Integration Note

Manufacturer:	Axis
Model Number(s):	P5512PTZ
Minimum Core Module Version:	6.1.34
Comments:	Camera Firmware 5.40.9.6 – Firmware to fix vulnerability released 7/2016
Document Revision Date:	07/15/2016

OVERVIEW AND SUPPORTED FEATURES

Installing this Axis camera can be broken down into the following steps:

1. Install cameras at desired locations, and pull power and Cat5 cabling as needed. Refer to the Axis documentation for mounting details.
2. Connect the cameras electrically to the home network and configure the cameras. See **Camera Configuration** below.
3. Integrate the cameras into the **g!** system and test proper operation. This step is outlined in **g! Configuration Details**.

THE AXIS CAMERAS SUPPORT THE FOLLOWING FEATURES:

Pan / Tilt / Zoom: The Axis P5512PTZ can be turned to see various locations and zoom in and out.

Presets: Some Panasonic cameras support presets, allowing the user to store predefined locations such as a driveway or pool. This feature is supported in the driver, and is configurable using a dropdown menu.

Motion Detection: The Axis P5512PTZ supports motion detection to trigger events in the **g!** system.

Image Flip: The camera can be mounted with its base up or down, and the image will appear normal. Simply set the "flip 180" option in the **g!** Configurator.

One-Way Audio: The Axis P5512PTZ supports a Listen function for audio. This is supported on applicable models.

THESE CAMERAS DO NOT SUPPORT THE FOLLOWING FEATURES:

Input/Output: These cameras include an I/O connector for sensor inputs and alarm outputs. These are not supported by the **g!** system at this time.

Two-Way Audio: Two way audio (speaking from a touch screen and outputting from Camera) is not supported by the **g!** system at this time.

Any feature not specifically noted as "supported" is not supported.

ELAN Home Systems ● 1690 Corporate Circle ● Petaluma, CA 94954 USA
tech support: 800.622.3526 • main: 760.710.0990 • sales: 877.289.3526 • email: elan@elanhomesystems.com

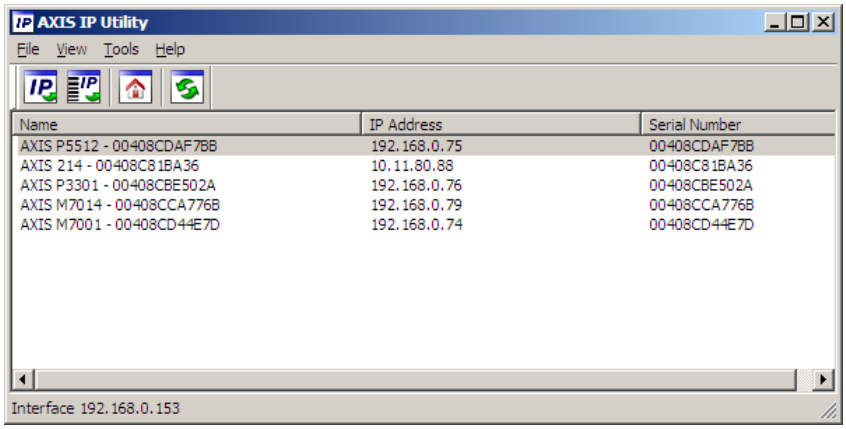
CAMERA CONFIGURATION

The camera configuration is done with software provided by Axis, which must be run from a computer with Windows also connected to the same network as the camera. Alternatively the camera can be setup by searching for it on the network and browsing to its IP to access its web server setup pages.

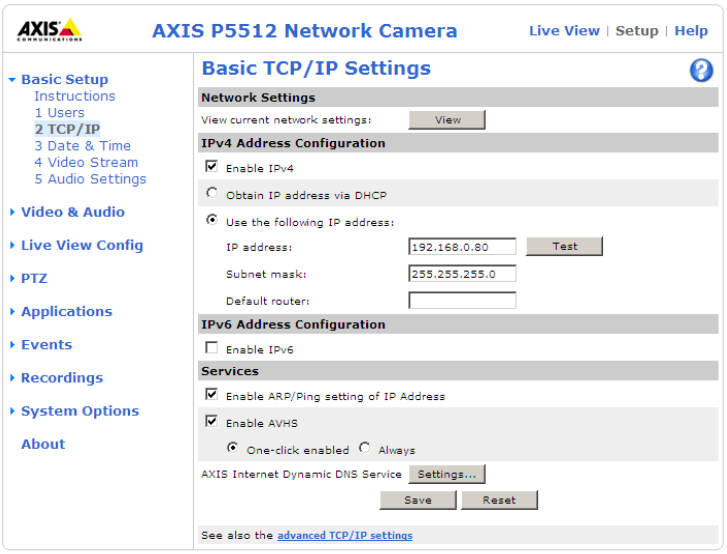
The software program from Axis is the **AXIS IP Utility**, and the version used for this document is shown in the header above.

