VISION
AV installation products

TC-HDMIIP/3
PRODUCT MANUAL

vav.link/tc-hdmiip-3

CONTENTS

TRANSMITTER

1. Power Input 5V/1A
2. RJ45 Output – CAT6 cable up to 150 metres (492ft) long
3. IR blaster 3.5mm Minijack – supports most infrared signals from 20-60 KHz. Tip: IR signal, Ring: power, Sleeve: ground
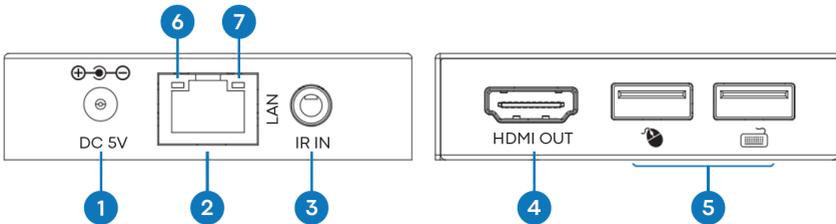4. HDMI Input
5. USB-B – connects to computer
6. Link LED (orange) – will flash when correctly connected. If not lit check ethernet cable.
7. Power indicator (green)

RECEIVER

1. Power Input 5V/1A
2. RJ45 input
3. IR receiver 3.5mm Minijack socket - supports most infrared signals from 20-60 kHz. Tip: IR signal, Ring: power, Sleeve: ground
4. HDMI Out
5. 2 x USB-A ports – connect USB 1.1 devices here e.g. mouse, keyboard NOTE: this will not support USB 2.0 devices
6. Link LED (orange) – will flash when correctly connected. If not lit check ethernet cable.
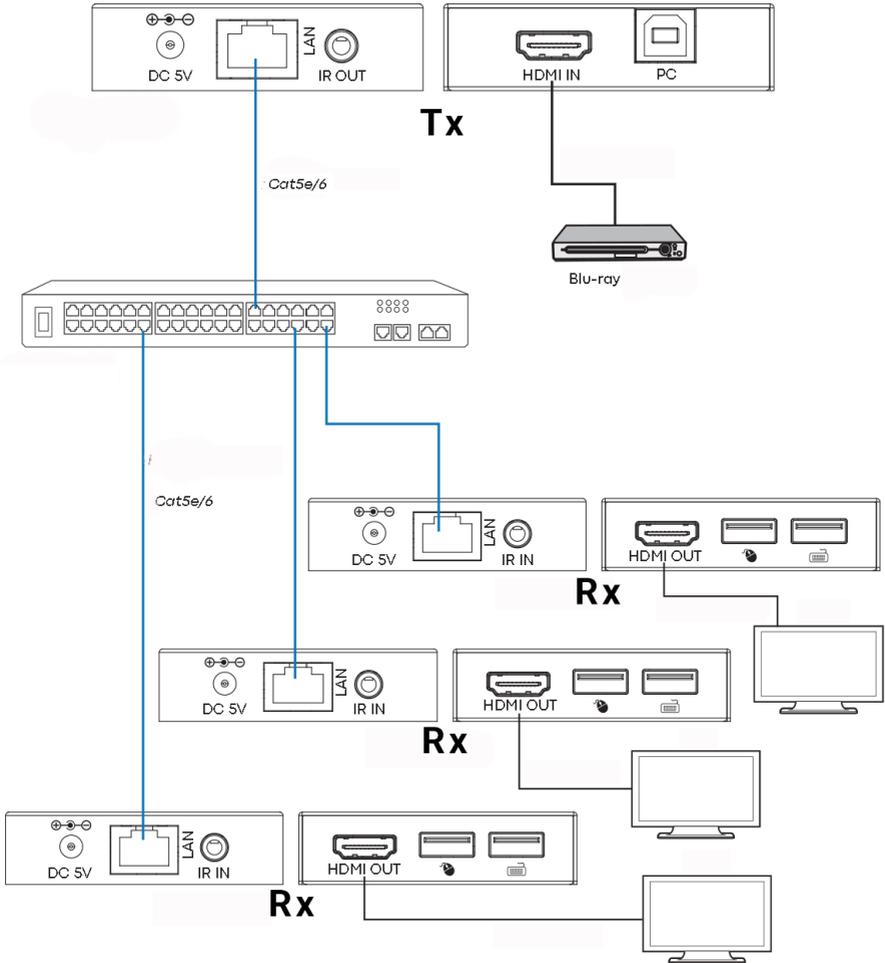7. Power indicator (green)

