



Camera Installation Kit
PMON-1001

Product Manual

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0. Precautions

Read these instructions

You should read all the safety and operating instructions before using this product.

Heed all warnings

You must adhere to all the warnings on the product and in the instruction manual. Failure to follow the safety instruction given may directly endanger people, cause damage to the system or to other equipment.

Servicing

Do not attempt to service PMON-1001, charger or battery yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Trademarks

All names used in this manual are probably registered trademarks of respective companies.

Liability

Every reasonable care has been taken during the writing of this manual. Please inform your local office if you find any inaccuracies or omissions. We cannot be held responsible for any typographical or technical errors and reserve the right to make changes to the product and manuals without prior notice.

FCC/CE Regulation

NOTE: This equipment is a service pack with PSE board and several purchasing parts. Every purchasing part has been tested and found to comply with mandatory limits as below table.

Wi-Fi AP		Charger		Battery
CE	EN 300 328(2.4-2.4835GHz) EN 301 489 EN 61000-6-1	CE	EN 55022/EN 61000-3-2 EN 55024	UN38.3 UL 1642
FCC	Part15 B	FCC	Part15 B	

1. Introduction

Package Contents



PMON-1001



ANTENNA



BATTERY



CHARGER



BELT BAG



QUICK INSTALLATION GUIDE

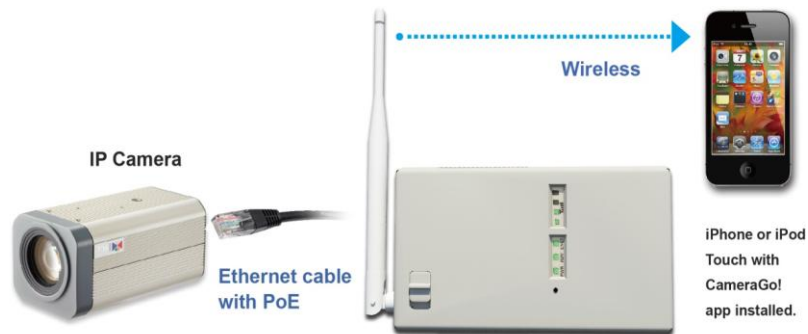
Design Concept

Camera Installation Kit PMON-1001 is a light on-the-belt hardware utility that connects to the IP camera and provides PoE power through a short network cable while providing wireless network access for iPhone or iPod Touch that has a free app "CameraGo!" installed.

With the help of this installation kit it is possible to do convenient and time-saving viewing angle and focus adjustment of ACTi cameras without needing to bring a notebook computer up on the ladder with the long cable attached or ask someone on the ground for assistance.



Architecture of Camera Installation Kit



The following chapters of this manual describe the hardware and firmware of the PMON-1001 device. For more details about software application CameraGo!, please refer to its user manual.

Safety Instructions

Don't use wrong power specifications

This device is likely to be damaged or damage other equipments / personnel, if you use a power supply with different voltage than the correct one. All warranty of this product will be voided in the situations above. The above mentioned damages may be caused by either of the following conditions:

- Wrong power supply for given charger
- Wrong power specification battery used with given charger
- Wrong power specification battery used in PMON-1001

Don't open the casing of the product except the battery section

Warranty of this product will be voided if the casing of PMON-1001 has been opened, except the battery section.

Cleaning

Avoid any water getting into PMON-1001 while cleaning its surface. For safety reasons, remove the battery from the device before cleaning it. Warranty of this product will be voided if the water gets into PMON-1001 and damages the device.

Water and Moisture

Do not use this video product near water, for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool and the like. Do not use it outdoors in a rainy or snowy day. Warranty of this product will be voided if the water gets into PMON-1001 and damages the device.

Servicing

Do not attempt to service this video product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Damage Requiring service

Refer servicing to qualified service personnel under the following conditions.

