DW DIGITAL WATCHDOG
Everything's Digital

MEGAPIX MPA20M

IP 2.0MP Armored Vandal Dome Camera

Quick Setup Guide

Logos: HD 1080 · Onvif · 3 CODEC · UPnP

PREPARATION

The following items are included with the MEGAPIX camera

- User Manual
- CD (Manual & Software)
- Quick Start Guide
- Mounting Template
- L-Wrench T10-M3
- 4 Screws
- 4 Dry Wall Anchors

1. Camera Input Sensor
2. Power Supply DC12V
   MAX 4.8W, 400mA
   MAX 5.7W, 475mA [IR]
3. RJ45 Connector

Thank you for purchasing Digital Watchdog's MEGAPIX Armored Vandal Dome Camera. Before installing the camera, please verify your model and read this guide carefully.

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INSTALLATION

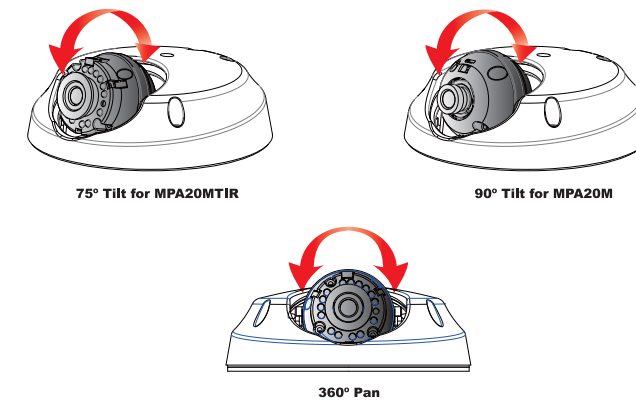## Prepare the Camera and Mounting Surface

1. Using the supplied T10-M3x15.0 Allen Key, loosen the four security screws. Carefully remove the dome cover.

2. As shown in the diagram, the MEGAPIX camera comes with a safety wire attached. The safety wire will secure the dome to the camera module during the installation process.

3. Use camera mounting template or your camera to mark the holes as required.

4. Drill holes into the drywall and insert the drywall mounts.

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SPECIFICATIONS

Lens Specifications

Lenses are pre-focused at the factory. In the unlikely event that the optical effect of the dome cover cause a slight defocusing of the lens, hold the dome cover over the lens to make a final adjustment.

1. Y-Axis: 90° Tilt for MPA20M
   75° Tilt for MPA20MTIR
2. X-Axis: 360° Pan

75° Tilt for MPA20MTIR   90° Tilt for MPA20M

360° Pan

Over-rotating the lens will damage the camera lens module

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Recommended Settings

Camera Access from Internal Network
1. Set Camera to DHCP. Refer to page 10.

Camera Access from External Network
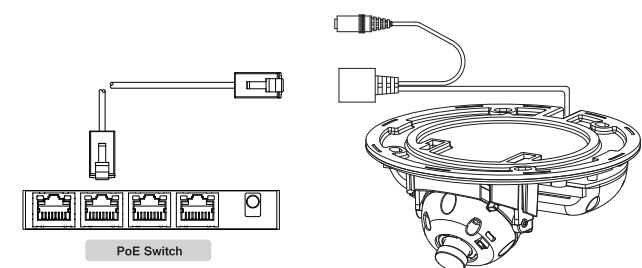2. Set Camera to Static and DDNS. Refer to page 10.

Camera Color Settings

White Balance	
Mode	Auto
Auto Exposure	
Brightness	11
Shutter Mode	Auto
Digital Slow Shutter	Off
Shutter Speed	1/30
AGC Gain	18
BLC Mode	Off
Day & Night	
Mode	Auto
Switching from Color to B/W	5 [0 ... 10, default 5]
Switching from B/W to Color	5 [0 ... 10, default 5]
Extra Setting	
Lens Mode	Indoor
Chroma	8
Sharpness	5
Mirror	Off
Flip	Off
Digital Noise Reduction	Middle

TEL: (866) 446-4359
www.Digital-Watchdog.com / technicalsupport@dwcc.tv
Technical Support Hours: Monday-Friday 8:30AM to 8:00PM EST
01042012

