KA263TX HDMI OVER IP MATRIX 120M WITH IR 4K60HZ (IP COLOUR) TRANSMITTER

Introduction

This 4K@60Hz HDMI over IP matrix kit, including a transmitter and a receiver, realizing switching, extending and distributing 4K@60Hz audio and video signals via the IGMP switch. Built on ipcolor STREAM™ technology to deliver high-definition and low-latency transmission. The transmitter can extend 100 signal sources and switch to 253 receiving terminals. The HDMI signal can be extended up to 120 meters over Category 6 or higher-level networking cables while supporting one-toone connection and many-to-many connection. Equipped with HDMI loop out, bi-directional IR passback, RS-232 command control, I/O. Widely used in audiovisual conference, transportation control center, radio and television, education and training and other fields.

Features

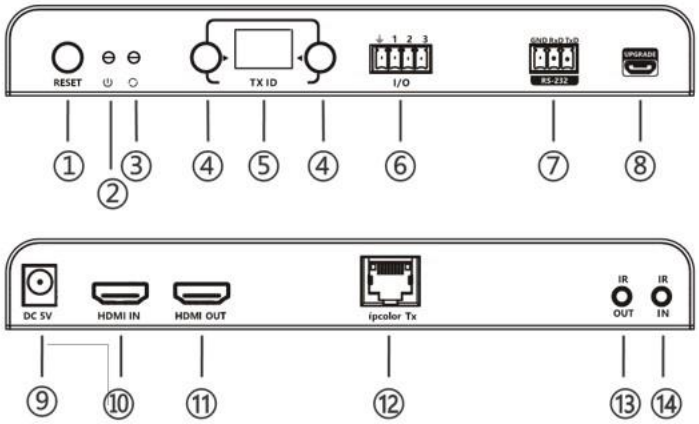
1. Built on ipcolor STREAM™ technology to deliver high-definition and low-latency transmission.
2. Supports up to 3840 x 2160@60Hz resolution, backwards compatible.
3. Compatible with Cat5/5e/6 or higher-level networking cables, transmission distance of Cat6 cable is 120 meters.
4. Supports one-to-one or many-to-many connections through the gigabit switch.
5. Supports RS-232 passthrough and control.
6. The transmitter supports HDMI loop out.
7. Supports bi-directional IR pass-back(20 ~ 60KHz).
8. Supports I/O interface control.
9. Supports POE (Power over Ethernet).
10. Creating multi-screen splicing with up to 5x5(also include 1x1/1x2/1x3/1x4/1x5/2x1/2x2/2x3/2x4/2x5/3x1/3x2/3x3/3x4/3x5/4x1/4x2/4x3/4x4/4x5/5x1/5x2/5x3/5x4/5x5) video wall through switch and controlled by APP.
11. Supports 100 signal source inputs and 253 signal outputs, providing flexible many-to-many matrix configuration.
12. Firmware upgrading via Micro USB port.
13. Lightning protection, surge protection, ESD protection.
14. Supports stable 24/7 operation.

Technical Parameter

Item	Transmitter	Receiver
Video		
Input interface	1x HDMI	1x RJ45
Output interface	1xHDMI 1xRJ45	1x HDMI
HDMI Length	≤5m	≤5m
Maximum transfer rate	18Gbps	
Compatibility	HDMI 2.0	
	HDCP 1.4/HDCP 2.2	
Resolution	3840x2160@24/30/50/60Hz, 1080P@50/60Hz, 720@50/60Hz, 1920x1200@60Hz, 2560x1440@60Hz	
Connection types	One-to-one connection, Many-to-many connection, Switch cascading	
Transmission distance	CAT5 80m/ CAT5E 100m/ CAT6 100m	
Transmission latency	70~180ms	
Audio signal		
Input interface	1x HDMI	1x RJ45
Output interface	1x HDMI 1x RJ45	1x HDMI
HDMI output	LPCM 2.0	
Command Signal		
Input Interface	1x 3.5mm IR input 1x 3.5mm IR output	1x 3.5mm IR input 1x 3.5mm IR output
IR receiving range	≤5m	
IR frequency	20kHz~60kHz	
RS232 (GND/RXD/TXD)	Default baud rate: 115200 Supported: 2400, 8400, 9600, 19200, 38400, 57600, 115200	
Power		
Power supply	DC 5V/2A	DC 5V/2A
Power Consumption	TX ≤ 5.5W	RX ≤ 3.5W
Operating Environment		
Working Temperature	-20°C ~ 60°C	
Storage Temperature	-30°C ~ 70°C	
Humidity	0 ~ 90%RH (no condensation)	
Physical Properties		
Housing	Iron	
Weight	472g	458g
Color	Black	
Dimensions	191(L) * 96(W) * 25(H) mm	
Protection	ESD protection 1a Contact discharge level 2 (±4KV) 1b Air discharge level 3 (±8KV) Implementation of the standard: IEC61000-4-2	
	Lightning protection, Surge protection	