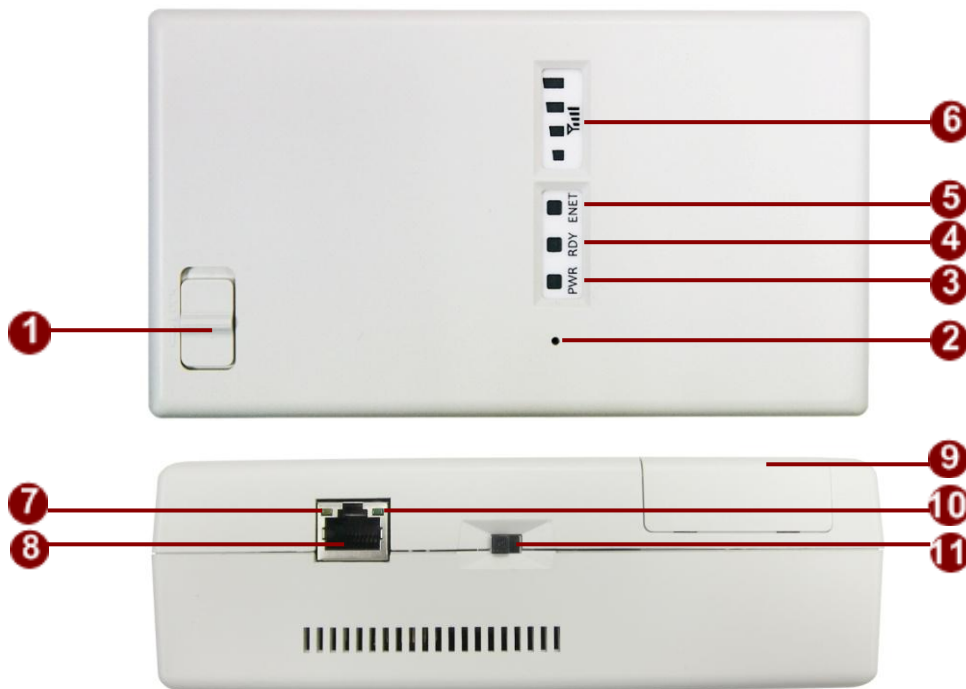
- 1) When the power-supply system is damaged (PMON-1001 does not start up or does not provide PoE power to camera)
- 2) If liquid has been spilled, or objects have fallen into the video product.

- 3) If the product has been directly exposed to rain or water.
- 4) If the product does not operate normally by following the operating Instructions in this manual. Adjust only those controls that are covered by the instruction manual, as an improper adjustment of other controls may result in damage, and will often require extensive work by a qualified technician to restore the product to its normal operation.

Safety Check

Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine if the product is in proper operating condition.

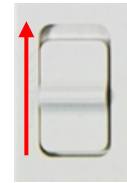
Physical description



- | | |
|--|---------------------------|
| 1 Antenna Lock | 7 PSE Power On |
| 2 Reset Button | 8 Ethernet Port |
| 3 Power LED | 9 Battery Slot |
| 4 System Ready LED | 10 PSE in Use |
| 5 Ethernet Connected / Data Transmission | 11 Power On Switch |
| 6 Searching for Camera / Ready for Client | |

1) Antenna Lock

This switch locks the antenna to keep it firmly mounted to the PMON-1001.



2) Reset Button

It resets the PMON-1001 back to factory default configuration. It can be used when the device is not behaving normally and there are no other ways to restore normal working condition.

The procedure of reset:

1. Power up the unit
2. Wait 1 minute
3. Press the Reset Button using a pin and hold it for **5 seconds**.
4. Release the button. The unit will restore the settings to factory default and reboot.



3) Power LED

Power LED ON indicates that the Wireless AP module of PMON-1001 has been powered on. Power LED OFF indicates that the device has been turned off.



4) System Ready LED

The System Ready LED turns ON when the Wireless AP system has been booted up completely. If this LED does not automatically turn ON after Power LED is already ON, then the system boot up has failed. In such case, try to Reset the device.



