

INSTRUCTION MANUAL



4K 30 Hz AV Over IP Matrix Switcher with Wall Plate Transmitters

Before using the product, please carefully
read the manual and safekeep it.



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SAFETY REMINDERS

To protect the device and operating personnel from electrostatic discharge, ensure that the device is properly grounded before powering it on. Please observe the following guidelines when installing, using, or maintaining this equipment.



Keep the apparatus away from moisture and liquids to prevent damage.



Clean the apparatus using only a dry cloth.



Ensure proper ventilation and avoid placing the unit in confined spaces.



Disconnect from power during storms or prolonged periods of non-use.



Do not obstruct ventilation openings to prevent overheating and potential hazards.



Prevent the power cord from being damaged by pressure or excessive bending.



Keep the unit away from heat sources to maintain safe operation.



Use only manufacturer-approved accessories.



Avoid placing open flames near or on the unit.



Seek professional servicing when required.



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FOREWORD

- Welcome to use our product. Thank you for supporting our product! For the security of you and the equipment, please be sure to carefully read the product manual before using the equipment.
- Please carefully protect the frangibility label pasted on the product, as it is the warranty voucher.
- This manual only serves as the direction for operation instead of maintenance service. Additional remarks will be provided if the functions or relate parameters change in future.
- Please first read this manual if any doubt in using the product. The equipment operation is described in detail in the manual. Please follow the specification in the book. Please contact us if you still have questions, and we will give you a satisfactory answer as soon as possible.
- The edition of the manual is subject to change without notice.

DISCLAIMERS

The information in this manual has been thoroughly reviewed and is believed to be accurate. However, we are not responsible for any patent infringements or third-party rights violations that may arise from its use.

We do not accept liability for any inaccuracies in this document, nor do we guarantee updates or the continued accuracy of the information provided.

We reserve the right to make changes or improvements to this document and/or product at any time without prior notice.

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Version 1.0 | February 20205

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NOTICES

NOTICES

- Please observe the following notices in installing, using and maintaining the equipment to guarantee reliable use of equipment and personnel security.
- Please don't use the product in the following occasions: the occasions with dust, oil smoke, conductible dust, active gases, flammable gases, the occasions exposed to high temperature, dew and rain and wind, the occasions with vibration and impact. The electroshock, fire and misoperation will also result in damage to the product.
- Shall guarantee no foreign matters on the ventilation face like packaging materials such as the contact paper after the product is installed, as this may lead to unsmooth rejection of heat to result in fire, fault and misoperation in running.
- Shall avoid connecting wire, plugging and unplugging the cable, as this may cause electroshock or damage to the circuit.
- The installation and wiring must be firm and reliable, lest the poor contact should result in misoperation.
- For the application occasions with severe interference, the input and output cables of high-frequency signal shall be shield cables to improve the system's interference free performance. The installation and wiring, etc. shall not be performed until the external power supply is all cut off, as this may cause electric shock or damage to the equipment.
- The product is earthed via the earthed conductor of powerline. To avoid the electroshock, the earthed conductor must be connected with the ground. Please be sure to correctly earth the product before connecting the input end or output end of the product.
- Please don't touch the terminal when the product is energized, lest electroshock or misoperation be caused.
- Don't clean the product or tighten the terminal until the power is turned off, as electric shock may be caused by live operation.
- Don't connect or dismantle the communication signal cable, connect or dismantle the cable of expansion module or control unit until the power is turned off, as this may cause damage to or misoperation of the equipment.
- Don't dismantle the equipment lest the interior electric elements be damaged.
- Be sure to read up this manual and fully confirm the security before change, pilot run, stain and stopping of the program. Please contact us in case of insoluble problems.

INTRODUCTION



This is a wallplate panel 4K HDMI over IP system that functions as a Matrix Switcher, Video Wall Controller, and Multiview System. The transmitter and receiver use the same unit, which can be configured via PC software to operate either as an encoder or a decoder. This design offers greater flexibility and helps reduce overall system costs.

The front panel features an LCD screen that displays the device name, IP address, and firmware version—making system setup and configuration much more convenient. The unit supports both DC and PoE power options, simplifying installation. When configured as an encoder, it supports one HDMI loop-out, audio embedding and de-embedding via a 3.5mm jack, as well as keyboard and mouse transmission.

The system supports control via Windows software, Android/iOS apps, and UDP commands. It also allows for custom UI configurations. It can function as a matrix switcher, video wall controller, signal distributor, and multiview processor (supporting up to 16 windows per screen). Additional features include real-time source preview and RTSP IP camera decoding.

