

Blackjack **CUBE**™

Powered by DW Spectrum™

State of the art hyper-optimized video management platform designed for ease, speed and efficiency.

Blackjack™ Cube — Up to 16 (Cube-LX) and 64 (Cube) 2.1MP Cameras (1080p True HD Resolution)

Blackjack Cube-LX

DW-BJCUBE2T-LX	DW-BJCUBE4T-LX	DW-BJCUBE6T-LX	DW-BJCUBE9T-LX	DW-BJCUBE12T-LX	DW-BJCUBE18T-LX
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Blackjack Cube

DW-BJCUBE3T	DW-BJCUBE4T	DW-BJCUBE6T	DW-BJCUBE9T	DW-BJCUBE12T	DW-BJCUBE18T
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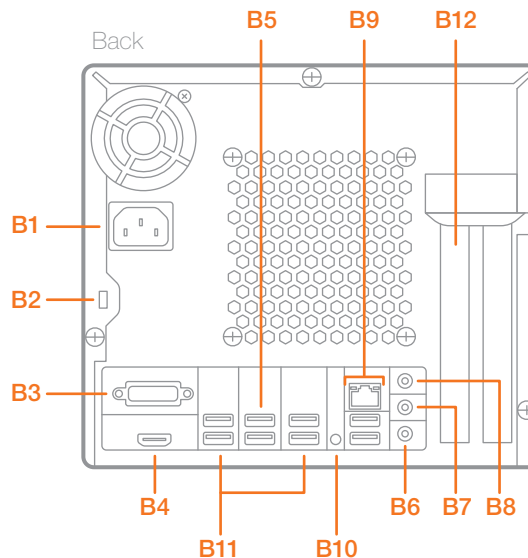
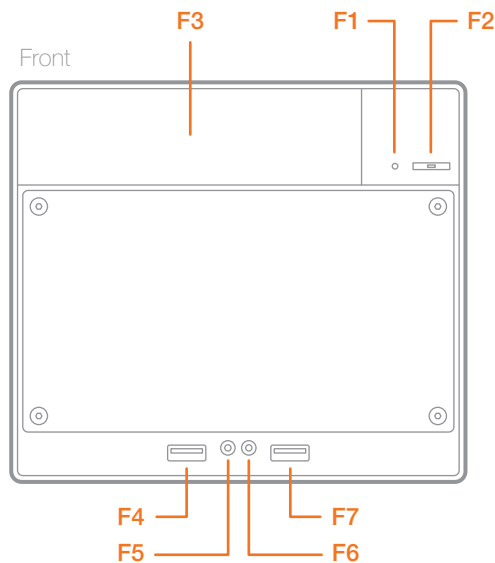
Blackjack Cube-LX
Blackjack Cube

Username: **admin**

Password: **admin**

Attention: This document is intended to serve as a quick reference page for initial set-up. See the DW Spectrum full manual for more information on features and functionality.

BLACKJACK CUBE HARDWARE



- F1** HDD LED
- F2** Power Button / Power LED
- F3** 5.25" Bay
- F4** USB 2.0 Port
- F5** Microphone Jack
- F6** Headphone Jack
- F7** USB 2.0 Port

- B1** AC Power Socket
- B2** Kensington Lock
- B3** DVI-I Output
- B4** HDMI HD Output
- B5** USB 3.0 Ports
- B6** Microphone Jack
- B7** Line-Out Jack
- B8** Line-In Jack
- B9** WAN & USB 2.0 Ports (Onboard LAN – recommended for internet connection use)
- B10** Clear CMOS Button
- B11** USB 2.0 Ports
- B12** LAN (Second Card – recommended for camera connection use)

Default Login Information

Username: **admin**

Password: **admin**

WARNING For an optimal system configuration, it is recommended that a UPS (Uninterruptable power Supply) be used to power the setup. Dual monitors are not recommended due to CPU performance. To connect two monitors to the Cube, go to the display setup to activate the second monitor.

