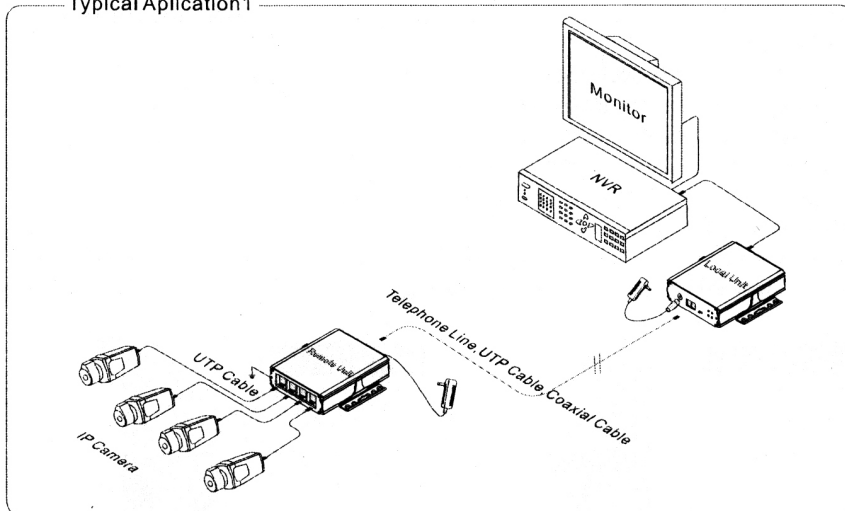


Ethernet Extender

Ethernet extender is a new type of network extender that adopting VDSL2 technology. It can extend network signal up to 1500m via coax(or UTP cable telephone line) with transmission band up to 100M bps. The extender can also support ethernet switch. Several host can use the same network via the ethernet extender. It also support 4ch ethernet signal transmission. The network extender kit includes one server unit and one camera unit. The network extender kit features strong isolation, lighting protection, anti-interference. It is recommended in CCTV system, meeting system and smart construction project etc..

Typical Application 1



Features

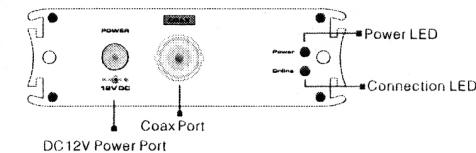
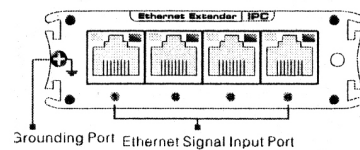
- Power Supply: 12V DC;
- Transmission Cable: Coax, UTP Cable, Telephone Cable;
- Transmission Distance: 0-1500m;
- Standard: Support IEEE802.3XILIE, 10/100Base-TX Ethernet Standard;
- Operation: Upgrade existing network, easy operation, plug&play;
- Structure: Delicate design, support MIT rack, easy installation.

Notice

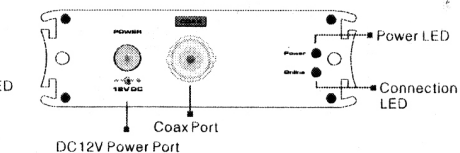
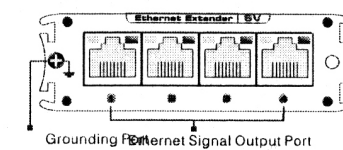
The transmission distance is related to the quality of the cable, please use standard coax or UTP cable for best transmission quality.

Board Diagram

IPC



SV



LED Instruction

| LED | Status | Instruction |
|----------|--------------------|---|
| POWER | On | Power on |
| | Off | Power off or power supply error |
| ONLINE | Flash Twice | Flash twice after power on. Device is in initialization. |
| | Slow Flash | After initialization, the LED will be in slow flash to search another device. The duration of the process will be 1min. |
| | Intermittent Flash | Connection success |
| RJ45 LED | Green on | Network port connected |
| | Yellow on | Network port not connected |
| | Yellow Flash | Device in communication |

Package Contents

Please check the following list. If you find out the item missed, please contact your local dealer.

- Ethernet Extender 1kit
- MIT Hanger Accessory Kit 2kit
- BNC Converter 2set
- DC12V/1A Power Adaptor 2set
- Application Manual 1pcs

1. Power off the system before the installation. Installation with system power on may cause damage to the device.
2. Connect RJ45 port of the IPC unit to the IP cameras;
3. Connect RJ45 port of the SV unit to the NVR;
4. Connect the SV unit and IPC unit with the coax, UTP cable or telephone cable;
5. Examine the system and make sure the connection is stable. Power the system.
6. Examine the network.

