Blackjack® MX™

Servers Powered by DW Spectrum® IPVMS

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

Blackjack® MX™ mini desktop servers — Up to 120Mbps

DW-BJMX2T

Default Login Information for DW Spectrum® IPVMS		Default login information for the server's OS	
Username: **admin**	Password: **admin12345**	Username: **dwuser**	Password: **Dw5pectrum**

WHAT'S IN THE BOX					
Blackjack MX Server		1	Keyboard and Mouse		1 set
Quick Start Guide		1	Power Cable		1
VESA Mount Bracket and Screws		1 set			

NOTE: Download all your support materials and tools in one place.

1. Go to: **http://www.digital-watchdog.com/support-download/.**
2. Search your product by entering the part number in the '**Search by Product**' search bar. Results for applicable part numbers will populate automatically based on the part number you enter.
3. Click '**Search**'. All supported materials, including manuals, Quick start guides (QSG), software and firmware will appear in the results.

Attention: This document is intended to serve as a quick reference for initial setup.
See the DW Spectrum® full manual for more information on features and functionality.
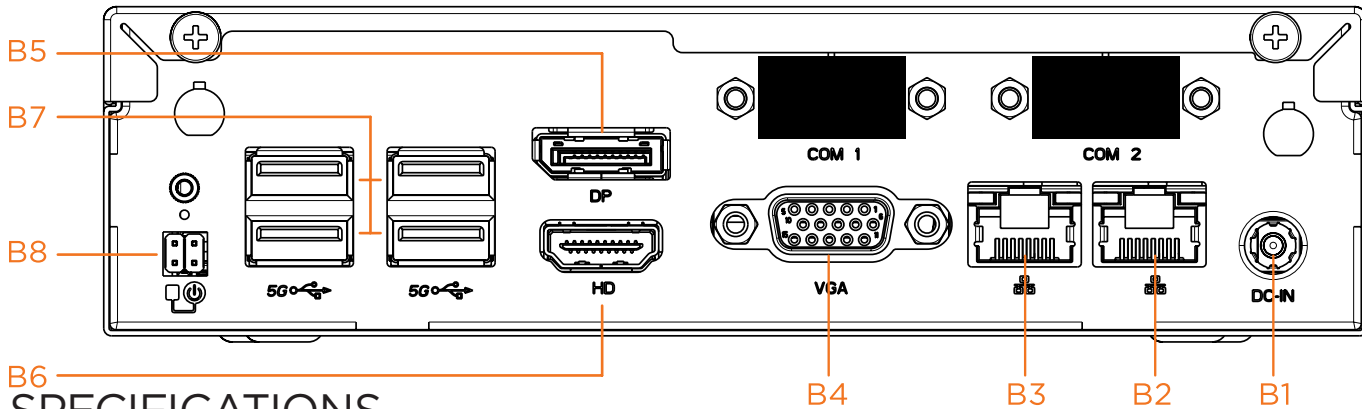
Blackjack® MX™

FRONT PANEL

F4
F3
F2
F1
F5
F6
F6
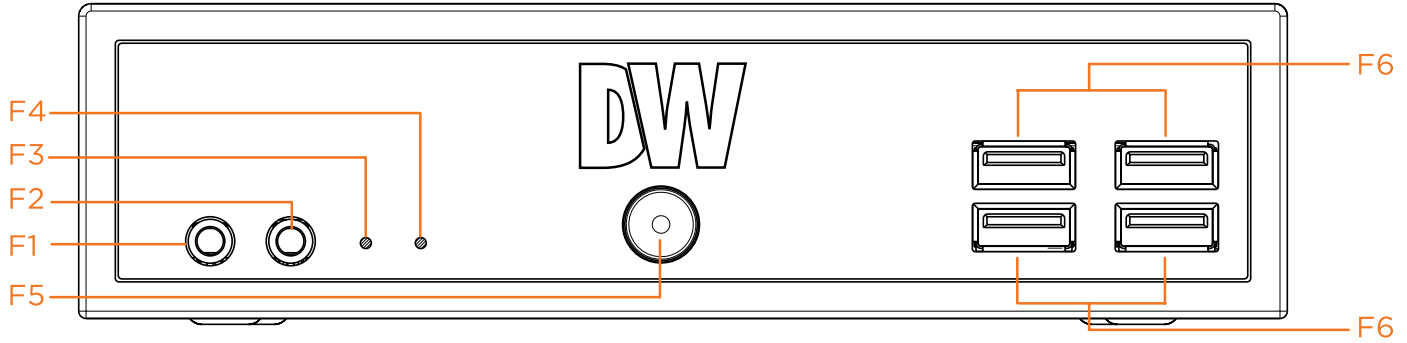
Default Login Information for DW Spectrum® IPVMS