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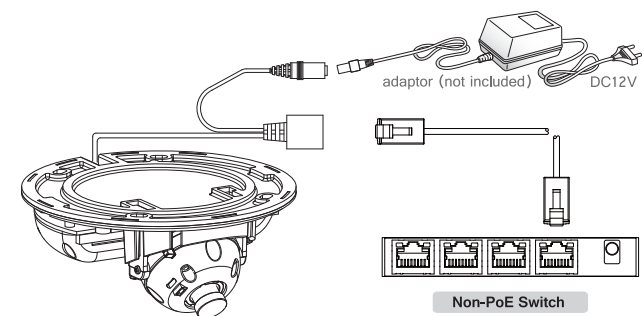# Network Connection

There are two options.*

1. **Using a PoE-Enabled Switch**

The MEGAPIX Camera is PoE-compliant, allowing transmission of power and data via a single ethernet cable. Follow the illustrations below to connect the camera to a PoE-enabled switch using an ethernet cable.

PoE Switch

2. **Using a Non-PoE Switch**

If a PoE-enabled switch is not used, use a power adaptor to connect the MEGAPIX Camera to a Non-PoE switch.

adaptor (not included)   DC12V

Non-PoE Switch

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Mount the Camera

The MEGAPIX Camera is designed to be surface mounted on a wall or ceiling.

5. Pull wires through and make connections. Refer to "Network Connection" for further explanation.

6. Mount the camera to the wall or ceiling using the screws provided with the camera.

6. Adjust the camera's pan and tilt.
7. Check the LED Light. Green light flickers for booting. Red light turns on when booting is complete.

8. Tighten the four locking screws.

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Webviewer Specifications

Minimum Requirements for PC

CPU	Intel P4 2.0GHz Dual Core
RAM	More than 1GB
HDD	200GB Required for Saving Clip Image
OS	Microsoft Windows XP or Higher
Resolution	Higher than 1024X768

Camera Specifications

Model		MPA20M
Image	Device	1/2.7" CMOS Sensor
	Pixels - Total	2016(H) X 1108(V)
Min. Scene Illumination	Color	F1.6, 30IRE: 0.8 Lux
	B/W	F1.6, 30IRE: 0.01 Lux
Functions	3D-DNR	Available
	Privacy Zone	Available
	Day/Night	Auto, Color, B/W
Resolutions	Color	1920(H) X 1080(V)
	B/W	1920(H) X 1080(V)
Lens	Focal Length	4.0mm Fixed
Video	Main Monitor	LVDS Out (16 BIT Y, Cb, Cr Digital, BT-1120)
	Sub Monitor	CVBS Analog
	Compression Type	H.264, MPEG4, MJPEG
	Frame Rate	30fps at All Resolutions
Network	LAN	802.3 Compliance 10/100 LAN
	Protocol	TCP/IP, HTTP, DHCP, PPPoE, ICMP, ARP, RARP, RTSP, NTP, UDP
	PoE	802.3af Compliance
	Streaming	Dual-Stream at Different Rates and Resolutions
Port & I/O	RS232	Consol
	Configuration	Reset Switch, Configuration Clear Switch
Power	Requirement	DC12V, PoE
	Consumption	4.8W, 400mA
Environmental Conditions	Operating Temperature	-10℃ ~ 55℃ (14°F ~ 131°F)
	Storage Temperature	-20℃ ~ 70℃ (-4°F ~ 158°F)
	Operating Humidity	Under 90% (Non-Condensing)
Physical Specifications	Dimensions	120 X 55.7 mm, 4.72 X 2.19 in
	Weight	0.65 lb
	Certifications	CE, FCC, RoHS, IP66

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MEGAPIX CAMERA SETUP

Installing IP Finder

IP Finder searches for all the available network devices on your local area network.

1. Install [IP Finder] **IP Finder** to find the MEGAPIX Camera on the local network. The **IP Finder** software can be found on the included User Manual CD. Run **IP Finder** and install onto your PC.
2. When setup is complete, launch the **IP Finder** software.
3. To find your MEGAPIX camera, click **Search** button.
4. Your MEGAPIX camera will appear as "MPA20M."
5. To access the camera directly via Internet Explorer, select the desired device and click **Web Connect.**
   To change basic network settings through the IP Finder software, select the desired device and click **Configuration.** Then, proceed to pages 10~11 for information on setting up the camera on IP Finder.

