRS-26 BD-7P	
		Connection cable:	Studer Nr. 1.810.749.00	

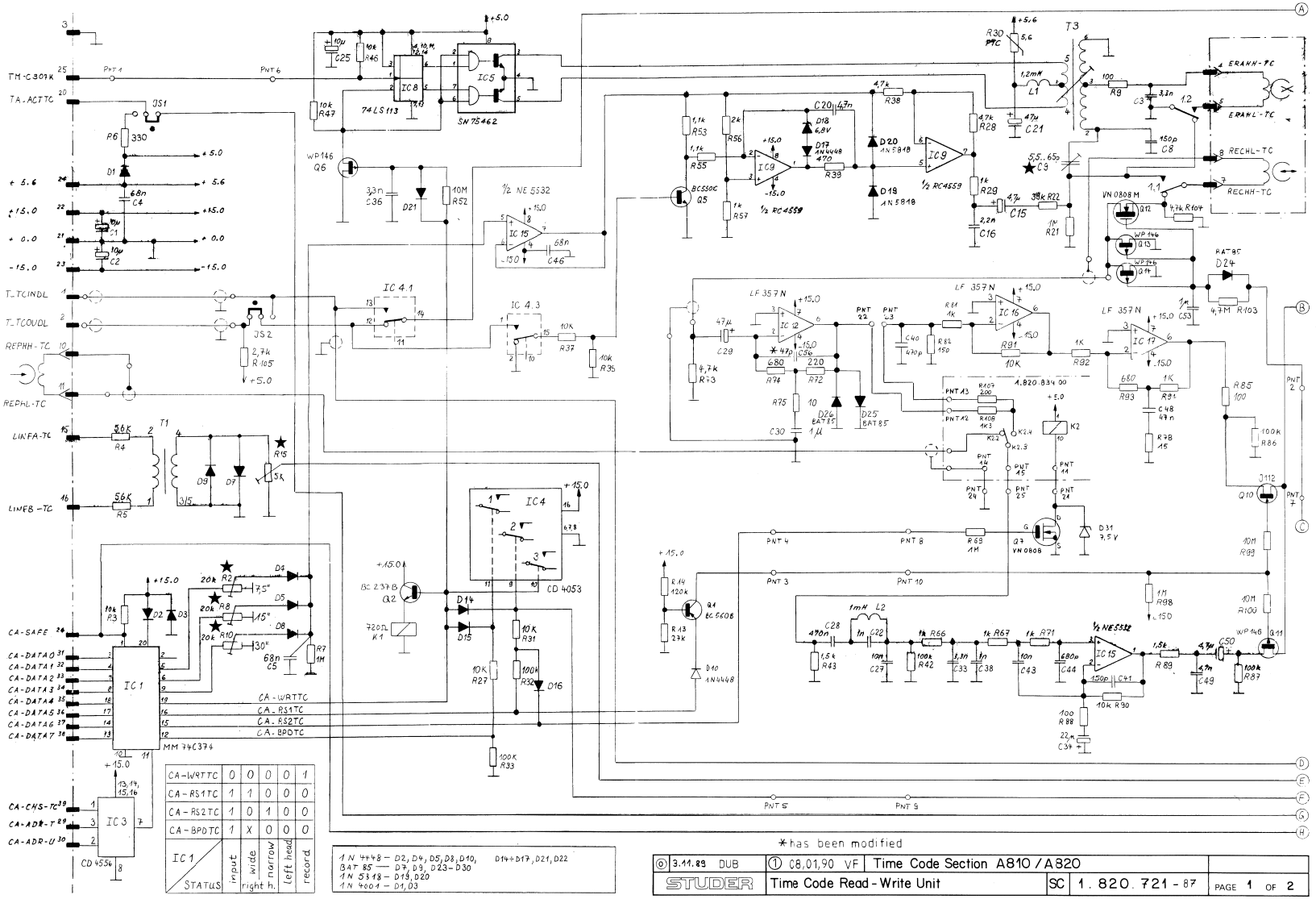
Ce=Ceramic

MANUFACTURER: Fc=Fairchild, ITT=Intermetall, Mot=Motorola,
NS=National Semiconductor, Ph=Philips,
Ses=Sescosem, Tf=Telefunken, Tho=Thomson,
TI=Texas Instruments.

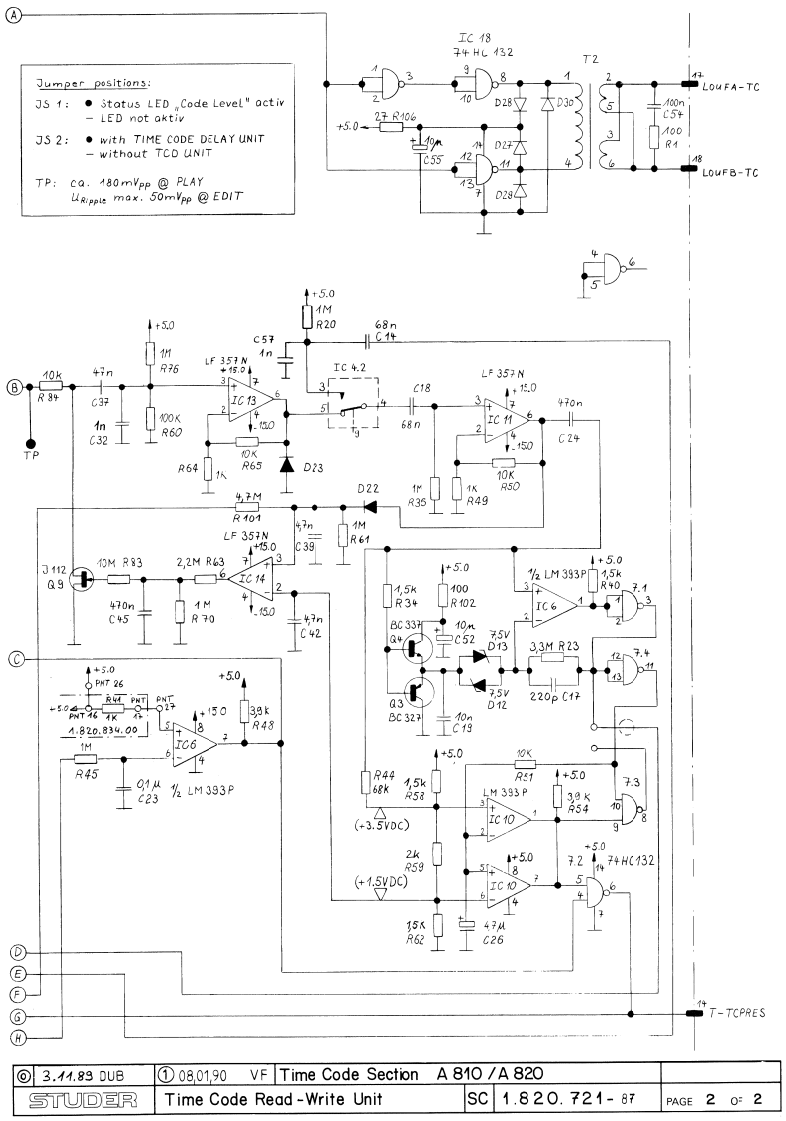
1.810.763.82 NRS CONTROL BOARD BD 88/05/0400

★ R15: LINE INPUT CALIBRATION RECORD
★ R2: RECORD LEVEL SETTING FOR 7,5" (3¾IPS)
★ R8: RECORD LEVEL SETTING FOR 15"
★ R10: RECORD LEVEL SETTING FOR 30"
★ C9: BIAS CURRENT ALIGNMENT

TIME CODE READ-WRITE UNIT 1.820.721.87

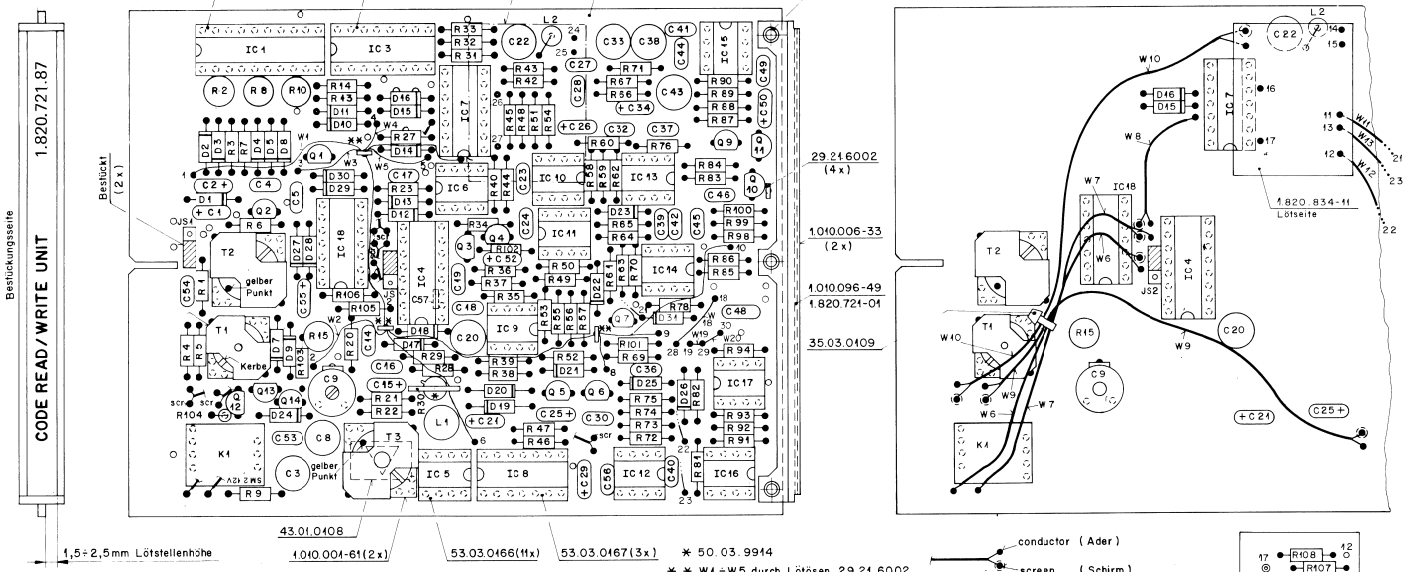


TIME CODE READ-WRITE UNIT 1.820.721.87



⓪ 3.11.89 DUB	① 08.01.90 VF	Time Code Section A 810 / A 820		
STUDER	Time Code Read-Write Unit	SC	1.820.721-87	PAGE 2 OF 2

TIME CODE READ-WRITE UNIT 1.820.721.87



Drahtverbindungen

Nr.	Punkt ◄► Punkt	Norm Nr.	Verarbeitung Abschredelänge	Verarbeitung Abisolierung	
W 1	1 ◄► 6	1.010.115-64			
W 2	2 ◄► 7	1.010.113-64			
W 3	3 ◄► 10	1.010.118-64			
W 4	4 ◄► 8	1.010.115-64			
W 5	5 ◄► 9	1.010.116-64			
W 6		64.03.0186	95 mm	Bild 1	
W 7		64.03.0186	90 mm	Bild 1	
W 8		64.03.0186	40 mm	Bild 1	
W 9		64.03.0186	115 mm	Bild 2	
W 10		64.03.0186	130 mm	Bild 2	
W 11	11 (1.820.834) ◄► 21	1.010.110-64			
W 12	12 (1.820.834) ◄► 22	1.010.115-64			
W 13	13 (1.820.834) ◄► 23	1.010.114-64			
W 14	14 (1.820.834) ◄► 24	1.010.019-54 (Stift)			①
W 15	15 (1.820.834) ◄► 25	1.010.019-54 (Stift)			①
W 16	16 (1.820.834) ◄► 26	1.010.019-54 (Stift)			①
W 17	17 (1.820.834) ◄► 27	1.010.019-54 (Stift)			①
W 18	18 ◄► 28	1.010.107-64			
W 19	19 ◄► 29	64.01.0104			
W 20	29 ◄► 30	64.01.0104			

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	C....1	59.26.2100	10 uF 20%, 16V, Sal	Ph,Ri
	C....2	59.26.2100	10 uF 20%, 16V, Sal	Ph,Ri
	C....3	59.05.1332	3.3 nF 2.5%	
	C....4	59.06.0683	68 nF 10%	
	C....5	59.06.0683	68 nF 10%	
	C....6	00.00.0000	not used	
	C....7	00.00.0000	not used	
	C....8	59.05.2151	150 pF 2.5%	
	C....9	59.18.0102	65 pF Trimmer Capacitor, Philips Nr 2222 808 01001	
	C....10	00.00.0000	not used	
	C....11	00.00.0000	not used	
	C....12	00.00.0000	not used	
	C....13	00.00.0000	not used	
	C....14	59.06.0683	68 nF 10%	
	C....15	59.26.5479	4.7 uF 20%, 25V, Sal	Ph,Ri
	C....16	59.06.0222	2.2 nF 10%	
	C....17	59.34.4221	220 pF 5%, Cer	
	C....18	59.06.0683	68 nF 10%	
	C....19	59.06.0103	10 nF 10%	
	C....20	59.05.2472	4.7 nF 2.5%	
	C....21	59.26.0470	47 uF 20%, 6.3V, Sal	Ph,Ri
	C....22	59.05.1102	1 nF 1%	
	C....23	59.06.0104	100 nF 10%	
	C....24	59.06.0474	470 nF 10%	
	C....25	59.26.2100	10 uF 20%, 16V, Sal	Ph,Ri
	C....26	59.26.5479	4.7 uF 20%, 25V, Sal	Ph,Ri
	C....27	59.06.0103	10 nF 10%	
	C....28	59.06.0474	470 nF 10%	
	C....29	59.26.0470	47 uF 20%, 6.3V, Sal	Ph,Ri
	C....30	59.06.5105	1 uF 5%	
	C....31	00.00.0000	not used	
	C....32	59.06.5102	1 nF 10%	
	C....33	59.05.1332	3.3 nF 1%	
	C....34	59.26.1220	22 uF 20%, 10V, Sal	Ph,Ri
	C....35	00.00.0000	not used	
	C....36	59.06.0332	3.3 nF 10%	
	C....37	59.06.0473	47 nF 10%	
	C....38	59.05.1102	1 nF 1%	
	C....39	59.06.0472	4.7 nF 10%	
	C....40	59.32.2471	470 pF 10%	
	C....41	59.34.4151	150 pF 5%, Cer	
	C....42	59.06.0472	4.7 nF 10%	
	C....43	59.05.1103	10 nF 1%	
	C....44	59.32.2681	680 pF 10% Cer	
	C....45	59.06.0474	470 nF 10%	
	C....46	59.06.0683	68 nF 10%	
	C....48	59.06.0473	47 nF 10%	
	C....49	59.06.0472	4.7 nF 10%	
	C....50	59.26.5479	4.7 uF 20%, 25V, Sal	Ph,Ri
	C....51	00.00.0000	not used	
	C....52	59.26.1100	10 uF 20%, 10V, Sal	Ph,Ri
	C....53	59.06.5105	1 uF 5%	
	C....54	59.06.0104	100 nF 10%	
	C....55	59.26.1100	10 uF 20%, 10V, Sal	Ph,Ri
	C....56	59.34.1100	10 pF 5% Cer	
)1	C....56	59.34.2470	47 pF 5% Cer	
	C....57	59.60.0102	1 nF 5% Cer, Chip	
	D....1	50.04.0122	1N4001 1N4002, 1N4003, 1N4004	Mot,GI,Sol
	D....2	50.04.0125	1N4448	Fc,ITT,Ph,Ses
	D....3	50.04.0122	1N4001 1N4002, 1N4003, 1N4004	Mot,GI,Sol
	D....4	50.04.0125	1N4448	Fc,ITT,Ph,Ses
	D....5	50.04.0125	1N4448	Fc,ITT,Ph,Ses
	D....6	00.00.0000	not used	
	D....7	50.04.0127	BAT 85 BAS 40-02	Ph,Sie
	D....8	50.04.0125	1N4448	Fc,ITT,Ph,Ses
	D....9	50.04.0127	BAT 85 BAS 40-02	Ph,Sie
	D....10	50.04.0125	1N4448	Fc,ITT,Ph,Ses
	D....12	50.04.1103	7.5 V Z BZX83C 7V5, BZX55C 7V5, ZPD 7.5	Ses,ITT
	D....13	50.04.1103	7.5 V Z BZX83C 7V5, BZX55C 7V5, ZPD 7.5	Ses,ITT
	D....14	50.04.0125	1N4448	Fc,ITT,Ph,Ses
	D....15	50.04.0125	1N4448	Fc,ITT,Ph,Ses
	D....16	50.04.0125	1N4448	Fc,ITT,Ph,Ses
	D....17	50.04.0125	1N4448	Fc,ITT,Ph,Ses
	D....18	50.04.1102	6.8 V Z BZX83C 6V8, BZX55C 6V8, ZPD 6.8	Ses,ITT
	D....19	50.04.0512	1N5818 1N5819	Mot
	D....20	50.04.0512	1N5818 1N5819	Mot
	D....21	50.04.0125	1N4448	Fc,ITT,Ph,Ses
	D....22	50.04.0125	1N4448	Fc,ITT,Ph,Ses
	D....23	50.04.0127	BAT 85 BAS 40-02	Ph,Sie
	D....24	50.04.0127	BAT 85 BAS 40-02	Ph,Sie
	D....25	50.04.0127	BAT 85 BAS 40-02	Ph,Sie
	D....26	50.04.0127	BAT 85 BAS 40-02	Ph,Sie
	D....27	50.04.0127	BAT 85 BAS 40-02	Ph,Sie
	D....28	50.04.0127	BAT 85 BAS 40-02	Ph,Sie
	D....29	50.04.0127	BAT 85 BAS 40-02	Ph,Sie
	D....30	50.04.0127	BAT 85 BAS 40-02	Ph,Sie
	D....31	50.04.1103	7.5 V Z BZX83C 7V5, BZX55C 7V5, ZPD 7.5	Ses,ITT
	IC....1	50.07.0003	MM74C374N	NSC
	IC....2	00.00.0000	not used	
	IC....3	50.07.0004	MC14556BCP CD4556BE, 4556BPC	Fc,Mot,RCA
	IC....4	50.07.0015	MC14053B CD4053BCN	Mot,NSC
	IC....5	50.05.0227	SN75462P SN75472P, SN75462JG	TI
	IC....6	50.05.0283	LM393N LM393	NSC,TI
	IC....7	50.17.1132	MC74HC132 PC74HC132 MM74HC132	Mot,Ph,NS
	IC....8	50.06.0113	SN74LS113N N74LS113N, DM74LS113N	TI,Sig,NSC
	IC....9	50.09.0107	RC4559NB	Ra
	IC...10	50.05.0283	LM393N LM393	NSC,TI