CAMERA SETTINGS

1. Start the AXIS IP Utility Setup Program.
2. Wait a moment to allow the software to find the camera: the following screen appears, then select the desired camera.

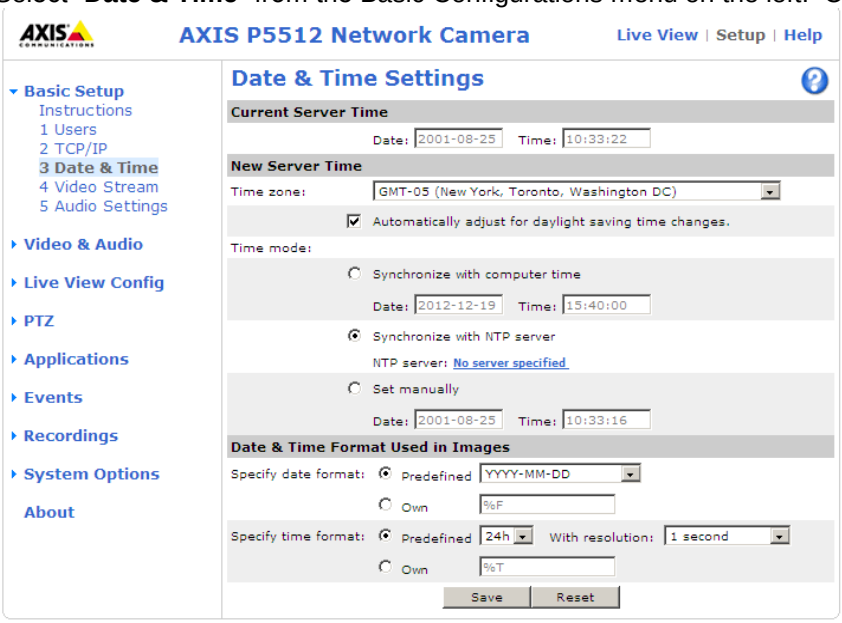


3. Click the “Home” button in the utility to get to the camera’s configuration screen. You will be prompted for a user name and password. The default user name is “root”, and the default password is “root”
4. Click the “Setup” Link in the upper right corner of the home page.
5. Select “**TCP/IP**” under “**Basic Setup**” on the left.

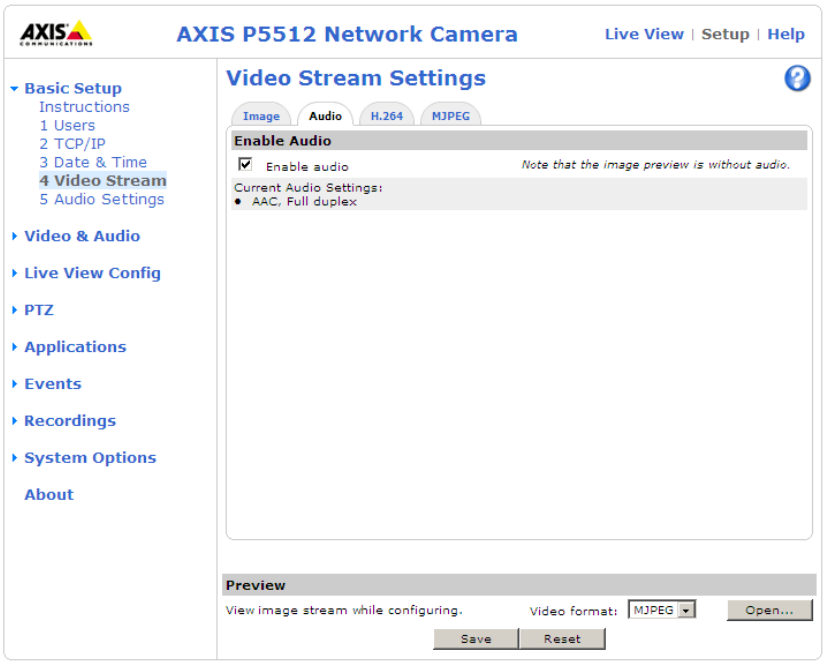


6. Set the IP address, Subnet mask, and Default router to the desired value, we suggest setting the first camera to 192.168.0.80, the second to 192.168.0.81, and so forth. See example above.
7. Click Save then Click ok to the warnings, wait 30 seconds, reboot the camera then browse to the camera at the new IP.

