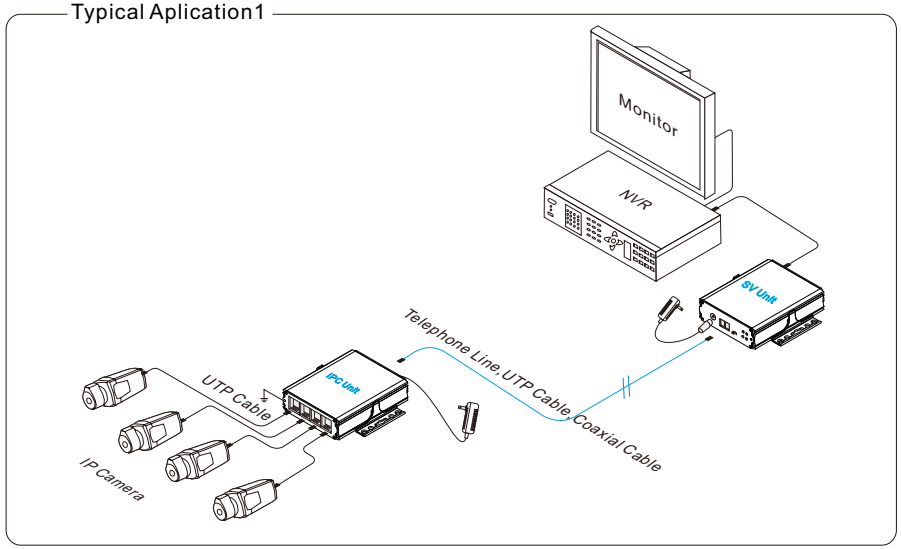
Ethernet Extender

Ethernet extender is a new type of network extender . 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.In real engineer,Ethernet extender need to be used in pair,SV as Server unit and IPC as camera unit . The network extender kit features strong isolation, lighting protection, anti-interference. its applications include CCTV system, meeting system and smart construction project etc..

Typical Aplication1



Features

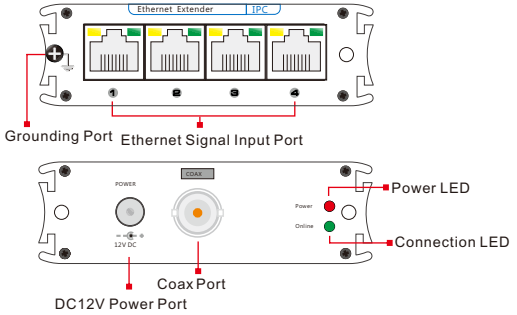
- Power Supply: 12V DC;
- Transmission Cable: Coax, UTP Cable, Telephone Cable;
- Transmission Distance: 0-1500m;
- Standard: Support 10/100Base-TX Ethernet Standard;
- Operation: Use existing network, easy operation, plug&play,convenient and efficient;

Notice

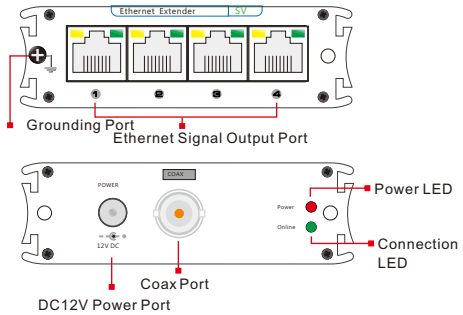
The transmission distance is related to the quality of the cable, please use standard coax or UTP cable for best transmission quality.

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
	Green off	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 SV 1kit
- Ethernet Extender IPC 1kit
- MIT Hanger Accessory Kit 1kit
- BNC Converter 2set
- DC12V/1A Power Adaptor 2set

Pls follow the following installation steps

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.

Specification

Item		Description		
Power	Power Supply	Power Adapter		
	Power Range	DC12V		
	Consumption	<6W		
Ethernet Port	Port	RJ45 Port, Support MDI/MDIX Function		
	Signal	10/100Base-Tx		
	Transmission Distance	100m		
EOC Port	Port	Female BNC Port		
	Signal	Coal signal		
	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
	1200m	32Mbps	6Mbps	26Mbps
	1500m	15Mbps	2Mbps	13Mbps
Status	Power LED	1 unit (Red)		
	Connection LED	1 unit (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℃~55℃		
	Storage Temperature	-20℃~70℃		
	Humidity	0~95%		
Structure	Size	138mm×82mm×25mm (With Port Length)		
	Material	Aluminum		
	Color	Black		
	Weight	206g		
Stability	MTBF	>30000h		

Specifications suject to change without notice.

Trouble shooting

Please examine the device according 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;

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;

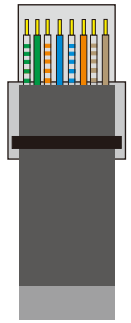
5.Plug 8 cables into RJ45 plug, make sure each cable is in each pin.

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;

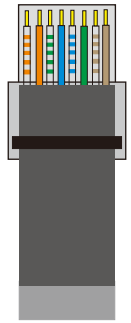
8.Using network tester to test the cable whether is working.

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.