TIME CODE READ-WRITE UNIT 1.820.721.87

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	IC...11	50.09.0110	LF357 A Slew rate >40V/1us	NS
	IC...12	50.09.0110	LF357 A Slew rate >40V/1us	NS
	IC...13	50.09.0110	LF357 A Slew rate >40V/1us	NS
	IC...14	50.09.0110	LF357 A Slew rate >40V/1us	NS
	IC...15	50.09.0106	NE5532AN XR5532AN, 5532ANB	Sig,Ex,Ra
	IC...16	50.09.0110	LF357 A Slew rate >40V/1us	NS
	IC...17	50.09.0110	LF357 A Slew rate >40V/1us	NS
	IC...18	50.17.1132	MCJ4HC132 PC74HC132 MM74HC132	Mot,Ph,NS
	JS....1	00.00.0000	See Note 1	
	JS....2	00.00.0000	See Note 1	
	K.....1	56.04.0171	SM D1012	ITT
	K.....2	56.04.0195	TQ2	
	L.....1	62.02.2122	1.2 mH TDK Nr. CSL 0812-122 J	
	L.....2	62.01.0128	1 mH Gowanda Nr. 17-104, Delevan Nr. 1641-105	
	Q.....1	50.03.0496	BC560E	Sie
	Q.....2	50.03.0436	BC237B BC547B, BC550B	ITT,Mot,Ph,Sie
	Q.....3	50.03.0351	BC327-25	ITT,Ph,Sie
	Q.....4	50.03.0340	BC337-25	ITT,NS,Ph,Sie
	Q.....5	50.03.0497	BC550E	Sie
	Q.....6	50.03.0329	WF 146	Six
	Q.....7	50.03.1505	VN 0808M ZVN 0108A	Fe,Six
	Q.....9	50.03.0350	J112F J112, TM00062	Sc,NS,Mot
	Q....10	50.03.0350	J112F J112, TM00062	Sc,NS,Mot
	Q....11	50.03.0329	WF 146	Six
	Q....12	50.03.1505	VN 0808M ZVN 0108A	Fe,Six
	Q....13	50.03.0329	WF 146	Six
	Q....14	50.03.0329	WF 146	Six
	R.....1	57.11.3101	100 Ohm 5%	
	R.....2	58.11.6203	20 kOhm See Note 2	
	R.....3	57.11.3103	10 kOhm 2%	
	R.....4	57.11.3562	5.6 kOhm 2%	
	R.....5	57.11.3562	5.6 kOhm 2%	
	R.....6	57.11.3331	330 Ohm 2%	
	R.....7	57.11.3105	1 MOhm 2%	
	R.....8	58.11.6203	20 kOhm See Note 2	
	R.....9	57.11.3101	100 Ohm 2%	
	R....10	58.11.6203	20 kOhm See Note 2	
	R....11	00.00.0000	not used	
	R....12	00.00.0000	not used	
	R....13	57.11.3273	27 kOhm 5%	
	R....14	57.11.3124	120 kOhm 5%	
	R....15	58.11.6502	5 kOhm See Note 3	
	R....16	00.00.0000	not used	
	R....17	00.00.0000	not used	
	R....18	00.00.0000	not used	
	R....19	00.00.0000	not used	
	R....20	57.11.3105	1 MOhm 2%	
	R....21	57.11.3105	1 MOhm 2%	
	R....22	57.11.3393	39 kOhm 2%	
	R....23	57.11.5335	3.3 MOhm 5%	
	R....24	00.00.0000	not used	
	R....25	00.00.0000	not used	
	R....26	00.00.0000	not used	
	R....27	57.11.3103	10 kOhm 2%	
	R....28	57.11.3472	4.7 kOhm 1%	
	R....29	57.11.3102	1 kOhm 1%	
	R....30	57.99.0209	5.6 Ohm PTC Resistor, Philips Nr. 2322 662 91005	
	R....31	57.11.3103	10 kOhm 2%	
	R....32	57.11.3104	100 kOhm 2%	
	R....33	57.11.3104	100 kOhm 2%	
	R....34	57.11.3152	1.5 kOhm 2%	
	R....35	57.11.3103	10 kOhm 2%	
	R....36	57.11.3105	1 MOhm 2%	
	R....37	57.11.3103	10 kOhm 2%	
	R....38	57.11.3472	4.7 kOhm 1%	
	R....39	57.11.3471	470 Ohm 2%	
	R....40	57.11.3152	1.5 kOhm 2%	
	R....41	57.11.3102	1 kOhm 2%	
	R....42	57.11.3104	100 kOhm 2%	
	R....43	57.11.3152	1.5 kOhm 2%	
	R....44	57.11.3683	68 kOhm 2%	
	R....45	57.11.3105	1 MOhm 2%	
	R....46	57.11.3103	10 kOhm 2%	
	R....47	57.11.3103	10 kOhm 2%	
	R....48	57.11.3392	3.9 kOhm 2%	
	R....49	57.11.3102	1 kOhm 2%	
	R....50	57.11.3103	10 kOhm 2%	
	R....51	57.11.3103	10 kOhm 2%	
	R....52	57.11.5106	10 MOhm 5%	
	R....53	57.11.3112	1.1 kOhm 1%	
	R....54	57.11.3392	3.9 kOhm 2%	
	R....55	57.11.3112	1.1 kOhm 1%	
	R....56	57.11.3202	2 kOhm 1%	
	R....57	57.11.3102	1 kOhm 1%	
	R....58	57.11.3152	1.5 kOhm 1%	
	R....59	57.11.3202	2 kOhm 1%	
	R....60	57.11.3104	100 kOhm 2%	
	R....61	57.11.3105	1 MOhm 2%	
	R....62	57.11.3152	1.5 kOhm 1%	
	R....63	57.11.5225	2.2 MOhm 5%	
	R....64	57.11.3102	1 kOhm 2%	
	R....65	57.11.3103	10 kOhm 2%	
	R....66	57.11.3102	1 kOhm 1%	
	R....67	57.11.3102	1 kOhm 1%	

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	R....68	00.00.0000	not used	
	R....69	57.11.3105	1 MOhm 2%	
	R....70	57.11.3105	1 MOhm 2%	
	R....71	57.11.3102	1 kOhm 2%	
	R....72	57.11.3221	220 Ohm 2%	
	R....73	57.11.3472	4.7 kOhm 5%	
	R....74	57.11.3681	680 Ohm 2%	
	R....75	57.11.3100	10 Ohm 2%	
	R....76	57.11.3105	1 MOhm 2%	
	R....78	57.11.3150	15 Ohm 2%	
	R....80	00.00.0000	not used	
	R....81	57.11.3102	1 kOhm 2%	
	R....82	57.11.3151	150 Ohm 2%	
	R....83	57.11.5106	10 MOhm 5%	
	R....84	57.11.3103	10 kOhm 2%	
	R....85	57.11.3101	100 Ohm 2%	
	R....86	57.11.3104	100 kOhm 2%	
	R....87	57.11.3104	100 kOhm 2%	
	R....88	57.11.3101	100 Ohm 2%	
	R....89	57.11.3152	1.5 kOhm 2%	
	R....90	57.11.3103	10 kOhm 2%	
	R....91	57.11.3103	10 kOhm 2%	
	R....92	57.11.3102	1 kOhm 2%	
	R....93	57.11.3681	680 Ohm 2%	
	R....94	57.11.3102	1 kOhm 2%	
	R....95	00.00.0000	not used	
	R....98	57.11.3105	1 MOhm 2%	
	R....99	57.11.5106	10 MOhm 5%	
	R...100	57.11.5106	10 MOhm 5%	
	R...101	57.11.5475	4.7 MOhm 5%	
	R...102	57.11.3101	100 Ohm 5%	
	R...103	57.11.5475	4.7 MOhm 5%	
	R...104	57.11.3472	4.7 kOhm 5%	
	R...105	57.11.3272	2.7 kOhm 5%	
	R...106	57.11.3270	27 Ohm 5%	
	R...107	57.11.3201	200 Ohm 2%	
	R...108	57.11.3132	1.3 kOhm 2%	
	T.....1	1.022.218.00	Input Transformer 1:1	St
	T.....2	1.022.215.00	Time Code Output Transformer	St
	T.....3	1.022.221.00	Time Code HF Transformer	St

(01) 08.01.90 Optimized reading at high ambient temperature.

Note 1: Contact pin: Studer Nr. 54.01.0020
Berg Nr. 75 160-102-36
Philips Nr. 2422 025 89303
Bridge: Studer Nr. 54.01.0021
Commatel Nr. 313.1365.000 408
Philips Nr. 2422 024 88003

Note 2: Potentiometer, linear, Bourns Nr. 3329 H - 1 - 203
VRN Nr. 170 - 20k
Lesa Nr. 170 - 20k

Note 3: Potentiometer, linear, Bourns Nr. 3329 H - 1 - 502
VRN Nr. 170 - 5k
Lesa Nr. 170 - 5k

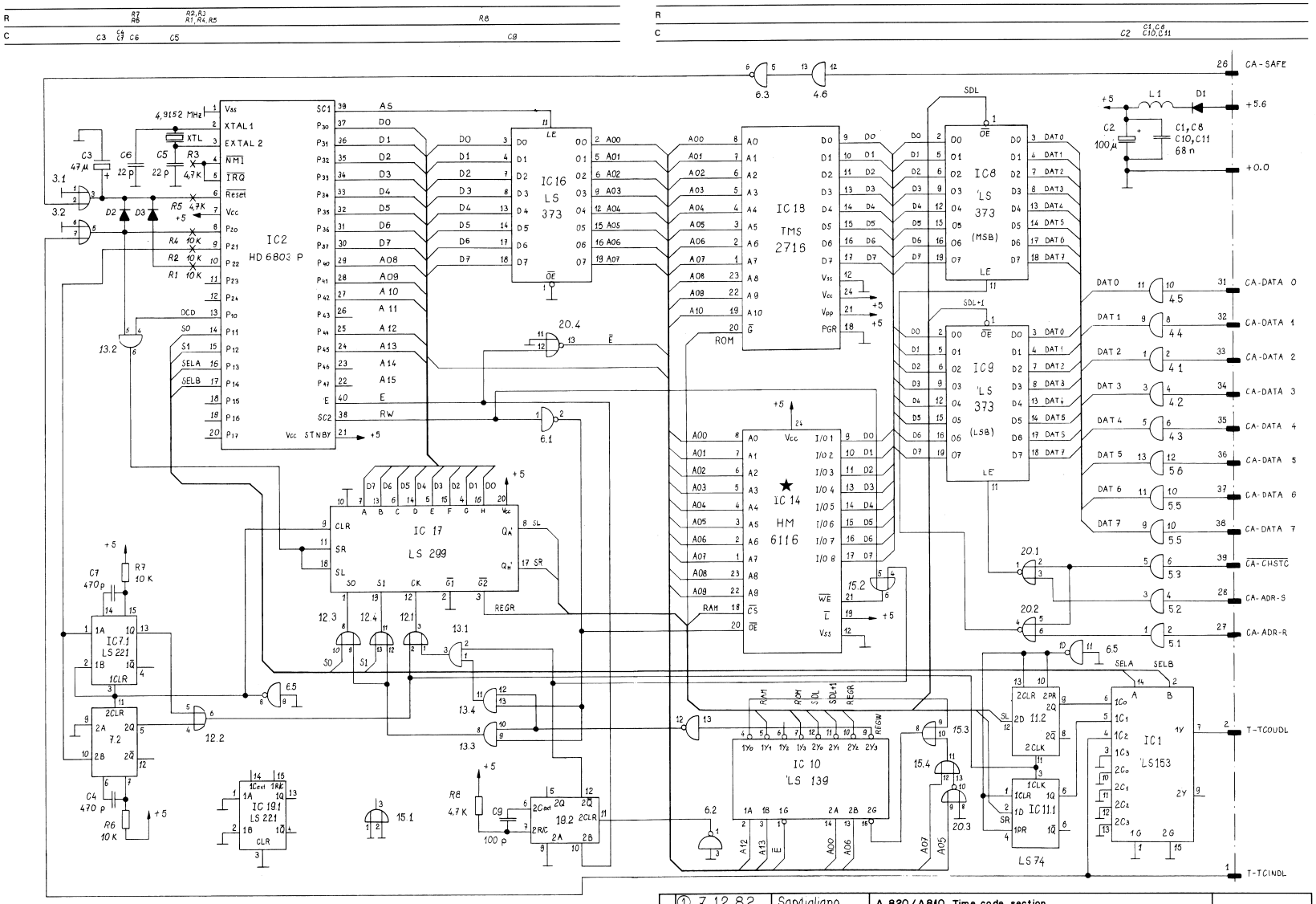
Cer=Ceramic, Sal=Solid Aluminum

MANUFACTURER: Ex=Exar, Fc=Fairchild, Fe=Ferranti,
GI=General Instruments, ITT=Intermetall,
Mot=Motorola, NS=National Semiconductors,
Ph=Philips, Ra=Raytheon, RCA=Radio Corp. of America,
Ses=Sescosem, Sie=Siemens, Sig=Signetics, St=Studer,
Six=Siliconix, TS=Teledyne Semiconductors,
Tf=Telefunken, TI=Texas Instruments

1.820.721.87 CODE READ/WRITE UNIT DUB89/11/0300

1.820.721.87 CODE READ/WRITE UNIT DUB90/01/0801

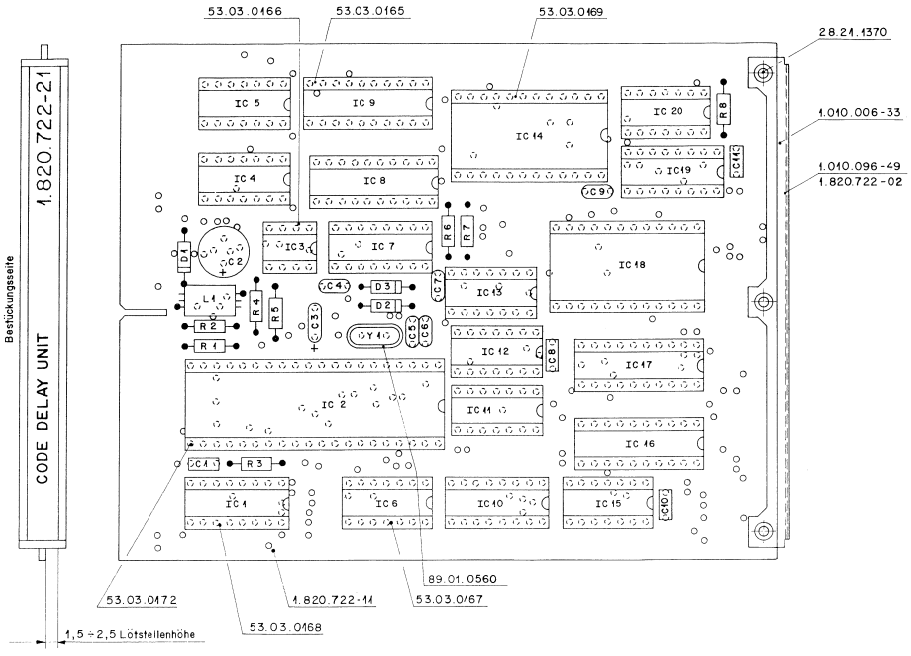
CODE DELAY UNIT 1.820.722.21



★HAS BEEN MODIFIED

① 7.12.82	Sandigliano	A 820/A810 Time code section	
STUDER	Code Delay Unit	SC 1.820.722-21	PAGE 1 OF 1