Username: **admin**	Password: **admin12345**

Default login information for the server's OS

Username: **dwuser**	Password: **Dw5pectrum**

F1	Mic in (3.5mm)	B1	Power port (DC-IN)
F2	Audio out (3.5mm)	B2	2.5GbE LAN RJ45 port (LAN2)
F3	Power LED	B3	2.5GbE LAN RJ45 port (LAN1)
F4	HDD Activity LED	B4	VGA video output
F5	Power Button	B5	DisplayPort video output
F6	4x USB 3.2 ports	B6	True HD video output
		B7	4x USB 3.2 ports
		B8	Clear CMOS & Power Button & +5V

REAR PANEL

B5
B7
B8
B6
COM 1
COM 2
DP
HD
VGA
DC-IN
B4
B3
B2
B1

SPECIFICATIONS

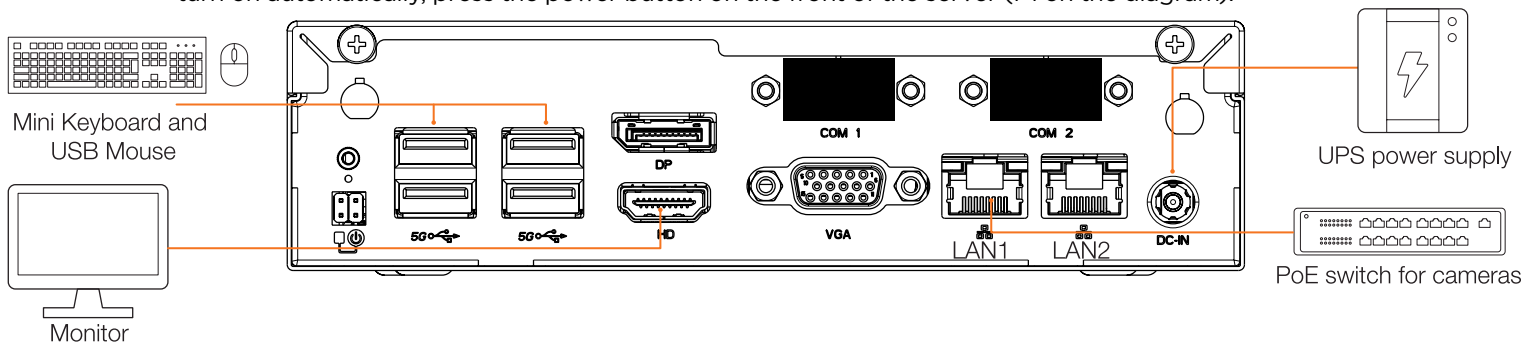| PART NUMBER		DW-BJMX
Included IP licenses		---
Form factor		Mini Desktop
Operating system		Windows® 10
OS on SSD		m.2 SSD
CPU		Intel® Alder Lake-N processor N100
Memory		16GB
Ethernet port		2 x 2.5GbE ethernet ports (RJ45)
System	Max video storage rate (Mbps)	120 Mbps
Storage	Maximum HDD	1 x SSD
	Maximum storage	2TB
	USB interface	Yes
Video output	Outputs	1x True HD 2.0b, 1x DP1.4a, 1x VGA for system configuration. Maximum 1 display output at a time.
	Video card	Onboard Intel HD Graphics
Pre-loaded VMS software		DW Spectrum® IPVMS Server
Keyboard and mouse		Included
Power supply		65W*
Operating temperature and humidity		41°F-104°F (5°C-40°C), 20-90% RH
Dimension (WxDxH)		6.49" x 7.48" x 1.69" (165 x190x x 43 mm)
Other certification		FCC, CE, RoHS, NDAA, TAA
Warranty		5 year limited

* UPS recommended
Specifications and components mentioned are subject to change without notice.

SETTING UP THE SERVER

STEP 1: **Connect external devices, power and network.**

1. Connect a monitor, USB keyboard, USB mouse and network cable to the Ethernet port labeled LAN1 (B3 on the diagram).
   Configure the camera's network first, then configure the server's local network.

