

MEGAPIX MPTZ20XFM

IP 2.1M Pan, Tilt, Zoom Camera

Quick Setup Guide

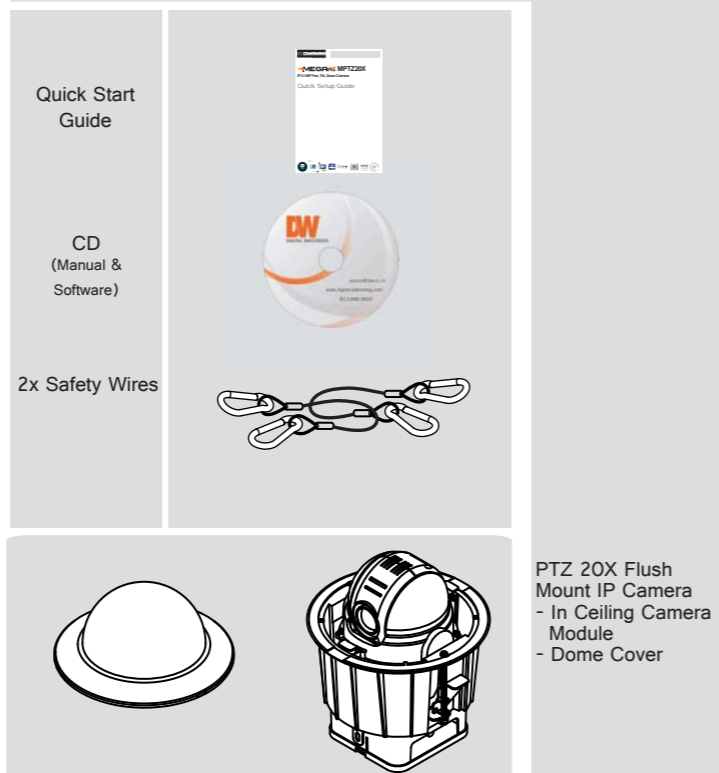


* Default Username and Password: admin/ admin



PREPARATION

The following items are included with the MPTZ20X Camera

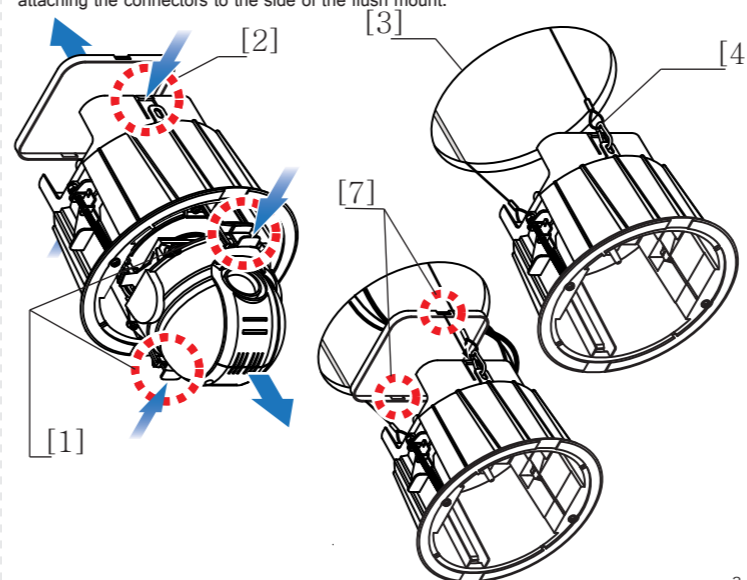


Thank you for purchasing Digital Watchdog's 20X MEGAPIX Pan Tilt Zoom Camera. Before installing the camera, please verify your model and read this guide carefully.