CODE DELAY UNIT 1.820.722.21



Ad	..POS..	...REF.No...	DESCRIPTION			MANUFACTURER
	C.....1	59.99.0205	68 nF		Ce	
	C.....2	59.22.5101	100 uF	20%, 6V	El	
	C.....3	59.26.0470	47 uF	20%, 6V	Sal	Ph
	C.....4	59.34.5471	470 pF		Ce	
	C.....5	59.34.2220	22 pF		Ce	
	C.....6	59.34.2220	22 pF		Ce	
	C.....7	59.34.5471	470 pF		Ce	
	C.....8	59.99.0205	68 nF		Ce	
	C.....9	59.34.1101	100 pF		Ce	
	C....10	59.99.0205	68 nF		Ce	
	C....11	59.99.0205	68 nF		Ce	
	D.....1	50.04.0512	1N5818	1N5819		Mot
	D.....2	50.04.0122	1N4001	1N4002, 1N4003, 1N4004		Fc,GI,Mot,Sol
	D.....3	50.04.0122	1N4001	1N4002, 1N4003, 1N4004		Fc,GI,Mot,Sol
	IC....1	50.06.0153	SN74LS153N	N74LS153N		Sig,TI
	IC....2	50.16.0107	MC6803G-1	HD6803P-1		Hi,Mot
	IC....3	50.05.0203	SN7546 3P	SN75463JG, SN55463JG, DS3613N		NS,TI
	IC....4	50.07.0902	MM74C902			NS
	IC....5	50.07.0902	MM74C902			NS
	IC....6	50.06.0004	SN74LS 04N	N74LS 04N		Sig,TI
	IC....7	50.06.0221	SN74LS221N			TI
	IC....8	50.06.0373	SN74LS373N	N74LS373N		Mot,Sig,TI
	IC....9	50.06.0373	SN74LS373N	N74LS373N		Mot,Sig,TI
	IC...10	50.06.0139	AM74LS139N	SN74LS139N		AMI,TI
	IC...11	50.06.0074	SN74LS 74N	N74LS 74AN		Sig,TI
	IC...12	50.06.0032	SN74LS 32N	N74LS 32N		Sig,TI
	IC...13	50.06.0008	SN74LS 08N	N74LS 08N		Sig,TI
	IC...14	50.14.0107	HM6116 LP	-3, MSM5128-15, A		Hi,Ok
	IC...15	50.06.0032	SN74LS 32N	N74LS 32N		Sig,TI
	IC...16	50.06.0373	SN74LS373N	N74LS373N		Mot,Sig,TI
	IC...17	50.06.0299	SN74LS299N	AM74LS299PC		AMI,TI
	IC...18	1.820.983.20	Software	50/89 TC Delay 2CH		St
21	IC...18	1.820.983.21	Software	50/91 TC Delay 2CH		St
	IC...19	50.06.0221	SN74LS221N			TI
	IC...20	50.06.0002	SN74LS 02N	N74LS 02N		Sig,TI
	L.....1	62.01.0115	Interference coil, Philips Nr 4312 020 36700			
	R.....1	57.11.4103	10 kOhm	5%		
	R.....2	57.11.4103	10 kOhm	5%		
	R.....3	57.11.4472	4.7 kOhm	5%		
	R.....4	57.11.4103	10 kOhm	5%		
	R.....5	57.11.4472	4.7 kOhm	5%		
	R.....6	57.11.4103	10 kOhm	5%		
	R.....7	57.11.4103	10 kOhm	5%		
	R.....8	57.11.4472	4.7 kOhm	5%		
	Y.....1	89.01.0553	Quartz 4.915 MHz, +-100 ppm			
01	Y.....1	89.01.0560	Quarz 4.9152 MHz, +-100 ppm			

(00) 12/01/90 Software 50/89

(01) 24/05/91 Studer number of quarz Y1 modified

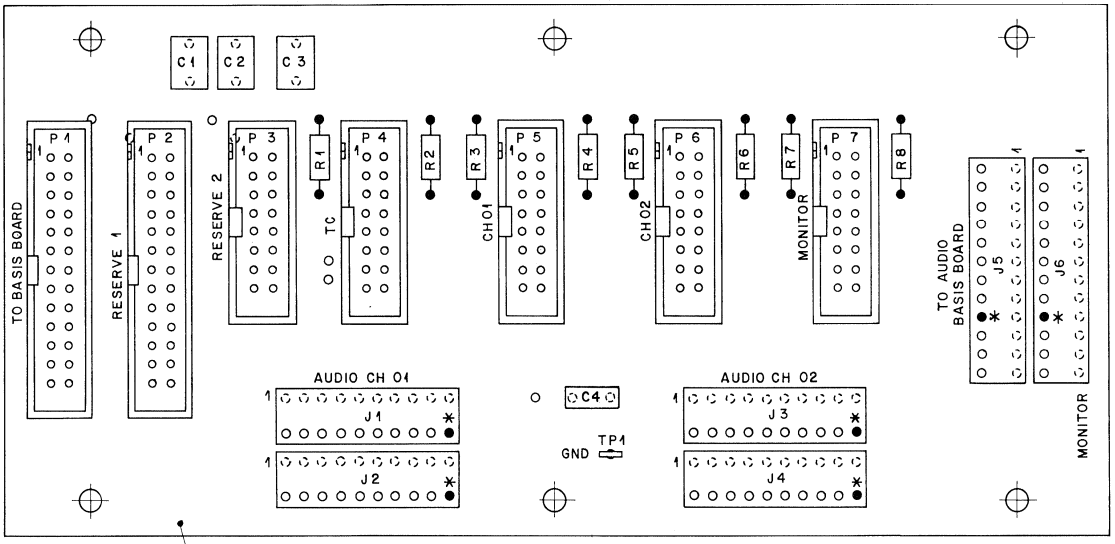
(21) 18/12/91 Software 50/91

Ce=Ceramic, El=Electrolytic, Sal=Solid aluminium

MANUFACTURER: AMI=American Microsystem Inc., Fc=Fairchild,
GI=General Instruments, Hi=Hitachi, Mos=Mostek,
Mot=Motorola, NS=National Semiconductors, Ph=Philips,
Sig=Signetics, Sol=Solitron, St=Studer,
TI=Texas Instruments, Ok=Oki

1.820.722.20	CODE DELAY UNIT "ESE"	VF 90/01/1200
1.820.722.20	CODE DELAY UNIT "ESE"	ZB 91/05/2401
1.820.722.21	CODE DELAY UNIT	PG 91/12/1821

DISTRIBUTION BOARD 1.820.794.81

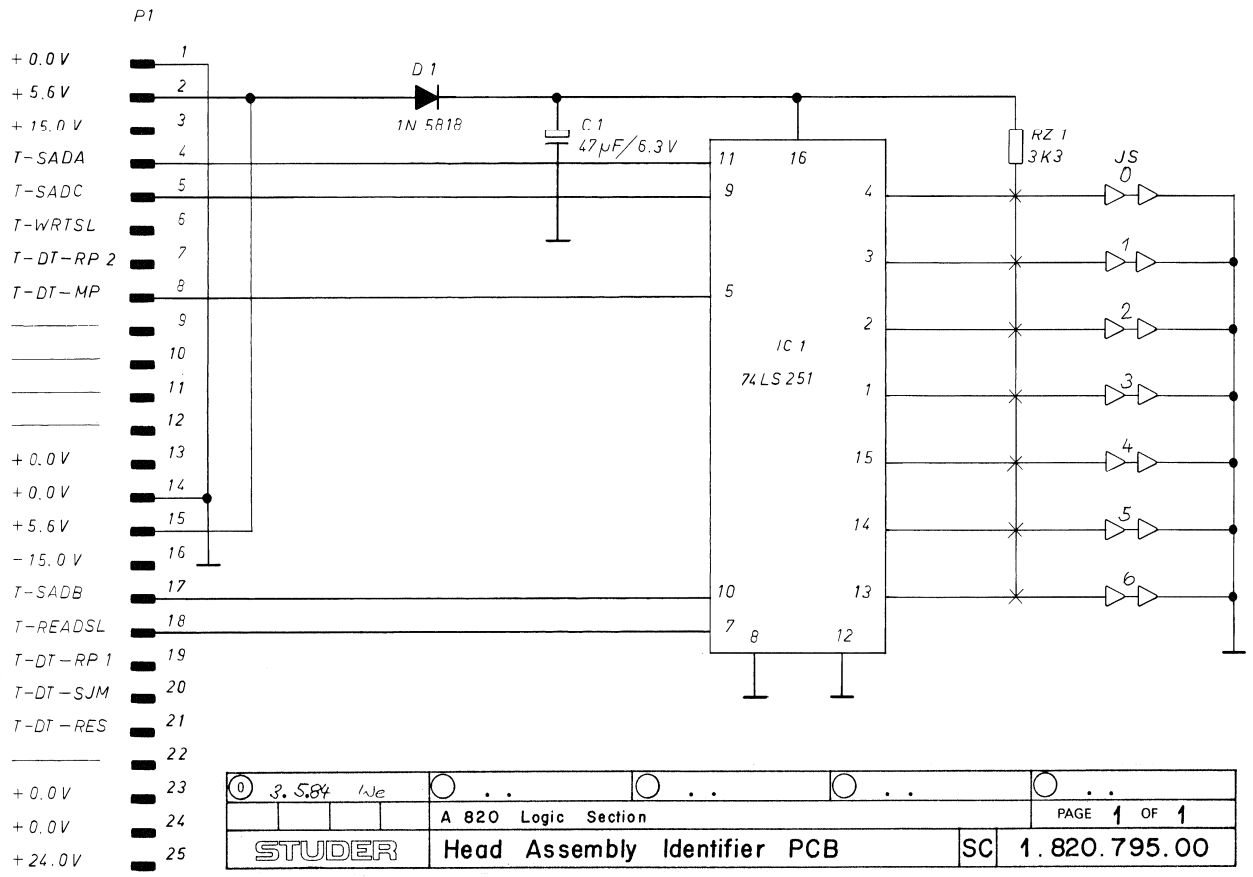


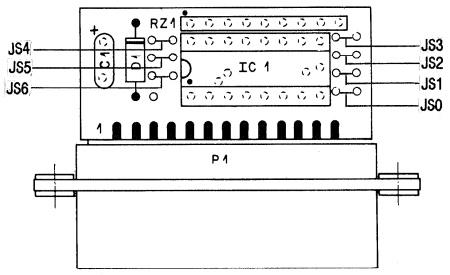
Ad	..POS..	...REF.No...	DESCRIPTION	...MANUFACTURER
	C.....1	59.06.0474	470 nF	10%, 50V, PETP
	C.....2	59.06.0474	470 nF	10%, 50V, PETP
	C.....3	59.06.0474	470 nF	10%, 50V, PETP
	C.....4	59.06.0104	100 nF	10%, 50V, PETP
	J.....1	54.01.0290	10 cont.	CIS, AMP Nr. 163.680-9
	J.....2	54.01.0290	10 cont.	CIS, AMP Nr. 163.680-9
	J.....3	54.01.0290	10 cont.	CIS, AMP Nr. 163.680-9
	J.....4	54.01.0290	10 cont.	CIS, AMP Nr. 163.680-9
	J.....5	54.01.0215	12 cont.	CIS, AMP Nr. 1-163.680-1
	J.....6	54.01.0215	12 cont.	CIS, AMP Nr. 1-163.680-1
	P.....1	54.14.2003	26 cont.	see note 1
	P.....2	54.14.2003	26 cont.	see note 1
	P.....3	54.14.2002	16 cont.	see note 2
	P.....4	54.14.2002	16 cont.	see note 2
	P.....5	54.14.2002	16 cont.	see note 2
	P.....6	54.14.2002	16 cont.	see note 2
	P.....7	54.14.2002	16 cont.	see note 2
	R.....1	57.11.3100	10 Ohm	1%, 0.25W
	R.....2	57.11.3100	10 Ohm	1%, 0.25W
	R.....3	57.11.3100	10 Ohm	1%, 0.25W
	R.....4	57.11.3100	10 Ohm	1%, 0.25W
	R.....5	57.11.3100	10 Ohm	1%, 0.25W
	R.....6	57.11.3100	10 Ohm	1%, 0.25W
	R.....7	57.11.3100	10 Ohm	1%, 0.25W
	R.....8	57.11.3100	10 Ohm	1%, 0.25W
	TP....1	29.21.6002		Testpoint

PETP = Polyester
Note 1 - Yamaichi Nr. FAP-26-08//4, Burndy Nr. BPH 9 B 26 B00 GS
Note 2 - Yamaichi Nr. FAP-16-08//4, Burndy Nr. BPH 9 B 16 B00 GS

1.820.794.81 DISTRIBUTION BOARD GP 91/10/1100

HEAD ASSEMBLY IDENTIFIER BOARD 1.820.795.00





Ad	..POS..	...REF.No...	DESCRIPTION.....		MANUFACTURER
	IC....1	50.06.0251		SN 74 LS 251 N	TI
	D.....1	50.04.0512	1N 5818	1N 5819,	Mot
	C.....1	59.26.0470	47 uF	20%, 6.3V , Sal	Ph
	RZ....1	57.88.4332	8 *3.3K	5%, SINGLE LINE	
	P.....1	54.13.1003	D-TYPE	25 POL. LOET	ITT,TRW

Sal=Solid aluminium

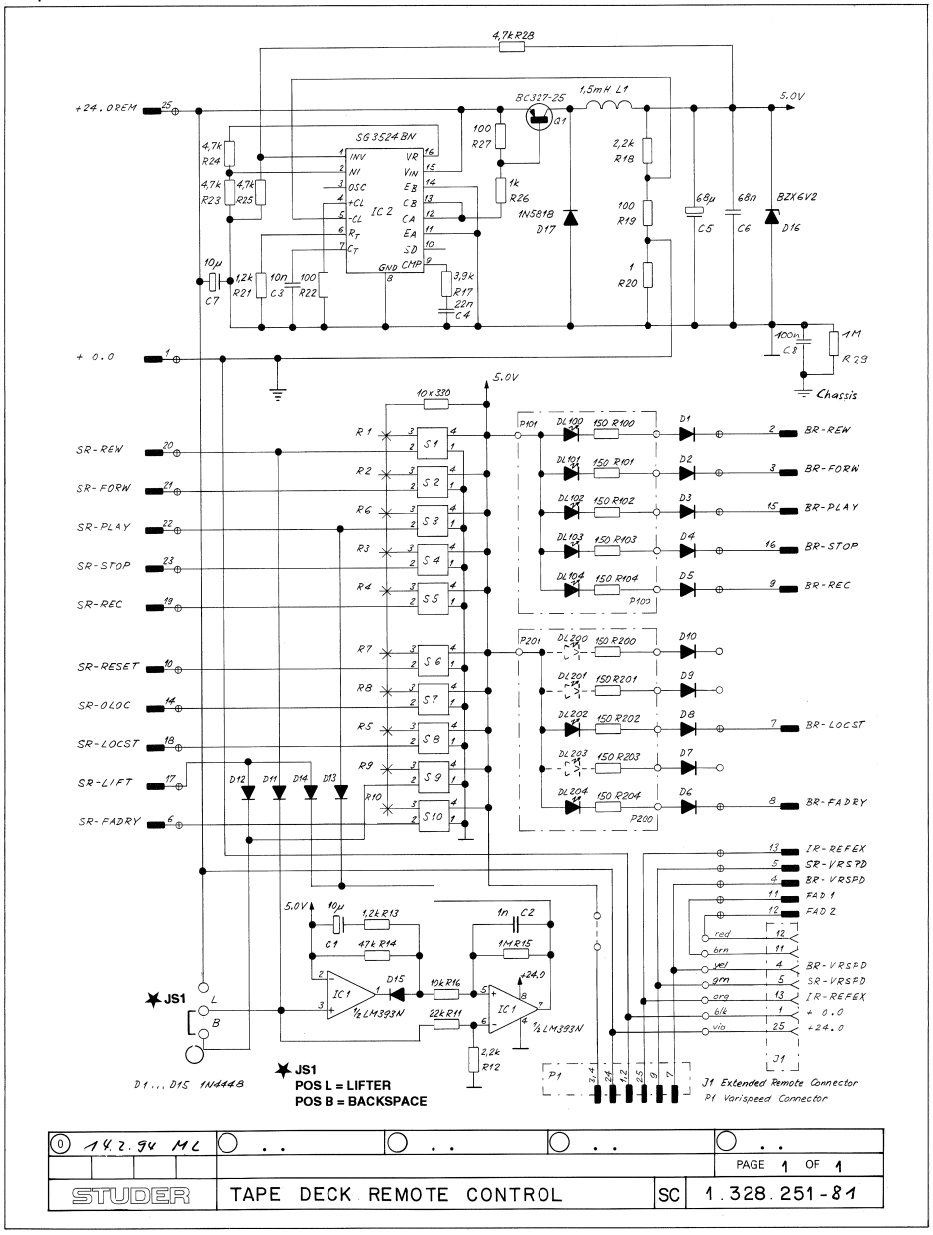
Manufacturer: ITT=Intermetall, Mot=Motorola, Ph=Philips, St=Studer, TI=Texas Instrument, TRW=TRW

1.820.795.00 HEAD ASSY IDENTIFIER BOARD WE 84/05/0300

FOR VERSION:	JUMPERS INTERRUPTED (X): JS0	JS1	JS2	JS3	JS4	JS5	JS6
A820-1, A820-1 VU	X						
A820-0.75		X					
A820-0.75 VU	X	X					
A820-2 F	X	X	X				
A820-2, A820-2 VU		X	X				
A820-2/2 VU			X				
A820-2 TC, A820-2 TC VU	X		X				
A820-2/2-1/2" VU	X	X		X			
A820-2/2-1/2" TC VU			X	X			

