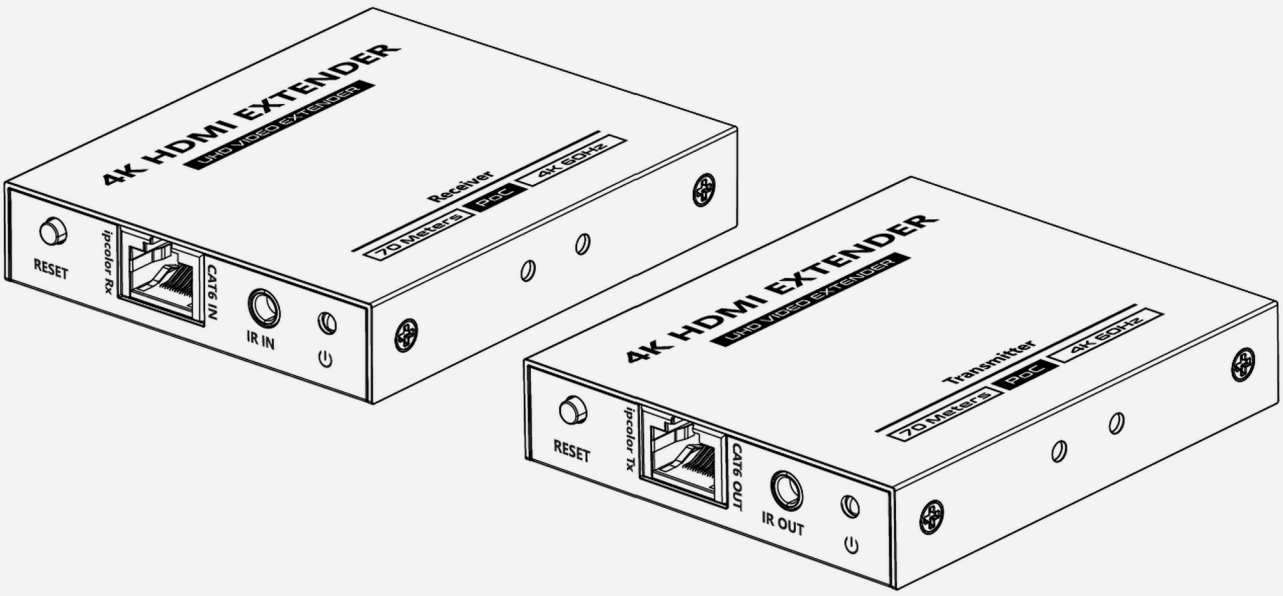
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SOLUTIONS FOR GROWTH

# User Manual

# nT16BD04

## HDMI + IR + AUDIO + PoC EXTENDER - 70 Mtrs



## • Important Safety Instructions:

1. To prevent electric shock, please ensure that all apparatus is properly grounded.
2. Do not place this apparatus near or over a radiator or heat register, or where it is exposed to direct sunlight.
3. Place the device in a well-ventilated area, do not block any ventilation openings.
4. 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.
5. Do not place the device on an uneven or unstable surface. The device may fall resulting in a malfunction.
6. Never insert anything metallic into the open parts of this apparatus. This may cause a danger of electric shock.
7. If a three-party power supply is used, please ensure that the power supply specifications meet the product requirements.

## • Introduction

This is an HDMI point-to-point extender kit, it can realize zero-latency transmission. The 4K@60Hz HDMI signal can be extended by 70m through CAT6/6A/7 network cable. It supports HDMI loop out, IR passthrough, 3.5mm audio output, etc.
This kit is a reliable, ultra-high-definition video transmission solution, which is widely used in security monitoring, home theater, broadcasting, training and other fields.

## • Features

1. Zero-latency transmission.
2. Extend 4K@60Hz HDMI signal up to 70m/230ft over Cat6/6A/7 cable.



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3. The receiver supports 3.5mm stereo output.
4. Support HDR10.
5. Support EDID passthrough and auto downscaling.
6. The transmitter supports HDMI loop out.
7. Support IR passthrough.
8. Lightning protection, surge protection, ESD protection.
9. Support PoC Network Cable Power Supply，Only TX Power Supply is Needed.