Designed to work over a 1G network switch using multicast mode, it supports input and output resolutions up to 4K30, with low latency and seamless switching between sources. This system is ideal for commercial, residential, and governmental applications.



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SPECIFICATION

Front Panel	
Indicators	PWR: power indicator SYS: System indicator LINK: LAN cable connection indicator HDMI: HDMI signal status
OLED Screen	Showing the Model, ID, IP, status
Back Panel	
Video	1*Type-A HDMI
Audio	1*3.5mm IN & 1*3.5mm OUT
LAN	1*RJ-45(PoE)
USB	2*USB-B ports for keyboard & mouse or PC host
Power	DC 12V 1A
Specification	
Video	HDMI1.4, HDCP1.4, resolution up to 4K30 in and out
Audio	3.5mm Line in/out, or HDMI audio
IP	Bandwidth up to 20Mbps
	Manually static IP address
	Protocol H.264/265
	Latency 80~120ms
Control	3 rd Party Control by TCP/ UDP / Windows PC software, Android/iOS APP
Product Dimension	
Temperature	-20°C~+60°C
Humidity	10-90%

FEATURES

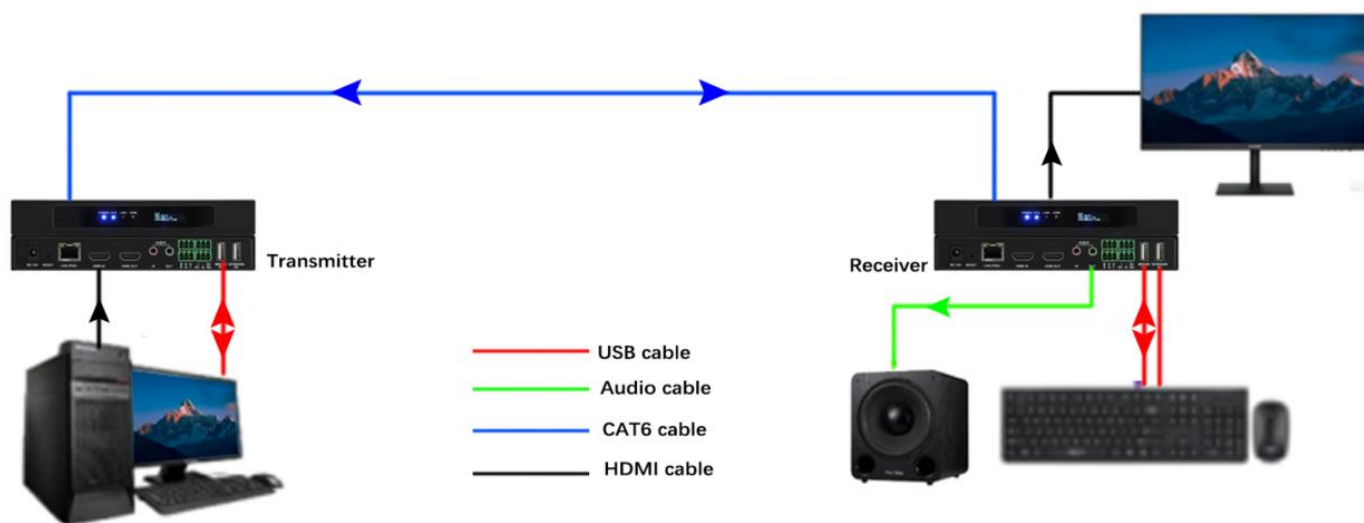
- Integrated transmitter and receiver in a single unit, switchable via software
- Supports input and output resolutions up to 4K@30Hz; transmission distance up to 150 meters
- Supports matrix switching, video wall, multiview, and signal distribution
- Includes preview, OSD, EDID management, and other advanced functions
- Supports up to 16 windows per screen (PIP and POP not supported)
- Dual power options: PoE and DC power supply
- Customizable control user interface
- Compatible with Windows software and mobile apps; no IP control box required
- Supports TCP and UDP control commands
- Supports keyboard and mouse transmission, as well as audio input and output
- Supports ONVIF and RTSP protocols



