

Over IP Audio Matrix



Disclaimer

The product name and brand name may be registered trademark of related manufactures. ™ and ® may be omitted on the user manual. The pictures in this user manual are just for reference. We reserve the rights to make changes without further notice to a product or system described herein to improve reliability, function or design.

• Important Safety Instructions:

- 1) Do not expose this device to rain or place it near water. Any liquid that goes into the device may cause a failure, fire, or electric shock.
- 2) Never insert anything metallic into the open parts of this device. This may cause a danger of electric shock.
- 3) Do not place this device near or over a radiator or heat register, or where it is exposed to direct sunlight.
- 4) The device should be repaired only by a qualified technician.
- 5) If a third-party power supply is used, please ensure that the power supply specifications meet the product requirements.

• Introduction

This is a distributed audio matrix kit consisting of a transmitter and a receiver. When connected to an IGMP-enabled switch, it can switch, extend, and distribute one audio signal across different interfaces. Built on ipcolor STREAM™ technology to deliver low-latency transmission. It supports direct one-to-one connections, as well as one-to-many, many-to-one, and many-to-many connections via an IGMP switch. Audio signals can be extended up to 120 meters using CAT6/6A/7. This product is widely used in campus broadcasting, radio stations, conference centers, and command centers.

• Features

- 1. Built on ipcolor STREAM™ technology to deliver low-latency transmission.
- 2. Compatible with Cat5e/6 or higher-level networking cables, transmission distance of Cat6 cable is 120 meters.
- 3. Supports direct one-to-one connections, as well as one-to-many, many-to-one, and many-to-many connections via an IGMP switch.
- 4. Transmitter: accepts 3.5 mm, 6.35 mm, RCA and LGR left/right audio inputs.
Receiver: delivers 3.5 mm, 6.35 mm, RCA and LGR left/right audio outputs.
- 5. Easily switch audio sources by dragging and dropping within the companion mobile app.
- 6. Supports 256 signal source inputs and 256 signal outputs, providing flexible many-to-many matrix configuration.
- 7. Supports POE(Power Over Ethernet).
- 8. Firmware upgrading via Micro USB port.
- 9. Lightning protection, surge protection, ESD protection.
- 10. Supports stable 24/7 operation.

• Package Contents



OR



User manual x1



Screw x5



Grounding Screw x1



Mounting ear x2



DC5V/2A Power adapter x 1

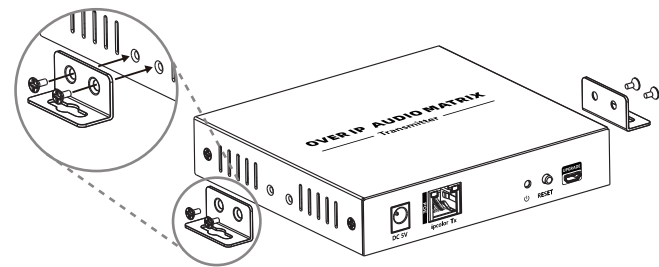


Terminal block (3P) x1

• Installation Requirements

Item	Description	Requirement
Audio source device	PC, DVD, NVR, etc. with audio port	/
Cable	Cat5e/6 or above, following standard IEEE-568B	Cat6/6A/7 ≤ 120m
Network switch	One-to-many, many-to-one, many-to-many or switch cascade	IGMP POE Gigabit switch
Router	Use the APP to control the product while in the same network	Gigabit bandwidth or higher

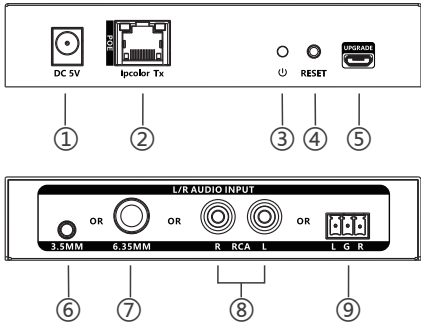
• Wall Mounting



Note: Choose the wall mounting position and attach the mounting ears to the unit according to the diagram.

