Integration Note

Manufacturer:	VIVOTEK
Model Number(s):	**VS8401, VS8801**
Minimum Core Module Version:	g! 5.8
Comments:	VS8401 FW 0101d Tested
Document Revision Date:	2/13/2013

OVERVIEW

The Vivotek VS8401/8801 video servers are network devices with four or eight analog video inputs. When integrated to the g! system the analog video images can be accessed from the viewer interface locally and or remotely.

Note: The remote access video quality will be dependant on the internet connection speed.

SUPPORTED FEATURES

- Viewing of up to four or eight analog cameras (depending on model) using MJPEG feeds.
- Motion Detection

UNSUPPORTED FEATURES

- The Input/Output terminal strip on the Vivotek server is not supported.
- Audio input on the Vivotek server is not supported.
- Use of any Vivotek features for PTZ control of cameras.
- Secure authentication for camera access.
- Any other features not specifically mentioned as supported above are not supported.

Any feature not specifically noted as “supported” is not supported.

INSTALLATION OVERVIEW

Installing the Video Server can be broken down into the following steps:

1. Install the Video Server at the desired location, and pull power, Cat5 and coax video cabling as needed.
2. Connect the Video Server electrically to the cameras and the home network and configure the Video Server. See **Video Server Configuration**.
3. Integrate the cameras into the **g!** system and test proper operation. This step is outlined in **g! Configuration Details**.

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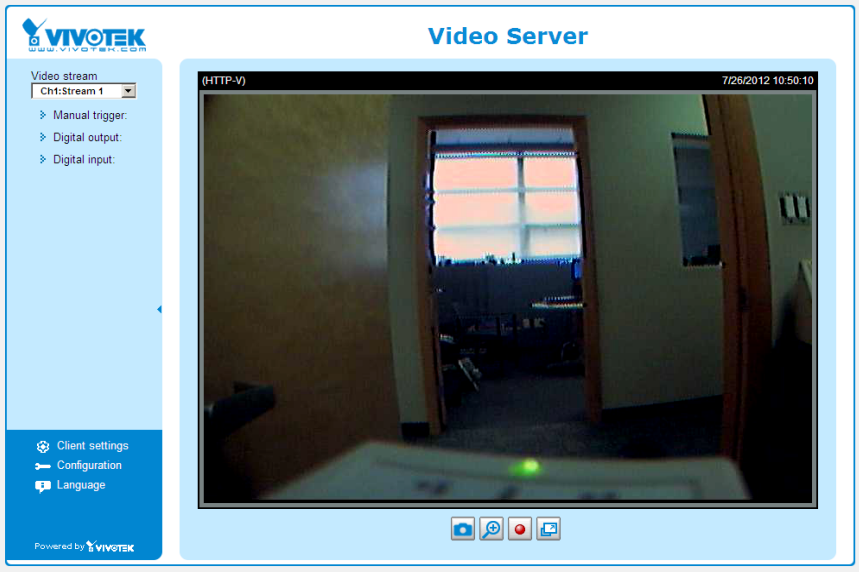
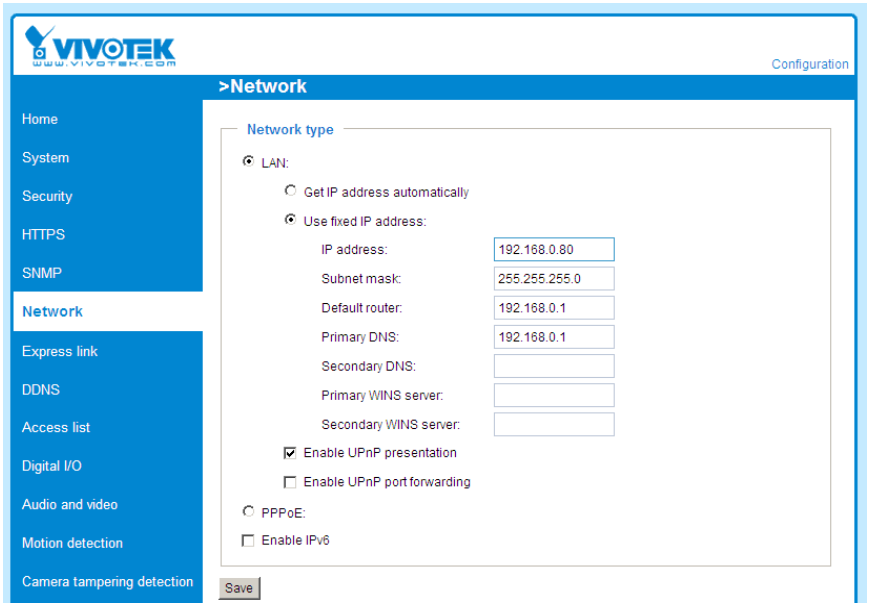
VIDEO SERVER CONFIGURATION