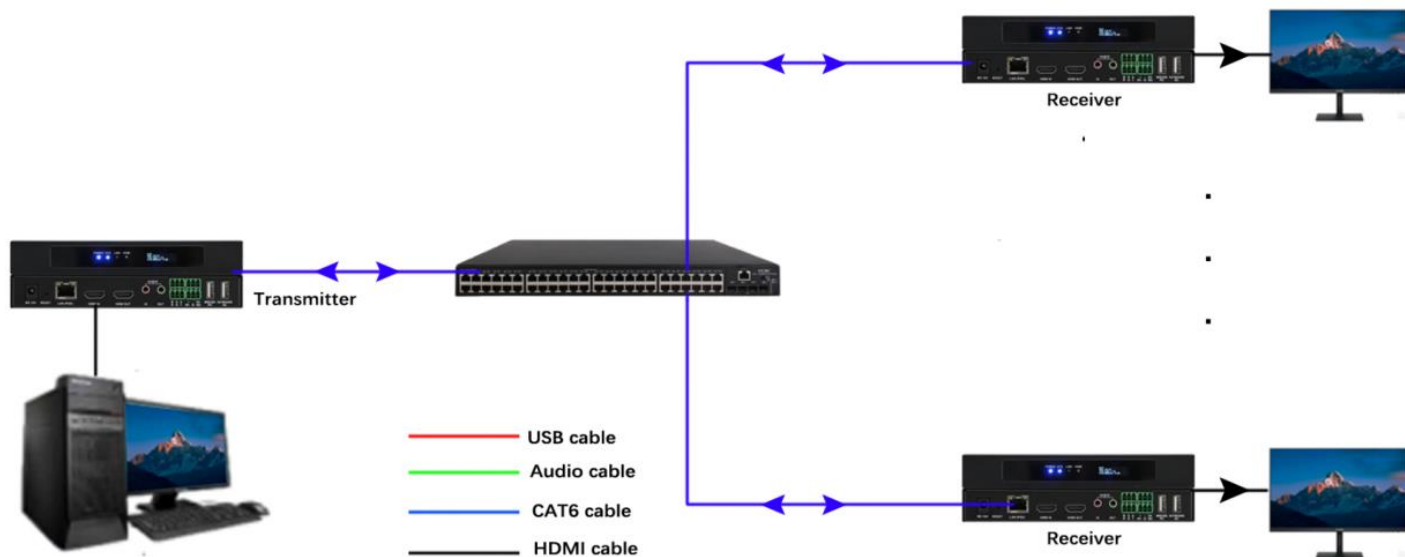
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CONNECTION DIAGRAM