5) Ethernet Connected / Data Transmission

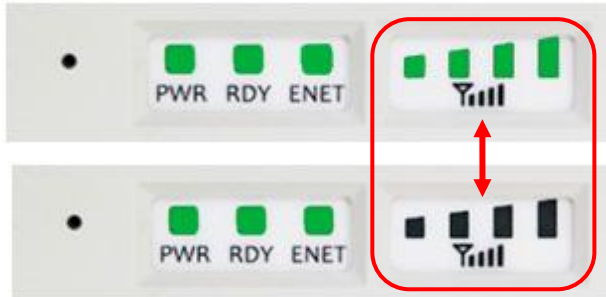
The ENET LED ON means that the camera has been connected to PMON-1001 through Ethernet port. The



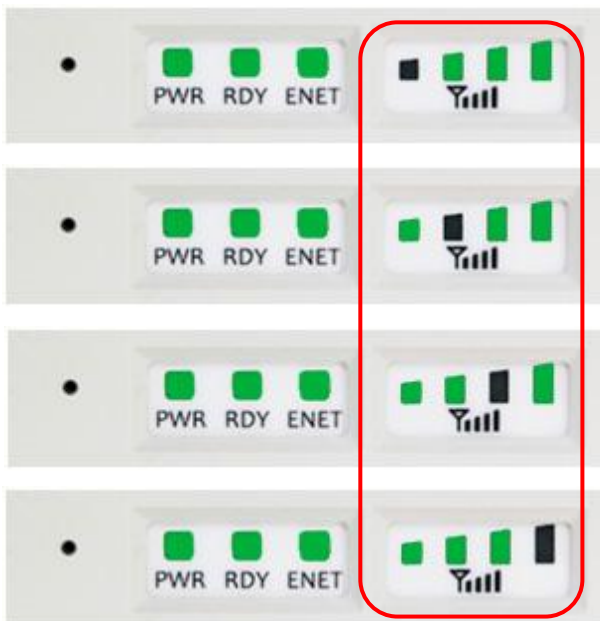
ENET LED blinking means that PMON-1001 is sending or receiving data from the camera. The ENET LED OFF means that no camera has been plugged to PMON-1001 yet.

6) Searching for Camera / Ready for Client

All the 4 Wi-Fi LEDs blinking at the same time means that the PMON-1001 is **searching for the camera** or **waiting the camera to boot up**.



When the Wi-Fi LEDs are **blinking back and forth**, it means that PMON-1001 and camera have successfully established connection and they are **ready for client access**.



7) PSE in use

This LED ON (orange color) means that the camera has started to draw PoE power from PMON-1001.



8) Ethernet Port

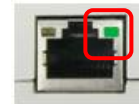
This port can mainly be used to plug in the Ethernet cable that connects to the camera. It is also possible to use it to connect to a PC for system configuration of PMON-1001 firmware.

9) Battery Slot

It hosts the battery that gives power to PMON-1001 as well as to IP camera through Ethernet cable. One battery is included in the PMON-1001 package.

10) PSE Power On

This LED ON (green color) means that PMON-1001 is ready to provide PoE power for the camera.



11) Power On Switch

Turns the PMON-1001 ON or OFF.



