

DIGI-1X4B-1H Technical Specifications

One HDMI Input to Four HDBaseT Output Plue One HDMI Output Distribution Amplifier

Rev 160426

The Intelix DIGI-1X4B-1H is an HDMI distribution amp with four HDBaseT outputs and one HDMI Loop output. The Intelix DIGI-1X4B-1H is designed for any system that requires an HDMI signal to be distributed to multiple remote locations.

The Intelix DIGI-1X4B-1H features HDBaseT twisted pair extension for four outputs, allowing the same signal to be routed to a remote destination with an HDBaseT receiver. The HDBaseT ports support up to 4Kx2K HDMI video with audio, wide-band IR tunneling (for IR control of source or displays), RS232 tunneling, and HDCP up to 60 meters (196 feet). Each HDBaseT output port supplies power to the attached extender, eliminating the need for a power supply at the display end.

The Intelix DIGI-1X4B-1H is designed with an HDMI loop out which is intended to cascade to additional units, allowing for system expansion for larger systems. A unique control design allows the RS232 port to be addressed and cascaded, allowing control commands to be discretely directed to the RS232 port of any attached HDBaseT receiver. This design allows third party control systems to reduce the number of COM ports required, thus reducing hardware costs.

The Intelix DIGI-1X4B-1H is HDMI compatible and supports up to 4kx2k resolutions, Deep Color, and full 3D capabilities. The DA features advanced EDID and HDCP handling, including EDID preset modes to ensure the image is the same across all displays.

	DIGI-1X4B-1H IxS Distribution Amplifier with Extended Outputs				inteli Digital & Analog devices
44 mm (1.73 in)	- පො - U Firmware	idmi O	0	2 3	4 C Link HDCP
	 ✓ 220 mm (8.66 in) 				
44 mm (1.73 in)	HDMI INPUT	OUT	Contraction of the second sec	IN $Tx \neq Rx$ $\bigcirc \bigcirc \bigcirc \bigcirc$ $\bigcirc \bigcirc \bigcirc \bigcirc$ LOOP = RS232 =	$ \begin{bmatrix} On & 0 \\ 1 & 2 & 3 & 4 \\ 0 & 1 & 2 & 3 & 4 \\ 0 & 1 & 2 & 3 & 4 \\ 1 & 2 & 3 & 4 \end{bmatrix} $ $ \hline $ $ = EDID = DC 24V $

intelix DIGITAL & ANALOG DEVICES



Input/Output Connections	
HDMI Input	One (1) HDMI Type A Receptacle Connector
HDBaseT Outputs	Four (4) Shielded RJ45 Female
HDMI Output	One (1) HDMI Type A Receptacle Connector
RS232 In	One (1) 3-Pole/3.5mm Euroblock
RS232 Loop	One (1) 3-Pole/3.5mm Euroblock
•	
IR Input	One (1) 3.5mm TRS
IR Loop	One (1) 3.5mm TRS
IR Output	One (1) 3.5mm TS
24V DC Power	One (1) Locking Barrel (5.5 mm OD, 2.1 mm ID)
Supported Audio, Video, and Control	
Maximum Video Compatibility at 60 m	Deep Color 36/30/24 Bit at 1080p
Maximum Video Compatibility at 35 m	Deep Color 48 Bit at 1080p, 3D, and 4k x 2k
Maximum Passive HDMI Cable Distance	5 m (16.4 ft)
Video Compliance	HDMI and HDCP
Embedded Audio	Up to PCM 8 channel, Dolby Digital TrueHD, and DTS-HD Master Audio
Input DDC Signal	5.0 volts p-p (TTL)
Input Video Signal	0.5 to 1.0 volts p-p
RS232 Baud Rate	9600, 19200, 38400, and 115200 baud
IR Carrier Frequency Range	33-55kHz at 5 volts
HDBaseT Signal Characteristics	
Maximum Distance	60 m
Cable Requirements	Solid core shielded Category 5e, Category 6 or greater with TIA/EIA-568B crimp pattern
Bandwidth	10.2 Gbps
Gain	0 dB – 10 dB at 100 MHz
Signal to Noise Ratio (SNR)	> 70 dB at 100 MHz over 100 m
Return Loss	< -30 dB at 5 KHz
Total Harmonic Distortion (THD)	< 0.005% at 1 KHz
Min-Max Signal Level	< 0.3 V – 1.45 Vp-p
Differential Phase Error	±10° at 135 MHz over 100 m
Chassis and Environmental	
Enclosure	Painted Aluminum
Dimensions	44 mm x 220 mm x 148 mm (1.73 in x 8.66 in x 5.83 in) – 1/2 RU
Shipping Weight	0.67 kg (1.48 lbs.)
Operating Temperature	0° to +48° C (+32° to +120° F)
Operating Humidity	10% to 90%, Non-condensing
Storage Temperature	-20° to +70° C (+14° to +158° F)
Storage Humidity	10% to 85%, Non-condensing
Power, ESD, and Regulatory	
	1001/2401/40 / 50 60 Hz / 1 74
	ן דרנ, נב, גטחס, UL, TUV, נגנ
•	
Included Accessories	Installation Guide, Power Supply, US IEC Power Cable, IR Loop Cable, RS232 Control Cable, RS232 Loop Cable, Shelf Feet with Screws, Mounting Rails with Screws
Optional Accessories	DIGIB-EMT (IR Emitter) and DIGIB-EYE (IR Receiver)
Compatible Receivers (AV and PoE)	DIGI-HD60-R
Compatible Receivers (AV and Control)	FLX-BI4
Compatible Receivers (AV, PoE and Control)	DIGI-HDX-R, DIGI-HD60C-R
Compatible Receivers (AV and PoE) Compatible Receivers (AV and Control)	DIGIB-EMT (IR Emitter) and DIGIB-EYE (IR Receiver) DIGI-HD60-R FLX-BI4

Distances and picture quality may be affected by cable grade, cable quality, source and destination equipment, RF and electrical interference, and cable patches.

intelix Digital & Analog Devices