



# **User Manual**

## **EDU-H201AUC-KIT**

**Multi-function AV Distribution System**

**All Rights Reserved**

Version: EDU-H201AUC-KIT\_2019V1.0

## Preface

Read this user manual carefully before using the product. Pictures shown in this manual are for reference only. Different models and specifications are subject to real product.

This manual is only for operation instruction, please contact the local distributor for maintenance assistance. The functions described in this version were updated by December 2019. In the constant effort to improve the product, we reserve the right to make functions or parameters changes without notice or obligation. Please refer to the dealers for the latest details.

## FCC Statement

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation.

Operation of this equipment in a residential area is likely to cause interference, in which case the user at their own expense will be required to take whatever measures may be necessary to correct the interference.

Any changes or modifications not expressly approved by the manufacture would void the user's authority to operate the equipment.



## **SAFETY PRECAUTIONS**

To ensure the best from the product, please read all instructions carefully before using the device. Save this manual for further reference.

- Unpack the equipment carefully and save the original box and packing material for possible future shipment.
- Follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- Do not dismantle the housing or modify the module. It may result in electrical shock or burn.
- Using supplies or parts not meeting the products' specifications may cause damage, deterioration or malfunction.
- Refer all servicing to qualified service personnel.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Do not put any heavy items on the extension cable in case of extrusion.
- Do not remove the housing of the device as opening or removing housing may expose you to dangerous voltage or other hazards.
- Install the device in a place with fine ventilation to avoid damage caused by overheat.
- Keep the module away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
- Do not twist or pull by force ends of the cable. It can cause malfunction.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- Unplug the power cord when left unused for a long period of time
- Information on disposal for scrapped devices: do not burn or mix with general household waste, please treat them as normal electrical wastes.

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## 1. Product Introduction

The EDU-H201AUC-KIT is a multi-function AV distribution system designed to provide HDMI video switching, system control, video extension and analog audio amplification in a convenient kit. The system consists of K12-TX1-4K HDBaseT Transmitter, EDU-RX1 HDBaseT Receiver and K12-PAD1 Control Panel.

Utilizing the Valens Colligo series chips, power, control, video up to 4K, and audio are transported over a single 40m (131ft)/70m (230ft) solid core Category cable between the wall plate transmitter and the receiver. The wall plate control panel connects to the wall plate transmitter with a second solid core Category cable. All the power needed for the system is provided by the receiver. Additionally, the receiver features a built-in web GUI for control and analog audio de-embedding to a built-in 2x20 watt @4Ohm stereo amplifier.

### 1.1 Features

- Two HDMI inputs can be switched freely.
- HDMI video resolution is up to 4K@60Hz 4:2:0.
- Extends 4K@60Hz 4:2:0 signal up to 40m (131ft) and 1080p@60Hz signal up to 70m (230ft) via a single CATx cable.
- USB for interactive whiteboard connection.
- Supports HDCP 2.2.
- Supports MIC input.
- 2x20Watt@4Ohm amplifier output.
- Customizable control panel, support IR learning.
- Copy and load IR and RS232 control settings.
- Supports GUI control.
- Supports UPNP.
- Micro USB for firmware upgrade.

## Multi-function AV Distribution System

### 1.2 Package List

|               |   |
|---------------|---|
| Transmitter   | <ul style="list-style-type: none"> <li>● 1x EDU-TX1 Scaler Wall Plate HDBaseT Transmitter</li> </ul>  |
| Receiver      | <ul style="list-style-type: none"> <li>● 1x EDU-RX1 HDBaseT Receiver</li> <li>● 2x Mounting Ears with 4 Screws</li> <li>● 4x Plastic Cushions</li> <li>● 1x 4-pin Terminal Block</li> <li>● 3x 3-pin Terminal Blocks</li> <li>● 1x 2-pin Terminal Block</li> <li>● 1x IR Emitter</li> <li>● 1x USB-A to USB-B Cable</li> <li>● 1x Power Adapter (DC 24V 2.71A)</li> </ul> |
| Control Panel | <ul style="list-style-type: none"> <li>● 1x EDU-PAD1 Control Panel</li> </ul>   |
|               | <ul style="list-style-type: none"> <li>● 1 x User Manual</li> </ul>   |

### 1.3 Customer Service

We provide limited warranty for the product within **three years** counting from date of purchase (The purchase invoice shall prevail).

**Note:** *Please contact your distributor immediately if any damage or defect in the components is found.*

## Multi-function AV Distribution System

### 2. Specification

#### 2.1 EDU-TX1 Transmitter

| <b>Video</b>           |   |
|------------------------|---|
| Video Input            | (1) HDMI IN 1, (1) HDMI IN 2  |
| Video Input Connector  | (2) 19-pin type-A female HDMI   |
| Video Output           | (1) PoC IN/HDBT OUT, (1) POWER/RS232  |
| Video Output Connector | (2) RJ45  |
| <b>Control</b>         |   |
| Control Port           | (1) TO PC, (1) FIRMWARE   |
| Control Connector      | (1) Type-B USB, (1) Micro USB   |
| <b>General</b>         |   |
| Video Resolution       | Up to 4K@60Hz 4:2:0   |
| Transmission Mode      | HDBaseT   |
| Transmission Distance  | <b>CAT5e/6:</b><br>4K@60Hz 4:2:0 ≤ 35 meters (115 feet),<br>1080p@60Hz ≤ 60 meters (197 feet) |
|                        | <b>CAT6a/7:</b><br>4K@60Hz 4:2:0 ≤ 40 meters (131 feet),<br>1080p@60Hz ≤ 70 meters (230 feet) |
| Bandwidth              | 10.2Gbps  |
| HDMI Version           | 1.4   |
| HDCP Version           | 2.2   |
| Operation Temperature  | -5~ +55℃  |
| Storage Temperature    | -25 ~ +70℃  |
| Relative Humidity      | 10%-90%   |
| Dimension (W*H*D)      | 105mm x 89mm x 44mm   |
| Net Weight             | 242g  |

