EZCast ProAV

EZL01 User Manual
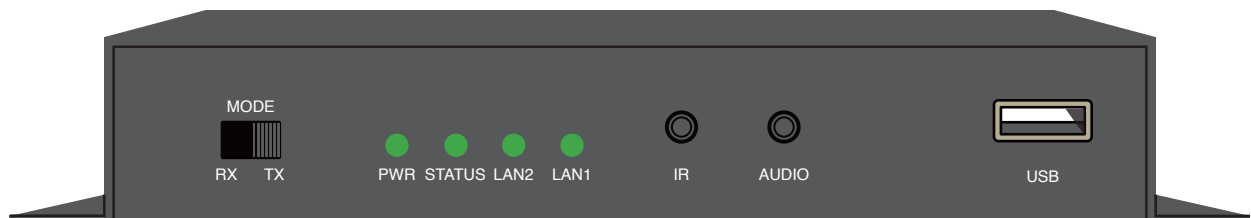**- Ver. 1.0 -**

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Product Overview

ProAV EZL01 is the latest new model of EZCast ProAV series products, which delivers real- time synchronized video/audio transmission over ethernet. Users just simply use existing cat. 5E cable to achieve long distance, zero latency, and almost lossless content. It can switch between transmitter and receiver mode, and also embedded 2 port layer-2 switch for 1 source to 2 synced displays. The transmitter HDMI lookback display will let you monitor the content simultaneously.
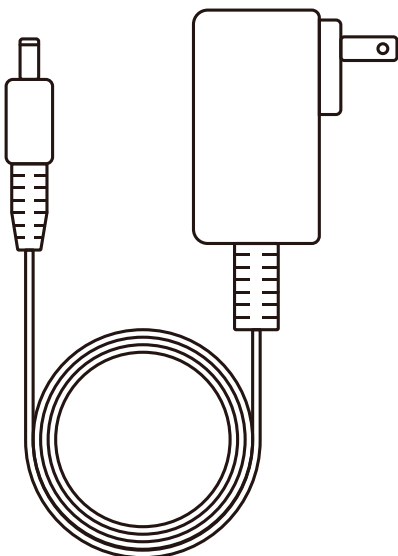
1. Features

- Zero ms Latency from Tx to Rx
- Up to 150m over a single Cat.5e or better cable
- Build in 2x Gigibit RJ-45 ports
- IGMP Snooping support
- HDMI lookback display (Tx)
- Hardware switch to change Tx or Rx mode
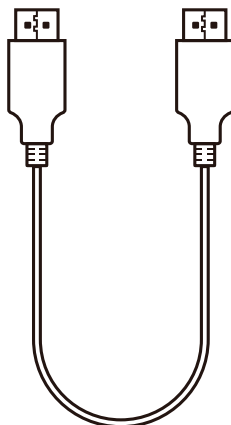- Support IR remote control, Audio in&out
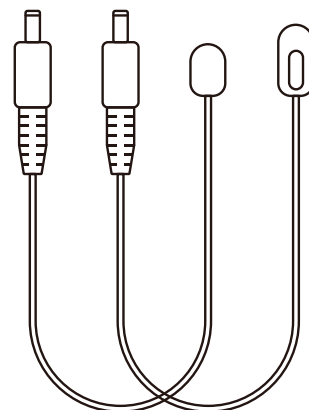
2. What's in The Box
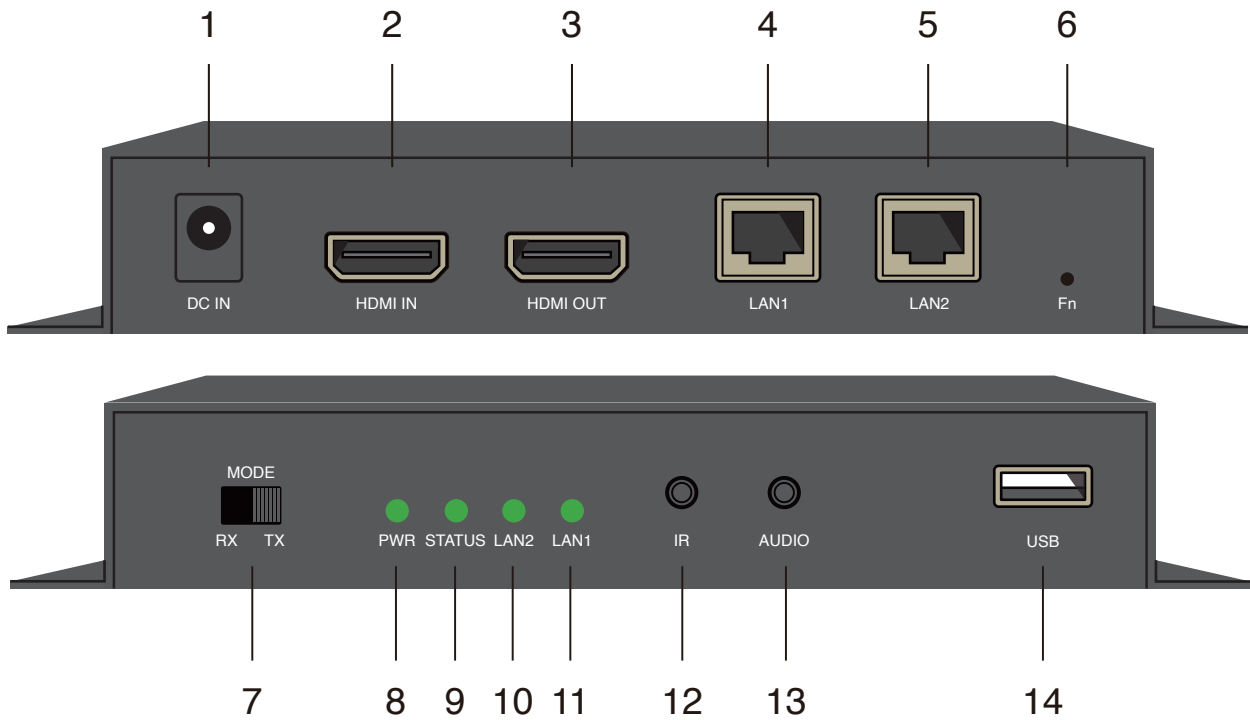

