



Optica P218Z HD Outdoor 18x PTZ Speed Dome
Network Camera

User's Manual

Ver. 1.7

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1. Overview

The P218Z HD Speed Dome Network Camera transmits digital video and audio data using wire connection. Live video can be monitored and recorded from window-based computer via network.

The video encoder supports real-time H.264 Full HD resolution. Simultaneous Quad Codecs, H.264 Baseline / Main / High Profile, MJPEG, are available for various network applications via speeding or limited bandwidth. Better image quality and high resolution are delivered by IP support. It eliminates the “combing” effect due to scene change and performs more stabilized image.

With IP solution, multiple and authorized users can view the immediate image from any location through network even using a standard web-browser. It enables users to access and remote the camera without at specific locations.

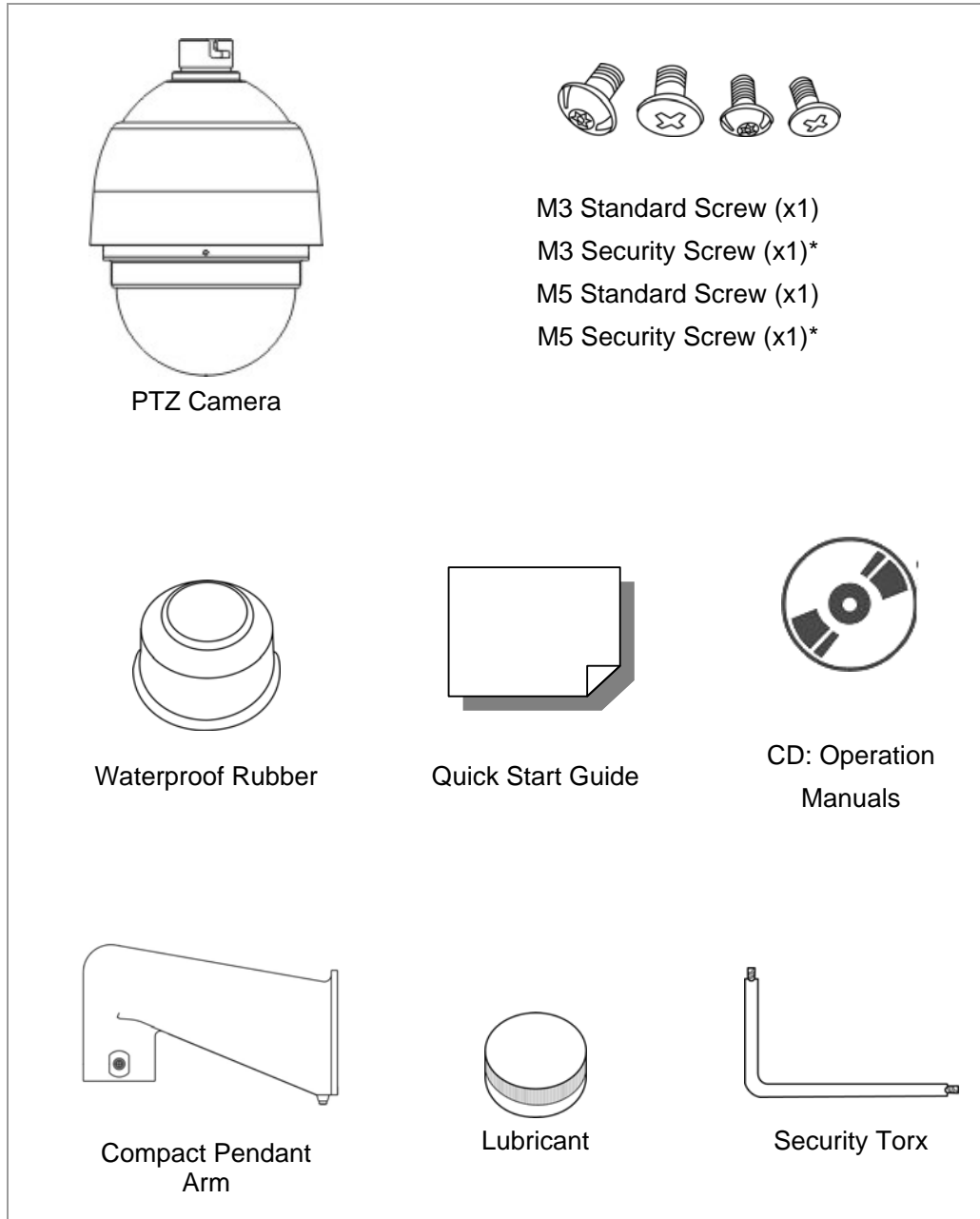
1.1 Features

- 18x Optical Zoom
- 10x Digital Zoom
- Dual Streams, Full HD real-time + D1 real-time
- Quad streams, MJPEG + H.264 x 3 / H.264 x 4 support
- Quad Codecs, H.264 Baseline / Main / High Profile, MJPEG
- Vertical View Mode (Image rotation by 90 degrees)
- Full HD Real-time Resolution
- Two-way Audio Support
- Removable IR Cut Filter
- Motion Detection
- Wide Dynamic Range
- Digital Noise Reduction