SPECIFICATIONS CUBE

	Linux Model	Windows Model
Operating System	Linux® Ubuntu® 14.04	Windows® 7 64 Bit
IP Cameras	Max 16 IP Cameras	Max 64 IP Cameras
Max Throughput	80Mbps	360Mbps
Recording Speed	1080p: 480fps	1080p: 1920fps
Screen Mode	Unlimited Layouts	Unlimited Layouts
Max. HDD Bays	3x SATA HDDs	3x SATA HDDs
Video Out	DVI-I, HDMI	DVI-I, HDMI
Recording Resolution	1080p	1080p
CPU	Intel® i3® Processor	Intel® i5® Processor
Memory	4GB	8GB
LAN	2x Gigabit Ethernet (RJ45)	
Power	100VAC: 250W, 2.5 Amps	
Dimensions	325mm L x 216mm W x 190mm H	

SETTING UP THE CUBE

STEP 1: When setting up the Blackjack Cube, make sure the following are in the box:

- Cube Server
- Recovery CD
- Quick Start Guide
- Power Cable
- Accessory CD (Including Manual)

NOTE Monitor, keyboard & mouse are not included.

STEP 2:

1. Connect a monitor, USB mouse, and network cables (not included).
2. Connect the server to an appropriate power supply.
3. In the server's login screen, enter username and password (admin | admin).

STEP 3: Desktop View

The server's Network Setup Window and DW Spectrum™ software will launch automatically when the server boots up. To relaunch, double click on each of the desktop icons.



Linux OS

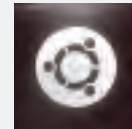
LINUX-BASED SOFTWARE MANUAL LAUNCH To launch the DW Spectrum™ Software on the Linux-Based Cube:

OPTION 1: Double-click the DW Spectrum™ desktop icon.



OR

OPTION 2: Go to the dashboard on the top left side. Search 'DW'. Click the DW icon.



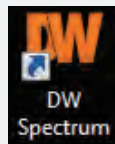
(Onboard LAN – recommend for Internet connection)



Windows 7

WINDOWS-BASED SOFTWARE MANUAL LAUNCH To launch the DW Spectrum™ Software on the Windows-Based Cube:

OPTION 1: Double-click the DW Spectrum™ desktop icon.



OR

OPTION 2: Go to 'Start' on the bottom left and select DW Spectrum™ from the Start Menu.



STEP 4: Logging to Server



The DW Spectrum™ client will automatically load the local server's credentials in the host information. Enter the server's username and password. By default, the server's credentials are:

**Server IP : 127.0.0.1
USER : admin
PW : admin**

After logging in, all supported cameras on the network will automatically populate in the client's Display Tree.



Linux OS

STEP 5: Network Configuration - Linux System

The Cube's Network Setup window will open automatically upon boot up.

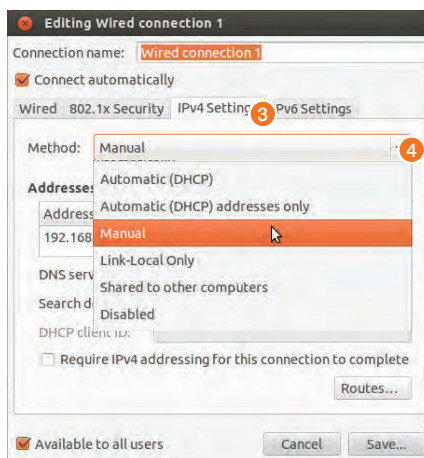
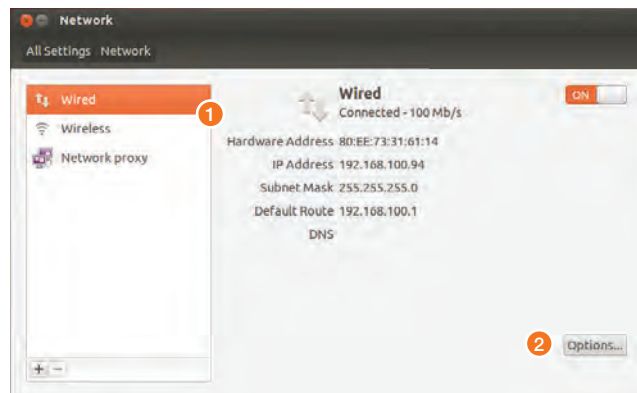
NOTE The Blackjack Cube's network settings are set by default to DHCP.

