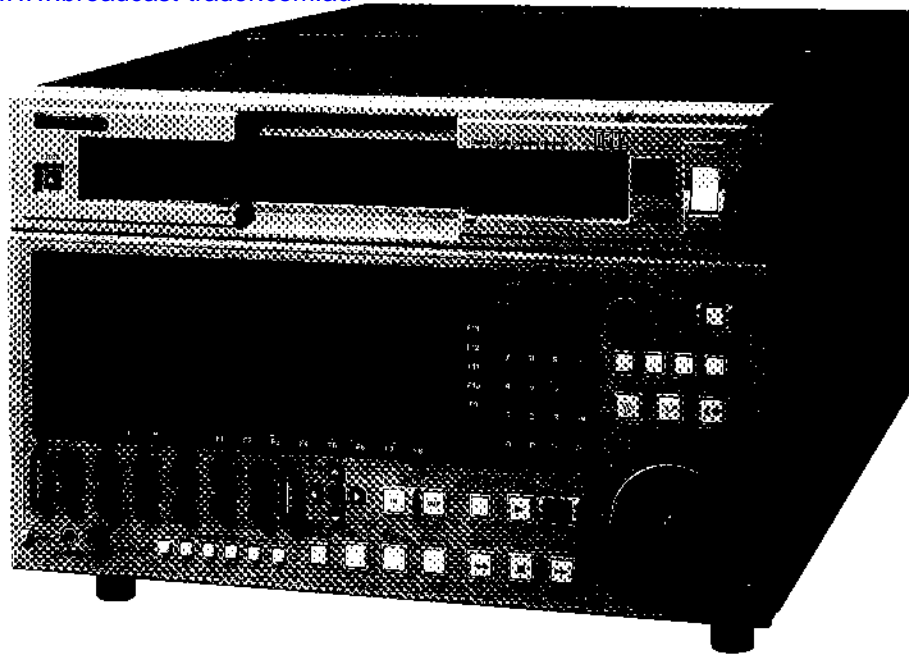


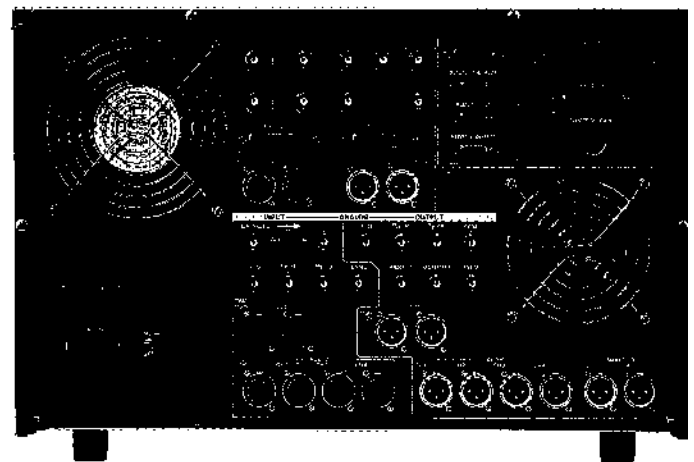
# AJ-D580E/B D-5 1/2" Component Studio VTR



Downloaded from: [www.broadcaster.com.au](http://www.broadcaster.com.au)



- Non-Compressed 10-bit 4:2:2 Component
  - D-3 Playback Capability (with optional AJ-PB35H)
  - Maximum 124-minutes of recording on one 1/2" cassette
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- Auto-Tracking allows noiseless Still/Slow Playback (-1x to +2x normal speed)
  - Confidence Playback
  - Easy channel condition monitoring
  - Built-in Internal Test Signal Generator
  - Direct-Access Control Panel provides immediate access to main operation.
  - Pre-Read Editing (Read-before-write)
  - 4-Channel PCM Audio
  - Digital Component I/O Capability (Serial/Parallel)
  - Digital Composite Output Capability (Serial/Parallel) (with Optional AJ-MK20)
  - Analogue Composite Output Capability (with Optional AJ-MK11, AJ-MK20)
  - Analogue Component I/O Capability (with Optional AJ-MK11)
  - AES/EBU Digital Audio I/O Capability
  - Analogue Audio I/O Capability (with Optional AJ-MK30)
  - RS-422A 9-pin serial, 50-pin parallel and RS-232C interface
  - Detachable Control Panel
  - Self-Diagnostic System
  - Analogue Composite Input Capability (with optional AJ-MK11, AJ-MK40)



