iTrans NeoLink-H70CDR

HDMI 4K60 NeoLink Extenders, 70m Receiver, Cascading

Hardware User Manual V1.0



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Important Safety Instructions:

- To prevent electric shock, please ensure that all apparatus is properly grounded.
- Do not hot plug when it is working.
- Do not place this apparatus near or over a radiator or heat register, or where it is exposed to direct sunlight.
- Place the device in a well-ventilated area, do not block any ventilation openings.
- Do not expose this apparatus to rain or place it near water. Any liquid that goes into the apparatus may cause a failure, fire, or electric shock.
- Do not place the device on an uneven or unstable surface. The device may fall resulting in a malfunction.
- Never insert anything metallic into the open parts of this apparatus. This may cause a danger of electric shock.
- If a three-party power supply is used, please ensure that the power supply specifications meet the product requirements.

1. Introduction

The iTrans NeoLink-H70CDR Receiver works with its paired Transmitter (iTrans NeoLink-H70CDT) to extend high-definition video and audio signals up to 230 ft (70 m) at 4K@60Hz resolution via a single CAT6 cable, achieving zero-latency, uncompressed long-distance transmission. Featuring a built-in daisy-chain capability, the NeoLink OUT port allows you to connect additional receivers, supporting up to 10 units in a single cascade for expanded multi-display setups. The device also supports HDMI loop-out, HDR, bi-directional IR passback, and S/PDIF audio output. This kit provides a reliable, ultra-high-definition video transmission solution, widely used in outdoor advertising, digital signage, monitoring systems, home entertainment, and conference rooms.

2. Features

- Zero latency.
- **4K@60Hz** HDMI signal can be transmitted 70 meters through a CAT6/6A/7 network cable.
- Supports **cascading up to 10 receivers** with automatic display resolution adaptation.
- The receiver can **extract digital audio** from the transmitter through the **S/PDIF port**.
- Supports audio formats (Dolby TrueHD 7.1CH/Dolby Digital 5.1CH).
- Supports **HDR(YUV4:4:4)**, EDID passback.
- **The transmitter features an HDMI loop-out port**.
- Support **bi-directional IR passback** function (20~60KHz).
- Anti-lightning, anti-surge, anti-static protection.

3. PACKAGE CONTENTS

- 1 × Receiver unit
- 1 × 5V DC 2A Power Adapter (US/EU/UK/AU)
- 1 × IR receiver extension cable (3.28ft/1.0m)
- 2 × Wall-Mount Brackets
- 6 × Screws
- 1 × Grounding screw

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4. SPECIFICATIONS

Item	iSwitch iTrans NeoLink-H70CDR
Technical	
HDMI compliance	HDMI2.0, compatible HDMI1.4
HDCP compliance	HDCP2.2, compatible HDCP1.4
Transmission meduim	CAT6/CAT6A/CAT7
Transmission distance	70m
Video bandwidth	18Gbps
Video support	1280x960,1280x800,1280x768,1680x1050, 1360x768,1366x768,1600x900,1024x768,800x600 480i@60Hz,480p@60Hz,576i@50Hz,576p@50Hz, 720p@50/60Hz,1080i@50/60Hz,1080p@50/60Hz, 3840x2160@24/25/30/50/60Hz,4096x2160@24/25Hz,
Audio support	LPCM/DTS-HD/DTS-Audio/Dolby Digital 5.1CH
HDR10(YUV4:4:4)	support
HDMI Loop-out	support
ARC and S/PDIF out	support
EDID through	support
Cascade Connection	Supports up to 10 receivers in cascade, auto adapt to display resolution
Bi-directional IR passback	support
Input TMDS signal	0.7~1.2Vp-p
Input DDC signal	5Vp-p
Input	HDMI×1, DC2.1×1, 3.5mm jack ×1(IR)
Output	HDMI×1，RJ45 ×1，3.5mm jack ×1（IR）
HDMI connector	Type A 19 Pins,Female

Network cable standard	CAT6/CAT6A/CAT7 , follow IEEE-5688 standard
Mechanical	
Housing Material	Aluminium
Dimensions (L×W×H mm)	106.0(L) x 99.0(W) x 26.2(H)mm
Net weight	210g
Power supply	5V/2A
Power consumption	4W
Operation temperaure	-20~60°C
Storage temperature	-30~70°C
Relative humidity	0~90%(no condensation)

5. Installation Requirements

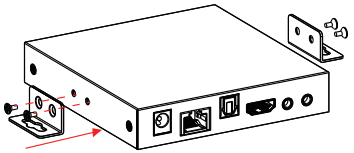
- HDMI source device (compute graphics card, DVD, PS3,)HD monitoring equipment etc.
- HDMI display device like SDTV, HDTV, projector with HDMI port.
- UTP/STP CAT6/CAT6A/CAT7 cable. Follow standard IEEE-568B, It is recommended to select a network cable with less loss and crosstalk.

