PWAYTEK DT2108

PWAYTEK 1x8 1080P HDMI Splitter Extender (Model DT2108) Instruction Manual

Brand: PWAYTEK | Model: DT2108

1. Introduction

The PWAYTEK 1x8 1080P HDMI Splitter Extender (Model DT2108) is designed to transmit HDMI audio/video signals over long distances using standard Ethernet cables. This device allows a single HDMI source to be mirrored across up to 8 remote displays simultaneously, supporting resolutions up to 1080P@60Hz. It is ideal for various applications including engineering, security, exhibitions, and home audio-visual setups.

2. Package Contents

- 1x HDMI Extender/Splitter (DT2108)
- 8x CAT Receivers
- 1x IR Blaster Cable (3.9FT)
- 8x IR Receiver Cable (3.9FT)
- 9x 12V DC Locking Power Adapters
- 1x User Manual

Note: The number of power adapters may vary based on the specific kit configuration.

3. Product Features

- **Ultra-Long Distance Transmission:** Transmits HDMI audio/video signals up to 150 meters (492ft) via Cat6/7 Ethernet cable, 120m via Cat5e, and 100m via Cat5.
- **8 Remote Video Outputs:** Mirrors a single HDMI source to 8 displays, outputting identical video to different TVs or projectors simultaneously.
- **One HDMI Loop-out:** The transmitter unit includes an HDMI loop-out port, allowing connection to a local monitor for easy signal source status checking.
- **Full HD 1080P Support:** Supports resolutions up to 1920x1080P@60Hz, delivering high-definition and clear picture quality. Compatible with 3D signals and other resolutions like 1080i/720p.
- **IR Pass-through:** Allows remote control of the source device from any of the remote display locations.

- **Durable Metal Enclosure:** Both transmitter and receiver units feature full metal enclosures for enhanced durability and reduced external interference.

