eLink 100
PROFESSIONAL GRADE WIRELESS EXTENDER FOR HDMI

Real-time wireless transmission of HDMI signals for applications where cable installation is not an option

- Reliable, professional-grade wireless extension of HDMI video and multi-channel audio signals up to 100 feet (30 meters)
- Capable of transmitting through multiple walls and furniture
- Supports computer video up to 1920x1080, including HDTV 1080p/60
- HDCP Compliant
- Ultra-low latency transmission of video and audio signals
- Professional-grade technology enables simultaneous transmission from one transmitter to as many as four receivers
- Actively monitors RF spectrum to select the ideal transmission channels
The eLink 100 eliminates wires for a clean installation.

The Extron eLink 100 is a professional-grade wireless transmitter and receiver set for extension of HDMI video and multi-channel audio up to 100 feet (30 meters). This HDCP-compliant extender features a robust wireless communication technology to ensure high reliability and real-time performance with exceptional image quality for resolutions up to 1920x1080, including HDTV 1080p/60. It includes features designed specifically for professional AV systems such as AES-128 encryption to ensure a secure link and use of the 5 GHz spectrum for transmission through multiple walls. Extron eLink™ technology ensures reliable operation of up to four eLink extender sets in the presence of the facility’s other wireless systems. In addition to point-to-point designs, one transmitter can support four receivers to create a wireless distribution system.

The eLink 100 Professional Wireless Extender for HDMI is ideal for use in AV applications that benefit from wireless connection between a source and a display device. For example, the eLink 100 can provide signal extension from a media server or Blu-ray Disc player to a display positioned at the front of a presentation room without having unsightly cables stretched between source and display. In divisible spaces, a wireless connection enables a portable lectern to be moved anywhere within the room regardless of the location of floor boxes. For historic buildings, a wireless connection from the source or equipment room to the display can reduce or eliminate expensive and time-consuming structural modifications such as the need to core or trench concrete for cable runs. Wireless connections also simplify the setup and teardown in rental and staging applications.

For connection stability within environments with multipath signals, the eLink 100 uses a robust multi-input and multi-output - MIMO communication technology that reliably delivers high quality video and audio with real-time performance. MIMO technology provides maximum throughput to enable precise image transmission of high resolution video with ultra-low latency, which makes the extender suitable for live presentations. Use of the 5 GHz spectrum allows omnidirectional transmission through walls and furniture.

The included professional-grade technologies enable up to four eLink 100 transmitter and receiver sets to operate within the same space and without disrupting other wireless systems. Also, one transmitter can support multiple receivers, creating a virtual wireless distribution system. A single eLink 100 T transmitter can support up to four eLink 100 R receivers, allowing a single source such as a digital signage player to support multiple displays. The eLink 100 is also compatible with a broad range of multi-channel audio signals, providing reliable operation with HDMI devices, DSP mixers, and professional sound systems. This design flexibility further reduces costs and simplifies the upgrade or installation and setup of a professional AV system.

The eLink 100 wireless extender is backed by Extron’s award-winning service and support. The compact transmitter and receiver enclosures may be concealed or mounted in adjacent areas to maintain the aesthetics of the facility.
Reliable, professional-grade wireless extension of HDMI video and multi-channel audio signals up to 100 feet (30 meters)

Capable of transmitting through multiple walls and furniture
The eLink 100 wireless extender works in the 5 GHz spectrum to allow for broad coverage and transmission through walls and similar materials, overcoming limitations of other technologies that are more directional or limited to line-of-sight.

Supports computer video up to 1920x1080, including HDTV 1080p/60

Supported HDMI specification features include data rates up to 6.75 Gbps, Deep Color up to 12-bit, 3D, and multi-channel audio formats

HDCP Compliant
Professional-grade technology enables simultaneous transmission from one transmitter to as many as four receivers
One transmitter can support multiple receivers, allowing an AV signal to be distributed to as many as four displays.

AES 128-bit Data Encryption
Ensures content sent between the transmitter and receiver is fully encrypted and secure.

Ultra-low latency transmission of video and audio signals
Latency of less than one millisecond ensures high quality wireless operation with real-time performance.

Actively monitors RF spectrum to select the ideal transmission channels
Provides Automatic Frequency Selection – AFS and Dynamic Frequency Selection – DFS, using the most appropriate frequencies to avoid interference from other devices operating in the same spectrum.

Supports multiple embedded audio formats
The eLink 100 is compatible with a broad range of multi-channel audio signals, providing reliable operation with HDMI devices and surround sound systems.

eLink™ wireless technologies allow as many as four extenders to operate within the same space
Enables point-to-point signal extension between up to four eLink 100 transmitter and receiver pairs without risk of interference or signal loss.