1. Connect the Video Server Ethernet port the network. Video feeds should also be connected at this time, if you have not done so already.
2. Use the Vivotek Installation Wizard or g!Tools Network Manager to locate the device on the network. See Vivotek documentation for details on using the Installation Wizard as a network finder.
3. Start a browser and bring up the video server interface by typing in the IP Address- you should see a screen similar to the one below.



4. Click the **Configuration** link  at the left to open the device settings.

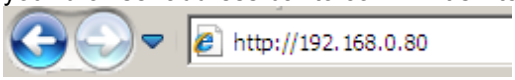
5. Click **Network** to access the IP address assignment window as shown in the window below.



a. Select the radio button for “LAN”. Assign the Vivotek a static IP address on your network. Elan reccomends using 192.168.0.80 for the first Vivotek server, 192.168.0.81 for the second, and so on.

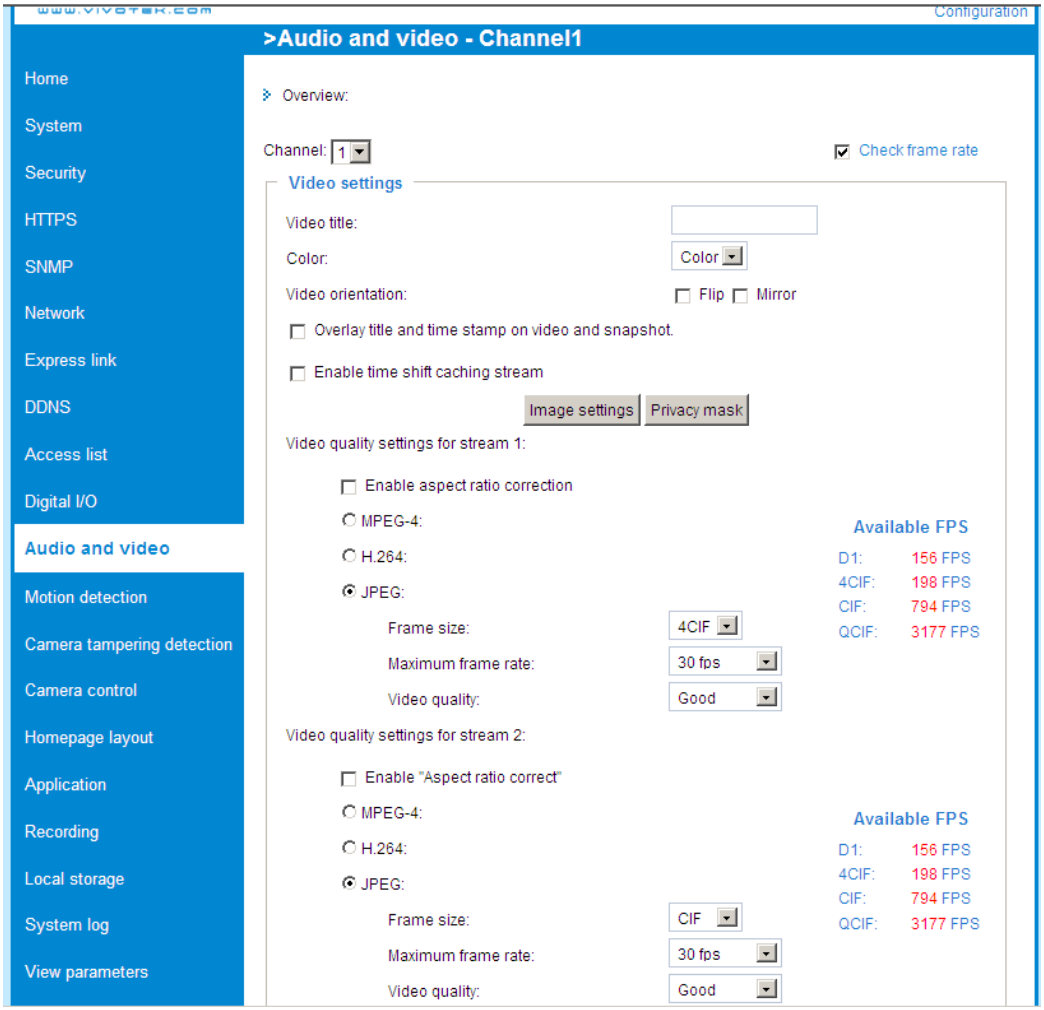
b. Click the “Save” button and wait for the unit will restart the video server for the IP configuration to take effect.