4. Port Diagram

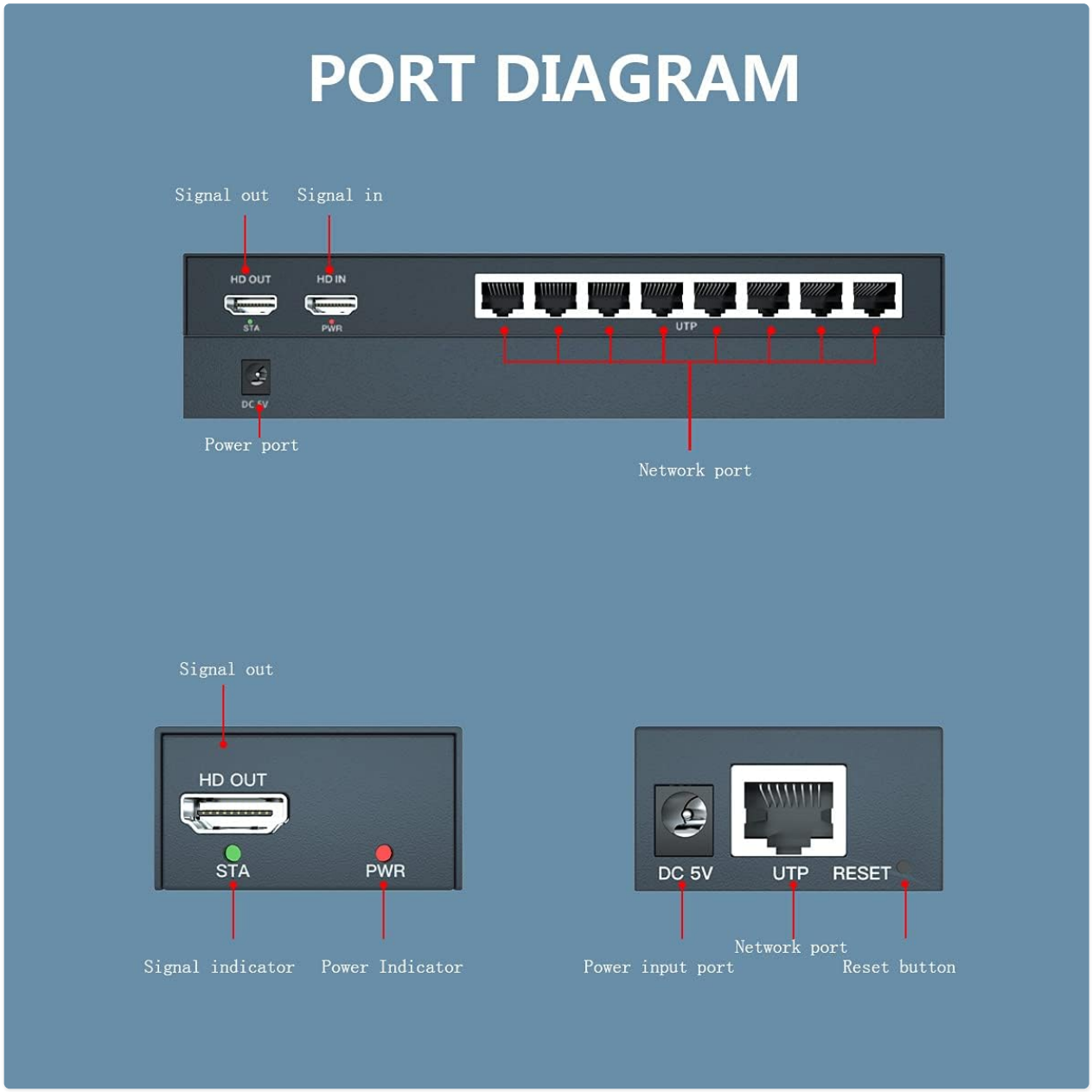

Image: Detailed view of the ports on the PWAYTEK HDMI Splitter Extender transmitter and receiver units. The transmitter features DC 12V power input, HDMI IN, HDMI OUT (loop-out), and 8 UTP (Ethernet) output ports. The receiver units have DC 5V power input, UTP (Ethernet) input, and HDMI OUT. Both units also show STA (Status) and PWR (Power) indicators, and IR TX/RX ports.

5. Setup and Connection

5.1 Connection Diagram

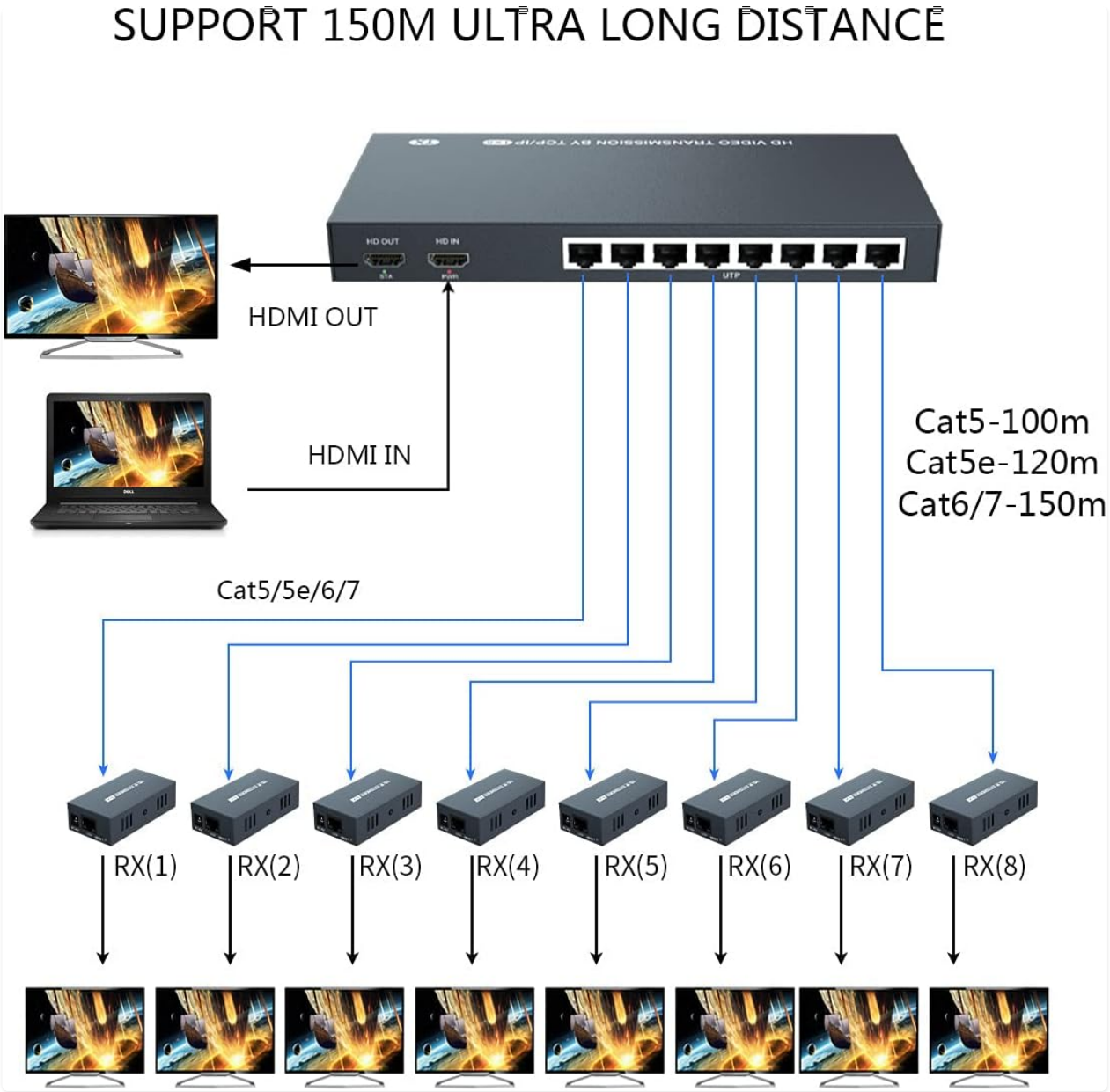

Image: A diagram illustrating the connection of the PWAYTEK HDMI Splitter Extender. An HDMI source (laptop) connects to the HDMI IN of the transmitter. The transmitter's UTP ports connect via Cat5/5e/6/7 cables to multiple receiver units. Each receiver unit then connects to an HDMI display (TV). The transmitter also has an HDMI OUT for local monitoring.

