

# User Manual

## - Hardware -

---

Ethernet over Coax / UTP Managed Receiving Switch  
ECP-2808RM / ECP-2816RM / EUP-2808RM / EUP-2816RM

---

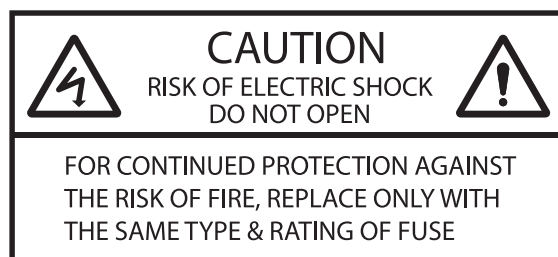


# Contents

<b>Precaution and Safety Guidelines .....</b>	<b>3</b>
<b>1. Product Overview .....</b>	<b>4</b>
1.1. Introduction.....	4
1.2. Features.....	4
1.3. Package Contents .....	4
<b>2. Hardware Installation .....</b>	<b>5</b>
2.1. Front Panel.....	5
2.2. Rear Panel .....	6
2.3. LED Indication .....	7
2.4. Configuration Instruction .....	8
2.4.1. Prepare devices and materials .....	8
2.4.2. Hardware Installation.....	8
2.4.2.1. Rackmount Bracket Installation Guide	
2.4.2.2. Rack Mount Instructions	
2.4.2.3. Grounding	
2.4.3. Joining instruction .....	15
2.4.4. Label the configured network group .....	16
2.5. Transmission distance & Bandwidth by distance .....	17
2.5.1. Performance chart.....	17
2.6. Typical Installation .....	19
<b>3. Product Specifications.....</b>	<b>20</b>
3.1. Technical Specifications .....	20
<b>4. Troubleshooting.....</b>	<b>22</b>
<b>5. Warranty Policy.....</b>	<b>23</b>
<b>6. Regulatory and Certificates .....</b>	<b>23</b>
<b>7. Customer supports.....</b>	<b>23</b>

## Precaution and Safety Guidelines

- Please install the device following the installation guide.
- Read all warnings.
- **Warning:** Do not touch the device and cable with wet hands.
- **Warning:** Clean this apparatus only with a dry cloth.
- **Warning:** Please do not put the products on anything electrical conductive (screwdrivers, coins, iron, etc.) and not put them around water.
- **Warning:** Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus that produce heat.
- **Warning:** Do not use for other purposes.
- **Warning:** Do not put the signal lines (Coax, UTP) in the same conduit as high voltage wiring
- Do not put any sticker or paint on it.
- Indoor use only.
- Please use only attachments or accessories specified by the manufacturer.
- Unplug the device during a lightning storm or when the device is not used for a long time.  
(i.e. Connecting analog camera to BNC connector)
- Do not connect analog cameras to BNC connectors (B-Linx Port) on this devices (ECP Series only)
- Do not connect any IP devices to RJ45 connectors (T-Linx Port) on this devices (EUP Series only)
- When the unit is not working properly, please contact dealer or customer service.
- Please do not disassemble the unit by yourself.
- If this device emits smoke, abnormal noise, or a strange odor, please turn off the power switch, unplug the AC power cord immediately, and contact dealer or customer service.



The lightning flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

# 1. Product Overview

## 1.1. Introduction

The All-New Intercoax ECP/EUP-2808RM/2816RM Series is 19" rack mountable managed Long Distance Ethernet and PoE over Coax/UTP Receiving Switches.

ECP/EUP-2808RM/2816RM series are capable of connecting more than 8/16 ECP Transmitters even with Daisy-Chain connection and also support PoE powered devices such as IP cameras.

Data rates up to 1Gbps are achievable, making these devices the ideal choice in new or legacy installations where existing Coax/UTP cable is re-deployed as part of an upgrade from Analog to IP cameras.

ECP/EUP-2808RM series have built-in 320 Watt power supply and ECP/EUP-2816RM series have built-in 640 Watt power supply (\*Dual power supply of 320W + 320W for power sharing and redundancy)

PoE up to 60W per port is available.

Intercoax' "ECP Manager", accessible via Web GUI, allows management of all IEEE 1901-HPAV standard devices connected, and multiple ECP/EUP-2808RM/2816RM devices remotely.

## 1.2. Features

- Ethernet & PoE transmission over Coax / UTP cable
- Complies to IEEE1901-HPAV standard
- Extended transmission distance up to 2,400m
- PoE/ PoE+/ Extra PoE up to 60W (PoE++) per B-Linx port & T-Linx port
- Total management software, "ECP Manager", via Web GUI
- Friendly Graphic User Interface with EasyView
- Remote Join & Unjoin, Change joining password
- Remote power reset by each port
- Real-time monitoring of power consumption for each port
- Multicast Setting with IGMP Query & Report Generator
- SNMP ready
- VLAN ready
- Port Locking for extra secured network connectivity
- Alarm LED & buzzer and notification on ECP Manager
- Scheduled event reporting and alert reporting to designative users
- Back up & Restore of configuration
- Auto Power Short Protection
- B-Linx & T-Linx Smart Device Detection for safe power transmission
- 320W (8 port) / 640W (16 port) Built-in Power Supply
- Built-in crosstalk canceling technology
- Support multiple configuration (Daisy Chain, Star, Ring, Etc.) on each port
- Gigabit SFP and Copper uplink port
- 19-inch(1U) rack mountable design

## 1.3. Package Contents



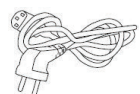
ECP-2816RM  
(ECP-2808RM / EUP-2808RM / EUP-2816RM)



Bracket



Quick Installation  
Guide

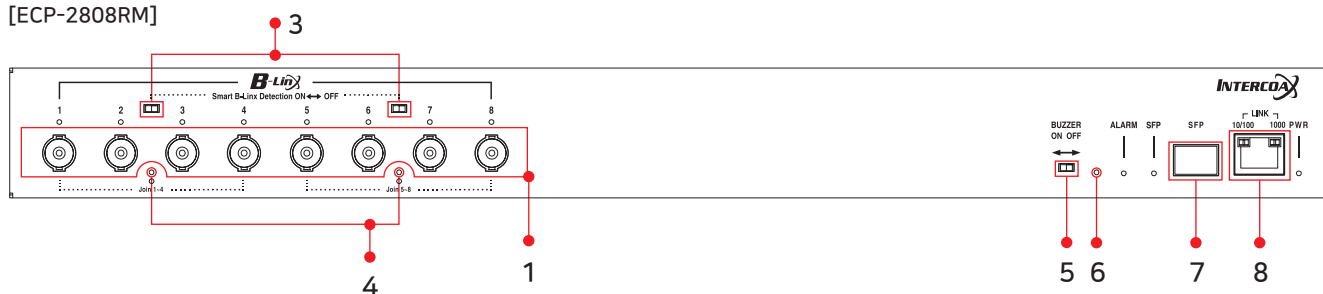


AC Power code

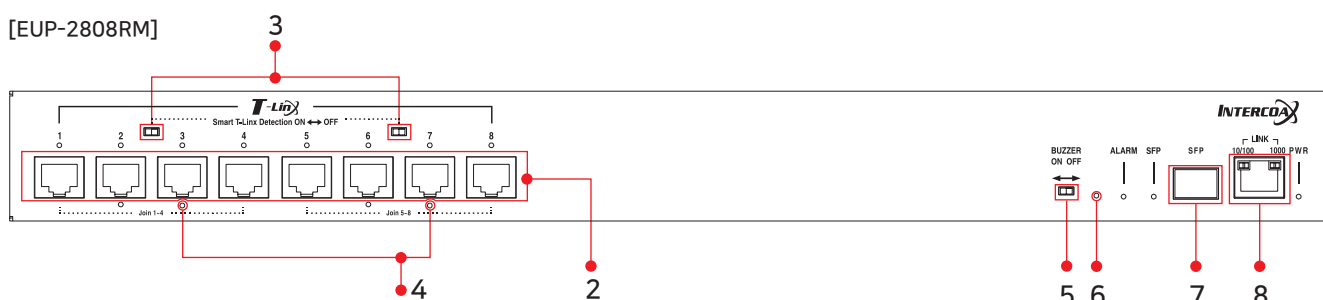
## 2. Hardware Installation

### 2.1. Front Panel

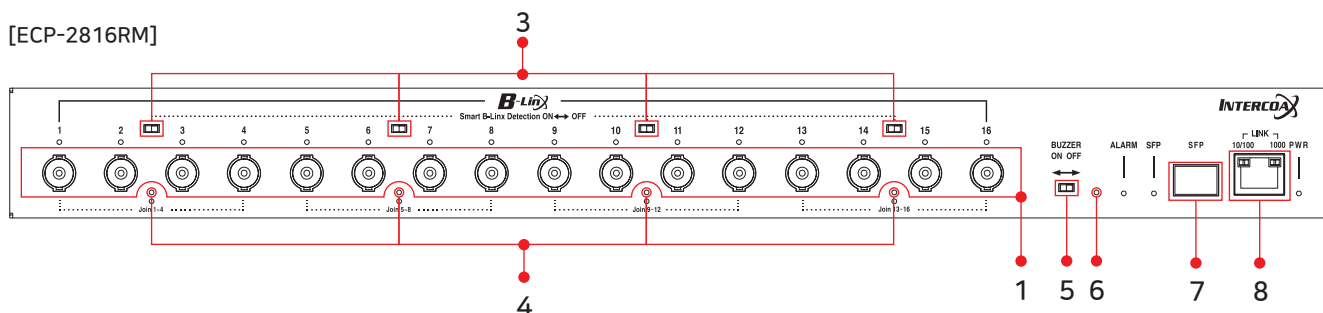
[ECP-2808RM]