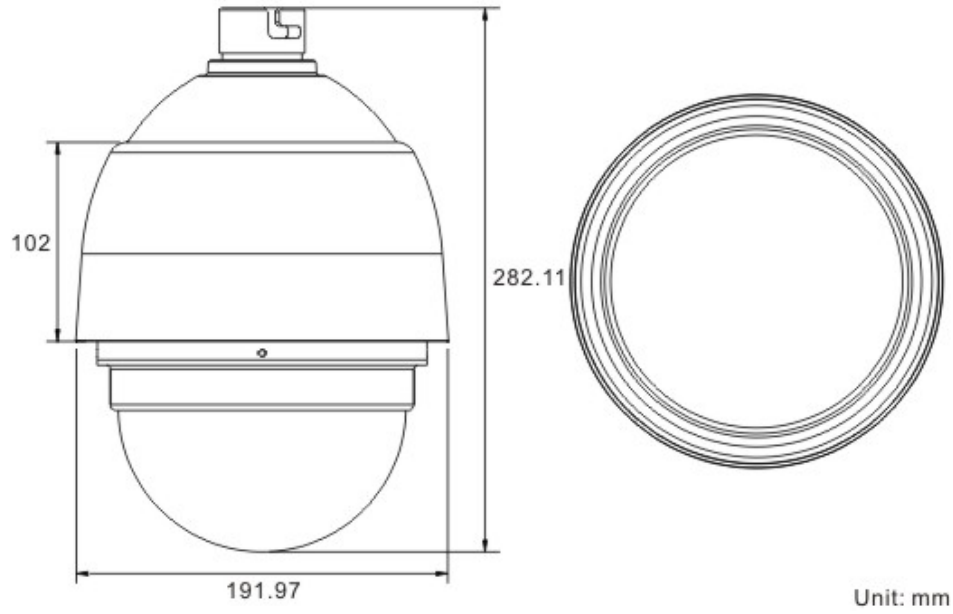
1.2 Package Contents

Please check the box contains the items listed here. If any item is missing or has defects, DO NOT install or operate the product and contact the dealer for assistance.

Outdoor Dome Camera Package



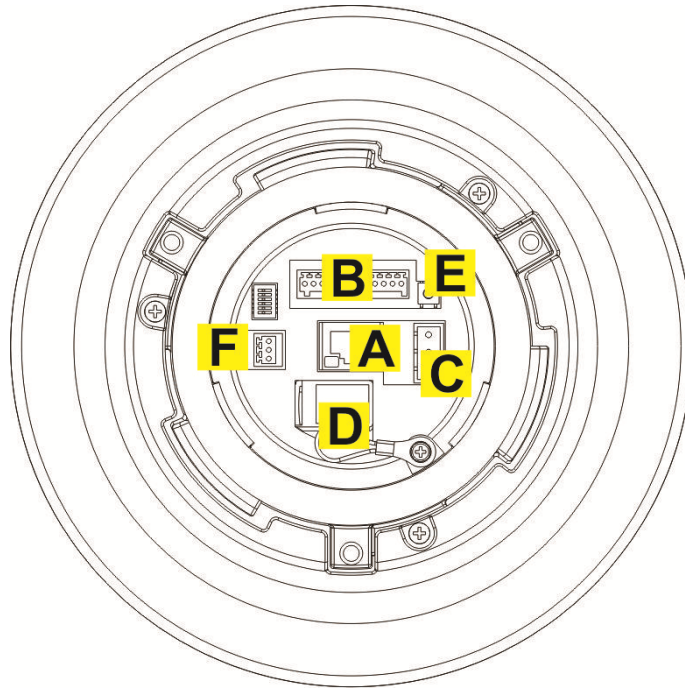
1.3 Dimensions



1.4 Switch / Connector Definition

There are various connectors located on the camera's back plate as shown in the figures below.

Please refer to the diagrams and tables accompanied with for use of each switch / connector.



A	RJ-45 Connector
B	ALARM I/O
C	Power
D	Micro SD Card Slot
E	Factory Reset Button
F	Audio I/O



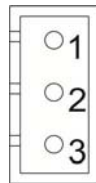
NOTE: DO NOT change the camera's Communication Switch factory default settings.

2. Camera Cabling

Please follow the instructions below to complete P218Z HD Speed Dome Network Camera connection.

2.1 Connect Power

Please refer to the illustrations below to connect power core through the supplied power adaptor. The camera can be powered by Power Over Ethernet Plus / PoE+ (802.3.at) or AC 24V. However, AC 24V power is required to power the Camera heater.



Pin	Definition
1	AC 24_1
2	FG
3	AC 24_2

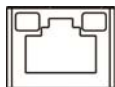
2.2 Connect Ethernet Cable

Use of Category 5 Ethernet cable is recommended for network connection; to have best transmission quality, cable length shall not exceed 100 meters. Connect one end of the Ethernet cable to the RJ-45 connector of the Network Speed Dome Camera, and the other end of the cable to the network switch or PC.



NOTE: In some cases, Ethernet Crossover Cable might be needed when connecting the Network Speed Dome Camera directly to the PC.

Check the status of the link indicator and activity indicator LEDs. If the LEDs are unlit, please check LAN connection.

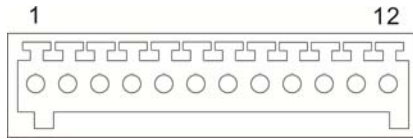


Green Link Light indicates good network connection.

Orange Activity Light flashes for network activity indication.

2.3 Apply Alarm I/O

The P218Z HD Speed Dome Network Camera supports 4 digital alarm inputs and 2 digital alarm outputs. Please make sure the alarm connections are properly wired before starting to configure alarm related settings on this “Application” page. Please refer to the pin definition table below for alarm system wiring.

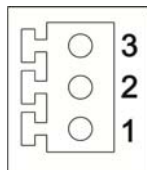


Pin	Definition
1	ALARM_OUT_NO_1
2	ALARM_OUT_NC_1
3	ALARM_OUT_COM_1
4	GND
5	ALARM_OUT_NO_2
6	ALARM_OUT_NC_2

Pin	Definition
7	ALARM_OUT_COM_2
8	GND
9	ALARM_IN_4
10	ALARM_IN_3
11	ALARM_IN_2
12	ALARM_IN_1

2.4 Apply Audio

Please refer to the illustrations below to set up the audio according to the Audio pin definition.



Pin	Definition
1	LINE_OUT
2	GND
3	LINE_IN

3. System Requirements

To perform the P218Z HD Speed Dome Network Camera via web browser, please ensure the PC is in good network connection, and meet system requirement as described below.

Items	Minimum Requirement
Personal Computer	1. Intel® Pentium® IV, 3 GHz or higher, Intel® Core2 Duo, 2 GHz or higher 2. 1 GB RAM or more 3. AGP graphics card 64 MB RAM, DirectDraw
Operating System	Windows VISTA / Windows XP / Windows 7
Web Browser	Internet Explorer 6.0 or later, Firefox, Chrome, Safari
Network Card	10Base-T (10 Mbps) or 100Base-TX (100 Mbps) operation
Viewer	ActiveX control plug-in for Microsoft IE

4. Access Camera

For initial access to the P218Z HD Speed Dome Network Camera, users can search the camera through the installer program: DeviceSearch.exe, which can be found in “Device Search” folder in the supplied CD.