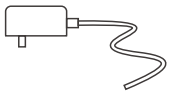
## • Package Contents



Transmitter x1



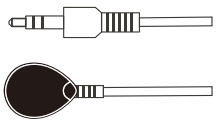
Receiver x1



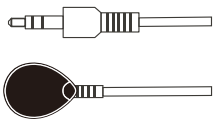
DC5V/2A x1



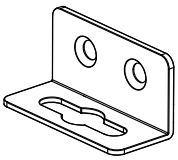
User manual x1



IR receiver extension cable x1



IR blaster extension cable x1



Mounting ear x4



Screw x10

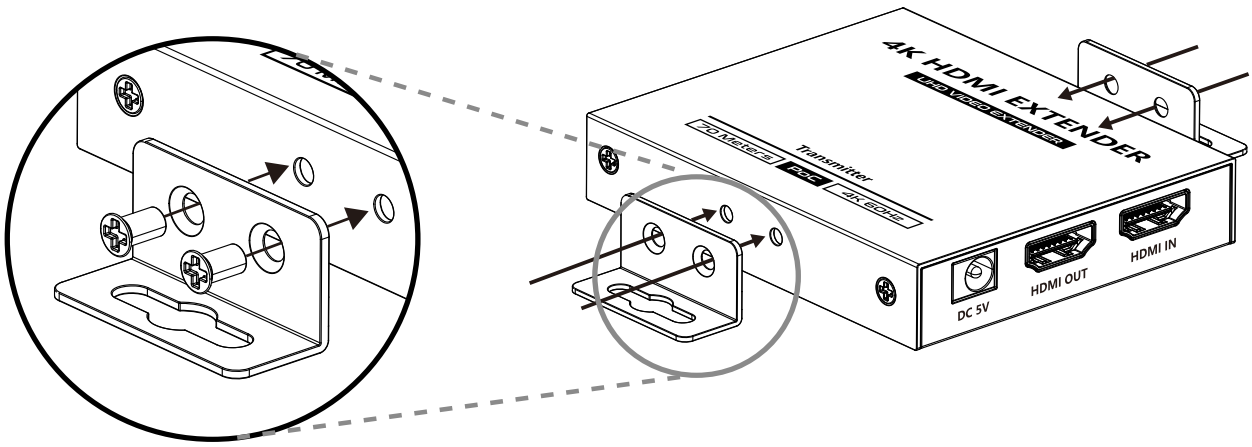


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- **Installation Requirements**

| Item | Description | Requirement |
|---|---|---|
| Signal source | Devices with HDMI port (PC, DVD, NVR, etc.) | HDMI cable ≤5m |
| Cable | CAT6/6A/7，following standard IEEE-568B | CAT6/6A/7≤70m |
| Display device | TVs, projectors, etc. with HDMI port | HDMI cable ≤5m |

- **Wall Mounting**



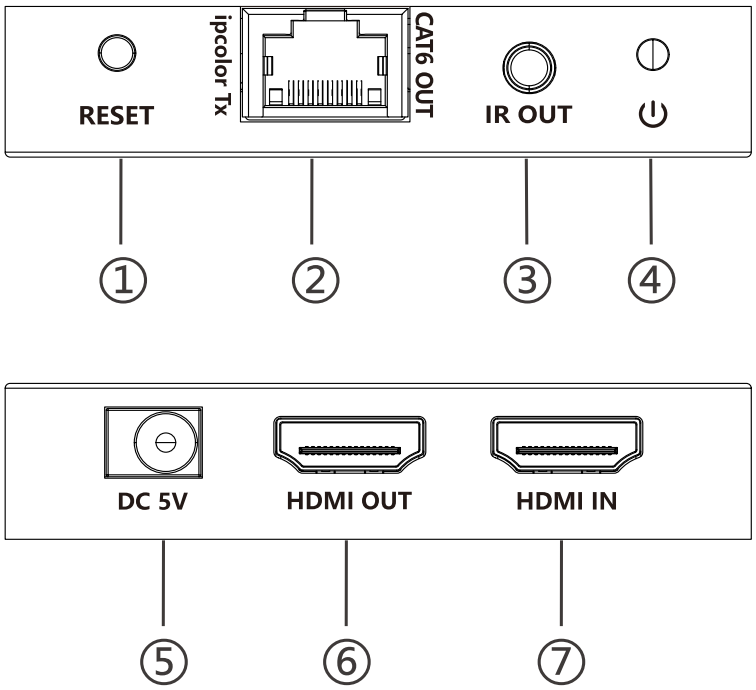

Install the mounting ears on the unit according to the diagram, and select the wall mounting position to fix it.