   NOTE: See page 2 for a detailed back panel breakdown for each model.

2. Connect the server to an appropriate power source. A UPS system is recommended. 600VA or higher is recommended (per PSU).

3. Connecting the power cable to a live power source may turn on the server automatically. If the server does not turn on automatically, press the power button on the front of the server (F1 on the diagram).
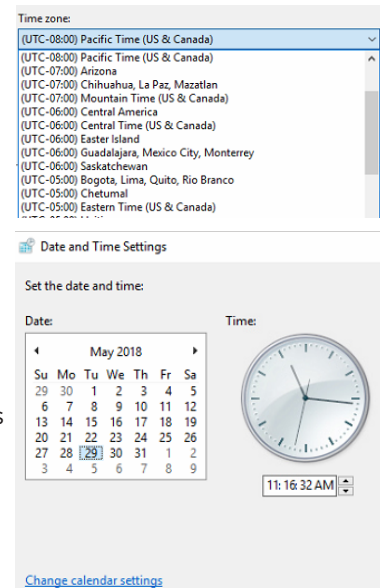

Mini Keyboard and USB Mouse

Monitor

UPS power supply

PoE switch for cameras

COM 1　COM 2

DP　HD　VGA　LAN1　LAN2　DC-IN

STEP 2: **Configure date and time**

1. Double-click on the date and time icon on the desktop.

2. Change time zone if it is not correct **Change time zone...** (default is UTC-08:00 Pacific Time).

3. Press OK after selecting the correct time zone.

4. Click "Change date and time…" to update the date and time if they are not correct.

   Change date and time...
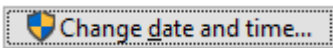
   * Verify the time zone before updating the date and time. Time may show 2 or 3 hours off due to an incorrect time zone.

5. Press OK after adjusting to the correct date and/or time. Press OK to close the date and time when done.

Time zone:
(UTC-08:00) Pacific Time (US & Canada)
(UTC-08:00) Pacific Time (US & Canada)
(UTC-07:00) Arizona
(UTC-07:00) Chihuahua, La Paz, Mazatlan
(UTC-07:00) Mountain Time (US & Canada)
(UTC-06:00) Central America
(UTC-06:00) Central Time (US & Canada)
(UTC-06:00) Easter Island
(UTC-06:00) Guadalajara, Mexico City, Monterrey
(UTC-06:00) Saskatchewan
(UTC-05:00) Bogota, Lima, Quito, Rio Branco
(UTC-05:00) Chetumal
(UTC-05:00) Eastern Time (US & Canada)

Date and Time Settings
Set the date and time:
Date:　　　　　　　　　　　Time:
May 2018
Su Mo Tu We Th Fr Sa
29 30　1　2　3　4　5
6　7　8　9　10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28 29 30 31　1　2
3　4　5　6　7　8　9
11: 16: 32 AM

Change calendar settings

STEP 3: **Configure network**

Please have the following information ready before starting the network configuration.

|	Camera network (LAN1)	Local network (LAN2)
IP address		
Subnet mask / Netmask		
Default gateway / Gateway	Not applicable	
DNS servers	Not applicable	

* The camera network and local network cannot be on the same network.

**NOTE** The Blackjack® server's network settings are set to DHCP as default.

NOTE If you are not sure what information to enter, contact your Network Administrator or Internet Service Provider for the information.