Main Product

Power Cable   HDMI Cable   RX/TX Adapter for IR   Screw X4

Hardware Introduction

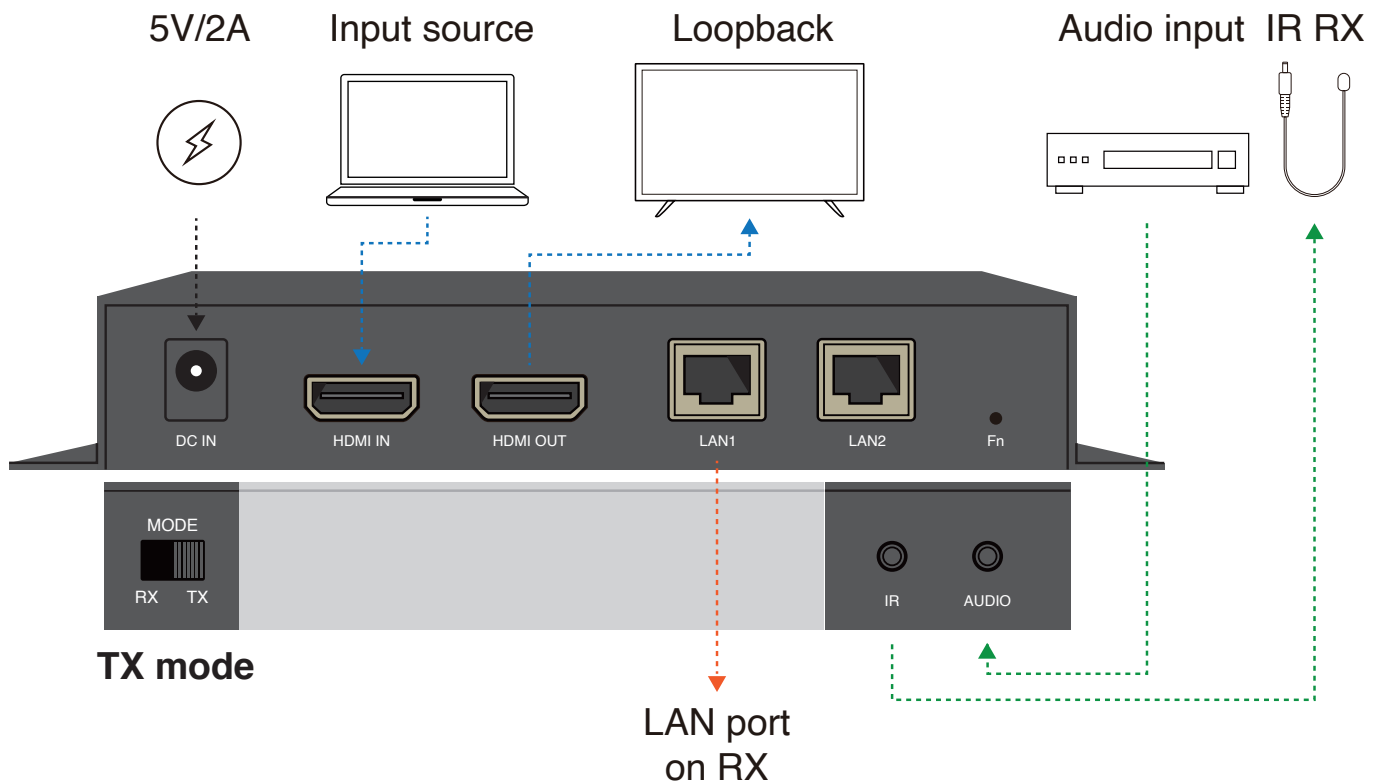| Item	Description
1	DC IN port: 12V/1A power supply is required.
2	HDMI IN port
3	HDMI OUT port
4	LAN 1 port
5	LAN 2 port
6	Fn hole: Long press for 5 seconds to reset to factory default settings.
7	MODE switch: Switch to RX or TX mode.
8	PWR light: Lightning when power is supplied.
9	STATUS light: Lightning when HDMI IN port is tramsmitting data.
10	LAN 2 light: Flashing when LAN 2 port is transmittiing data.
11	LAN 1 light: Flashing when LAN 1 port is transmitting data.
12	IR port: Transmit IR signal for remote control.
13	AUDIO port: Transmit audio.
14	USB port: Use for upgrading firmware.

Installation Guide

1. Transmitter installation

1. Power on EZL01 by a DC cable and switch to TX mode.
2. Use a HDMI cable to connect HDMI input source to HDMI IN port on EZL01.
3. Use a LAN cable to connect EZL01 (TX) to EZL01 (RX) to transmit data.

*Optional connection
1. To loopback, use a HDMI cable to connect a monitor to HDMI OUT port on EZL01. It's an optional connection.
2. To use other audio source, connect EZL01 and audio source by a 3.5mm audio cable.
3. To control by an IR remote, connect IR RX to the IR port on EZL01 (TX).