Note:

- Ensure the device is disconnected from the power supply before installation.
- The recommended installation height is within 6.5ft (2m) above the ground.

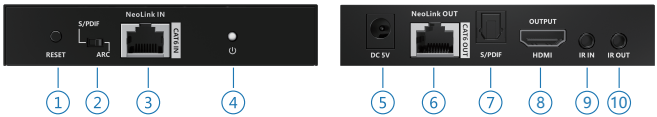
Installing Wall-Mount Brackets

1. Attach a wall-mount bracket to one side of the enclosure using the included screws.



2. Repeat the above step for the other side of the device.
3. Mount the brackets at the desired location using user-supplied screws (not included).

6. Panel Description



#	Name	Description
①	RESET	Press to restart the device
②	Audio switch	Choose to decode audio from HDMI or ARC output from fiber optic interface
③	NeoLink IN	Connect with network cable
④	Power/Signal indicator	When there is power and no HDMI signal, the indicator will flash, when there is HDMI signal, the indicator will light solid blue
⑤	DC5V	Connect with DC5V/2A power adapter
⑥	NeoLink OUT	For extra RX cascade connection via network cable
⑦	S/PDIF	Output digital audio signal
⑧	HDMI OUTPUT	Connect with HDMI display device
⑨	IR IN	Connect with IR receiver extension cable, please make sure the remote control used is within the effective range
⑩	IR OUT	Connect with IR blaster extension cable, please get closer to the source device while using

7. Installation Procedures

7.1 How to make a network cable

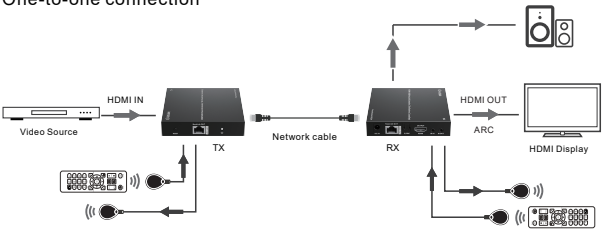


Follow the standard of IEEE-568B:

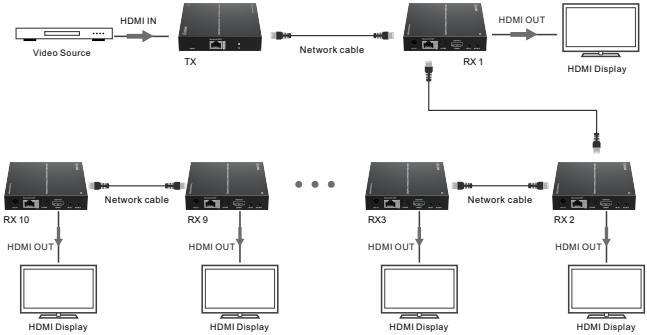
1-white and orange 2-orange 3-white and green 4-blue
5-white and blue 6-green 7-white and brown 8-brown

7.2 Connection Diagrams

• One-to-one connection



• Cascade connection



Note: To ensure the quality of signal transmission, please use network cable within 50 meters when cascaded.

7.3 Connection Instructions

1) Connect the source device to the HDMI in port of the transmitter with an HDMI cable, and connect the HDMI out port of the receiver to the display device with another HDMI cable.
2) Connect the NeoLink OUT port of the transmitter and the NeoLink IN port of the receiver via a network cable (CAT6/CAT6A/CAT7). If cascading is used, connect the NeoLink OUT port of the previous receiver to the NeoLink IN port of the next receiver.
3) If using HDMI loop out, connect the display device to the HDMI OUT port of the transmitter.
4) Plug the power supply into the device to get started.

Note: It is recommended to use a length range within 2~70m network cable. If the cable is too short, there may be no display output because the signal is too strong. If the cable is too long, the output may be with poor quality.

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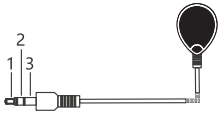
7.4 IR User Guide



IR receiver

1. Power
2. IR Signal
3. Null

1) IR blaster extension cable should plug in the IR OUT port of the transmitter and receiver, IR receiver extension cable should plug in the IR IN port of the transmitter and receiver.
2) The emitter of the IR blaster extension cable should be as close as possible to the IR receiving window of the source device.
3) Face the receiving head of the IR receiver extension cable to the user for convenient remote control.

8. FAQ

Q: There is no output on screen when all connections are correct?

A:

1) Please make sure the HDMI cables supports 4K×2K if the output signal from the source device is 4K×2K resolution.
2) Please check and make sure the network cable insert to the RJ45 port well.
3) Restart the transmitter or receiver by pressing the reset button.

Q: Black screen happened on the display/monitor?

A:

1) Check if the length of the cable is within the specified range.
2) Reset the transmitter to re-built the connection.

Q: The display shows unusual color or no sound?

A:

1) Reset the transmitter or receiver to re-built the connection.
2) Check if the HDMI cables are connected well.
3) Reconnect the network cable.