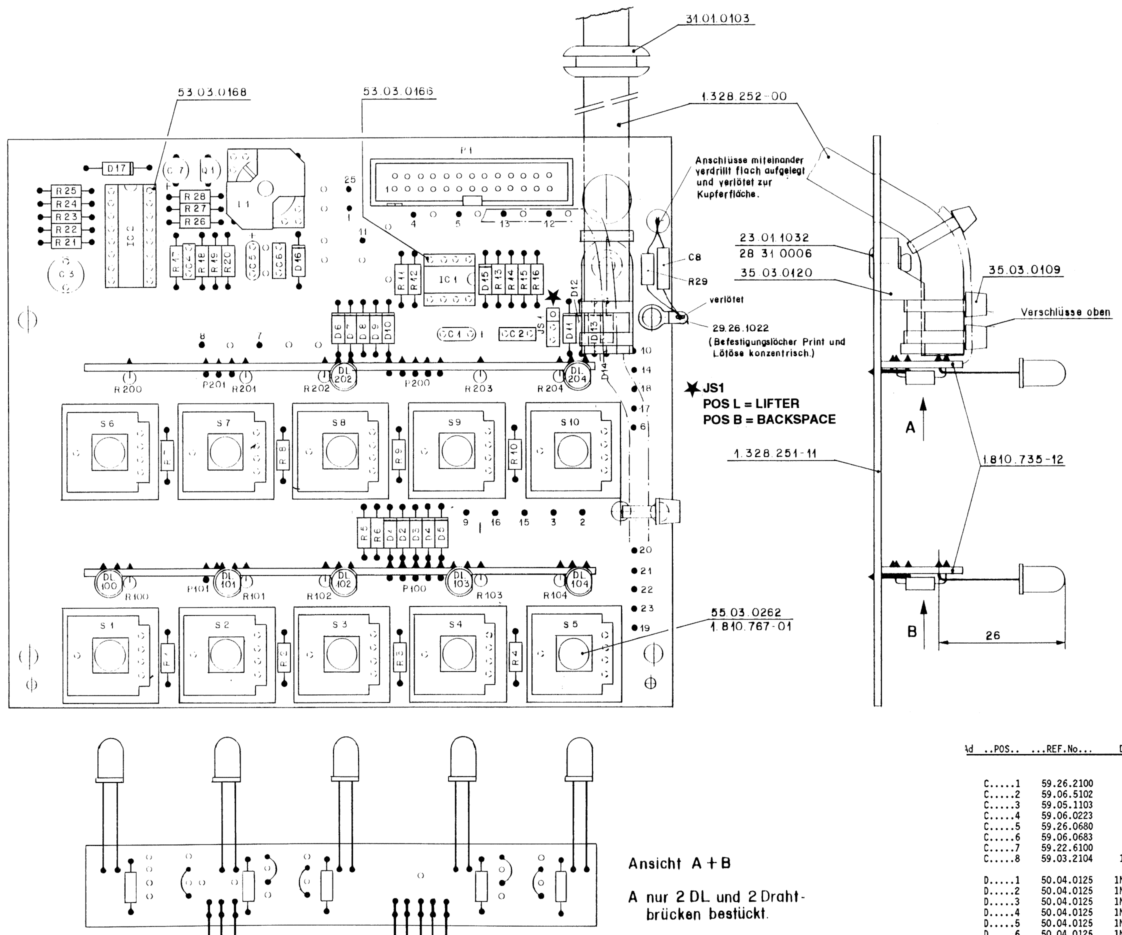
TAPE DECK REMOTE CONTROL CABINET (PARALLEL) 1.328.250.81

- Tape Deck Remote Control PCB 1.328.251.81



0 14.2.94 ML				PAGE 1 OF 1
STUDER	TAPE DECK REMOTE CONTROL		SC	1.328.251-81

TAPE DECK REMOTE CONTROL CABINET (PARALLEL) 1.328.250.81
- Tape Deck Remote Control PCB 1.328.251.81



	26.1.94
STUDER REGENSDORF ZÜRICH	TAPE DECK REMOTE CONTROL BOARD ESE
	1.328.251-81

Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	C.....1	59.26.2100	10 uF	20%, 16V, Sal	Ph
	C.....2	59.06.5102	1 nF	5%, PETP	
	C.....3	59.05.1103	10 nF	1%, Pp	
	C.....4	59.06.0223	22 nF	10%, PETP	
	C.....5	59.26.0680	68 uF	20%, 6.3V, Sal	Ph
	C.....6	59.06.0683	68 nF	20%, PETP	
	C.....7	59.22.6100	10 uF	-10%, 40V, El	
	C.....8	59.03.2104	100 nF	35V/us	
	D.....1	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
	D.....2	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
	D.....3	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
	D.....4	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
	D.....5	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
	D.....6	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
	D.....7	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
	D.....8	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
	D.....9	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
	D....10	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
	D....11	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
	D....12	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
	D....13	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
	D....14	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
	D....15	50.04.0125	1N4448		Fc,ITT,Ph,Ses,Tf
	D....16	50.04.1118	6.2 V Z	BZX83C 6.2, BZX55C 6.2, ZPD 6.2	ITT,Ses
	D....17	50.04.0512	1N5818	1N5819	Mot
	DL..100	50.04.2112	MW5353	CM4-584B, HLMP-3401	CM,GI,HP
	DL..101	50.04.2112	MW5353	CM4-584B, HLMP-3401	CM,GI,HP
	DL..102	50.04.2112	MW5353	CM4-584B, HLMP-3401	CM,GI,HP
	DL..103	50.04.2112	MW5353	CM4-584B, HLMP-3401	CM,GI,HP
	DL..104	50.04.2111	MW5753	CM4-284B, HLMP-3301	CM,GI,HP
	DL..200	. .	not used		
	DL..201	. .	not used		
	DL..202	50.04.2112	MW5353	CM4-584B, HLMP-3401	CM,GI,HP
	DL..203	. .	not used		
	DL..204	50.04.2112	MW5353	CM4-584B, HLMP-3401	CM,GI,HP
	IC....1	50.05.0283	LM393N		NS,Tho,TI
	IC....2	50.05.0279	SG3524BN		SG
	JS....1	. .		See note 1	
	L.....1	1.022.197.00	1.5 mH		St
	P.....1	54.14.2003	26 cont.	See note 2	
	P...100	54.01.0269	5 cont.	AMP Nr. 163.740-3	
	P...101	54.01.0227	3 Cont.	AMP Nr. 163.740-1	
	P...200	54.01.0269	5 cont.	AMP Nr. 163.740-3	
	P...201	54.01.0227	3 cont.	AMP Nr. 163.740-1	
	Q.....1	50.03.0351	BC327-25		ITT,Ph,Sie
	R.....1	57.11.3331	330 Ohm		
	R.....2	57.11.3331	330 Ohm		
	R.....3	57.11.3331	330 Ohm		
	R.....4	57.11.3331	330 Ohm		
	R.....5	57.11.3331	330 Ohm		
	R.....6	57.11.3331	330 Ohm		
	R.....7	57.11.3331	330 Ohm		
	R.....8	57.11.3331	330 Ohm		
	R.....9	57.11.3331	330 Ohm		
	R....10	57.11.3331	330 Ohm		
	R....11	57.11.3223	22 kOhm		
	R....12	57.11.3222	2.2 kOhm		
	R....13	57.11.3122	1.2 kOhm		
	R....14	57.11.3473	47 kOhm		
	R....15	57.11.3105	1 MOhm		
	R....16	57.11.3103	10 kOhm		
	R....17	57.11.3392	3.9 kOhm		
	R....18	57.11.3222	2.2 kOhm		
	R....19	57.11.3101	100 Ohm		
	R....20	57.11.3109	1 Ohm		
	R....21	57.11.3122	1.2 kOhm		
	R....22	57.11.3101	100 Ohm		
	R....23	57.11.3472	4.7 kOhm		
	R....24	57.11.3472	4.7 kOhm		
	R....25	57.11.3472	4.7 kOhm		
	R....26	57.11.3102	1 kOhm		
	R....27	57.11.3101	100 Ohm		
	R....28	57.11.3472	4.7 kOhm		
	R....29	57.11.3105	1 MOhm		
	R...100	57.11.3151	150 Ohm		
	R...101	57.11.3151	150 Ohm		
	R...102	57.11.3151	150 Ohm		
	R...103	57.11.3151	150 Ohm		
	R...104	57.11.3151	150 Ohm		
	R...200	57.11.3151	150 Ohm		
	R...201	57.11.3151	150 Ohm		
	R...202	57.11.3151	150 Ohm		
	R...203	57.11.3151	150 Ohm		
	R...204	57.11.3151	150 Ohm		
	S.....1	. .		See note 3	
	S.....2	. .		See note 3	
	S.....3	. .		See note 3	
	S.....4	. .		See note 3	
	S.....5	. .		See note 3	
	S.....6	. .		See note 3	
	S.....7	. .		See note 3	
	S.....8	. .		See note 3	
	S.....9	. .		See note 3	
	S....10	. .		See note 3	

Note 1 - Contact pin: Studer 54.01.0020, Berg 75 160-102-36
Bridge: Studer 54.01.0021, Philips 2422 024 88003

Note 2 - Connector: Yamaichi FAP-26-08//4, Burndy BPH 9 B 26 B00 GS

Note 3 - Switch: Studer 55.03.0261, Rafi 3.13001.110
Extender: Studer 55.03.0262, Rafi 5.55101.690

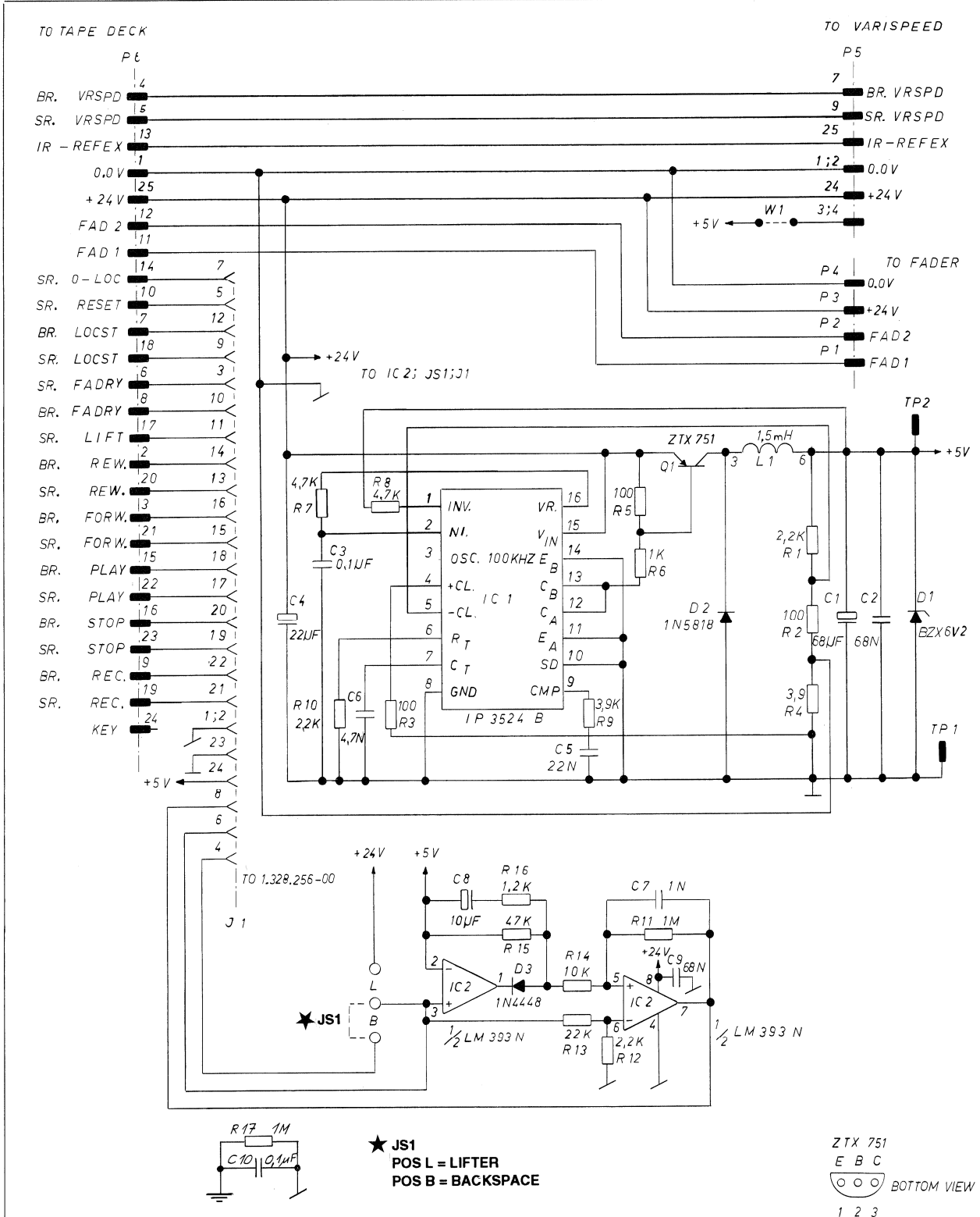
Ce=Ceramic, El=Electrolytic, Sal=Solid aluminium, PETP=Polyesterfilm, Pp=Polypropylen.

MANUFACTURER: CM=Chicago Miniatur, Fc=Fairchild, GI=General Instruments, HP=Hewlett Packard, ITT=Intermetall, Mot=Motorola, NS=National Semiconductors, Ph=Philips, Ses=Sescosem, SG=Silicon General, Sie=Siemens, St=Studer, Tho=Thomson, TI=Texas Instruments, Tf=Telefunken.

1.328.251.81 TAPE DECK REMOTE CONTROL ML 94/01/2600

TAPE DECK REMOTE CONTROL MODULE (PARALLEL) 1.328.255.81

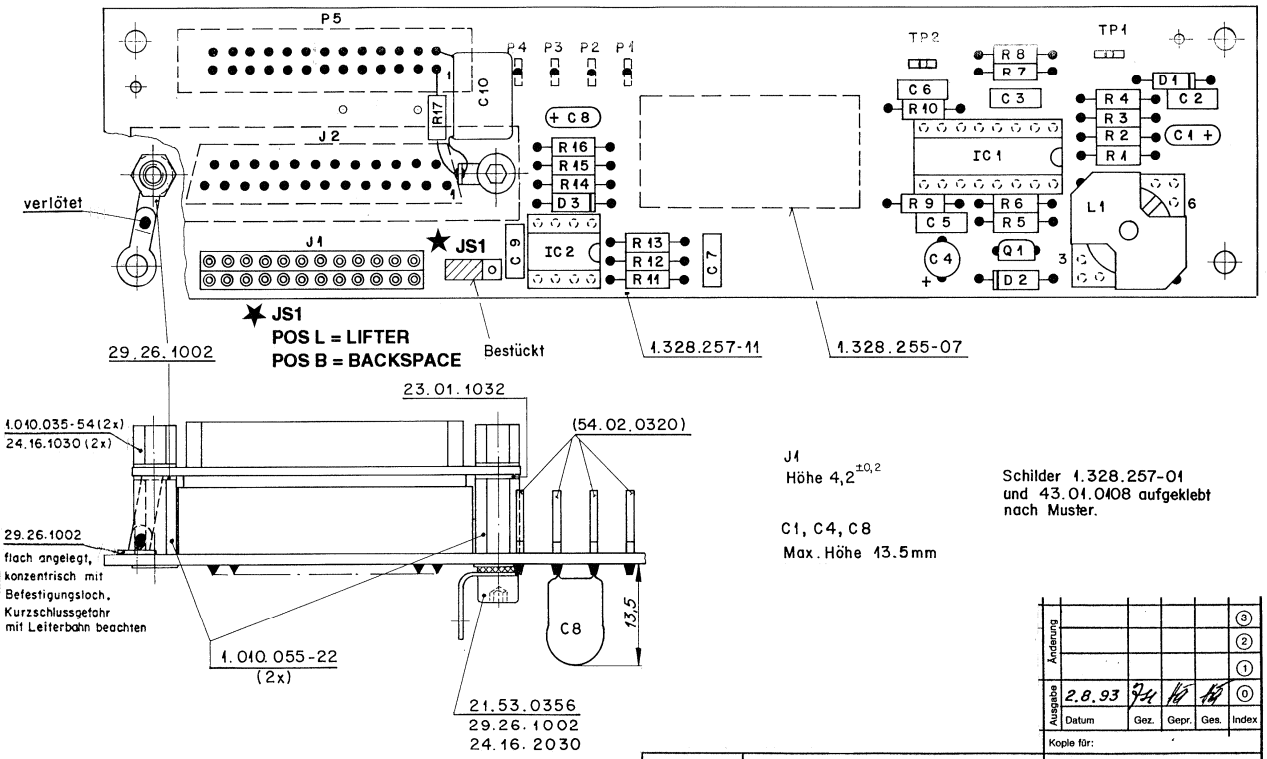
- Connector PCB 1.328.257.81



0 02.08.93 C. METZ					
	MODUL PARALLEL A727, A812, A820				PAGE 1 OF 1
STUDER	CONNECTORS BOARD			SC	1.328.257-81

TAPE DECK REMOTE CONTROL MODULE (PARALLEL) 1.328.255.81

- Connector PCB 1.328.257.81



J1
Höhe $4,2^{\pm 0,2}$

C1, C4, C8
Max. Höhe 13.5mm

Schilder 1.328.257-01
und 43.01.0408 aufgeklebt
nach Muster.

