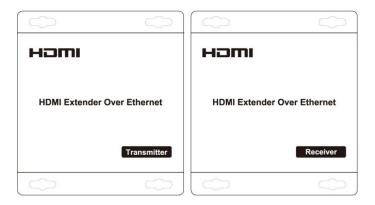


HDMI Extender over Ethernet

MODEL: IP-1000 TX/RX Operating Instructions



Dear Customer

Thank you for purchasing this product. For optimum performance and safety, please read these instructions carefully before connecting, operating or adjusting this product. Please keep this manual for future reference.

FEATURES

- HDCP version 1.2 compliant
- Supports 1080p and 720p video, plus 2-channel audio
- Uses gigabit IP switches with IGMP snooping for extension and distribution
- Plug-and-play operation no programming or setup required
- Extends 1080p HDMI signals up to 120 m over a single UTP Cat5e/6 cable
- Cable runs can be extended another 120 m by adding a Gigabit Ethernet switch
- Traffic can be unicast, multicast or broadcast for different applications
- Commands from a remote can be transferred back to the source devices
- Maximum 3 layers of ethernet switches could be passed through

NOTICE

We reserve the right to make changes in the hardware, packaging and any accompanying documentation without prior written notice.



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SPECIFICATIONS

Operating Temperature Range	-5 to +35°C (+23 to +95°F)
Operating Humidity Range	5 to 90%RH (No Condensation)
Input Video Signal	0.5-1.0 Volts P-P
Input DDC Signal	5 volts p-p (TTL)
Support Video Format	DTV/HDTV:480i/576i/480P/576P/720P/1080i/1080P
Video Output	HDMI, HDCP1.2
Transmission Distance	1080P 8-bit 120 m (Maximum) over single CAT5E/6 /24AWG/Solid
Power consumption	TX:3 watts;RX:3 watts (Maximum)
IR wavelength & frequency	Wavelength: 940 nm, frequency 38 kHz
Dimension (L×W×H)	103.5x93.5x24.6 mm
Net Weight	Receiver: 220 g, Transmitter: 220 g

Note1: Specifications are subject to change without notice. Mass and dimensions are approximate.

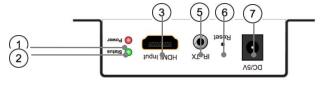
PACKING CONTENTS

- 1) Main Unit. Transmitter & Receiver HDMI Extender
- 2) Power adapter DC 5 V/1 A x 2 PCS
- 3) IR-TX cable & IR-RX cable
- 4) Operating Instructions



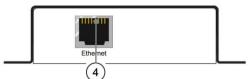
PANEL DESCRIPTIONS

Transmitter Panel





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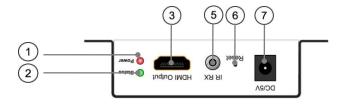


- ① Indicator of power input
- ② Status of signal connection
- ③ HDMI input
- 4 Ethernet port
- ⑤ IR-TX port
- 6 Reset button
- 7 Power input port

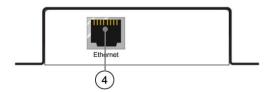
3



Receiver Panel







- ① Indicator of power input
- ② Status of signal connection
- ③ HDMI output
- 4 Ethernet port
- ⑤ IR-RX port
- Reset button
- 7 Power input port



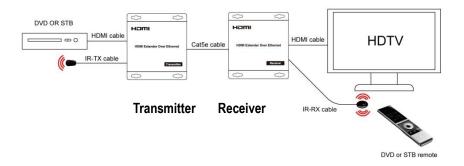
CONNECTING AND OPERATING

- 1) Connect the HDMI signal sources (Such as DVD, STB etc) to HDMI Transmitter.
- 2) Connect CAT5e or 6 cables to both the Ethernet of the transmitter and Ethernet port of the Receiver. (The cables must follow the standard of EIA-TIA 568B).
- 3) Connect the HDMI output (Such as HD-LCD, HD-DLP) into the Receiver.
- 4) Connect the power supply into Power port.
- 5) Connect the IR-TX receiving cables into IR-TX port on the back panel and affix the emitter onto the source IR windows.
- 6) Connect IR-RX cable into IR-RX port on the receiver and affix the IR receiver in direct line of site with the handheld remote control. It is recommended to affix the receiver on the display frame /bezel or the display stand.

