

CAT5, CAT6 and CAT7 Twisted Pair HDMI extenders supporting HDCP encryption and HDMI 1.3a compliant signals.

**DVI-HDCP-TP-TX100R, HDMI-TP-TX100R,
DVI-HDCP-TP-RX100R, HDMI-TP-RX100R**

Highlight features

- Precise manual, or automatic cable equalizing
- TMDS reclocking in receiver
- Advanced EDID management in transmitter
- RS-232 pass-through
- Remote power with 3 modes:
local / remote-send / remote-receive



DVI-HDCP-TP-TX100R; DVI-HDCP-TP-RX100R; HDMI-TP-TX100R and HDMI-TP-RX100R deep color extenders can transmit HDMI or DVI-D signals over two CAT5, CAT6 or CAT7 cables. They fully support HDMI 1.3a signals with or without HDCP encryption. The DVI-HDCP-TP series extenders feature screw-locking DVI connectors to ensure reliable operation in professional environments, instead of the easily unpluggable HDMI connectors while keeping the benefits of the HDMI1.3a interface with audio.

Cross compatibility between all the devices in the product series is ensured thanks to Lightware's attentive design. Any transmitter can be paired with any receiver without restriction. With Lightware's hybrid modular matrix concept, it is even possible to connect an extender box directly to the matrix router using an MX-HDMI-TP series input or output board (MX-HDMI-TP-IB or MX-HDMI-TP-OB).

Power source can be set by jumper for local supply with plug-in adapter, or for remote supply through TP CATx cable. All devices can be mounted on rack shelf, or used standalone.

Supporting HDMI1.3 standard, these products can be seamlessly connected to BluRay players, set top boxes, AV receivers or even Apple TV.

Options

1U rack shelf



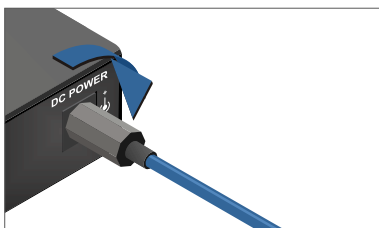
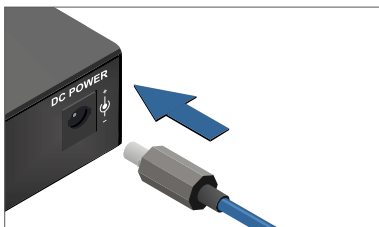
Advanced EDID Management – the well known Lightware technology – is built in the 100 series transmitters. Using the Factory, Custom or Transparent EDID emulation the user can fix and lock EDID data on the transmitter’s input connector. Advanced EDID Management eliminates noise and bit errors on DDC lines and fixes the resolution, video- and audio parameters emulated to the source.

TMDS reclocking: unique to Lightware 100 series twisted pair receivers we provide this professional feature. The circuitry cleans the signal from noise and jitter ensuring a stable recovered digital signal at outputs with sharp transitions and accurate timing.

Equalization on receiver’s RJ45 input connectors is available for Automatic adaptive or fine tunable Manual operation. In manual mode the 25 turn trimpot allows the most accurate setting between 0 and 40dB values which helps tweaking the given cable loss even on highest 1080p resolution.