DIRECT CONNECTION EXAMPLE

This product is plug and play. There is an online interface to access advanced settings but generally it is not required.
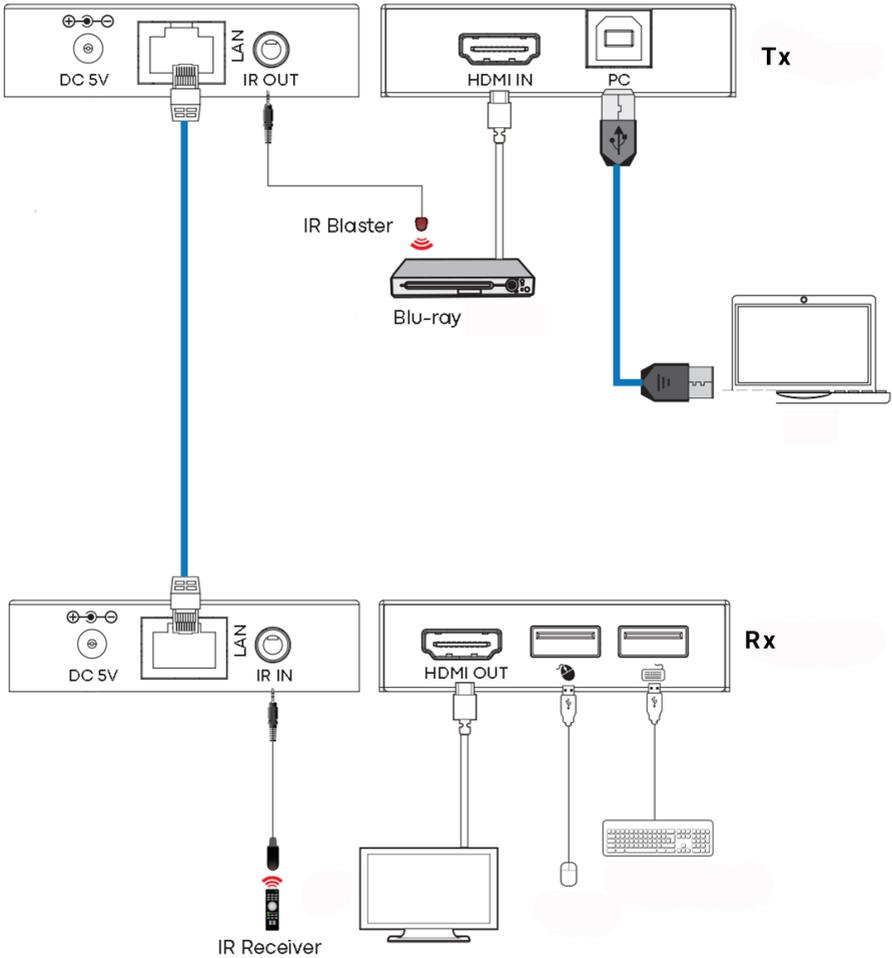
NETWORK CONNECTION EXAMPLE

By routing via the network there is no cable length limitation as the signal is repeated at every node.