Änderung					
					③
					②
					①
Ausgabe	2.8.93				⓪
	Datum	Gez.	Gepr.	Ges.	Index

Kopie für:

STUDER REGENSDORF ZÜRICH	Benennung: CONNECTOR BOARD ESE	Nummer: 1.328.257-81

Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	C.....1	59.26.0680	68 u 20%, 6.3V , SAL	
	C.....2	59.06.0683	0.068 u 10%, 63V , PETP	
	C.....3	59.06.0104	0.1 u 10%, 63V , PETP	
	C.....4	59.22.6220	22 u -20%, 35V , EL	
	C.....5	59.06.0223	0.022 u 10%, 63V , PETP	
	C.....6	59.06.0472	4700 p 10%, 63V , PETP	
	C.....7	59.06.0102	1000 p 10%, 63V , PETP	
	C.....8	59.26.2100	10 u 20%, 16V , SAL	
	C.....9	59.06.0683	0.068 u 10%, 63V , PETP	
	C....10	59.03.2104	0.1 u 10%, 160V , PETP	
	D.....1	50.04.1118	BZX 6V2 5%, 6.2 V, 0.40 W, Z,	
	D.....2	50.04.0512	1 N 5818 Schottky	Mot.
	D.....3	50.04.0125	1 N 4448 75 V; 100 mA; Si.	
	IC....1	50.05.0279	IP 3524 B Regulating pulse width modulator	IPS.
	IC....2	50.05.0283	LM 393 N Dual low power comparator	TI.
	J.....1	53.03.0218	2 * 12 Pin Socket terminal strip	
	J.....2	54.13.0023	D-type, 25 pin print female connector	
	JS....1	54.01.0021	2 * 0.63 Jumper (See Note 1)	
	L.....1	1.022.197.00	1,5 mH Choke	St.
	P.....1	54.02.0320	2.8 * 0.8 Soldering pin	
	P.....2	54.02.0320	2.8 * 0.8 Soldering pin	
	P.....3	54.02.0320	2.8 * 0.8 Soldering pin	
	P.....4	54.02.0320	2.8 * 0.8 Soldering pin	
	P.....5	54.14.2003	26 Pin print male connector	
	Q.....1	50.03.0352	ZTX 751 S 60 V, 2 A, PNP Si.	Fe.
	R.....1	57.11.3222	2.2 k 1%, 0207 , MF	
	R.....2	57.11.3101	100 1%, 0207 , MF	
	R.....3	57.11.3101	100 1%, 0207 , MF	
	R.....4	57.11.3399	3.9 1%, 0207 , MF	
	R.....5	57.11.3101	100 1%, 0207 , MF	
	R.....6	57.11.3102	1.0 k 1%, 0207 , MF	
	R.....7	57.11.3472	4.7 k 1%, 0207 , MF	
	R.....8	57.11.3472	4.7 k 1%, 0207 , MF	
	R.....9	57.11.3392	3.9 k 1%, 0207 , MF	
	R....10	57.11.3222	2.2 k 1%, 0207 , MF	
	R....11	57.11.3105	1 M 1%, 0207 , MF	
	R....12	57.11.3222	2.2 k 1%, 0207 , MF	
	R....13	57.11.3223	22 k 1%, 0207 , MF	
	R....14	57.11.3103	10 k 1%, 0207 , MF	
	R....15	57.11.3473	47 k 1%, 0207 , MF	
	R....16	57.11.3122	1.2 k 1%, 0207 , MF	
	R....17	57.11.3105	1 M 1%, 0207 , MF	
	TP....1	54.02.0320	2.8 * 0.8 Soldering pin	
	TP....2	54.02.0320	2.8 * 0.8 Soldering pin	
	W.....1	1.010.324.64	4.3 * 10.2 Bridge (not inserted)	

Note 1: Jumper
Contact Pin: Studer Nr. 54.01.0020
Berg Nr. 77 311-102-36
Philips Nr. 2422 062 43241
Fawag Nr. AS 1-034/058-36 G-0.75u Au
Bridge : Studer Nr. 54.01.0021
Berg Nr. 65 474-001
Philips Nr. 2422 024 88003
AMP Nr. 141 767-1

CER=Ceramic, EL=Electrolytic, MP=Metallized Paper, MPC=Metallized Polycarbonate, MPETP=Metallized Polyester, PC=Polycarbonate, PETP=Polyester PP=Polypropylene, PS=Polystyrol, SAL=Solid Aluminium, TA=Tantal Cermet=Ceramic Metal, MF=Metal Film.

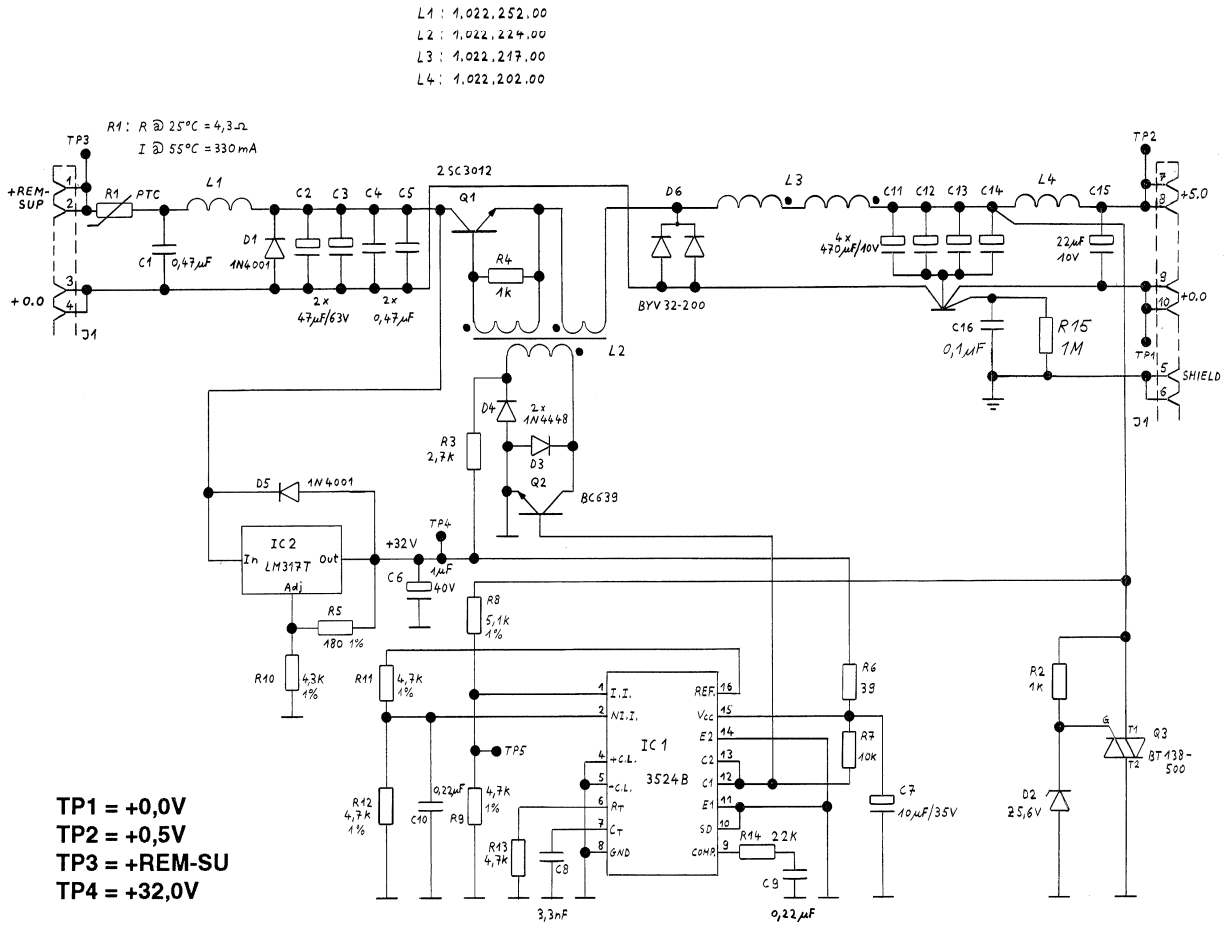
MANUFACTURERS :
Fe = Ferranti
IPS = Integrated Power Semiconductors Limited
Mot = Motorola
St = Studer
TI = Texas Instruments

1.328.257.81 CONNECTORS BOARD GP 93/08/0200

END
→

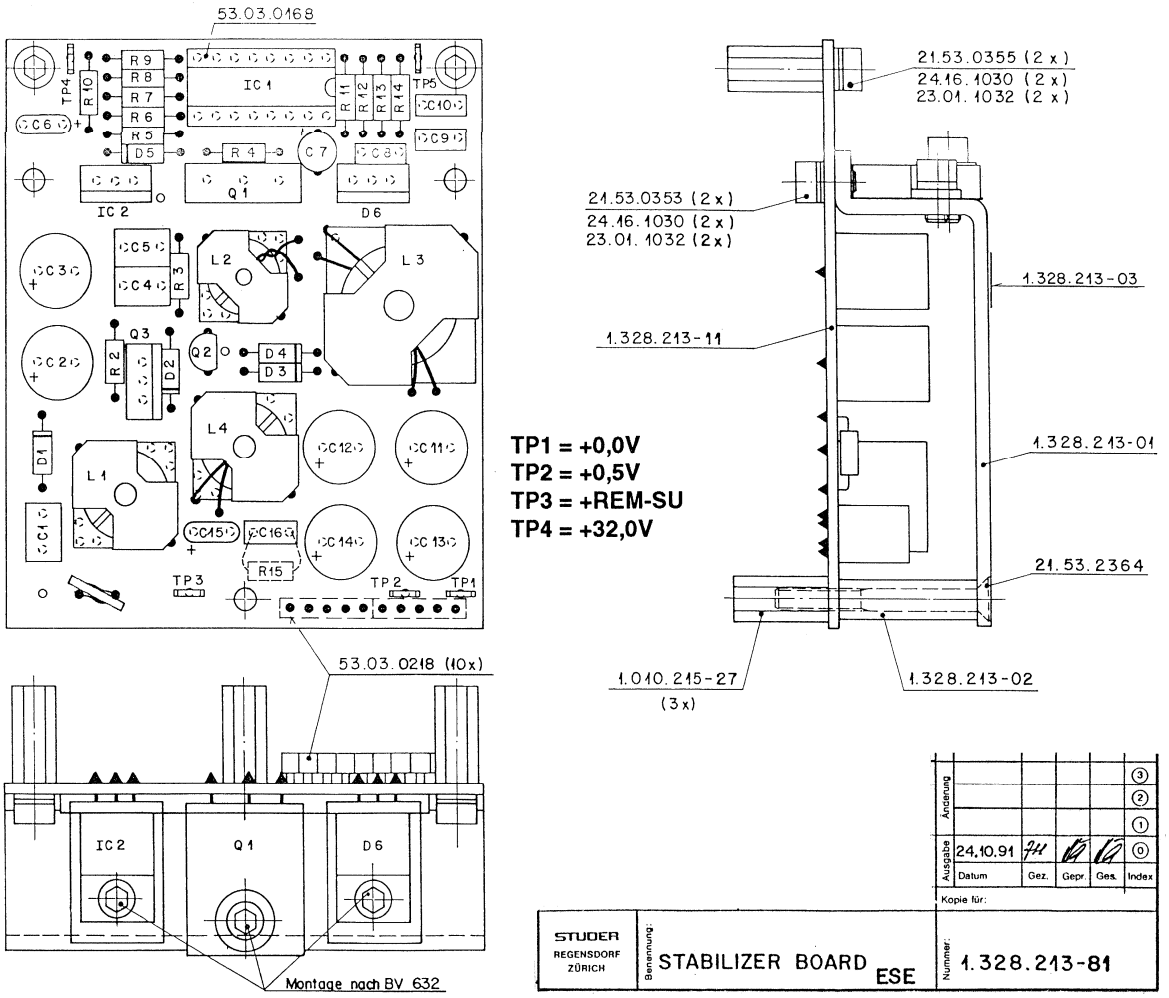
REMOTE TIMER / LAP MODE DISPLAY 1.328.270.81
REMOTE CONTROL CABINET (SERIAL) 1.328.210.81
REMOTE CONTROL MODULE (SERIAL) 1.328.220.81

- Stabilizer PCB 1.328.213.81



0 24.10.85 CHE	. .	. .	. .	. .
	A820/A812			PAGE 1 OF 1
STUDER	STABILIZER BOARD		SC	1.328.213.81

REMOTE TIMER / LAP MODE DISPLAY 1.328.270.81
REMOTE CONTROL CABINET (SERIAL) 1.328.210.81
REMOTE CONTROL MODULE (SERIAL) 1.328.220.81
- Stabilizer PCB 1.328.213.81



Änderung					
					③
					②
					①
Ausgabe	24.10.91	FH			⓪
	Datum	Gez.	Gepr.	Ges.	Index

Kopie für:

STUDER REGENSDORF ZÜRICH	Benennung: STABILIZER BOARD ESE	Nummer: 1.328.213-81

Ad	..POS..	...REF.No...		DESCRIPTION	MANUFACTURER
	C.....1	59.06.0474	0.47 uF	10%, PETP	
	C.....2	59.22.8470	47 uF	20%, 63V , EL	
	C.....3	59.22.8470	47 uF	20%, 63V , EL	
	C.....4	59.06.0474	0.47 uF	10%, PETP	
	C.....5	59.06.0474	0.47 uF	10%, PETP	
	C.....6	59.26.9109	1 uF	20%, 40V , SAL	
	C.....7	59.22.6100	10 uF	-20%, 35V , EL	
	C.....8	59.06.0332	3300 pF	10%, PETP	
	C.....9	59.06.0224	0.22 uF	10%, PETP	
	C....10	59.06.0224	0.22 uF	10%, PETP	
	C....11	59.22.3471	470 uF	-20%, 10V , EL	
	C....12	59.22.3471	470 uF	-20%, 10V , EL	
	C....13	59.22.3471	470 uF	-20%, 10V , EL	
	C....14	59.22.3471	470 uF	-20%, 10V , EL	
	C....15	59.26.1220	22 uF	20%, 10V , SAL	
	C....16	59.06.0104	0.1 uF	10%, 50V , PETP	
	D.....1	50.04.0122	1N 4001		Mot
	D.....2	50.04.1108	5.6 V	BZX83 C 5V6, BZX55 C 5V6, ZPD 5.6	Ses,ITT
	D.....3	50.04.0125	1N 4448		Fc,ITT,Ph,Ses
	D.....4	50.04.0125	1N 4448		Fc,ITT,Ph,Ses
	D.....5	50.04.0122	1N 4001		Mot
	D.....6	50.04.0517	BYV32-200		Mot,Ph
	IC....1	50.05.0279	SG 3524BN		SG
	IC....2	50.10.0104	LM 317T	LM 317 SP	Tho,Mot,NS,TI
	J.....1	00.00.0000		see note 1	
	L.....1	1.022.252.00	0.32 mH	Filter Coil	St
	L.....2	1.022.224.00		Power Supply Transformer	St
	L.....3	1.022.217.00	46 uH	HF-Coil, 5A	St
	L.....4	1.022.202.00	16.9 mH	Filter Coil	St
	Q.....1	50.03.0517	2 SC 3012	NPN	NEC
	Q.....2	50.03.0551	BC 639	NPN	Mot,Ph
	Q.....3	50.99.0106	T 2800	400V, 8A,Triac	Ph

Ad	..POS..	...REF.No...		DESCRIPTION	MANUFACTURER
	R.....1	57.92.1331	PTC	see note 2	Ph
	R.....2	57.11.3102	1	kOhm 1%	
	R.....3	57.11.3272	2.7	kOhm 1%	
	R.....4	57.11.3102	1	kOhm 1%	
	R.....5	57.11.3181	180	Ohm 1%	
	R.....6	57.11.3390	39	Ohm 1%	
	R.....7	57.11.3103	10	kOhm 1%	
	R.....8	57.11.3512	5.1	kOhm 1%	
	R.....9	57.11.3472	4.7	kOhm 1%	
	R....10	57.11.3432	4.3	kOhm 1%	
	R....11	57.11.3472	4.7	kOhm 1%	
	R....12	57.11.3472	4.7	kOhm 1%	
	R....13	57.11.3472	4.7	kOhm 1%	
	R....14	57.11.3223	22	kOhm 1%	
	R....15	57.11.3105	1	MOhm 1%	
	TP....1	54.02.0320	Test Point		
	TP....2	54.02.0320	Test Point		
	TP....3	54.02.0320	Test Point		
	TP....4	54.02.0320	Test Point		
	TP....5	54.02.0320	Test Point		

EL=Electrolytic, SAL=Solid Aluminium, PETP=Polyester

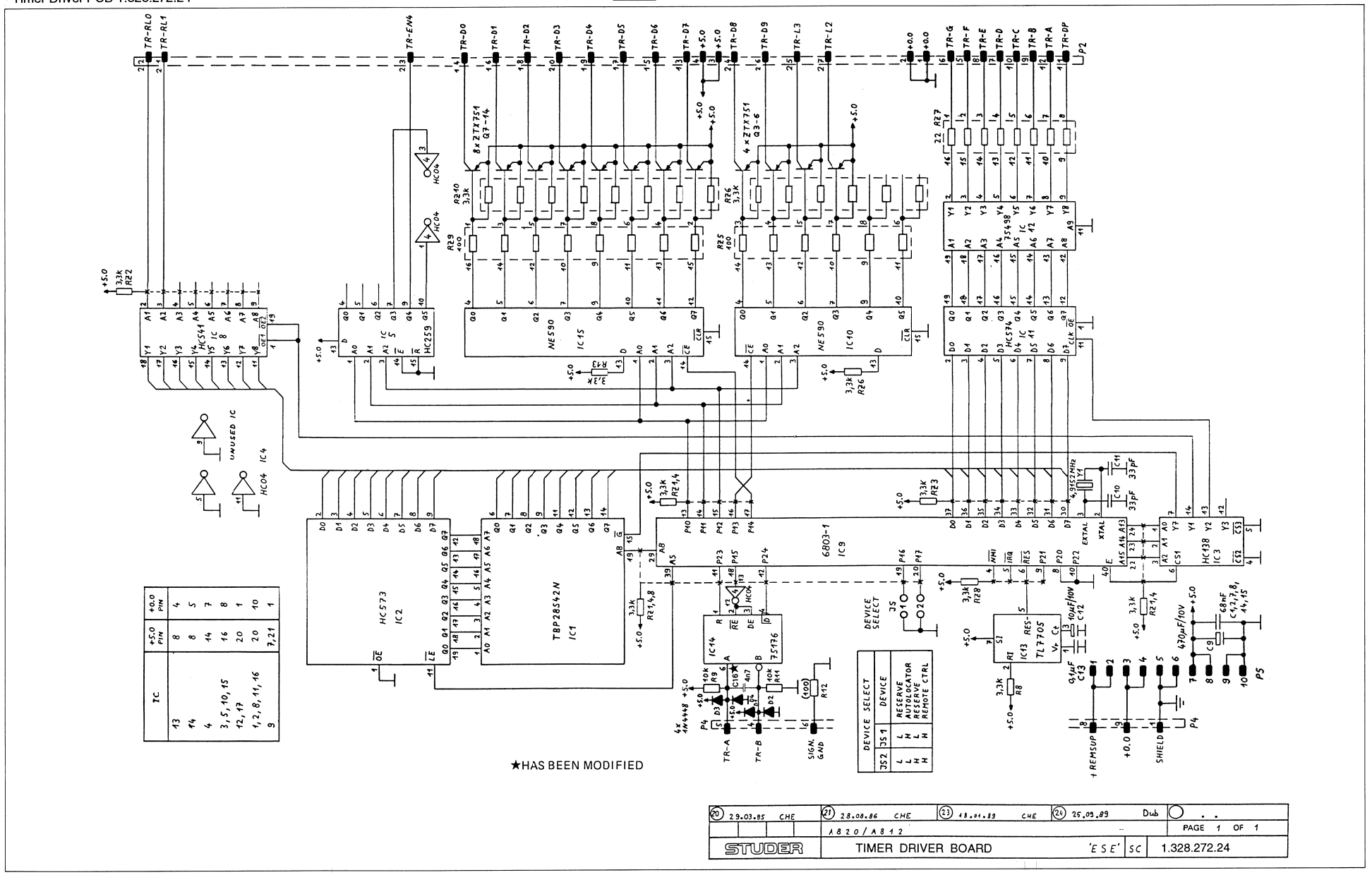
MANUFACTURERS: Fc=Fairchild, ITT=Intermetall, Mot=Motorola,
NEC=Nippon Electric Corp., NS=National Semiconductors,
Ph=Philips, Ses=Sescosem, SG=Silicon General, St=Studer
Tho=Thomson, TI=Texas Instruments

note 1 - Connector: 10 pieces Studer Nr.53.03.0218

note 2 - PTC Thermistor: R @ 25 degree Celsius = 4.7 Ohm
I @ 55 degree Celsius = 330 mA
Philips Nr.2322 663 13311