Specification

| Item | | Description | | | |
|------------------------------------|-----------------------|---|--------------------|--------------------|--|
| Power | Power Supply | Power Adapter | | | |
| | Power Range | DC 12V | | | |
| | Consumption | <6W | | | |
| Ethernet Port | Port | RJ45 Port, Support MDI/MDIX Function | | | |
| | Signal | 10/100Mbps High Speed Ethernet Signal | | | |
| | Transmission Distance | 100m | | | |
| EOC Port | Port | Female BNC Port | | | |
| | Signal | VDSL2 Standard | | | |
| | Distance | Max Rate(Max) | Upstream Rate(Max) | Download Rate(Max) | |
| | 300m | 128Mbps | 44Mbps | 84Mbps | |
| | 600m | 112Mbps | 36Mbps | 76Mbps | |
| | 900m | 82Mbps | 23Mbps | 59Mbps | |
| | 1200m | 59Mbps | 13Mbps | 46Mbps | |
| | 1500m | 43Mbps | 9Mbps | 34Mbps | |
| EOC to 24AWG UTP Transmission Rate | Distance | Max Rate(Max) | Upstream Rate(Max) | Download Rate(Max) | |
| | 300m | 130Mbps | 45Mbps | 85Mbps | |
| | 600m | 88Mbps | 27Mbps | 61Mbps | |
| | 900m | 48Mbps | 10Mbps | 38Mbps | |
| | 1500m | 15Mbps | 2Mbps | 13Mbps | |
| Status | Power LED | 1↑ (Red) | | | |
| | Connection LED | 1↑ (Green) | | | |
| Protection | Surge Protection | 2KV (Different Mode) 4KV (Common Mode) Per: IEC61000-4-5 | | | |
| | ESD | 1a Contact Discharge Level 3 1b Air Discharge Level 3 Per: IEC61000-4-2 | | | |
| Environment | Working Temperature | 0°C~55°C | | | |
| | Storage Temperature | -20°C~70°C | | | |
| | Humidity | 0~95% | | | |
| Structure | Size | 138mm × 82mm × 25mm (With Port Length) | | | |
| | Material | Aluminum | | | |
| | Color | Black | | | |
| | Weight | 206g | | | |
| Stability | MTBF | >30000h | | | |

Specifications subject to change without notice.

Problem Examination

Please examine the device according to the following instruction:

- Please installing the system according to the instruction;
- Please check if the RJ45 cable reach the standard of EIA/TIA568A pr 568B;
- Please make sure the transmission distance is not surpass the max distance;
- Please replace the failure device with a working one;
- If the problem still exist, please contact your local dealer.

RJ45 Making Method

Instruments to be used: wire crimper, network tester. Wire sequence of RJ45 plug should conform with EIA/TIA568A or 568B.

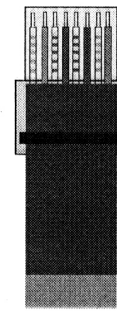
1. Shuck off about 2cm long the insulating layer, and bar the 4 pairs UTP cable;
2. Depart the 4 pairs UTP cable and straighten them;
3. Line up the 8 pieces of cables per EIA/TIA 568A or 568B.
4. Cut out 1.5 cm cable wrap and leave the bare wire;
5. Plug 8 cables into RJ45 plug, make sure each cable is in each pin.
6. Then use wire crimper to crimp it;
7. Follow the 5 steps above to make the another end, following the same sequence of the first plug;
8. Using network tester to test the cable whether is working.

| pin | color |
|-----|--------------|
| 1 | white/green |
| 2 | green |
| 3 | white/orange |
| 4 | blue |
| 5 | white/blue |
| 6 | orange |
| 7 | white/brown |
| 8 | brown |



EIA/TIA 568A

| pin | color |
|-----|--------------|
| 1 | white/orange |
| 2 | orange |
| 3 | white/green |
| 4 | blue |
| 5 | white/blue |
| 6 | green |
| 7 | white/brown |
| 8 | brown |



EIA/TIA 568B



attention:

- When choose RJ-45 make sure if one end is EIA/TIA568A, the other end should also be EIA/TIA568A.
- When choose RJ-45 make sure if one end is EIA/TIA568B, the other end should also be EIA/TIA568B.