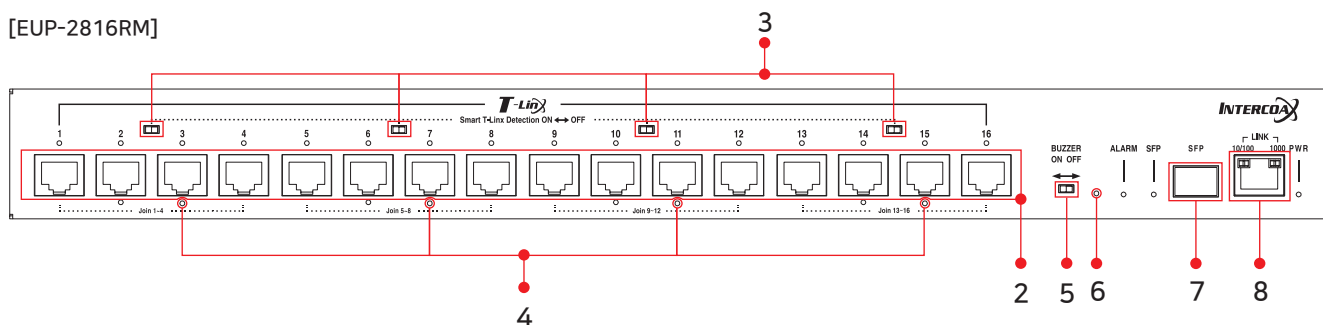
[EUP-2808RM]



[ECP-2816RM]



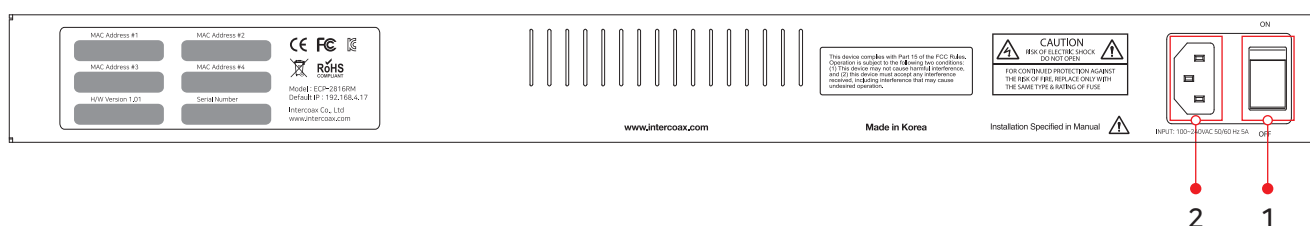
[EUP-2816RM]



No.	Description
1	<b>B-Linx Ports (1~8 / 1~16) :</b> Connect Intercoax ECP Transmitters or IEEE1901-HPAV standard devices by coaxial cable with BNC male connector.
2	<b>T-Linx Ports (1~8 / 1~16) :</b> Connect Intercoax ECP Transmitters or IEEE1901-HPAV standard devices by UTP cable with RJ45 male connector.

No.	Description
3	<b>Smart B-Linx / T-Linx Detection On ↔ Off :</b> B-Linx / T-Linx Detection mode On/Off switch <ul style="list-style-type: none"> <li>- <b>Detection Mode ON:</b> Detects B-Linx &amp; T-Linx devices before supplying power over Coax.</li> <li>- <b>Detection mode OFF:</b> By-pass detection, classification and power management checks.</li> </ul> <p><b>[Caution]</b>            Do not connect analog cameras or network devices on BNC or RJ-45 port directly if Smart B-Linx / T-Linx detection switch is OFF, it may cause a serious damage to the device connected.</p>
4	<b>Join (1-4, 5-8, 9-12, 13-16) :</b> Hidden button to create new Network group with ECP Transmitters. <ul style="list-style-type: none"> <li>- Press the button with a paper clip and hold for 2 seconds for Joining (Create new password).</li> <li>- Press the button with a paper clip and hold for 15 seconds for Unjoining (Remove the existing password).</li> </ul> <p><b>[Note]</b> Please refer to the Network Grouping Software manual, available on Intercoax' Website.</p>
5	<b>Buzzer On ↔ Off :</b> Move the switch left or right to buzzer sound on or off.
6	<b>Factory Reset :</b> The hidden factory reset button. Press and hold for 10 seconds the reset button to restore to its original factory settings.
7	<b>SFP :</b> Connect an SFP module for uplink data (1000 Base-FX GBIC slot).
8	<b>Link :</b> Connect an RJ45 Ethernet cable for uplink data (10/100/1000 BaseT).

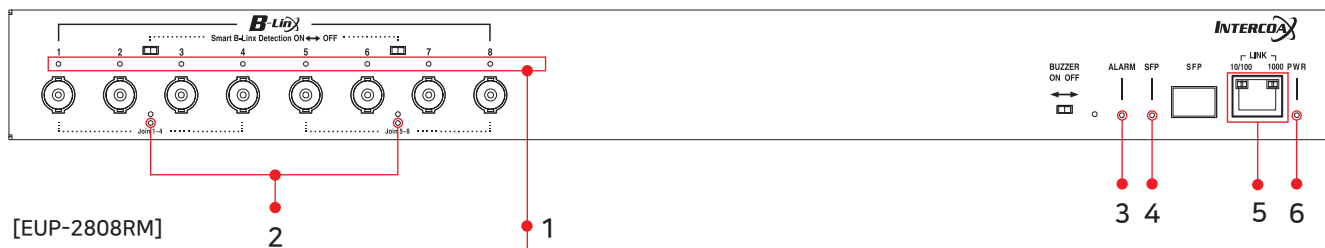
## 2.2. Rear Panel



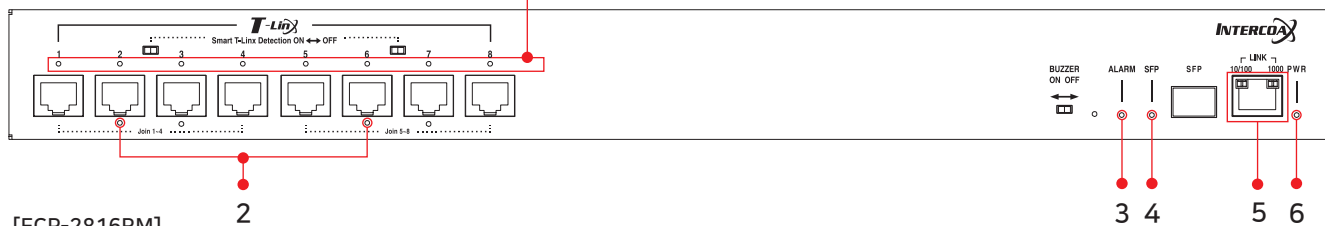
No.	Description
1	<b>Power ON/OFF Switch</b>
2	<b>Power Connector</b> The connector is for 100~240V AC power inputs 50Hz/60Hz

