## **USER MANUAL**



# CI R-HDMI-K21

### 300M HDMI KVM IP Extender

#### Enjoy the vivid world

#### Introduction:

300M HDMI IP Extender is based on TCP/IP standard. It transmits your HD display with the high resolution up to 300 meters away from your DVD or computer source by using one CAT5e/6 cable. At the same time, it's convenient to transmit HDMI audio and video source by point-to-point mode, point-to-multipoint, multipoint-to -multipoint mode and cascade connection mode .



\* Support HDCP1.4. \* Decoding mode MJPEG.

\* Support point-to-point mode, one point-to-multi point mode

- and cascade connection mode.
- \* 802 3 Ethernet standard
- \* Support IR remote control.
- \* Support USB mouse and keyboard extension.
- \* The design of pure hardware, plug and play, no need for additional software.

#### Specifications:

Resolutions Audio	
The max working current	TX /50m4 RX /50m2
Size(L-W-H)	
Weight	
Operating Temperature/Humidi	ty 0°C-45°C/10%-80%RH(no condensation)
Storage Temperature/Humidity	10 C -70 C /5%-90%RH(no condensation)

Keep it clear that the IP addr. of the unit(the congruent relationship of IP addr. and DIP switch was showed in the user's manual), the IP addr. of RX can be showed on the display when RX do not connect with the network cable. With the IP addr. of RX, e.g.: IP addr. is 192.168.1.215, then input 192.168.1.215:9999

in the browser to click "Enter", the web opening.

#### Application diagrams: Multipoint to multipoint application



Note: The transmission distance through the switch is 200 meters before and after.

#### Application diagrams:



1PC

1PC

1PC

audio-visual conference command and control center

### The Package contents:

1. Transmitter	1PC	5. IR transmitter
2. Receiver	1PC	6. USB cable male to male
<ol><li>5V Power adapter</li></ol>	2PCS	<ol><li>User's Manual</li></ol>
4. Carrier frequency infrared	1PC	

### Physical interface diagram:





- 8: IR-RX --- Connect IR receiver;
- 9: HDMI Out --- HDMI output,
- 3: Status --- Status indicator;
- 4: Link --- Network connection indicator; 5: Reset --- restart key (Short press to restart,

2: PWN --- Power indicator

- 10: SET --- DIP switch seting; 11: Ethernet --- Network interface by cat5e/6;
- 12: USB-PC --- USB output, connect computer;

connect HDMI display device;

- 13: Keyboard --- USB input,keyboard input; 14: Mouse --- USB input, mouse input;
- and long press ip address to restore factory settings; 6: IR-TX --- Connect IR transmitter; 7: HDMI In --- connect HDMI signal source;

#### Connection and operation:

- 1: Connect the HDMI source (such as DVD, PS3, STB) to the "HDMI IN" of transmitter by HDMI cable.
- 2: Connect the "HDMI out" of Receiver to display by HDMI cable.
- 3: Connect the Transmitter and Receiver with one cat5e/6 cable (recommend), the furthest distance is 300M.(SET DIP number 1-4 must be dialed downward.)
- 4: Plug the IR receiver to the RX, and IR transmitter to the TX. Aim at the equipment which needs to be controlled if you need the IR control function.
- 5.Plug the mouse and keyboard into the USB port of the RX, and connect the USB port of the TX with the computer if you need the KVM control function.
- 6: Connect two pieces of 5V power supply to the transmitter and receiver, and power on Now the PWN indicator of the units is lightened; when the status indicator twinkling, link indicator light up, means the units start successfully.
- 7: Multi-point to Multi-point pairing: when multiple TX and multiple RX connect with switcher and Multi-point to Multi-point pairing requested, please setting by SET dip

switch or pairing the IP extenders by Web browser setting. Note: SET dip switch status :

"ON" corresponding level 0(dial down) ; "OFF" corresponding level 1.



DIP switcher from left to right, SW1 SW2 SW3 SW4.

SW1: point to multi-point ---OFF; multi-point to multi-point---ON(dial down).

SW2 SW3 SW4: IP setting:

TX board: IP address 192,168,1,x, "x" is the DIP switch status SW2 SW3 SW4+200. range 200-207.

For example: DIP switch status SW2=ON SW3=OFF SW4=ON, so, x=010b+200=202. RX board: IP address 192.168.1.x, "x" is the DIP switch status SW2 SW3 SW4+208, range 208-215.

For example: DIP switch status, SW2=ON SW3=OFF SW4=ON , so, x=010b+208=210. Note: The systems would restart when the DIP switch status changed, it supports setting 8 sets of IP addresses at most, then, maximum realize 1-8 and 8-8, setting by web to pair the IP address is requested if the application occasion out of this range. When using point to multi-point mode, the DIP switch SW1 of TX and RX both should dial

to "OFF", TX board SW2/3/4 can be setting arbitrarily, no need to stay the same with RX board of SW2/3/4, multiple SW2/3/4 of RX board need keep different status. When using multi-point to multi-point mode, the DIP switch SW1 of TX and RX both should dial to "ON", SW1/2/3/4 of the TX need to stay the same with SW1/2/3/4 of RX board.More settings, such as MAC address, gateway,multicast group,device name, etc., please setting by web.

Input ip:9999 in browser, the IP address is belongs to the extender, e.g.the TX IP addr. is 192.168.1.202, so input 192.168.1.202:9999, then be allowed to open the web to operate setting action. Once used web to update the settings, then web settings go into effect, the DIP switch settings invalid. If need make DIP switch take effect again, should input 888888 in restore term of web, then click "Commit", now it would restore the factory default settings and re-start.

The MAC address will generate automatically and randomly and keep fixed after the extender power on first time. Whether or not power on after that, the MAC address will keep the one generated at the first time.Pair the RX/TX, the extenders and PC should under the same LAN.

For example: PC IP addr.: 192.168.1.216
Subnet mask: 255.255.255.0
Gateway: 192.168.1.1