1.328.213.81 STABILIZER BOARD BD91/10/2400

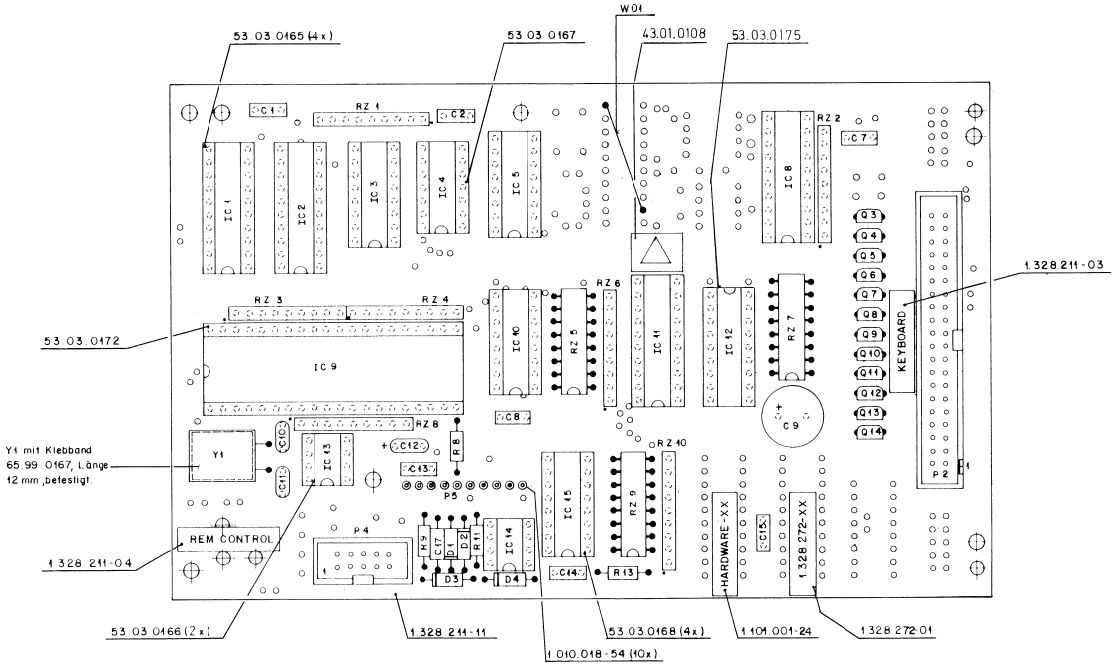
REMOTE TIMER / LAP MODE DISPLAY 1.328.270.81
- Timer Driver PCB 1.328.272.24



IC	+5.0 PIN	+0.0 PIN
13	8	4
14	8	5
4	14	7
3, 5, 10, 15	16	8
12, 17	20	1
1, 2, 8, 11, 16	20	10
9	7, 21	1

REMOTE TIMER / LAP MODE DISPLAY 1.328.270.81

- Timer Driver PCB 1.328.272.24



Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	Q.....3	50.03.0352	ZTX 751 S	Fe
	Q.....4	50.03.0352	ZTX 751 S	Fe
	Q.....5	50.03.0352	ZTX 751 S	Fe
	Q.....6	50.03.0352	ZTX 751 S	Fe
	Q.....7	50.03.0352	ZTX 751 S	Fe
	Q.....8	50.03.0352	ZTX 751 S	Fe
	Q.....9	50.03.0352	ZTX 751 S	Fe
	Q....10	50.03.0352	ZTX 751 S	Fe
	Q....11	50.03.0352	ZTX 751 S	Fe
	Q....12	50.03.0352	ZTX 751 S	Fe
	Q....13	50.03.0352	ZTX 751 S	Fe
	Q....14	50.03.0352	ZTX 751 S	Fe
	R.....8	57.11.4332	3.3 kOhm 2%	
	R.....9	57.11.4103	10 kOhm 2%	
	R....10	57.11.4102	1 kOhm 2%	
24	R....10	00.00.0000	not used replaced by C16	
	R....11	57.11.4103	10 kOhm 2%	
	R....12	00.00.0000	not used	
	R....13	57.11.4332	3.3 kOhm 2%	
	RZ....1	57.88.4332	Network, 8 * 3.3 kOhm, 2%, single line	
	RZ....2	57.88.4332	Network, 8 * 3.3 kOhm, 2%, single line	
	RZ....3	57.88.4332	Network, 8 * 3.3 kOhm, 2%, single line	
	RZ....4	57.88.4332	Network, 8 * 3.3 kOhm, 2%, single line	
	RZ....5	57.88.3101	Network, 8 * 100 Ohm, 5%, DIL 16	
	RZ....6	57.88.4332	Network, 8 * 3.3 kOhm, 2%, single line	
	RZ....7	57.88.3220	Network, 8 * 22 Ohm, 5%, DIL 16	
	RZ....8	57.88.4332	Network, 8 * 3.3 kOhm, 2%, single line	
	RZ....9	57.88.3101	Network, 8 * 100 Ohm, 2%, DIL 16	
	RZ....10	57.88.4332	Network, 8 * 3.3 kOhm, 5%, single line	
23	W.....1	1.010.108.64	Wrap wire, D = 0.255, L = 80 MM.	St.
	Y.....1	89.01.0560	4.9152 MHz +-100 ppm, Nymph Nr. TD 18/NMP 049	

Index (01) : Wrap Wire #1.010.108.64 introduced at 18.01.89.

(20) 23.04.85 : PCB lay-out -11
(21) 01.12.86 : IC 12 (SN 75498 N) delivered for spare purpose only.
New devices IC 11 and IC 12.
(22) 08.12.86 : Extended Autolocator Key Board.
(23) 05.06.87 : Software 29/87
(23.1) 18.01.89 : Wire bridge W01
(24) 25.09.89 : Improved noise suppression on differential line.

Note 2 - Connector: 10 Contacts
Studer Nr. 54.14.2001
Yamaichi Nr. FAP-10-08//4
Burndy Nr. BPH 7 B 10 B00 GS

Note 3 - Connector: 40 Contacts
Studer Nr. 54.14.2004
Yamaichi Nr. FAP-40-08//4
Burndy Nr. BPH 9 B 40 B00 GS

Note 4 - Connector: 10 Pieces
Studer Nr. 1.010.018.54

Cer=Ceramic, El=Electrolytic, PETP=Polyester film, Sal=Solid aluminium.

MANUFACTURERS: fc=Fairchild, Fe=Ferranti, Hi=hitachi, Is=Intersil,
ITT=Intermetall, Mot=Motorola, NS=National Semiconductors
Ph=Philips, RCA=RCA Corporation, Ses=Sescosem, SGS=SGS/Ates,
Sig=Signetics, Sp=Sprague, St=Studer, Tf=Telefunken,
TI=Texas Instruments, To=Toshiba.

1.328.272.00	TIMER DRIVER BOARD	SU 85/04/2300
1.328.272.00	TIMER DRIVER BOARD	SU 85/04/2320
1.328.272.00	TIMER DRIVER BOARD	BD 86/12/0121
1.328.272.00	TIMER DRIVER BOARD	BD 86/12/0822
1.328.272.00	TIMER DRIVER BOARD	CM 89/01/1823
1.328.272.00	TIMER DRIVER BOARD	DUB89/09/2524

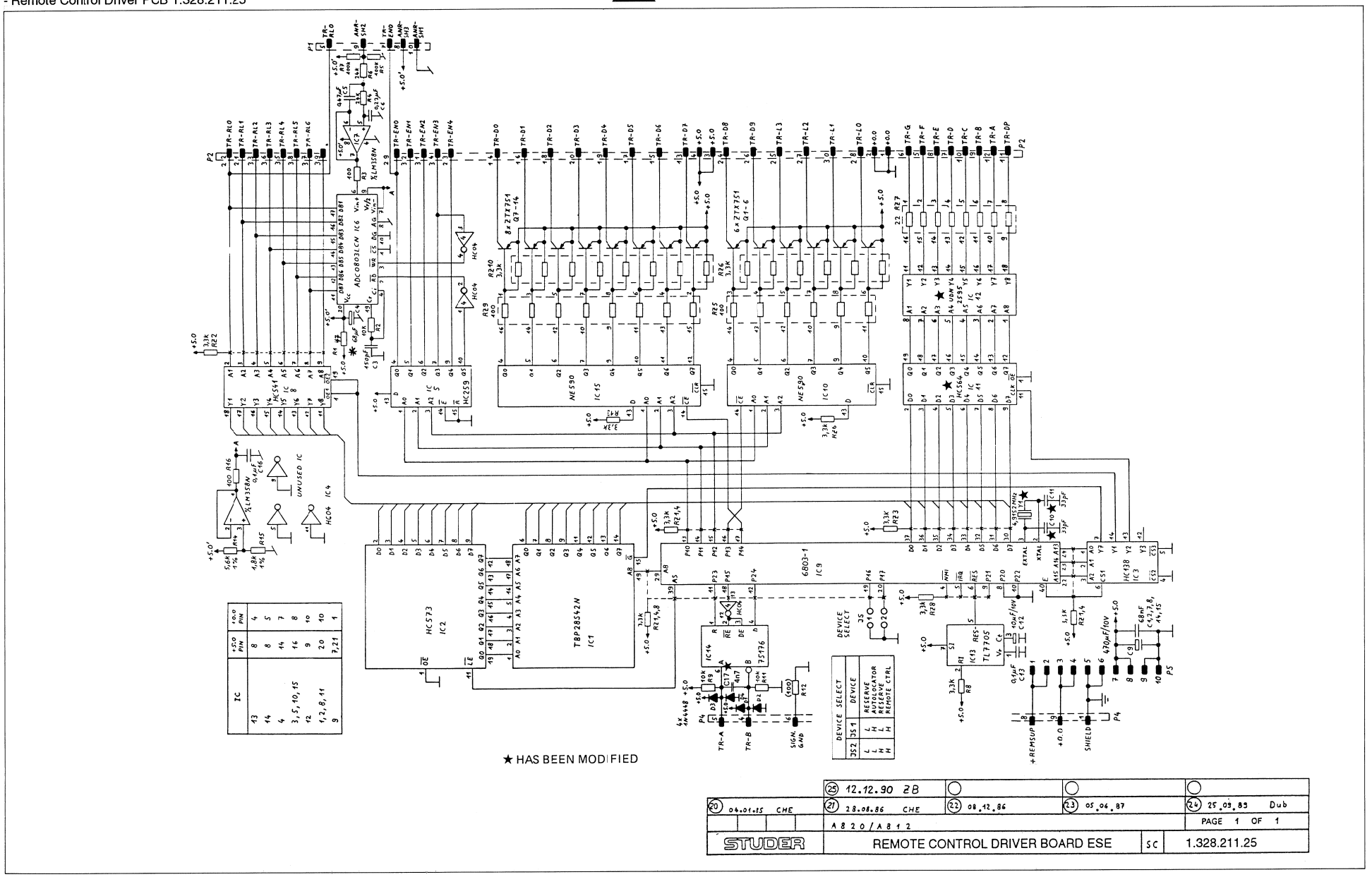
Änderung					
					(3)
					(2)
					(1)
Ausgabe	25.9.89				(0)
	Datum	Ges	Gezr	Ges	Index

Kopie für

STUDER REGENSDORF ZURICH | Benennung: TIMER DRIVER BOARD ESE | Nummer: 1.328.272-24

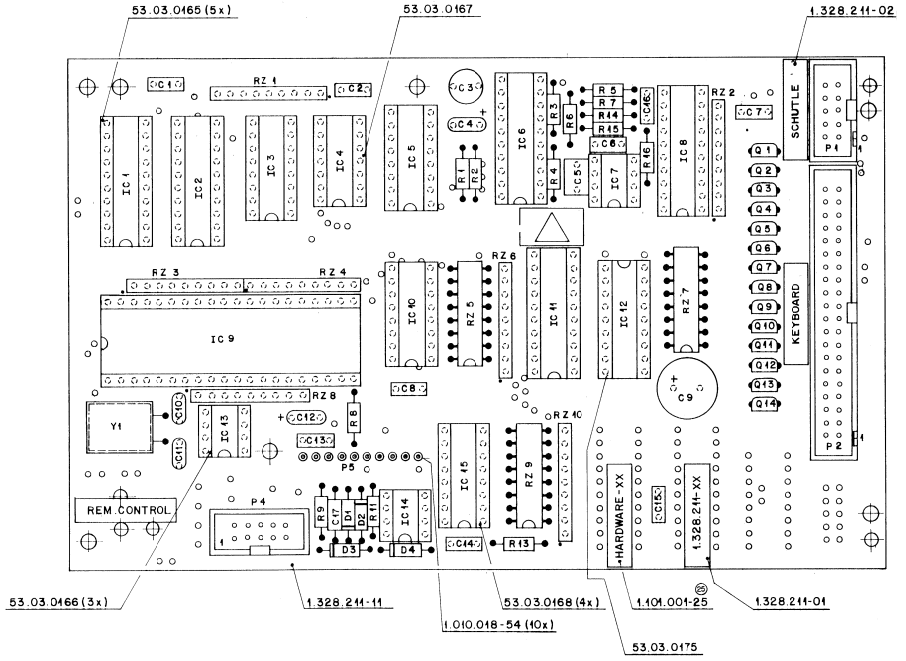
Ad	..POS..	...REF.No...	DESCRIPTION	MANUFACTURER
	C.....1	59.06.0683	68 nF 10%, 63V, PETP	
	C.....2	59.06.0683	68 nF 10%, 63V, PETP	
	C.....7	59.06.0683	68 nF 10%, 63V, PETP	
	C.....8	59.06.0683	68 nF 10%, 63V, PETP	
	C.....9	59.22.3471	470 uF -20%, 10V, El	
	C....10	59.34.2330	33 pF 5%, N150, Cer	
	C....11	59.34.2330	33 pF 5%, N150, Cer	
	C....12	59.26.1100	10 uF 20%, 10V, Sal	
	C....13	59.06.0104	100 nF 10%, 63V, PETP	
	C....14	59.06.0683	68 nF 10%, 63V, PETP	
	C....15	59.06.0683	68 nF 10%, 63V, PETP	
24	C....16	59.03.2472	4.7 nF 10%, 63V, PETP	
	D.....1	50.04.0125	1N 4448	Fc,ITT,Ph,Ses,Tf
	D.....2	50.04.0125	1N 4448	Fc,ITT,Ph,Ses,Tf
	D.....3	50.04.0125	1N 4448	Fc,ITT,Ph,Ses,Tf
	D.....4	50.04.0125	1N 4448	Fc,ITT,Ph,Ses,Tf
23	IC....1	1.328.999.22	Software 29/87 REM-CTR. DRIVER	St
	IC....2	50.17.1573	74 HC 573 .. 74 HC 573 .	Mot,NS,Ph,RCA,SGS,TI,To
	IC....3	50.17.1138	74 HC 138 .. 74 HC 138 .	Mot,NS,Ph,RCA,SGS,TI,To
	IC....4	50.17.1004	74 HC 04 .. 74 HC 04 .	Mot,NS,Ph,RCA,TI,To
	IC....5	50.17.1259	74 HC 259 .. 74 HC 259 .	Mot,NS,Ph,RCA,SGS,TI,To
	IC....8	50.17.1541	74 HC 541 .. 74 HC 541 .	Mot,NS,Ph,RCA,SGS,TI,To
	IC....9	50.16.0107	MC 6803P-1 HD 6303P-1	Hi,Mot
	IC...10	50.15.0102	NE 590 N	Sig
21	IC...11	50.17.1564	74 HC 564 .. 74 HC 564 .	Mot,NS,Ph,RCA,TI
21	IC...12	50.15.0118	UDN-2595A	Sp
	IC...13	50.11.0122	TL7705ACP	TI
	IC...14	50.15.0115	SN 75176AP DS 3595 N	NS,TI
	IC...15	50.15.0102	NE 590 N	Sig
	P.....2	. .	see note 3	
	P.....4	. .	see note 2	
	P.....5	. .	see note 4	

