



AVer Bullet type Camera

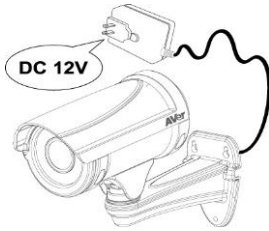
Installation Guide



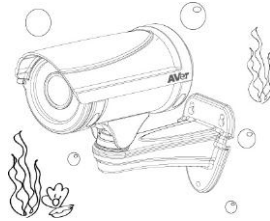
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Important Safeguard



Do not use power supply with different voltage other than DC12V/PoE.



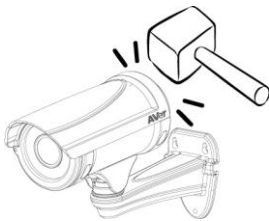
Do not submerge the unit in the water.



Unplug the power of this unit as soon as smoke or unusual odor is detected.



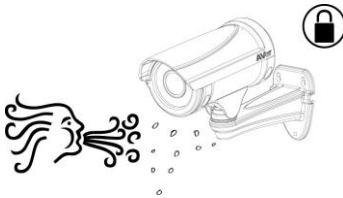
Unplug the power supply before cleaning. Use only a lens cleaning cloth and never use benzene, thinner, or other solvent for cleaning.



Do not attempt to service this unit by yourself. Always refer all servicing to qualified service personnel.



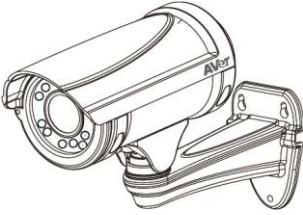
Do not place the unit in unsteady surface and also do not drop the unit.



Keep the IP camera housing close and prevent the dust from getting in the housing.

Package Contents

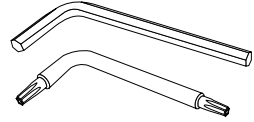
The following items are included in the package.



AVer bullet type camera



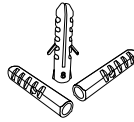
Software & Manual CD



2 L-type Wrenches

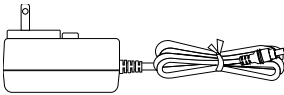


3 Screws



3 Plastic Anchors

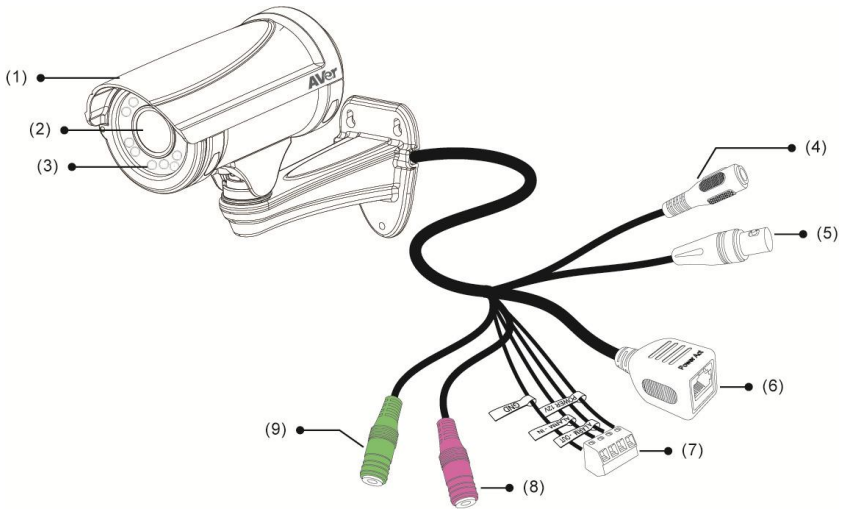
Optional Accessories



Power Adapter (12V, 2A) and Power cord

* The power adapter will vary depending on the standard power outlet of the country where it is sold. Depending on your package the power adapter maybe included.