## Multi-function AV Distribution System

### 2.2 EDU-RX1 Receiver

| <b>Video</b>           |  |
|------------------------|--|
| Video Input            | (1) HDBT IN/PoC  |
| Video Input Connector  | (1) RJ45   |
| Video Output           | (1) TO DISPLAY   |
| Video Output Connector | (1) 19-pin type-A female HDMI  |
| <b>Audio</b>           |  |
| Audio Input            | (1) MIC  |
| Audio Input Connector  | (1) 3-pin terminal block   |
| Audio Output           | (1) 2x20Watt@4Ω, (1) LINE OUT  |
| Audio Output Connector | (1) 4-pin terminal block, (1) 3-pin terminal block   |
| Audio Format           | HDMI embedded audio: PCM/Dolby/DTS<br>MIC input audio: PCM<br>Analog output audio: PCM               |
| <b>Control</b>         |  |
| Control                | (1) TCP/IP, (1) FROM TOUCHSCREEN, (1) IR OUT, (1) RS232,<br>(1) REMOTE MUTE                          |
| Control Connector      | (1) RJ45, (1) Type-A USB, (1) 3.5mm mini jack, (1) 3-pin terminal block,<br>(1) 2-pin terminal block |
| <b>General</b>         |  |
| Video Resolution       | Up to 4K@60Hz 4:2:0  |
| Transmission Mode      | HDBaseT  |
| Transmission Distance  | <b>CAT5e/6:</b> 4K@60Hz 4:2:0 ≤ 35 meters (115 feet),<br>1080p@60Hz ≤ 60 meters (197 feet)           |
|                        | <b>CAT6a/7:</b> 4K@60Hz 4:2:0 ≤ 40 meters (131 feet),<br>1080p@60Hz ≤ 70 meters (230 feet)           |
| Bandwidth              | 10.2Gbps   |
| HDMI Version           | 1.4  |
| Power Supply           | Input:100V~240V AC; Output: 24V DC 2.71A   |
| Power Consumption      | 55W (Max)  |
| Operation Temperature  | -5~ +55℃   |
| Storage Temperature    | -25 ~ +70℃   |
| Relative Humidity      | 10%-90%  |
| Dimension (W*H*D)      | 250mm x 31mm x 130mm   |
| Net Weight             | 682g   |

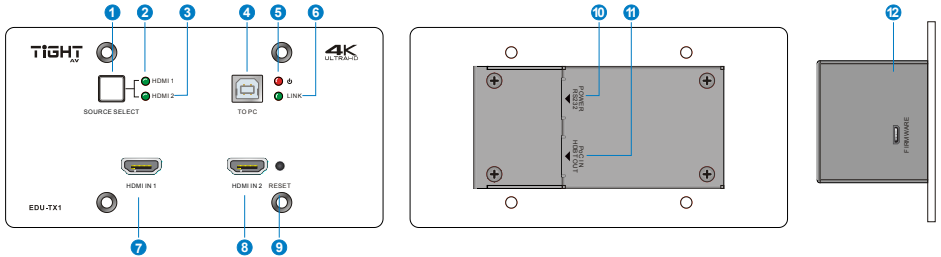


**Multi-function AV Distribution System****2.3 EDU-PAD1 Control Panel**

| <b>Port</b>           |   |
|-----------------------|---|
| Program Port          | (1) CONFIG, (1) POWER/RS232   |
| Output Port           | (1) Type-A USB, (1) RJ45  |
| Other                 | (1) Volume Knob, (2) Buttons (SOURCE, DISPLAY ON/OFF), (1) Built-in IR sensor |
| Operation Temperature | -5~ +55°C   |
| Storage Temperature   | -25 ~ +70°C   |
| Relative Humidity     | 10%-90%   |
| Dimension (W*H*D)     | 80mm x 80mm x 37mm  |
| Net Weight            | 124g  |

### 3. Panel Description

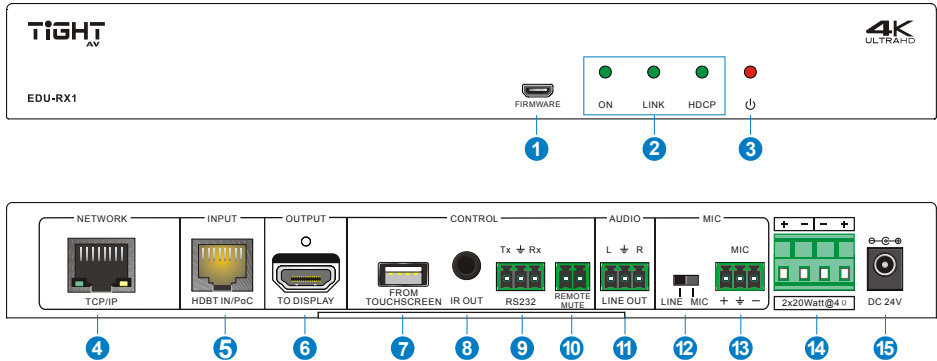
#### 3.1 EDU-TX1 Transmitter



- ① **SOURCE SELECT:** Blue-backlit button for source selection.
- ② **HDMI IN 1 LED:** Illuminates yellow when the HDMI source device is connected to the HDMI input 2 port or green when the HDMI source is selected as input.
- ③ **HDMI IN 2 LED:** Illuminates yellow when the HDMI source device is connected to the HDMI input 2 port or green when the HDMI source is selected as input.
- ④ **TO PC:** Connects to Host PC to receive USB control signal from receiver.
- ⑤ **POWER LED:** Illuminates red when power is applied.
- ⑥ **LINK LED:** Illuminates green when there is a valid HDBaseT connection with the receiver. The LED is off when there is no valid link.
- ⑦ **HDMI IN 1:** Connects to an HDMI source device.
- ⑧ **HDMI IN 2:** Connects to an HDMI source device.
- ⑨ **RESET:** Press this button to reboot the transmitter.
- ⑩ **POWER/RS232:** Connects to the **POWER/RS232** port on the control panel via CATx cable to receive RS232 control signal and power the control panel.
- ⑪ **PoC IN/HDBT OUT:** Connects to the **HDBT IN/PoC** port of receiver by CATx cable. The transmitter can be powered by this port once the receiver has been powered up.
- ⑫ **FIRMWARE:** Micro-USB port for firmware upgrade.