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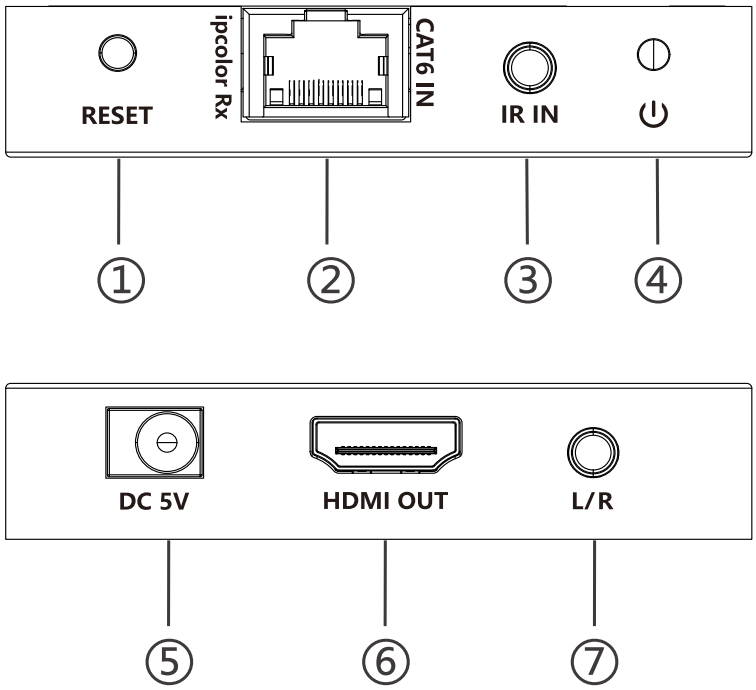
# • Panel Description

## 1. Transmitter




| | | |
|---|---|---|
| ① | Reset button | Press to restart the device |
| ② | RJ45 output | Connect with CAT6/6A/7 network cable |
| ③ | IR out | Connect with IR blaster extension cable |
| ④ | Power indicator | When there is power and no HDMI signal, the indicator will flash, when there is HDMI signal, the indicator will light solid |
| ⑤ | DC5V | Connect with DC 5V power adapter |
| ⑥ | HDMI output | Connect with local HDMI display device with HDMI cable |
| ⑦ | HDMI input | Connect with HDMI source device with HDMI cable |

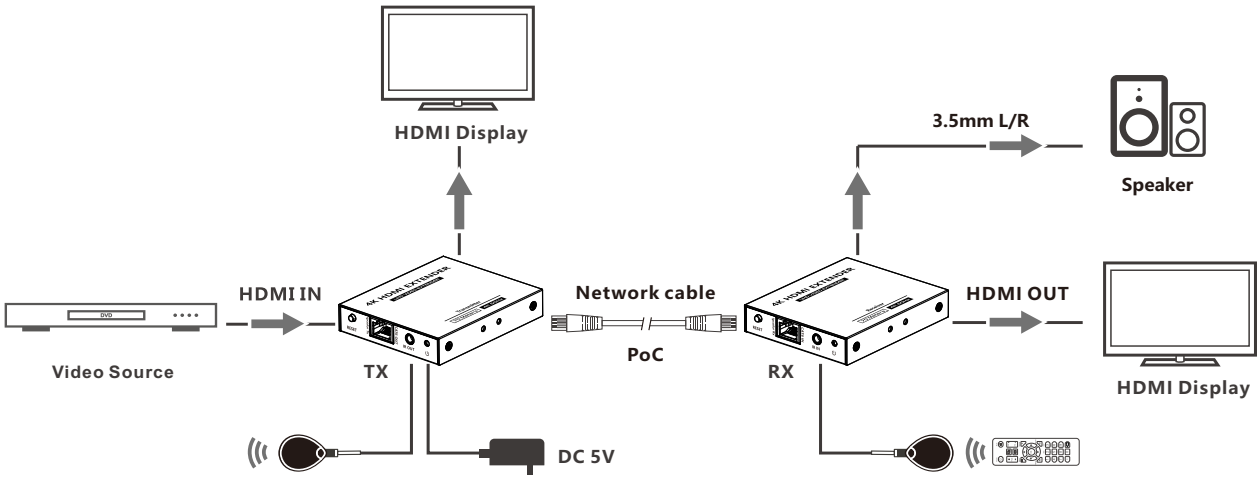
## 2. Receiver




| | | |
|---|---|---|
| ① | Reset button | Press to restart the device |
| ② | RJ45 input | Connect with CAT6/6A/7 network cable |
| ③ | IR in | Connect with IR receiver extension cable |
| ④ | Power indicator | When there is power and no HDMI signal, the indicator will flash, when there is HDMI signal, the indicator will light solid |
| ⑤ | DC5V | Connect with DC 5V power adapter |
| ⑥ | HDMI output | Connect with HDMI display device with HDMI cable |
| ⑦ | 3.5mm stereo output | Connect with earphone or speaker |