## 2.3. LED Indication

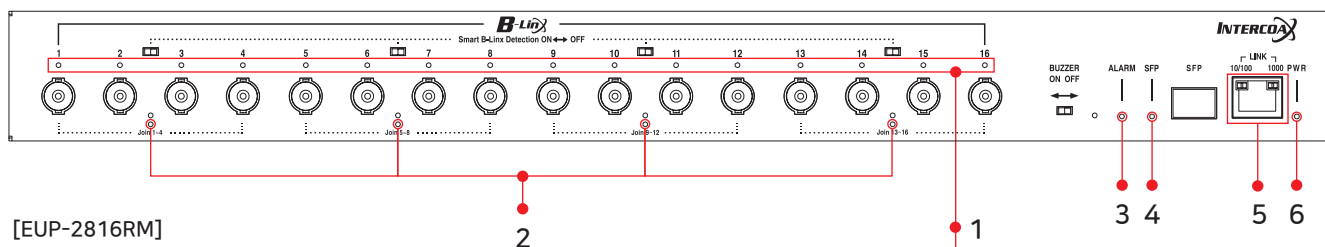
[ECP-2808RM]



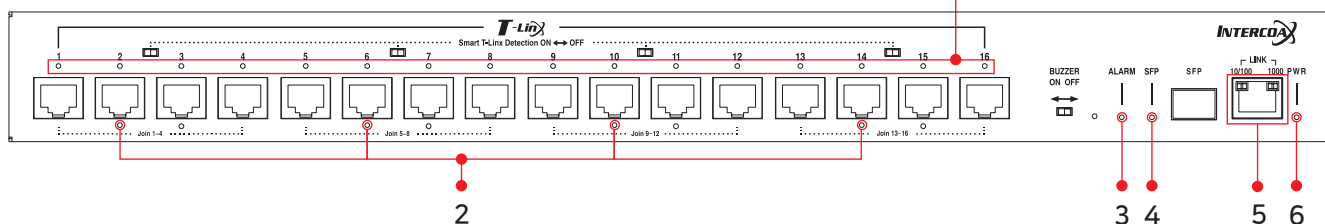
[EUP-2808RM]



[ECP-2816RM]



[EUP-2816RM]



No.	LED Indication	On	Off	Blinking
1	B-Linx/T-Linx (1~8 / 1~16)	<ul style="list-style-type: none"> <li>ECP/EUP Transmitter is connected</li> <li>Power over coax / UTP working properly</li> </ul>	<ul style="list-style-type: none"> <li>No device connected on B-Linx / T-Linx port</li> </ul>	<ul style="list-style-type: none"> <li>Short circuit or over current protection is working</li> </ul>
2	Join (1~4 / 5~8, 9~12, 13~16)	-	<ul style="list-style-type: none"> <li>Unjoined ECP device is connected</li> </ul>	<ul style="list-style-type: none"> <li>ECP/EUP transmitter linked properly</li> <li>Transmitting Data Via Coax / UTP</li> </ul>
3	Alarm	<ul style="list-style-type: none"> <li>System boot-up</li> <li>Alarm is detected</li> </ul>	<ul style="list-style-type: none"> <li>Device in normal operation</li> </ul>	<ul style="list-style-type: none"> <li>Factory reset is progressing</li> </ul>
4	SFP	<ul style="list-style-type: none"> <li>Transmitting Data</li> </ul>	<ul style="list-style-type: none"> <li>SFP Link is down</li> <li>No device connected on SFP port</li> </ul>	-
5	LINK	-	<ul style="list-style-type: none"> <li>Uplink (Copper) is down</li> </ul>	<ul style="list-style-type: none"> <li>Transmitting Data Green: 10/100 Amber: 1000</li> </ul>
6	PWR	<ul style="list-style-type: none"> <li>Power ON</li> </ul>	<ul style="list-style-type: none"> <li>Power OFF</li> </ul>	-

## 2.4. Configuration Instruction

### 2.4.1. Prepare devices and materials

- Ethernet over Coax /UTP Receiving Switch (ECP-2808RM, EUP-2808RM, ECP-2816RM, EUP-2816RM)
- ECP-Transmitters (ECP-2701, ECP-8401, ECP-8301, ECP-2601T, etc.)
- EUP-Transmitters (EUP-8401T, EUP-2601T & All ECP-Transmitters with BTE-02)
- RJ-45 patch cord
- Short Coax cable or 4 pairs UTP cable (at least 4 cables for joining)
- Password label (if it is necessary)
- Paper clip (If it is necessary for pressing joining button)
- Network Switch and PC (OS: Window 7 or later)

### 2.4.2. Hardware Installation

1. Apply power to the receiving switch.



2. Use short coax or UTP cables to connect the receiving switch and the ECP/EUP-Transmitters
3. The blue power LED and B-Linx & T-Linx LED of the receiving switch will be ON.
4. The blue power LED of the ECP/EUP-Transmitters will be ON.





5. The green join LED of the receiving switch and ECP-Transmitters will blink regularly if both devices are already joined with same network password.

**[Note]**

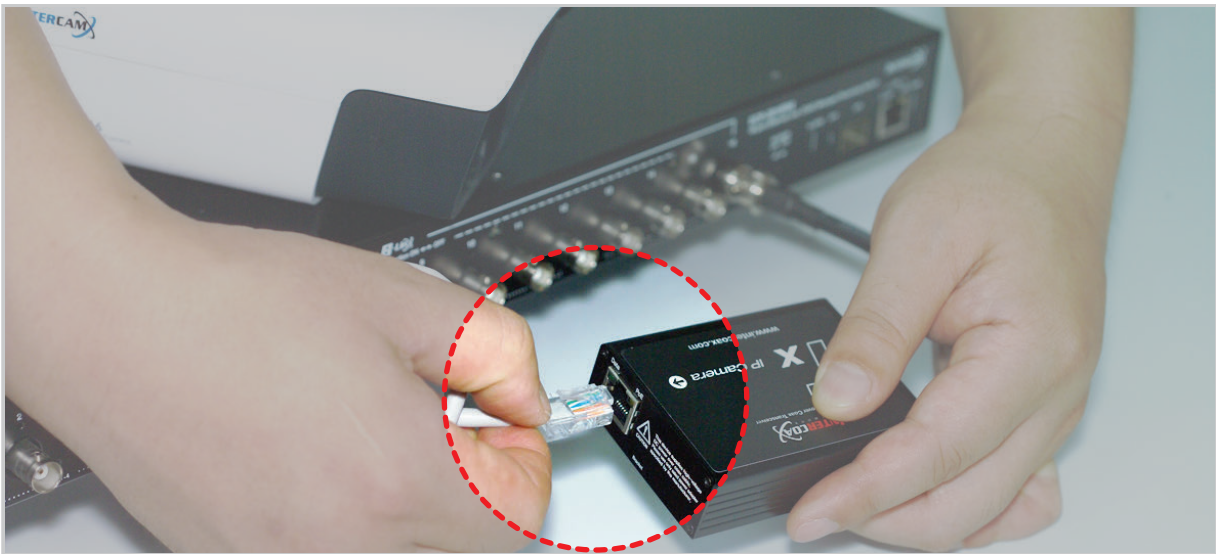
All ECP/EUP products have the same network password as factory default mode to support plug & play configuration between ECP/EUP Series.

6. If the green Join LED is OFF on both receiving switch and ECP-Transmitter, joining work should be necessary for network communication.

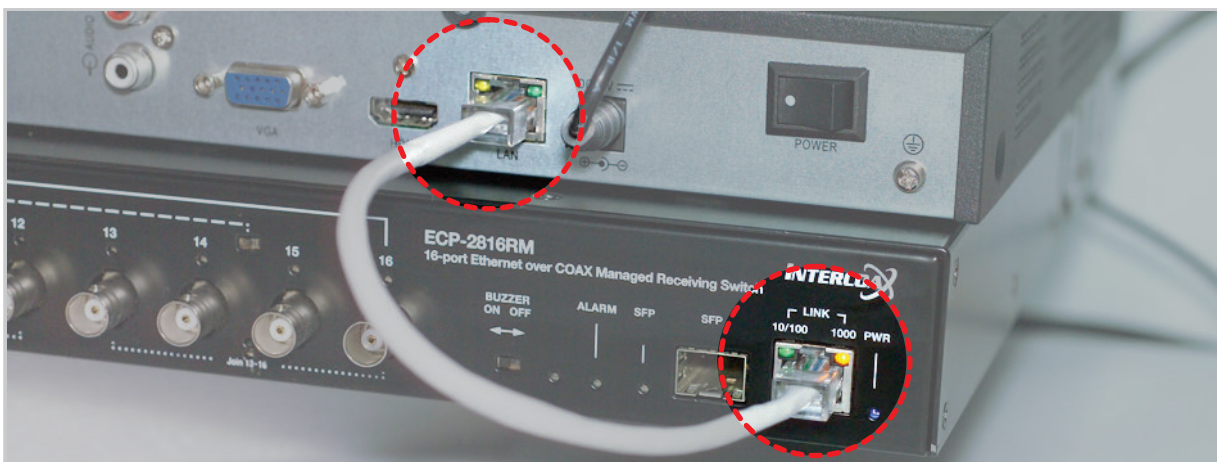
**[Note]**

For joining work, Please refer to the Network Grouping Software manual, available on Intercoax' Website.