Product Specification

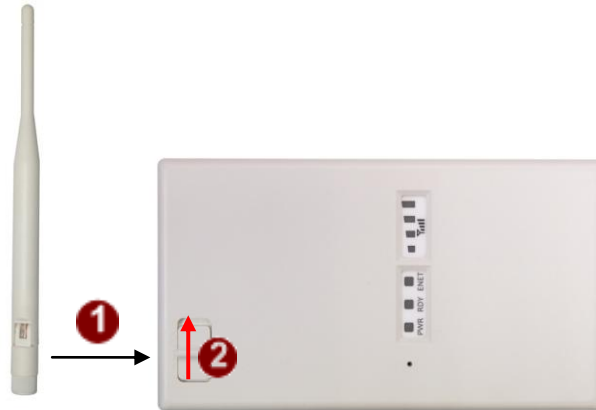
PMON-1001	
• General	
Full Name	Camera Installation Kit PMON-1001
Maximum Number of Cameras	1
• Live View	
Display Layout Mode	Single channel
Display Resolution	Defined by mobile device
Re-scaling to Full Screen	Auto
Rotation	Auto
• PTZ & Auto Focus	
PTZ Control	Pan, tilt and zoom buttons as video overlay
Re-focus	Re-focus button to auto focus the camera
• System	
IP Address Management	Smart DHCP
Device search	Auto search via UDP
Video Streaming Protocol	HTTP
Wi-Fi Security	WEP/WPA/WPA2-PSK
• Remote Access	
Handheld Mobile Device	iPhone 3G or newer; iPod Touch
Operating System Requirement	iOS 5.0 or newer
Application Requirement	Free downloadable app "CameraGo!" (English only)
• Network Interface	
Ethernet Port	1, Ethernet (10/100 Base-T), RJ-45 connector
PoE Power Supply for Cameras	PoE Class 3 (IEEE 802.3af)
Wi-Fi Standard	802.11 b/g
Wi-Fi Operating Frequency	2412 ~ 2462 MHz
• Hardware	
Dimensions (W x H x D)	169.94 mm x 54 mm x 97.34 mm (6.69" x 2.13" x 3.83")
Weight	535.5 g (1.18 lb), including the weight of battery and antenna
Operating Temperature	-20°C ~ 50°C (-4°F ~ 122°F)
Operating Humidity	10% ~ 85% RH
Power Source / Consumption	Li-ion battery / Depends on PoE camera
Antenna	5 dBi Plastic Omni Antenna
• Bundled Accessories	
Battery	Rechargeable, Li-ion, 4400mAh, 7.2V, 184.5 g (0.41 lb)
Battery Charger	US or EUR connector, AC 110 ~ 240V, Charging current 600 mA ± 50 mA, 126 g (0.28 lb)
Belt Bag	Water-resistant canvas, yellow, 55.5 g (0.12 lb)
• Integration	
Unified Solution	Fully compatible with ACTi cameras