- # Installation Procedures

## 1. Connection Diagrams



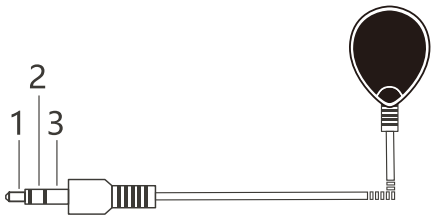

## 2. Connection Instructions

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) Use a Cat6/6A/7 cable to connect the RJ45 port of the transmitter and receiver.
3) If using HDMI loop out, connect the display device to the HDMI OUT port of the transmitter.
4) If using IR passthrough, the IR blaster extension cable should plug in the IR OUT port of the transmitter, the IR receiver extension cable should plug in the IR IN port of the receiver.

5) If you need to output audio additionally, connect the speaker to the L/R port with a 3.5mm stereo audio cable.

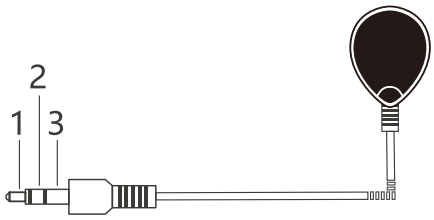
6) Plug the power supply into the devices to get started.

### 3. IR User Guide




IR blaster

1. Power
2. IR Signal
3. Null




IR receiver

1. Power
2. IR Signal
3. Grounding

1) IR blaster extension cable should plug in the IR OUT port of the transmitter or receiver, IR receiver extension cable should plug in the IR IN port of the transmitter or 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) Point the remote control at the receiving head of the IR receiver extension cable to operate.

## • FAQ

Q: The devices are connected correctly, but why is there no image displayed?

A: 1) Please make sure the HDMI cable meets the transmission requirements. (e.g. 4K HDMI cable)

2) Please check and make sure the network cable is connected well.

3) Restart the transmitter or receiver by pressing the reset button.

Q: Why does the display occasionally have a black screen?

A: 1) Check if the length of the cable is within the specified range.

2) Reset the transmitter or receiver to re-built the connection.

Q: Why is the display color abnormal 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.

## • Technical Parameters

| Items | Transmitter | Receiver |
|---|---|---|
| **Video** | | |
| **Input interface** | 1x HDMI Type A Female | 1x RJ45 Female |
| **Output interface** | 1x HDMI Type A Female<br>1x RJ45 Female | 1x HDMI Type A Female |
| **HDMI Length** | ≤5m | ≤5m |
| **Maximum transfer rate** | 18Gbps | |
| **Maximum transmission bandwidth** | 600MHz | |
| **EDID passthrough** | Yes | |
| **Compatibility** | HDMI 2.0 (Deep color, 4K, HDR, YUV4:4:4) | |
| | HDCP 2.2 | |
| **Resolutions** | 720p@50/60Hz、1080i@50/60Hz、1080p@50/60Hz、<br>3840x2160@24/25/30/50/60Hz、4096x2160@24/25Hz、<br>1280x960、1280x800、1280x768、1680x1050、<br>1360x768、1366x768、1600x900、1024x768、800x600 | |
| **Transmission distance** | CAT6/6A/7≤70m | |
| **Audio** | | |
| **Input interface** | 1x HDMI Type A Female | N/A |
| **Output interface** | 1x HDMI Type A Female | 1x HDMI Type A Female<br>1x 3.5mm L/R Female |
| **Audio formats** | LPCM/DTS-HD/DTS-Audio/Dolby Digital 5.1CH/Dolby Atmos | |
| **Command Signal** | | |
| **IR interface** | 1x 3.5mm IR OUT Female | 1x 3.5mm IR IN Female |
| **Receiving range** | ≤5m | |
| **Infrared frequency** | 20KHz~60KHz | |

| | | |
|---|---|---|
| **Power** | | |
| **Power Supply** | DC5V/2A | DC5V/2A |
| **Power Consumption** | ＜4W | ＜4W |
| **Operating Environment** | | |
| **Working temperature** | -20℃~60℃ | |
| **Storage temperature** | -30℃~70℃ | |
| **Humidity** | 0~90%RH (No condensation) | |
| **Physical Properties** | | |
| **Housing** | Metal | |
| **Weight** | 140g | 140g |
| **Color** | Black | |
| **Dimensions** | 85.0(L)*75.5(W)*16.5(H)mm | |
| **Protection** | ESD protection<br>1a Contact discharge level 2 (±4KV)<br>1b Air discharge level 3 (±8KV)<br>Implementation of the standard: IEC61000-4-2 | |
| | Lightning protection, Surge protection | |
| **Certifications** | FCC/CE/RoHS2.0 | |