7. Connect ECP-Transmitters to IP Camera  
(IP it is PoE IP Camera, Please select PoE Switch 'ON' from ECP Transmitters)



8. Connect the receiving switch to Network switch and PC using RJ45 Patch cord.

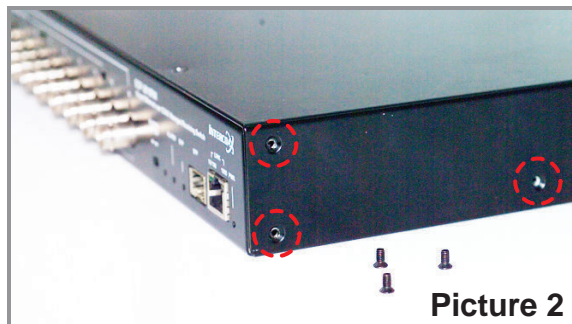


### 2.4.2.1. Rackmount Bracket Installation Guide

1. Remove the 3 of factory installed screws from both sides of managed switch and keep these screws as they will be used to attach the new rack mount brackets. (See Picture 1 & 2)



Picture 1



Picture 2

2. Using these screws, attach the supplied rackmount bracket to the managed switch (Carefully check LEFT and RIGHT side brackets, see pictures 3 & 4).



Picture 3






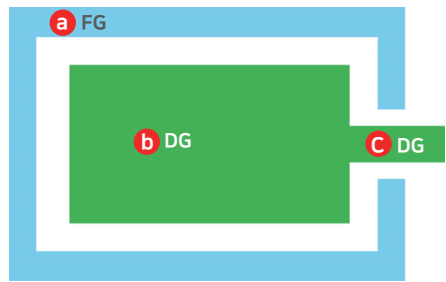

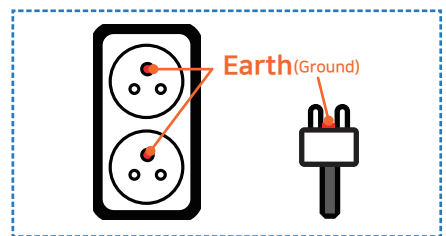

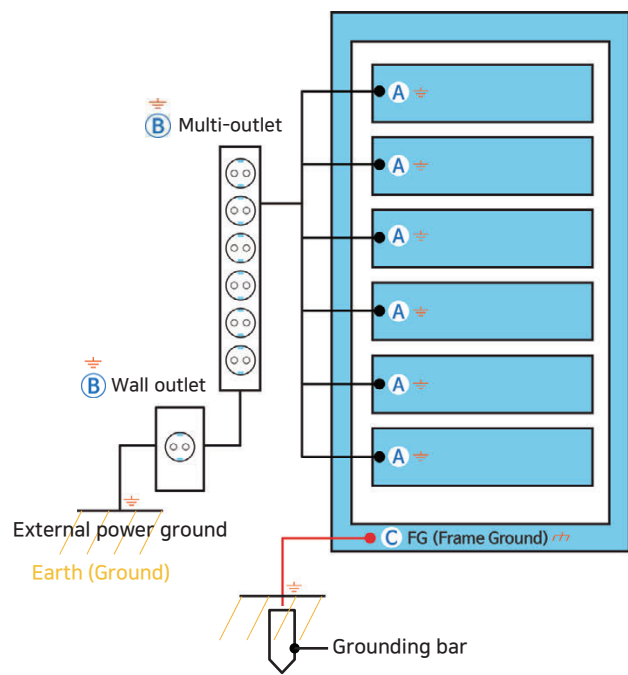
Picture 4

### 2.4.2.2. Rack Mount Instructions

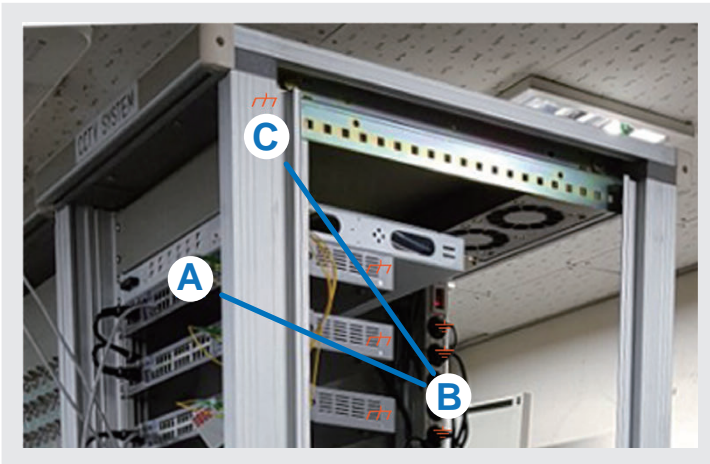
1. **Elevated Operating Ambient** - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (T<sub>ma</sub>) specified by the manufacturer.
2. **Reduced Air Flow** - Installation of the equipment in a rack should be such that the amount of airflow required for safe operation of the equipment is not compromised.
3. **Mechanical Loading** - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.
4. **Circuit Overloading** - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring.

## 2.4.2.3. Grounding

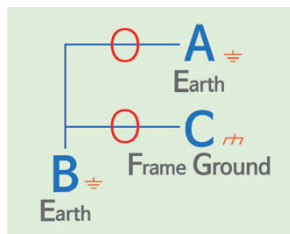
### ■ Glossary

Abbreviation	Description	
E	<ul style="list-style-type: none"> <li>E = Earth = Ground</li> <li>Sign : </li> </ul>	
FG	<ul style="list-style-type: none"> <li>FG = Frame Ground</li> <li>Sign : </li> <li>Product Case <b>a</b></li> </ul>	 <p>ex) ECP-8301EP</p>
DG	<ul style="list-style-type: none"> <li>DG = DC Ground</li> <li>Product PCB Board</li> <li>The outside of <b>b</b></li> <li>BNC connector <b>c</b></li> </ul>	
A	<ul style="list-style-type: none"> <li>Main Unit (AC Power input product)</li> </ul>	 <p>ex) ECP-2808</p>
B	<ul style="list-style-type: none"> <li>AC Power Input (Concentric plug)</li> </ul>	 <p>ex) In Europe</p>
C	<ul style="list-style-type: none"> <li>Set Rack Type Case (FG  )</li> </ul>	 <p><b>[Caution]</b> Do not connect to water pipes or gas pipes.</p>

## ■ Earth and FG link

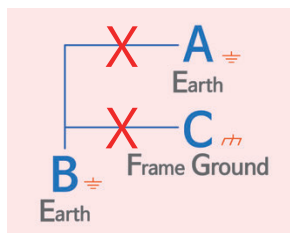
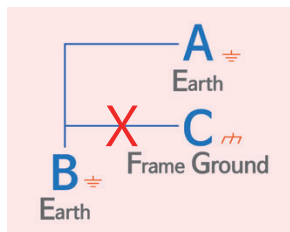
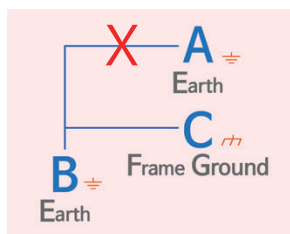


### • Right example



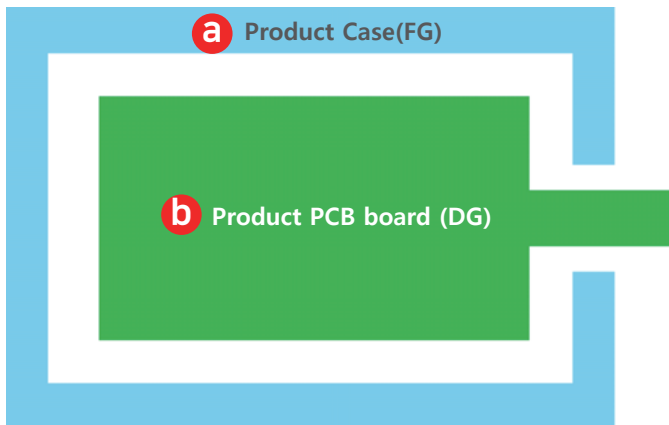
- B (AC Power input) must be connected
- A terminal (AC powered product) and
- C (set rack type case )

### • Incorrect example



When **X** part no connections,  
failure such as **noise interference**.