2. Using PMON-1001

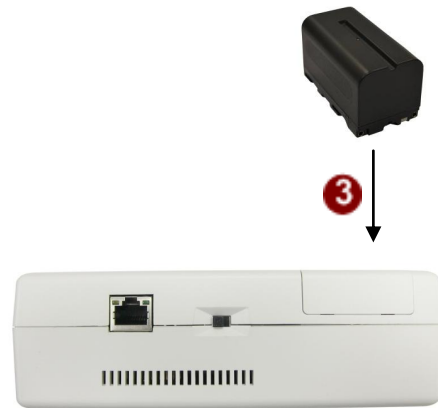
Assembly

1 Screw in the antenna

2 Lock the antenna



3 Insert fully charged battery into the kit



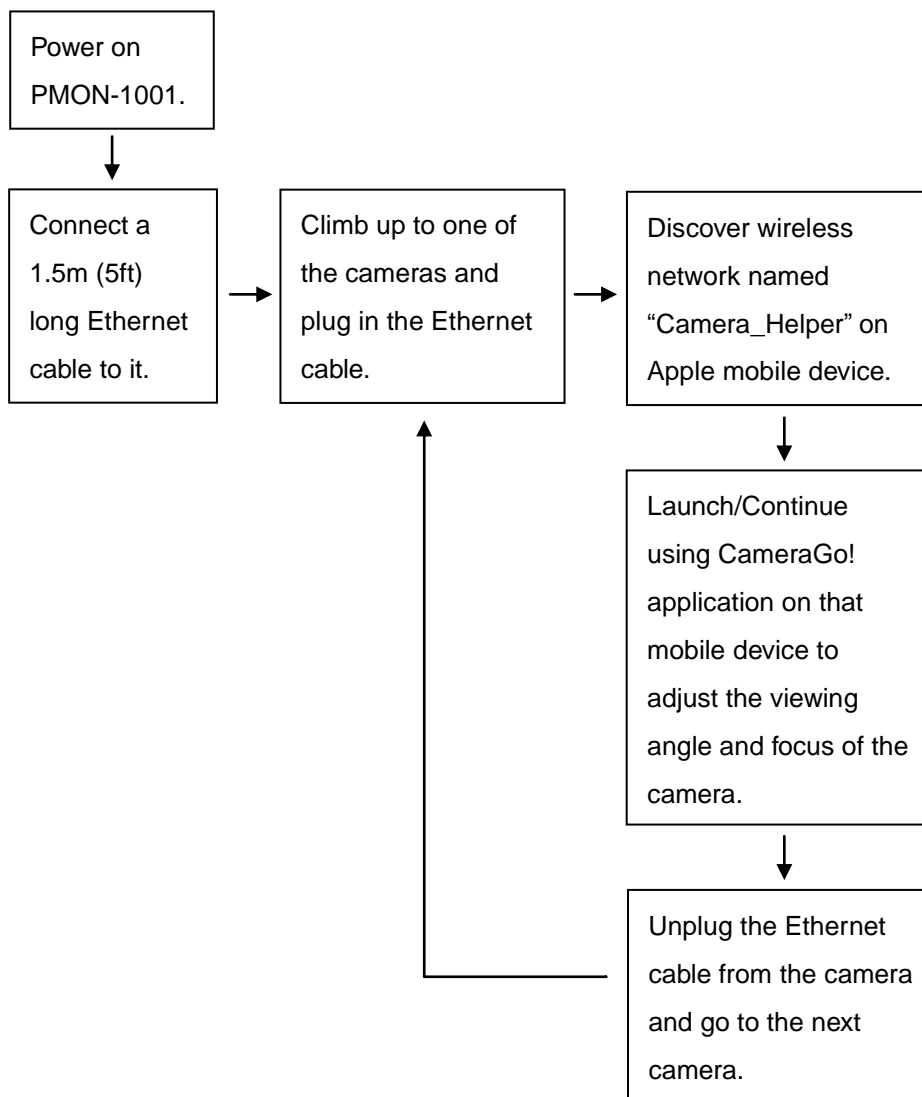
4 Put the kit into the belt bag.