Rear

## Optional Accessories for D-5 VTR

**AJ-PB35H**  
D-3 Playback Adaptor

**AJ-MK20**  
Interface Board for Composite Video Output

**AJ-MK40**  
Interface Board for Analogue Composite Video Input

**AJ-MK11**  
Interface Board for Analogue Component Video Input/Output

**AJ-MK30**  
Interface Board for Analogue Audio Input/Output

**SHL-064H SRVS**  
SRAM Memory Card for set up

# AJ-D580E/B

## General

Power Requirement:	100 to 120V or 220 to 240V, AC $\pm 10\%$ , switchable
Power Consumption:	600W Maximum
Operating Temperature:	5°C to 40°C
Operating Humidity:	10% to 90% (No-condensing)
Weight:	50 kg
Dimensions (W x H x D):	437 x 291 x 653 mm
Recording Format:	D-5
Recording Track:	Digital Video Cue Audio: 1 track, Digital Audio: 4 ch, Linear Time Code: 1 track, Control: 1 track
Tape Speed:	167.228 mm/sec.
Recording Time:	Max. 124 min. with AJ-D5C124LP Max. 63 min. with AJ-D5C63MP Max. 23 min. with AJ-D5C23SP
Cassette Type:	1/2" Metal Particle (L/W/S)
FF/REW Time:	Within 195 sec. using AJ-D5C124LP Within 115 sec. using AJ-D5C63MP Within 65 sec. using AJ-D5C23SP
Edit Accuracy:	0 frame (with TC)
Servo Lock Time:	Within 1 second (Framing/Standby ON)
Tape Timer Accuracy:	$\pm 1$ frame (with continuous CTL signal)
Auto Tracking Range:	-1 to +2 x Normal Speed

## Video Performance (13.5 MHz 10 bit Sampling)

Sampling Frequency:	Y: 13.5MHz, C (P <sub>B</sub> , P <sub>R</sub> ): 6.75MHz
Quantization:	10 bits/sample (10 bit CCIR 601)
Video Bandwidth:	Y: 25Hz to 5.75MHz $\pm 0.5$ dB C (P <sub>B</sub> , P <sub>R</sub> ): 25Hz to 2.75MHz, $\pm 0.5$ dB
S/N Ratio:	Better than 60dB
K Factor:	Less than 1% (2T Pulse)
Input Level Adjustable Range:	Y, P <sub>B</sub> , P <sub>R</sub> : $\pm 3$ dB (Analogue Input Only)
Output Level Adjustable Range:	Y, P <sub>B</sub> , P <sub>R</sub> : $\infty$ to +3dB Black Level: $\pm 100$ mV Video phase: $\pm 216$ step (148 nsec/step) Component H Phase: $\pm 432$ step (74 nsec/step)

## Video Performance (18 MHz 8 bit Sampling)

Sampling Frequency:	Y: 18MHz, C (P <sub>B</sub> , P <sub>R</sub> ): 9MHz 8 bits/sample
Video Bandwidth:	Y: 25Hz to 7.67MHz $\pm 0.5$ dB C (P <sub>B</sub> , P <sub>R</sub> ): 25Hz to 3.67MHz, $\pm 0.5$ dB
S/N Ratio:	Better than 56dB
K Factor:	Less than 1% (2T Pulse)
Output Level adjustable Range:	Y, P <sub>B</sub> , P <sub>R</sub> : $\infty$ to +3dB Black Level: $\pm 100$ mV Video Phase: $\pm 288$ steps (148 nsec./step) Component H Phase: $\pm 576$ steps (74 nsec./step)

## Digital Audio

Sampling Frequency:	48kHz
Quantization:	20 bits/sample
Frequency Response:	20Hz to 20kHz $\pm 0.5$ dB
Dynamic Range:	More than 100dB (at 1kHz, A weighted)
Distortion:	Less than 0.03%
Cross Talk:	Less than -80dB (at 1kHz, between any 2 channels)
Wow & Flutter:	Below measurable limit
Headroom:	18dB
Operating Level:	+8/+4/0/-20dB switchable (Line IN/OUT)
Emphasis:	T1=50 $\mu$ sec./T2=15 $\mu$ sec. (On/Off selectable)
Input/Output Gain Range:	$\infty$ to +12dB

