

Ethernet Over Coaxial Master/Slave Transceiver

MODEL: EA-EOC101K

◆ **Description:**

EA-EOC101 is designed to extend IP Ethernet transmission and use coaxial cable to IP camera. EA-EOC101 transmission distance up to 2000m (6500ft), these transceivers are extremely simple to use. Status LEDs indicate power and link connectivity/activity for RJ45 ports.

◆ **Feature:**

- No PC required, plug & play and reducing the cables cost
- Transmit IP camera or other 10/100 Base-T full duplex IP devices over coaxial cable
- Up to 2000 meter transmission distance by RG6 cable
- Built-in 6KV surge protection at BNC and 4KV at RJ45 ports
- Multi EoC transceiver/IP cameras to one transceiver at NVR side transmission

◆ **SPECIFICATIONS:**

MODEL	EA-EOC101		
Extender Interface			
Connector Type	1x BNC		
Cable Type	75-ohm RG59, RG6, or RG11 video-grade coaxial cable		
Max. Transmission Distance	2000m (6500ft.) for the RG6 coaxial cable		
Ethernet Interface			
Connector Type	1x RJ-45 with LEDs on Connector		
Cable Type	Straight through or cross-over Cat5 Cable, Auto MDI/MDIX		
Rate	IEEE 802.3x, Auto-Detection for 10/100Base-T and full/half duplex		
Control & Indicators			
Color LED	Coaxial Data Signal Strength Green : GOOD (Link speed > 60 Mbps) Amber : MEDIUM (Link speed 20~60Mbps) Red : BAD (Link speed < 20Mbps) OFF : NO LINK		
Yellow LED (On RJ45)	Power On		
Green LED (On RJ45)	Link/Act.		
Push Button	Reset / Pairing ⁽¹⁾ (Join or Leave Network Group ⁽²⁾)		
	Push Duration	LED Status	Description
	1 – 3 sec	Red Blink	Join/Host Network Group ⁽³⁾
	5 – 8 sec	Amber Blink Once -> OFF	Leave Network Group ⁽⁴⁾
	12 - 30 sec	OFF -> Amber Blink Once	Reset to Default Network Group
Power			
Input Operating Voltage	DC 12V / 500mA		
Power Consumption	1.5W		

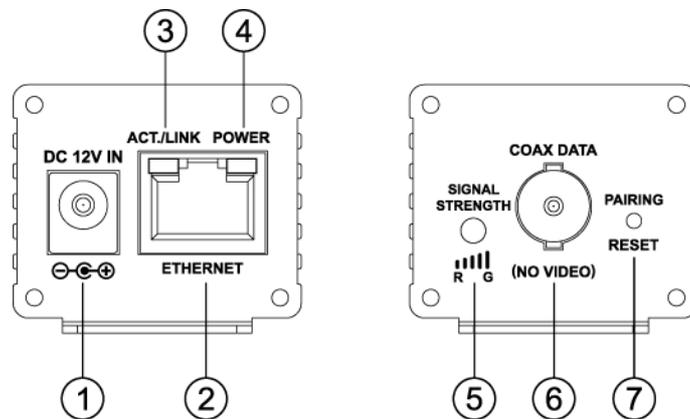
Mechanical & Environmental	
Weight	175g (6.17 oz)
Dimensions (W × L × H)	38 x120 x 33mm (1.5"x4.7"x1.3")
Operation Temperature	-20°C ~ +60°C (-4°F ~ 140°F)
Storage Temperature	-30°C ~ 80°C (-22°F ~ 176°F)
Humidity	20% to 85% RH. (non-condensing)

1. All EA-EOC101 factory default is paired to same network group, it can be installed directly, no need pairing again.
2. The transmission system consists of one EA-EOC101 transceiver at NVR side and up to four EA-EOC101 transceivers that connect to IP cameras or other IP device.
3. Use two or more transmission systems at NVR side, and there are crosstalk problems on cables that between different transmissions systems, otherwise no need to do **pairing** process.
4. To **join** another network group, must **leave** current group first, then do the group **join**.

