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TEAC®



SERVICE MANUAL

C-3X

Stereo Cassette Deck

1 SPECIFICATIONS AND SERVICE DATA

NOTES:

1. Improvements may result in changes in specifications and service data.
2. 0 dB is referenced to 0.775 V in this manual unless otherwise specified.
3. All the electrical numeral values are for STANDARD speed unless otherwise specified.

SPECIFICATIONS

Track System 4-track, 2-channel stereo
Heads 3: Erase, record and playback
Type of Tape Cassette tape, C-60 and C-90 (Philips type)
Tape Speed 4.75 cm/s (1-7/8 ips), 9.5 cm/s (3-3/4 ips)
Input (level and impedance)
MIC: Specified input level: -57 dB (1.09 mV)/10k ohms
 Minimum input level: -67 dB (346 μ V)
LINE IN: Specified input level: -9 dB (275 mV)/50k ohms
 Minimum input level: -19 dB (86.9 mV)
Output (level and impedance)
OUTPUT: Maximum output level: -2.5 dB (581 mV)/50k ohms
 Specified output level: -5 dB (436 mV)
PHONES: Specified output level: -15.8 dB (126 mV)/8 ohms

Equalization

	HIGH	STANDARD
METAL	3180 μ s + 35 μ s	3180 μ s + 70 μ s
Co(CrO ₂)	3180 μ s + 35 μ s	3180 μ s + 70 μ s
NORMAL	3180 μ s + 50 μ s	3180 μ s + 120 μ s

Head Configuration

1/2-track, 1-channel erase head
 1/4-track, 2-channel record head and playback head in a single housing

Motors 1 DC servo capstan motor
 1 DC reel motor

Bias Frequency 100 kHz \pm 5 kHz

Operation Position Horizontal

Power Requirements

100/117/220/240 V AC, 50/60 Hz, 41 W (General export model)
 117 V AC, 60 Hz, 41 W (U.S.A./Canada model)
 220 V AC, 50 Hz, 41 W (Europe model)
 240 V AC, 50 Hz, 41 W (U.K./Australia model)

Weight 9 kg (19-3/16 lbs.) net

Dimensions See Fig. 3-2

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SERVICE DATA

MECHANICAL

Tape Speed Deviation 3,000 Hz \pm 45 Hz
Tape Speed Drift 30 Hz
Wow and Flutter

	HIGH	STANDARD
Playback	0.065% (WRMS)	0.08% (WRMS)
Record/playback	0.18% (RMS)	0.25% (RMS)

Pinch Roller Pressure 390 g to 490 g (13.8 oz to 17.3 oz.)
Reel Torque (at STANDARD speed)
 Take-up: 45 to 65 g-cm (0.625 to 0.903 oz-inch)
 Supply: 3 to 8 g-cm (0.0417 to 0.111 oz-inch)
 F.F. & REW: 90 to 160 g-cm (1.25 to 2.22 oz-inch)
Fast Winding Time
 90 seconds for MTT-501 (C-60)

ELECTRICAL

Frequency Response

See Figs. 5-9 to 5-13.

Signal-to-noise Ratio

Playback	Better than:	
	HIGH	STANDARD
METAL, Co(CrO ₂)	55 dB	52 dB
NORMAL	53 dB	48 dB

Overall	Better than:	
	HIGH	STANDARD
METAL, Co(CrO ₂)	49 dB	48 dB
NORMAL	46 dB	45 dB

S/N is improved by 5 dB at 1 kHz and 10 dB above 5 kHz when Dolby NR* is used.

Erase Efficiency 65 dB min. at 1 kHz (measured with input 10 dB higher than the specified input level)

Channel Separation 35 dB min. at 1 kHz

Adjacent Track Crosstalk 40 dB min. at 125 Hz

Total Harmonic Distortion 2.0% or less with NORMAL, Co(CrO₂) and METAL tapes

CAUTION

△ Parts marked with this sign are safety critical components. They must always be replaced with identical components - refer to the TEAC Parts List and ensure exact replacement.