INSTALLATION

Prepare the Camera and Mounting Surface

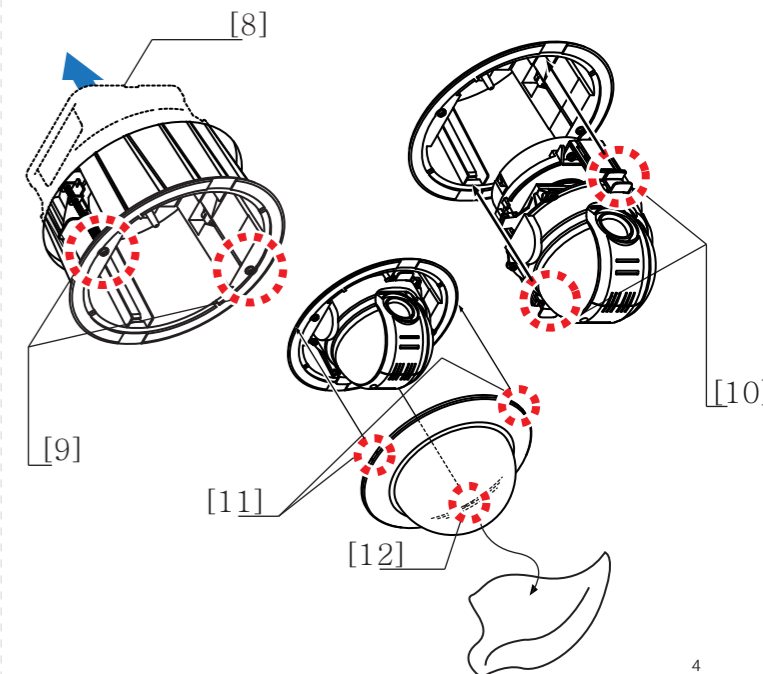
1. Remove the PTZ mechanism from the in-ceiling housing to connect all necessary cables. To detach camera mechanism, press down and hold both black handles on the camera mechanism. Pull them up to detach the camera.
2. Detach the Flush Mount cover by pressing on the connectors on the side of the flush mount housing.
3. To mount the flush mount camera in the ceiling, drill a 190mm (7.48") diameter hole in the ceiling.
4. Use the safety wires to secure the flush mount to the ceiling during and after installation.
5. Run all the necessary cables via the mounting accessory's bracket to the upper housing. Use the cabling diagram on page 5.
6. Check the LED lights are on. Green light flickers when the camera is booting, and Red light turns on when booting is complete.
7. Once all the cables are properly connected to the camera, close the Flush Mount cover by attaching the connectors to the side of the flush mount.



SPECIFICATIONS

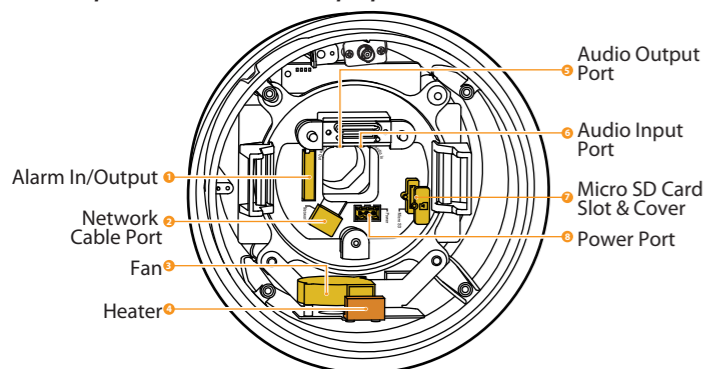
Cable Specifications

8. Insert the in-ceiling housing into the ceiling hole and press the edge of the housing against the ceiling.
9. Secure the in-ceiling housing in place by turning the clip bolts located on the housing clockwise.
10. After checking the orientation of one touch connector in the upper housing, press the PTZ mechanism into hook in the upper housing. To lock the PTZ mechanism to the upper housing, press the two black handles until the module makes a clicking sound.
11. Close the dome cover dome and secure it to place using the accessory wrench.
12. When the installation is complete, remove the protective plastic from the cover dome.



Mounting the Camera

The MPTZ20XFM MEGAPIX camera supports audio and relay connections. Use the diagram below for additional information on the specific cables and their purpose.

