

STEREO CASSETTE DECK WITH DOLBY NR SYSTEM

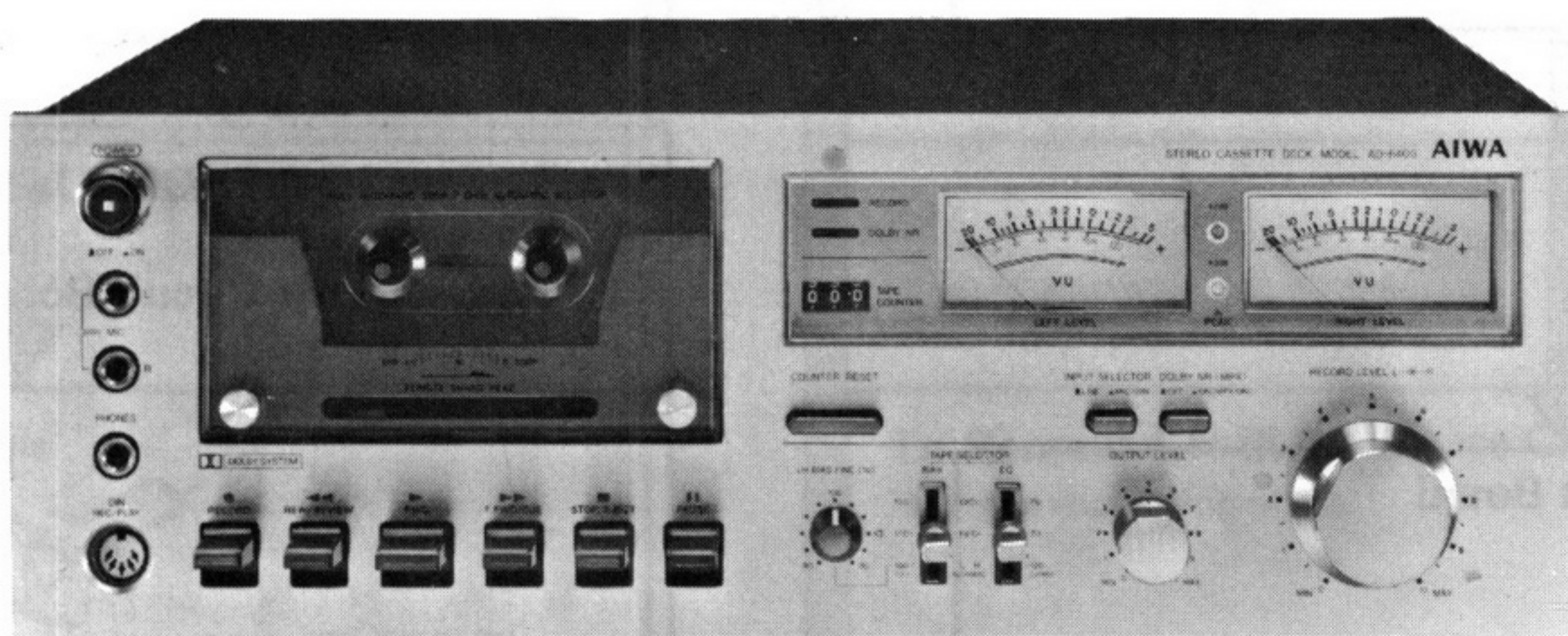
MODEL AD-6400^{EE,UK}

AIWA[®]

[SERVICE MANUAL]