To change the server's network settings to Static IP, follow the instructions below.

1. Go to Network Settings from the desktop button.
2. Select **'Wired'** from the list and click **'Options'** at the bottom of the window.
3. Click on the **'IPv4 Settings'** tab.
4. From the drop-down menu, select connection type: DHCP or Manual (static).
5. If **'Manual'** is selected, click **'Add'** next to Addresses.
6. Enter IP Address, Netmask, and Gateway according to network requirements.
Contact your network administrator for more information.
7. Add a DNS server address.
8. Click **'Save'** to save the settings or **'Cancel'** to return to the Network setup page.

NOTE Contact your Network Administrator and ISP for proper setup.

9. In the Network Settings main page, make sure the Wired Status is marked as **"Connected"**.



Windows 7

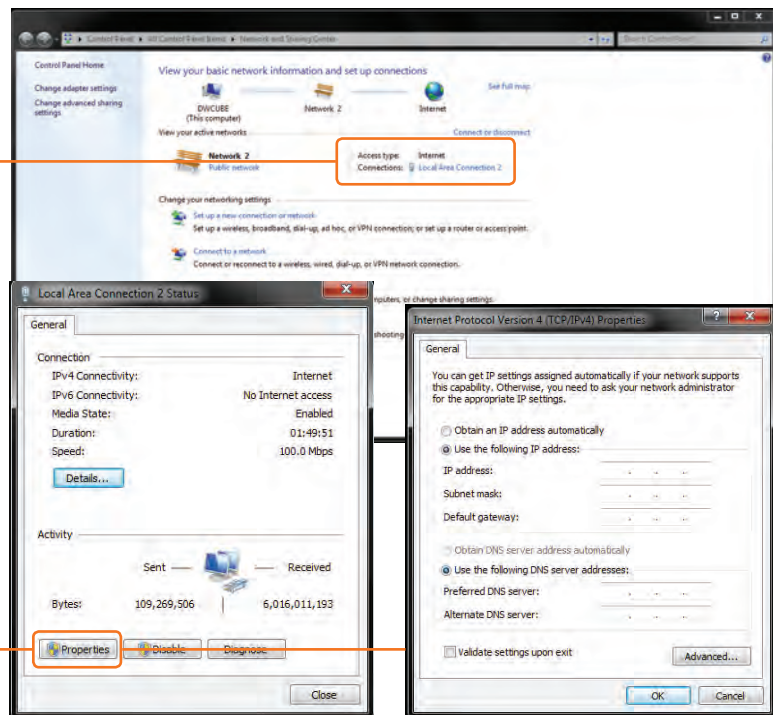
STEP 5: Network Configuration - Windows System

The Cube supports dual network cards so you may setup one for external connection and one for internal connection to the cameras to balance the bandwidth. To change the server's network settings to static:

1. Go to **'Start'** and select **'Network'** from the Windows Start menu.
2. All connected network cards will appear in this page.
3. Click Local Area Connection and select **'Properties'** from the new popup window.
4. Double-Click the **'Internet Protocol Version 4'** option.
5. Check the box next to **'Use the following IP address'**
6. Enter the new IP Address, Netmask, and Gateway according to network requirements.

NOTE Contact your Network Administrator and ISP for proper setup.

7. Add a DNS server address.
8. Click **'OK'** to save the settings or **'Cancel'** to return to the Network setup page.



NOTE If you are not connecting to the Blackjack™ from within the same network, you may be required to perform port forwarding on your router to access the server. Contact your Network Administrator or Installer for additional information.



UPGRADING THE DW SPECTRUM IPVMS SOFTWARE ON LINUX CUBE MODELS

When installing or upgrading the DW Spectrum™ software, each component of the software must be installed separately.