| 5V/2A | Input source | Loopback | Audio input | IR RX |

DC IN   HDMI IN   HDMI OUT   LAN1   LAN2   Fn

MODE
RX   TX

TX mode

IR   AUDIO

LAN port
on RX

------▶ HDMI cable   ------▶ Power supply
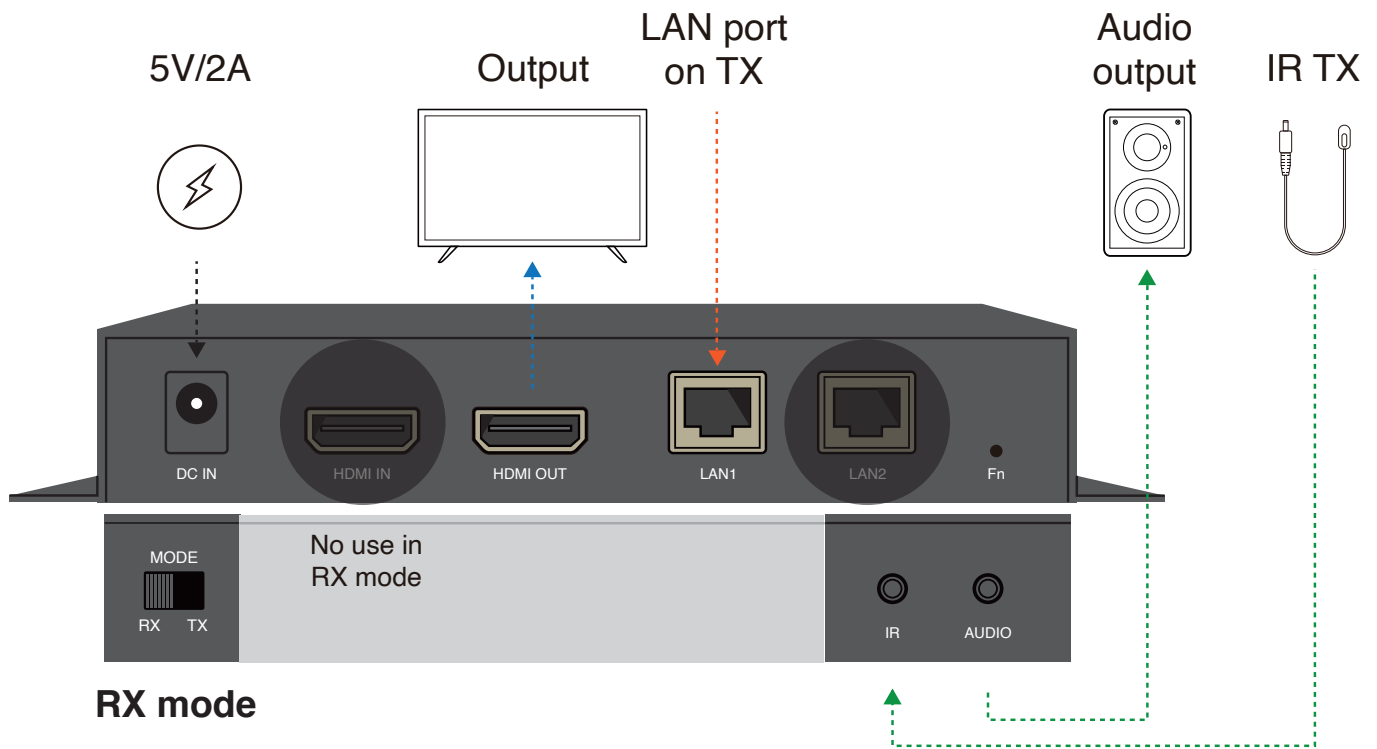------▶ LAN cable   ------▶ 3.5mm cable

2. Receiver installation

1. Power on EZL01 by a DC cable and switch to RX mode.
2. Use a HDMI cable to connect a monitor to HDMI OUT port on EZL01.
3. Use a LAN cable to connect EZL01 (TX) to EZL01 (RX) to receive data.

*Optional connection
1. To output audio to other speaker, connect EZL01 and audio output source by a 3.5mm audio cable.
2. To control by an IR remote, connect IR TX to the IR port on EZL01 (RX).

Note: HDMI IN port and LAN2 port are no use in RX mode.

5V/2A	Output	LAN port on TX		Audio output	IR TX

DC IN   HDMI IN   HDMI OUT   LAN1   LAN2   Fn

MODE
RX   TX

No use in
RX mode

IR   AUDIO

RX mode

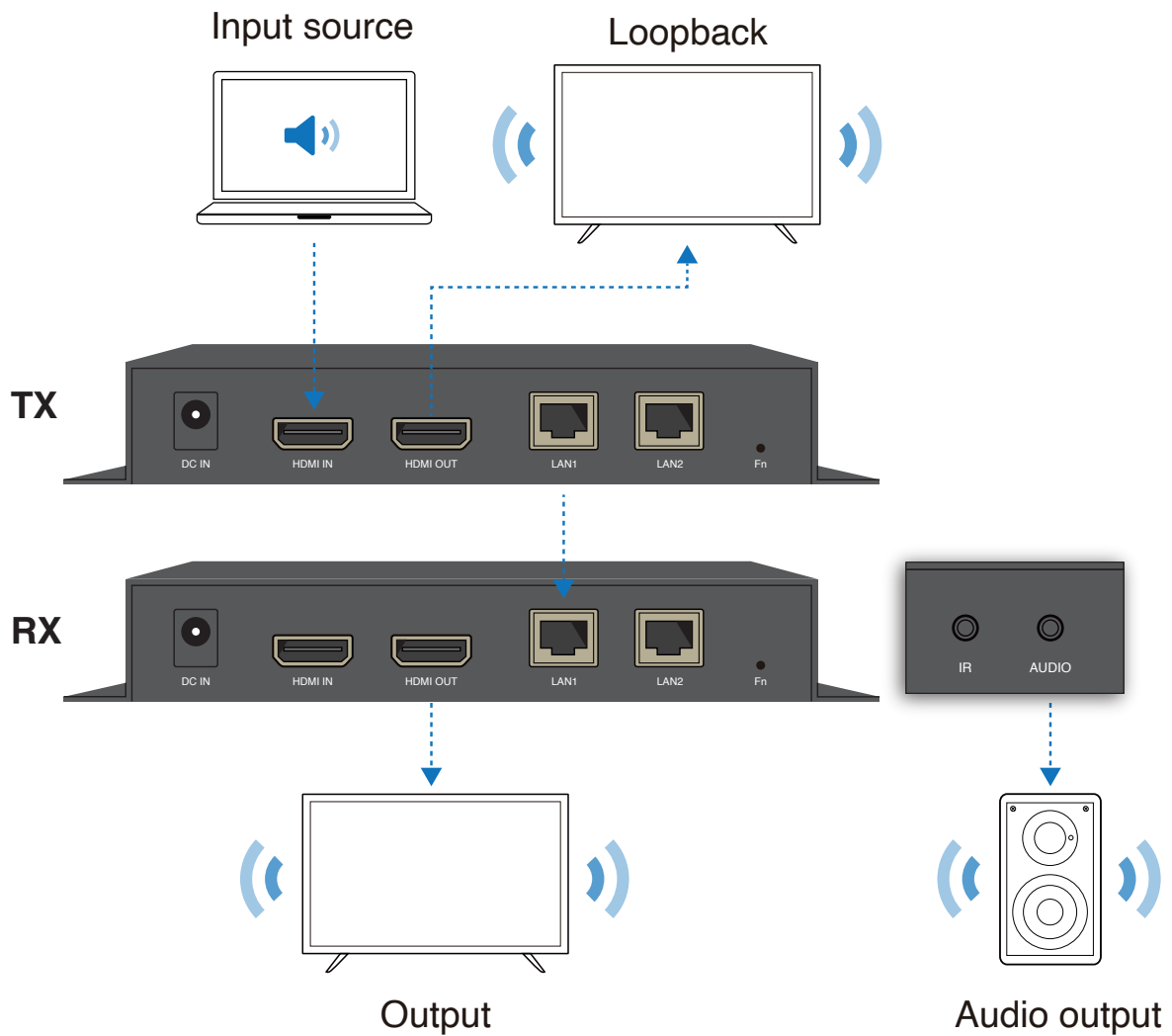- - - - ▶ HDMI cable   - - - - ▶ Power supply
- - - - ▶ LAN cable   - - - - ▶ 3.5mm cable

3. Audio transmission

Audio input from HDMI IN port on EZL01 (TX) can be transmitted to:
1. Loopback monitor connected to HDMI OUT port on TX.
2. Output monitor connected to HDMI OUT port on RX.
3. Speaker connected to AUDIO port on RX.