Device Search Software Setup

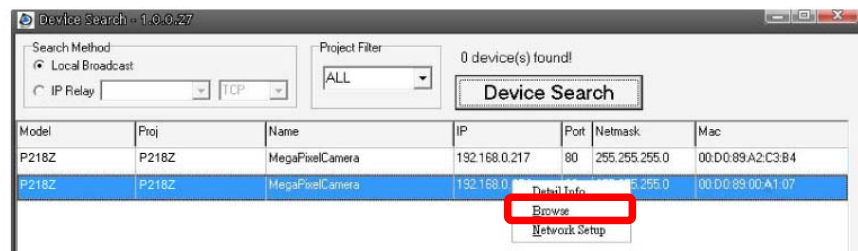
Step 1: Double click on the program Device Search.exe. After its window will appear, click on the <Device Search> button on the top side.

Step 2: The security alert window will pop up. Click on <Unblock> to continue.

Device Search

Step 3: Click on <Device Search> again, and all the finding IP devices will be listed in the page. The IP Camera default IP setting is DHCP.

Step 4: Double click or right click and select <Browse> to access the camera directly via web browser.



Step 5: Then the prompt window of request for entering default username and password will appear for logging in to the Network Speed Dome Camera.

The default login ID and password for the Administrator are:

Login ID	Password
Admin	1234



NOTE: ID and password are case sensitive.



NOTE: It is strongly advised that administrator's password be altered for the security concerns. Refer to [Full HD Speed Dome IP Camera Menu Tree](#) for further details.

Additionally, users can change the camera's network property, either DHCP or Static IP directly in the device finding list. Refer to the following section for changing the Network Speed Dome Camera's network property.

Example of Changing IP Camera's Network Property

Users can directly change a camera's network property, ex. from static IP to DHCP, in the finding device list. The way to change the camera's network property is specified below:

- Step 1:** In the finding device list, click on the camera that is wished to change its network property. On the selected item, right click and select <Network Setup>. Meanwhile, record the camera's MAC address, for future identification.
- Step 2:** The <Network Setup> page will come out. Select <DHCP>, and click on <Apply> button down the page.
- Step 3:** Click on <OK> on the Note of setting change. Wait for one minute to re-search the P218Z HD Speed Dome Network Camera.
- Step 4:** Click on the <Device Search> button to re-search all the devices. Then select the Network Speed Dome Camera with the correct MAC address. Double click on the IP Camera, and the login window will come out.
- Step 5:** Enter User name and Password to access the Network Speed Dome Camera.

Installing Optica Viewer Software Online

For the initial access to the P218Z HD Speed Dome Network Camera, a client program, Optica Viewer, will be automatically installed to the PC when connecting to the Network Speed Dome Camera.

If the Web browser doesn't allow Optica Viewer installation, please check the Internet security settings or ActiveX controls and plug-ins settings (refer to [Internet Security Settings](#)) to continue the process.

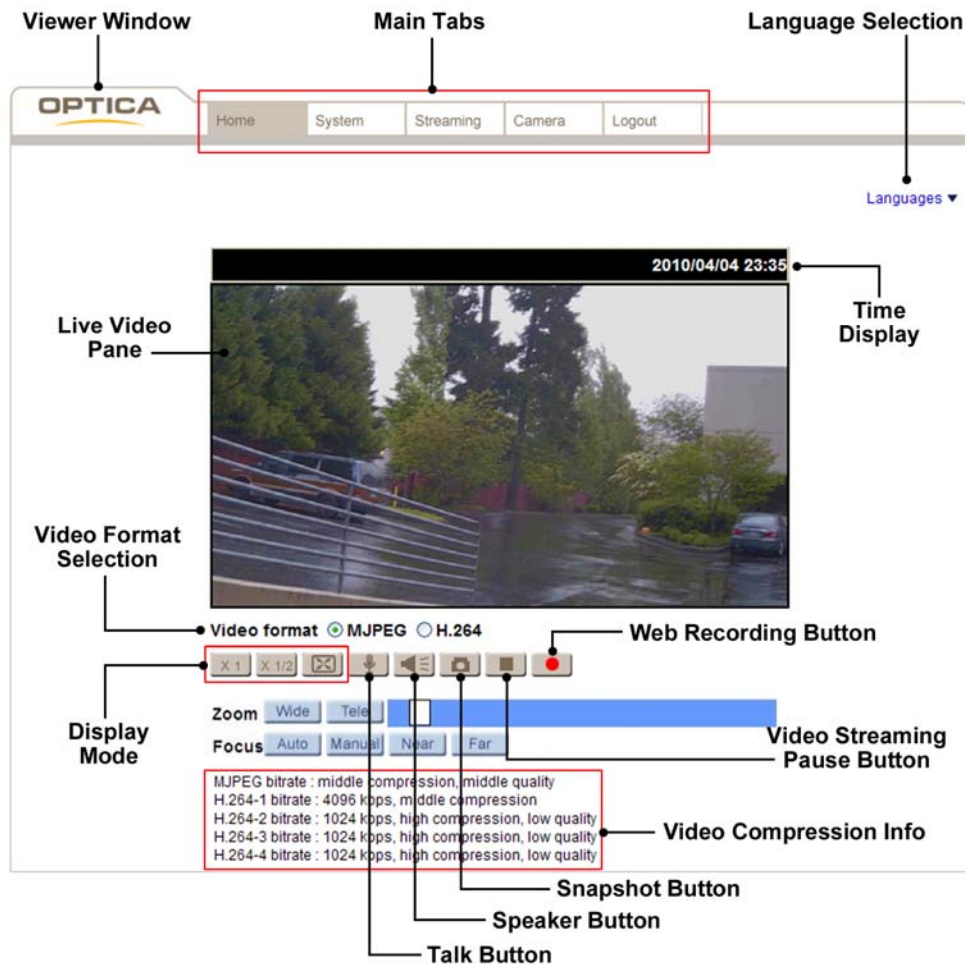
The Information Bar (just below the URL bar) may come out and ask for permission to install the ActiveX Control for displaying video in browser. Right click on the Information Bar and select <Install ActiveX Control...> to allow the installation. Then the security warning window will pop up. Click on <Install> to carry on software installation.