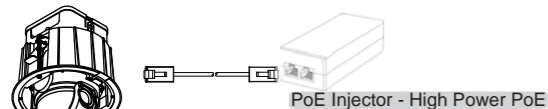


Network Connection

There are two options for powering the MPTZ20XFM MEGAPIX Camera*

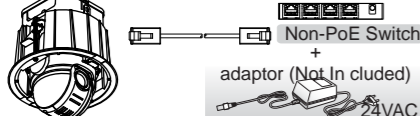
1 Using a PoE-Enabled Switch

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.



2 Using a Non-PoE Switch

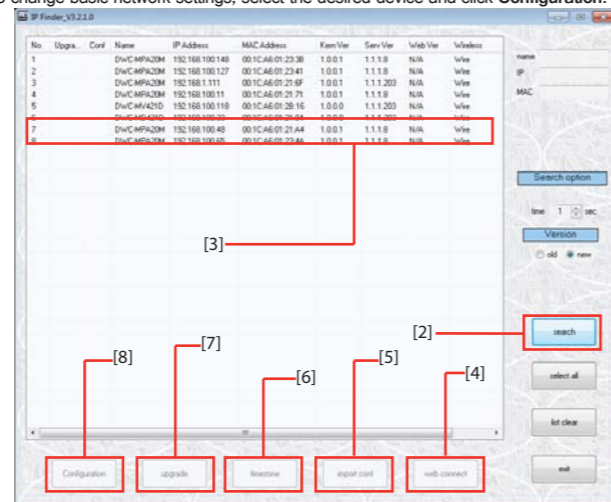
If a PoE-enabled switch is not used, use a power adaptor to connect the MEGAPIX Camera to a Non-PoE switch.



Installing IP Finder

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

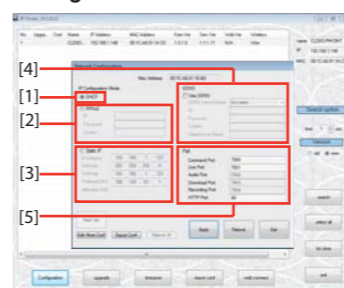
1. Install IP Finder software included in the User Manual CD to find your MEGAPIX Camera on the local network.
2. When setup is complete, launch the IP Finder software. Click Search to find your camera.
3. Your MEGAPIX camera will appear as "DWC-MPTZ20X".
4. To access the camera via the web browser, select the desired device and click Web Connect.
5. To import camera settings from a different camera, press import conf.
6. To adjust the camera's date & time, press the timezone button.
7. Click Upgrade to keep the camera's firmware to the latest version*.
8. To change basic network settings, select the desired device and click Configuration.



* See pages 6 in this QSG for more information.

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, 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. 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.

Resetting the Camera

Pressing the reset button on the camera's control board for five (5) seconds 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

Setting the Camera on IP Finder

Set the Camera for Internal Use

If you wish to connect your MEGAPIX Camera internally from 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. DHCP is Recommended.
3. If you wish to use DDNS, select the Use DDNS option and enter a registered DDNS information.
4. When the setup is complete, select Apply.
5. Press the Reboot button. This process may take up to a minute.
6. Select Exit.
7. On the IP Finder, select Search and confirm that your changes have been made.

Set the Camera for External Use

If you wish to connect your MEGAPIX Camera from an external network:

1. Find your MEGAPIX Camera on IP Finder software and click Configuration.
2. Select Static IP Configuration Mode and enter all the network information.
3. If you wish to use DDNS, select the Use DDNS option and enter a registered DDNS information.
4. When the setup is complete, select Apply.
5. Then, select Reboot button. This process may take up to a minute.
6. Select Exit.
7. On the IP Finder, select Search and confirm that your changes have been made.