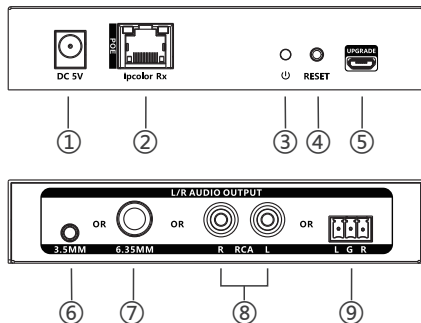
• Panel Description

1. Transmitter(Tx)



① Power port	Connect with DC5V/2A power adapter
② ipcolor Tx	Connect with CAT5e/6 or higher-level networking cables(POE input)
③ Power indicator	Indicator lights up when power is applied
④ Reset	1) Press to restart the device 2) Press and hold for 5 seconds to restore factory settings
⑤ Micro USB port	For firmware upgrading
⑥ 3.5mm L/R audio input	Connect with 3.5mm L/R audio source device
⑦ 6.35mm L/R audio input	Connect with 6.35mm L/R audio source device
⑧ RCA L/R audio input	Connect with 3.5mm RCA L/R audio source device
⑨ LGR L/R audio input	Connect with LGR L/R audio source device (Via terminal block)

2. Receiver(Rx)



①	Power port	Connect with DC5V/2A power adapter
②	ipcolor RX	Connect with CAT5e/6 or higher-level networking cables(POE input)
③	Power indicator	Indicator lights up when power is applied
④	Reset	1) Press to restart the device 2) Press and hold for 5 seconds to restore factory settings
⑤	Micro USB port	For firmware upgrading
⑥	3.5mm L/R audio output	Connect with 3.5mm L/R audio equipment
⑦	6.35mm L/R audio output	Connect with 6.35mm L/R audio equipment
⑧	RCA L/R audio output	Connect with 3.5mm RCA L/R audio equipment
⑨	LGR L/R audio output	Connect with LGR L/R audio equipment (Via terminal block)

• Installation Procedures

1. How to make a network cable



Follow the standard of IEEE-568B:

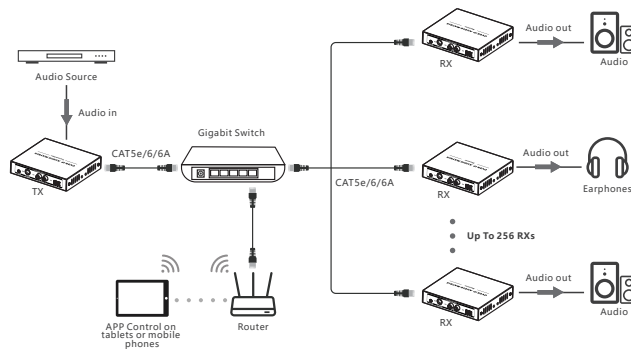
- 1-white and orange 2-orange 3-white and green 4-blue
5-white and blue 6-green 7-white and brown 8-brown

2. Connection Diagrams

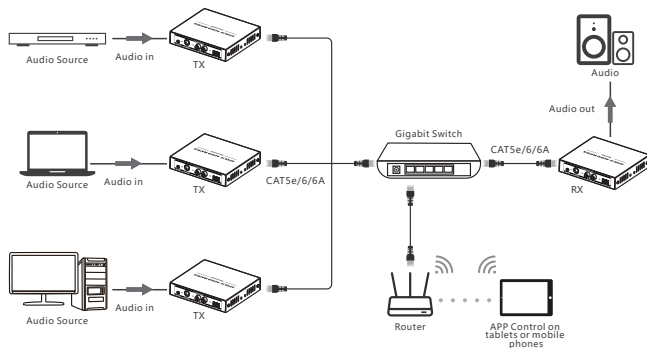
2.1 One-to-one connection



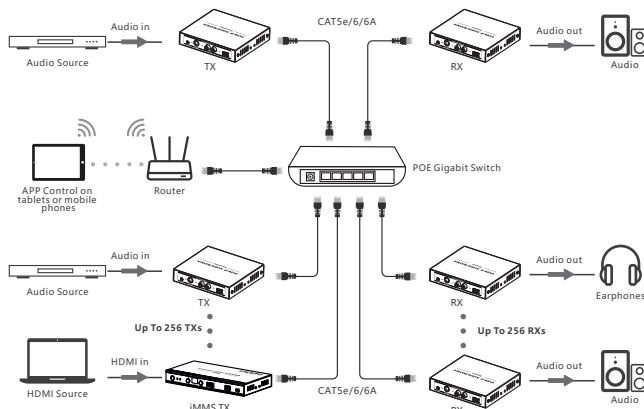
2.2 One-to-many connection (Control via the iMMS APP):