Click on <Finish> to close the Optica Viewer window when download is finished. For the detailed software download procedure, please refer to [Optica Viewer Download Procedure](#).



NOTE: If the Live Video Pane on Home Page can not be shown for users who have installed the Optica Viewer in the PC previously. Please refer to [Upgrade the Optica Viewer](#).

Once login to the P218Z HD Speed Dome Network Camera, users will see the Home page as shown below:



NOTE: Refer to [Full HD PTZ IP Camera Menu Tree](#) for further button / function details.

5. Setup Video Resolution

Users can setup Video Resolution on Video Format page of the user-friendly browser-based configuration interface.

Video Format can be found under this path: **Streaming> Video Format**.

The screenshot displays the OPTICA web interface for configuring video settings. The top navigation bar includes 'Home', 'System', 'Streaming' (highlighted), 'PTZ', and 'Logout'. The left sidebar contains 'Video Format' (highlighted), 'Video Compression', 'Video OCX Protocol', 'Video Frame Rate', and 'Audio'. The main content area is titled 'Video Format' and contains several sections:

- Video Resolution :** A dropdown menu is set to 'H.264 + H.264'. Below it, 'H.264-1 format' is set to '1920 x 1080 (30 fps)' and 'H.264-2 format' is set to '720 x 480 (30 fps)'. 'BNC support' is 'N/A'. A 'Save' button is present.
- Note :** A message states: 'Image attachment by FTP or E-mail will be available only while MJPEG streaming is selected.'
- Text Overlay Settings :** Checkboxes for 'Include date' and 'Include time' are checked. 'Include text string' is checked and set to 'P218Z'. A 'Save' button is present.
- Video Rotate Type :** A dropdown menu is set to 'Normal video'. A 'Save' button is present.
- GOV Settings :** Input fields for 'H.264-1 GOV Length', 'H.264-2 GOV Length', 'H.264-3 GOV Length', and 'H.264-4 GOV Length' are all set to '30'. A 'Save' button is present.
- H.264 Profile :** Dropdown menus for 'H.264-1', 'H.264-2', 'H.264-3', and 'H.264-4' are all set to 'Main profile'. A 'Save' button is present.

The default value of Video Resolution is H.264- 1920 x 1080 (30 fps) + H.264 720 x 480 (30 fps)

For more Video Resolution combination detail, please refer to [Appendix D: Video Resolution](#). Click on <Save> to confirm the setting.

Appendix A: Technical Specifications

Items	P218Z Model	
Camera		
Image Sensor	1/2.8" Sony Progressive CMOS	
Optical Zoom	18x	
Digital Zoom	1 ~ 10x variable	
Minimum illumination	0.05 (Color), 0.01 lux (B / W) @ F1.6	
Focal Length	4.7 ~ 84.6 mm	
Focus Mode	Auto / Manual	
White Balance	Auto / Indoor / Outdoor / ATW / Manual	
Iris Control	Auto / Manual	
Electronic Shutter	1/1 ~ 1/10k sec.	
AGC control	Auto / Manual	
Backlight Compensation	On / Off	
Operation		
Pan Travel	360° endless	
Tilt Travel	- 10° ~ 190°	
Manual Speed	0.5° ~ 90° /s	
Presets	256	
Preset Accuracy	0.225°	
Preset Speed	5° ~ 400° /s	
Sequence	8	
Auto Pan	4	
Cruise	8	
Privacy Mask	16	
Proportional Pan & Tilt	On / Off (Pan and tilt speed proportional to zoom ratio)	
Resume after Power loss	Yes	
Home Function	Preset / Sequence / Auto Pan / Cruise	
Auto Flip	Image / Mechanical / Off	
Motion Detection	On / Off	
Wide Dynamic Range	On / Off	
Day / Night: IR Cut Filter	Auto / Manual	
Image Rotation	Flip / Mirror / Inverse / Portrait	
Digital Noise Reduction	On / Off	
Network		
Video Compression	H.264 / MJPEG	
Video Streaming	Quad Streams - H.264*4 / MJPEG + H.264*3	
Video Resolution	1080P / SXGA / 720P / XGA / SVGA / D1 / VGA / CIF	
Frame Rate	1080P (30 fps) + D1 (30 fps) 720P (60 fps) + CIF (60 fps)	
Audio Compression	G.711 / G.726 ADPCM / AAC	
Audio Streaming	Two-way Audio	
Networking	10 / 100 Mb Ethernet (RJ-45)	
Protocols	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, IEEE 802.1x, QoS, ONVIF	
Security	User Account and Password Protection	
Alarm	Input	4 Sets
	Output	2 Sets
Alarm Reaction	Preset / Sequence / Auto Pan / Cruise	
Micro SD	microSDHC 32GB support	
Supported Web Browser	Internet Explorer (6.0+) / Chrome / Firefox / Safari	

General	
Environment	Indoor / Outdoor
Operating Temperature	- 40°C ~ 50°C (- 40°F ~ 122°F)
Dimension	∅ 191.97 x 282.11 mm (∅ 7.55 x 11.1 in.)
Weight	2.3 kg (5.11 lb) (not including Pendant Arm)
Power Source	PoE+ (w/o Heater) / AC 24V ± 10% (@ 3A)
Power Consumption	20 W (50 W with Heater)
Regulatory	CE / FCC / RoHS / IP66

Appendix B: Delete the Existing Optica Viewer

For users who have installed the Optica Viewer in the PC previously, please first remove the existing Optica Viewer from the PC before accessing to the P218Z HD Speed Dome Network Camera.

Deleting the Optica Viewer

Activate <Control Panel>, and then double click on <Add or Remove Programs>. In the <Currently installed programs> list, select <Optica Viewer> and click on the button <Remove> to uninstall the existing Optica Viewer.

Deleting Temporary Internet Files

To improve browser performance, it is suggested to clean up the all the files in the Temporary Internet Files.