Please note: Insert/Extract cables gently.

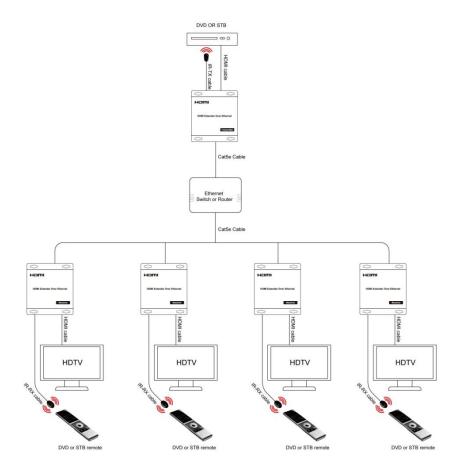
TYPICAL APPLICATION

1) One to One





2). One to many





Setup the TX or the RX (need FW 1.07 or newer)

Download: www.macab.com > Premium Brand (Catline)

A HTTP server is embedded in each TX and RX. You can setup the HDMI extender via web browser. The default IP address of the TX is 192.168.168.55 and the RX is 192.168.168.56. No matter what you assign the device IP address the default IP address will reload when a Reset is performed.

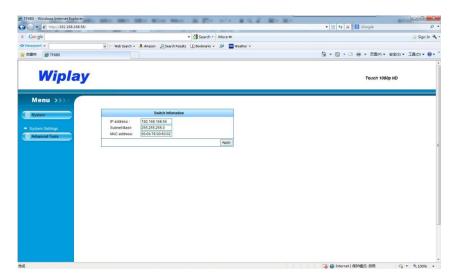
Step 1: Assign the PC or laptop IP address through Control Panel, Network Connections, Local Area Connections Status, Properties, Internet Protocol (TCP/IP), Use the following IP address. Type the IP address field with 192.168.168.11(0-255) and Subnet mask with 255.255.255.0. After that press OK to save the configuration.



Step 2: turn on the device, the red light becomes lighting, waiting about 10 seconds, the green light starts working, at this time to press the reset button about 5-10 seconds to turn off the green light.

Step 3: Use an Ethernet Cable to connect the PC or laptop and the device. The power LED is still red and the status LED becomes green blink.

Step 4: Ping the connected device through the sequence, Start, Run, cmd, ping 192.168.168.55 (TX) or ping 192.168.168.56 (RX). You will receive the reply if the connection is established. Use IE browser to get access the web server. You can set IP address, Subnet mask, Gateway, and MAC address in this page.



Destination: one "TX to many RX" or many "TX connect to many RX", IP and MAC address must be different.

Step 5: After click Apply button, the device shows Status LED green turn off. Turn off the device.



MAINTENANCE

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner of benzine to clean this unit.

PRODUCT SERVICE

1) Damage requiring service:

The unit should be serviced by qualified service personnel if:

- (a) The DC power supply cord or AC adapter has been damaged;
- (b) Objects or liquids have gotten into the unit;
- (c) The unit has been exposed to rain;
- (d) The unit does not operate normally or exhibits a marked change in performance;
- (e) The unit has been dropped or the cabinet damaged.
- 2) **Servicing Personnel:** Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.

WARNING

- To prevent fire or shock hazard, do not expose this appliance to rain or moisture.
- To prevent the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Refer servicing to qualified service personnel.
- The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products that produce heat.
- When cleaning, unplug this product from the wall outlet before cleaning. The product should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine, insecticides or other volatile liquids since they may corrode the cabinet.
- This product should be operated only from the type of power source indicated on the marking label.

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