## Multi-function AV Distribution System

### 3.2 EDU-RX1 Receiver



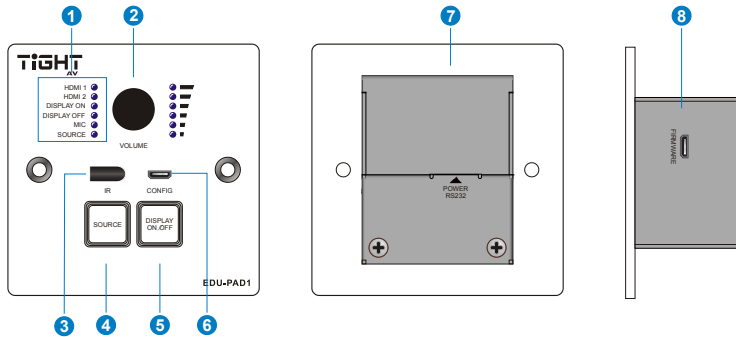
- ① **FIRMWARE:** Micro-USB port for firmware upgrade.
- ② **LED indicators:**
  - **ON:** Illuminates green when the system is in normal working status.
  - **LINK:** Illuminates green when there is a valid HDBaseT connection with the transmitter. The LED is off when there is no valid link.
  - **HDCP:** Illuminates green when there is HDMI video traffic with HDCP. It will blink green when there is HDMI video traffic without HDCP and will be off when there is no HDMI video traffic.
- ③ **POWER LED:** Illuminates red when power is applied.
- ④ **TCP/IP:** Connects to the control device (e.g. PC) to control the system by GUI.
- ⑤ **HDBT IN/PoC:** Connects to the **PoC IN/HDBT OUT** port of transmitter by CATx cable.
- ⑥ **TO DISPLAY:** Connects to a display device (e.g. Projector).
- ⑦ **FROM TOUCHSCREEN:** Connects to a touch screen device (e.g. Interactive whiteboard) to transmit USB signal back to the Host PC. The port also can be connected to an interactive projector to achieve on-line handwriting annotation, but it can't be synchronized to the Host PC.
- ⑧ **IR OUT:** Connects to IR emitter to control the display device.
- ⑨ **RS232:** Connects to a display device (e.g. Projector) for RS232 control.

## Multi-function AV Distribution System

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- ⑩ **REMOTE MUTE:** Connects to fire alarm system. When the fire alarm signal input, the audio output will be set to mute.
- ⑪ **LINE OUT:** Connects to an audio broadcast device to output HDMI embedded audio and MIC audio in mixed mode. In additional, the port can be connected to a sound recorder for sound recording.
- ⑫ **LINE/MIC Level Selector Switch:**
  - When the switch turns to “MIC”, the microphone input is connected to dynamic microphone. There are two different connections:
    - 1) **Unbalanced connection:**  
“ $\perp$ ” connects to ground, and “-” connects to signal.
    - 2) **Balanced connection:**  
“+” connects to positive, “-” connects to negative and “ $\perp$ ” connects to ground.
  - When the switch turns to “LINE”, the microphone input is connected to normal or wireless microphone. There are two different connections:
    - 1) **Unbalanced connection:**  
“ $\perp$ ” connects to ground, and “-” connects to signal.
    - 2) **Balanced connection:**  
“+” connects to positive, “-” connects to negative and “ $\perp$ ” connects to ground.
- ⑬ **MIC:** Connects to wireless microphone and compatible with MIC and LINE audio. When connect PC or other audio input device besides microphone, only “-” and “ $\perp$ ” pins need to be used.
- ⑭ **2x20Watt@4Ω:** Connects to speakers for audio mixing output.
- ⑮ **DC 24V:** Power port for power adapter connection.

### 3.3 EDU-PAD1 Control Panel



#### ① LED indicators:

- **HDMI 1:** Illuminates blue when the HDMI input 1 source is selected.
- **HDMI 2:** Illuminates blue when the HDMI input 2 source is selected.
- **DISPLAY ON:** Illuminates blue when DISPLAY ON function is selected by pressing **DISPLAY ON/OFF** button.
- **DISPLAY OFF:** Illuminates blue when DISPLAY OFF function is selected by pressing **DISPLAY ON/OFF** button.
- **MIC:** Illuminates blue when the MIC audio is selected to be adjusted.
- **SOURCE:** Illuminates blue when the source audio is selected to be adjusted.

② **VOLUME:** Press and hold this button for three seconds to select MIC or SOURCE audio to be adjusted. Rotate the button to turn up or turn down the selected audio. Press the button to mute or unmute the current audio source.

③ **IR:** Built-in IR sensor to receive IR signal from IR remote.

④ **SOURCE:** Blue-backlit button for source selection.

⑤ **DISPLAY ON/OFF:** Blue-backlit button. It can be programmed by IR learning to turn on or off the display device.