The procedure is as follows:

Step 1: Click on the <Tools> tab and select the option <Internet Options>.

Step 2: Click on <Delete> button under <Browsing history> section. Then click on the <Delete Files> button under the <Temporary Internet files> section.

Step 3: A confirmation window will pop up. Click on <Yes> to start deleting the files.

Appendix C: Setup Internet Security

If ActiveX control installation is blocked, please either set Internet security level to default or change ActiveX controls and plug-ins settings.

Internet Security Level: Default

Step 1: Start the Internet Explorer (IE).

Step 2: Click on the <Tools> tab on the menu bar and select <Internet Options>.

Step 3: Click on the <Security> tab, and select <Internet> zone.

Step 4: Down the page, click on the <Default Level> button and click on <OK> to confirm the setting. Close the browser window, and restart a new one later to access the Network Speed Dome Camera.

ActiveX Controls and Plug-ins Settings

Step 1: Repeat **Step 1~3** of the previous section above.

Step 2: Down the page, click on the <Custom Level> button to change ActiveX controls and plug-ins settings. The Security Settings window will pop up.

Step 3: Under <ActiveX controls and plug-ins>, set **ALL** items (as listed below) to <Enable> or <Prompt>. Please note that the items vary by IE version.

ActiveX controls and plug-ins settings:

1. Allow previously unused ActiveX controls to run without prompt.
2. Allow Scriptlets.
3. Automatic prompting for ActiveX controls.
4. Binary and script behaviors.
5. Display video and animation on a webpage that does not use external media player.
6. Download signed ActiveX controls.
7. Download unsigned ActiveX controls.
8. Initialize and script ActiveX controls not marked as safe for scripting.
9. Run ActiveX controls and plug-ins.
10. Script ActiveX controls marked safe for scripting.

Step 4: Click on <OK> to accept the settings and close the Security Settings window.

Step 5: Click on <OK> to close the Internet Options screen.

Step 6: Close the browser window, and restart a new one later for accessing the Camera.

Appendix D: Video Resolution

Quad Stream

H.264 + H.264 + H.264 + H.264 / MJPEG				
H.264-1	H.264-2	H.264-3	H.264-4 / MJPEG	
1920 x 1080 (15 fps)	1280 x 1024 (15 fps)	1280 x 720 (15 fps)	720 x 480 (15 fps)	
			640 x 480 (15 fps)	
			352 x 240 (30 fps)	
		800 x 600 (15 fps)	800 x 600 (30 fps)	720 x 480 (30 fps)
				640 x 480 (30 fps)
				352 x 240 (30 fps)
		720 x 480 (15 fps)	720 x 480 (30 fps)	720 x 480 (30 fps)
				640 x 480 (30 fps)
	352 x 240 (30 fps)			
	720 x 480 (30 fps)	640 x 480 (30 fps)	640 x 480 (30 fps)	
			352 x 240 (30 fps)	
			352 x 240 (30 fps)	
	640 x 480 (30 fps)	640 x 480 (30 fps)	640 x 480 (30 fps)	
			352 x 240 (30 fps)	
			352 x 240 (30 fps)	
	352 x 240 (30 fps)	352 x 240 (30 fps)	352 x 240 (30 fps)	
			352 x 240 (30 fps)	
			352 x 240 (30 fps)	
	1280 x 720 (15 fps)	1280 x 720 (15 fps)	800 x 600 (30 fps)	720 x 480 (30 fps)
				640 x 480 (30 fps)
				352 x 240 (30 fps)
		800 x 600 (30 fps)	800 x 600 (30 fps)	720 x 480 (30 fps)
				640 x 480 (30 fps)
				352 x 240 (30 fps)
		720 x 480 (30 fps)	720 x 480 (30 fps)	720 x 480 (30 fps)
				640 x 480 (30 fps)
	640 x 480 (30 fps)			
	640 x 480 (30 fps)	640 x 480 (30 fps)	640 x 480 (30 fps)	
			352 x 240 (30 fps)	
			352 x 240 (30 fps)	
	1280 x 720 (30 fps)	1280 x 720 (30 fps)	640 x 480 (30 fps)	720 x 480 (30 fps)
				640 x 480 (30 fps)
				352 x 240 (30 fps)
1024 x 768 (15 fps)	1024 x 768 (15 fps)	800 x 600 (30 fps)	720 x 480 (30 fps)	
			640 x 480 (30 fps)	
			640 x 480 (30 fps)	
720 x 480 (30 fps)	720 x 480 (30 fps)	720 x 480 (30 fps)	720 x 480 (30 fps)	
			640 x 480 (30 fps)	
			640 x 480 (30 fps)	
1024 x 768 (30 fps)	1024 x 768 (30 fps)	800 x 600 (30 fps)	352 x 240 (30 fps)	
			720 x 480 (30 fps)	
			352 x 240 (30 fps)	
800 x 600 (30 fps)	800 x 600 (30 fps)	800 x 600 (30 fps)	720 x 480 (30 fps)	
			640 x 480 (30 fps)	
			352 x 240 (30 fps)	
720 x 480 (30 fps)	720 x 480 (30 fps)	720 x 480 (30 fps)	720 x 480 (30 fps)	
			640 x 480 (30 fps)	
			352 x 240 (30 fps)	
640 x 480 (30 fps)	640 x 480 (30 fps)	640 x 480 (30 fps)	640 x 480 (30 fps)	
			352 x 240 (30 fps)	
			352 x 240 (30 fps)	
1920 x 1080 (30 fps)	352 x 240 (30 fps)	352 x 240 (30 fps)	352 x 240 (30 fps)	