1. Double-click on the "Network Connections" icon on the desktop.

2. Right-click on "Ethernet with cable connected" and click "Properties."
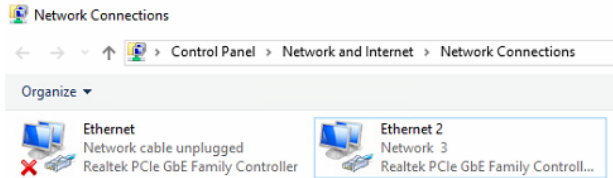
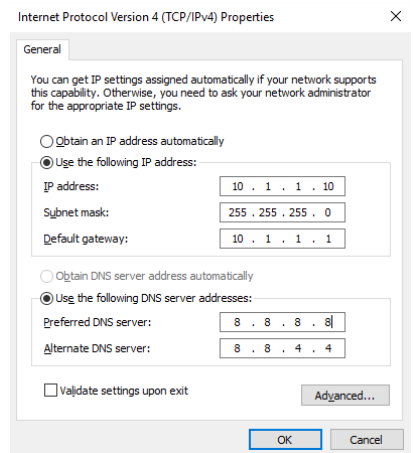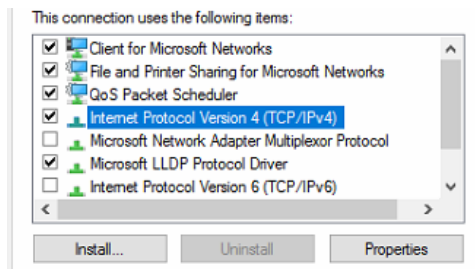3. Select "Internet Protocol Version 4 (TCP/IPv4)" and click "Properties."
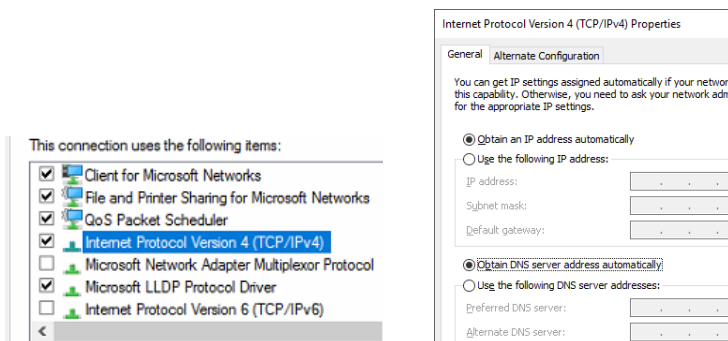
4. Select "Use the following IP address" (Use the following DNS server addresses will be selected automatically).

5. Enter the IP address and Subnet mask of the camera network. (Do not enter anything for the default gateway, preferred DNS server, or alternate DNS server.)

6. Click OK to close, then click close to go back to network connections.
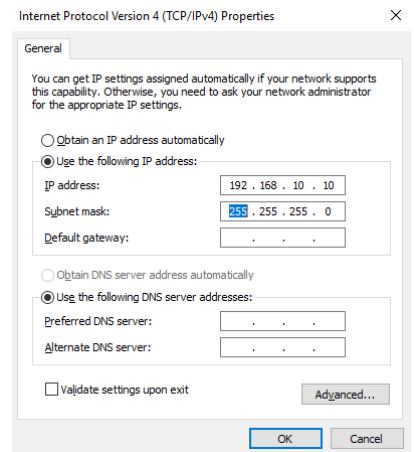
Local Network

7. Right-click on the other Ethernet, the one with the network cable unplugged, and click "Properties."

8. Select "Internet Protocol Version 4 (TCP/IPv4)" and click "Properties".

9. Select "Use the following IP address" (Use the following DNS server addresses will be selected automatically).

10. Enter the IP address and subnet mask of the camera network.

11. Click OK to close, then click close to go back to network connections.

12. Connect a network cable to the Ethernet port labeled LAN2 (B2 on the diagram on page 2) to the switch or router of the local network.

13. Close the network connections dialog.
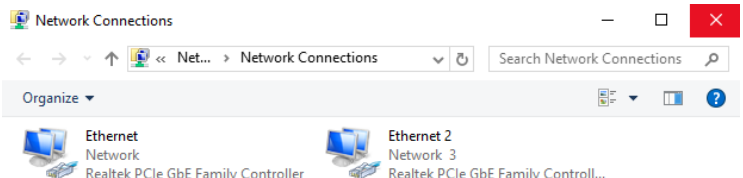
CONFIGURE CAMERAS USING DW® IP FINDER™

Refer to the camera's QSG to configure any DW® IP camera's IP address using DW® IP finder™.

To launch the DW Spectrum IPVMS client, follow one of these options:

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

OPTION 2: Go to 'Start' on the bottom left and select DW Spectrum® in the Digital Watchdog folder.
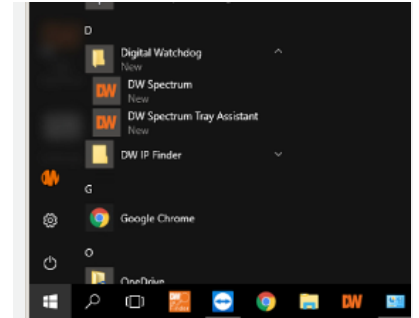
SETTING UP DW SPECTRUM® MEDIA SERVER