Bullet IP Camera Parts



No.	Function	No.	Function
(1)	Sun Shield	(6)	RJ45 Ethernet Jack
(2)	Camera Lens	(7)	I/O Terminal Block
(3)	Light Sensor	(8)	Phone Jack (Audio In)
(4)	Power Jack	(9)	Phone Jack (Audio Out)
(5)	BNC Jack (Video Out)		

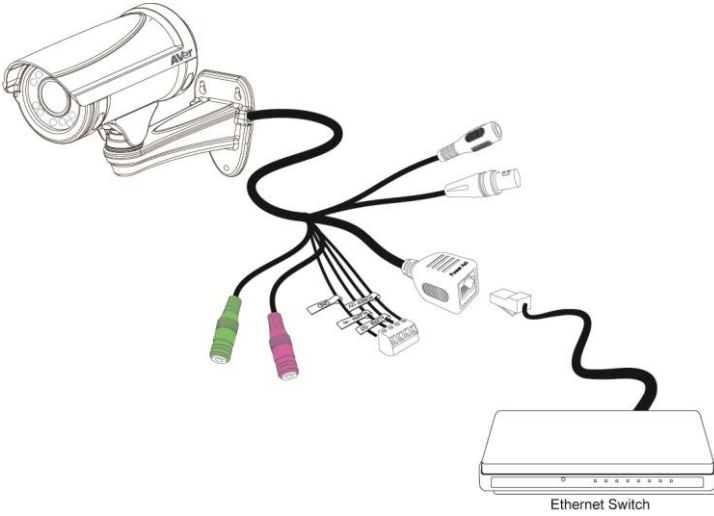
Mounting the IP Camera

This section provides useful tips on how to adjust the IP camera to meet your needs.

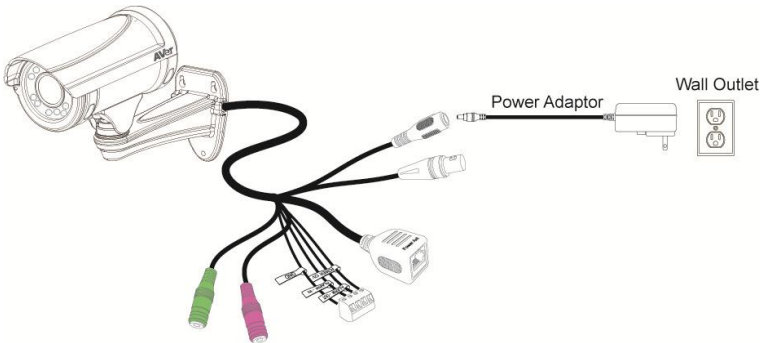
Deploying Network

Network Connection via Ethernet Switch

- Connect the RJ45 cable from the Ethernet switch to RJ45 Ethernet jack of camera



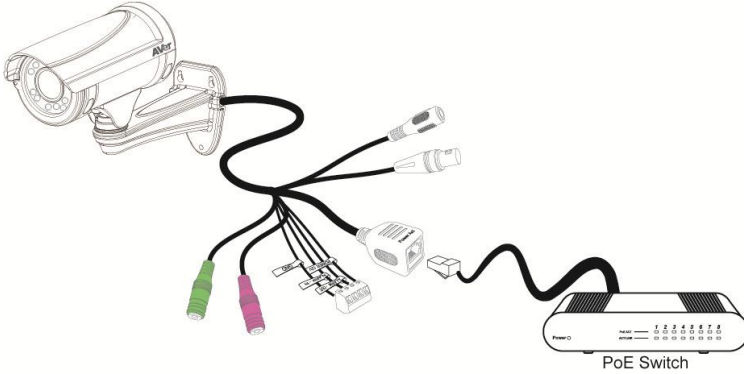
- Connect the power adaptor to power jack of camera.