REMOTE CONTROL CABINET (SERIAL) 1.328.210.81
REMOTE CONTROL MODULE (SERIAL) 1.328.220.81
- (Stabilizer PCB 1.328.213.81: See under 1.328.270.81)
- Remote Control Driver PCB 1.328.211.25



REMOTE CONTROL CABINET (SERIAL) 1.328.210.81
REMOTE CONTROL MODULE (SERIAL) 1.328.220.81

- (Stabilizer PCB 1.328.213.81: See under 1.328.270.81)
- Remote Control Driver PCB 1.328.211.25



	12.12.90	JH	Zb	JH	23
	25.9.89	PH			24
Änderung	5.6.87				23
	8.12.86				22
	1.12.86	PH			21
Ausgabe	2.5.86	A.Ho			20
	Datum	Ges.	Gepr.	Gen.	Index

Kopie für:

STUDER REGENSDORF ZÜRICH	Benennung: REMOTE CONTROL DRIVER BOARD ESE	Nummer: 1.328.211.25

Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
20	C.....1	59.06.0683	68 nF	10%, 63V, PETP	
20	C.....2	59.06.0683	68 nF	10%, 63V, PETP	
20	C.....3	59.05.2151	150 pF	2.5%, 630V, PP	
20	C.....4	59.26.0680	68 uF	20%, 6.3V, Sal	
20	C.....5	59.06.0474	470 nF	10%, 63V, PETP	
20	C.....6	59.06.0224	220 nF	10%, 63V, PETP	
20	C.....7	59.06.0683	68 nF	10%, 63V, PETP	
20	C.....8	59.06.0683	68 nF	10%, 63V, PETP	
20	C.....9	59.22.3471	470 uF	-20%, 10V, El	
20	C....10	59.34.2220	22 pF	5%, N150, Cer	
21	C....10	59.34.2330	33 pF	5%, N150, Cer	
20	C....11	59.34.2220	22 pF	5%, N150, Cer	
21	C....11	59.34.2330	33 pF	5%, N150, Cer	
20	C....12	59.26.1100	10 uF	20%, 10V, Sal	
20	C....13	59.06.0104	100 nF	10%, 63V, PETP	
20	C....14	59.06.0683	68 nF	10%, 63V, PETP	
20	C....15	59.06.0683	68 nF	10%, 63V, PETP	
20	C....16	59.06.0104	100 nF	10% 63V, PETP	
24	C....17	59.03.2472	4.7 nF	10% 63V, PETP	
20	D.....1	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
20	D.....2	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
20	D.....3	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
20	D.....4	50.04.0125	1N 4448		Fc,ITT,Ph,Ses,Tf
	IC....1	50.14.0120	TBP28S42N		TI
20	IC....1	1.328.999.20		Software 13/85	St
22	IC....1	1.328.999.21		Software 50/86	St
23	IC....1	1.328.999.22		Software 29/87	St
20	IC....2	50.17.1573	74 HC 573	.. 74 HC 573 .	Mot,NS,Ph,RCA,SGS,TI,To
20	IC....3	50.17.1138	74 HC 138	.. 74 HC 138 .	Mot,NS,Ph,RCA,SGS,TI,To
20	IC....4	50.17.1004	74 HC 04	.. 74 HC 04 .	Mot,NS,Ph,RCA,TI,To
20	IC....5	50.17.1259	74 HC 259	.. 74 HC 259 .	Mot,NS,Ph,RCA,SGS,TI,To
20	IC....6	50.07.0029	ADC0803LCN		Is,NS
20	IC....7	50.05.0286	LM 358 N	LM 358 P	Mot,NS,TI
20	IC....8	50.17.1541	74 HC 541	.. 74 HC 541 .	Mot,NS,Ph,RCA,SGS,TI,To
20	IC....9	50.16.0107	MC 6803P-1	HD 6803P-1	Hi,Mot
20	IC....10	50.15.0102	NE 590 N		Sig
20	IC....11	50.17.1574	74 HC 574	.. 74 HC 574 .	Mot,NS,Ph,RCA,SGS,TI,To
21	IC....11	50.17.1564	74 HC 564	.. 74 HC 564 .	Mot,NS,Ph,RCA,TI
20	IC....12	50.15.0113	SN 75498 N		TI
21	IC....12	50.15.0118	UDN-2595A		Sp
20	IC....13	50.11.0122	TL7705ACP		TI
20	IC....14	50.15.0115	SN 75176AP	DS 3695 N	NS,TI
20	IC....15	50.15.0102	NE 590 N		Sig
20	IC....16	. .	not used		
20	IC....17	. .	not used		
20	P.....1	. .		see note 2	
20	P.....2	. .		see note 3	
20	P.....3	. .	not used		
20	P.....4	. .		see note 2	
20	P.....5	. .		see note 4	
20	Q.....1	50.03.0352	ZTX 751 S		Fe
20	Q.....2	50.03.0352	ZTX 751 S		Fe
20	Q.....3	50.03.0352	ZTX 751 S		Fe
20	Q.....4	50.03.0352	ZTX 751 S		Fe
20	Q.....5	50.03.0352	ZTX 751 S		Fe
20	Q.....6	50.03.0352	ZTX 751 S		Fe
20	Q.....7	50.03.0352	ZTX 751 S		Fe
20	Q.....8	50.03.0352	ZTX 751 S		Fe
20	Q.....9	50.03.0352	ZTX 751 S		Fe
20	Q....10	50.03.0352	ZTX 751 S		Fe
20	Q....11	50.03.0352	ZTX 751 S		Fe
20	Q....12	50.03.0352	ZTX 751 S		Fe
20	Q....13	50.03.0352	ZTX 751 S		Fe
20	Q....14	50.03.0352	ZTX 751 S		Fe
20	R.....1	57.11.3100	10 Ohm	2%	
25	R.....1	57.11.3470	47 Ohm	2%	
20	R.....2	57.11.3103	10 kOhm	2%	
20	R.....3	57.11.3101	100 Ohm	2%	
20	R.....4	57.11.3243	24 kOhm	1%	
20	R.....5	57.11.3104	100 kOhm	2%	
20	R.....6	57.11.3243	24 kOhm	1%	
20	R.....7	57.11.3104	100 kOhm	2%	
20	R.....8	57.11.3332	3.3 kOhm	2%	
20	R.....9	57.11.3103	10 kOhm	2%	
20	R....10	57.11.3102	1 kOhm	2%	
24	R....10	00.00.0000	not used	replaced by C17	
20	R....11	57.11.3103	10 kOhm	2%	
20	R....12	. .	not used		
20	R....13	57.11.3332	3.3 kOhm	2%	
20	R....14	57.11.3562	5.6 kOhm	1%	
20	R....15	57.11.3182	1.8 kOhm	1%	
20	R....16	57.11.3101	100 Ohm	2%	
20	RZ....1	57.88.4332		Network, 8 * 3.3 kOhm, 5%, single line	
20	RZ....2	57.88.4332		Network, 8 * 3.3 kOhm, 5%, single line	
20	RZ....3	57.88.4332		Network, 8 * 3.3 kOhm, 5%, single line	
20	RZ....4	57.88.4332		Network, 8 * 3.3 kOhm, 5%, single line	
20	RZ....5	57.88.3101		Network, 8 * 100 Ohm, 2%, DIL 16	
20	RZ....6	57.88.4332		Network, 8 * 3.3 kOhm, 5%, single line	
20	RZ....7	57.88.3220		Network, 8 * 22 Ohm, 2%, DIL 16	
20	RZ....8	57.88.4332		Network, 8 * 3.3 kOhm, 5%, single line	
20	RZ....9	57.88.3101		Network, 8 * 100 Ohm, 2%, DIL 16	
20	RZ...10	57.88.4332		Network, 8 * 3.3 kOhm, 5%, single line	
20	RZ...11	. .	not used		
20	Y.....1	89.01.0553	4.9152 MHz	+-100 ppm, Nymph Nr. TD 18/NMP 049	
21	Y.....1	89.01.0560	HC-49/V	4.9152 MHz, +-20 ppm	Quarz AG,ITT,Saronix

(20) 01.02.85 PCB lay-out -11.

(21) 01.12.86 IC12-SN75498N delivered for spare purpose only, new devices IC11 and IC12.
Y1, C10, C11 improved accuracy of quartz frequency.

(22) 08.12.86 Extended Autolocater key Board.

(23) 05.06.87 Software 29/87.

(24) 25.09.89 Improved noise suppression on differential line.

(25) 12.12.90 Ripple on AD-converter supply reduced.

Note 2 - Connector, 10 Contacts
Studer Nr. 54.14.2001
Yamaichi Nr. FAP-10-08//4
Burndy Nr. BPH 7 B 10 BOO GS

Note 3 - Connector, 40 Contacts
Studer Nr. 54.14.2004
Yamaichi Nr. FAP-40-08//4
Burndy Nr. BPH 9 B 40 BOO GS

Note 4 - Connector: 10 Pieces
Studer Nr. 1.010.018.54

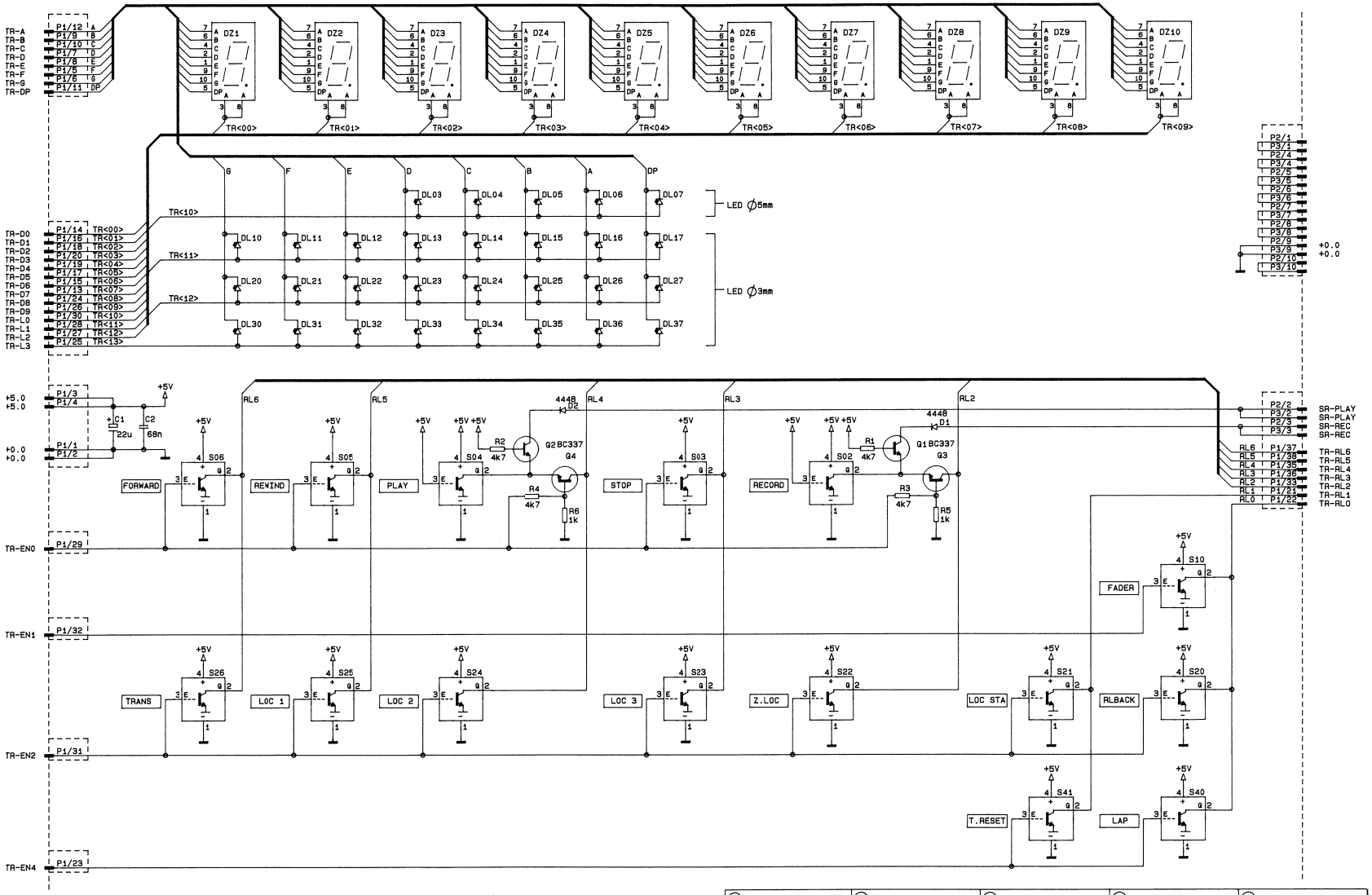
Cer=Ceramic, El=Electrolytic, PETP=Polyester Film, PP=Polypropylen, Sal=Solid Aluminium.

MANUFACTURERS: Fc=Fairchild, Fe=Ferranti, Hi=hitachi, Is=Intersil, ITT=Intermetall, Mot=Motorola, NS=National Semiconductors Ph=Philips, RCA=RCA Corporation, Ses=Sescosem, SGS=SGS/Ates, Sig=Signetics, Sp=Sprague, St=Studer, Tf=Telefunken, TI=Texas Instruments, To=Toshiba.

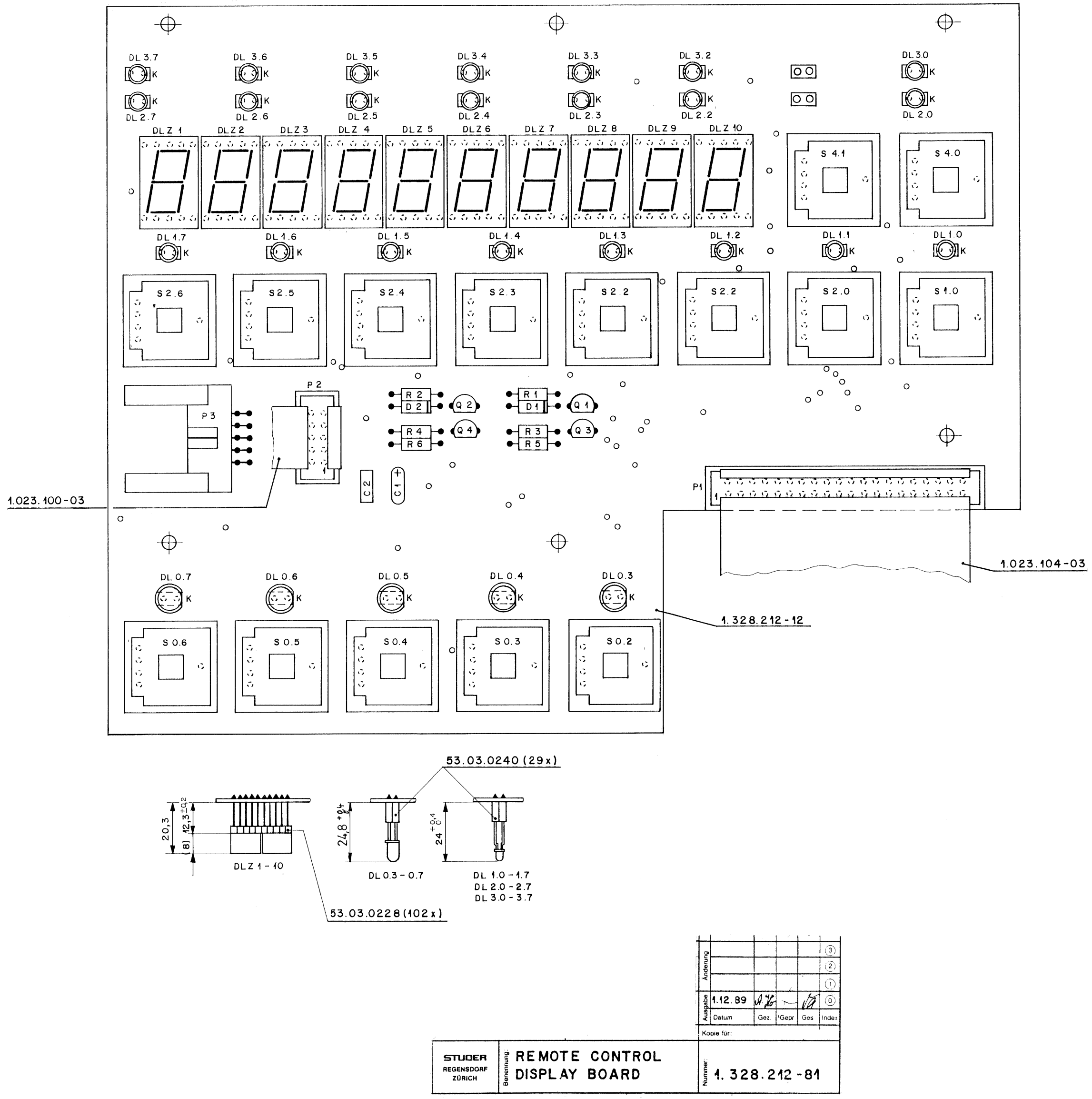
1.328.211.00 REMOTE CONTROL DRIVER BOARD BD 85/02/0100
1.328.211.00 REMOTE CONTROL DRIVER BOARD BD 85/02/0120
1.328.211.00 REMOTE CONTROL DRIVER BOARD BD 86/12/0121
1.328.211.00 REMOTE CONTROL DRIVER BOARD BD 86/12/0822
1.328.211.00 REMOTE CONTROL DRIVER BOARD BD 87/06/0523
1.328.211.00 REMOTE CONTROL DRIVER BOARD VF 89/09/2524
1.328.211.00 REMOTE CONTROL DRIVER BOARD ZB 90/12/1225