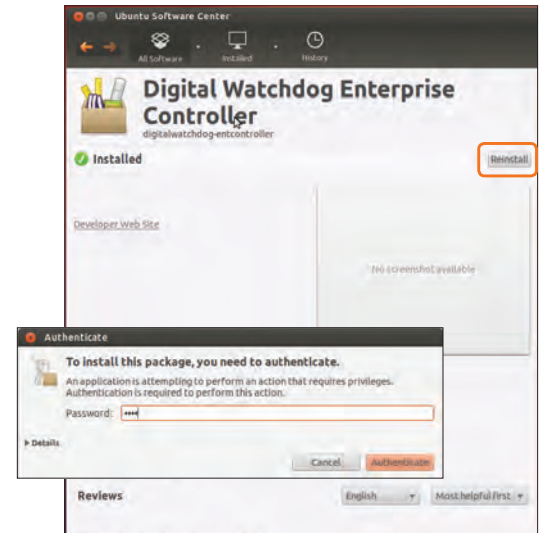
To download the software, go to www.digital-watchdog.com, and search for 'DW Spectrum' to access the product page, documentation and software downloads.

To install the software:

NOTE Internet connection is necessary to complete the software installation properly.

1. Right-click the installation file and select "Run using Ubuntu Software Center".
2. Enter the admin password (Default: **admin**).
3. Enter the following information as requested:
 - Server Address: Enter '**localhost**' to use the current server's IP address.
 - Username & Password: Username and password for the server. Default: **admin / admin**.
(Onboard PAN)
 - Port: Main port associated with the server. Default port: **7001**.
(server and for client connection use)
4. Repeat for all other software components.

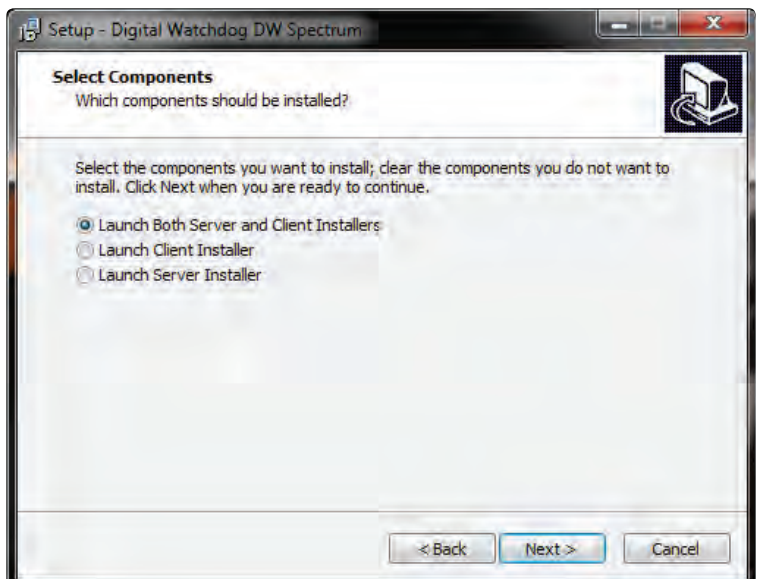
NOTE When the upgrade process is complete, it is recommended to restart the server.