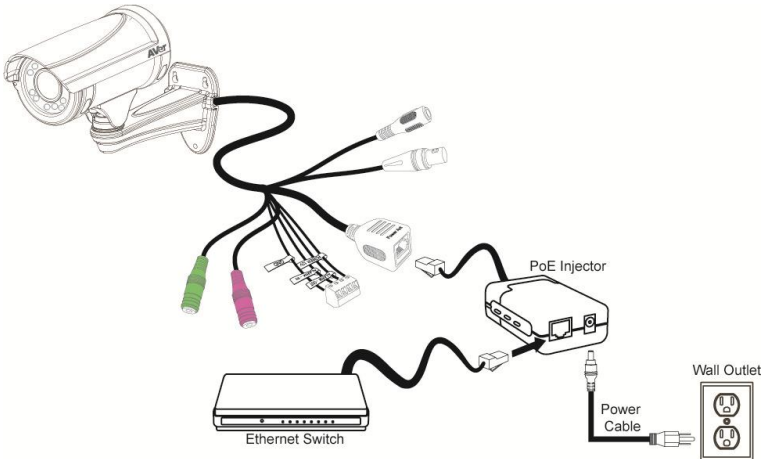
Power over Ethernet Connection

Bullet type camera is fully complies with PoE standard. It allows you to use PoE enabled switch or PoE injector to transmit data and power thru single Ethernet cable.

■ PoE Enabled Switch Connection Diagram



■ PoE Injector Connection Diagram



Connecting External Devices to I/O Terminal Block



- 1 Power 12V
- 2 Digital output
- 3 Digital input
- 4 Ground

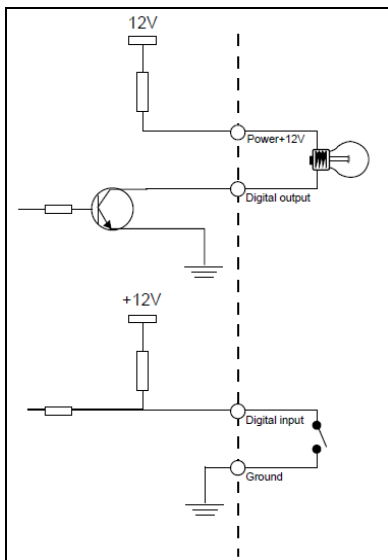
No.	Function
(1)	Power 12V
(2)	Digital Output
(3)	Digital Input
(4)	Ground

[Note] Maximum power output is 12V/100mA

Power LED

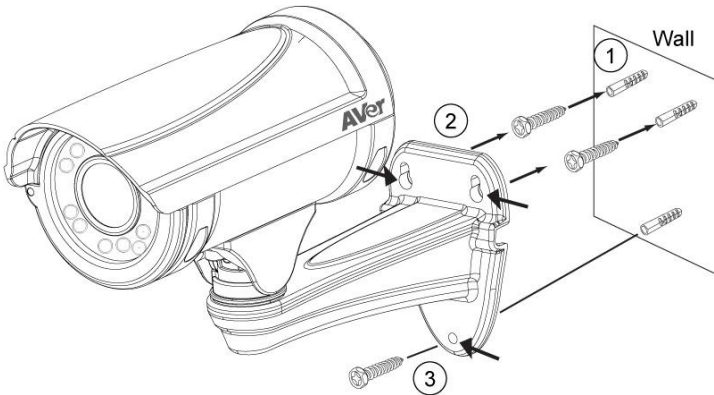
LED	Status
Steady Red	Heating
Blinking Green	System working
Steady Green	Booting Firmware updating
No Light	Power off