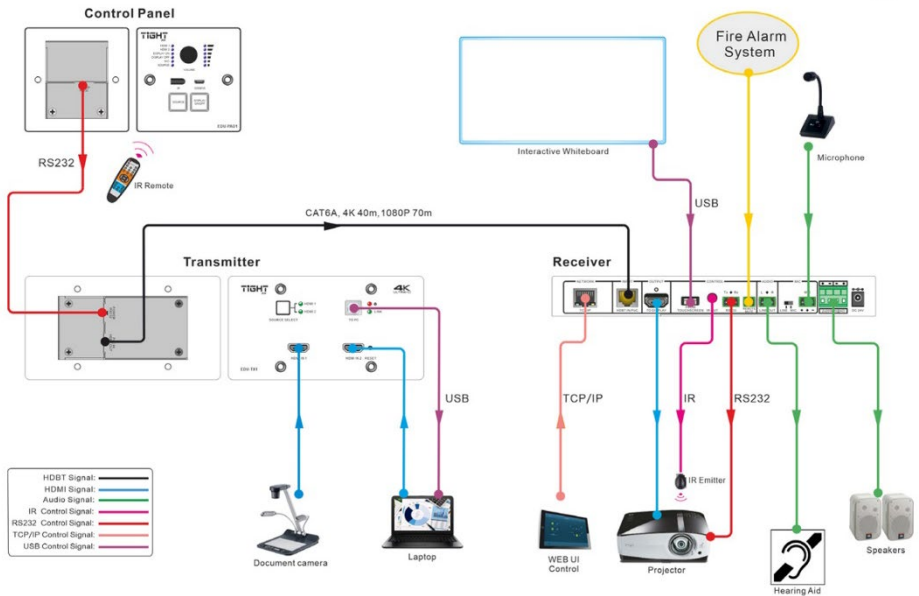
⑥ **CONFIG:** Connects to U-disk to copy or load control settings.

⑦ **POWER/RS232:** Connects to the **POWER/RS232** port of the transmitter via CATx cable to transmit RS232 control signal and power the control panel.

⑧ **FIRMWARE:** Micro-USB port for firmware upgrade.

## Multi-function AV Distribution System

### 4. System Connection



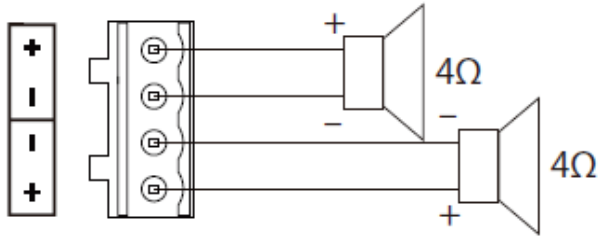
**Note:**

- Connect HDBT ports via solid core CAT5e/6 cable with TIA/EIAT568B standard terminations at both ends.
- The distance is less than 40m at 4K or 70m at 1080p between transmitter and receiver.

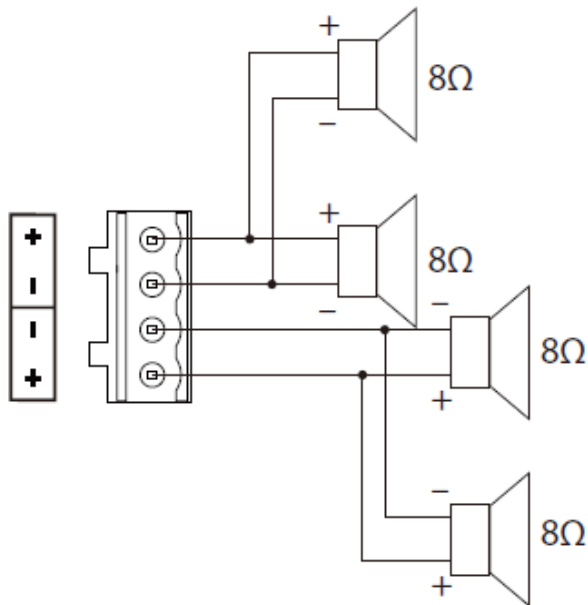
Multi-function AV Distribution System

4.1 Speaker Wiring Configurations

4Ω Load with 4Ω speakers:



4Ω Load with 8Ω Speakers:

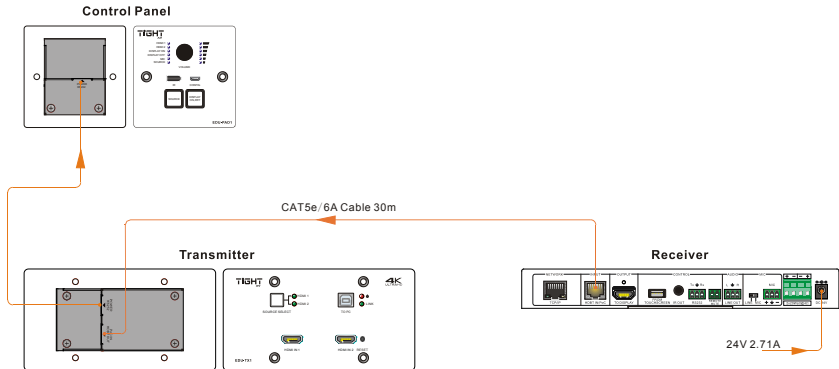


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### 4.2 PoC Connection

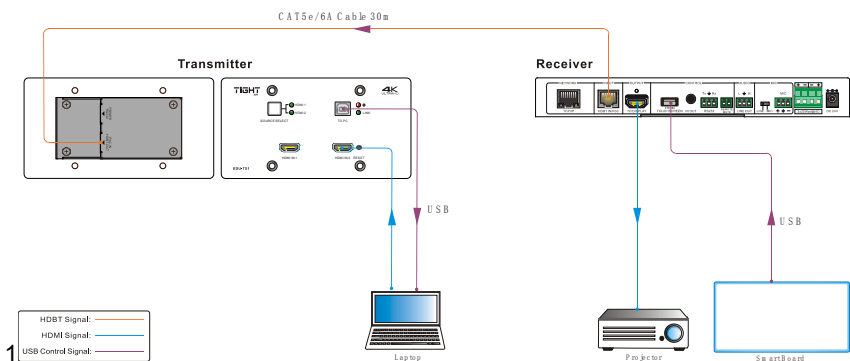
The system supports PoC, which allows several terminals share the same power supply and eliminates the need for extra power supply at the remote nodes.