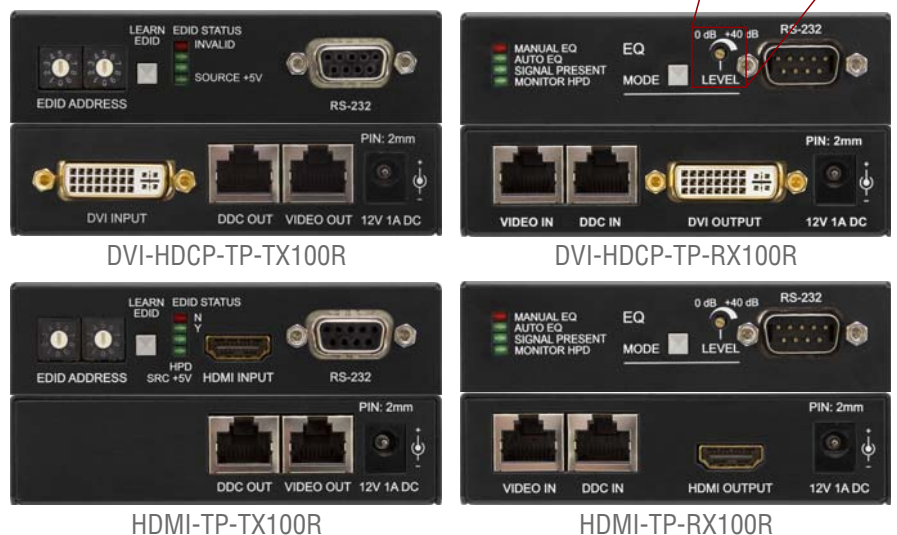


Locking DC plug

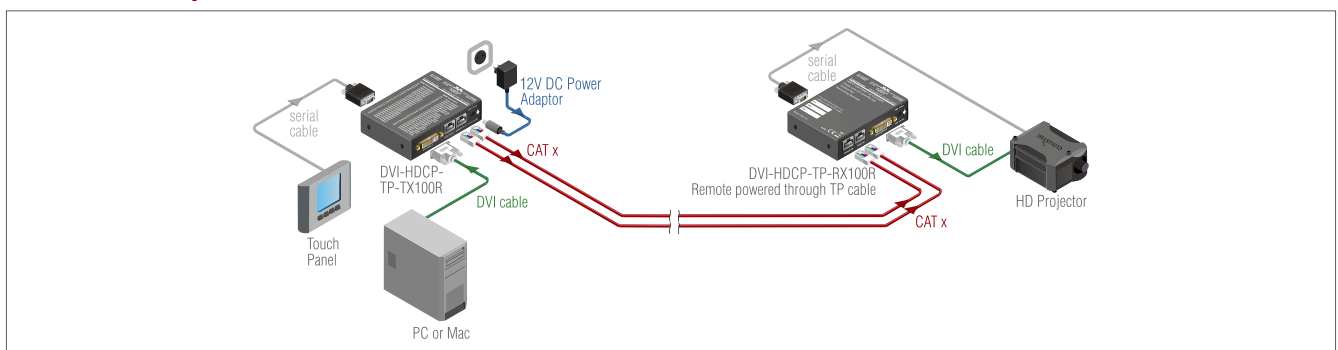


Twist 90° clockwise to lock

Transmitters and receivers front and back view



Stand alone operation



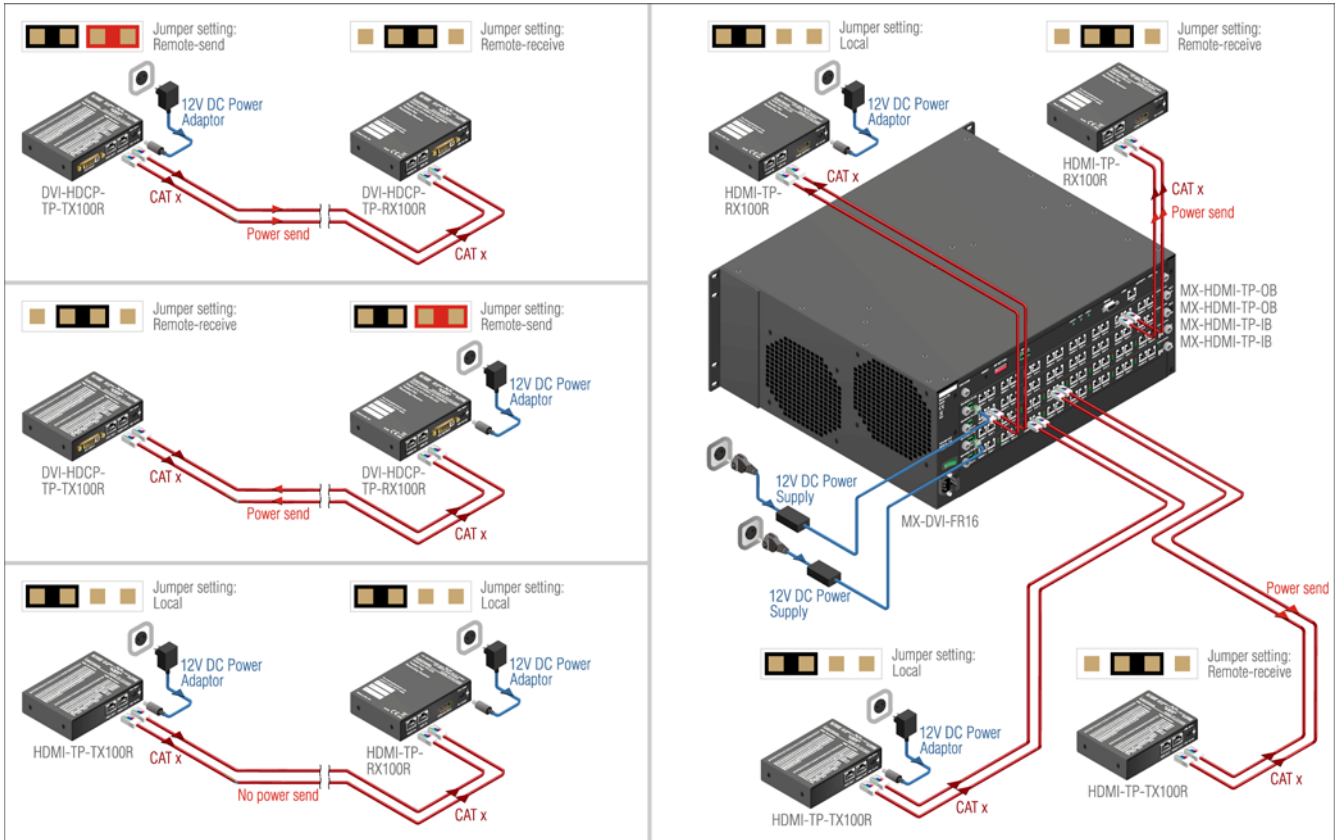
Compatibility table:

■ http://www.lightware.eu/pdfs/tp_extenders_cross_comp.pdf

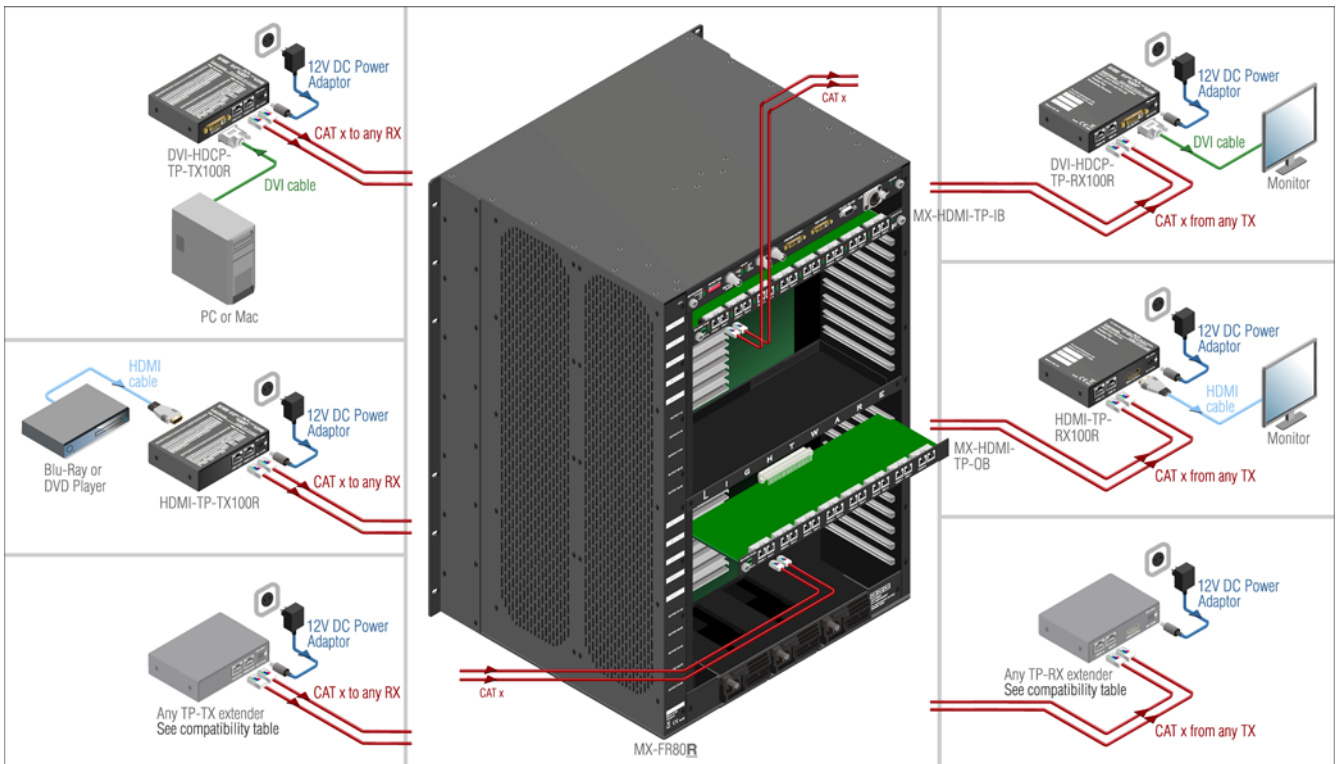
Comparison chart:

■ http://www.lightware.eu/pdfs/tp_comparison_chart.pdf

Remote Power Options



Integrated system operation



Applications

- Home theatre systems
- Multiroom video and audio control
- Professional AV systems, conference rooms
- Digital signage

Features

- Extends HDMI1.3a, HDCP1.1 and DVI1.0 signals
- Supports Dolby TrueHD and DTS-HD Master Audio 7.1 formats
- 1920x1200 or 2048x1080 maximal resolutions
- Cross compatibility with any Lightware Twisted Pair device
- Jumper selectable local or remote power source
- Precise manual, or automatic adaptive cable equalization adjustment
- TMDS reclocking in receiver
- Advanced EDID Management in transmitter
- Metal housing for professional use and rack mounting

Connectors

Power:	locking DC connector (2.1 / 5.5 mm)
TX input, RX output:	HDMI or 29 pin DVI-I connectors (only digital pins are connected)
TX output, RX input:	Dual RJ45

Specifications

Data rate:	2.25 Gbps per color
Resolution:	640x480 to 1920x1200 or 2048x1080 deep color
HDCP pass through:	yes
EDID memory (TX):	yes, 49 factory preset, 50 user presets
EDID emulation (TX):	yes, from memory or transparent
TP cable equalization (RX):	0-40dB manual or automatic
Front panel control (TX):	yes, EDID learn button, EDID selector switch
Front panel control (RX):	yes, EQ setting
LED indicators (TX):	EDID state, hotplug, source 5V
LED indicators (RX):	EQ mode, signal present, hotplug
RS-232 pass through:	yes
Power supply:	External power adaptor (100 to 240 V AC, 50/60Hz), (12V DC, 1A)
Power consumption (TX):	2 Watts
Power consumption (RX):	4 Watts
Dimensions:	98W x 67D x 25H mm
Net weight (TX):	230 gramms / product
Net weight (RX):	230 gramms / product
Compliance:	CE, UL, FCC
Warranty:	3 years

Maximum extension distances

Resolution	TMDS Freq	CAT5e UTP	CAT5e FTP	CAT6 UTP	CAT6 FTP	CAT6 S/FTP	CAT7 S/FTP
640x480	25,2 MHz	65m	65m	75m	75m	80m	80m
800x600	40,0 MHz	65m	65m	70m	70m	75m	75m
1024x768	65,0 MHz	60m	60m	65m	65m	75m	75m
1280x720p	74,4 MHz	60m	60m	65m	65m	75m	75m
1920x1080i	74,4 MHz	60m	60m	65m	65m	75m	75m
1280x1024	108,2 MHz	50m	50m	65m	65m	70m	70m
1400x1050	122,1 MHz	40m	40m	60m	65m	70m	70m
1920x1080p	149,1 MHz	30m	30m	55m	60m	65m	65m
1920x1200	153,4 MHz	20m	20m	50m	60m	65m	65m
1600x1200	162,4 MHz	NR	NR	45m	55m	65m	65m
1920x1080p 30 bit	186,3 MHz	NR	NR	NR	50m	40m	60m
1920x1080p 36 bit	223,6 MHz	NR	NR	NR	20m	10m	20m

NR: Not recommended

Supplied accessory



Universal DC adaptor

Wall power adaptor with interchangeable plug for international use.

Universal input: 100-240 V AC, 50-60 Hz

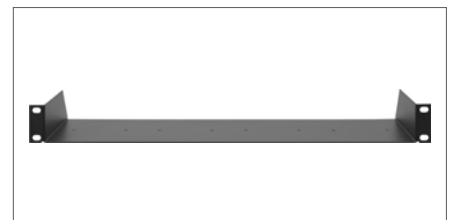
Output: 5V DC, 1A

Optional accessories



Under desk mounting kit

The UD-kit makes easy to mount a single device on any flat surface (e.g. furniture).



Rack shelf

The 1U high rack shelf provides mounting holes for fastening two half-rack or four quarter-rack sized units.