H.264 + H.264 + H.264 + H.264 / MJPEG				
H.264-1	H.264-2	H.264-3	H.264-4 / MJPEG	
1280 x 1024 (15 fps)	1280 x 1024 (15 fps)	1280 x 720 (15 fps)	720 x 480 (30 fps)	
		1280 x 720 (30 fps)	640 x 480 (30 fps)	
		800 x 600 (30 fps)	352 x 240 (30 fps)	
			720 x 480 (30 fps)	720 x 480 (30 fps)
			640 x 480 (30 fps)	640 x 480 (30 fps)
		640 x 480 (30 fps)	640 x 480 (30 fps)	
	1280 x 1024 (30 fps)	720 x 480 (30 fps)	352 x 240 (30 fps)	
		640 x 480 (30 fps)	352 x 240 (30 fps)	
		352 x 240 (30 fps)	352 x 240 (30 fps)	
	1280 x 720 (15 fps)	1280 x 720 (30 fps)	720 x 480 (30 fps)	
			640 x 480 (30 fps)	
	1280 x 720 (30 fps)	800 x 600 (30 fps)	720 x 480 (30 fps)	
			640 x 480 (30 fps)	
			352 x 240 (30 fps)	
			352 x 240 (30 fps)	
		720 x 480 (30 fps)	720 x 480 (30 fps)	
			640 x 480 (30 fps)	
			640 x 480 (30 fps)	
			352 x 240 (30 fps)	
	1024 x 768 (30 fps)	800 x 600 (30 fps)	720 x 480 (30 fps)	
			640 x 480 (30 fps)	
			352 x 240 (30 fps)	
		720 x 480 (30 fps)	720 x 480 (30 fps)	
			640 x 480 (30 fps)	
352 x 240 (30 fps)				
800 x 600 (30 fps)	800 x 600 (30 fps)	720 x 480 (30 fps)		
		640 x 480 (30 fps)		
	720 x 480 (30 fps)	720 x 480 (30 fps)		
		640 x 480 (30 fps)		
1280 x 1024 (30 fps)	1024 x 768 (30 fps)	352 x 240 (30 fps)		
	800 x 600 (30 fps)	800 x 600 (30 fps)		
		720 x 480 (30 fps)		
		640 x 480 (30 fps)		
		352 x 240 (30 fps)		
	720 x 480 (30 fps)	720 x 480 (30 fps)	720 x 480 (30 fps)	
			640 x 480 (30 fps)	
			352 x 240 (30 fps)	
		640 x 480 (30 fps)		
		352 x 240 (30 fps)		
	640 x 480 (30 fps)	640 x 480 (30 fps)		
		352 x 240 (30 fps)		
	352 x 240 (30 fps)	352 x 240 (30 fps)		
	1280 x 720 (15 fps)	1280 x 720 (15 fps)	1280 x 720 (30 fps)	
720 x 480 (30 fps)				
1280 x 720 (30 fps)		1280 x 720 (30 fps)	640 x 480 (30 fps)	
			352 x 240 (30 fps)	
		800 x 600 (30 fps)	720 x 480 (30 fps)	
			640 x 480 (30 fps)	
		720 x 480 (30 fps)	720 x 480 (30 fps)	
			640 x 480 (30 fps)	
1024 x 768 (30 fps)		800 x 600 (30 fps)	720 x 480 (30 fps)	
			640 x 480 (30 fps)	

H.264 + H.264 + H.264 + H.264 / MJPEG				
H.264-1	H.264-2	H.264-3	H.264-4 / MJPEG	
1280 x 720 (30 fps)	1280 x 720 (30 fps)	800 x 600 (30 fps)	352 x 240 (30 fps)	
		720 x 480 (30 fps)	352 x 240 (60 fps)	
		640 x 480 (30 fps)	352 x 240 (60 fps)	
		352 x 240 (60 fps)	352 x 240 (60 fps)	
	1024 x 768 (30 fps)	800 x 600 (30 fps)	800 x 600 (30 fps)	352 x 240 (30 fps)
			720 x 480 (30 fps)	720 x 480 (30 fps)
		640 x 480 (30 fps)	640 x 480 (30 fps)	640 x 480 (30 fps)
			352 x 240 (60 fps)	352 x 240 (60 fps)
			352 x 240 (60 fps)	352 x 240 (60 fps)
	800 x 600 (30 fps)	800 x 600 (30 fps)	800 x 600 (30 fps)	720 x 480 (30 fps)
			720 x 480 (30 fps)	640 x 480 (30 fps)
		720 x 480 (60 fps)	720 x 480 (60 fps)	352 x 240 (60 fps)
			640 x 480 (30 fps)	640 x 480 (60 fps)
			640 x 480 (60 fps)	352 x 240 (60 fps)
			640 x 480 (60 fps)	352 x 240 (60 fps)
	800 x 600 (60 fps)	352 x 240 (60 fps)	352 x 240 (60 fps)	
	720 x 480 (30 fps)	720 x 480 (30 fps)	720 x 480 (30 fps)	720 x 480 (60 fps)
			720 x 480 (60 fps)	640 x 480 (60 fps)
		640 x 480 (30 fps)	640 x 480 (60 fps)	352 x 240 (60 fps)
	720 x 480 (60 fps)	640 x 480 (60 fps)	352 x 240 (60 fps)	352 x 240 (60 fps)
352 x 240 (60 fps)		352 x 240 (60 fps)	352 x 240 (60 fps)	
640 x 480 (30 fps)	640 x 480 (30 fps)	640 x 480 (60 fps)	640 x 480 (60 fps)	
640 x 480 (60 fps)	640 x 480 (60 fps)	352 x 240 (60 fps)	352 x 240 (60 fps)	
352 x 240 (60 fps)	352 x 240 (60 fps)	352 x 240 (60 fps)	352 x 240 (60 fps)	
1024 x 768 (30 fps)	1024 x 768 (30 fps)	800 x 600 (30 fps)	720 x 480 (30 fps)	
			640 x 480 (30 fps)	
			352 x 240 (30 fps)	
		720 x 480 (30 fps)	720 x 480 (30 fps)	720 x 480 (30 fps)
			640 x 480 (30 fps)	640 x 480 (30 fps)
	800 x 600 (30 fps)	800 x 600 (30 fps)	800 x 600 (30 fps)	352 x 240 (30 fps)
			720 x 480 (30 fps)	352 x 240 (30 fps)
		720 x 480 (30 fps)	720 x 480 (30 fps)	720 x 480 (30 fps)
			640 x 480 (30 fps)	640 x 480 (30 fps)
			352 x 240 (30 fps)	352 x 240 (30 fps)
			352 x 240 (30 fps)	352 x 240 (30 fps)
	720 x 480 (30 fps)	720 x 480 (30 fps)	720 x 480 (30 fps)	720 x 480 (30 fps)
			640 x 480 (30 fps)	640 x 480 (30 fps)
		640 x 480 (30 fps)	640 x 480 (30 fps)	352 x 240 (30 fps)
			352 x 240 (30 fps)	352 x 240 (30 fps)
			352 x 240 (30 fps)	352 x 240 (30 fps)
	640 x 480 (30 fps)	640 x 480 (30 fps)	640 x 480 (30 fps)	640 x 480 (30 fps)
			352 x 240 (30 fps)	352 x 240 (30 fps)
		352 x 240 (30 fps)	352 x 240 (30 fps)	352 x 240 (30 fps)