Operational Flow

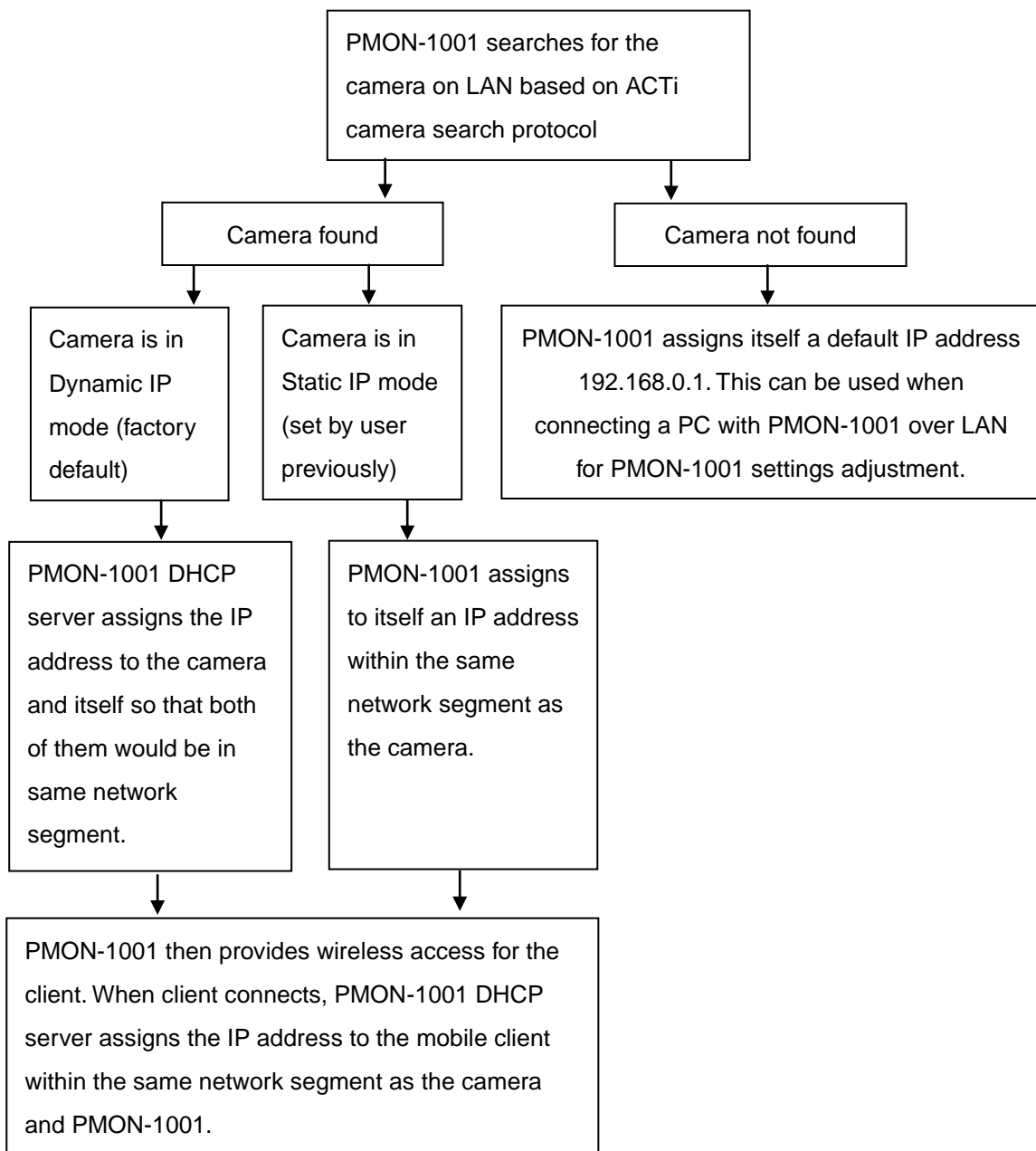
PMON-1001 is designed so that there is no manual configuration needed. It is ready to serve all ACTi cameras as you take it out of the box. The following description of operation flow explains how it can serve cameras with different IP addresses and network segments without needing to do any manual network configurations.

The flow of using Camera Installation Kit



Network connection between mobile device and camera

The camera installation kit PMON-1001 acts as WLAN Access Point to provide the IP address to the mobile client (Apple device) by DHCP protocol. Thanks to the smart DHCP design, PMON-1001 will be able to have itself, the camera and the mobile device all in the same network subnet without changing the IP settings of the camera.



Mobile client communication with the camera

When both client and the camera have successfully connected to PMON-1001, it is possible to transmit data (video stream, commands) between the camera and the CameraGo! app in the mobile device.

The details of the communication between CameraGo! app and the camera are covered in **CameraGo! User Manual**.

Using Multiple PMON-1001 in Same Area

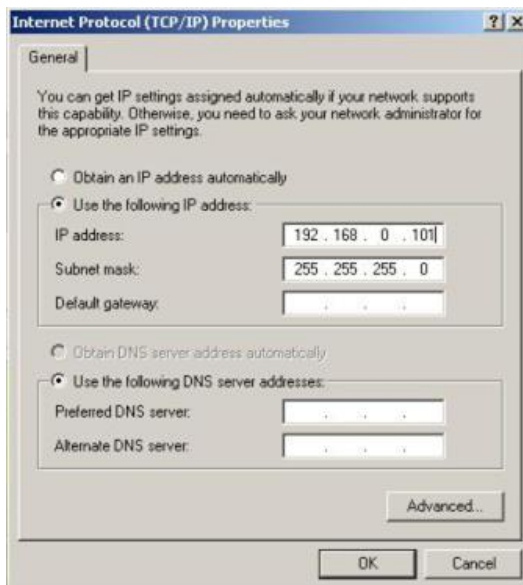
For large scale installations there may be a need for more than 1 unit of PMON-1001. Having two or more PMON-1001 within the same area would require a clear distinction between each wireless network naming so that the Apple mobile device could connect to the right network.