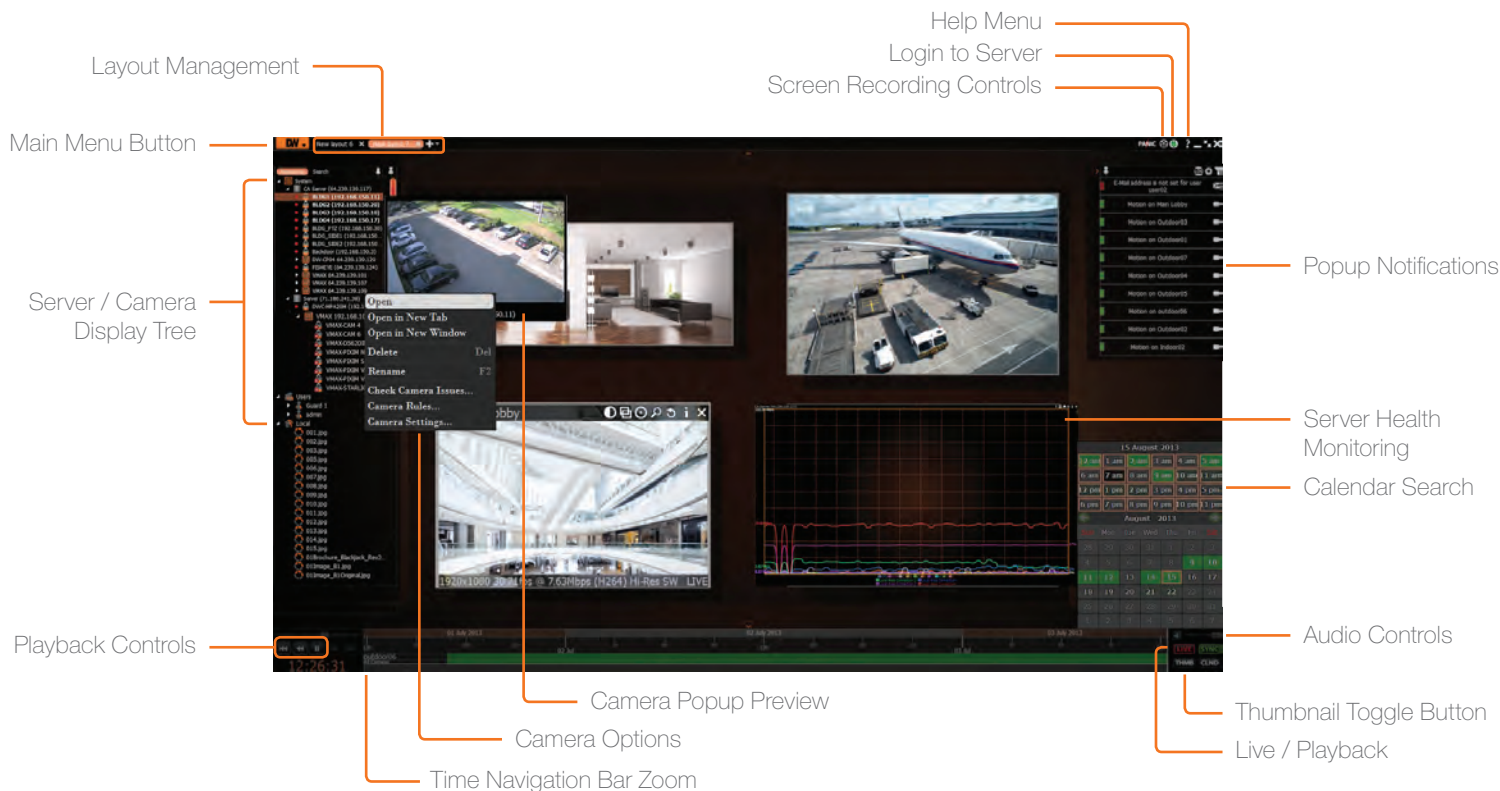
UPGRADING THE DW SPECTRUM IPVMS SOFTWARE ON WINDOWS CUBE MODELS

To install the DW Spectrum™ full software package:

1. Go to www.digital-watchdog.com and download the latest software version.
2. Double-click on the installation file to run the installation wizard.
3. Select the installation option:
 - a. Launch Both Server and Client Installers.
 - b. Launch Client Installer only.
 - c. Launch Server Installer only.
4. Follow the installation wizard's instructions to complete the installation.



USER INTERFACE OVERVIEW



LICENSE REGISTRATION

The Blackjack Servers come with complimentary eight (8) recording licenses. In addition, any licenses purchased with the hardware will be found at the bottom of the Server's hardware, as a sixteen- digit code that needs to be activated.

OPTION 1: If your server has internet access—

1. Go to **DW Menu Button > System Administrator > Licenses**.
2. Select '**Automatic Activation via Internet**' from the drop-down options.
3. Input your sixteen-digit license key.
4. Press '**Activate License**'. The system will notify you if the activation was successful.
5. If your licenses have been registered successfully, they will appear under the Active Licenses table.

