Key Digital X444LP 4K HDMI Extender Set

The KD-X444LP HDMI CAT5e/6 extender set from Key Digital is a 4K 18G transmitter/receiver pair featuring Power over CAT (PoC) with bi-directional IR and RS-232 control extension. The single CAT5e/6 UTP/STP extension, with fully automatic, cable length dependent equalization and amplification, has a range of more than 70m (230ft).

The KD-X444LP supports video resolutions up to 4096x2160/60 Hz at 4:4:4 through Key Digital’s proprietary UHDoTP (Ultra High Definition over Twisted Pair) protocol. The extender set provides uncompressed 10.2 Gbps signal extension with visually lossless compression applied to video formats exceeding 10.2 Gbps.

The provided power supply can be flexibly connected at either of the Tx or Rx units, with the second unit receiving PoC.

An expansive list of content standards is supported by the KD-X444LP, including the HDCP 2.2 anti-piracy protocol; the HDR10 standard for high-dynamic-range video; and EDID management for display recognition. It also offers deep color support up to UHD/4K 30Hz 4:4:4/12-bit or 60Hz 4:4:4/8-bit. A full buffer system manages HDCP authentication, EDID control handshakes and TMDS re-clocking / signal re-generation for serial data optimization.

Dolby and DTS surround formats up to 6.1 channels are supported alongside video extension, while the KD-X444LP Tx unit’s HDMI pass-thru output supports Dolby, Dolby TrueHD, DTS and DTS-HD surround formats up to 7.1 channels.

For shorter extensions of 50m (164ft) or less, and where 7.1 HD audio or HDMI pass thru is not required, Key Digital offers its otherwise identically capable KD-X444SP extender set.

Photo file 1: KD-X444LP.jpg

Photo caption 1: Key Digital KD-X444LP extender set, transmitter front and rear (left) and receiver front and rear (right)