◆ Packing

1. EA-EOC101 Transceiver ×2
2. User manual ×1
3. Wall Mount Kit ×2
4. Power Adaptor ×2 [Option: DC 12V / 500mA]

◆ PANEL DESCRIPTIONS:



1. DC12V IN: Power Supply DC12V/500mA.
2. ETHERNET: Ethernet Interface (10/100Mbps for full duplexer).
3. ACT./LINK: Data Link for indication LED.
4. POWER: Power On for indication LED.
5. SIGNAL STRENGTH: G(Green) : GOOD.
A(Amber) : MEDIUM.
R(Red) : BAD.
OFF : NO LINK.
6. COAX DATA: Coaxial Transmission.
7. PAIRING/RESET: **PAIRING** for network group **join/leave**, **RESET** for factory default network group

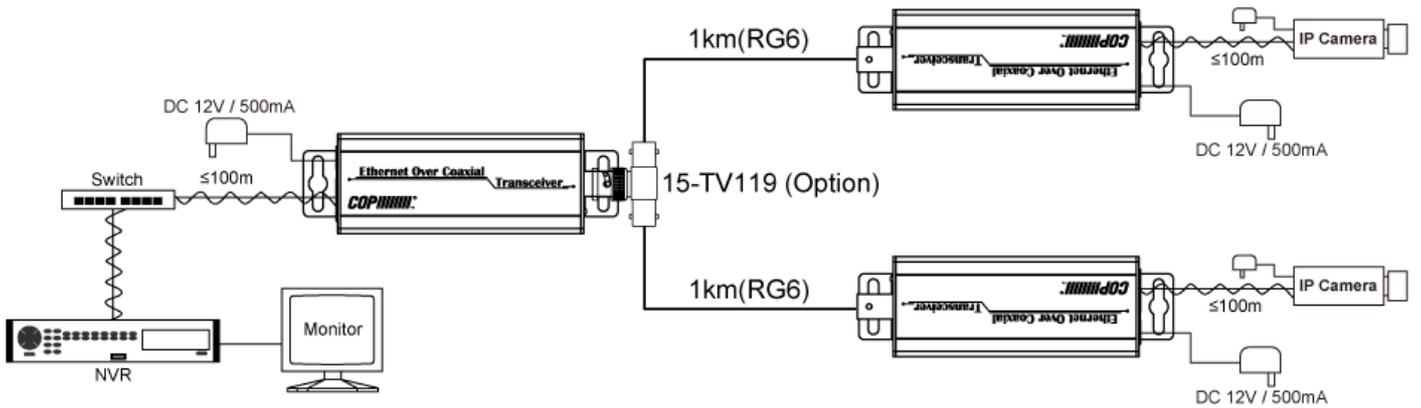
◆ CONNECTION DIAGRAM:

Notice: The cable quality, camera bandwidth requested and supply power noise will caused the distance which may not match as bellow specification.

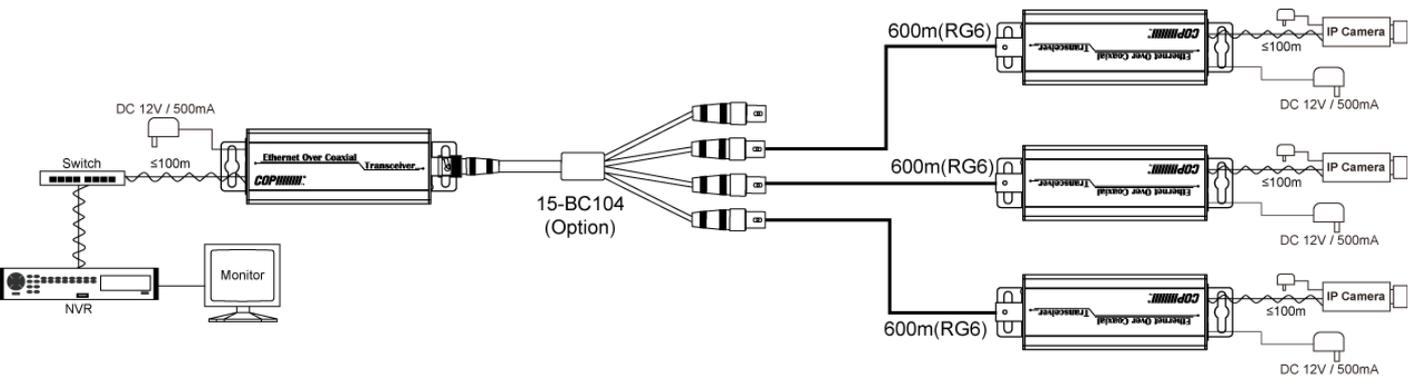
◆Application Diagram 1: Single Camera EoC Transmission System