## ■ FG and DG Separation



ex) ECP-8301EP

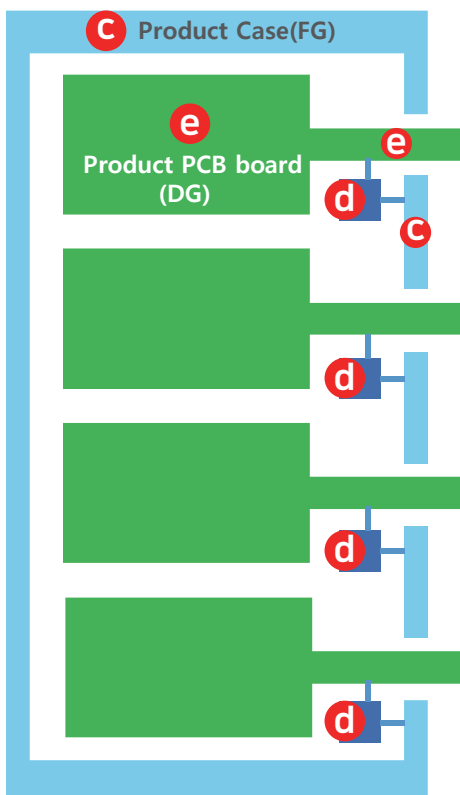
### • Incorrect example



- **a** is FG(Frame Ground)
- **b** is DG(DC Ground)

**[Caution]** Do not connect FG and DG directly.

### • Right example (ex. ECP-8404)



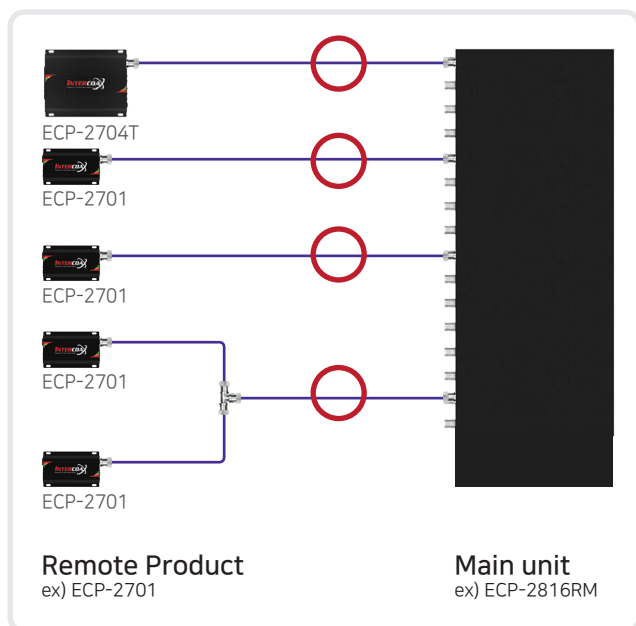
- **c** is FG(Frame Ground)
- **d** is Protection element
- **e** is DG(DC Ground)

### **[Note]**

When need protection **from Surge and ESD**, use **Protection element**.

## ■ DG separates between Remote products

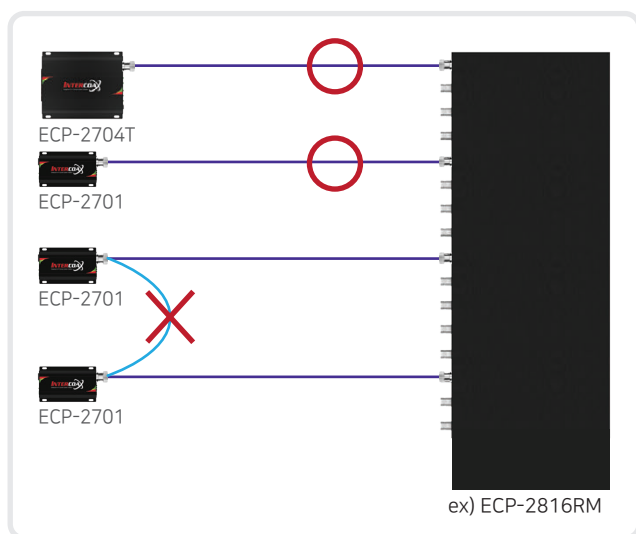
- Right example



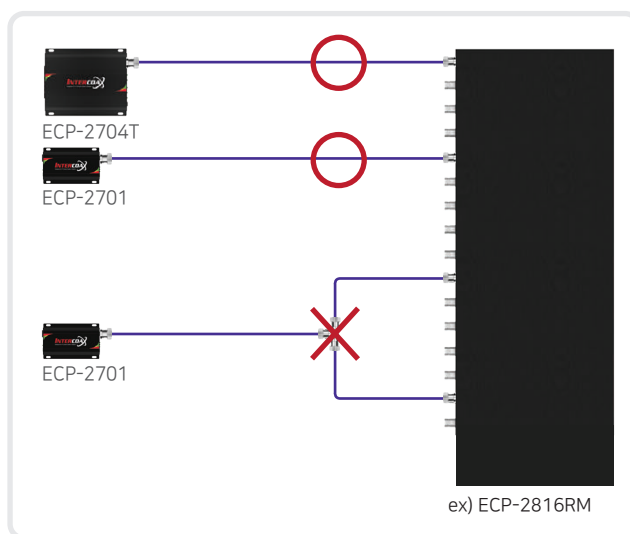
- When you connect the main unit to several remote products by cable and use it as a multi, ensure that **DG(DC Ground)** between **Remote Products** is not connected each other.

- Incorrect example

- Failure : Noise



- Failure : Short-circuit



## ■ etc.

- Be careful with Camera and Camera Power.

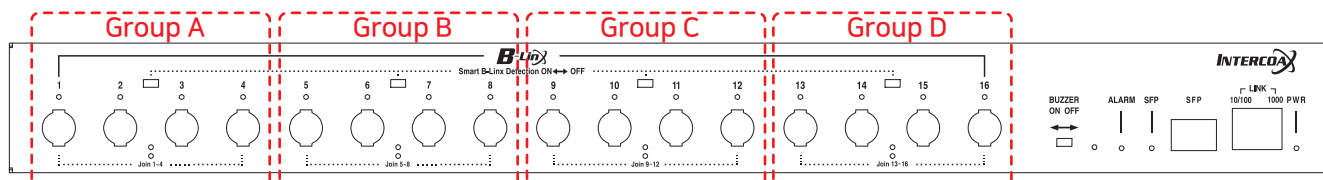
### [Note]

- Make sure that Adapters and connectors in cables are not in contact with each other and Keep the insulation when fastened to case frame and Use the surge protection element (Prevention and protection of loop formation)
- Be very careful about insulation, shielding, and closed loop prevention as a whole for installation products.



### 2.4.3. Joining instruction

- All ECP/EUP products are pre-joined with the same network password ("HomePlugAV") as the factory default mode to support plug & play configuration between ECP/EUP Series.
- If the receiving switch and all of ECP/EUP-Transmitters are already Joined (Join LED on both devices), It is unnecessary to join the devices again pressing JOIN button.
- ECP/EUP-28XXRM series have 2 or 4 network groups with every 4 channels (1-4, 5-8, 9-12, 13-16) and It is possible to avoid network interference by setting the password of each group.



#### 1. Basic connection

Prepare 4 short coaxial cables for convenience and connect each ECP/EUP-Transmitters to Group A (B-Linx port 1 to 4) and apply the power to the receiving switch.

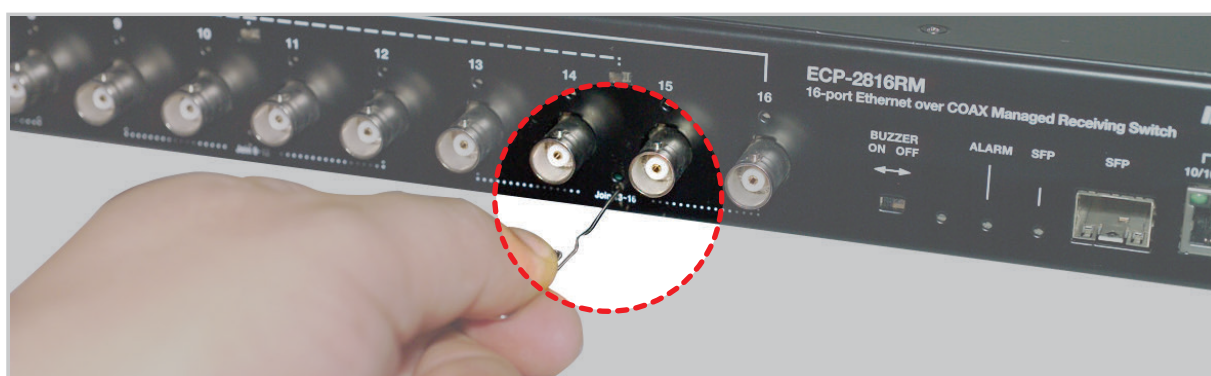
#### 2. Unjoin (If required, when Join LED on both receiving switch and ECP-Transmitter is not ON)

Removing the password

- Push the join button for 15 seconds on each unit of ECP/EUP-Transmitter in Group A.
- ECP/EUP-Transmitter will reboot and it is ready to be joined.
- BNC Join LED turns off.