Connect a 24V DC power adapter to the power port of receiver, the transmitter and control panel can be energized synchronously with PoC solution, see the picture below:



### 4.3 USB Connection

The receiver has a USB port (**FROM TOUCH SCREEN**) to connect interactive whiteboard. When user make notes on interactive whiteboard, the receiver will receive the signal from interactive whiteboard and send it back to the Host PC. Please refer to the return path of USB signal as shown as below.



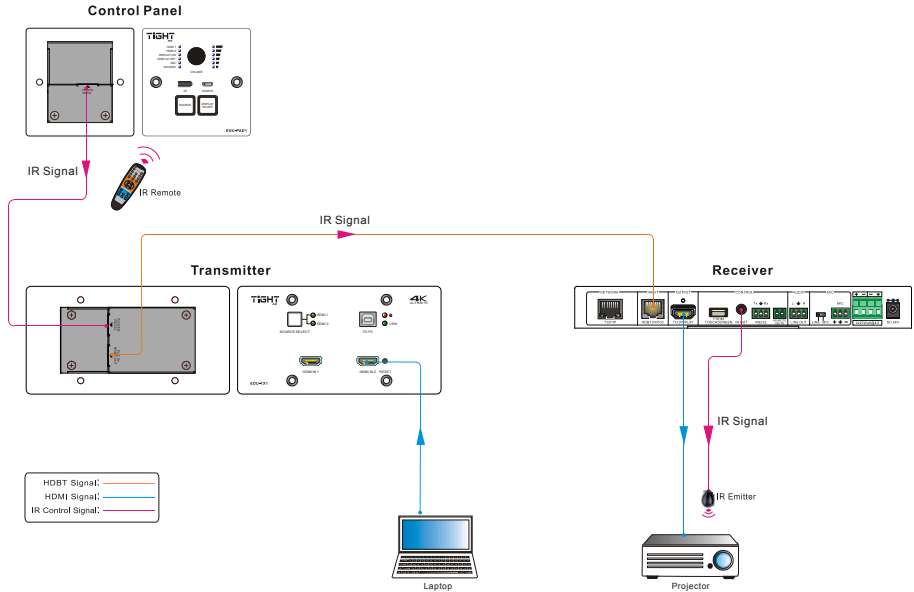
**Note:** The special USB control cable is required if the connection distance is more than 4m/13ft between the receiver and the interactive whiteboard.



## Multi-function AV Distribution System

### 4.4 IR Connection

The control panel provides a built-in IR sensor and the receiver provides an **IR OUT** port for IR pass-through control. Connect IR emitter to the **IR OUT** port of the receiver, and then put the IR emitter close to the display device (e.g. Projector), and put the IR remote of display device close to the built-in IR sensor, the display device can be controlled by pressing IR remote.

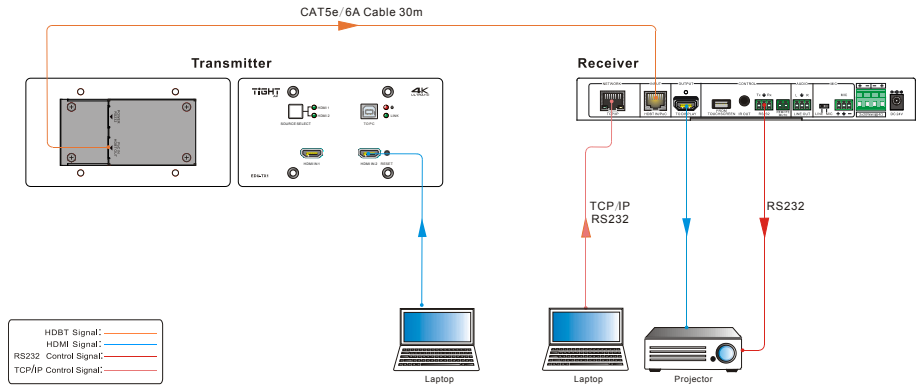


## Multi-function AV Distribution System

### 4.5 RS232 Connection

The receiver provides an additional RS232 interface to connect the display device, and then the display device can be controlled by sending RS232 commands via GUI.

Please refer to **5.3.3 Command Tab**.



## 5. System Operation

### 5.1 IR Learning

The IR learning function allows user to use the buttons of control panel to displace some keys of IR remote which can control display device or other devices. The control panel has two buttons: **SOURCE** and **DISPLAY ON/OFF**, but the **SOURCE** button does not support IR learning function, because it is designed for source selection.

- **Enter IR Learning Mode**

Simultaneously press **SOURCE** and **DISPLAY ON/OFF** buttons to enter IR learning mode. These two buttons will light up, and the **DISPLAY ON** and **DISPLAY OFF** LEDs will start to flash.

- **Programming the DISPLAY ON and DISPLAY OFF Functions**

- 1) Press **DISPLAY ON/OFF** button to choose DISPLAY ON or DISPLAY OFF button function, and its corresponding LED will light blue. For example, press **DISPLAY ON/OFF** button to choose DISPLAY ON button function, and the **DISPLAY ON** LED lights blue.
- 2) Press the corresponding key (such as power on key) on IR remote; meanwhile, put IR remote close to the IR sensor of control panel.
- 3) Once set up successfully, the **DISPLAY ON** LED will flash three times.
- 4) Repeat the above all three steps to set another **DISPLAY OFF** button function.