Input source   Loopback

TX

DC IN   HDMI IN   HDMI OUT   LAN1   LAN2   Fn

RX

DC IN   HDMI IN   HDMI OUT   LAN1   LAN2   Fn   IR   AUDIO

Output   Audio output

4. Multi-audio input
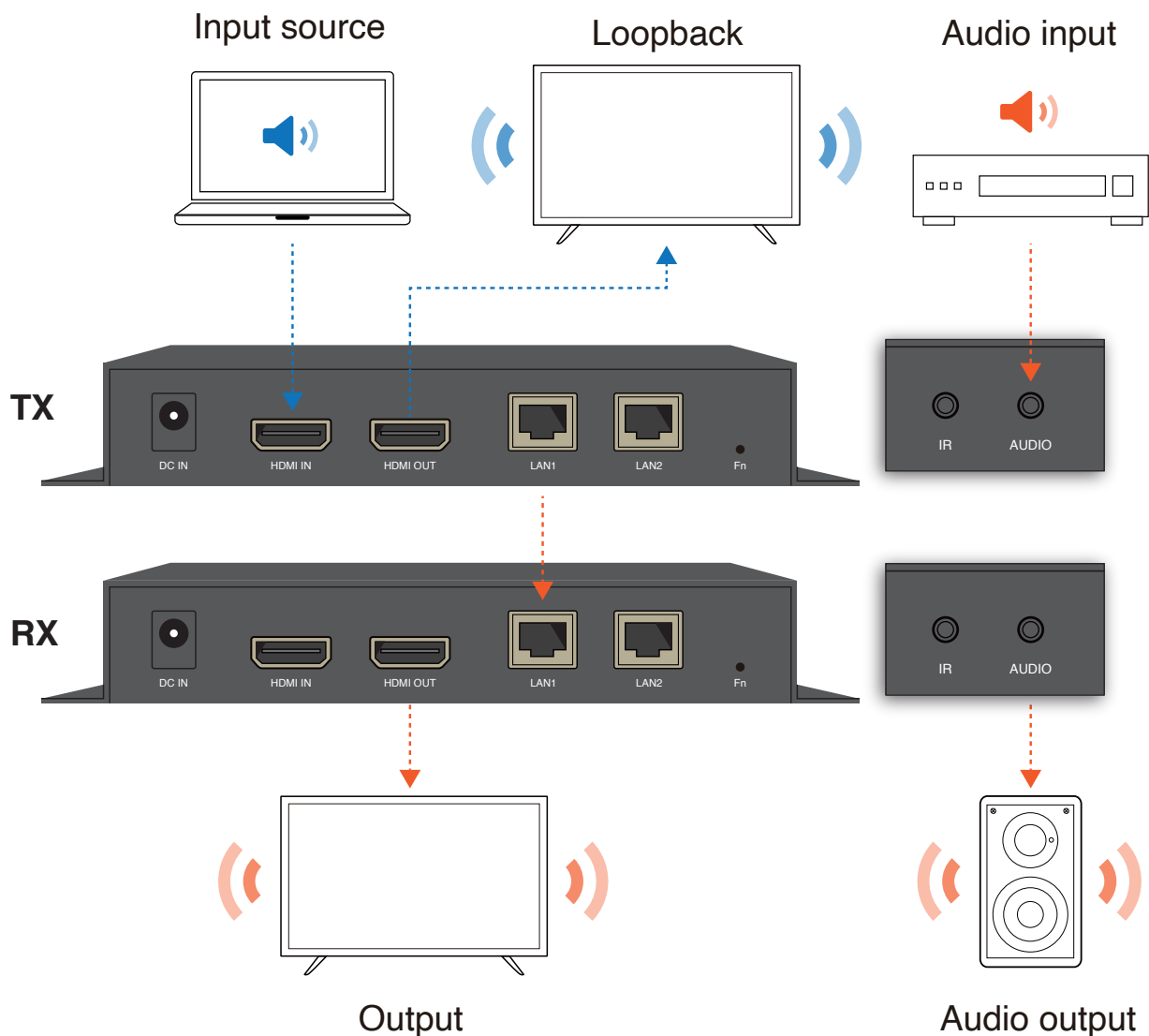
Two audio source input to TX: one from HDMI IN port and the other from AUDIO port on TX, transmit to different ouput device.