Webviewer Specifications

Minimum Requirements for PC

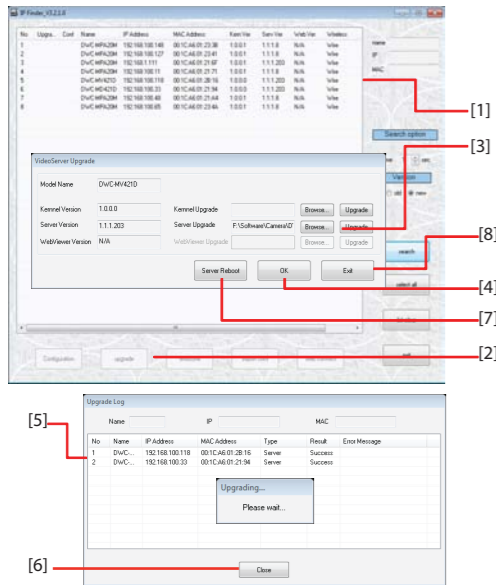
CPU	Intel P4 2.0GHz Dual Core
RAM	More than 1GB
HDD	200GB Required for Saving Clip Image
OS	Microsoft Windows XP or Higher
Resolution	Higher than 1024X768

MEGAPIX CAMERA SETUP

Upgrading the Camera's Firmware

Use IP Finder to perform firmware upgrade to all your MEGAPIX cameras from one convenient location.

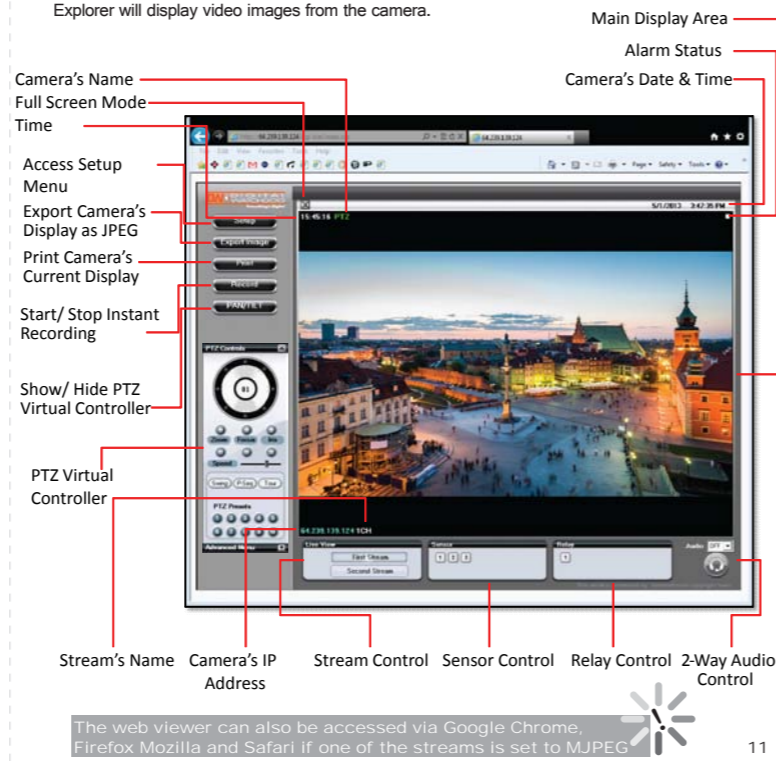
1. Select all the cameras you would like to upgrade. You can select multiple cameras by clicking on multiple camera models while holding down the Ctrl button.
2. Press the 'Upgrade' button.
3. Browse and select the appropriate file to use for the upgrade. Press the 'OK' button.
4. The system will start updating all the selected cameras in a new window.
5. The system will indicate if the upgrade was successful or not for each camera.
6. When all cameras have been properly upgraded, press the 'Close' button
7. To complete the upgrade, reboot the cameras by pressing the 'server reboot' button.
8. Press the 'Exit' button
9. Allow up to 60 seconds for the cameras to reboot and press the 'Search' button. If the cameras reappear in the IP Finder the reboot is complete and the camera is ready.



Accessing the Camera

Monitor & 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> (Default)
2. Enter Username and Password. (Default: 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.