Internal Connection Diagram of DI/DO

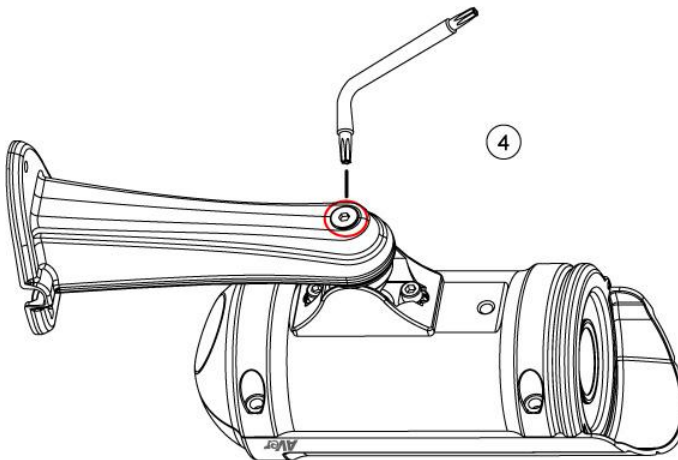


Mounting the IP Camera

- ① Insert the 3 plastic anchors in the wall. Then, screws the 2 screws into the 2 top of plastic anchors and do not fasten the screws; leave some space to allow IP camera to hook on the screws.
- ② Hook the IP Camera on the screws that are screwed on top of 2 plastic anchors. Then, fasten the screws.
- ③ Secure the last screw at bottom hole of IP camera.



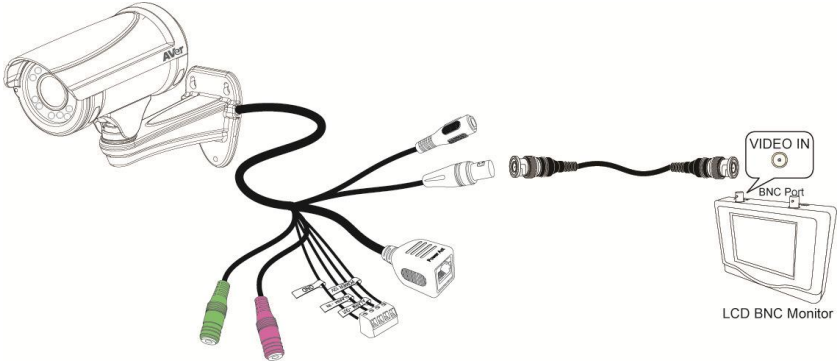
- ④ Use the torx pin head bolt to lose the screw under the stand to adjust the angel of IP camera. After adjusting, use the torx pin head bolt to fix the IP camera.



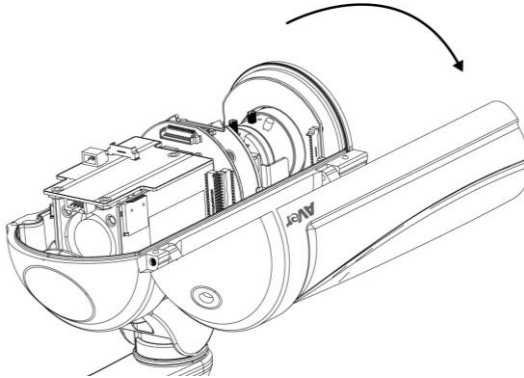
Focusing the IP Camera with BNC Monitor

The IP camera is supported with BNC analog video out jack which allows you to connect an analog display devices such as an LCD BNC monitor for you to adjust the camera focus and zoom.

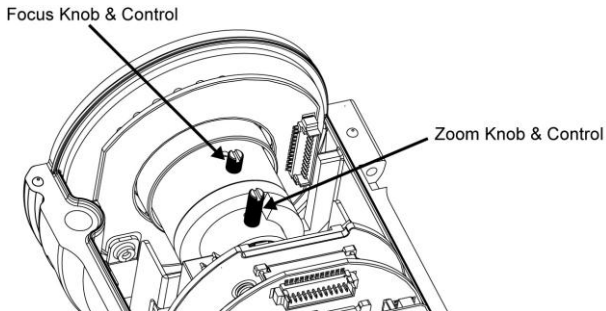
1. Connect the LCD BNC monitor to the BNC jack.