- Audio from HDMI IN port on TX:
Transmit to loopback monitor connected to HDMI OUT port on TX only.
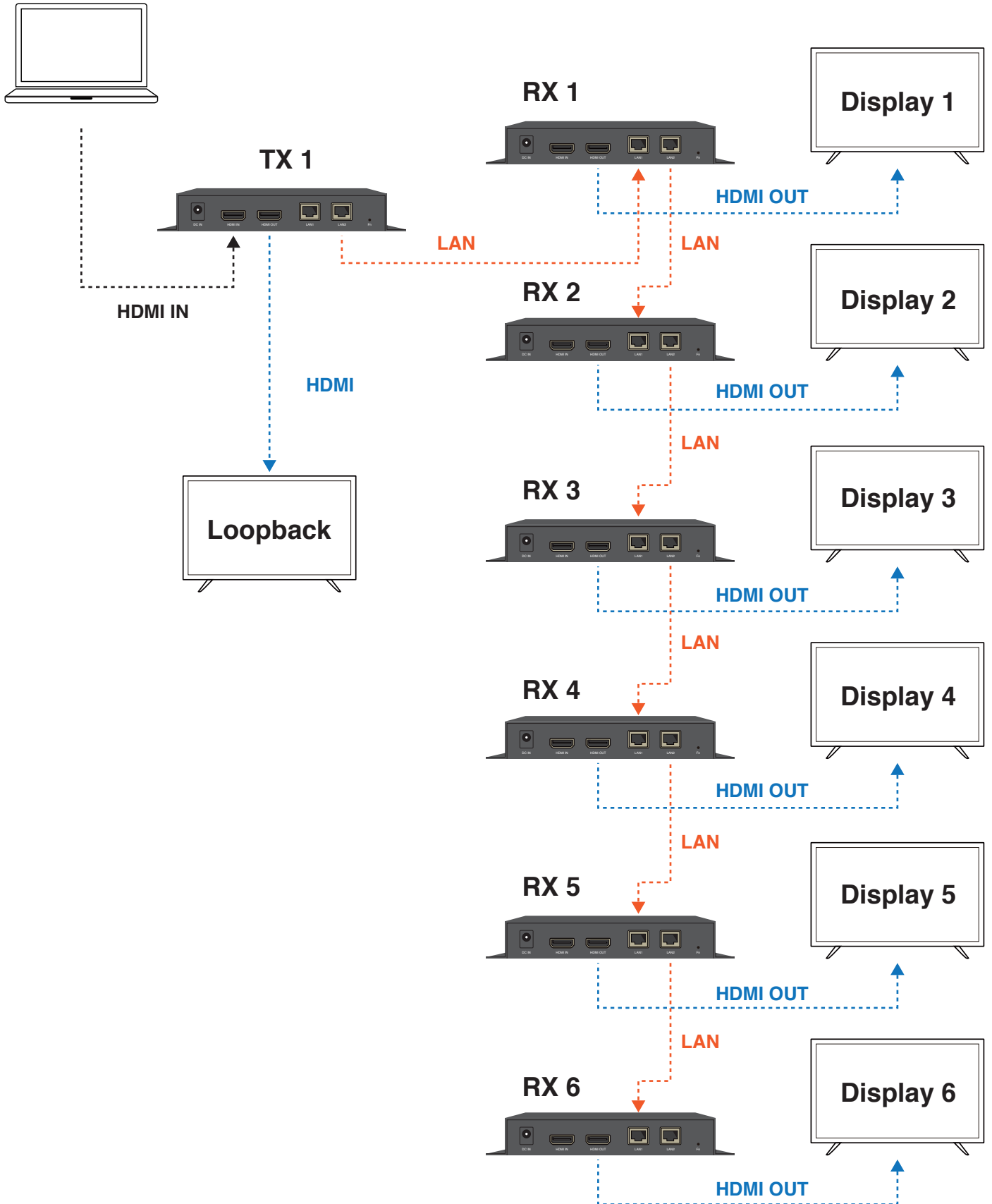
- Audio from AUDIO port on TX:
Transmit to both output monitor connected to HDMI OUT port on RX and speaker connected to AUDIO port on RX.

Input source　　　　Loopback　　　　Audio input

TX

DC IN　　HDMI IN　　HDMI OUT　　LAN1　　LAN2　　Fn

IR　　AUDIO

RX

DC IN　　HDMI IN　　HDMI OUT　　LAN1　　LAN2　　Fn

IR　　AUDIO

Output　　　　　　　Audio output

5. One to multi scenario (Daisy Chain)

One TX can be transmitted to multi RXs via 1000m LAN cable (CAT. 5e above) connected between RXs.
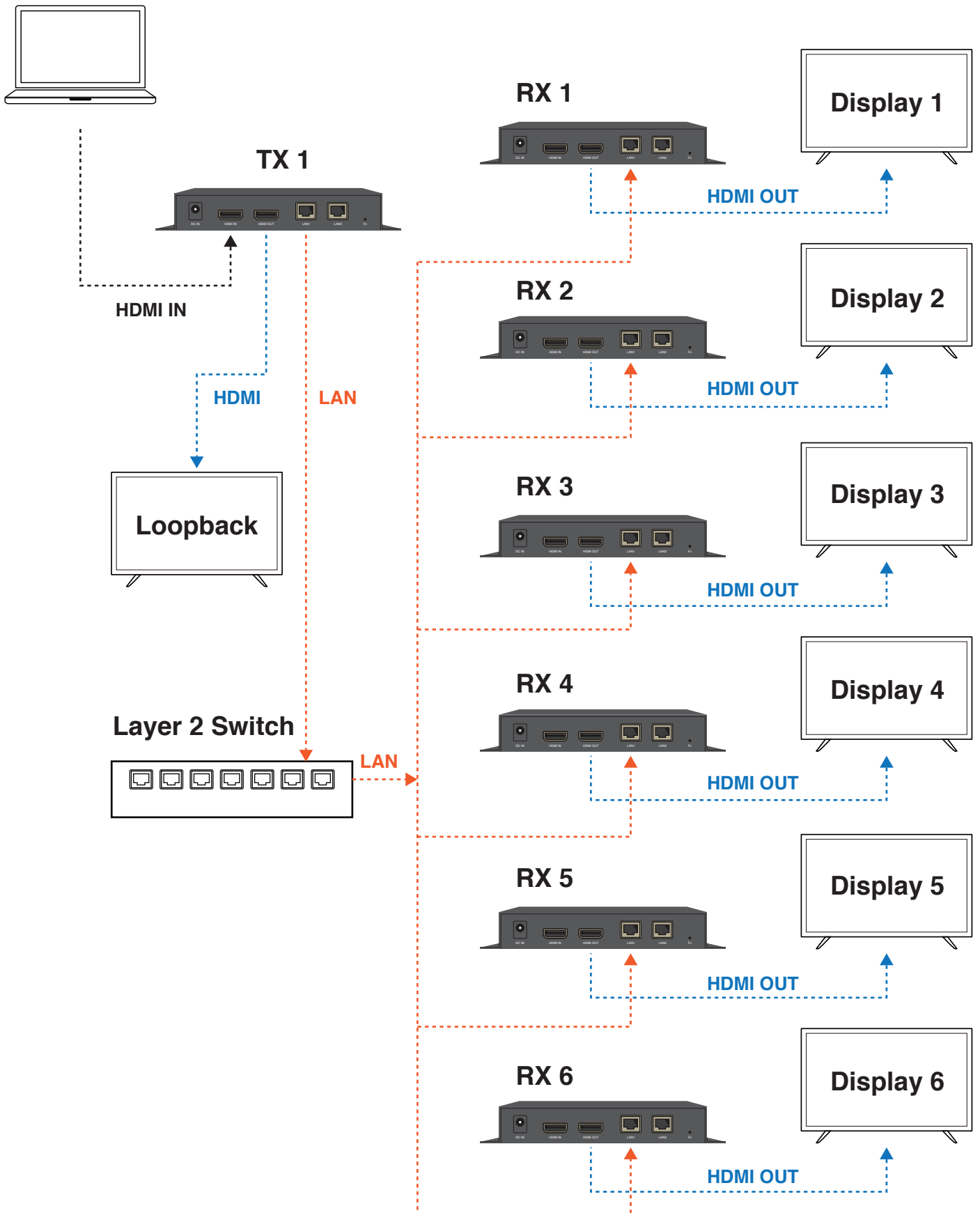
HDMI source

