

# MDA 4V HD-SDI

ONE INPUT, FOUR OUTPUT, HD-SDI  
DISTRIBUTION AMPLIFIER

- Automatically adapts to SMPTE and ITU digital video standards
- Data rates up to 3G-SDI video
- Passes embedded audio, ancillary ID, and metadata information
- Input format indicators
- Automatic input equalization
- Automatic output reclocking
- Four buffered and re-clocked outputs
- Rack-mountable
- External international power supply included



The MDA 4V HD-SDI is a compact one input, four output distribution amplifier for SDI and multi-rate HD-SDI serial digital video, including 3G-SDI. It is ideal for use in applications requiring distribution of serial digital video signals, such as broadcast and video production facilities, rental and staging, and medical imaging systems.



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## DESCRIPTION

The **MDA 4V HD-SDI** is a compact one input, four output distribution amplifier for SDI and multi-rate HD-SDI serial digital video signals up to 2.97 Gbps. It automatically recognizes and adapts to common serial digital video signals that comply with SMPTE and ITU standards, including SMPTE 259M, 292M, and 424M, and ITU-R.BT.601 and BT.1120. The MDA 4V HD-SDI is ideal for use in broadcast and video production facilities, medical facilities, rental and staging, and other applications requiring a single serial digital video source to be sent to up to four displays at the same time.

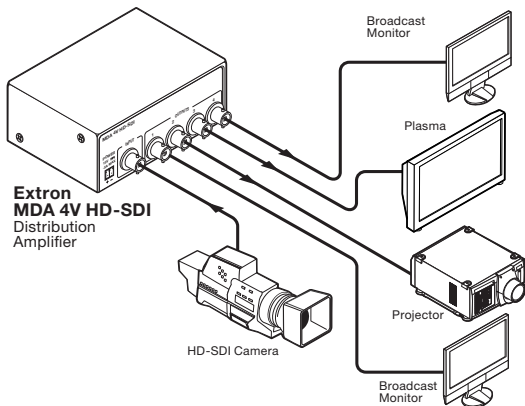
The MDA 4V HD-SDI features automatic input equalization up to 1000 feet (300m) for all SDI and HD-SDI data rates from 19 Mbps to 2.97 Gbps. Output reclocking is provided for recognized SDI and HD-SDI standard data rates, including 270 Mbps, 1.485 Gbps, and 2.97 Gbps. A convenient front panel data rate indicator allows visual confirmation of input data rates for quick visual identification of the incoming digital video signal.

Housed in a rack-mountable 1U, one-quarter rack width metal enclosure, the MDA 4V HD-SDI is ideal for easy integration into both new and existing A/V systems, including broadcast and production facilities, command and control centers, and medical imaging facilities.

## FEATURES

- Automatically adapts to SMPTE and ITU digital video standards
- Supports data rates up to 3G-SDI video
- Passes embedded audio, ancillary ID, and metadata information
- Input format presence LED indication
- Automatic input equalization
  - SDI - up to 400 feet (120 m) on RG59
  - HD-SDI - up to 200 feet (60 m) on RG59
- Automatic output reclocking
- Rack-mountable, 1U, quarter rack width metal enclosure
- External international power supply included

## APPLICATION DIAGRAM



## SPECIFICATIONS

### VIDEO

Gain .....	Unity
Resolution .....	8 or 10 bits, automatic
Operation standards .....	SMPTE-259M, SMPTE 292M, SMPTE 424M, ITU-R BT.601, ITU-R BT.1120
Equalization and reclocking.....	Automatic for up to -30 dB of cable loss
Auto data rate lock.....	Yes

### VIDEO INPUT

Number/signal type.....	1 single link SDI, HD-SDI, or 3G-SDI digital component video
Connectors .....	1 female BNC
Data rates .....	19 Mbps to 2.97 Gbps
Input cable equalization.....	Automatic
HD-SDI .....	150 m using Extron RG6 cable 100 m using Extron RG59 cable
SDI .....	200 m using Extron RG6 cable 150 m using Extron RG59 cable
Nominal level.....	0.8 Vp-p
Minimum/maximum levels .....	0.5 V to 1 Vp-p with no offset
Impedance .....	75 ohms
Return loss .....	<-15 dB @ 5 MHz to 2.97 GHz
DC offset (max. allowable).....	5 V
Input coupling .....	AC

### VIDEO OUTPUT

Number/signal type.....	4 single link SDI, HD-SDI, or 3G-SDI digital component video
Connectors .....	4 BNC female
Reclocking .....	Automatic for 270 Mbps, 1.485 Gbps, 2.97 Gbps, or bypassed for other rates
Nominal level.....	0.8 Vp-p
Minimum/maximum levels .....	0.5 V to 1.0 Vp-p
Impedance .....	75 ohms
Return loss .....	<-15 dB @ 1 MHz
DC offset .....	±5 mV with input at 0 offset

### GENERAL

External power supply.....	100 VAC to 240 VAC, 50/60 Hz, external, autoswitchable; to 12 VDC, 1 A, regulated
Power input requirements.....	12 VDC, 0.4 A
Cooling.....	Convection, unvented
Rack mount.....	Yes, with optional standard 1U rack shelf, part #60-190-01 or 60-604-01; or with VersaTools® 1U, 3.5" deep rack shelf, part #60-190-20 or 60-604-20; or with the MBB 100 Back of the Rack Mounting Kit, part #70-367-01. Also furniture mountable with optional VersaTools Under Desk Mounting Kit MBU 123, part #70-212-01.
Enclosure type .....	Metal
Enclosure dimensions .....	1.7" H x 4.3" W x 3.0" D (1U high, quarter rack wide) 4.3 cm H x 10.9 cm W x 7.6 cm D (Depth excludes connectors.)
Product weight .....	0.5 lbs (0.2 kg)
Shipping weight .....	2 lbs (1 kg)
Vibration .....	ISTA 1A in carton (International Safe Transit Association)
Listings.....	UL, CUL
Compliances .....	CE, FCC Class A, VCCI, AS/NZS, ICES
MTBF .....	30,000 hours
Warranty.....	3 years parts and labor

**NOTE:** All nominal levels are at ±10%.

Model	Version Description	Part Number
MDA 4V HD-SDI	1x4 High Definition - SDI .....	60-884-01

Specifications are subject to change without notice.



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