2. Open the IP camera case.

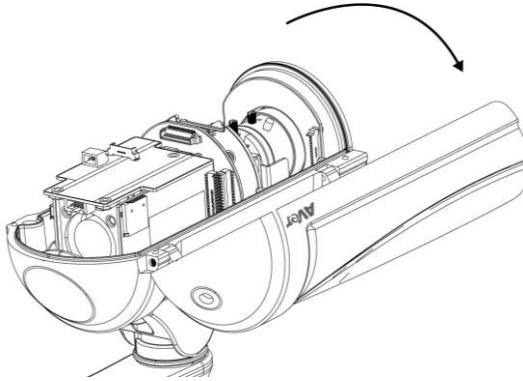


3. Slightly loosen the focus and zoom control knobs and adjust the focus and zoom range. Slightly tighten the focus and zoom knobs once you are done adjusting.

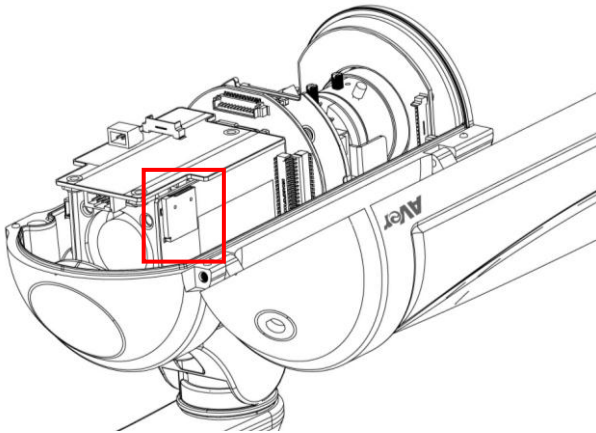


Insert microSD Card to System

1. Open the IP camera case.



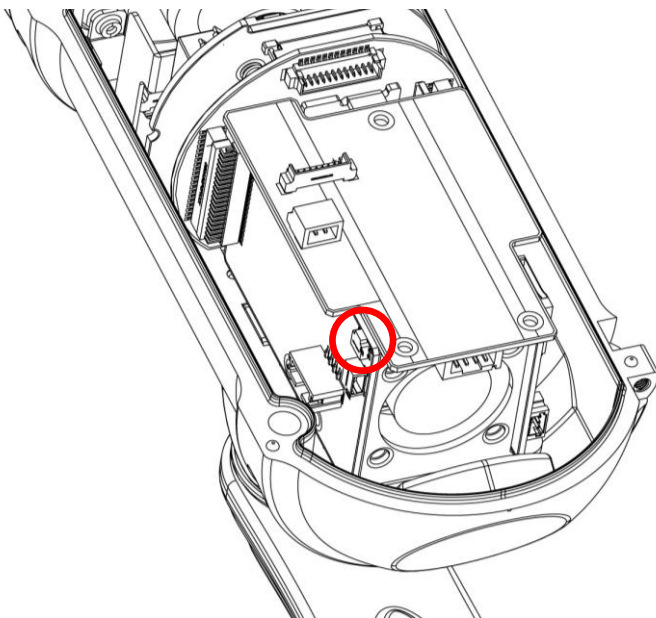
2. Insert microSD card



[Note] We recommend to use industrial grade microSD card (support operating temp from -40°C to 85°C) for extreme temperature condition.

Hardware Reset

1. Open the IP camera case.
2. Short PJ1 pins around 10 seconds.



WARNING!!

This will cause all the configuration settings back to factory default.