- **Exit IR Learning Mode**

Press the **SOURCE** button to exit IR learning mode, and this button will go dark.

- **Apply IR Learning Function**

Press the **DISPLAY ON/OFF** button on control panel to turn on display, and then press this button again to turn off display device.

**Note:**

- *When the control panel is in the IR learning mode, press **SOURCE** button can exit.*
- *If there is no operation for sixty seconds, the control panel will automatically exit the IR learning mode.*
- *All buttons will go dark while the control panel exits IR learning mode successfully.*

## 5.2 Button Control

- **Select Input Source**

Press the **HDMI 1** or **HDMI 2** button on the control panel to select the appropriate source device.

Press the **SOURCE SELECT** button on the transmitter to switch input source.

- **Power On and Off the Display**

When power on the display, press the **ON** button on the control panel.

When power off the display, press the **OFF** button on the control panel.

- **Power On and Off the System**

There are two modes for controlling display device and system: synchronous and asynchronous control mode, which can be selected via GUI. For more details, please refer to the [5.3.2 Setting Tab](#).

**1) Synchronous mode:**

Press the **ON** or **OFF** button on control panel to turn on or off the display device and system concurrently.

**2) Asynchronous mode:**

Press the **ON** or **OFF** button on control panel to turn on or off the display device.

Press and hold the **ON** or **OFF** button to power on or off system.

- **Volume Control**

Turn the volume knob clockwise will raise the volume; turning the volume knob counterclockwise will lower the volume.

Press the volume knob will mute or unmute the current audio source.

Press and hold the volume knob for three seconds will switch to the other audio source. If the audio source is muted, this action will unmute the source.

## Multi-function AV Distribution System

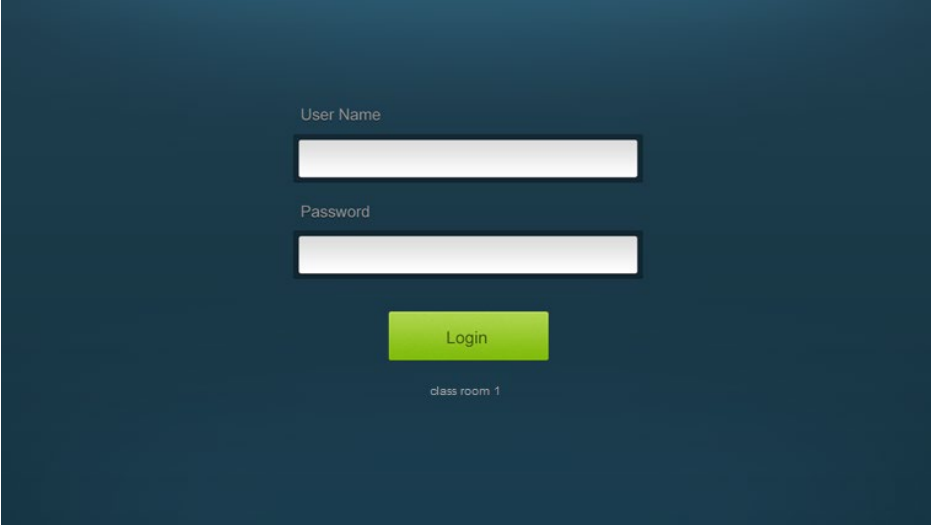
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### 5.3 GUI Control

The web browser control interface is an alternative method to control the system without having to interact with the control panel.

The default IP address of the transmitter is 192.168.0.178. This can be changed in the Network settings by an administrator.

Type **192.168.0.178** in your browser, it will enter the log-in interface shown as below:



User Name

Password

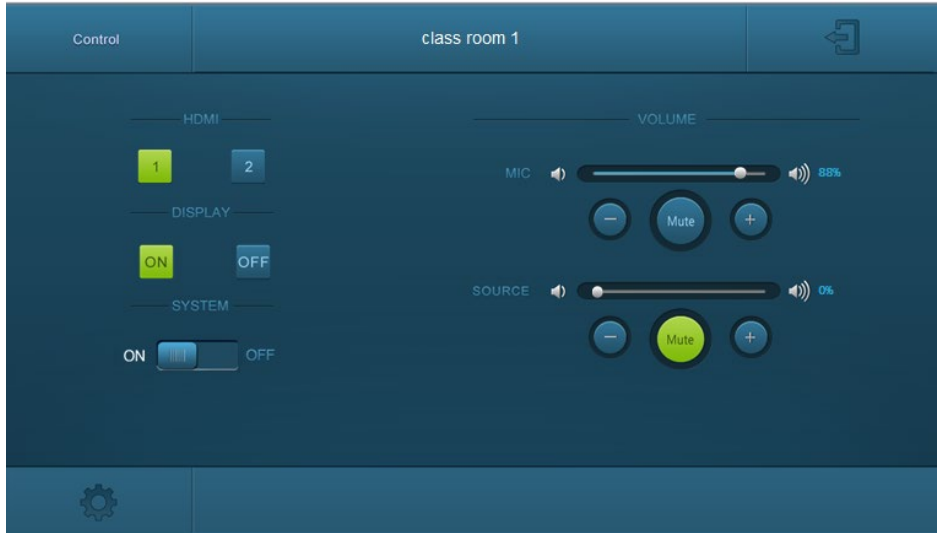
Login

class room 1

To change the settings of the web browser interface or program RS232 commands for the display device, it requires log into the transmitter as an administrator. The User Name is **admin** and the default Password is **admin**.

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### 5.3.1 Device Control Tab



#### **HDMI**

Switch between HDMI input 1 and HDMI input 2.