6. One to multi scenario (Through L2 switch)

One TX can be transmitted to multi RXs via 1000m LAN cable (CAT. 5e above) connected through a L2 switch.
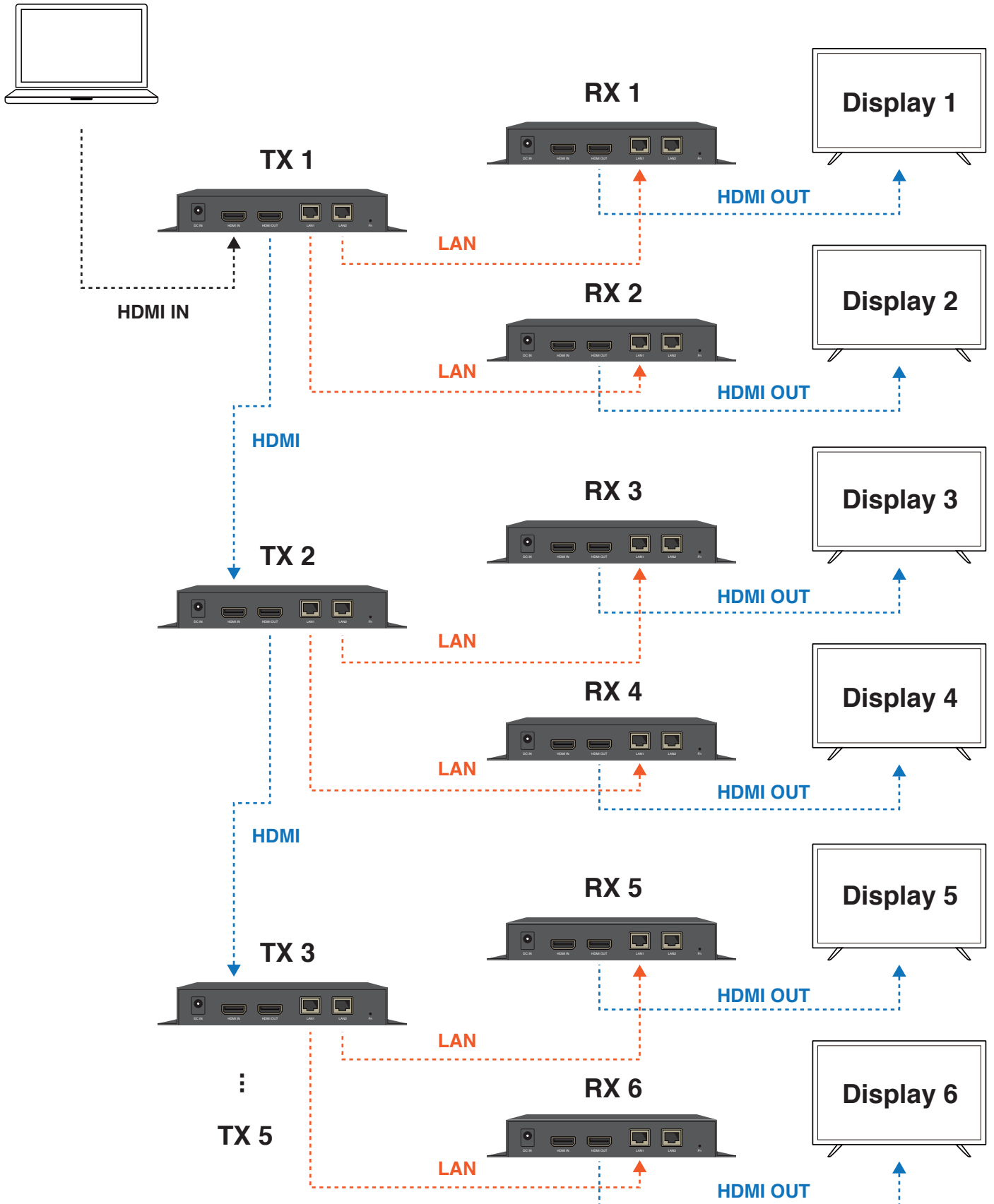
HDMI source