Notes:
1/ All Tx and Rx must be on same subnet
2/ Microwave transmitters typically do not provide enough bandwidth for this product
3/ For multicasting a standalone Gigabit switch is recommended
4/ Switch can be unmanaged since IGMP snooping DOES NOT need activation

DHCP

A DHCP switch assigns IP addresses to each end point, otherwise the end points default to 192.168.10.10 (Tx) or 11 (Rx).

MULTIPLE TRANSMITTERS

Only ONE transmitter can be used on a network. Setting up a virtual LAN allows you to use more than one transmitter on a physical network. The systems are kept separate and cannot be used as a matrix.

If more than one transmitter / receiver sets share same network create a Virtual LAN on the network switch for each transmitter and receiver set.

Example:

- Connect 15 transmitters to ports 1-15
- Connect 15 receivers to ports 16-30
- Create VLAN_1 and assign ports 1 and 16
- Create VLAN_2 and assign ports 2 and 17 etc…

ADVANCED SETTINGS – WEB INTERFACE
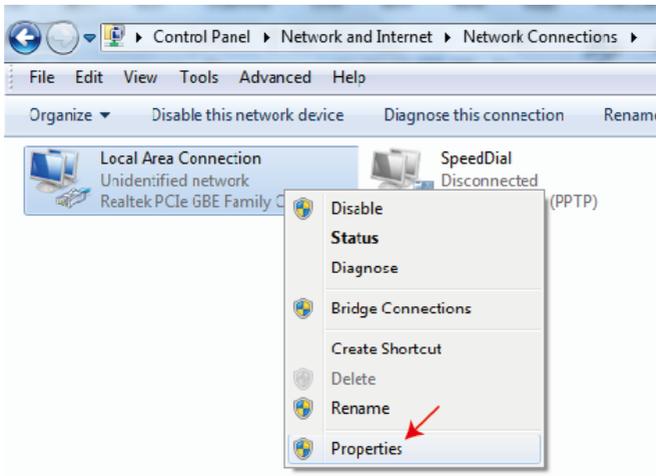
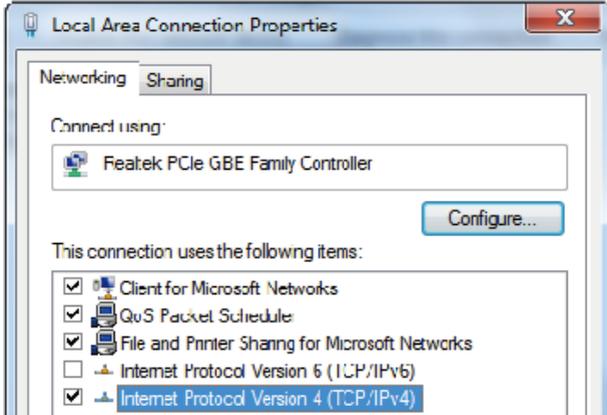Connect a PC directly to the LAN port, and connect power to the device.
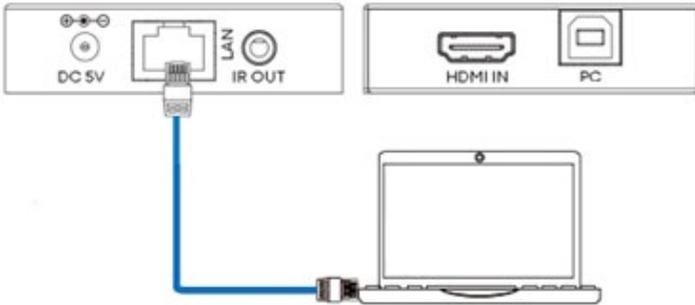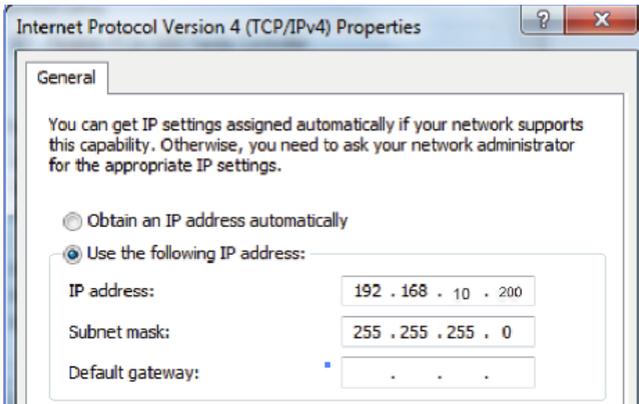