#### 3. Join :

We recommend using the Intercoax Manager Software to join the devices (the software can be downloaded on our website)



Creating new password (Random password)

- After unjoining, press the Group A join button and hold for 2 seconds and release the button.
- Press the join button on one of ECP/EUP-Transmitters and hold for 2 seconds and release the button. PWR LED turns off and on, and then BNC Join LED turns on and will be flickering and it means both devices are joined successfully.
- Join other 3 units of ECP/EUP-Transmitters repeating above steps (A, B)

#### 4. Repeat above ① ~ ③ steps for the other groups (B, C, D)

**[Caution]**

This method will join the devices by assigning a random password and it can not be restored to the factory default password.

**[Note]**

Joining can also be made with the management software, INTERCOAX ECP MANAGER but before joining with software, the ECP-28XXRM series and ECP-Transmitters should already be joined together with the same network group password.

**[Note]**

Password on ECP/EUP-Transmitters can be also easily changed by Intercoax Manager software. Please visit [www.intercoax.com](http://www.intercoax.com) to download the software.

#### 2.4.4. Label the configured network group

- **After joining with the join button**, it is highly recommended to put the label on the devices joined in same network group and keep the documentation of Group ID and MAC address of the devices in each group.
- **After joining with the software**, it is highly recommended to put the label on the devices joined in same group and password of the group and keep the documentation of Group ID and MAC address of the devices in each group.
- This documentation helps to identify each network group after deployment and when maintaining devices.



## 2.5. Transmission distance & Bandwidth by distance

### 2.5.1. Performance chart

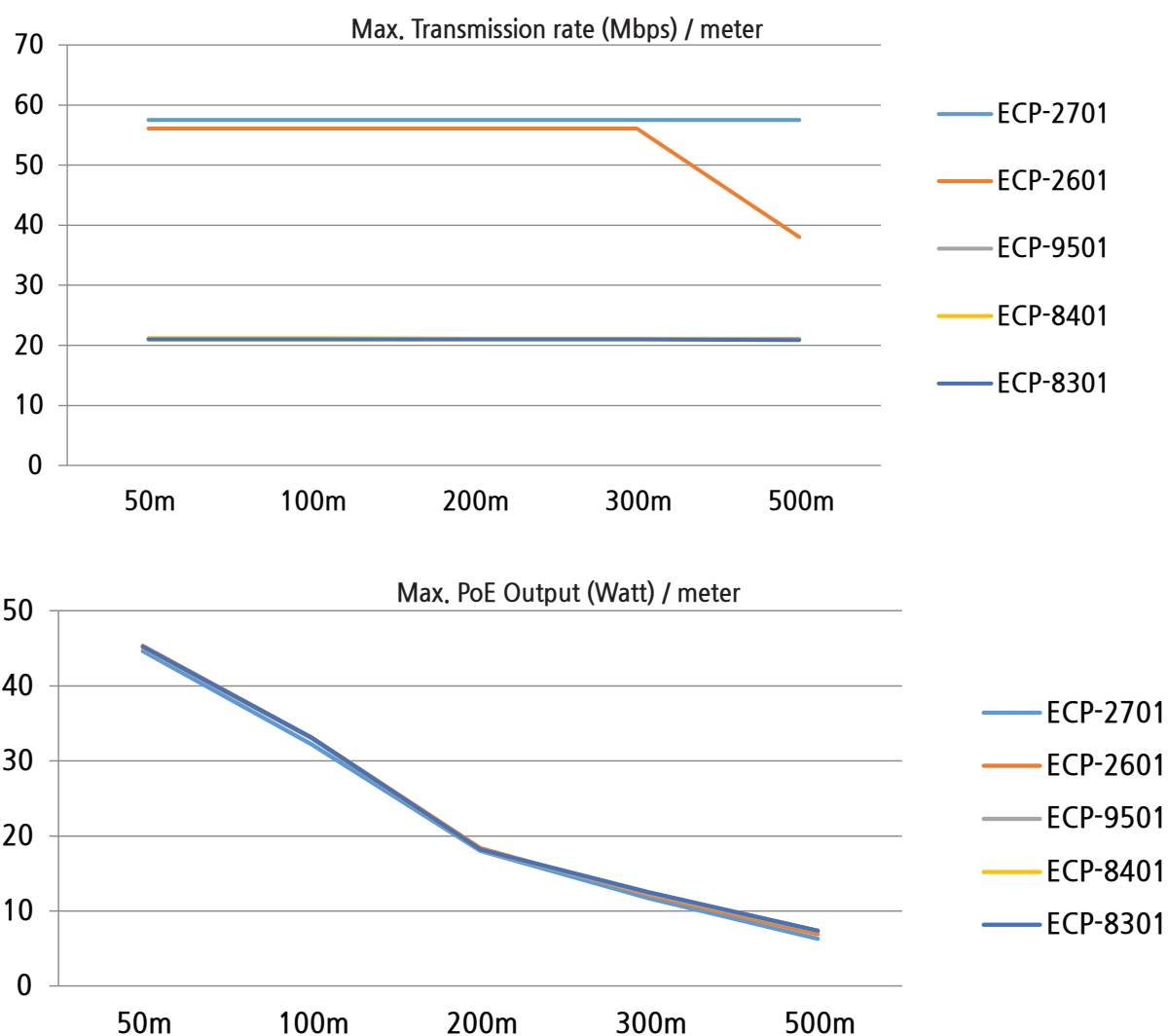
#### ■ ECP-2808RM / ECP-2816RM (B-Linx Models)

When using ECP-2XXX series as Transmitter (Based on One transmitter per port)

RG6 Coaxial Cable	50m	100m	200m	300m	500m
Trans.Rate (Mbps)	57.5	57.5	57.5	57.5	50
PoE Output (W)	45.3	33.1	18.4	12.1	6.9

When using ECP-9xxxx & 8xxxx series as Transmitter (Based on One transmitter per port)

RG6 Coaxial Cable	50m	100m	200m	300m	500m
Trans.Rate (Mbps)	21.2	21.2	21.1	21.1	21
PoE Output (W)	45.2	33.1	18.2	12.5	7.4



#### [Note]

Above performance charts may vary depending on cable spec and installation environment.