Set using ISO screws



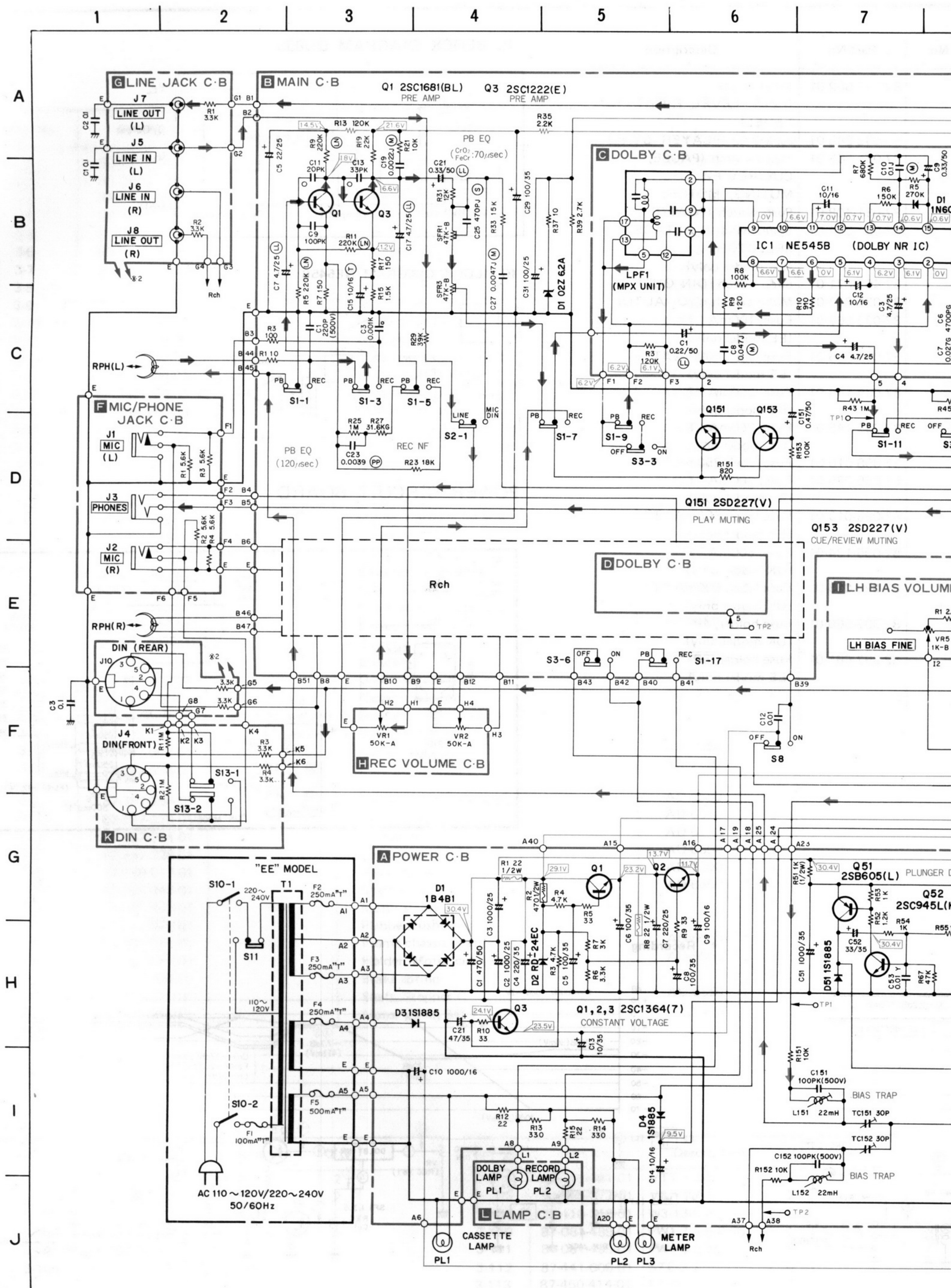
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SPECIFICATIONS