PC Setup
Select properties:

Double-click Internet Protocol Version 4 (TCP/IPv4)

Set IP address as:

Note: The IP address of the computer and device need to be in same network segment
e.g. as the Tx's IP address is 192.168.10.10, the PC's IP should be 192.168.10.x (x be be 1-255 except 10).

Browser Interface

Input device IP address into your browser: 192.168.10.10 (Tx) or 11 (Rx).

The first time you connect you will be forced to reset the password.

Note: As an IP product this product could be targeted by hackers to access corporate networks. It is ESSENTIAL you set a robust password.

Status page
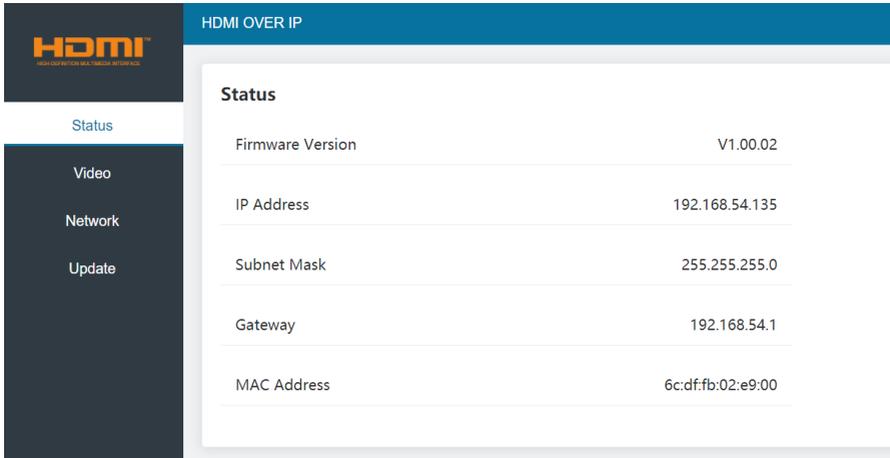
HDMI OVER IP	
Status	
Firmware Version	V1.00.02
IP Address	192.168.54.135
Subnet Mask	255.255.255.0
Gateway	192.168.54.1
MAC Address	6c:df:fb:02:e9:00

Navigation: Status, Video, Network, Update

Video Settings

Dectype
The dectype is H265 at MainStream or SubStream.

Resolution:
Choose:
MainStream resolution includes 1280*720 , 1920*1080 and Auto.
Substream resolution includes 352*288, 640*480, 720*576.

Bitrate:
You can set bitrate:
The MainStream range is from 1024Kb/s to 20480Kb/s.
The SubStream range is from 256Kb/s to 2048Kb/s.

Network Settings

IP Settings

- **DHCP mode** automatically obtains network configuration, including IP address, Subnet, Gateway.
- **User mode** set manually. The IP address and Gateway address cannot the same. You don't need to change the Subnet address.

Note: If you have changed the IP address, you can continue use current interface. Next time you connect you need to use the new IP address. A factory reset will reset the IP address to the original address.

Port: The default value is 80.