Multi-input and multi-output, or MIMO, wireless technology provides robust connection
Ensures wireless connections are stable in environments with multipath signals.

Cost-effective alternative to cable installation
Reduces installation time and costs associated with signal extension by eliminating the need to install cables in challenging environments such as historic buildings and rooms with mobile lecterns.

On-screen display
The eLink 100 features an on-screen display for simplified setup and configuration.

IR remote control
The included IR remote control provides easy control for configuration and setup.

IR output control port
The eLink 100 R receiver accepts IR signals from a remote control and sends the signal to the transmitter for control of source equipment, such as a Blu-ray Disc player.

Compact design for easy installation into small spaces or behind equipment

Energy-efficient, external universal power supply included
Provides worldwide power compatibility.

APPLICATION DIAGRAM
Specifications

NOTE: *Appropriate DVI-D to HDMI cables or adapters are required for DVI signal input/output.

**VIDEO**

**Maximum data rate**
6.75 Gbps (2.25 Gbps per color)

**Maximum pixel clock**
148.5 MHz

**Resolution range**
Up to 1080p @ 60 Hz; 8, 10, or 12 bit color depth and VESA up to 1920x1080 @ 60 Hz

**Supported resolutions**
720(1440)x480*, 640x480*, 720x480*, 720(1440)x576*, 720x576*, 1280x720*, 1920x1080*, 1366x768*, 1440x900*, 1400x1050*, 1600x900*, 1680x1050*, 640x480*, 800x600*, 1024x768*, 1280x720*, 1920x1080*  
* = 60 Hz, and 59.94 Hz  
** = 50 Hz  
*** = 50 Hz, 60 Hz, and 59.94 Hz  
**** = 50 Hz, 60 Hz, 23.98 Hz, 24 Hz, 25 Hz, 59.94 Hz, 29.97 Hz, and 30 Hz  
***** = 60 Hz  
****** = 72 Hz, and 59.94 Hz  
******* = 60 Hz, and 72 Hz  
******** = 60 Hz, and 70 Hz  
********* = 50 Hz, 60 Hz, 23.98 Hz, 24 Hz, 59.94 Hz, 29.97 Hz, and 30 Hz

**Formate**
RGB and YCbCr digital video

**Standards**
DVI 1.0, HDMI, HDCP 2.0

**VIDEO INPUT — TRANSMITTER**

**Number/signal type**
1 single link HDMI (or DVI-D*)

**VIDEO OUTPUT — RECEIVER**

**Number/signal type**
1 single link HDMI (or DVI-D*)

**AUDIO**

**Supported formats**
PCM, Dolby Digital 2/0, Dolby Digital 2/0 Surround, Dolby Digital 5.1, Dolby Digital Surround EX, DTS 2-channel, DTS Digital Surround 5.1, DTS 96/24

**COMMUNICATIONS**

**IR control port (Rx)**
Included IR remote control

**IP pass-through control port (Rx to Tx)**
Unidirectional, 38 KHz

**SIGNAl CHARACTERISTICS**

**HDCP compliant**
Yes

**Bandwidth**
40 MHz

**Transmission distance**
100 ft (30 m)

**Operating frequency**
Non-GFS center frequencies
USA/Canada: 5.19 – 5.23, 5.755 – 5.795 GHz  
EU: 5.19 – 5.23 GHz
Australia: 5.19 – 5.23 GHz

DFF center frequencies
USA/Canada: 5.27 – 5.59, 5.67 GHz  
EU: 5.27 – 5.67 GHz  
Australia: 5.27 – 5.55 GHz, 5.67 GHz

**System latency**
<<1 ms

**Security Encryption Standards**
AES-128

**GENERAL**

**Power supply**
External  
Input: 100-240 VAC, 50-60 Hz  
Output: 5 VDC, 2.6 A, 13 watts

**Power consumption**

**Transmitter**
Device and power supply: 8.8 watts, 100-240 VAC, 50-60 Hz
Receiver: 9.0 watts, 100-240 VAC, 50-60 Hz

**Cooling**
Convection

**Thermal dissipation**

**Transmitter**
Device: 24.4 BTU/hr  
Device and power supply: 28.9 BTU/hr
Receiver: 29.6 BTU/hr
Device and power supply: 29.6 BTU/hr

**Mounting**
Wall mount: Yes

**Enclosure type**
Plastic

**Warranty**
3 years parts and labor

**The eLink 100 is certified for use in the following countries:**

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**For complete specifications, please go to www.extron.com**

Specifications are subject to change without notice.