END

REMOTE CONTROL CABINET (SERIAL) 1.328.210.81
REMOTE CONTROL MODULE (SERIAL) 1.328.220.81
- Stabilizer PCB 1.328.213.81: See under 1.328.270.81)
- Remote Control Display PCB 1.328.212.81



REMOTE CONTROL CABINET (SERIAL) 1.328.210.81
REMOTE CONTROL MODULE (SERIAL) 1.328.220.81
- Stabilizer PCB 1.328.213.81: See under 1.328.270.81)
- Remote Control Display PCB 1.328.212.81



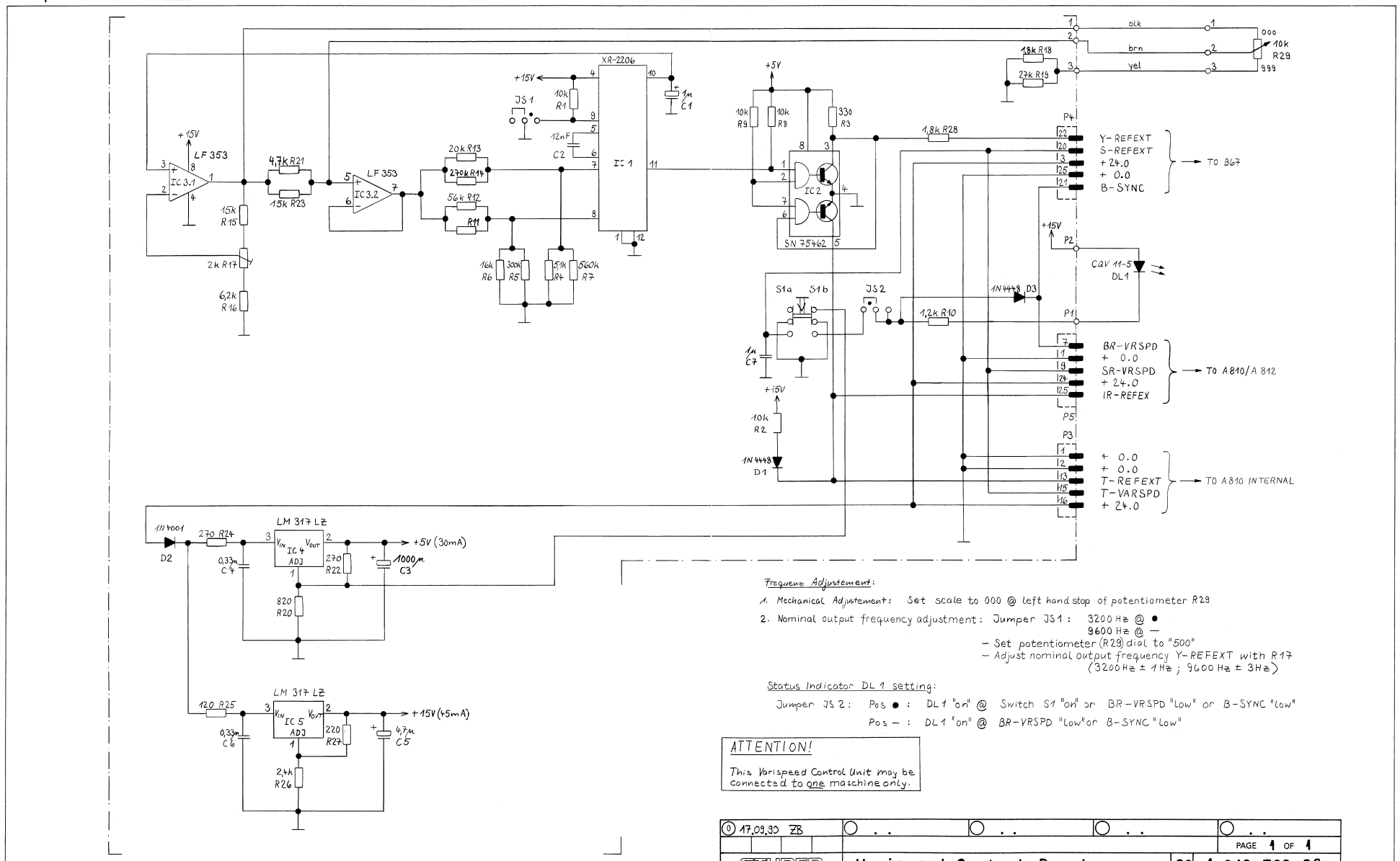
Ad	..POS..	...REF.No...	DESCRIPTION		MANUFACTURER
	C.....1	59.26.1220	22 uF	-20%, 10V , SAL	
	C.....2	59.06.0683	68 nF	10%, PETP	
	DL....0	50.04.2111	MV 5753	LED, Red , HLMP 3301	Sie
	DL....0	50.04.2112	MV 5353	LED, Yellow, HLMP 3401	Sie
	DL....1	50.04.2112	MV 5353	LED, Yellow, HLMP 3401	Sie
	DL....1	50.04.2112	MV 5353	LED, Yellow, HLMP 3401	Sie
	DL....1	50.04.2112	MV 5353	LED, Yellow, HLMP 3401	Sie
	DL....1	50.04.2130	CQV 13-7	LED, Yellow	Sie
	DL....1	50.04.2130	CQV 13-7	LED, Yellow	Sie
	DL....1	50.04.2130	CQV 13-7	LED, Yellow	Sie
	DL....1	50.04.2130	CQV 13-7	LED, Yellow	Sie
	DL....1	50.04.2130	CQV 13-7	LED, Yellow	Sie
	DL....1	50.04.2130	CQV 13-7	LED, Yellow	Sie
	DL....2	50.04.2130	CQV 13-7	LED, Yellow	Sie
	DL....2	50.04.2130	CQV 13-7	LED, Yellow	Sie
	DL....2	50.04.2130	CQV 13-7	LED, Yellow	Sie
	DL....2	. .	not used		
	DL....2	50.04.2130	CQV 13-7	LED, Yellow	Sie
	DL....2	50.04.2130	CQV 13-7	LED, Yellow	Sie
	DL....2	50.04.2131	CQV 15-5	LED, Green, CQV 15-6	Sie
	DL....3	50.04.2129	CQV 11-7	LED, Red	Sie
	DL....3	50.04.2130	CQV 13-7	LED, Yellow	Sie
	DL....3	50.04.2131	CQV 15-5	LED, Green, CQV 15-6	Sie
	DL....3	50.04.2130	CQV 13-7	LED, Yellow	Sie
	DL....3	. .	not used		
	DL....3	50.04.2130	CQV 13-7	LED, Yellow	Sie
	DL....3	50.04.2130	CQV 13-7	LED, Yellow	Sie
	DL....3	50.04.2130	CQV 13-7	LED, Yellow	Sie
	DL....3	50.04.2130	CQV 13-7	LED, Yellow	Sie
	DL....4	50.04.2130	CQV 13-7	LED, Yellow	Sie
	DL....4	50.04.2130	CQV 13-7	LED, Yellow	Sie
	DLZ...1	73.01.0124	MAN 6660	7-Segments, Red, Brightness "G"	GI
	DLZ...2	73.01.0124	MAN 6660	7-Segments, Red, Brightness "G"	GI
	DLZ...3	73.01.0124	MAN 6660	7-Segments, Red, Brightness "G"	GI
	DLZ...4	73.01.0124	MAN 6660	7-Segments, Red, Brightness "G"	GI
	DLZ...5	73.01.0124	MAN 6660	7-Segments, Red, Brightness "G"	GI
	DLZ...6	73.01.0124	MAN 6660	7-Segments, Red, Brightness "G"	GI
	DLZ...7	73.01.0124	MAN 6660	7-Segments, Red, Brightness "G"	GI
	DLZ...8	73.01.0124	MAN 6660	7-Segments, Red, Brightness "G"	GI
	DLZ...9	73.01.0124	MAN 6660	7-Segments, Red, Brightness "G"	GI
	DLZ..10	73.01.0124	MAN 6660	7-Segments, Red, Brightness "G"	GI
	D.....1	50.04.0125	1N 4448		
	D.....2	50.04.0125	1N 4448		
	P.....1	54.14.2004	Connector	40 contacts, flat cable	
	P.....2	54.14.2001	Connector	10 contacts, flat cable	
	P.....3	54.14.2111	Connector	10 contacts, latch, flat cable	
	Q.....1	50.03.0156	BC337		Sie
	Q.....2	50.03.0156	BC337		Sie
	Q.....3	50.03.0156	BC337		Sie
	Q.....4	50.03.0156	BC337		Sie
	R.....1	57.11.3472	4.7 kOhm	5%	
	R.....2	57.11.3472	4.7 kOhm	5%	
	R.....3	57.11.3472	4.7 kOhm	5%	
	R.....4	57.11.3472	4.7 kOhm	5%	
	R.....5	57.11.3102	1 kOhm	5%	
	R.....6	57.11.3102	1 kOhm	5%	
	S.....0	55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110	
	S.....0	55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110	
	S.....0	55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110	
	S.....1	55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110	
	S.....1	55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110	
	S.....1	55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110	
	S.....2	55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110	
	S.....2	55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110	
	S.....2	55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110	
	S.....2	55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110	
	S.....2	55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110	
	S.....3	55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110	
	S.....3	55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110	
	S.....4	55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110	
	S.....4	55.03.0261	TTL-switch	1 * OC, Rafi Nr. 3.13001.110	

SAL=Solid Aluminium, PETP=Polyester

MANUFACTURER: GI=General Instruments, Sie=Siemens

1.328.212.81 REMOTE CONTROL DISPLAY BOARD VF 89/11/1000

VARISPEED CONVERSION KIT (FOR PAR. REMOTE CONTROL ONLY) 1.328.253.00
VARISPEED CONTROL MODULE 1.328.290.00
- Varispeed Control PCB 1.810.762.83



Frequenz Adjustement:

1. Mechanical Adjustement: Set scale to 000 @ left hand stop of potentiometer R29
2. Nominal output frequency adjustment: Jumper JS1: 3200 Hz @ ●
   9600 Hz @ —
   - Set potentiometer (R29) dial to "500"
   - Adjust nominal output frequency Y-REFEXT with R17 (3200 Hz ± 1 Hz; 9600 Hz ± 3Hz)

Status Indicator DL 1 setting:

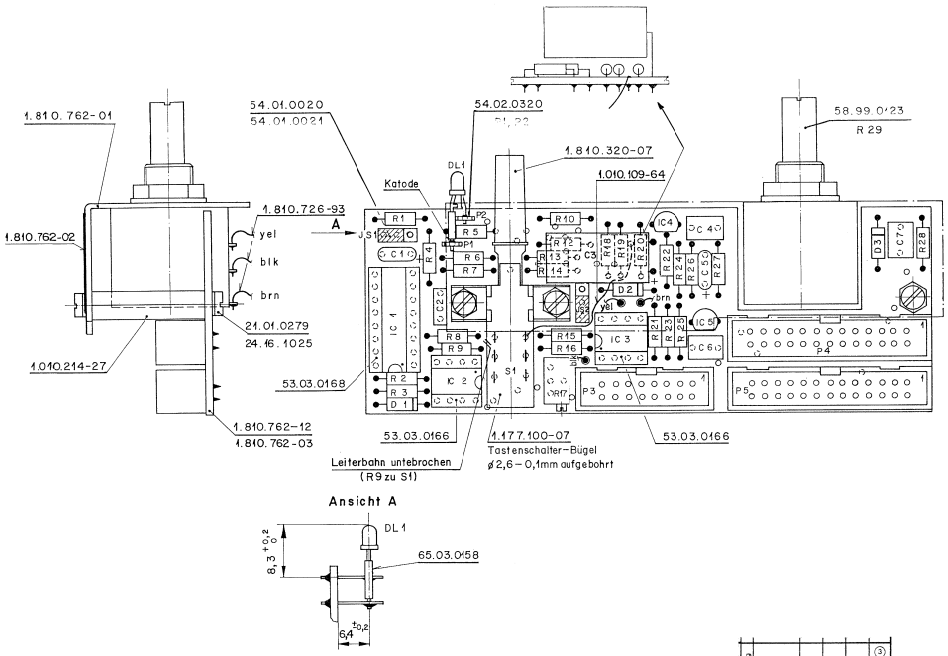
Jumper JS 2: Pos ● : DL1 "on" @ Switch S1 "on" or BR-VRSPD "Low" or B-SYNC "Low"
Pos — : DL1 "on" @ BR-VRSPD "Low" or B-SYNC "Low"

ATTENTION!

This Varispeed Control Unit may be connected to one maschine only.

0 17.09.90 ZB	. .	. .	. .	. .	PAGE 1 OF 1
STUDER	Varispeed Control Board			SC	1.810.762.83

VARISPEED CONVERSION KIT (FOR PAR. REMOTE CONTROL ONLY) 1.328.253.00
VARISPEED CONTROL MODULE 1.328.290.00
- Varispeed Control PCB 1.810.762.83



Ansicht A

Ausgabe	Änderung				
					2
					2
					1
5.10.90					0
Datum	Ges.	Gepr.	Ges.	Index	

Kopie für:

STUDER REGENSDORF ZÜRICH	Benennung: VARISPEED CONTROL BOARD	Nummer: 1.810.762 – 83

Ad	..POS..	...REF.No...	DESCRIPTION			MANUFACTURER
	C.....1	59.26.9109	1 uF	20%,	40V , Sal	Ph
	C.....2	59.99.0220	12 nF	5%,	50V , Cer see note 1	
	C.....3	59.99.1700	1000 uF	6,3V	L < 21mm D < 10mm	
	C.....4	59.06.0334	0.33uF	10%,	63V , Petp	
	C.....5	59.26.5479	4.7 uF	20%,	25V , Sal	Ph
	C.....6	59.06.0334	0.33uF	10%,	63V , Petp	
	C.....7	59.06.5105	1uF	10%,	50V , Petp	
	D.....1	50.04.0125	1N 4448			Ph,Ses,ITT,Fc,Tf
	D.....2	50.04.0122	1N 4001			Mot,GI,Sol
	D.....3	50.04.0125	1N 4448			Ph,Ses,ITT,Fc,Tf
	DL....1	50.04.2129	CQV11-7			Sie
	IC....1	50.11.0108	XR2206CP	SG 2206		Ex
	IC....2	50.05.0227	SN75462P			TI
	IC....3	50.09.0101	LF 353N	TL 072CP		TI,NS,Mot
	IC....4	50.10.0108	LM317LZ			Nat,Mot
	IC....5	50.10.0108	LM317LZ			Nat,Mot
	JS....1	54.01.0020	Pin (3*)	54.01.0021 Bridge (1*) see note 2		
	JS....2	54.01.0020	Pin (3*)	54.01.0021 Bridge (1*) see note 2		
	P.....1	54.02.0320		2,8*0,8		
	P.....2	54.02.0320		2,8*0,8		
	P.....3	54.14.2102		16-contacts	see note 3	
	P.....4	54.14.2003		26-contacts	see note 4	
	P.....5	54.14.2003		26-contacts	see note 4	
	R.....1	57.11.3103	10 kOhm	5%		
	R.....2	57.11.3103	10 kOhm	5%		
	R.....3	57.11.3331	330 Ohm	5%		
	R.....4	57.11.3512	5.1 kOhm	1%		
	R.....5	57.11.3304	300 kOhm	5%		
	R.....6	57.11.3163	16 kOhm	1%		
	R.....7	57.11.3564	560 kOhm	5%		
	R.....8	57.11.3103	10 kOhm	5%		
	R.....9	57.11.3103	10 kOhm	5%		
	R....10	57.11.3122	1.2 kOhm	5%		
	R....11	. .	not used			
	R....12	57.11.3563	56 kOhm	1%		
	R....13	57.11.3203	20 kOhm	1%		
	R....14	57.11.3274	270 kOhm	5%		
	R....15	57.11.3153	15 kOhm	5%		
	R....16	57.11.3622	6.2 kOhm	5%		
	R....17	58.05.0202	2 kOhm	25 turns		
	R....18	57.11.3182	1.8 kOhm	1%		
	R....19	57.11.3273	27 kOhm	5%		
	R....20	57.11.3821	820 Ohm	1%		
	R....21	57.11.3472	4.7 kOhm	1%		
	R....22	57.11.3271	270 Ohm	1%		
	R....23	57.11.3153	15 kOhm	1%		
	R....24	57.11.3271	270 Ohm	5%		
	R....25	57.11.3121	120 Ohm	5%		
	R....26	57.11.3242	2.4 kOhm	1%		
	R....27	57.11.3221	220 Ohm	1%		
	R....28	57.11.3182	1.8 kOhm	5%		
	R....29	58.99.0123	10 kOhm	10 turns		
	S.....1	1.177.100.07	Switch			St

Note 1: 12nF,50V: Centralab Nr. CN 40 C 123 J
Siemens Nr. B 37 983 - J - 5123 - J
Kemet Nr. C 062 S 123 J 5 G 5 CA

Note 2: Contact pin: Berg Nr. 75160-102-36
Philips Nr. 2422 025 89303
Bridge: Berg Nr. 65474-001
AMP Nr. 141767-1
Philips Nr. 2422 024 88003

Note 3: 16-contacts: Siemens Nr. V23535-A2700-A162
Thomas+Betts 501-1627 ES

Note 4: 26-contacts: Yamaichi Nr. FAP-26-08//4
Burndy Nr. BPH 9 B 26 B00 GS

Manufacturer: Ex=Exar, Fc=Fairchild, GI=General Instruments,
ITT=Intermetall, Mot=Motorola, Nat=National(Matsushita)
NS=National Semiconductors, Ph=Philips,
Ses=Sescosem, Sie=Siemens, Sol=Solitron,
St=Studer, Tf=Telefunken, TI=Texas Instrument

1.810.762.83 VARISPEED CONTROL BOARD ZB90/10/0500