Update Firmware, Factory Reset

HDMI OVER IP	
TX	
SOC Update	Browse... No file chosen Update 0%
Factory Reset	Reset
Reboot	Reboot
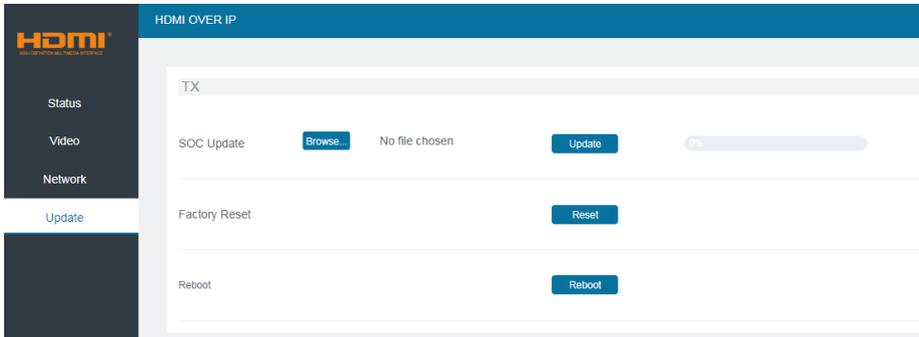
To update firmware select browse to open a bin. File. Click "Upgrade".

Progress can seem to hang at 99%. This is normal. Do not take action until progress reaches 100%.

After upgrade clear the browser cache so the update can take effect e.g. Chrome: Ctrl+shift+delete

VLC TRANSMISSION

It is possible to replace a transmitter with a PC running VLC. Once you have connected to the advanced settings interface, open VLC on the PC.

Step 1: Select Media > Open Network Stream
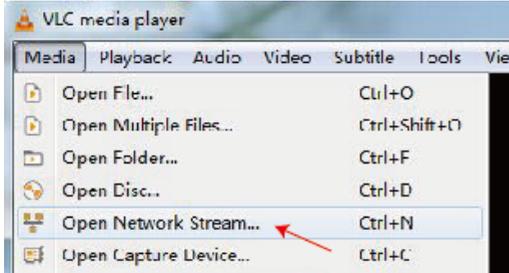
Step 2: Enter URL.
MainStream: rtsp://192.168.10.10/live/main/av_stream
SubStream: rtsp://192.168.10.10/live/sub/av_stream

Click "Play"
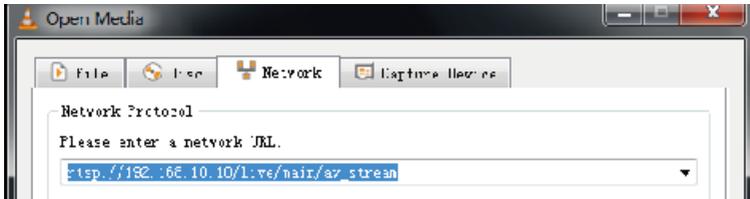
Use Video Settings in the browser interface to control VLC resolution settings.

You can also select "Tools>Codec information" in VLC to see resolution settings. The bitrate is shown on the statistics tab, and will float up and down.

Notes:

1. If VLC does not work well check IP address and network connection status. The IP address of the computer and product should be in the same network segment.
2. If everything is OK, the device boot static IP needs some time to communicate with router. Try again.

TROUBLESHOOTING

No link indicator

- Check network cable
- Replace with shorter cable you know works

Image flashing or colour incorrect

Check CAT6 cable wiring. It should be wired to 568B standard at both ends:

If one end has green and orange swapped this is a cross-over cable and cannot be used.

No image

- Try another source
- Make sure display input is correct

DECLARATION OF CONFORMITY

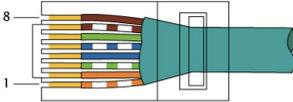Concerning CE, EMC, and LVD safety regulations, VISION products are certified and comply with all known local regulations. VISION commits to ensure all products are fully compliant with all applicable certification standards for sale in participating countries.