8. From the cameras homepage click setup.
9. Select "**Date & Time**" from the Basic Configurations menu on the left. Configure for your location.



10. The camera can be mounted to a ceiling. If this is true in your situation, select "**Video Stream**" under "**Basic Settings**" and select "**180**" from the "**Rotate Image:**" dropdown.
11. If you will be using a Microphone with the camera select "**Audio**" under basic settings. Check the Enable audio box, set the audio mode, encoding, and bit rate as shown below then click save.



12. Click "**Save**" and wait for a few moments: once the settings have been saved you should see a small dialog box that confirms the changes were made. **Reboot the camera** to ensure the settings take effect.

MOTION DETECTION SETUP

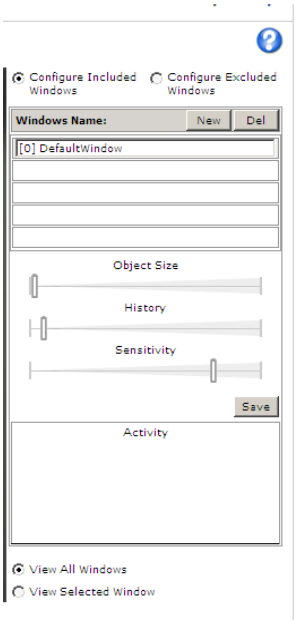
Motion detection setup is only required if you will be using motion detection by the camera as an event map trigger. This is most commonly used for the **g!** DVR recording.

Note: We recommend using **Internet Explorer** as your browser when setting up motion detection as we have found this process may be slow with other browsers.

1. Access the Video Server's configuration by opening a web browser and entering the camera's IP address. Enter the root user credentials.
2. Click the "Setup" link in the upper right.
3. On the Left, click "Events". Select "Motion Detection" to access the following screen:

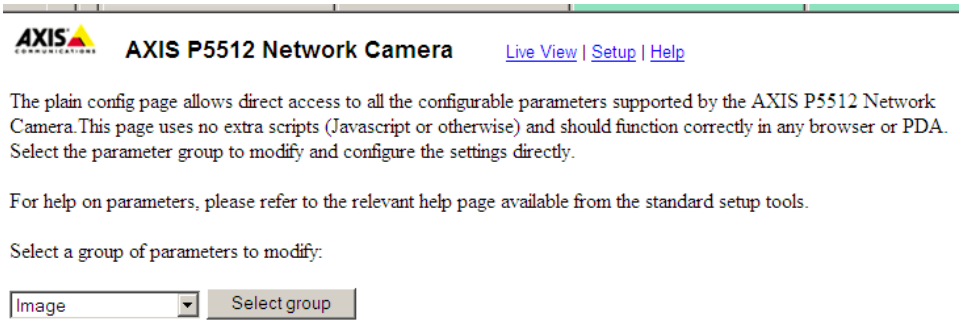
4. Click **Add Window** to add an include window to the image. For motion detection the camera will need at least one include window to define the area to look for motion. Additional include windows may be added as well as exclude windows to mask motion from items that may frequently move but are not desired to be considered motion.
5. For example: To limit the area where the server is looking for motion, decrease the size of the Default Window and drag it to center on the area of the image where relevant motion is expected. This will limit the number of false triggers due to background motion, thus conserving disk space. If you wish to capture all motion that the camera sees, this window can be left full screen. Additional windows can also be added, and the windows can be set to "Include" or "Exclude" depending on your preference. An "Exclude" window might be useful if there is a tree or flag in the image that is frequently moved by the wind, and it is not desired to trigger and event if the tree or flag moves.

