

## PRODUCT CONFIGURATION AND SPECIFICATIONS

# JH-110M System Disc Mastering Reproducer

The JH-110M is the first logically designed disc mastering reproducer having the transport microprocessor control lathe functions.

- ★ Totally transformerless electronics
- ★ ¼ and ½ inch master tape recorders
- ★ Head azimuth adjustable without tools
- ★ Head alignment ultra stable
- ★ Electronics, transport and power supply 19" rack mountable
- ★ 3 speed quartz controlled transport—7.5, 15, 30 ips
- ★ NAB/IEC switching provided
- ★ Separate equalization and bias controls for 3 speeds
- ★ External equalization controls
- No relays in transport-completely solid state with high response DC torque motors
- ★ Constant tape tension: ±¼ oz. for all speeds and all reel sizes (max. 14")
- ★ Adjustable fast wind and RTZ speeds for extreme care in handling master tapes

- ★ Variable speed control—6 to 36 ips
- "Paper Basket" and "Hand Spool" edit modes
- ★ Additional optical sensor for automatic lathe spiral/banding function
- DIN or NAB standard head assembly available
- ★ Delay times for any lathe system available (.5, .6 or 1 turn table revolution)
- ★ Remote Motion control available
- The microprocessor based RTZ III/M standard equipment featuring:
  - 4 tape position memories, RTZ function and 20 additional memories for "banding/ spiraling", "expand/echo" and "leadout" functions
  - Up/down real time counter in minutes/ seconds
  - Tape speed indicator in ips Presettable counter
  - Variable profile cabinet optional
- ★ Modular design enhances serviceability



DES	SCRIPTION	MODEL NUMBER
	D DISC TRANSFER SYSTEMS uce only)	
Moi	no for CAPPS system no for NEUMANN system no for SCULLY system	JH-110M-1-C-UM JH-110M-1-N-UM JH-110M-1-S-UM
Ste	reo for CAPPS system reo for NEUMANN system reo for SCULLY system	JH-110M-2-C-UM JH-110M-2-N-UM JH-110M-2-S-UM
OPTION	S FOR JH-110M SYSTEMS	
Lov	v speed transport: 3.75, 7.5, 15 ips.	JH-110M-OPT-1
	l stereo head assembly for 2-track systems only ereo -0.75mm guard band, full track erase)	JH-110M-OPT-2
	mprehensive Service Manual, in addition to copy supplied with machine.	JH-110B-OPT-5
1/2"	format stereo head assemblies mounted in place of the normal 1/4" format reo head assemblies	JH-110M-OPT-7
ACCESS	SORIES FOR ALL JH-110M SYSTEMS	
Var	riable profile cabinet	VP-M
	be transport remote control including controls for MVC, RTZ III (return, reset), indees 35-foot remote cable	JH-110B-R/C
"DI	N-HUB" adaptor with tape platter for maximum 1000m tape pancakes. Set of 2.	JH-110-D/F
ADDITIC	DNAL ELECTRONICS	
2 c	hannels of playback only electronics (drawer not included) for JH-110M	JH-110M-PB/E
ADDITIC	DNAL HEAD ASSEMBLIES	
DIN	ack head assemblies ¼"  I Stereo head assemblies ¼"  ack head assemblies ½"	HA-2-110M HA-DIN-110M HA-2½-110M
TAPE FO	DRMAT CONVERSION KITS	
	Roller guides, set of 14 Roller guides, set of 14	RG-1M RG-2M
HEADS	and the continue bardware not included	
	cement, mounting hardware not included	UD 4 440F
	no playback head ¼"	HP-1-110E
2-tr	ack playback head ¼"  I stereo playback head ¼"	HP-2-110E HP-DIN-110E
DIA	a stereo diavoack nead 74	HP-DIN-110E
	track stereo playback head 1/4"	HP-1/4-110E

1/4" format, low speed (OPT 1) JH-110M Systems

1/2" format, low speed (OPT 1) JH-110M Systems

1/2" format, high speed JH-110M Systems

MODEL NUMBER

JH-110B-S-KIT-AO-4

JH-110B-S-KIT-AP-4

JH-110B-S-KIT-AQ-4

DESCRIPTION

## **OVERALL PERFORMANCE**

## Frequency Response

30 ips, AES	Reproduce 40 Hz - 28 kHz	+75/	- 2dB
15 ips, NAB	30 Hz - 24 kHz	+.75/	- 2dB
7.5 ips, NAB	30 Hz - 20 kHz	+.75/	-1.5 dB

## Signal-to-Noise

Reference to 510 nWb/m

Unwe	ighted, 20 Hz - 20 kHz	
	mono	2TK
30 ips, AES	74	71
15 ips, NAB	73	70
7.5 ips, NAB	71	68
	Weighted, dB(A)	
30 ips, AES	87	84
15 ips, NAB	81	78
7.5 ips, NAB	81	78

## Distortion

#### Electronics

THD:

.1% or less (1kHz at +22dBv)

Overall

THD:

.8% or less (510nW/m, 15 ips)

## **Amplifier Electronics**

Output impedance

120 ohms balanced

Output clipping

+24 dBm

## **TRANSPORT**

## Speeds

Fixed

7.5, 15 and 30 ips

Variable

6 to 36 ips

## Configurations

1/4 inch 1/4 inch Full track

1/4 Inch

2 track

½ inch

2 track

#### Reel sizes

available with NAB A (3, 5 or 7 inch), NAB B ( $10\frac{1}{2}$  or 14 inch), DIN 1000m ( $11\frac{1}{2}$  inch)

### Tension

51/2 oz.  $\pm 1/4$  at all play speeds, beginning to end of reel

## Long term speed stability

better than .02%

#### Wow Flutter

30 ips < .02 DIN 45507 weighted 15 ips < .04 DIN 45507 weighted 7.5 ips < .06 DIN 45507 weighted

## Start time

to 0.1% DIN 45507 flutter, 101/2" reels

30 ips	900 msec
15 ips	500 msec
7.5 ips	500 msec

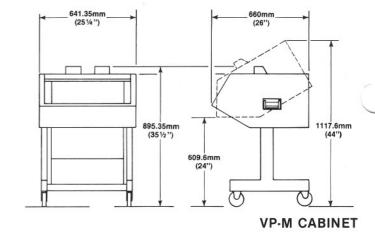
#### Rewind time

2400 ft. 110 seconds 4800 ft. 170 seconds

## SYSTEM WEIGHT

transport unmounted	38 lbs.
electronic drawer, dual channel	19 lbs.
variable profile cabinet	73 lbs.

## SYSTEM DIMENSIONS



Specifications subject to change as innovative advancements in technology are incorporated.



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