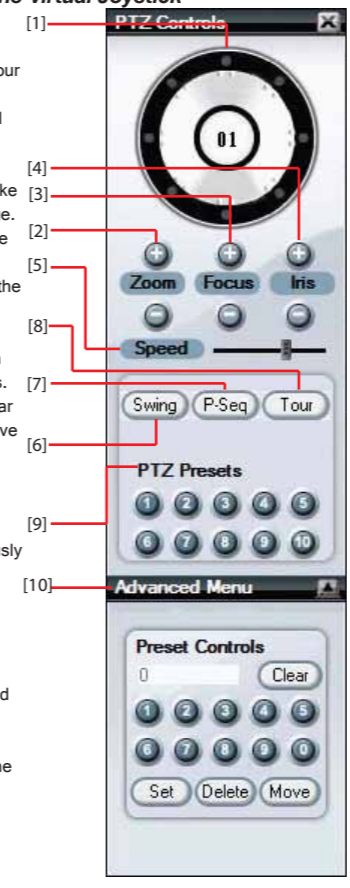


The web viewer can also be accessed via Google Chrome, Firefox Mozilla and Safari if one of the streams is set to MJPEG

Accessing the Camera

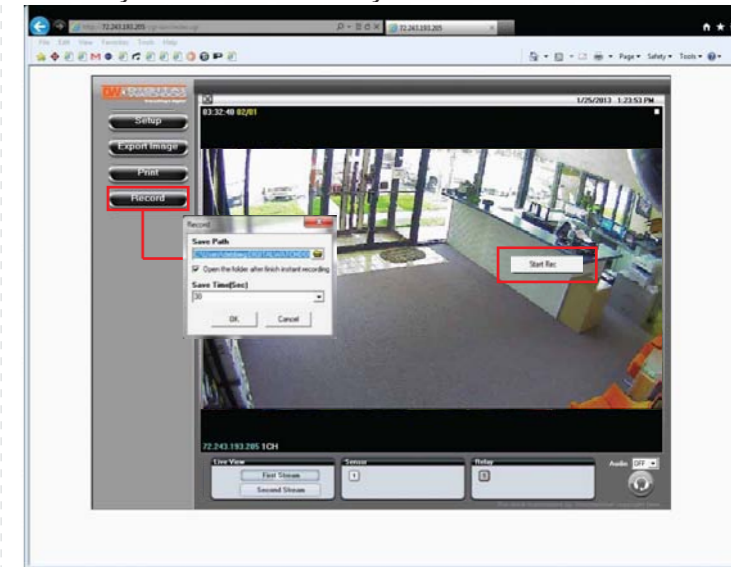
Controlling the Camera Using the Virtual Joystick

1. Pan Tilt Wheel- Move the camera in eight (8) directions by clicking and holding with your mouse's left button on the corresponding button. Pressing the central upper button will move the camera UP. To stop the camera's movement, release the mouse' click.
2. Zoom Control Button- Press the '+' to make the camera zoom into the center of the image. Press '-' to make the camera zoom out to the full field of view.
3. Focus Control Button- If 'Focus Mode' in the Camera's Setup Menu is 'Auto', the Focus cannot be changed manually.
4. Iris Control Button- The iris of the camera can be controlled by clicking '+' or '-' buttons.
5. Speed Control Button- Move the speed bar to the left to reduce the camera's speed. Move the speed bar to the right to increase the camera's speed.
6. Swing Button- Start and stop any of the previously set Swing commands.
7. P-Seq Button- Start and stop any previously set Preset Sequence commands.
8. Tour Button- Start and stop any of the previously set tour commands.
9. Presets buttons- Send the camera to a specific preset previously setup. To activate presets higher than 10, expand the Advanced Menu option and use the numeric buttons to select a preset.
10. Advanced Menu- Preset Controls-Use the Advanced Menu to delete, set and move presets from the camera's main display window.



Instant Recording

Instantly record live video to your local drive.



