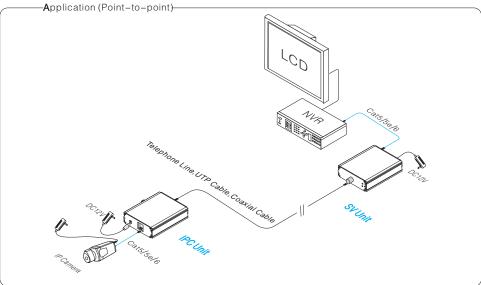
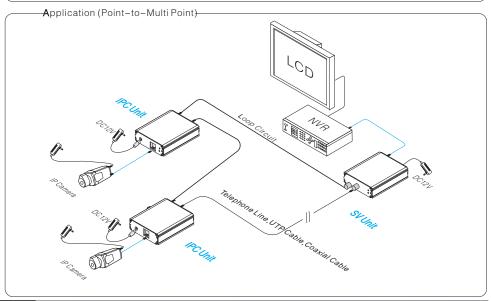
# **Ethernet Extender**

Ethernet Extender is consist of SV-Unit and IPC-Unit, it can use in pairs or one-to-many. It uses coaxial cable or other kind cable to extend transmission of the Ethernet signal. It can meet the single mode, link mode and star mode, also can build the loop network, which there is breakdown in the circuit, but the system still can work normally. This product is very suitable for long distance transmission Ethernet signal and the situation needs link mode network, such as network video surveillance, network engineer....





#### **■**Feature

- Use coaxial cable transmit Ethernet signal, maximum distance up to 2km;
- Network delay less than 1ms;
- Optional transmission medium, coaxial cable, power line or UTP cable;
- Meet single mode, link mode and star mode network at the same time;
- Loop circuit mode, if there is one breakdown in the circuit, the system still can work normally;
- Meet Standard: IEEE802.3 10BASE-T, IEEE802.3u 100BASE-TX;
- Appearance and structure: Solid and delicate, meet MIT rack installation standard;
- Protection and anti-interference: Excellent circut isolation protection, effectively improve product's lightning protection, ESD and anti-interference ability;

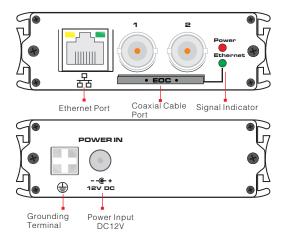


#### **Notice**

- 1) Transmission distance is related with the cable, please use the standard Cat5/5e/6 network cable to get the better transmission result!
- 2) Network rate decreases with the transmission distance;
- 3) In point-to-multi point, the maximum speed rate is 100Mbps, pleas don't connect with too many IPC Units.

## **■**Board Diagram

#### Ethernet Extender Board



# **■**Installation Step

Please check the following items before installation. If any missing, please contact the dealer.

Ethernet Extender	1pc
<ul><li>Power Adapter</li></ul>	1pc
• Hanger	2pc
BNC Connector	2pc
<ul><li>User Manual</li></ul>	1pc

### Please follow the following step

- 1) Please turn off the signal source and the device's power, installation with power on may damage the device;
- 2) Use network cable to connect IP camera with IPC unit's RJ45 port;
- 3) Use network cable to connect SV unit's RJ45 port with NVR:
- 4) Use telephone cable or UTP/coaxial cable to connect the transmission port of IPC unit and SV unit;
- 5) Check if the installation is correct and device is good, make sure all the connection is reliable and power up the system;
- 6) Make sure the network is working normal.

# **■** Specification

Item		Description	
Power	Power Supply	Power Adapter	
	Voltage	DC12V	
	Consumption	<10W	
Ethernet Port	Ethernet Port	EoC Port: Use coaxial cable to transmit Ethernet signal and power Ethernet Port: 10/100mbps	
	Transmission Distance	EoC Port with Coaxial Cable: 2km (maximum), transmission rate decrease with distance; Ethernet Port with Cat5\5e\6: 100m	
LED Status Indicator	Power	1 (Red)	
	EPOC Ethernet	1 (Green)	
	RJ45 Ethernet	1 (Green),1 (Yellow) indicate Link/act	
Protection	ESD	1a Contact Discharge Level 3 1b Air Discharge Level 3 Per: IEC61000-4-2	
	Working Temperature	0℃~55°C	
	Storage Temperature	-40°C~85°C	
	Humidity (Non- condensing)	0~95%	
Mechanical	Dimension (L×W×H)	82mm × 100mm × 25mm	
	Color	Aluminum	
	Color	Black	
	Weight	IPC: 180g; SV:180g	
Stability	MTBF	>30000h	

Product are subject to change without prior notice

## ■ Trouble Shooting

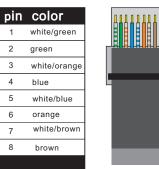
#### Please find the following solution when the device doesn't work

- Please confirm if the installation is correct;
- Please confirm if the RJ45 cable order in accordance with the EIA/TIA568A or 568B industry standards;
- The maximum transmission distance is depend on the signal source and cable quality, please do not over the maximum transmission distance:
- Please replace a normal device with a failure one to check if the device is broken;
- If the problem still exist, please contact the factory.

#### ■ RJ 45 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.









Ethernet Extender-

EIA/TIA 568A

EIA/TIA 568B

## Notice

- 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.