## Cue Audio

Frequency Response:	100Hz to 12kHz $\pm 3$ dB
S/N Ratio:	More than 44dB
Distortion:	Less than 2% (at 1kHz, standard level)
Wow & Flutter:	Less than 0.1%
Operating Level:	Line In: +8/+4/0/-20/(-60)dB switchable ( ): Input only Line Out: +8/+4/0/-20dB switchable
Input/Output Gain Range:	$\infty$ to +12dB

## Input/Output Signal

Video Input:	
Analogue Component:	Y, P <sub>B</sub> , P <sub>R</sub> , G, B switchable Y (with sync): 1.0Vp-p, 75 $\Omega$ , P <sub>B</sub> , P <sub>R</sub> : 0.7Vp-p, 75 $\Omega$ BNC x 4 (with composite sync) EBU Tech.3246-E, 25-pin x 1 EBU Tech.3267-E, BNC x 1, active through out
Parallel Digital Component:	
Serial Digital Component:	
Reference:	
Analogue Composite:	BNC x 1 loop-through with 75 $\Omega$ On/Off
Video Output:	
Analogue Component:	Y, P <sub>B</sub> , P <sub>R</sub> , G, B switchable Y (with sync): 1.0Vp-p, 75 $\Omega$ , P <sub>B</sub> , P <sub>R</sub> : 0.7Vp-p, 75 $\Omega$ BNC x 4
Parallel Digital:	
Component/Composite:	EBU Tech.3246-E/3267-E
Serial Digital:	25-pin x 1 (switchable)
Component/Composite:	EBU Tech.3267-E switchable, BNC x 3 (switchable)
Analogue Composite Out:	BNC x 1 (VBS/VB)
Analogue Monitor Out:	BNC x 1 (with TC Display)
Digital Monitor Out:	Serial Digital Component EBU Tech.3267-E, BNC x 2 (with TC Display)
Audio Input:	
Analogue (CH1, 2, 3, 4):	Max. 28dBu 150 $\Omega$ /600 $\Omega$ /high impedance switchable, XLR x 4 AES/EBU format, XLR x 2
Digital (CH1/2, CH3/4):	EBU Tech.3246-E, 25-pin x 1
Parallel Digital (CH1, 2, 3, 4):	EBU Tech.3267-E, BNC x 1
Serial Digital (CH1, 2, 3, 4):	Max. 18dBm 150 $\Omega$ /600 $\Omega$ /high impedance switchable, XLR x 1
Cue:	
Audio Output:	
Analogue (CH1, 2, 3, 4):	Max. 28dBu low impedance, XLR x 4
Digital (CH1/2, CH3/4):	AES/EBU format, XLR x 2
Parallel Digital (CH1, 2, 3, 4):	EBU Tech.3246-E, 25-pin x 1
Serial Digital (CH1, 2, 3, 4):	EBU Tech.3267-E, BNC x 3
Cue:	Max. 18dBu low impedance, XLR x 1
Monitor L/R:	Max. 24dBu low impedance, XLR x 1
Headphones:	Variable level control by VR, MG
Others:	
WFM Out:	Input: Video (Y/G, P <sub>B</sub> /B, P <sub>R</sub> /R) Output: Video (Y/G, P <sub>B</sub> /B, P <sub>R</sub> /R, Composite, Monitor) RF ENV (CH 0/1/2/3), RF EYE (CH 0/1/2/3), CTL (R/P, CONF), TC switchable, BNC x 1
Time Code	
Input:	2.4Vp-p $\pm$ 1.4Vp-p, 10k $\Omega$ , balanced, XLR x 1
Output:	2.4Vp-p, low impedance, balanced, XLR x 1
Remote	
Remote-in:	For 9-pin RS-422A interface
Remote-out:	For 9-pin RS-422A interface
Remote-in/out:	For 9-pin RS-422A interface
RS-232C:	For 25-pin RS-232C interface
Parallel I/O:	For 50-pin parallel communication
V/A Control:	For 15-pin video and audio remote control
Control Panel:	For 20-pin front control panel interface