Concerning EU directive 2011/65/EU regarding "Restriction of use of certain Hazardous Substances in Electrical and Electronic Equipment" (RoHS), this directive sets out that electrical components should not contain unsafe levels of dangerous chemical compounds. All VISION products certifiably comply with RoHS regulations including the Commission Delegated Directive (EU) 2015/863 of 31 March 2015, amending Annex II to Directive 2011/65/EU as regards to the list of restricted substances, to include phthalates. This product should be returned to the place of purchase at the end of its useful life for recycling.

WEEE Registration: GD0046SY

Concerning REACH restricted chemicals, VISION neither produces nor imports chemicals. Therefore, as Downstream User we are under no obligation to provide safety data sheets. According to ongoing audits based on information provided by our suppliers, our products contain no substances > 0.1 % by weight, included in the candidate list in accordance with Article 59 (1,10) of the REACH regulation. In order to guarantee product safety and to secure our supply chain, we require consistent implementation of REACH by our suppliers. The assurance of REACH-conformity is part of our supplier qualification standards.

This product is compliant with the UK's PSTI Act (Product Security and Telecommunications Infrastructure Act 2022) and related EU directives.

DECLARATION OF ORIGIN

All VISION products are made in the People's Republic of China (PRC). VISION products are imported into the EU by VISION who is wholly owned by 'TD Synnex', Registered in England Nr. 04625566 at Redwood 2, Chineham Business Park, Crockford Lane, Basingstoke, Hampshire, RG24 8WQ.

WARNINGS

For electronic products: **Caution – risk of electric shock. Do not open.**

Use only domestic AC outlets. Connecting to an outlet supplying a higher voltage may create a fire hazard. Do not disconnect the plug from the AC outlet by pulling the cord; always pull the plug itself. If you do not intend to use the product for any considerable length of time, unplug the unit. Ensure power cable is not twisted, squeezed, or sheared.

Do not install this product in a location exposed to direct sunlight or close to heating equipment, extremely cold locations, places subject to excessive vibration or dust, and or poorly ventilated places. Do not expose this appliance to excessive humidity, rain, moisture, dripping, or splashing. Do not place objects filled with liquids on or near this product.

Before moving the unit, be sure to pull out the power cord from the AC outlet and disconnect the interconnection cords with other units. If you detect an abnormal smell or smoke, turn this product off immediately and unplug the power cord. Contact your reseller or Vision.

LIFETIME RETURN-TO-BASE WARRANTY

If you need support contact Vision via the contact us section on visionaudiovisual.com

End users should contact the reseller they bought it from to raise a support request.
Resellers should contact the distributor they bought it from to raise a support request.

This product comes with a lifetime return to base warranty. If you have a problem, you are required to provide a DETAILED DESCRIPTION of the fault.

Some Vision products are very technical and require troubleshooting all elements of the installation as it may not be the Vision product at fault. Because of this the manufacturer may refuse to replace the item if an adequate description is not provided.

- This warranty applies only to the original purchaser and is not transferable.
- This warranty protects you against the following:
    - Failure of any components, including the power supply
    - Damage when the product is first removed from its packaging if reported within 24 hours of purchase.
- If the product is DOA (dead on arrival), you have 21 days from purchase date to notify the national distributor via your AV reseller.
- The original purchaser is responsible for shipment of the product to Vision's appointed distributor.
- The liability of Vision is limited to the cost of replacement of the faulty unit under warranty except for death or injury (EU85/374/EEC).
- If the product is end of line (EOL) the Vision will provide a credit instead of replacement.
- This warranty does not protect this product against faults caused by abuse, misuse, incorrect installation, unstable or faulty power input, or modification.

Vision aims to send a replacement item within 5 working days however this may not always be possible, in which case it will be sent as soon as practicably possible.

LEGAL DISCLAIMER

The details above may change without prior warning. This User Manual is published without warranty and any improvements or changes to the User Manual necessitated by typographical errors, inaccuracies of current information, or improvements to programs and/or equipment, may be made at any time and without notice. Such changes will be incorporated into new editions of the User Manual.