H.264 + H.264 + H.264 + H.264 / MJPEG				
H.264-1	H.264-2	H.264-3	H.264-4 / MJPEG	
800 x 600 (30 fps)	800 x 600 (30 fps)	800 x 600 (60 fps)	352 x 240 (60 fps)	
		720 x 480 (60 fps)	720 x 480 (60 fps)	
		640 x 480 (60 fps)	640 x 480 (60 fps)	
	800 x 600 (60 fps)	800 x 600 (60 fps)	720 x 480 (60 fps)	352 x 240 (60 fps)
			640 x 480 (60 fps)	352 x 240 (60 fps)
	720 x 480 (30 fps)	720 x 480 (30 fps)	720 x 480 (60 fps)	720 x 480 (60 fps)
			640 x 480 (60 fps)	640 x 480 (60 fps)
	720 x 480 (60 fps)	720 x 480 (60 fps)	720 x 480 (60 fps)	352 x 240 (60 fps)
			640 x 480 (60 fps)	640 x 480 (60 fps)
		640 x 480 (60 fps)	640 x 480 (60 fps)	640 x 480 (60 fps)
800 x 600 (60 fps)	800 x 600 (60 fps)	352 x 240 (60 fps)	352 x 240 (60 fps)	
	720 x 480 (60 fps)	352 x 240 (60 fps)	352 x 240 (60 fps)	
	640 x 480 (60 fps)	640 x 480 (60 fps)	352 x 240 (60 fps)	
		352 x 240 (60 fps)	352 x 240 (60 fps)	
	352 x 240 (60 fps)	352 x 240 (60 fps)	352 x 240 (60 fps)	
720 x 480 (30 fps)	720 x 480 (60 fps)	720 x 480 (60 fps)	720 x 480 (60 fps)	
		640 x 480 (60 fps)	640 x 480 (60 fps)	
	640 x 480 (60 fps)	640 x 480 (60 fps)	640 x 480 (60 fps)	
720 x 480 (60 fps)	720 x 480 (60 fps)	720 x 480 (60 fps)	352 x 240 (60 fps)	
		640 x 480 (60 fps)	352 x 240 (60 fps)	
		352 x 240 (60 fps)	352 x 240 (60 fps)	
	640 x 480 (60 fps)	640 x 480 (60 fps)	352 x 240 (60 fps)	
		352 x 240 (30 fps)	352 x 240 (60 fps)	
352 x 240 (60 fps)	352 x 240 (30 fps)	352 x 240 (60 fps)		
640 x 480 (30 fps)	640 x 480 (60 fps)	640 x 480 (60 fps)	640 x 480 (60 fps)	
640 x 480 (60 fps)	640 x 480 (60 fps)	640 x 480 (60 fps)	352 x 240 (60 fps)	
		352 x 240 (60 fps)	352 x 240 (60 fps)	
	352 x 240 (60 fps)	352 x 240 (60 fps)	352 x 240 (60 fps)	
352 x 240 (60 fps)	352 x 240 (60 fps)	352 x 240 (60 fps)	352 x 240 (60 fps)	

Triple Stream

H.264-1 + H.264-2 + H.264-3 / MJPEG		
H.264-1	H.264-2	H.264-3 / MJPEG
1920 x 1080 (15 fps)	1280 x 1024 (15 fps)	1280 x 720 (15 fps)
		800 x 600 (30 fps)
		720 x 480 (30 fps)
		640 x 480 (30 fps)
		352 x 240 (30 fps)
	1280 x 720 (15 fps)	1280 x 720 (30 fps)
		800 x 600 (30 fps)
	1280 x 720 (30 fps)	720 x 480 (30 fps)
		640 x 480 (30 fps)
		352 x 240 (30 fps)
	1024 x 768 (30 fps)	800 x 600 (30 fps)
		720 x 480 (30 fps)
		640 x 480 (30 fps)
		352 x 240 (30 fps)
800 x 600 (30 fps)	800 x 600 (30 fps)	
	720 x 480 (30 fps)	
	640 x 480 (30 fps)	
	352 x 240 (30 fps)	
720 x 480 (30 fps)	720 x 480 (30 fps)	
	640 x 480 (30 fps)	
	352 x 240 (30 fps)	
640 x 480 (30 fps)	640 x 480 (30 fps)	
	352 x 240 (30 fps)	
1920 x 1080 (30 fps)	352 x 240 (30 fps)	352 x 240 (30 fps)
1280 x 1024 (15 fps)	1280 x 1024 (15 fps)	1280 x 720 (30 fps)
		800 x 600 (30 fps)
	1280 x 1024 (30 fps)	720 x 480 (30 fps)
		640 x 480 (30 fps)
		352 x 240 (30 fps)
	1280 x 720 (15 fps)	1280 x 720 (30 fps)
	1280 x 720 (30 fps)	800 x 600 (30 fps)
720 x 480 (30 fps)		
1024 x 768 (30 fps)	640 x 480 (30 fps)	
	800 x 600 (30 fps)	
1280 x 1024 (30 fps)	1280 x 720 (30 fps)	720 x 480 (30 fps)
		352 x 240 (30 fps)
	1024 x 768 (30 fps)	640 x 480 (30 fps)
		352 x 240 (30 fps)
		800 x 600 (30 fps)
	800 x 600 (30 fps)	720 x 480 (30 fps)
		720 x 480 (30 fps)
		640 x 480 (30 fps)
		352 x 240 (30 fps)
	720 x 480 (30 fps)	720 x 480 (30 fps)
640 x 480 (30 fps)		
352 x 240 (30 fps)		
640 x 480 (30 fps)	640 x 480 (30 fps)	
	352 x 240 (30 fps)	
352 x 240 (30 fps)	352 x 240 (30 fps)	352 x 240 (30 fps)
1280 x 720 (15 fps)	1280 x 720 (30 fps)	1280 x 720 (30 fps)

