

**Model Shown:**  
JH-24-24 with standard system remote control and optional Auto-Locator III mounted to JH-20 Accessory Stand

## PRODUCT CONFIGURATION AND SPECIFICATIONS

- ★ One or two inch multitrack tape recorder
- ★ 8, 16 or 24 track models available
- ★ Quick change heads for fast one/two inch conversion
- ★ Modular construction
- ★ Automatic switching for overdubbing
- ★ Full track erasure
- ★ QUIOR (QUIet Initiation Of Record) circuitry
- ★ Servo controlled tape transport
- ★ Phase locked capstan drive system
- ★ Manual Velocity Control
- ★ Torque Limit switching to facilitate use of different reel sizes and tape thicknesses
- ★ Accommodates up to 14 inch dia. reels
- ★ Transport and Electronics remote controls provided as standard equipment.
- ★ 2 speed, fixed crystal reference/ variable speed/ external reference
- ★ Totally transformerless electronics
- ★ Separate preamplifiers for Repro and Cue
- ★ Separate Repro and Cue equalization
- ★ Phase linearity achieved throughout the audio path
- ★ NAB/IEC operation selectable
- ★ Fixed Cue and Bias traps, no alignment required
- ★ Spot erasure feature
- ★ Multiway input/output connectors
- ★ Plug-in compatible with JH-45 AutoLock
- ★ Optional AutoLocator III available
- ★ Microprocessor based
- ★ 10 Memories
- ★ Built-in TVI (Tape Velocity Indicator) reading in ips or 1/4 semitones



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1400 West Commercial Blvd., Ft. Lauderdale, Florida 33309 /Phone (305) 491-0825/TLX 514362

DESCRIPTION	MODEL NUMBER
<b>MULTITRACK RECORDING SYSTEMS</b>	
equipped with	
8 channel electronics; cabinet wired for 8 channels	JH-24-8
8 channel electronics; cabinet wired for 16 channels	JH-24-16/8
16 channel electronics; cabinet wired for 16 channels	JH-24-16
16 channel electronics; cabinet wired for 24 channels	JH-24-24/16
24 channel electronics; cabinet wired for 24 channels	JH-24-24
<b>STANDARD OPTIONS</b>	
Solder lug type Tuchel® mating connectors for inputs and outputs	
for JH-24-8	JH-24-OPT-1-8
for JH-24-16	JH-24-OPT-1-16
for JH-24-24	JH-24-OPT-1-24
<b>UPGRADE KITS FOR PRE-WIRED SYSTEMS</b>	
To upgrade JH-24-16/8 to JH-24-16 (all parts, including head assembly)	JH-24-U-KIT-1
To upgrade JH-24-24/16 to JH-24-24 (all parts, including head assembly)	JH-24-U-KIT-2
<b>UPGRADE KITS FOR STANDARD SYSTEMS</b>	
To upgrade JH-24-8 to JH-24-16 (all parts, including head assembly)	JH-24-U-KIT-3
To upgrade JH-24-16 to JH-24-24 (all parts, including head assembly)	JH-24-U-KIT-4
<b>ACCESSORIES</b>	
<b>AutoLocator III</b> , bi-directional tape position locator and real time counter with 10 memories, shuttle function and tape velocity indicator. Readouts in minutes/seconds, ips, and ¼ semitones. Provided with 35-foot Remote Cable.	A/L III
System Remote Control/ <b>AutoLocator III</b> mounting kit, including base plate	JH-16-SRC/MK
Accessory stand capable of holding a System Remote Control with <b>AutoLocator III</b> or <b>AutoLock</b> , including standard mounting bracket	JH-20
Additional bracket to hold a maximum of three JH-110 remote controls on JH-20	JH-20-3
Accessory stand capable of holding, side by side, one <b>AutoLocator III</b> and one <b>Autolock</b> , or two <b>AutoLocator IIIs</b> , or two <b>Autolocks</b> , including standard mounting bracket	JH-21
Phase Meter in remote style housing including power supply	JH-22
<b>AutoLock</b> , a SMPTE/EBU generator/reader/synchronizer	JH-45
Universal Adapter, to adapt the JH-45 AutoLock for use with selected non-MCI masters.	JH-48
High Speed SMPTE/EBU Decoder for JH-48	JH-48-OPT-1
NTSC/PAL generator synchronizer for JH-48	JH-48-OPT-2
Looping function for JH-48	JH-48-OPT-3
Transport Control Decoder for JH-48 (Must be used with JH-48-OPT-1)	JH-48-OPT-4
<b>HEAD ASSEMBLIES</b>	
8 track head assembly complete, 1 inch	HA-24-8
16 track head assembly complete, 2 inch	HA-24-16
24 track head assembly complete, 2 inch	HA-24-24
<b>MECHANICAL TRANSPORT CONVERSION KITS</b>	
1 inch tape lifter pin, tachometer and guide kit (to convert 2 inch transport to 1 inch tape operation in combination with the appropriate head assembly, which is not included)	LTG-1

DESCRIPTION	MODEL NUMBER
2 inch tape lifter pin, tachometer and guide kit (to convert 1 inch transport to 2 inch tape operation in combination with the appropriate head assembly, which is not included)	LTG-2

#### REMOTE CONTROL CABLE LONGER THAN 35 FEET

(only when ordered together with basic system)

Remote Control, **AutoLocator III** or **AutoLock** cable, longer than 35 feet, not exceeding total length of 60 feet.