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Setting the Camera on IP Finder

Set the Camera for Internal Use

If you wish to connect your MEGAPIX Camera internally from within the same network:
1. Find your MEGAPIX Camera on IP Finder software and click **Configuration.**
2. Select an IP Configuration Mode – **DHCP**, **PPPoE**, or **Static** – that is available to you. Recommended Setting is DHCP.*
3. If you wish to use DDNS, select the **Use DDNS** option. See page 10 for further information.
4. When the setup is complete, select **Apply.**
5. Then, select **Reboot** button. The rebooting process usually takes up to a minute.
6. Select **Exit.**
7. On the IP Finder window, select **Search** and comfirm that your changes have been made.

Set the Camera for External Use

If you wish to connect your MEGAPIX Camera to an external network, please use Static IP.
1. Find your MEGAPIX Camera on IP Finder software and click **Configuration.**
2. Select **Static** IP Configuration Mode.
3. If you wish to use DDNS, select the **Use DDNS** option. See page 10 for further information.
4. When the setup is complete, select **Apply.**
5. Then, select **Reboot** button. The rebooting process usually takes up to a minute.
6. Select **Exit.**
7. On the IP Finder window, select **Search** and comfirm that your changes have been made.

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Accessing the Camera

Remote Video Monitoring

Monitor and configure the MEGAPIX camera through a built-in webviewer.

1. Enter the IP address of the camera on the Internet Explorer window.
   Example: **http://192.168.1.123** (Factory Default)
2. Enter Username and Password.
   Username: admin
   Password: admin
3. The web browser will ask to install Active-X Control. Once it has been installed, Internet Explorer will display video images from the camera.

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Export Live Video Image

Export a screenshot of the current live video to your computer.

1. Click **Export Image** button located on the left. **Save As** window will appear.
2. Select the location on your computer you wish to Save In and type in a **File Name.**
3. Click **Save** button and the screenshot will be saved.

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Setting the Camera on IP Finder

User can use the IP Finder software to setup the basic network settings.

1. **DHCP**: If DHCP is selected, an IP address will automatically be assigned to the camera. If your network does not support DHCP, a default IP address and subnet mask will automatically be assigned.
2. **PPPoE**: Select this option, when you use WAN service or a PPPoE-based internet service. To use PPPoE, you must contact your Internet Service Provider for a User ID and Password.*
3. **Static IP**: This option will assign a static (fixed) IP to your camera. A static IP address will prevent the network from changing the camera's IP address and make it easier to access, especially when the camera is on a large network and accessed by multiple users.
   To use static IP, you will need to contact your Internet Service Provider.*
4. **Use DDNS**: Check this option to use DDNS (Dynamic DNS). DDNS allows users to setup a unique URL for the IP camera.
   To use DDNS, you must register for a DDNS ID from a DDNS Hosting Service.*
5. **Port**: This section displays all the port numbers that are required for remote communication.

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Resetting the Camera

SW5 [Camera Reboot]

Reboot the system and the camera will start immediately.
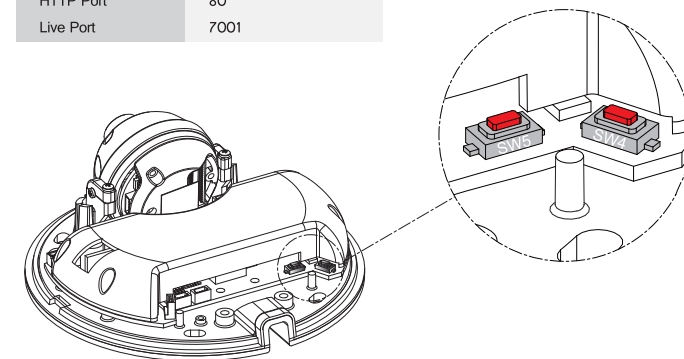
SW4 [Factory Default]

