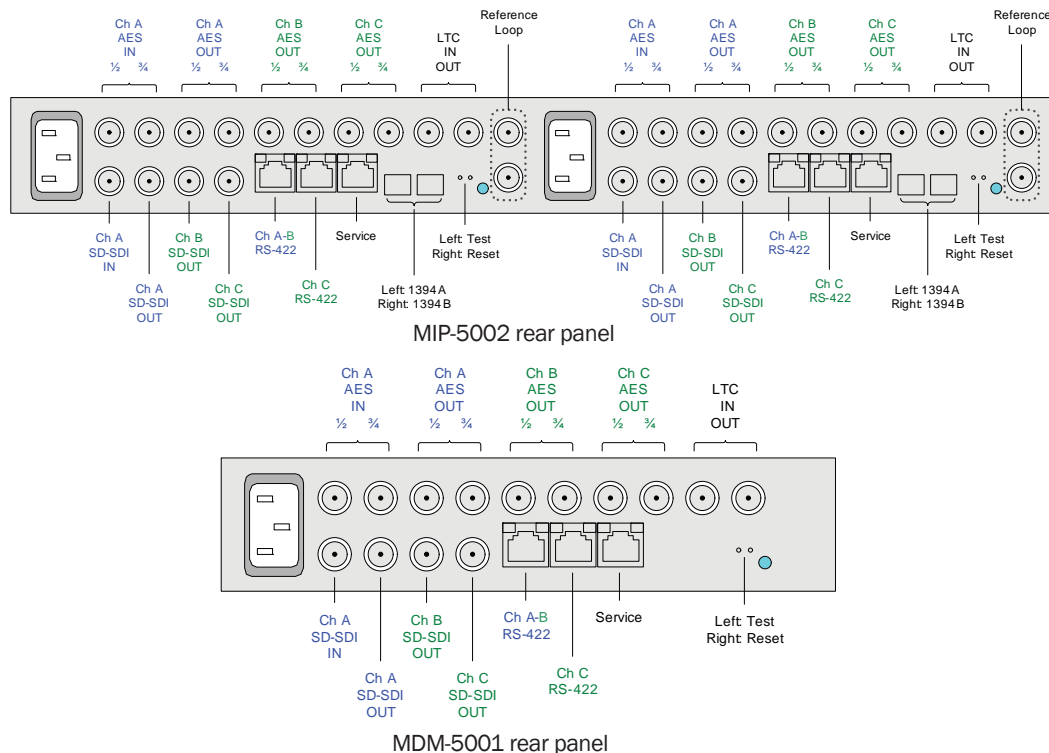


5000 Series Multichannel SD MediaPort MIP-5001, MIP-5002, and MDM-5001



The Omneon 5000 series Multichannel SD MediaPorts provide record and play of SD video and digital audio, compressing it for storage on the Omneon Spectrum Video Server and the Omneon MediaDeck using a variety of industry-standard compression formats. The MIP-5001 and MIP-5002 are supplied in their own enclosure and connect to the server by external cabling. The MDM-5001 plugs directly into one of the two accessory slots of the MediaDeck, which supplies power, reference, and data via the backplane connector.

These MediaPorts offer the features described below. Unless otherwise specified, each feature applies to all models in the 5000 Series.

- One (MIP-5001 and MDM-5001) or two (MIP-5002) SD-SDI video input/output channels, plus two (MIP-5001 and MDM-5001) or four (MIP-5002) SD-SDI video output channels, compliant with SMPTE 259M
- Support for up to 16 channels of embedded audio, or up to 4 channels of discrete (AES/EBU) audio, per video channel
- Modules are 'hot swappable' and can be replaced without disrupting other operations on the server
- Video encoded using any of the following:
 - DV-25, DVCPRO-25, or DVCPRO-50
 - MPEG-2 I-frame, 25-50 Mb/s
 - MPEG-2 Long GOP, 3-24.9 Mb/s
 - IMX 30, 40, or 50 Mb/s
- Frame rate of 25 or 29.97 fps (selectable)
- Selectable 4:2:0 or 4:2:2 chroma sampling depending on encoding and bitrate
- User-selectable MXF OP1a (self-contained essence), MXF OP1b, or QuickTime wrapper format (choice depends on video essence type)
- Supports SDI embedded audio compliant with SMPTE 272M
- Supports pass-through (data mode) of pre-compressed audio such as AC-3 and Dolby™ E

Audio is supplied to the MediaPort by either the rear panel AES/EBU BNC connectors for up to 2 pairs (4 channels) per video channel, or by SDI embedded audio (16 audio channels per video channel). SDI embedded audio support in accordance with SMPTE 272M is a standard feature of the 5000 series, eliminating the need for external embedders and de-embedders.