c. The webpage should automatically refresh to the new IP address. Take note of the IP in your browser address bar to confirm it switched correctly.

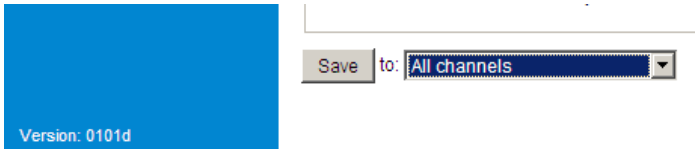


6. Enter **Configuration** and open the **Audio and Video** section.

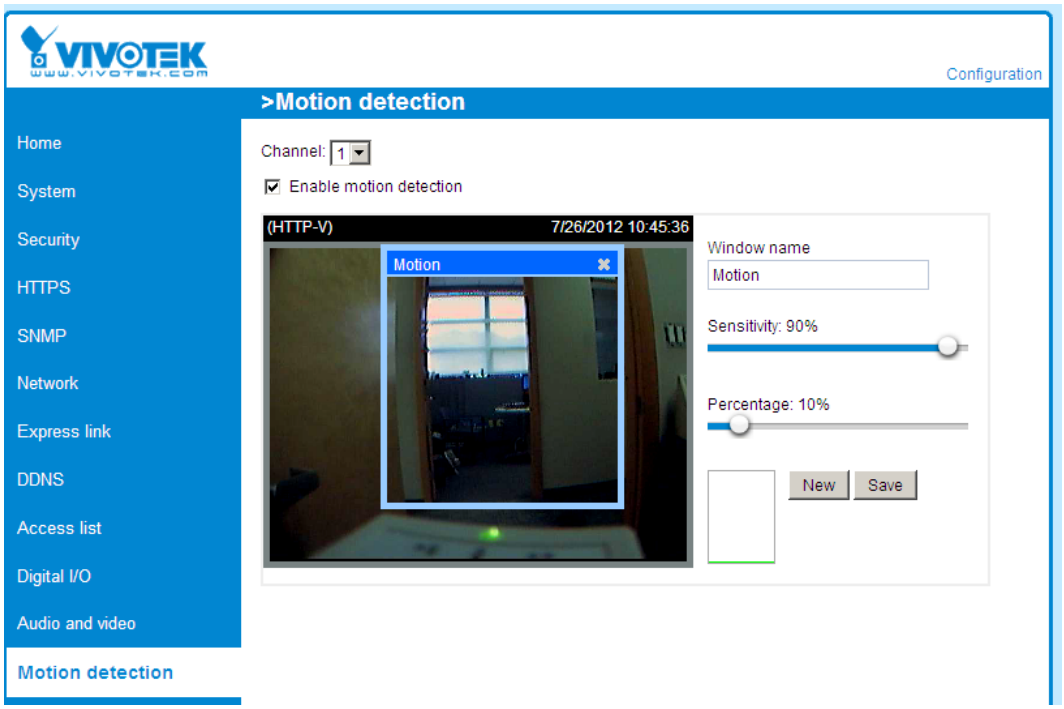
a. Change the **Video Settings** to **JPEG** as shown below.



b. **Save the JPEG Video Settings for All Channels**.