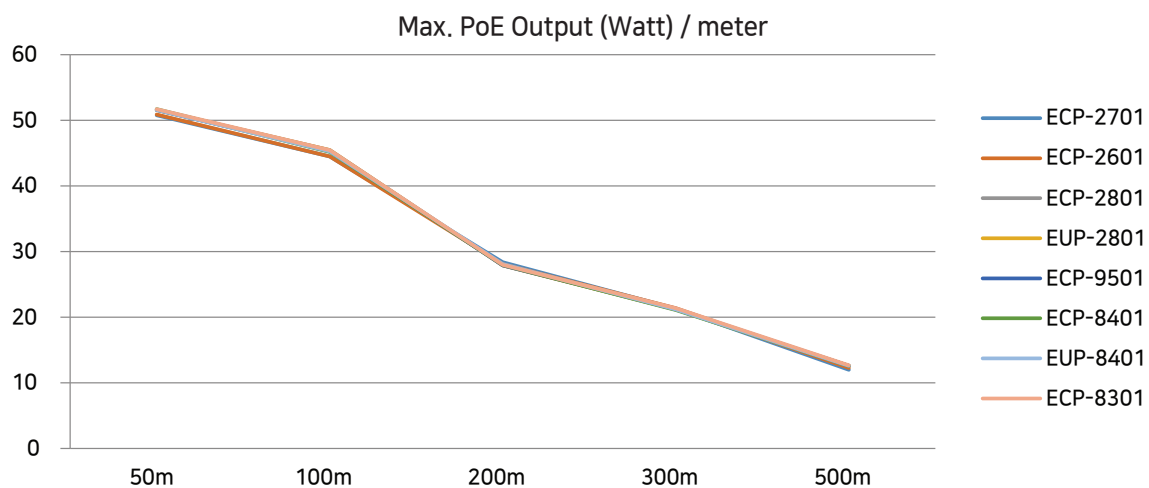
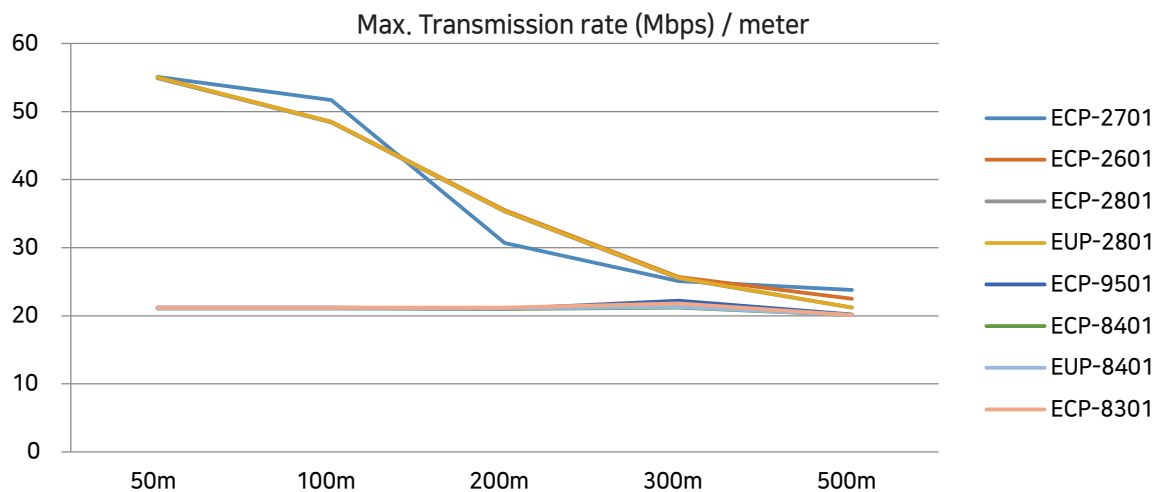
## ■ EUP-2808RM / EUP-2816RM (T-Linx Models)

When using 2xxx series + BTE-02 (ECP Model only) as Transmitter  
as Transmitter (Based on One transmitter per port)

Cat.5e UTP Cable	50m	100m	200m	300m	500m
Trans.Rate (Mbps)	55.1	51.7	35.4	25.7	23.8
PoE Output (W)	51.6	45.5	28.4	21.4	12.6

When using ECP/EUP-9xxxx & 8xxx series (ECP Models must have BTE-02)  
as Transmitter (Based on One transmitter per port)

Cat.5e UTP Cable	50m	100m	200m	300m	500m
Trans.Rate (Mbps)	21.2	21.2	21.1	22.2	20.2
PoE Output (W)	51.7	45.4	28.1	21.3	12.6



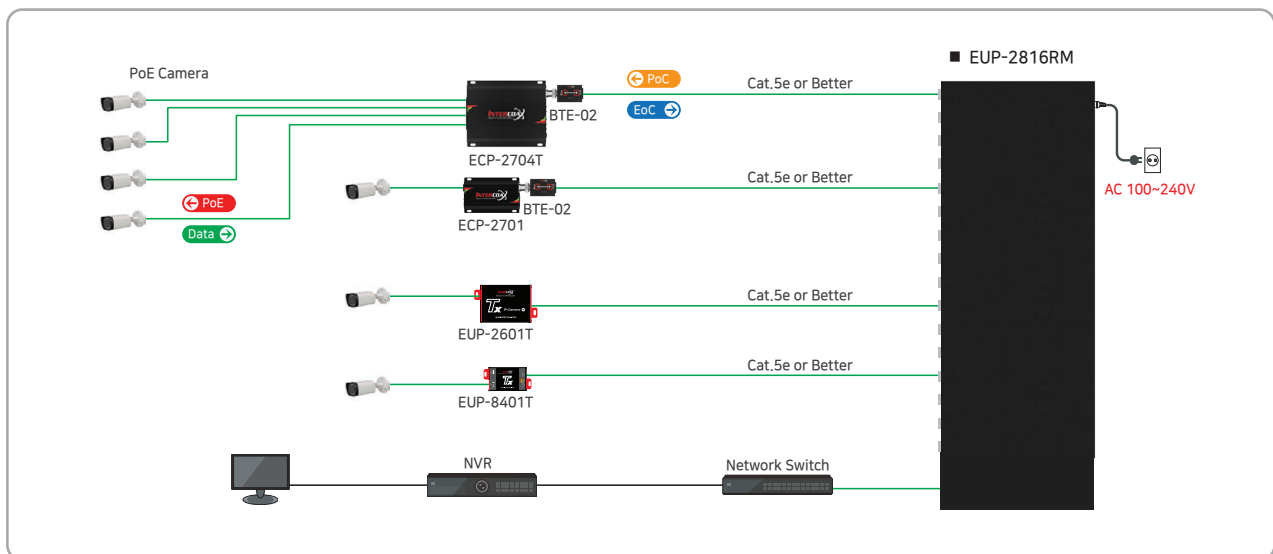
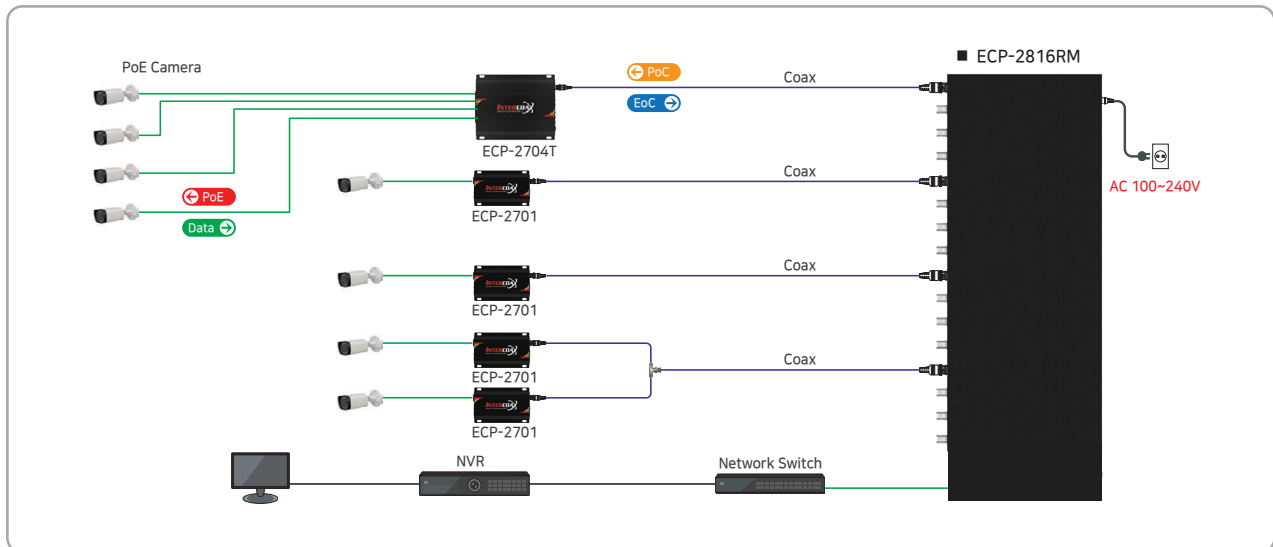
### [Note]

Above performance charts may vary depending on cable spec and installation environment.

## 2.6. Typical Installation

- The ECP/EUP-2808/2816RM Series deliver high bandwidth and power over coax/UTP cable. All ECP/EUP single port units or ECP/EUP transmitter series can be used as remote transmitters, typically located at the IP camera.
- ECP/EUP-2xxxx series are recommended to be used as remote transmitters for the maximum performance.