Technical Specifications

■ FB2027-1 (E) / FB2027-3 (E)

Model	FB2027-1 (E)	FB2027-3 (E)
Lens spec.	PTN-2M4016IR	PTK-2M2812N14IR
Lens type	fixed focal Lens (Board Mount M12 P0.5)	vari-focal Lens (Board mount, M14)
F/no	F1.6	F1.4
Iris type	Fixed	DC Iris
Focal length	4.0mm	2.8~12mm
View Angle	H 60° V 34.4°	H 83.3°(W)~28.1°(T) V 49.5°(W)~17.2°(T)
Camera image		
Min. illumination	0.8 Lux in day mode (IR off) 0.15 Lux in night (IR off) 0 Lux in night mode (IR on)	
Built-in LED	Yes	
IR distance	30M	
Built-in mechanical ICR	Yes	
Auto IRIS	Yes	
Video		
Compression	H.264/MPEG-4/MJPEG	
Max. resolution	1920 x 1080	
Frame rate	1920 x 1080 @ 30fps	
H.264/MPEG-4 bit rate mode	VBR, 5 levels CBR, 64/128/512/768Kbps & 1/2/3/4/6/8/10/12Mbps	
MJPEG quality	5 levels	
Regional of Interest	Yes	
Smart Stream	Yes, 5 windows	
Image orientation	mirror, flip	
Motion Detection zones	3	

Model	FB2027-1 (E)	FB2027-3 (E)
Video		
Privacy mask areas	3	
BLC	Yes	
D-WDR	Yes	
De-noise	2D/3D	
Day & night function	Auto/Manual/Schedule	
ePTZ	Yes	
Corridor Mode	Yes	
Cross Detection	Yes	
Audio		
Encoder	G.711 (μ -law)/G.726 (bit rate 16K~64bps) /AAC audio compression	
Streaming	2-ways audio	
Microphone	External microphone input	
Network		
Protocols	TCP/IP (IPv4/IPv6), HTTP, HTTPS, UPnP, SMTP, FTP, DHCP, NTP, DDNS, PPPoE, Samba, QoS, SNMP(V1/V2c/V3), 802.1X	
Ethernet	10/100 Base-T, RJ45 connector	
ONVIF	V2.X (Profile S), conformance test V12.06	
Security	Password protection/IP Filter	
Users	up to 10 users simultaneously	
Event		
Profiles	32 sets	
Triggers	Alarm Interval, Motion Detection Region, Digital Input SD Card, Network	
Actions	Trigger: Digital Output, Alarm Audio Send out video clip: FTP, NAS, SD card Send out snapshot / log: FTP, NAS, SD card, mail	

Model	FB2027-1 (E)	FB2027-3 (E)
Interface		
Digital input/output	1/1	
BNC Video output	Yes	
Built-in storage option	Micro SDHC & SDXC card (64GB max.)	
Built-in microphone	N/A	
External microphone input	Yes	
External Audio output	Yes	
General		
Power supply	DC 12V(2A)/PoE	
Power consumption	PoE (TYP.):	
	6.4W (LED/Heater off)	
	10.6W (LED on, Heater off)	
	18.5W (LED off, Heater on)	
	19.7W (LED/Heater on)	
Power consumption	DC-IN (TYP.):	
	4.6W (LED/Heater off)	
	8.2W (LED on, Heater off)	
	14.6W (LED off, Heater on)	
	15.7W (LED/Heater on)	
PoE	PoE Class 4 (IEEE802.3at)	
Dimensions	200 mm x 82.1 mm x 82.2 mm (L x H x W) w/o bracket	
Net weight	1110g	
Temperature and humidity	-15°C~45°C, 20%~90% Cold Start -25°C~45°C, 20%~90% Operating	
IP Rating	IP67	
Software Requirement		
OS	Windows® XP/7/8	
Browser	IE 8/9/10/11 (Full Function), Chrome Firefox and Safari (Basic Function)	
Firmware remote upgrade	Yes (via HTTP)	

Model	FB2027-1 (E)	FB2027-3 (E)
Bundle Software		
ExpressGO	Free up to 32CH	
IPCAM Utility	Yes	
SecureCenter	Yes	
Warranty		
Main body	2 years	
Accessories	1 year	

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