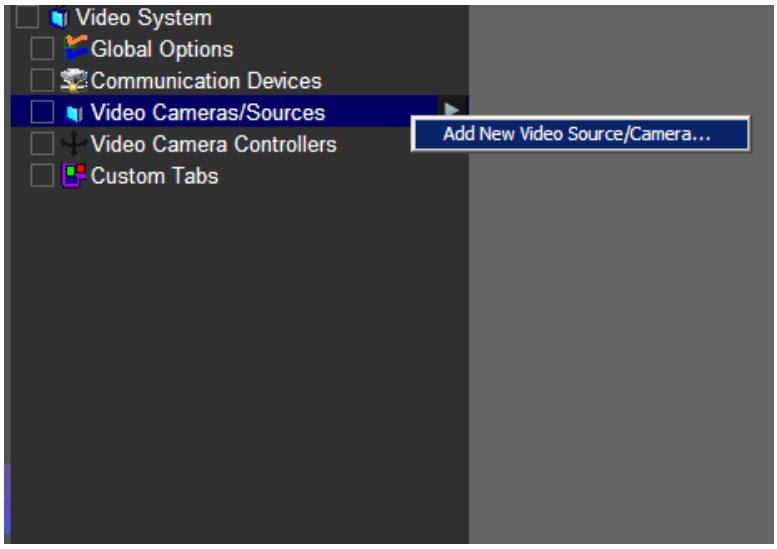
7. **Enable Motion Detection** and create a **Motion Detection Window** on all desired feeds by entering the **Configuration>Motion Detection** section.
    a. **Check** the **Enable Motion Detection** box.
    b. **Click** the **New** button to make a new Motion Detection area window.
    c. **Drag** the edges of the window to fill the desired part of the frame to look for motion activity. Only areas contained within the window will be tested for motion, so ensure to draw the window to include areas of importance like a doorway but avoid areas that will create motion "noise" like a ceiling fan or tree.
    d. Set the **Sensitivity** and **Percentage sliders**. Typically the recommend settings are Sensitivity 90 and Percentage 10, but these may need to be adjusted for your install. See Vivotek documentation for full details.
        - 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 to 90%
        - Percentage refers to the percent of pixels in the selected area that need to change to register motion. Lower numbers allow smaller objects to be detected. This slider should usually be set to 10%.
    e. **Name** the window and then **Save** settings.



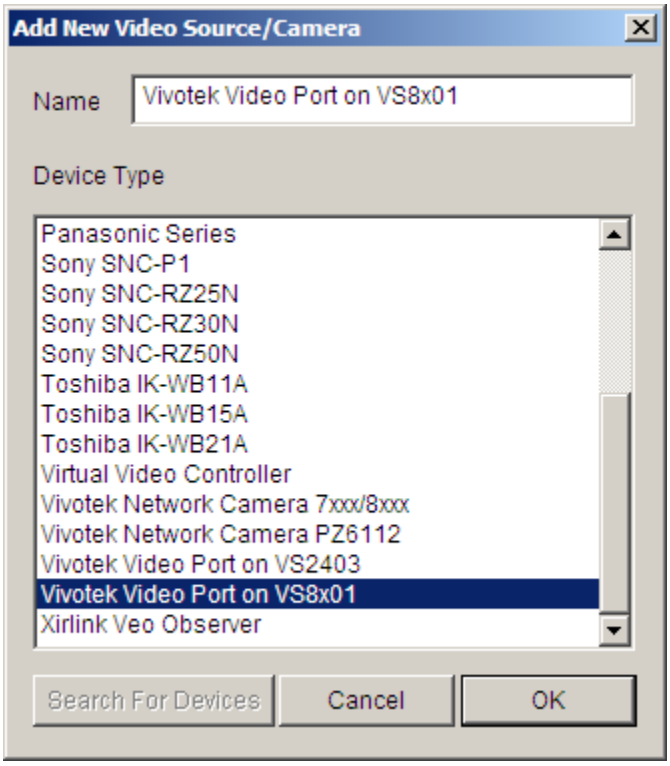
See the DVR Technical Note for information on setting up motion detection in the g! Software