5.2 Setup Steps

1. Connect your HDMI source (e.g., Blu-ray player, PC, game console) to the **HDMI IN** port of the transmitter unit using an HDMI cable.
2. If local monitoring is desired, connect an HDMI display to the **HDMI OUT (Loop-out)** port of the transmitter unit.
3. Connect each of the 8 **UTP OUT** ports on the transmitter unit to the **UTP IN** port of each receiver unit using Cat5e/6/7 Ethernet cables. Ensure high-quality cables are used for optimal performance over long distances.
4. Connect an HDMI display to the **HDMI OUT** port of each receiver unit using an HDMI cable.
5. For IR control, connect the IR Blaster cable to the **IR TX** port on the transmitter and position the blaster head near the IR receiver of your source device. Connect the IR Receiver cables to the **IR RX** port on each receiver unit and position the receiver head where you can point your remote control.
6. Connect the provided 12V DC power adapter to the transmitter unit and the 5V DC power adapters to each receiver unit.

7. Power on all connected devices (HDMI source, displays, and extender units).

5.3 EDID DIP Switch Setting

The transmitter unit features EDID DIP switches to manage video and audio settings, ensuring compatibility and optimal display quality across various devices. Refer to the EDID Management Table in the user manual for specific configurations.

Video: This video demonstrates the EDID DIP switch settings on a similar HDMI extender splitter. The EDID Management Table is shown, detailing various modes for fixed HD (1080p/60Hz) resolutions with different color depths and audio channels (2ch or 7.1ch), as well as options to copy the EDID from the output TV or support 3D signals.

6. Operating Instructions

Once all connections are made and devices are powered on, the HDMI Splitter Extender will automatically detect and configure the optimal display settings for each connected monitor. The Status (STA) and Power (PWR) indicator lights on both the transmitter and receiver units will confirm active connections and power status.

Use the IR pass-through functionality to control your HDMI source device from any remote display location. Point your remote control at the IR receiver connected to the remote display, and the signal will be transmitted back to the source device via the Ethernet cable.

Image: A setup demonstrating one image being copied into 8 identical remote images across multiple screens, showcasing the mirroring capability of the HDMI Splitter Extender.

6.1 Application Scenarios

Image: Various application scenarios for the HDMI Splitter Extender, including TV stores, security monitoring rooms, video conference setups, event venues, and outdoor screens, highlighting its versatility in different environments.

7. Maintenance

- Keep the device in a cool, dry place away from direct sunlight and heat sources.
- Clean the device with a soft, dry cloth. Do not use liquid or aerosol cleaners.
- Ensure proper ventilation around the units to prevent overheating.
- Regularly check all cable connections to ensure they are secure.

8. Troubleshooting

- **No Picture/Signal:**
  - Check all HDMI and Ethernet cable connections. Ensure they are securely plugged in.
  - Verify that all power adapters are correctly connected and receiving power. Check the PWR indicator lights.

- Ensure the HDMI source device is powered on and outputting a signal.
- Try adjusting the EDID DIP switch settings on the transmitter to match the lowest common resolution of your displays.
- Test with shorter or different HDMI/Ethernet cables to rule out cable issues.

- **Poor Picture Quality:**
  - Ensure you are using high-quality Cat5e/6/7 Ethernet cables.
  - Check the length of the Ethernet cable; exceeding the maximum recommended distance can degrade signal quality.
  - Verify that the resolution settings on your source device and displays are compatible.
- **IR Remote Control Not Working:**
  - Ensure the IR Blaster and IR Receiver cables are correctly connected to their respective ports (IR TX on transmitter, IR RX on receiver).
  - Check that the IR Blaster head is positioned directly in front of the source device's IR sensor.
  - Ensure the IR Receiver head is positioned where it can receive signals from your remote control.

9. Specifications

- **Model:** DT2108
- **Brand:** PWAYTEK
- **HDMI Version:** Compatible with HDMI 1.3
- **HDCP Version:** Compatible with HDCP 1.2
- **Supported Resolutions:** Up to 1080P@60Hz (1920x1080P@60Hz), also compatible with 1080i/720p.
- **Transmission Distance:**
  - Cat6/7: Up to 150 meters (492ft)
  - Cat5e: Up to 120 meters
  - Cat5: Up to 100 meters
- **Ethernet Cable Requirement:** Cat5/5e/6/7
- **HDMI Loop-out:** 1x on Transmitter
- **IR Control:** Supports IR pass-through (20-60KHz)
- **Power Supply:** Transmitter: DC 12V; Receivers: DC 5V
- **Enclosure:** Metal
- **Color:** Black
- **Item Weight:** 4.97 pounds
- **Package Dimensions:** 11.77 x 10.24 x 3.9 inches

10. Warranty and Support

This PWAYTEK HDMI Splitter Extender (DT2108) comes with a 12-month warranty. For any questions, technical assistance, or warranty claims, please contact PWAYTEK customer service. Refer to the included user manual for detailed contact information.