7. One to multi scenario (Over TX loopback)

One HDMI source can be transmitted to multi TXs over loopback connection by a HDMI cable, and each TX is connected to two RXs via 1000m LAN cable (CAT. 5e above). Note that the loopback connection cannot be more than 5 TXs.
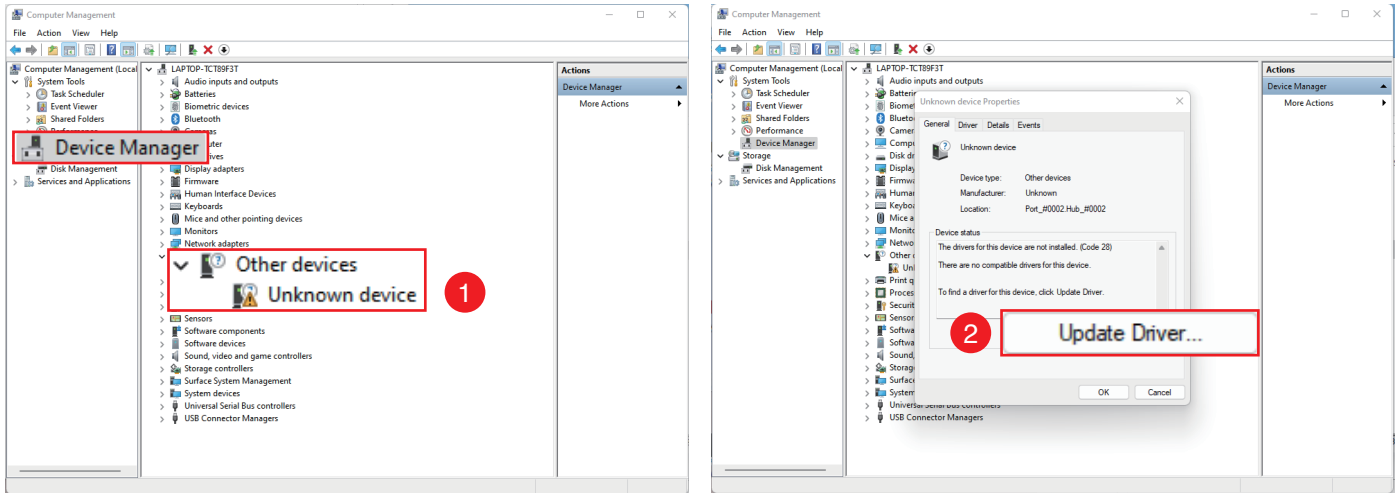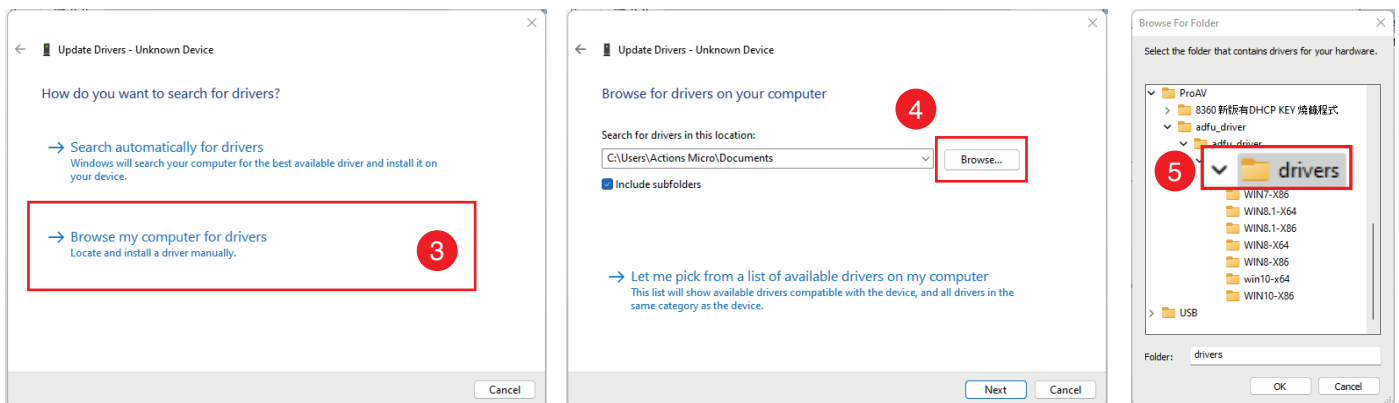
HDMI source

Firmware Update

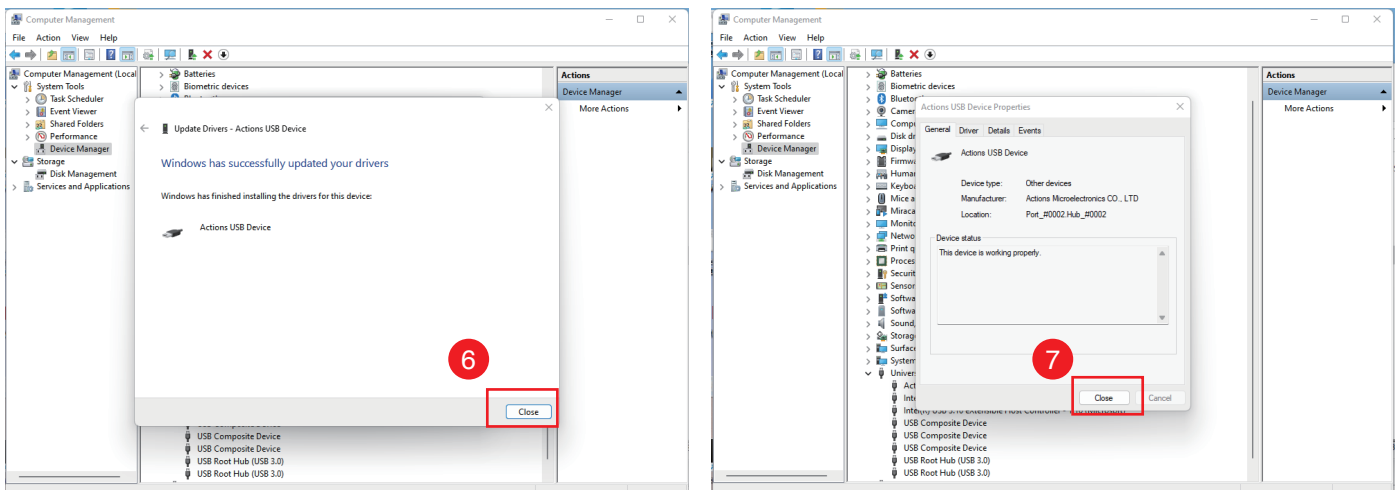## "ActionsMPUpdate" Tool Installation (Only for Windows)

1. Open "Computer Management" on your Windows computer, and double click to open System Tools > Device Manager > Other devices > Unknown device.
2. Click "Update Driver" in Unknown device properties.

3. Select "Browse my computer for drivers".
4. Click "Browse"
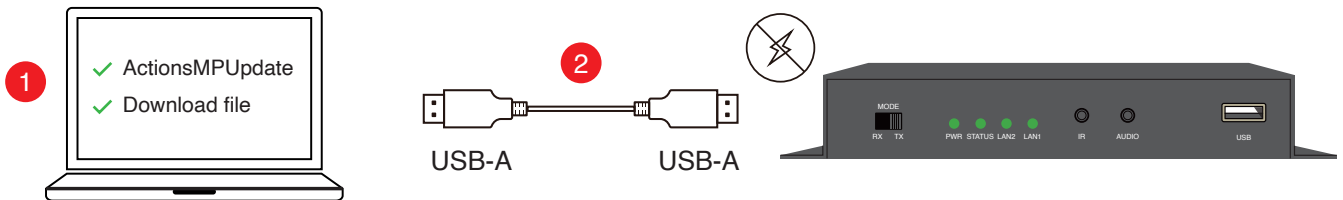5. Select adfu driver > "driver" file and click "OK" to update driver.

