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# DA-MAX+ Comprehensive Breakout Box Audio/Video Digital Format Converter



## \$1795

With Composite,  
Component, S-Video,  
Balanced and  
Unbalanced Audio,  
RS-422, SDI, AES/EBU,  
and FireWire/1394  
Connections  
Cables Are Extra

### **DA-MAX+ Bridges The Gap Between Analog and Digital Audio/Video**

DA-MAX+ is format converter that was designed to bridge the gap between analog and digital audio/video formats supporting input and output from all major formats. This low-cost, rack-mountable box features analog video and audio I/O, digital video (SDI) and digital audio (AES/EBU) support as well as standard DV over 1394/FireWire. Unique features include audio/video over FireWire, tape deck control including time-code, powered 6-port FireWire hub. Select the desired input - all analog outputs are simultaneously active.

**Multi-Format Converter:** The analog video decoder, converts CVBS (BNC), S-Video (4-pin DIN) or Component (BNC x 3) analog video input into an 8-bit digital video stream. The video decoder features two 10-Bit A/D converters and provides genlock capability via the CVBS (composite) video input. The complimentary 10-bit analog video encoder converts the digital video stream to CVBS (BNC), S-Video (4-pin DIN) and Component (BNC x 3) video outputs. The digital I/O option adds 270 MBit SMPTE 259M SDI capabilities. This digital video I/O makes possible conversions to and from DV to SDI, composite, S-Video, and component video to and from SDI. SDI connection includes only video and not embedded audio information.

DA-MAX+ processes analog audio via a high-resolution two-channel (stereo) 20-bit audio CODEC. The audio CODEC is fed by either balanced (XLR) or unbalanced (RCA) analog audio inputs. The CODEC outputs analog audio simultaneously in both balanced and unbalanced formats. Sampling rates of either 32, 44.1 or 48 kHz are supported. Additionally, the digital I/O includes an AES/EBU connection with both balanced (XLR) and unbalanced (RCA) connections.

**Tape Deck Control:** The much-requested feature of tape deck control including time-code re-stripping is included. Tape deck commands such as stop, rewind and play can be invoked from the application software program. These commands are sent via FireWire to DA-MAX where they are translated and forwarded to the tape deck over an RS-422 connection. Additionally, during the conversion of analog video to DV the time-code from the analog tape can be re-stripped into the DV data stream via the RS-422 connection. This unique feature allows the preservation of the time code.

**Control:** DA-MAX+ can be controlled via front panel selector switches or by a FireWire connection to a computer. In front-panel mode, the user can only select the video and audio input (all outputs are simultaneously active). In computer control mode, a software application program (included with DA-MAX+) allows the user to select the input (as in front panel mode). **The user can control:** 1) Analog Video Input Proc Amp: Hue, Brightness, Saturation and Contrast. 2) Audio Video Output Proc Amp: Hue, Brightness, Saturation and Contrast R-Y & B-Y Scaling, Setup. 3) Video Format: NTSC or PAL (overrides default). 4) Analog Audio In Volume Level. 5) Analog Audio Out Volume Level. 6) Tape Deck Control: Rewind, Play, Fast Forward, Stop. 7) Tape Code Re-Stripping (Analog Tape Time Code -> DV).



## **ProMax Systems, Inc.**

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# Specifications • DA-MAX+ Comprehensive Breakout Box • Format Converter

Size:	14.87 inch (width) x 3.4 inch (height) x 5.8 inch (depth)
Weight:	3 Pounds
Input Voltage Range:	100 – 240VAC, 50/60 HZ
Mounting Option:	Detachable, Rack-Mount Brackets Furnished
Agency Compliance:	FCC Class B and CE
Analog Video Formats:	NTSC (525 line / 60 Hz) or PAL (625 line / 50 Hz) Betacam, SMPTE or MII levels (With or Without Setup)
Analog Video Input:	<b>Sampling:</b> Two 10-Bit A/Ds, Hue, Brightness, Saturation and Contrast Control <b>Composite:</b> (BNC), 75 Ohm, 1.0V p-p <b>S-Video:</b> (4-Pin DIN), 75 Ohm, Y: 1.0V p-p, C: 627mV p-p <b>Component:</b> (BNC x 3), 75 Ohm, (Y, R-Y, B-Y), Betacam, SMPTE, or MII levels
Analog Video Output:	<b>Conversion:</b> Six 10-Bit D/As, Hue, Brightness, Saturation and Contrast Control <b>Composite:</b> (BNC), 75 Ohm, 1.0V p-p <b>S-Video:</b> (4-Pin DIN), 75 Ohm, Y: 1.0V p-p, C: 627mV p-p <b>Component:</b> (BNC x 3), 75 Ohm, (Y, R-Y, B-Y), Betacam, SMPTE, or MII levels
Analog Audio Sampling/Conversion:	48, 44.1 or 32 kHz at 20-bit resolution, 2-Channel
Analog Audio Input:	<b>Balanced:</b> (XLR x 2), +4 dBu nominal, 20 k Ohm input impedance <b>Unbalanced:</b> (RCA x 2)
Analog Audio Output:	<b>Balanced:</b> (XLR x 2), +4dBu nominal into 600 Ohm load <b>Unbalanced:</b> (RCA x 2)
Audio / Video Sync:	Audio and Video are fully synchronized, regardless of the input source
1394 (FireWire):	Six FireWire ports, 6-pin, 400 Mbits Speed
Bus Power:	20V @ 1.5 Amps
RS-422 I/O:	9-Pin D-Sub, 38.4 Baud
Front Panel Control:	<b>Push-Button Switches and LEDs select the following:</b> <b>Control:</b> Remote or Local <b>Audio Sampling:</b> 32 kHz or 48 kHz <b>Audio Input:</b> RCA, Balanced, or AES/EBU <b>Video Input:</b> 1394, CVBS, S-Video, Component, or SDI
<b>Digital I/O Included:</b>	
Digital Video I/O:	<b>SDI:</b> (BNC x 2), 75 Ohm, 10-bit resolution, 270 MBit/sec, SMPTE 259M
Digital Audio:	<b>AES/EBU:</b> (XLR x 2 and RCA x 2), 2-7 V p-p across a 110 Ohm load

**Front Panel**



**Control:** Remote or Local

**Audio Input:** RCA, Balanced, or AES/EBU

**Power On/Off**

**Audio Sampling:** 32 kHz, 44.1 or 48 kHz

**Video Input:** 1394, CVBS, S-Video, Component, or SDI

**Back Panel**



1394 FireWire Ports

RS-422 Connector

Analog Inputs

Analog Outputs

DC Power Connector From Furnished AC Adapter

SDI AES/EBU Included

**proMAX**

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