Pressing SW5 while holding down SW4 will initialize all environmental variables to factory default.
Previous setup for IP default, time, etcetera will be deleted.
If a system IP address is lost, reset the camera back to factory default.
The following are the default network settings:

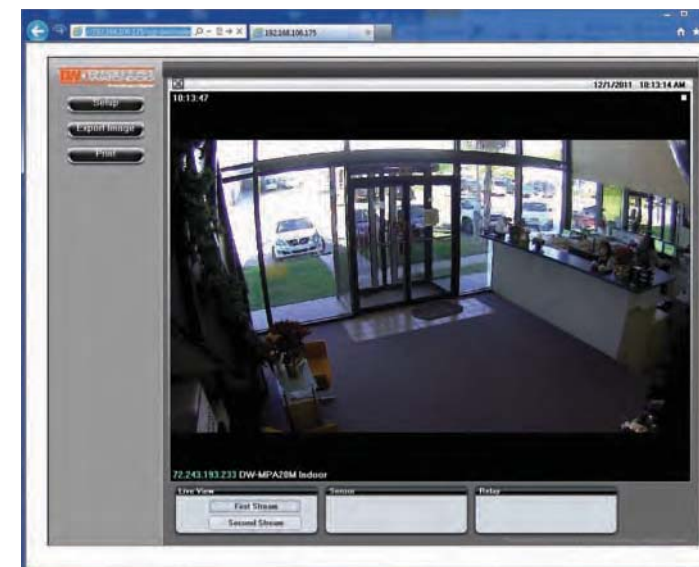|	
IP Mode	DHCP
IP Address	192.168.1.123
Subnet Mask	255.255.255.0
Gateway	192.168.1.123
Command Port	7000
HTTP Port	80
Live Port	7001

Frequent use may cause a System Error
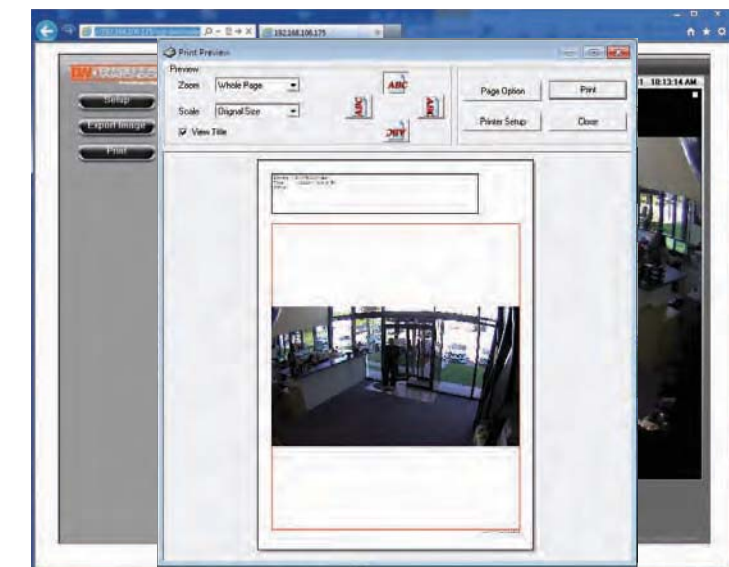
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First Stream & Second Stream

Configure two different stream settings (**First Stream** and **Second Stream**) for monitoring and recording. Second Stream is used to record on Motion Detection.
1. Click **Setup** to adjust the two available stream settings: **First Steam** and **Second Stream.** The two streams can differ in Resolution, Compression Type, Data Transfer Speed, and Framerate.
2. On the main monitoring page, user can view the camera with the First Stream settings or the Second Stream Settings. Below the display screen, click **First Stream** button to view the camera with the First Stream settings, and click **Second Stream** button to view the camera with the Second Stream settings.

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Print Live Video Image

Print a screenshot of the current live video.

1. Click **Print** button, and the **Print Preview** window will appear.
2. Scale the size of the screenshot or adjust the orientation of the screenshot.
3. To print information about the screenshot, select **View Title.** To add a memo for the screenshot, click **Page Option.**
4. Go to **Printer Setup** to select the printer and manage the printer properties.
5. Select **Print** to print the page, or **Close** to cancel the print.

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