6. For configuring the Motion Detection sensitivity there are three values that can be individually set for all included windows, “Object Size”, “History”, and “Sensitivity”:

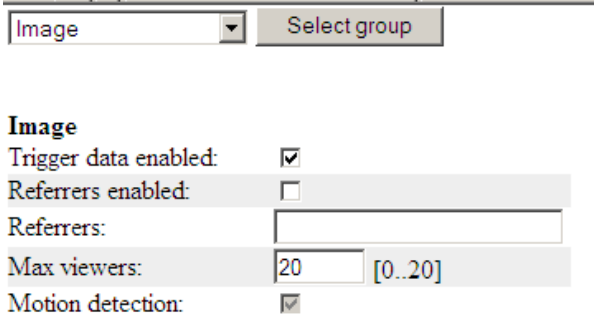


- Object Size refers to the number of pixels that need to change to trigger a motion event. The larger the object size, the less sensitive the detection. It is recommended that this be set to the minimum value possible.
- History refers to the length of time a moving object remains in the window before it is considered to be a non-moving part of the scene. A high setting will continue to trigger motion as long as the object is moving. A low setting will trigger motions when the object initially moves but then will be ignored. It is recommended that this slider be set high somewhere above 80%.
- Sensitivity refers to the difference in luminance from one frame to the next. A low setting will only trigger motion of there is a great difference in luminance, i.e. a bright object suddenly appears on a dark background. It is recommended to set this slider as high as possible. Typically greater than 90%. This setting will most likely need adjustment during initial setup to obtain the most reliable motion detection.

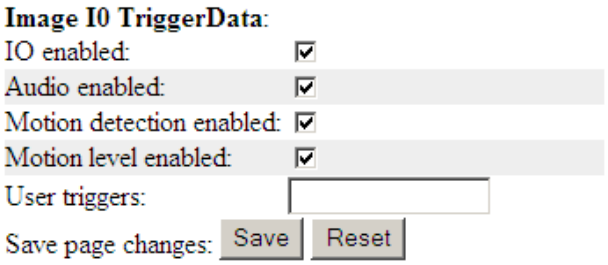
7. Select **“System Options”** on the left, then choose “**Advanced”**, then **“Plain Config”** to access the screen below:



8. Using the dropdown box, select **“Image”** as the group of parameters to modify. In the first section, “Image”, check the box for “**Trigger Data Enabled**”:



9. Scroll down to the entry for Image Trigger Data and place a check in the box labeled **"Motion Level Enabled":**



10. Click Save then close the browser
11. **Reboot the camera every time any motion detection adjustments are completed on the server to allow g! to reconnect and begin detecting motion.**

See the DVR Technical Note for information on setting up motion detection in the g! Software.

g! CONFIGURATION DETAILS

The following table provides settings used in the **g!** Configurator. Please refer to the *Configurator Reference Guide* for more details.

In the table below:

- "<Select>" Select the appropriate item from the list (or drop-down) in the Configurator.
- "<User Defined>", etc. Type in the desired name for the item.
- "<Auto Detect>", etc. The system will auto detect this variable.

Devices	Variable Name	Setting	Comments
Communication Device	**N/A (See Note 1)**	N/A (**See Note 1**)	
Video Cameras/Sources	**Name**	<User Defined>	
	Device Type	**Axis P5512PTZ**	Select appropriate MODEL
	IP Address	<User Defined> (Default: **192.168.0.80**) (See Note 2)	
	Port	**80**	Typically left at 80. Cameras do not need to be set to different listening ports for g!
	UserName	<User Defined> (Default: **root**)	
	Password	<User Defined> (Default: **root**)	
	Enable DVR	<Select> (Default:<**No**>)	Set to YES to enable the built in DVR function. See the DVR Integration Note for full details.
	Flip Image 180	<Select> (Default: <**No**>)	Set to YES if camera is inverted.
	Hide Resolution Control	<Select> (Default: <**No**>)	Set to YES to hide the Resolution control buttons from the Viewer.
	Hide Full Screen Control	<Select> (Default: <**No**>)	Set to YES to hide the Full Screen button from the Viewer.
	Default Resolution	<Select> (Default: <**Auto**>)	Set to desired Default Resolution: the camera will always load at this setting when viewed.
	Record Resolution	<Select> (Default: <**Don't Change**>)	Don't Change will default to last active resolution, or set a specific resolution for recording.
	Record Mode	<Select> (Default: **Auto (Medium Sensitivty)**)	Select the desired sensitivity level for the Auto motion mode, or choose fixed value.
	Record Threshold	<Select> (Default: Disabled)	Record Mode must be set to "Fixed Threshold" to enable. Select the desired motion %
	Event-Map Motion Trigger	<Select> (Default: Disabled)	Set to enable Motion Detection as a Event Map trigger. This is not required for typical DVR function, and is only needed if you wish to use the Motion % as a Event trigger.
	Trigger Value	<Select> (Default: **50%**)	Set the level for the Event Map motion detection trigger. Lower is more sensitive.

Notes:

1. No Communication Device is needed: just add Video Cameras.
2. By default, set the first IP Video device is set to 192.168.0.80, the second to 192.168.0.81, and so on.