CH-106TX & RX
HDMI v1.3 to CAT6 Transmitter & Receiver

Operation Manual

CH-106TX&RX
Precaution

Failure to follow the precautions described below may cause damage to HDMI 1.3 Transmitter Box and void the warranty.

- DO NOT open the case. Doing so will void the warranty. If you find problem with it, please return back to your retailer or seller who will assist you or provide you with solution.
- DO NOT use third-Party AC adapter or power cord. Doing so may damage HDMI 1.3 Transmitter Box.
- DO NOT bump, jar or drop contents of the products as it may damage it and result in warranty void.
- DO NOT set any liquids or beverages on the drive as they may damage HDMI 1.3 Transmitter Box.
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1. Introduction
The HDMI 1.3 transmitter and receiver over CAT 6 is an extend tool for your long
distance HDMI display. Instead of using expansive HDMI cable, your existing
CAT 6 cables/sockets also can perform the same functions like transfer Deep
Color (12 bits/color) video and new lossless compressed (Dolby TrueHD, Dolby
Digital Plus and DTS-HD Master Audio) Digital audio, with a bandwidth up to
225MHz. Moreover, you can use your existing remote control to control your
device over 30/45 meters long through the IR blaster. HDMI 1.3 Transmitter and
receiver, your substantial HDMI extender.

2. Applications
  ● Showroom display
  ● Window display
  ● Home or individual display
  ● Hyper market display
  ● Lecture room display

3. Package Contents
  ● HDMI 1.3 Transmitter
  ● HDMI 1.3 Receiver
  ● IR Eye Receiver cable
  ● IR Eye Blaster cable
  ● 5V DC power supply adaptor
  ● Operation Manual

4. System Requirements
HDMI input source equipment, output HDMI displayer, 2 x CAT 6
cables and source equipment’s remote control.

5. Features
  ● Compliant with HDMI 1.3, HDCP 1.1 and DVI1.1 standards.
  ● Supports digital video formats in Deep Color Mode at up to 36 bits (12bits/
color) and new lossless compressed (Dolby TrueHD, Dolby Digital Plus and
DTS-HD Master Audio) Digital audio.
  ● Supports CAT-6 cables for data/DDC transmission.
  ● Supports equalize and recover incoming TMDS data before re-transmitting
them with optimal quality regardless of the incoming signal quality.
  ● Supports high definition resolution, the cable distance test with
1080p/8bits resolution the Input/Output source can run up to 30/45 meters.
If 1080p/12bits resolution the Input/Output source can run up to 15/15
meters.
  ● Supports CEC bypass.
  ● Supports xvYCC.
## 8. Specifications

| Input Ports | 1 x HDMI  
|            | 1 x IR Receiver  
|            | 1 x CAT-6 Input Video  
|            | 1 x CAT-6 Input DDC  
| Output Ports | 1 x HDMI  
|             | 1 x Blaster  
|             | 1 x CAT-6 output for Video,  
|             | 1 x CAT-6 output for DDC  
| Power Supply | 1x5V/2.6A DC  
|             | (US/EU standards, CE/FCC/UL certified)  
| Dimensions (mm) | 50(W) x 62(D) x 23(H)/PC  
| Weight (g) | 90/PC  
| Chassis Material | Aluminum  
| Silkscreen Color | Silver  
| Operating Temperature | 0°C ~ 40°C  

6. Operation Controls and Functions

6.1 Front Panel

1. HDMI input: Connect the HDMI input port to the HDMI or DVI output of your source equipment such as DVD player or set-top-box.

2. Power: Plug the 5VDC power supply into the unit and connect the adaptor to AC wall outlet.
   (1) power adaptor is required for both Transmitter box and receiver box, the other box can select internal power supply.

3. HDMI output: Connect the HDMI output port to the HDMI or DVI output of your displayer such as HD TV or HD monitor.

6.2 Rear Panel

1. DDC input/output: Connect the DDC output of 106TX to the DDC input of the receiver unit using CAT-6 cable.

2. Video input/output: Connect the video output to the video input of the receiver unit using CAT-6 cable.

Note: A. Cable tested with CAT-6E / 23AWG / Solid and therefore, cable with different specification may result in different distance.

B. Cable distance tested with equipment PS3 20G, 37" Philips 8 bit LCD TV and 37" SamSung 12 bit LCD TV.

C. Figures provided in this manual are reference figures only, actual figures may depend on source and display use with cable specification.
7. Connection and Installation

- CH-106TX
- CH-1106TX
- DVD HDMI IN
- IR Blaster
- CAT6 OUTPUT

- CLUX-1H4CAT
- CLUX-1H8CAT
- DVD HDMI IN
- CAT6 OUTPUT x3

- CLUX-22HC
- CH-106TX
- CH-1106TX
- CLUX-1H4CAT
- CLUX-1H8CAT
- CMLUX-4H4CAT
- CLUX-22HC
- DVD HDMI IN
- HD TV
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Complete Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAT6</td>
<td>Category 6 cable</td>
</tr>
<tr>
<td>DVI</td>
<td>Digital Visual Interface</td>
</tr>
<tr>
<td>EDID</td>
<td>Extended Display Identification Data</td>
</tr>
<tr>
<td>HDCP</td>
<td>High-Bandwidth Digital Content Protection</td>
</tr>
<tr>
<td>HDMI</td>
<td>High-Definition Multimedia Interface</td>
</tr>
<tr>
<td>HDTV</td>
<td>High-Definition Television</td>
</tr>
<tr>
<td>IR</td>
<td>Infrared</td>
</tr>
<tr>
<td>LPCM</td>
<td>Linear Pulse Code Modulation</td>
</tr>
<tr>
<td>STD</td>
<td>Standard</td>
</tr>
<tr>
<td>SYNC</td>
<td>Synchronize</td>
</tr>
<tr>
<td>SXGA</td>
<td>Super Extended Graphics Array</td>
</tr>
<tr>
<td>VGA</td>
<td>Video Graphics Array</td>
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