Semiconductors:	3 IC's, 43 transistors, 23 diodes & 2 LED's	Cross talk:	More than 65 dB (at 1 kHz 0 VU)
Power source:	AD-6400EE: AC 110~120 V/220~240 V (switchable) 50/60 Hz AD-6400UK: AC 120 V/240 V (switchable) 50/60 Hz	Erasing ratio:	More than 60 dB (400 Hz +10 VU)
Power consumption:	10 W	Bias frequency:	100 kHz $\pm$ 10 kHz
Dimensions:	420(W) x 150(H) x 330(D) mm	Frequency response:	LH tape, 20~15 kHz (−10 dB) 30~13 kHz ($\pm$ 3 dB)
Weight:	7.5 kg		Fe-Cr tape, 20~17 kHz (−10 dB) 30~15 kHz ($\pm$ 3 dB)
Track system:	4-track 2-channel stereo		CrO ₂ tape, 20~17 kHz (−10 dB) 30~15 kHz ($\pm$ 3 dB)
Tape speed:	4.76 cm/sec. $\pm$ 1%	Motor:	(at Dolby off, Rec./pb)
Wow & flutter:	0.1% (According to DIN 45 500 Blatt 8)	Head:	38 pulse FG servo motor
Automatic shut-off action time:	4 $\pm$ 1 sec.	Input:	Ferrite guard head (FGH)
Pinch roller pressure:	375 $\pm$ 30 g		MIC: Max. input sensitivity 0.3mV (200 Ω ~ 10 k Ω suitable)
Take-up torque:	50 $\pm$ 10 g-cm		LINE IN: Max. input sensitivity 50 mV (More than 50 k Ω)
FF & rewind torque:	125 $\pm$ 25 g-cm		DIN: Max. input sensitivity 0.1 mV/k Ω (3 k Ω)
FF & rewind time:	Less than 95 sec. (w/C-60 cassette)		LINE OUT: Standard output level 0.775 V (0 VU) Optimum load im- pedance more than 50 k Ω
Playback output:	1.05 $\pm$ 0.05 V (LINE/DIN)		DIN: Standard output level 0.775 V (0 VU) Optimum load impedance more than 50 k Ω
Playback noise:	Less than 4.5 mV (LH, DOLBY ON)		PHONES: 3.4 mV (+3 VU) Load impedance 8 Ω
Rec./pb output:	Less than 3.0 mV (Fe-Cr, CrO ₂ , DOLBY ON)		
Rec./pb distortion:	0 VU $\pm$ 0.5 dB (LINE/DIN)		
Rec./pb S/N:	Less than 2.0% (LH)		
Channel separation:	Less than 1.5% (Fe-Cr)		
	Less than 3.0% (CrO ₂)		
	More than 43/45 dB (LH, DOLBY OFF/ON)		
	More than 45/48 dB (Fe-Cr, DOLBY OFF/ON)		
	More than 45/48 dB (CrO ₂ , DOLBY OFF/ON)		
	More than 28 dB (at 1 kHz 0 VU)		

- Specifications and external appearance are subject to change without notice due to product improvement.
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SCHEMATIC DIAGRAM







- 1) — B(+) power supply
- 2) ➡ Signal path
➡ Rec. path
- 3) The voltage is the reference value measured with a tester (20 k-ohms/V DC) when there are no signals.
An asterisk (*) indicates that the value was measured with a vacuum-tube voltmeter during recording.
- 4) Resistors with no designation have a rated power of ¼W and a tolerance of ±5%.
- 5) Capacitors with no designation have a dielectric strength of less than 50WV.
- 6) Ceramic capacitor symbols:
○⊥⊥ For temperature compensation (SL)
—⊥⊥ High dielectric constant system (YY)
—⊥⊥ High dielectric constant system (YP, YZ)
- 7) The only capacitor tolerances indicated are ±2% (G), ±5% (J) and ±10% (K).
- 8) Explanation of symbols
(M) Mylar capacitor
(S) Styrol capacitor
(T) Tantalum capacitor
(LL) Low-leakage capacitor
(PP) Polypropylene film capacitor
(LN) Low-noise resistor
- 9) Switches are set to the following positions

S1—1~10	REC/PB	(PB)
S2—1~2	INPUT SELECTOR	(LINE)
S3—1~6	DOLBY NR	(OFF)
S4—1~4	TAPE SELECTOR—BIAS	(LH)
S5—1~4	TAPE SELECTOR—EQ	(LH)
S6—1~6	PLAY MUTING	(STOP)
S7	PAUSE	(OFF)
S8	CUE/REVIEW MUTING	(OFF)
S9	MOTOR	(OFF)
S10	POWER	(OFF)
S11	VOLTAGE SELECTOR	
S12	DIN OUT	(FIX)
S13	DIN FRONT/REAR	(REAR)
S14	CrO ₂ AUTO	(OFF)

This schematic diagram is subject to change without notice in the interests of improved performance.