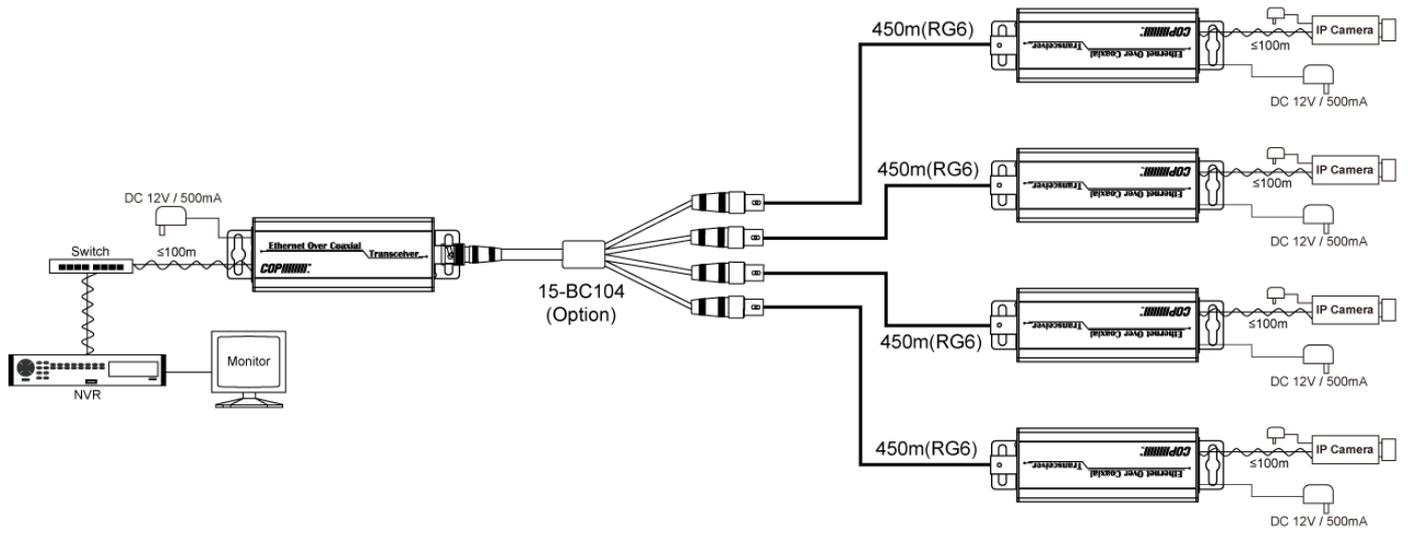
◆Application Diagram 2: Star Two Cameras EoC Transmission System



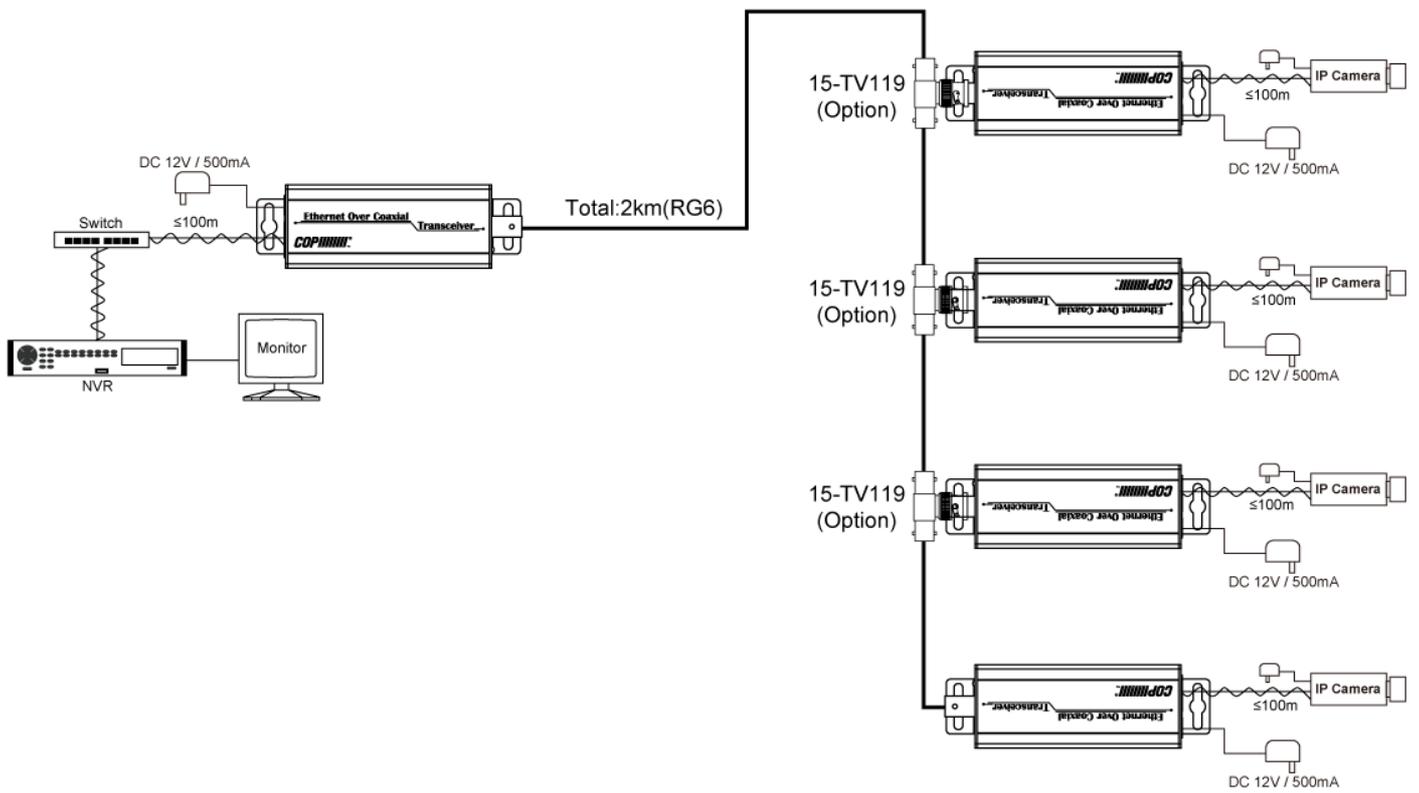
◆Application Diagram 3: Star Three Cameras EoC Transmission System