Login: **admin**
Password: **admin12345**

STEP 1: **Initial run from the Blackjack® server**

1. Open the DW Spectrum® client by double-click on the DW Spectrum® icon.

2. Click on the pre-configured server.

3. If the pre-configured server does not automatically log in, enter the password and click Connect. *Default password: admin12345 (case sensitive).
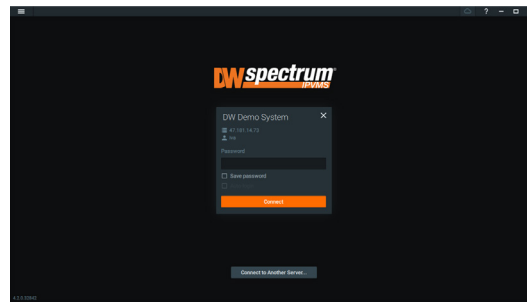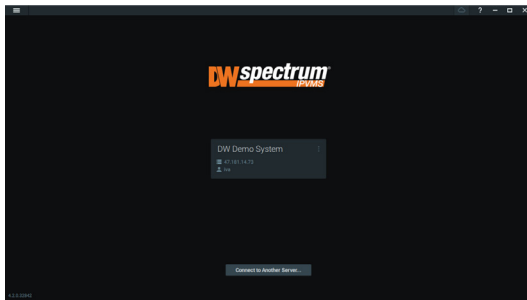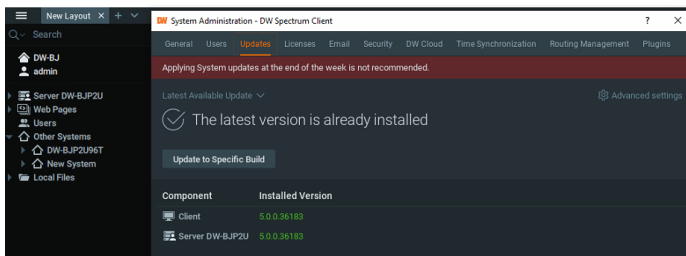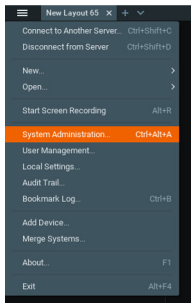
STEP 2: **To rename the server**

1. Right-click on the server name listed on the resources, then click server settings.
2. Go to the general tab and enter the new server name in the name field. Click OK.
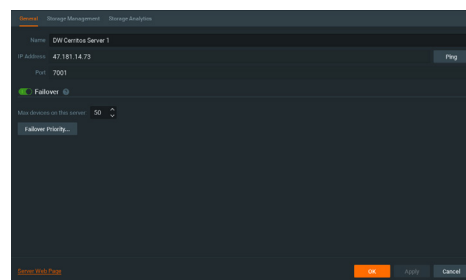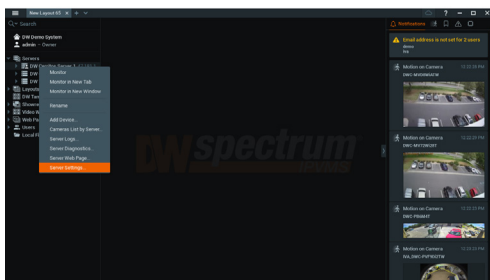
STEP 3:   To check for updates

1. Click on the menu [≡] then click "System Administration".
2. Go to the updates tab. If the system requires updating, click on the update system button.

* If you are using the latest version, it will say, "You have the latest version installed," and the Update System button will be disabled.

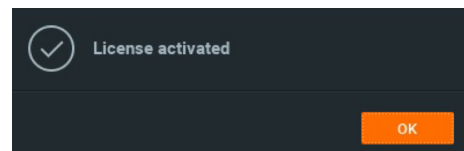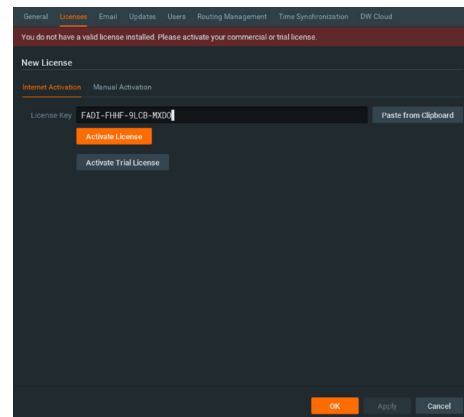3. Click OK when the update is completed.
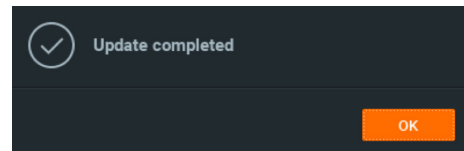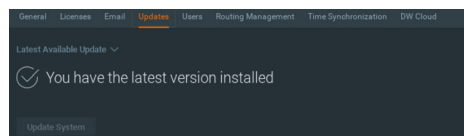
STEP 4:   Enter and activate licenses

