



1. INTRODUCTION

This 4K UHD Multi-Function Extender with KVM over TCP/IP allows you to transmit HDMI or VGA signals over CAT5e/6/7 network cable. This extender supports the transmission of Ultra High-Definition signals (up to 4K@30Hz YUV 4:4:4 or 4K@60Hz YUV 4:2:0) along with audio and USB up to 100m on a single cable. The transmission distance can be further extended (up to 100m per segment) by using gigabit network switches allowing the user to cascade the system without signal loss or introducing delay. It is also possible to have the Transmitter operate in multicast mode, allowing you to send a single AV signal to a virtually multi number of Receivers within the same local network. This system is perfect for both residential and commercial installation environments. This system also features bi-directional IR and RS-232 pass-through, analog line level in/out, and a microphone input (on the Receiver), providing the user with a variety of audio options. The USB functionality allows the system to act like a remote USB hub which, when combined with the VGA input/output feature, provides a flexible remote KVM platform. Configuration information is provided via On Screen Display (OSD) and control is by WebGUI and front panel controls.

2. APPLICATIONS

- HDMI, USB, Audio, RS-232 Extender
- Broadcasting system over single CAT5e/6/7
- Multimedia display on a large number of displays via multi-cast
- Hotel or convention center display multi-monitor broadcast and multi-data sharing
- Long distance data sending with cascade
- Matrix network system
- System control over RS-232 and equipment control over IR
- Remote KVM control of a system

3. PACKAGE CONTENTS

- 1 x HDMI/USB/RS-232/IR over single CAT5e/6/7 Transmitter
- 1 x HDMI/USB/RS-232/IR over single CAT5e/6/7 Receiver
- 1 x 5V/2.6A DC Power Adaptor
- 1 x 5V/4A DC Power Adaptor
- Operation Manual

4. SYSTEM REQUIREMENTS

- HDMI or VGA source equipment such as media players, video game consoles PCs or set-top boxes.
- HDMI or VGA receiving equipment such as HDTVs, monitors or audio amplifiers.
- Analog audio receiving equipment such as headphones, audio amplifiers or powered speakers.
- A Gigabit Ethernet network switch with jumbo frame support is required.
- A Gigabit Ethernet switch with “IGMP snooping” is required for proper multicast support.
- 8K jumbo frames are strongly recommended.

Note: The text may displayed incompletely once uses PC as source at resolution of 4K2K@60 YUV420.

5. FEATURES

- HDMI 2.0 and DVI 1.0 compatible, HDCP 2.2/1.4 compliant
- 1xHDMI input and output, 1xVGA input and output & 1xVGA bypass output
- Video, audio and control transmission over TCP/IP
- HDMI input resolutions up to 4K@60Hz (YUV 4:2:0) or 4K@30Hz (YUV 4:4:4)
- HDMI output resolutions up to 4K@30Hz (YUV 4:4:4)
- 4K@50/60Hz (YUV 4:2:0) sources are automatically converted to 4K@25/30Hz (YUV 4:4:4) for output
- Supports pass-through of audio formats including LPCM 2.0/5.1/7.1, Bitstream, and HD Bitstream
- Audio line in on Transmitter sends audio to the line out on connected Receivers

- Microphone input on Receiver for transmission to the Transmitter
- Supports USB keyboard and mouse extension
- Supports IR and RS-232 bypass
- Device has an info OSD and can be controlled via WebGUI and front panel controls

6. CONNECTION DIAGRAM