It is possible to change the ID and password of the wireless network of PMON-1001 in its firmware. For example, you can name the PMON-1001 networks as “Camera_Helper1”, “Camera_Helper2”, etc.

To access the firmware of PMON-1001, you need to connect an Ethernet cable from your PC to the Ethernet port of PMON-1001. Since the default IP of PMON-1001 will be 192.168.0.1 and mask 255.255.255.0, therefore you need to make sure that the IP settings of your PC are within the same network segment.

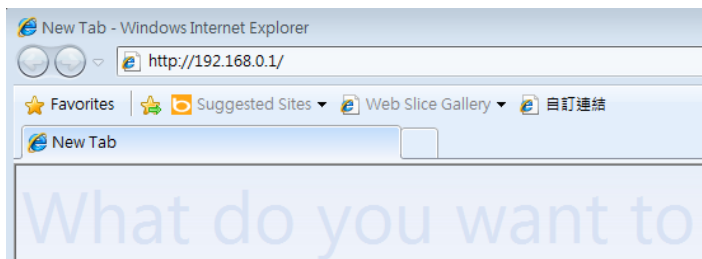
Adjusting the IP address of the PC

In the TCP/IP settings of your PC, set an IP address as 192.168.0.xxx, where xxx is any number between 2 and 254. The subnet mask is to be 255.255.255.0.



Connecting to the firmware via web browser

Open the web browser and key in the IP address of PMON-1001.

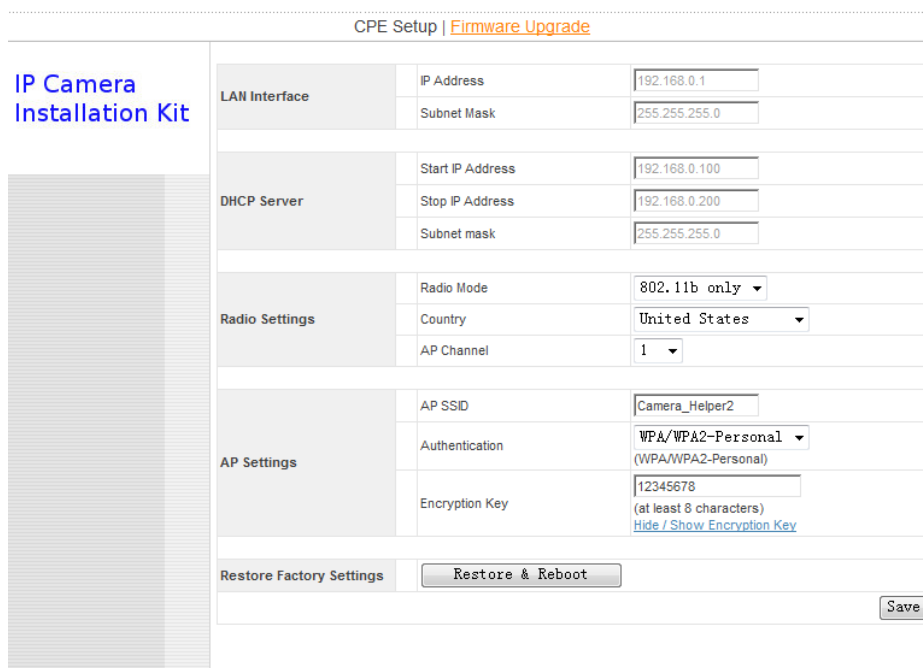


Upon successful connection you will see the welcome page of PMON-1001 firmware. Press “Advanced Config” button.



Among several configurable items, there are **AP SSID** and **Encryption Key** that may be changed according to user’s requirements.

If you want the wireless network name become “Camera_Helper2”, then please modify the AP SSID field accordingly and press “Save”. The same way you can change the Encryption key if you like.



Firmware Upgrade Option

There is also an option to upgrade the firmware of PMON-1001. If there is a need for enhanced firmware of PMON-1001 in the future, ACTi will provide the upgrade image for free.