1. Go to the system administration window and click on the license tab.

2. Enter the license key and click "Activate License." An Internet connection is required.

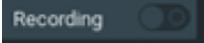* Click on "Activate Trial License" if you have not purchased a valid license key.

3. Click OK when the license key is activated.

STEP 5:   Configure recording

1. Right-click on a camera in the resource tree to set up the recording. Click on camera settings from the context menu.

2. Go to the recordings tab.
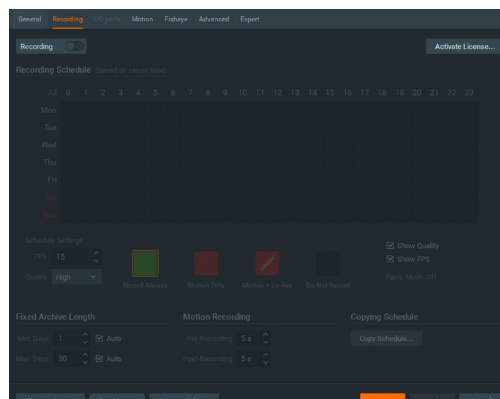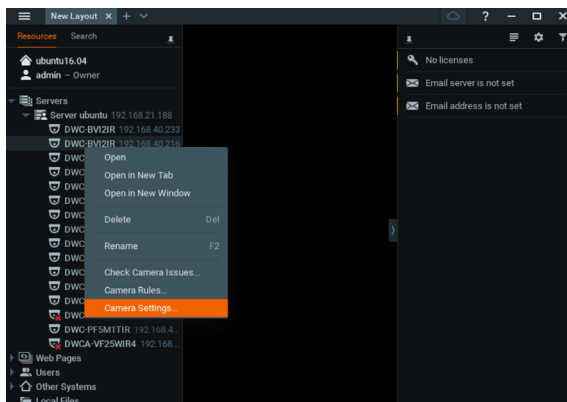
3. Click to turn on recording.

4. Configure the camera's schedule settings for quality, FPS and recording type.

5. Click and drag the mouse over the recording schedule to apply the settings to multiple days and times.
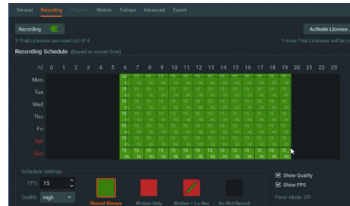
* Click "All" to apply the recording settings to the entire schedule.
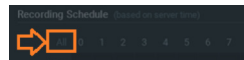
6. A red dot will appear next to the camera in the resource tree once recording is started.
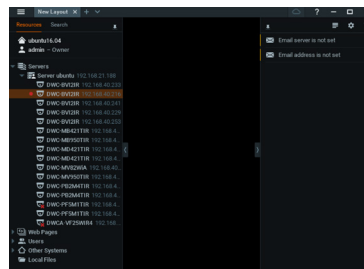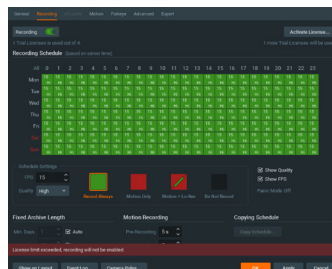
> **NOTE:** A Recording License is required to allow each camera to the archive.