Panel Description

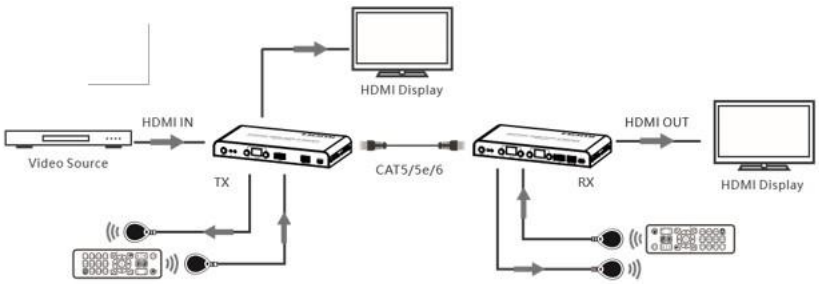
Transmitter



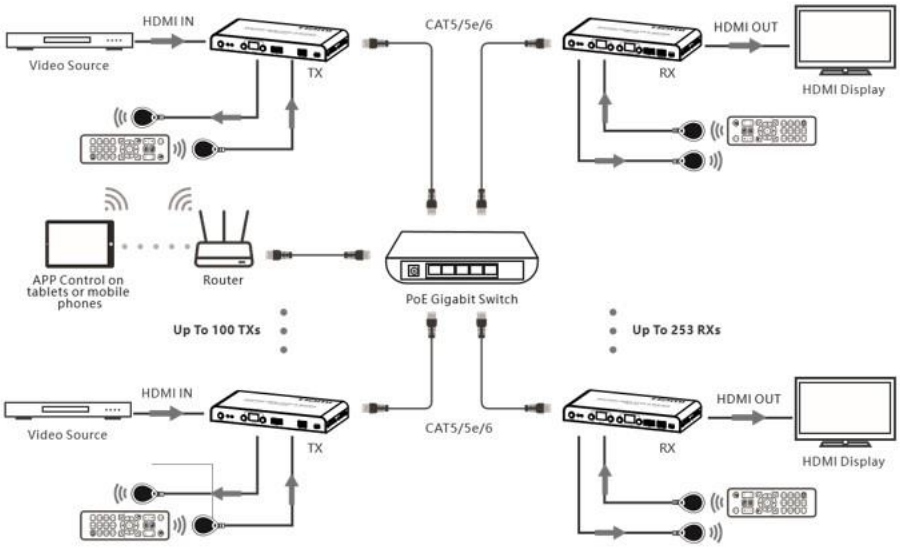
1.	Reset	1)Press to restart the device 2)Press and hold for 5 seconds to restore factory settings
2.	Power indicator (blue)	The indicator will turn on when the power is turned on
3.	Status indicator (orange)	1)Light off: The transmitter and the receiver have not established a connection 2)Flash: The transmitter and the receiver are connected but no video data transmission 3)Steady on: The video data is transmitting
4.	Transmitter ID setting button	Set up the ID of the transmitter
5.	Transmitter ID indicator	Indicate the ID of the transmitter
6.	I/O interface	Use the terminal block to connect the external device, and control the input/output signal via the control APP
7.	RS-232 (GND/RXD/TXD)	1)RS-232 passthrough commands for TX/RX 2)RS-232 control commands for APP
8.	Micro USB port	For firmware upgrading
9.	Power	Connect with DC5V/2A power adapter
10.	HDMI input	Connect with HDMI source device
11.	HDMI output	Connect with HDMI display device
12.	Ipcolor TX	Connect with CAT5/5e/6 or higher-level networking cables (POE input)
13.	IR output	Connect with IR blaster extension cable
14.	IR input	Connect with IR receiver extension cable

Connection Diagrams

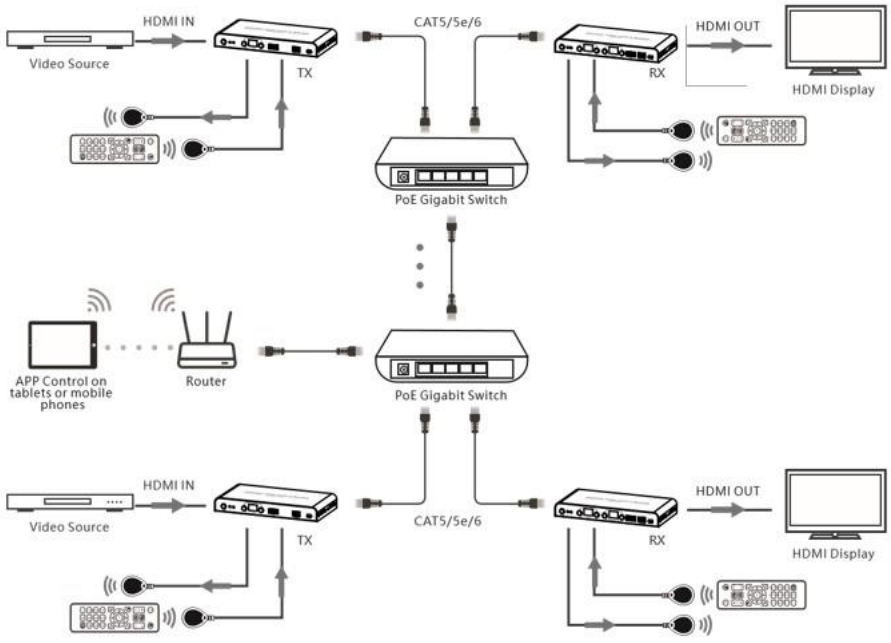
1. One-to-one connection



2. Many-to-many connection (through gigabit switch)



3. Many-to-many switch cascade connection (through gigabit switch)



4. Creating multi-screen splicing with up to 4x4 video wall through switch and controlled by APP