5000 Series Multichannel SD MediaPort Specifications

PARAMETER	SPECIFICATION	DETAIL
Video	SMPTE 259M and ITU-R BT.601 (data and electrical)	75 Ohm BNC (5001: 3 channels total with 1 SD-SDI bi-directional and 2 SD SDI output; 5002: 6 channels total with 2 SD SDI bi-directional and 4 SD SDI output)
Audio	AES/EBU, 24 bits per sample @ 48 KHz Pre-Compressed Audio	4 channels (2 AES pairs), or embedded per SMPTE 272M AC. 75 Ohm BNC connector Pass-through (data mode) of AC-3 and Dolby E
Compression	Video: DV-25, DVCPRO-25, DVCPRO-50 MPEG-2 Long GOP 3-24.9 Mb/s MPEG-2 I-frame 25-50 Mb/s IMX 30, 40, 50 Selectable 4:2:0 or 4:2:2 chroma depending on format and bitrate (DV formats fix the chroma sampling) Audio: Uncompressed PCM, 24-bit, 48 KHz	SMPTE 314M MPEG-2 MP@ML SMPTE 356M; MPEG-2 422P@ML
Video formats	720 x 480 @ 29.97 fps 720 x 576 @ 25 fps	Full raster horizontal sampling with 2 interlaced fields per frame
Control	VDCP and limited BVW protocol Omneon Player API	RS-422 interface; RJ-45 connector, RJ-45 to DB-9 adapter supplied Control of 5000 series via software; access via Ethernet to server
Server interface	IEEE 1394b	(MIP-500x) Interface via external cable to MediaDirector (MDM-5001) Interface by backplane connection to MediaDeck
Ancillary data	MPEG-2: SMPTE 328M DV: SMPTE 374M, SMPTE 376M SMPTE 334 and EIA-608	Timecode, Dolby metadata, Japanese subtitle, user-defined SD-SDI closed caption
Timecode	LTC MPEG-2: SMPTE 328M DV: SMPTE 374M, SMPTE 376M	75-ohm BNC connector Supplied in MPEG user data Supplied in VAUX packets in DV essence
Reference timing signal	Analog composite video with color burst, black signal	(MIP-500x) Supplied via REF LOOP connector (MDM-5001) Supplied by MediaDeck; sourced from MediaDeck's REF LOOP connector
Environmental	Operating Temperature Humidity	+10C to +35C 10% to 80% non-condensing
Safety	USL/CNL	UL 670950-1, 1st Edition CSA C22.2 No. 60950-1-03, 1st Edition IEC 60950-1 (2001) 1st Edition
EMC	FCC Part 15, ICES-003 ICES-003 Directive of Electromagnetic Compatibility (89/336/EEC) including amendments CISPR 22	Class A for Digital Equipment, USA Class A for Digital Equipment, Canada EN55022:1998, EN55024:1998 Emissions from Information Technology Equipment Immunity for Information Technology Equipment Class A
Dimensions	MIP-500x: W: 44.4 cm (17.5 inches) H: 4.4 cm (1.75 inches) D: 64.6 cm (25.43 inches) 65.4 cm (25.75 inches) 66.5 cm (26.18 inches) MDM-5001: plugs into MediaDeck accessory slot	Chassis only, inside rack 1 RU Chassis front to chassis rear Chassis front to rear of BNC connectors Front of bezel to rear of BNC connectors (Front bezel extends forward 1.1 cm (0.4375 inches) from chassis front edge and rack ear plane.)
Weight	MIP-5001: 5.4 kg (12.0 lb) MIP-5002: 6.4 kg (14.2 lb) MDM-5001: 1.1 kg (2.4 lb)	
Power	MIP-500x: 100-240V AC 45-63 Hz 120 W	(MIP-500x) Dual redundant power supplies with separate IEC sockets for standard power lead.



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