STEP 6: **Backup database**

1. Go to the system administration window and click on the general tab.

2. Click "Create Backup…".

3. Navigate to the folder you want to save the database and enter a name for the backup file. Click save.

    * It is strongly recommended that a database backup be created for external storage media before and after every update in the event that a system restore point is needed.
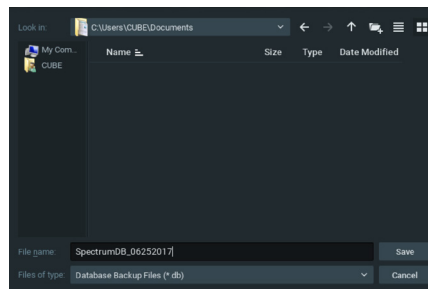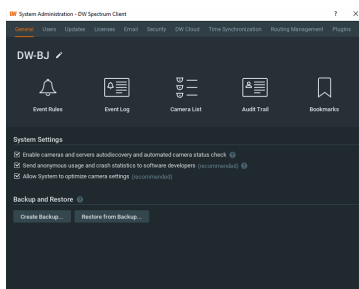
> **NOTE:** More information and instructions are available in the DW Spectrum® IPVMS user manual.

> **NOTE:** This products is covered by one or more claims of the HEVC Patents listed at patentlist.accessadvance.com.

TROUBLESHOOTING TIPS

Problem	Possible solutions
My camera does not auto-discover	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 a full list of supported cameras.) 3. Has the camera been 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 2 minutes for the server to map your network and detect all supported devices.
Videos are slow	1. Are you accessing the same cameras from multiple clients? (LAN and WAN) 2. Do you have a Gigabit network? Check your network speed.
My camera appears disconnected	1. Under camera settings, make sure the username 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 permission to view that specific camera.
I cannot get playback video from my camera	1. Do you have a network connection between the client and server (in case the 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 'unauthorized' message on my camera	1. Make sure the camera's username 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 username and password.

DW SPECTRUM SYSTEM REQUIREMENTS

Recommended specs for the full client

	Single-monitor DW Spectrum workstation	Dual-monitor DW Spectrum workstation	Quad-monitor DW Spectrum workstation
Processor	Intel i5 8th gen or AMD Ryzen 5 3000 Quad-Core or better	Intel i7 8th gen or AMD Ryzen 7 3000 Quad-Core or better	Intel i9 or AMD Ryzen 9 Quad-Core or better
Video card	Intel HD Graphics onboard GPU or better	Intel HD Graphics onboard GPU or better	GeForce GTX 1650 or better
RAM	8 GB DDR3 1600 MHz or better	16 GB DDR3 1600 MHz or better	32 GB or better
NIC	1Gbps or better	2 x 1 Gbit or better	2 x 1 Gbit or better
Storage	Dedicated SSD or NVME disk for the OS, 128 GB or larger	Dedicated SSD or NVME disk for the OS, 128 GB or larger	Dedicated SSD or NVME disk for the OS, 128 GB or larger
OS supported	**Microsoft Windows OS** (supported by both DW Spectrum® Server and Client). • Windows 8 – Released: October 2012 | EoS: 01/2023 • Windows 8.1 – Released: October 2013 | EoS: 01/2023 • Windows 10 – Released: July 2015 • Windows Server 2012 – Released: August 2012 | EoS: 10/2023 • Windows Server 2012 R2 – Released: October 2013 | EoS: 10/2023 • Windows Server 2016 – Released: October 2016 | EoS: 01/2027 • Windows Server 2019 – Released: October 2018 | EoS: 01/2029 • Windows Server 2022 – Released: August 2021 | EoS: 10/2031 **NOTE: DW Spectrum IPVMS for Windows can be installed as a software bundle, or the Server and Client software can be installed separately. **Ubuntu (Debian-based Linux) OS** (supported by both DW Spectrum Server and Client). • Ubuntu 16.04 LTS "Xenial Xerus" – Released: April 2016 | EoS: 04/2024 • Ubuntu 18.04 LTS "Bionic Beaver" – Released: April 2018 | EoS: 04/2028 • Ubuntu 20.04 LTS: "Focal Fossa" – Released: April 2020 | EoS: 04/2030 **NOTE: DW Spectrum IPVMS for Ubuntu is only available for separate installations (not bundled). **Macintosh OS** (supported only by the DW Spectrum Client. DW Spectrum Server is not available for macOS). • macOS 10.14 "Mojave" – Released: September 2018 • macOS 10.15 "Catalina" – Released: October 2019 • macOS 11.0, 11.1, 11.2 "Big Sur" – Released: November 2020 • macOS 12 "Monterey" – Released: October 2021 **NOTE: DW Spectrum IPVMS for macOS is only supported by the DW Spectrum Client.		

* Except Storage Server version

Important: OS not listed will be not be supported by DW®

Tech Support

Tel: +1 (866) 446-3595
Fax: (813) 888-9262

www.digital-watchdog.com
sales@digital-watchdog.com