WORKING AS EXTENDER AS ONE TO ONE

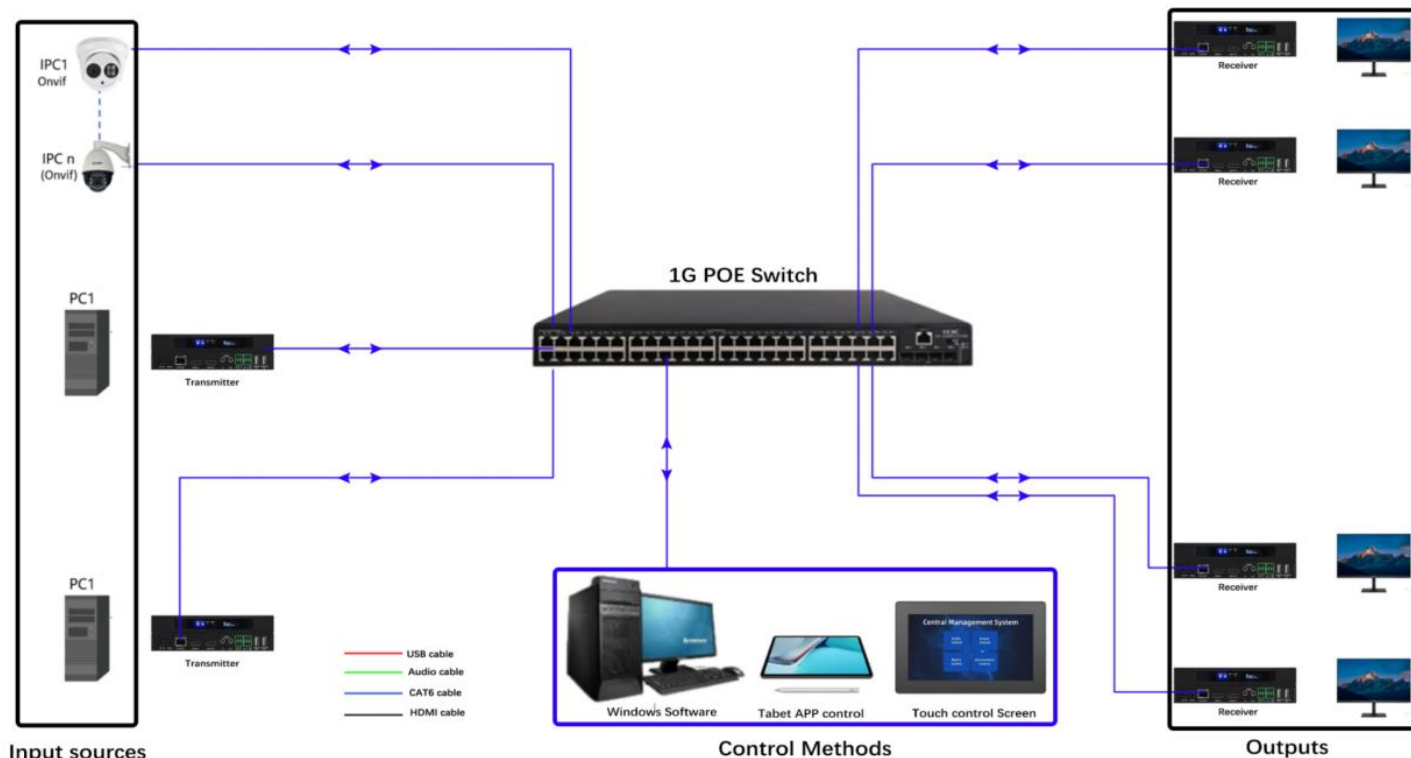


WORKING AS DISTRIBUTION, ONE TO MANY

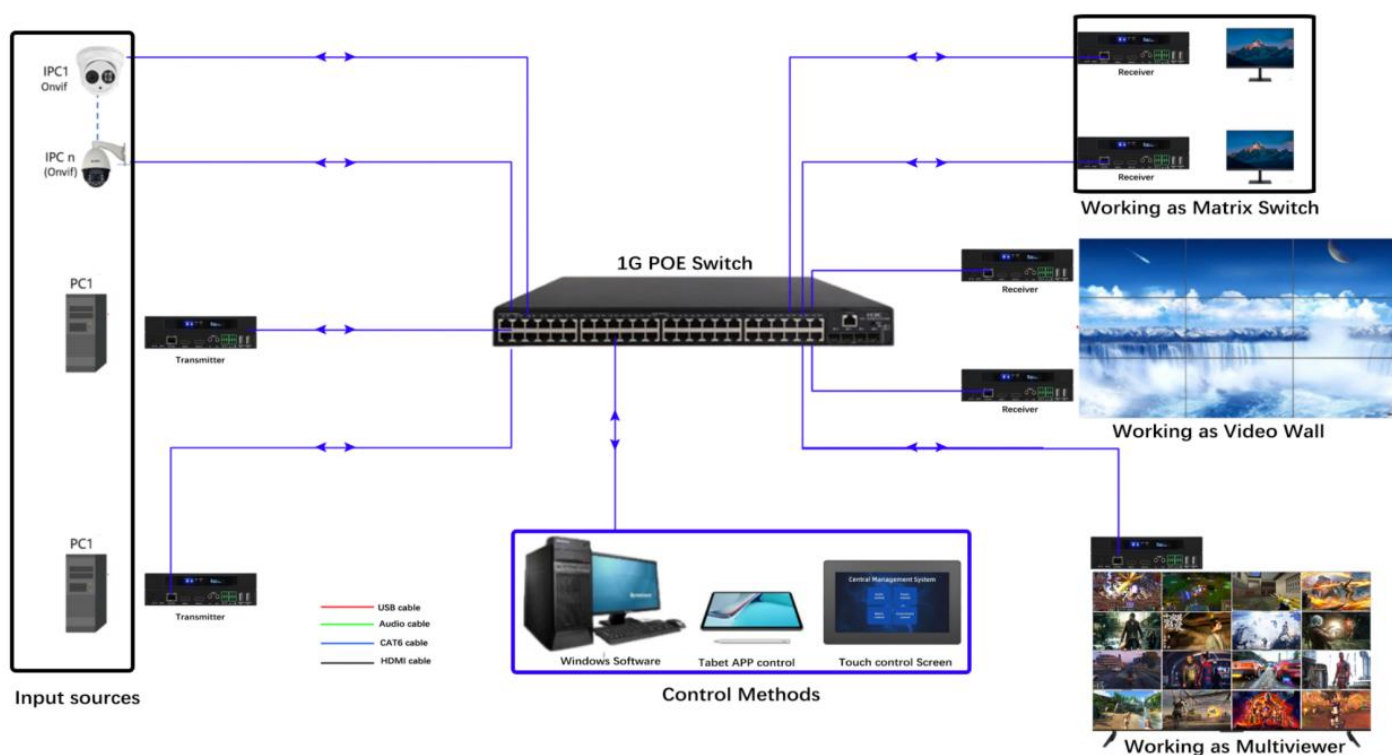


CONNECTION DIAGRAM

WORKING AS A MATRIX SWITCHER, MANY TO MANY



WORKING AS VIDEO WALL PROCESSOR AND MULTIVIEWER

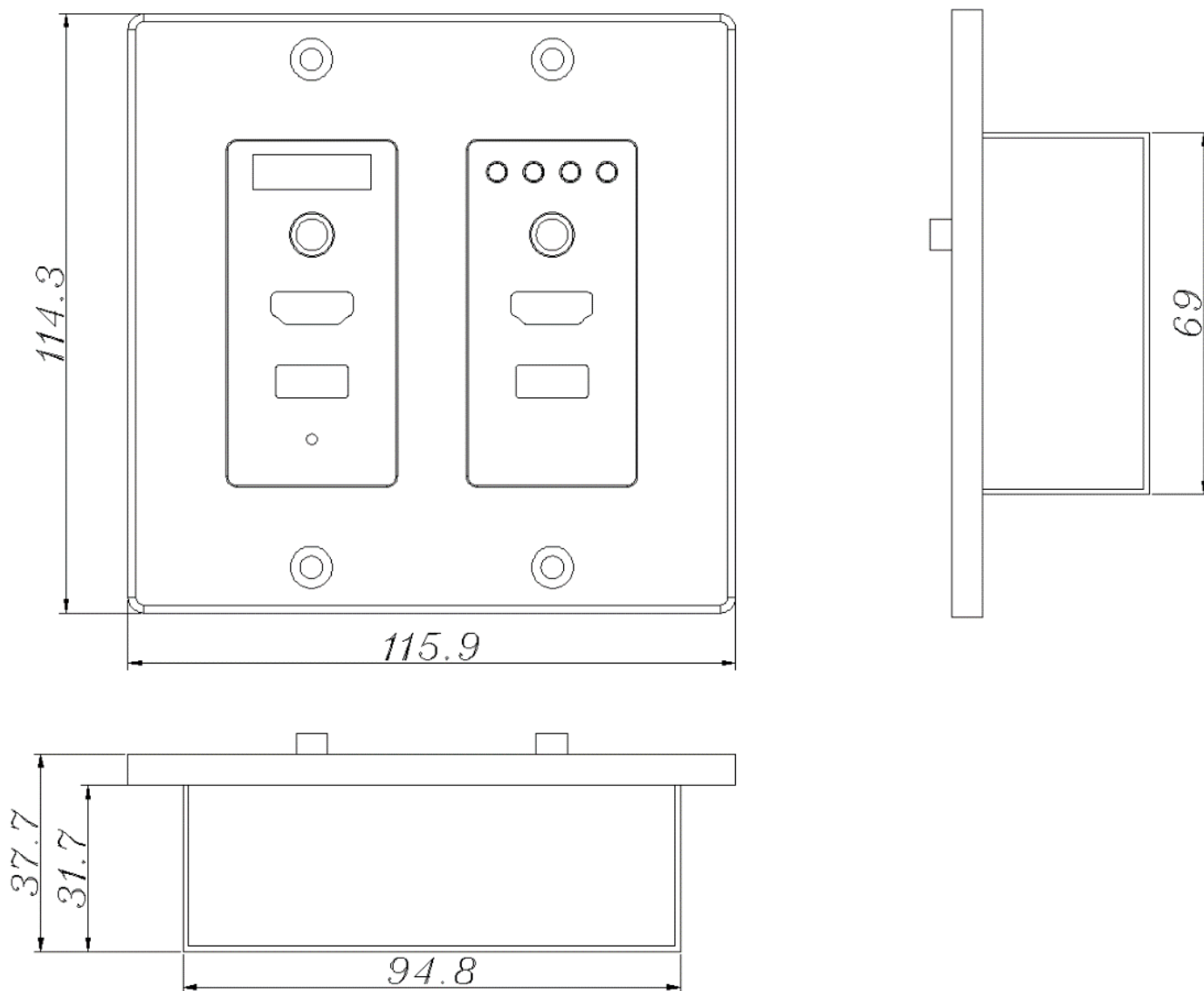




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PRODUCT DIMENSION

PRODUCT DIMENSION (L*W*H)(mm)





INQUIRIES AND AFTERSALES SUPPORT



HDTV Supply, Inc

Inquiries and Aftersales Support

For any inquiries or assistance related to this product, including aftersales service, please contact our customer support team. We are committed to providing you with the highest level of service.

Contact Details:

- Phone: 833-WOLFPACK (833-965-3722)
- Email: customerservice@hdtvsupply.com | support@hdtvsupply.com
- Website: www.hdtvsupply.com

Our team is ready to assist with any questions or concerns you may have.