#### **DISPLAY**

Turn the display on or off.

#### **SYSTEM**

Turn the system on or off.

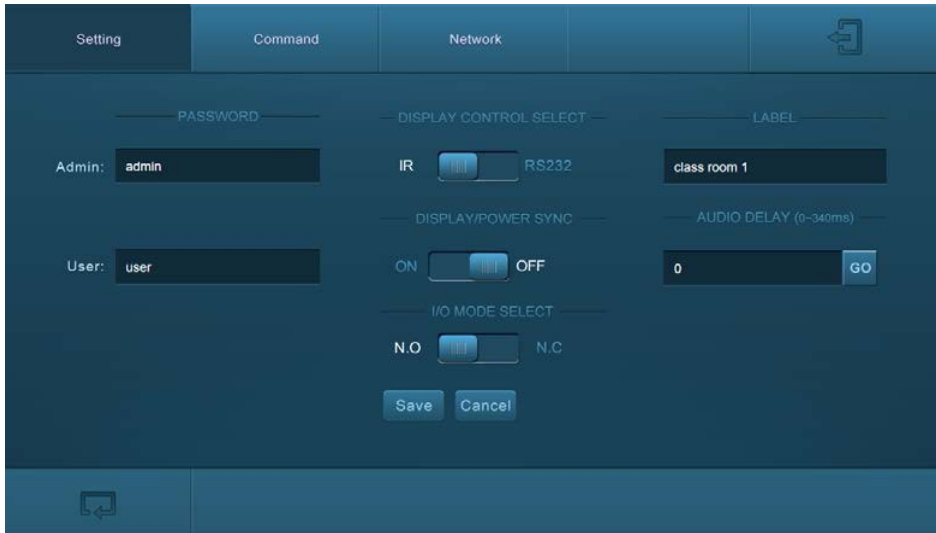
#### **VOLUME**

Mute or unmute MIC and SOURCE audio. Volume may be changed by pressing the “+” or “-” buttons or by dragging the volume slider.

**Note:** When you use Ipad to click the “+” or “-”, it is a normal phenomenon that the Mute button will shake.

### 5.3.2 Setting Tab

To enter the configuration settings, click on the gear icon on the lower left corner of the control interface.



#### **PASSWORD**

Change the password for the admin and user login screen.

#### **DISPLAY CONTROL SELECT**

Select whether the display will be controlled via IR or RS232.

#### **DISPLAY/POWER SYNC**

Select whether the display and system will be powered on and off simultaneously. This option is only active if the display device is controlled via RS232.

- When the mode is **ON**, press the **ON** or **OFF** button on control panel to turn on or off the display device and system concurrently.
- When the mode is **OFF**, press the **ON** or **OFF** button on control panel to turn on or off the display device; press and hold the **ON** or **OFF** button to power on or off system.

#### **I/O MODE SELECT**

Enable (N.O.)/ disable (N.C.) fire alarm signal input.

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### ***LABEL***

Rename the label at the top of the control screen.

### ***AUDIO DELAY***

Set up the audio delay to sync the audio with the video on the display device. The delay time is 0 to 340 ms. Click the GO button to activate the new value.

### ***Save/Cancel***

Save or cancel setting.

### **5.3.3 Command Tab (RS232 Display Control)**

This tab defines the RS232 display control commands. If a display device requires Hex commands, make sure the *Hex* box is checked.

### ***Display On***

Enter the RS232 command to turn on the display.



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**Multi-function AV Distribution System**

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***Display Off***

Enter the RS232 command to turn off the display.

***Input Select***

Enter the RS232 command to switch to the input which is connected to the receiver.

***Input Select Delay***

Enter the delay time in seconds between the Power On and Input Select commands. This delay may be between 1 and 100 seconds.

***Baud Rate***

Select the baud rate necessary to communicate with the display. Available baud rates are: 2400, 4800, 9600, 14400, 19200, 38400, 56000, 57600, and 115200 baud.

***Parity***

Select parity for RS232 communication.

***Command Ending***

Select the command ending for each RS232 command. Available command endings are: null, carriage return, line feed, carriage return and line feed.

***No Activity Timeout***

The system will enter standby, and the display will automatic shutdown when no signal input within the setup time.

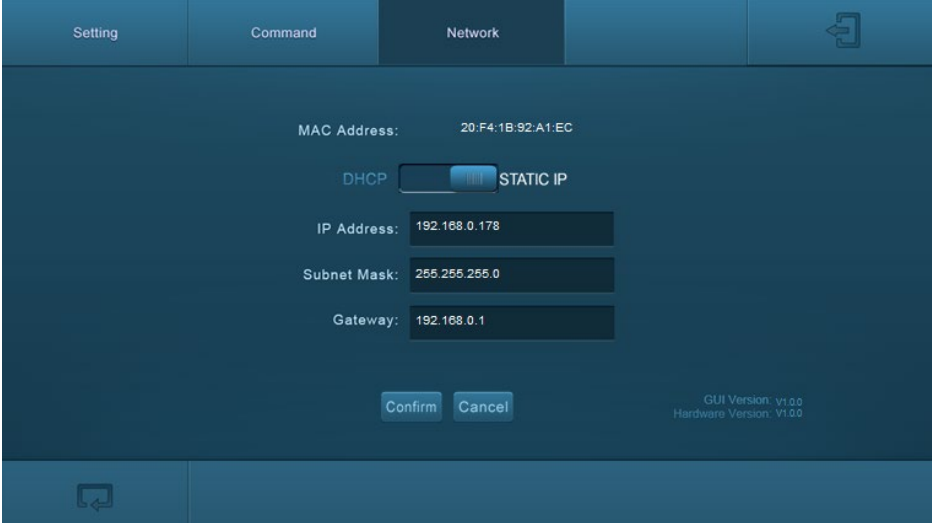
***Save/Cancel***

Save or cancel setting.