#### NOTE:

JH-24- 8	= total 2 cables
JH-24-16	= total 3 cables
JH-24-24	= total 4 cables
A/L III	= total 1 cable
AutoLock	= total 3 cables

#### SYSTEMS SPARE PARTS KITS

Most used "active components" kit	JH-24-S-KIT-1
Minimum "in-house" repair kit	JH-24-S-KIT-2
Emergency "in-field" repair kit, including one set of control and amplifier cards	JH-24-S-KIT-3
"Heavy support" kit	JH-24-S-KIT-4
Optional "heavy support" kit	JH-24-S-KIT-5

NOTE: For detailed list of contents of S-KITs see JH-24 manual.

## OVERALL PERFORMANCE

### Frequency Response

Record/Reproduce		
30 ips, AES	36 Hz - 26 kHz	+1.5/-3 dB
15 ips, NAB	30 Hz - 26 kHz	+1.5/-2 dB

Record/Sync		
30ips, AES	40Hz - 16kHz	± 0.5dB
15ips, NAB	50Hz - 16kHz	± 1dB

### Signal-to-Noise

Record/Reproduce, reference to 510 nWb/m

Unweighted, 20 Hz - 20 kHz		
	8/16 track	24 track
30 ips, AES	-67 dB	-64 dB
15 ips, NAB	-63 dB	-60 dB

Weighted, dB(A)		
30 ips, AES	-72 dB	-69 dB
15 ips, NAB	-68 dB	-65 dB

### Distortion

Harmonic distortion, 510 nWb/m, 1 kHz fundamental

3rd harmonic:	30 ips, AES	<.35%
	15 ips, NAB	<.50%

2nd harmonic:	30 ips, AES	<.10%
	15 ips, NAB	<.10%

3% 3rd harmonic:	30 ips, AES	1040 nWb/m
fluxivity level	15 ips, NAB	1020 nWb/m

Distortion is primarily a function of tape formulation and bias setting used. All specifications are typical and may vary.

### Bias Frequency

210 kHz

### Erase Frequency

105kHz

### Depth of Erasure

At 1 kHz better than 80 dB

### Amplifier Electronics

Input impedance	10k ohms balanced
Output impedance	120 ohms balanced
Output clipping	+26 dBm

## TRANSPORT

### Speeds

Fixed	15 and 30 ips
Variable	±20% around fixed speeds

## Configurations

1 inch	8 track
2 inch	16 track
2 inch	24 track

## Reel sizes

7½, 10 and 14 inch  
NAB hubs

## Tension

8 oz. ±¼ at all play speeds beginning to end of reel,  
measured at supply reel.

## Long term speed stability

better than .02%

## Wow Flutter

15ips less than .04% DIN 45507 weighted  
30ips less than .03% DIN 45507 weighted

## Stop time from fast wind

4 seconds, 10½ inch reel

## Start time

to .1% DIN 45507 flutter, 14" reels

30 ips	1200 msec
15 ips	600 msec

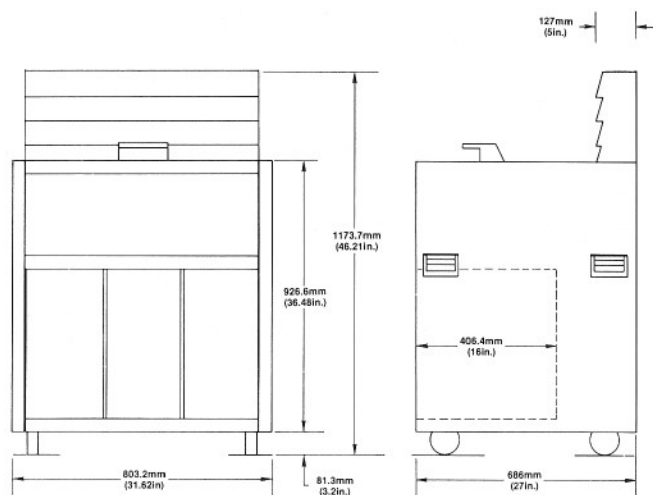
## Rewind time

2400 ft.	85 seconds
4800 ft.	140 seconds

## SYSTEM WEIGHT

JH-24-8	410 lbs.
JH-24-16	474 lbs.
JH-24-24	538 lbs.

## SYSTEM DIMENSIONS



Specifications subject to change as innovative advancements in technology are incorporated



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