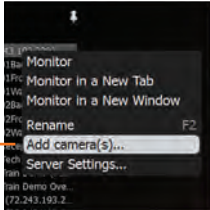
OPTION 2: If you do NOT have internet access—

1. Go to **DW Menu Button > System Administrator > Licenses**.
2. Select '**Manual Activation**' from the drop-down options.
3. Copy your hardware ID. This information will be filled out automatically by your server.
4. E-mail your Hardware ID and your License Key to **licenses@dwcc.tv**. Please allow up to 48 hours for Digital Watchdog to reply.
5. Once provided with an Activation Key, Enter this information without altering it in the Activation Key space and press '**Activate Licenses**'.

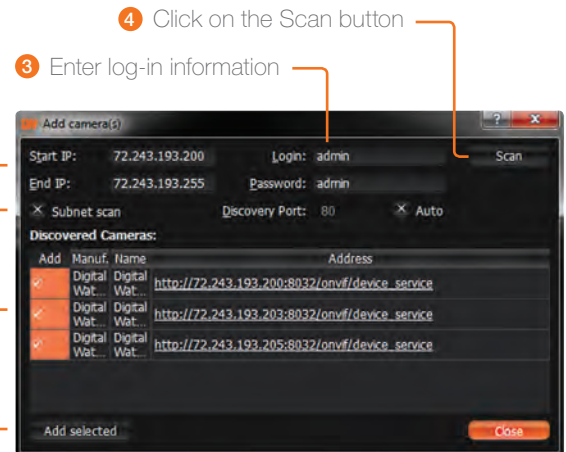


MANUALLY ADDING CAMERAS

Cameras can also be manually added by right-clicking on the server icon and choosing the 'Add camera(s)' option

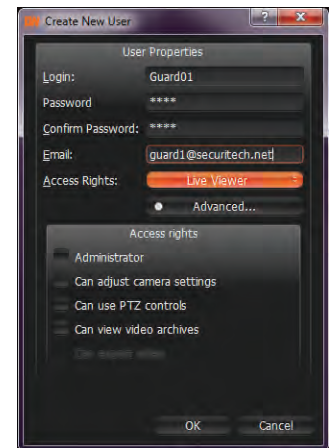


- 1 Enter the camera's IP address, URL, or RTSP information
- 2 Check to select a range
- 5 Cameras will populate the list automatically
- 6 Click to add all selected cameras

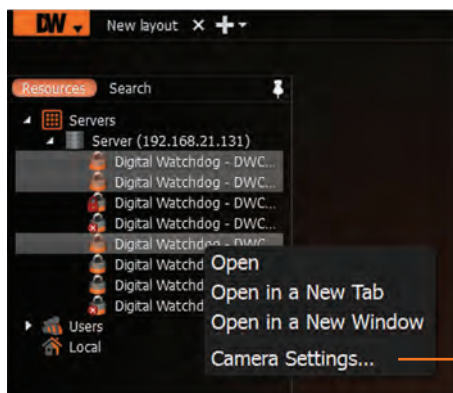


USER ACCOUNTS

	ADMIN	CAMERA SETTINGS	PTZ CONTROLS	VIDEO ARCHIVES	EXPORT VIDEO	VIEW LIVE VIDEO
Administrator	•	•	•	•	•	•
Advanced		•	•	•	•	•
Viewer				•	•	•
Live Viewer						•