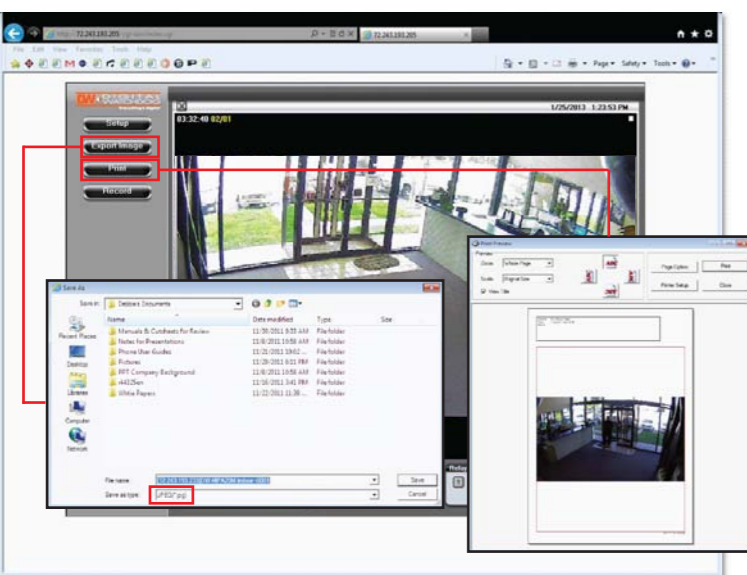
To Setup Instant Recording

Select the Record button.
Indicate where you want the videos to be saved.
Setup the duration of the instant recording. You can record up to 120 seconds of live video.
When setup is complete, click OK to save changes or Cancel to cancel any changes.

To Start and Stop Instant Recording

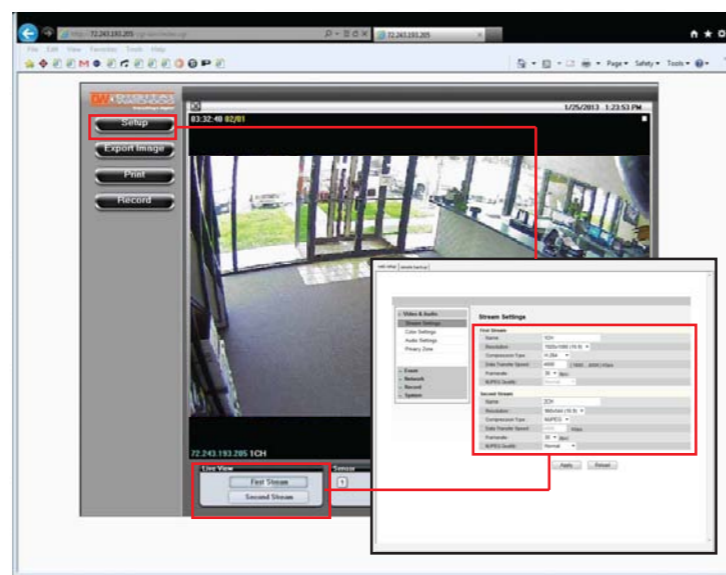
To Start, right-click anywhere on the display screen.
Select Start Rec. The icon on the top right of the screen will change to INSTANT.
To Stop, right-click anywhere on the display screen.
Select Stop Rec. The video will be displayed in the designated folder when recording is complete.

Export & Print



- Select the Export Image button. A 'Save As' window will appear.
- Select the folder you wish to Save in and type a File Name.
- Click 'Save' and the screenshot will be saved.*
- Select the Print button. The Print Preview window will appear.
- Adjust the orientation of the screenshot: portrait or landscape, facing left, right, up, or down.
- Zoom in on a portion of an image prior to printing or select the image's scale on the page.
- To print information about the screenshot, select View Title.
- To add a memo for the screenshot, select Page Option.
- Go to Printer Setup to select the printer and manage printer properties.
- Select Print to print the page, or Close to cancel the print.