2.3 Many-to-one connection (Control via the iMMS APP):



2.4 Many-to-many connection (Used with iMMS series products and control via the iMMS APP):



Note: It is suggested to use gigabit (1000 Mbps) IGMP POE switches in LAN transmission. DO NOT mix 100Mbps and gigabit switches when using switches cascading. The capacity of connecting transmitters and receivers units when using switch cascading depends on the switch bandwidth.

3. Audio Input/Output Instructions

- 1) The transmitter side provides L/R audio input interfaces, including 3.5 mm L/R, 6.35 mm L/R, RCA L/R, and LGR L/R. The receiver side provides L/R audio output interfaces, including 3.5 mm L/R, 6.35 mm L/R, RCA L/R, and LGR L/R.
- 2) Only one L/R interface (3.5 mm, 6.35 mm, RCA, or LGR) may be connected on either the transmitter or the receiver at a time; simultaneous connection of two or more interfaces is not permitted.
- 3) When multiple transmitters and receivers are connected, the iMMS APP allows audio to be output simultaneously from one or many audio source.
- 4) When the receivers are used with any transmitter from the iMMS series, the iMMS APP enables audio extraction from the incoming HDMI video signal.

4. Connection Instructions

- 1) Connect the audio source device to the L/R AUDIO INPUT port of the transmitter with audio cable, and connect the L/R AUDIO OUTPUT port of the receiver to the audio equipment with another audio cable.
- 2) If the connection is one-to-one, connect the RJ45 port of the transmitter and receiver with a Ethernet cable. For one-to-many, many-to-one, or many-to-many connections, an IGMP POE switch is required to connect the Transmitter and Receiver via Ethernet cables.
- 3) Plug the power supply into the devices to get started.

5. Download iMMS APP

Download iMMS APP from the website, seamlessly switch signal sources by dragging and dropping with iMMS APP.

<https://www.ipcolor.org/download.html>

If using an Android tablet, recommend using a tablet with a SOC Snapdragon 865 or above, 8GB or more of RAM, and a gigabit network to guarantee the optimal experience.

• FAQ

Q: Audio output is unstable?

- A:
- 1) Check that the Ethernet cable is within 120m.
 - 2) Press the "RESET" button on both the transmitter and receiver panels, then reconnect after the units have reset.

Q: Audio output stutters or is not smooth?

- A:
- 1) Verify that IGMP (Internet Group Management Protocol) is enabled on the network switch.
 - 2) Press the "RESET" button on both the transmitter and receiver panels, then reconnect after the units have reset.

Q: Audio volume is low or there is noise?

- A:
- 1) Confirm that only one audio input (on the transmitter) or one audio output (on the receiver) is connected.
 - 2) Re-insert the relevant connectors to ensure all connections are secure.

• Technical Parameters

Item	Transmitter(TX)	Receiver(RX)
Audio signal		
Input interface	1×3.5mm L/R 1×6.35mm L/R 1×RCA L/R 1×LGR L/R	1×RJ45
Output interface	1×RJ45	1×3.5mm L/R 1×6.35mm L/R 1×RCA L/R 1×LGR L/R
Connection types	One-to-one connection One-to-many connection Many-to-one connection Many-to-many connection Switch cascading	
Transmission distance	CAT5 80m / CAT5E 100m / CAT6 120m	
L/R output format	PCM 2.0	
Power		
Power Supply	DC 5V/2A(alternative)	DC 5V/2A(alternative)
Power Consumption	TX ≤ 2W	RX ≤ 2W
Operating Environment		
Working temperature	- 20℃~60℃	
Storage temperature	- 30℃~70℃	
Humidity	0~90%RH (no condensation)	
Physical Properties		
Housing	Iron	
Weight	380g	380g
Color	Black	

Dimensions	125.0(L)*115.0(W)*25.0(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