- Application Examples



## 3. Product Specifications

### 3.1. Technical Specifications

Model		ECP-2808RM	ECP-2816RM
Interface	Coax	8 x 75Ω BNC (Female) - Ethernet over Coax (B-Linx)	16 x 75Ω BNC (Female) - Ethernet over Coax (B-Linx)
	Up-Link	1 x RJ45 - 10/100/1000 Base-T with Auto MDIX, 1 x SFP - 1000 Base-FX	
B-Linx / T-Linx Transmission Rate (Ethernet over Coax/UTP)		UP to 560Mbps Full Duplex	UP to 1Gbps Full Duplex
B-Linx / T-Linx Communication Standard		IEEE1901-HPAV	
B-Linx / T-Linx Communication Modulation		OFDM	
B-Linx / T-Linx Communication Multiple Nodes (Daisy Chain)		2 remote transmitters per port recommended (Max up to 4 per port)	
ECP Manager Connectivity		Available	
IGMP		IGMP (V1/V2/V3) Snooping, IGMP Query & Report Generator	
Data Transmission Distance	Coax	Up to 2.4Km (RG6)	
Power Transmission Distance	Coax	Up to 1.2Km (RG6 / 7W)	
LED Indication	Power	1 x Blue	
	RJ45 Up-Link	1 x Green (10/100-Link) / 1 x Yellow (1000-Link)	
	SFP Up-Link	1 x Green (1000-Link)	
	Port	8 x Green	16 x Green
	Join	2 x Green	4 x Green
	Alarm	1 x Red	
Buzzer	Event	Buzzer / Mute	
Encryption		128-bit AES	
Power	AC Input	AC100V-240V (50Hz/60Hz), 320W / 640W	
	DC output per Port	Max DC 57V (Max. 60W per port for PoE support)	
	Port Short Protection	Auto Detection & Protection	
Heat dissipation		Max. 86/95 BTU/hr	Max. 138/151 BTU/hr
Smart B-Linx / T-Linx Device Detection		Detection On / Off	
Mechanical	Dimension	441.5(L) x 330(W) x 44(H)mm	441.5(L) x 330(W) x 44(H)mm
	Weight	5,160g	5,600g
Environment	Operating Temp	-10~ 60°C	
	Storage Temp	-30 ~ 80°C	
	Relative Humidity	10% ~ 80%	
Compliance	Certification	CE (including Railways Standard EN 50121-4), FCC, KC, RoHS	
	Surge Protection	IEC61000-4-5 4kV(1.2 / 50us), 2kA(8/20us)	

Model		EUP-2808RM		EUP-2816RM	
Interface	UTP	8 x 100Ω RJ45 (Female) - Ethernet over UTP (T-LinX)		16 x 100Ω RJ45 (Female) - Ethernet over UTP (T-LinX)	
	Up-Link	1 x RJ45 - 10/100/1000 Base-T with Auto MDIX, 1 x SFP - 1000 Base-FX			
T-Linx Transmission Rate (Ethernet over UTP)		UP to 560Mbps Full Duplex		UP to 1Gbps Full Duplex	
T-Linx Communication Standard		IEEE1901-HPAV			
T-Linx Communication Modulation		OFDM			
T-Linx Communication Multiple Nodes (Daisy Chain)		2 remote transmitters per port recommended (Max up to 4 per port)			
ECP Manager Connectivity		Available			
IGMP		IGMP (V1/V2/V3) Snooping, IGMP Query & Report Generator			
Data Transmission Distance	UTP	Up to 1.2Km (Cat.5e)			
Power Transmission Distance	UTP	Up to 1.2Km (Cat.5e / 7W)			
LED Indication	Power	1 x Blue			
	RJ45 Up-Link	1 x Green (10/100-Link) / 1 x Yellow (1000-Link)			
	SFP Up-Link	1 x Green (1000-Link)			
	Port	8 x Green		16 x Green	
	Join	2 x Green		4 x Green	
	Alarm	Red			
Buzzer	Event	Buzzer / Mute			
Encryption		128-bit AES			
Power	AC Input	AC100V-240V (50Hz/60Hz), 320W / 640W (Redundancy power option)			
	DC output per Port	Max DC 57V (Max. 60W per port for PoE support)			
	Port Short Protection	Auto Detection & Protection			
Smart T-Linx Device Detection		Detection On / Off			
Mechanical	Dimension	441.5(L) x 330(W) x 44(H)mm		441.5(L) x 330(W) x 44(H)mm	
	Weight	5,110g		5,540g	
Environment	Operating Temp	-10~ 60°C			
	Storage Temp	-30 ~ 80°C			
	Relative Humidity	10% ~ 80%			
Compliance	Certification	CE (including Railways Standard EN 50121-4), FCC, KC, RoHS			
	Surge Protection	IEC61000-4-5 4kV(1.2 / 50us), 2kA(8/20us)			

## 4. Troubleshooting

Problem	Action
Live video will be cut off	<ul style="list-style-type: none"> <li>• Check if the power supply system is properly connected.</li> <li>• Check if coax / UTP cable is connected properly.</li> <li>• Check if B-Linx / T-Linx Port LED is ON.</li> <li>• Check if the network port is properly connected and the network setting is set correctly.</li> <li>• Check the system for the input voltage from the power source.</li> <li>• If the problem persists even after you have taken the above actions, check the other network device settings (e.g. IP camera, NVR, etc.)</li> </ul>
The system does not turn on and the power indicator on the front panel does not work at all.	<ul style="list-style-type: none"> <li>• Check if the power supply system is properly connected.</li> <li>• Check the system input voltage from the power source</li> <li>• If the problem persists even after you have taken the above actions, check power cable and replace it if necessary.</li> </ul>
B-Linx / T-Linx port Indicator (LED) is blinking	<ul style="list-style-type: none"> <li>• Check the Coax / UTP cable if it is shorted.</li> </ul>
Join LED is not ON	<ul style="list-style-type: none"> <li>• Check the Coax / UTP cable if it is connected properly</li> <li>• Check UTP cable order if it is correct (Cable order should be EIA/TIA-568B Type)</li> <li>• Check if the password of the Local Node (Receiver) and Remote Node (Transmitter) is matched.</li> <li>• If the password of local node(Receiver) and remote node(Transmitter) is not matched or unknown password is entered, please join the both devices again <b>Please refer to Joining configuration on '2.4.3 Joining instruction'.</b></li> </ul>
No network connection over coax / UTP	<ul style="list-style-type: none"> <li>• Check that the cable length does not exceed transmission distance limitation (e.g. 500 meters) <b>Please refer to Specification on '2.5 Transmission distance &amp; Bandwidth by distance'.</b></li> <li>• Check the cable condition and ensure all BNC / RJ-45 connection are secure.</li> <li>• Check if there's any kind of signal booster, noise filter, repeaters, other amplifiers for the signal on cable, if yes, please remove them before installation of the devices</li> <li>• Check the Coax / UTP cable if it is shorted.</li> </ul>
No network connection from receiver to network switch or NVR, or transmitter to camera	<ul style="list-style-type: none"> <li>• Check that the cable length does not exceed transmission distance limitation (e.g. 500 meters) <b>Please refer to Specification on '2.5 Transmission distance &amp; Bandwidth by distance'.</b></li> <li>• Check the cable condition and ensure all BNC / RJ-45 connection are secure.</li> <li>• Check if there's any kind of signal booster, noise filter, repeaters, other amplifiers for the signal on cable, if yes, please remove them before installation of the devices.</li> </ul>
Transmitters are not turned powered on	<ul style="list-style-type: none"> <li>• Check that the cable length does not exceed transmission distance limitation of 100 meters.</li> <li>• Power the transmitter with separate power supply to check it turns on.</li> </ul>
PoE is not enabled to end-devices even the transmitter is working properly	<ul style="list-style-type: none"> <li>• Check that the network cable is in good condition and has been assembled correctly</li> <li>• Confirm if the camera is IEEE802.3af/at PoE Compliant.</li> <li>• Please check that the Ethernet length does not exceed transmission distance limitation of 100 meters.</li> <li>• Check the PoE output Switch on the Transmitter is set to ON.</li> <li>• Due to power drops on the cable, may need extra 57V power supply on the transmitter</li> </ul>

## 5. Warranty Policy

**Intercoax Co.,Ltd.** warrants that the product conforms to Intercoax's applicable published specifications and it free of defects for 24 months from the date of purchase.

Warranty will only be provided for the product purchased from an Intercoax authorized selling agent.

Defective product will be repaired, replaced or substituted with a product of equal value by Intercoax's option.

**This warranty will not be covered for** any damages or breakage from user's abuse, accident, modification of the device, natural disaster, product fails due to damage from shipment, handling, storage or misuse.

Intercoax's liability under any warranties shall be discharged by replacing or repairing any part or parts which do not conform to the applicable warranty under normal and proper use.

Intercoax's liability with respect to any product shall not exceed a refund of the price received by Intercoax for that product, and in no event shall Intercoax have any liability for any incidental, consequential, special, or indirect damages.

## 6. Regulatory and Certificates



### INFORMATION TO THE USER

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

### WARNING

Any changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

## 7. Customer supports

**Intercoax Co.,Ltd (Korea Head Office)**

**Web:** [www.intercoax.com](http://www.intercoax.com)

**Tel:** +82-31-365-3133

**Fax:** +82-31-365-3135

**For all general requests:** [info@intercoax.com](mailto:info@intercoax.com)

Contents of this manual are subject to change without prior notice for reasons such as functionality enhancements.