First Stream & Second Stream

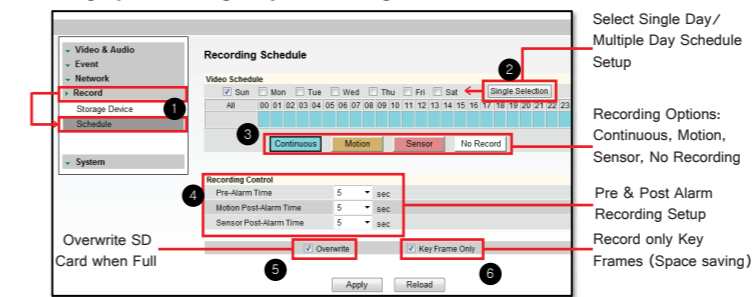


- Configure two different stream settings (First Stream and Second Stream) for monitoring and recording. Second Stream is used to record on Motion Detection and the SD card local backup.
1. Click Setup to adjust the two available stream settings: First Stream and Second Stream. The two streams can differ 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.
 3. 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.

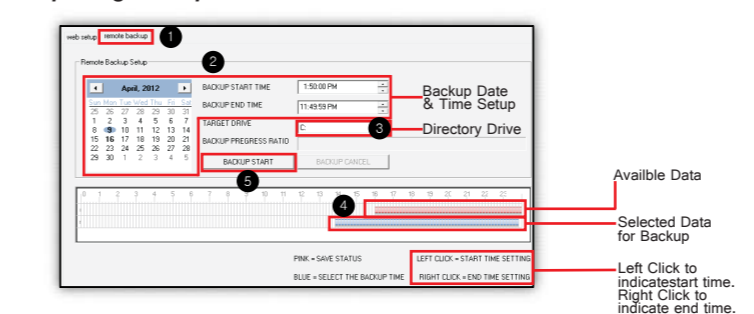
SD Card Installation & Setup

The MEGAPIX cameras offer local backup in case of network loss.

Setting up an Emergency Recording Schedule:



Exporting Backup Data from the SD Card:



SD card is for Recording Loss emergency recording.

Camera Specifications

IMAGE	
Image Sensor	1/2.8" CMOS Sensor (7% Larger Than 1/3" CMOS Sensor)
Minimum Scene Illumination	F1.6 (50IRE): 1.7 Lux [Color] / F1.6 (50IRE): 0.3 Lux [B&W]
LENS	
Focal Length & Maximum Aperture Ratio	4.7-94mm, F1.6-F3.5
Digital Zoom / Optical Zoom	12X / 20X
Sensor In/ Out	3 In/ 1 Out
Audio	
Compression and Sampling Rate	G.711 (8KHz), 1 Line Input & Output- Mono
Pan Tilt Zoom	
Range	360° Pan, 90° Tilt
Preset	255
Sequence	4 (Approximately 5 Minutes for Each Pattern)
Swing	8, 1.4"~180°/Sec
Tour	8 (Max 20 Entries Per Group)
NETWORK	
Interface	Ethernet 10/100 Base-T (RJ-45)
Video Compression Type	H.264, MPEG4, MJPEG
Resolution & Framerate	1920X1080 , Up to 30fps at All Resolutions
Protocol	TCP/IP, HTTP, DHCP, UPNP, RTP, RTSP, DDNS, NTP, UDP, Multicast
Maximum User Access	5 Users
ONVIF Conformance	Yes
Web Viewer	OS: Windows XP / Vista / 7, MAC OS Browser: Internet Explorer, Chrome, Firefox, Safari
Video Management Software	NxMS, DW Spectrum
Memory Slot	24 hours recording to Micro SDHC Card (4GB-32GB) Card Not Included*
ENVIRONMENTAL	
Operating Temperature/ Humidity	-10°C ~ 50°C (-14°F ~ 122°F), Less than 90%
Power Requirement	AC24V, PoE Injector (IEEE802.3af)
Power Consumption	Heater Off: 15W, 1.250mA Heater On: 55W, 4.583mA
MECHANICAL	
Dimensions	260 X 271.5 mm, 10.2 X 10.7 in

*Specification is subject to change without prior notice.