

# HDMI + audio signal extender over single fiber cable



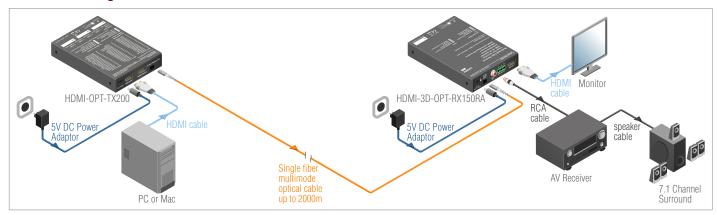
## **Highlight features**

- HDMI receiver supporting 3D and 4K over a fiber cable
- Digital & analog audio output
- Extends HDMI + audio + RS-232
- Bi-directional RS-232
- HDCP compliant, EDID transparent

Lightware HDMI-3D-OPT-RX150RA optical receiver provides extension of uncompressed Full-HD video and audio with optional HDCP encryption plus USB HID\* over one multimode fiber up to 2000 m. The unit offers a digital and an analog audio output, bi-directional RS-232 pass-through, HDCP compliance and works at all standard AV resolutions.

The interface's 9 Gbps bandwidth is capable of transmitting 1080p (@120Hz) video signals, video up to 4K pixel resolution (4K x 2K @30Hz), as well as video with full support of content protection (HDCP). HDMI-3D-0PT-RX150RA offers dual audio outputs: a digital S/PDIF audio and a symmetrical analog output with PHOENIX connectors.

### Standalone diagram







# HDMI-3D-OPT-RX150RA

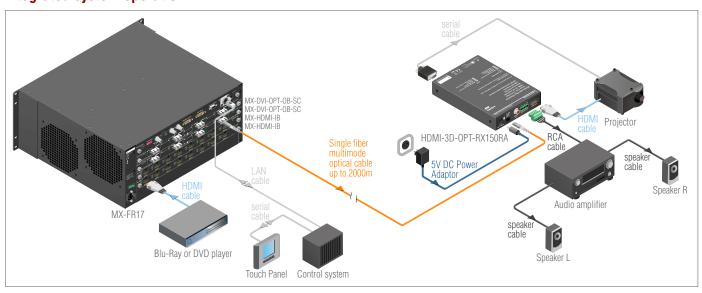


Single Fiber Technology makes the unit fully HDMI and HDCP compliant without the need of a second fiber cable or copper connections. To simplify cabling, the bi-directional communication - necessary for HDCP handshaking and USB transfer - is performed on the same fiber core that transmits the video signal. The receiver is configurable through the mini USB connector.

Intelligent HID Emulation\* is provided for two devices with full transparency. The special HID devices including keyboard and mouse - are emulated by the extender and transparently transferred to the computer with the result that no drivers are required for the proper functionality, it's as easy as Plug & Play.

- \*USB HID: Human Interface Device such as keyboard, mouse, presenter or Smart Card.
- \*USB HID (KVM) extension feature is under development, only available later.

### **Integrated system operation**



### Receiver front and rear view





### **Options**

1U rack shelf









# **Applications**

- Post production studios
- Control room
- Digital Signage
- Multiroom video
- Conference rooms, collaborative telepresence

#### **Features**

- HDMI 1.4 + Keyboard + Mouse fiber extender
- Up to 4K x 2K @30Hz or 1080p @120Hz
- HDCP 1.1 compliant extension over one multimode fiber
- 3D compliant
- 4K resolution can be achieved at lower frame rate (4096 x 2160 @30 Hz)
- Audio output: digital S/PDIF and symmetrical analog audio
- USB HID (Human Interface Device) only
- Bi-directional RS-232 pass-through
- Uncompressed video/audio up to 9 Gbps
- Single Fiber Technology
- Zero frame latency, no delay
- SC optical fiber connector
- Several status LEDs
- USB control
- Rack mounting options
- Locking DC connector

# **Locking DC plug**





Twist 90° clockwise to lock

# **Specifications**

Data rate:	9 Gbps maximum
Resolution:	up to 4K x 2K @30Hz or 1080p @120Hz or 720p/1080i @120Hz
EDID support:	transparent
HDCP pass through:	yes
RS-232 pass through:	yes
Fiber:	50/125 SC Multimode (preferred)
	62.5/125 SC Multimode
Transmission distance:	2000 m (using OM3e or OM4 type fiber)
Power:	universal power adaptor, DC 5 V 2.5 A
Power consumption:	3,9 W (typ.) 6,5 W (max)
Enclosure:	1 mm metal
Dimensions:	100,4 W x 131,9 D x 26 H mm
Weight:	430 grams
Compliance:	CE
Warranty:	3 years

#### **Connectors**

Fiber input:	SC receptacle
HDMI output:	HDMI connector
USB HID (RX):	2 x USB-A female connector
Digital audio output:	S/PDIF (digital)
Analog audio output:	5 pole PHOENIX connector
USB control:	mini USB-B female connector
Serial port:	9-pole D-sub
Power:	locking DC connector (2.5/5.5 mm)

### Supplied accessory



# **Universal DC adaptor**

Wall power adaptor with interchangeable plug for international use. Universal input: 100-240 V AC, 50-60 Hz.

## **Optional accessories**



### Under desk mounting kit

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



### Under desk mounting kit double

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



