

(U:NTSC /E:PAL) Features

- 50 Mbps, 8-bit, 4:2:2 D-9 recording/playback
- Two independently editable 16-bit, 48 kHz PCM audio channels
- Adjustable audio level
- Audio V-fade function
- Chroma filter to improve analog performance
- Optional serial digital video I/O with two channel embedded audio
- Built-in pre-read for layering and two machine A/B roll
- · Built-in pre-read window tolerance range of 5H
- · 2-hour recording time with DS-124 cassette
- Assemble/insert editing with appropriate editing controller
- · Frame-by-frame editing
- Audible PCM sound in slow motion for precise editing
- +-1/3 variable speed playback (field/frame selectable)
- Jog/shuttle control
- Analog I/O: Composite, component (Y, R-Y, B-Y)
- · Balanced 2 channel audio monitor output
- Remote TBC adjustment via 15-pin D-sub connector
- RS-422A standard control
- RS-232C serial port for standard control and diagnostics
- Viterbi circuit to improve the error rate
- . LTC time code with balanced I/O
- Instantaneous-lock function
- Rugged die-cast chassis using ceramic tape guide rollers and sapphire flanges for long life
- Center rotating head design for long head life
- · High speed auto tracking



This shows U-model.

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### **Optional accessories**

- SA-D92U 2 channel embedded audio SDI I/O board
- SA-K67U rack mount



**Specifications** 

# [GENERAL]

Format:	D-9	
Tape:	1/2-inch metal particle	
Power requirement:	AC 120 V, 60 Hz (BR-D860U)/AC 220 to 240 V, 50/60 Hz (BR-D860E)	
Power consumption:	140 W	
Dimensions (WHD):	429 x 189 x 567 mm (16-15/16" x 7-1/2" x 22-3/8")	
Weight:	Lighter than 23 kg (50.7 lbs.)	
Temperature	Operating: 5 degrees to 40 degrees (41 degreesF to 104 degreesF) Storage: -20 degrees to 60 degrees (-4 degreesF to 140 degreesF)	
Humidity:	30% to 80%	
Tape speed:	57.737 mm/s	
Recording time:	124 minutes (using DS-124 tape)	
Picture search:	+-32 times with visible color picture (forward & reverse)	
FF/REW time:	Approx. 3 minutes (with DS-104 tape)	
Slow motion:	+-1/3 times with full picture quality (requires remote control)	
Remote control:	RS-422A / RS-232C	
Remote diagnosis:	Via RS-232C (list capabilities)	
Rotation speed:	4500 rpm	
Tracks:	2 audio cue, 1 control, 10 tracks video/audio per frame (NTSC), 12 tracks (PAL)	
Track pitch:	20 um	
Head drum:	62 mm (same as S-VHS)	

Sampling:	4:2:2, 8-bit, Y: 13.5 MHz R-Y/B-Y: 6.75 MHz
Compression:	3.3:1 DCT based intraframe coding
Data rate:	50 Mbps
Frequency response (SDI in, analog out):	Y:0 to 5.75 MHz, +0.5/-2.0 dB (analog out) R-Y/B-Y: 0 to 2 MHz, +-1.0 dB
S/N (SDI in, analog out):	55 dB
K factor:	2%
Pre-read window:	5H
SDI I/O (unbalanced):	Option w/embedded audio
Analog I/O (75 ohms, unbalanced):	Composite: 1 Vp-p Y/C:Not available Component:Y: 1 Vp-p R-Y/B-Y: 0.7 Vp-p Reference: 0.45 Vp-p (loop)

## [VIDEO CONTROL ADJUSTMENT RANGE]

System sync phase:	+-3 us or more	
Subcarrier phase:	360 degrees or more	
Video phase:	+-1 us or more	
Video level:	+-3 dB or more	
Chroma level:	+-3 dB or more	
Chroma phase:	+-30 degrees or more	
Setup level:	0 mV or less to 100 mV or more	

## [AUDIO]

System:	2 ch PCM, 48 kHz, 16-bit
Frequency response:	20 Hz to 20 kHz +1/-1.5 dB
Dynamic range:	Less than 85 dB (at 1 kHz)
Distortion ratio:	Less than 0.1% (1 kHz at operation level)
Crosstalk:	Less than 75 dB (at 1 kHz)
Headroom:	20 dB
Emphasis:	Automatically switching in play
Wow and flutter:	Below measurable level
SDI I/O:	Option(embedded)
Analog input:	Line: -6/+4 dB high impedance balanced
Analog output:	Line: -6/+4 dB low impedance balanced
Monitor:	-6 dB low impedance balanced
Headphones:	Infinity to -14 dBs, 8 ohms