RECORDING SCHEDULE



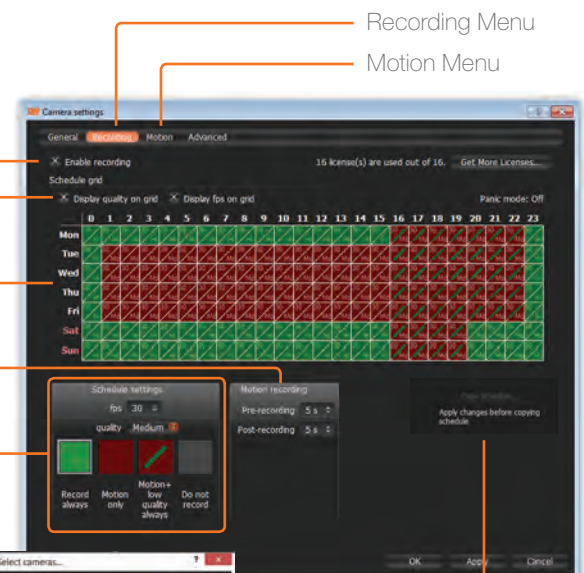
Select cameras and go to "Camera Settings"

Enable Cameras to Record
Select All

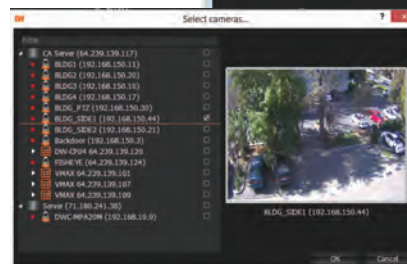
Click & Drag

Pre & Post Recording
(3 is recommended)

Recording Type



Copy Recording Settings to multiple cameras



TROUBLESHOOTING TIPS

Problem	Possible Solutions
My camera does not auto-discover	<ol style="list-style-type: none"> 1. Is the camera in the same LAN network as the Media Server? 2. Is your camera compatible with DW Spectrum? (Refer to our website for full list of supported cameras.) 3. Is the camera updated to its latest firmware? 4. If your camera is integrated with DW Spectrum via ONVIF, make sure ONVIF is enabled on your camera. 5. Try adding the camera manually. 6. Try rebooting the server after installation. Allow up to 30 seconds for the server to map your network and detect all supported devices.
Videos are slow	<ol style="list-style-type: none"> 1. Are you accessing the same cameras from multiple clients? (LAN & WAN) 2. Do you have a Gigabit network? Check your network speed.
My camera appears disconnected	<ol style="list-style-type: none"> 1. Under camera settings, make sure the user name and password are correct. 2. Under the camera settings, use the 'Ping' button to make sure the camera is connected to the network properly. 3. If you can connect to the camera's web viewer, try rebooting the camera and/or restore it to factory default. 4. Make sure your camera is using the latest firmware available. 5. Make sure that the camera is connected to the same network as the server. 6. If you are connecting to a camera that is integrated with DW Spectrum via the ONVIF protocol (see list), make sure ONVIF is enabled. 7. Make sure your user has permissions to view that specific camera.
I can't get playback video from my camera	<ol style="list-style-type: none"> 1. Do you have network connection between client and server (in case server and client are not on the same machine)? 2. Make sure your user has playback viewing permissions for the selected channel. 3. Make sure the camera is set to a recording mode that would provide recorded video for the selected time and environment. 4. On the server side, check the media server log to make sure the camera you are trying to watch has not been unexpectedly disconnected.
I get an 'unauthorized' message on my camera	<ol style="list-style-type: none"> 1. Make sure the camera's user name and password are properly entered in the camera's general information under the camera settings menu. 2. If necessary, try rebooting the camera to apply the camera's user name and password.

SYSTEM REQUIREMENTS

Recommended Specs for the Full Client



Windows 7



Linux OS

Processor	Intel Core i5 or greater
Video Card	Intel HD Graphics 2500 (or higher) with 1GB Dedicated Memory
Resolution	1920 x 1080
RAM	4GB
NIC	10 / 100 / 1000 Base-T Ethernet
OS	Windows 7, Server 2008, Vista, Ubuntu 12.04 LTS or Newer

Accessing DW Spectrum Log Files

From the DW Spectrum Client Software:

- Right-click on the Server's name and go to 'Server Logs'.
- You can adjust the number of entries in the log by changing the value at the end of the URL stating 'lines=1000'. For example, 'lines=1' will reduce the log report to a single line of data. 'lines=400' will display 400 lines of data.

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