◆Application Diagram 4: Star Quadruple Cameras EoC Transmission System



◆Application Diagram 4: Daisy-Chain Quadruple Cameras EoC Transmission System



Before do the pairing process, please check as bellow notice

- 1) If only setup one transmission system at NVR or control room side, no need to do pairing process.
- 2) When using two or more transmission systems at NVR or control room side, if there are no cross-talk problems between different transmission systems, no need to do pairing process.

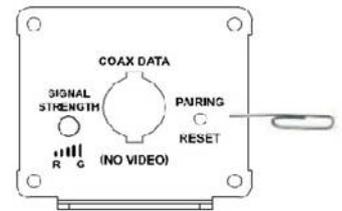
EoC/EoU Transmission System Network Group Pairing Instructions

Step 1: Setup EoC/EoU Transmission System

- Connect all the coaxial, cat. 5e cables between transceivers, setup cameras and NVR then power supplied to the system that one of the application diagrams.

Step 2: Host/Master Side Leaving Current Network Group

- On transceiver at NVR side, using the straightened paper-clip to access the small push button for **5 ~ 8 seconds**, the color LED will begin **AMBER** blinking once then **OFF**.



Step 3: Host/Master Side Create an New Network Group

- On transceiver at NVR side, using the straightened paper-clip to access the small push button for **1 ~ 3 seconds**, the color LED will begin **RED** blinking.

Step 4: Slave Side Transceiver Leaving Current Network Group

- On transceiver at Remote side (close to IP camera/device), using the straightened paper-clip to access the small push button for **5 ~ 8 seconds**, the color LED will begin **AMBER** blinking once then **OFF**.

Step 5: Slave Side Transceiver Joining New Network Group

- EOC/EoU transceivers at Remote side (close to IP camera/device), using the straightened paper-clip to access the small push button for **1 ~ 3 seconds**, the color LED will begin **RED** blinking. The transceivers will find each other and starting the transmission.

Step 6: Adding Additional Transceiver Joining New Network Group

- Repeat Step 4 and 5 to adding additional transceiver to new network group.

In Pairing Process Notice

- 1) In joining or leaving process, if you are not sure that joining or leaving has been successful, you can **RESET** the transceiver (press the push button 12 to 30 seconds), and repeat above steps.
- 2) After re-apply power or **RESET** transceiver, please wait color LED Amber blinking once then **GREEN**, its means power on reset finished and you can do the pairing process.
- 3) The transceiver is from **LEAVE** to **JOIN** state (color LED **RED** blinking), it must join new network group in 2 minutes, otherwise it will become **LEAVE** state again.



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