6. After updated driver, click "Close".
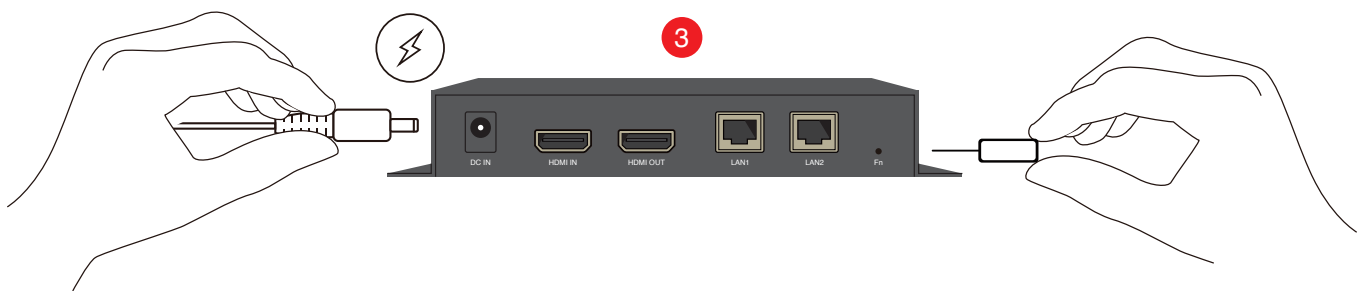7. Click "Close" again to finish installation.
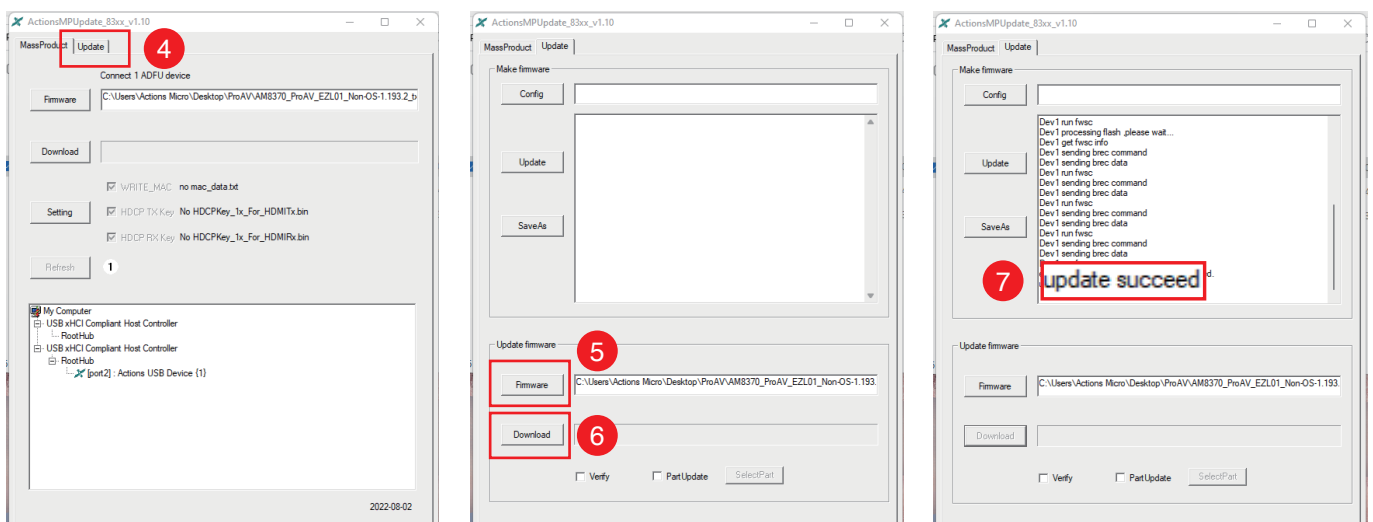
Update Firmware of EZL01

1. Install "ActionsMPUpdate" Tool on Windows computer and download firmware or configuration files.
2. Power off EZL01 and connect to the computer by a USB-A to USB-A data cable.

3. Use a clip to insert to Fn hole on EZL01. Hold the Fn and power on EZL01 by the DC adapter cable to enter update mode. You can see OSD of EZL01 displaying "Updating" or all LEDs starting to blink in "Red" color.

4. Open "ActionsMPUpdate" Tool on computer and select "Update" function.
5. Click "Firmware" button and choose the firmware or configuration file.
6. Click "Download" to run the update.
7. After updated firmware or parameter successfully, the message will show "update succeed". Also, the OSD of EZL01 displays "OK, please reboot" or all LEDs turn to "Green" color.
8. Reboot EZL01 to work.

Appendix

HDMI supported resolution

TX HDMI input	RX HDMI output	HDMI loopback output
640x480 60Hz	800x600 60Hz	640x480 60Hz
800x600 60Hz	800x600 60Hz	800x600 60Hz
1024x768 60Hz	1024x768 60Hz	1024x768 60Hz
1280x720 60Hz	1280x720 60Hz	1280x720 60Hz
1280x720 50Hz	1280x720 60Hz	1280x720 50Hz
1280x768 60Hz	1280x768 60Hz	1280x768 60Hz
1280x800 60Hz	1280x800 60Hz	1280x800 60Hz
1280x960 60Hz	1280X960 60Hz	1280x960 60Hz
1280x1024 60Hz	1280x1024 60Hz	1280x1024 60Hz
1360x768 60Hz	1920x1080 60Hz	1360x768 60Hz
1400x1050 60Hz	1400x1050 60Hz	1400x1050 60Hz
1440x900 60Hz	1440x900 60Hz	1440x900 60Hz
1920x1200 60Hz	1920x1200 60Hz	1920x1200 60Hz
1600x1200 60Hz	1600x1200 60Hz	1600x1200 60Hz
1680x1050 60Hz	1680X1050 60Hz	1680x1050 60Hz
1920x1080 60Hz	1920x1080 60Hz	1920x1080 60Hz
1920x1080 50Hz	1920x1080 60Hz	1920x1080 50Hz

Audio supported format

Audio Ch	Sampling Rate
Stereo	32KHz, 44.1KHz, 48KHz