**Note:** Please refer to the display device's user manual for more command details.

## Multi-function AV Distribution System

## 5.3.4 Network Tab



Setting Command Network

MAC Address: 20:F4:1B:92:A1:EC

DHCP  STATIC IP

IP Address: 192.168.0.178

Subnet Mask: 255.255.255.0

Gateway: 192.168.0.1

Confirm Cancel

GUI Version: v1.0.0  
Hardware Version: V1.0.0

**DHCP/STATIC IP**

Select whether the system will use a static IP or will be provided an IP via DHCP.

**IP Address**

Enter the IP address for the system.

**Subnet Mask**

Enter the subnet mask for the system.

**Gateway**

Enter the gateway address for the system.

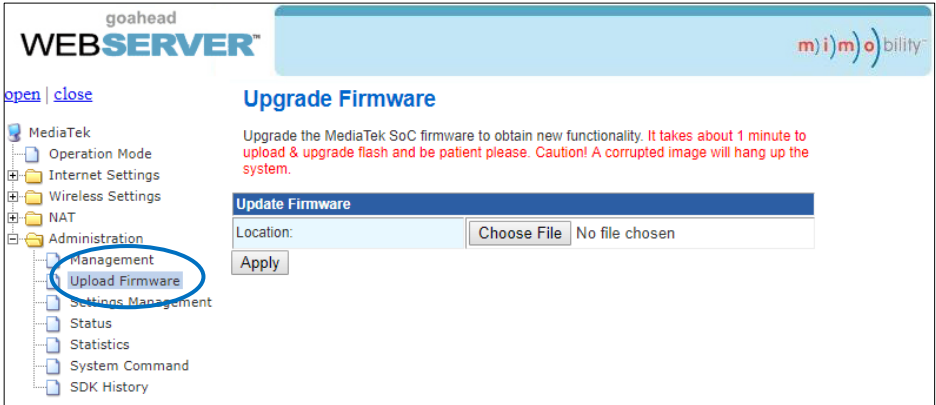
**Confirm/Cancel**

Save or cancel setting.

### 5.3.5 GUI Upgrade

Please visit at <http://192.168.0.178:100> for GUI online upgrade.

Type the username and password (the same as the GUI log-in setting, modified password will be available only after rebooting) to login the configuration interface. After that, click “Administration” in the source menu to get to “Upload Firmware” as shown below:



Select the desired update file and press “Apply”, it will start upgrading then.

**Note:** Please don't do anything during the upgrade process to avoid upgrade failure.

## Multi-function AV Distribution System

### 5.4 TCP/IP Control

The system can be controlled over a network connection. A TCP/IP communication software (e.g. TCP&UDP) needs to be installed on the control PC. After installing the control software, create a connection according the below parameters:

Default IP-Address: 192.168.0.178

Default Subnet Mask: 255.255.255.0

Default Gateway: 192.168.0.1

TCP Port Number: 4001

**Note:**

- All commands do need to end with "<CR><LF>".
- In the commands, "[ "and "]" are symbols for easy reading and do not need to be typed in actual operation.
- Please remember to end the commands with the ending symbols "." or ":",
- Please type the command carefully due to case sensitive.

| Command                    | Description                          | Command and Feedback Example              |
|----------------------------|--------------------------------------|---|
| <b>1A1.</b>                | Switch to input 1.                   | 1A1.                                      |
| <b>1A2.</b>                | Switch to input 2.                   | 1A2.                                      |
| <b>OHP Control OFF.</b>    | Display OFF.                         | OHP IR Control:OFF.                       |
| <b>OHP Control ON.</b>     | Display ON.                          | OHP IR Control:ON.                        |
| <b>PWOFF.</b>              | System OFF.                          | PWOFF.                                    |
| <b>PWON.</b>               | System ON.                           | PWON.                                     |
| <b>Mic Volume:[xx].</b>    | Set MIC volume to [xx]. [xx]=0~60    | Mic Volume:30<br>Mic Volume:30            |
| <b>Source Volume:[xx].</b> | Set source volume to [xx]. [xx]=0~60 | Source Volume:30<br>Source Volume:30      |
| <b>Mute Mic.</b>           | Mute microphone.                     | Mute Mic.                                 |
| <b>Unmute Mic.</b>         | Unmute microphone.                   | Unmute Mic.                               |
| <b>Mute Source.</b>        | Mute source audio.                   | Mute Source.                              |
| <b>Unmute Source.</b>      | Unmute source audio.                 | Unmute Source.                            |
| <b>Status.</b>             | Get all status.                      | SCALE FHD.<br>MODEL NAME:K12_TX1H.<br>... |

## 5.5 Copy and Load Control Settings

The system IR or RS232 configuration can be copied to a USB thumb drive and loaded into additional systems or be saved as a backup.

- **Copy Control Setting**

- 1) Insert a 4GB or smaller FAT32 formatted thumb drive into the **CONFIG** port on the control panel.
- 2) Synchronously press **HDMI 2** and **OFF** buttons for three seconds on control panel. As soon as release the buttons, they will light up while the copy is in progress.
- 3) Remove the thumb drive from the **CONFIG** port once all buttons go dark.

- **Load Control Setting**

- 1) Insert a 4GB or smaller FAT32 formatted thumb drive with saved configuration settings into the **CONFIG** port on the control panel.
- 2) Synchronously press **HDMI 1** and **ON** buttons for three seconds on control panel, and then the buttons will go dark while import successfully.
- 3) Remove the thumb drive from the **CONFIG** port once all buttons go dark.
- 4) Enter the Command Tab via GUI, the loaded RS232 commands will be showed, and then press **Save** to confirm them.