H.264-1 + H.264-2 + H.264-3 / MJPEG			
H.264-1	H.264-2	H.264-3 / MJPEG	
1280 x 720 (30 fps)	1280 x 720 (30 fps)	800 x 600 (30 fps)	
		720 x 480 (30 fps)	
		640 x 480 (30 fps)	
	1280 x 720 (60 fps)	1024 x 768 (30 fps)	352 x 240 (60 fps)
			800 x 600 (30 fps)
	800 x 600 (30 fps)	800 x 600 (30 fps)	720 x 480 (30 fps)
			640 x 480 (30 fps)
			352 x 240 (30 fps)
	800 x 600 (60 fps)	800 x 600 (60 fps)	800 x 600 (60 fps)
	720 x 480 (60 fps)	720 x 480 (60 fps)	720 x 480 (60 fps)
640 x 480 (60 fps)			
352 x 240 (60 fps)			
640 x 480 (60 fps)			
640 x 480 (60 fps)	640 x 480 (60 fps)	640 x 480 (60 fps)	
		352 x 240 (60 fps)	
1280 x 720 (60 fps)	352 x 240 (60 fps)	352 x 240 (60 fps)	
1024 x 768 (30 fps)	1024 x 768 (30 fps)	800 x 600 (30 fps)	
		720 x 480 (30 fps)	
		640 x 480 (30 fps)	
		352 x 240 (30 fps)	
	800 x 600 (30 fps)	800 x 600 (30 fps)	800 x 600 (30 fps)
			720 x 480 (30 fps)
			640 x 480 (30 fps)
	720 x 480 (30 fps)	720 x 480 (30 fps)	352 x 240 (30 fps)
			720 x 480 (30 fps)
			640 x 480 (30 fps)
640 x 480 (30 fps)	640 x 480 (30 fps)	640 x 480 (30 fps)	
		352 x 240 (30 fps)	
352 x 240 (30 fps)	352 x 240 (30 fps)	352 x 240 (30 fps)	
800 x 600 (30 fps)	800 x 600 (60 fps)	800 x 600 (60 fps)	
		720 x 480 (60 fps)	
		640 x 480 (60 fps)	
800 x 600 (60 fps)	800 x 600 (60 fps)	352 x 240 (60 fps)	
		720 x 480 (60 fps)	
		640 x 480 (60 fps)	
		352 x 240 (60 fps)	
720 x 480 (60 fps)	720 x 480 (60 fps)	640 x 480 (60 fps)	
		352 x 240 (60 fps)	
		720 x 480 (60 fps)	
		640 x 480 (60 fps)	
640 x 480 (60 fps)	640 x 480 (60 fps)	352 x 240 (60 fps)	
		640 x 480 (60 fps)	
		352 x 240 (60 fps)	
352 x 240 (60 fps)	352 x 240 (60 fps)	352 x 240 (60 fps)	

Dual Stream

H.264-1 + H.264-2 / MJPEG		
H.264-1	H.264-2 / MJPEG	BNC SUPPORT
1920 x 1080 (15 fps)	1920 x 1080 (15 fps)	-
	1280 x 1024 (30 fps)	-
	1280 x 720 (30 fps)	-
	1024 x 768 (30 fps)	-
	800 x 600 (30 fps)	-
1920 x 1080 (30 fps)	720 x 480 (30 fps)	-
	640 x 480 (30 fps)	-
	352 x 240 (30 fps)	-
1280 x 1024 (30 fps)	1280 x 1024 (15 fps)	-
	1280 x 720 (30 fps)	-
	1024 x 768 (30 fps)	-
	800 x 600 (30 fps)	-
	720 x 480 (30 fps)	-
	640 x 480 (30 fps)	-
	352 x 240 (30 fps)	-
1280 x 720 (30 fps)	1280 x 720 (30 fps)	-
	1024 x 768 (30 fps)	-
	800 x 600 (60 fps)	-
	720 x 480 (60 fps)	-
1280 x 720 (60 fps)	640 x 480 (60 fps)	-
	352 x 240 (60 fps)	-
1024 x 768 (30 fps)	1024 x 768 (30 fps)	-
	800 x 600 (30 fps)	-
	720 x 480 (30 fps)	-
	640 x 480 (30 fps)	-
	352 x 240 (30 fps)	-
800 x 600 (60 fps)	800 x 600 (60 fps)	-
	720 x 480 (60 fps)	-
	640 x 480 (60 fps)	-
	352 x 240 (60 fps)	-
720 x 480 (60 fps)	720 x 480 (60 fps)	-
	640 x 480 (60 fps)	-
	352 x 240 (60 fps)	-
640 x 480 (60 fps)	640 x 480 (60 fps)	-
	352 x 240 (60 fps)	-
352 x 240 (60 fps)	352 x 240 (60 fps)	-

Single Stream

H.264 Only	BNC SUPPORT
1920 x 1080 (30 fps) Low Latency	-
1920 x 1080 (30 fps)	-
1280 x 1024 (30 fps)	-
1280 x 720 (60 fps)	-
1024 x 768 (30 fps)	-
800 x 600 (60 fps)	-
720 x 480 (60 fps)	-
640 x 480 (60 fps)	-
352 x 240 (60 fps)	-

MJPEG Only	BNC SUPPORT
1920 x 1080 (30 fps)	-
1280 x 1024 (30 fps)	-
1280 x 720 (30 fps)	-
1024 x 768 (30 fps)	-
800 x 600 (60 fps)	-
720 x 480 (60 fps)	-
640 x 480 (60 fps)	-
352 x 240 (60 fps)	-