g! CONFIGURATION

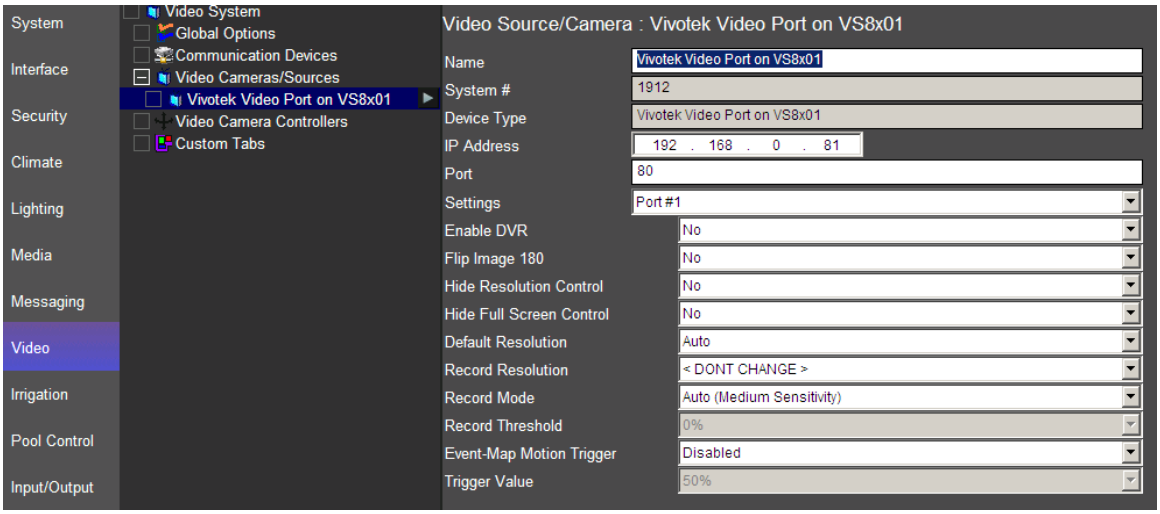
1. In the g! Configurator, go to the Video tab.



2. Right click “Video Cameras/Sources” and select “Add New Video Source/Camera”
3. Select “Vivotek Video Port on VS8x01” from the list provided.



4. Change the name to better reflect the source of the video stream, i.e. “Front Door Camera” or “Cable Video Feed”.



5. Set the IP address to the address of the Video Server.
6. In the “Settings” dropdown, select the port on the server into which the video source is connected.
7. Repeat for each device connected to the server.

g! CONFIGURATION DETAILS

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

In the table below:

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

Devices	Variable Name	Setting	Comments
Communication Device		**Not Required**	
Video Cameras	**Name**	<User Defined> (Default: **Vivotek VS8x01 Port**)	
	Device Type	**Vivotek VS8x01 Port** (See Note 1)	
	Location	<User Defined> (Not Required)	
	IP Address	<User Defined> (See Note 2)	
	Port	<User Defined> (Default: 80)	
	Settings	<Select> (See Note 3)	This is the video input: 1, 2, 3, 4, 5, 6, 7, or 8.
	Other settings are not specific to the Vivotek. For more information, see Online Help.		Use g!Tools or Press F1 in Configurator for Help

Notes:

1. Add one Vivotek Video Port for each camera or video source connected to the server.
2. Enter the IP address of the Video Server as configured in the setup.
3. Select the port number into which the video device is connected.

COMMON MISTAKES:

1. Failing to set a static IP. If you do not set a static IP, it is possible that due to a future event such as a reboot of the server or network gear, the IP address will change and break connectivity. Ensure to follow the above steps to set a static IP address for reliable control.
2. Failing to configure streams for MJPEG format. The Vivotek defaults to H.264, which is not supported in g!. See the Configuration steps above for Video Settings. In addition, ensure you have made the settings on all streams.
3. Failing to configure motion detection windows for motion detection. If motion detection is not enabled with a window configured, g! will not be able to see motion and use these for DVR recording or to trip other events. See the configuration steps above for configuring motion detection. In addition, ensure you have configured motion detection windows on all streams.
4. Adding security password or setting HTTPS as the exclusive access for the camera. The g! system does not support authentication with Vivotek devices.