

**Blackjack®DX** 

## PoE Servers Powered by DW Spectrum

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

## Blackjack DX Slim Desktop Servers – Up to 480Mbps

DW-BJDX31xxT DW-BJDX51xxT DW-BJDX71xxT
--

## Default Login Information for DW Spectrum

Default login information for the server's OS

Username: <b>admin</b>	Password: admin12345	Username: <b>d</b>

_	
ne: <b>dwuser</b>	Password: <b>Dw5pectrum</b>

	WHAT'S IN	N THE BOX		
Blackjack DX™ server	1	Keyboard and mouse	a a a a a a a a a a a a a a a a a a a	1 set
Quick start guide	1	Power cable		1

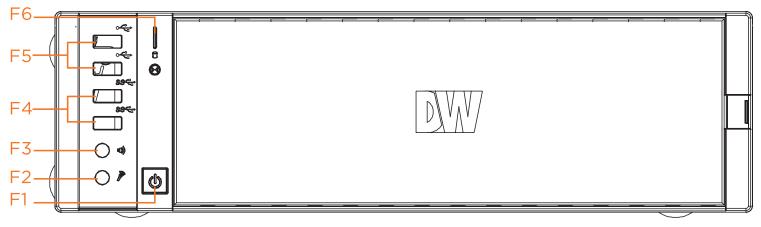
**NOTE:** Download all your support materials and tools in one place.

- 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<sup>®</sup> full manual for more information on features and functionality.

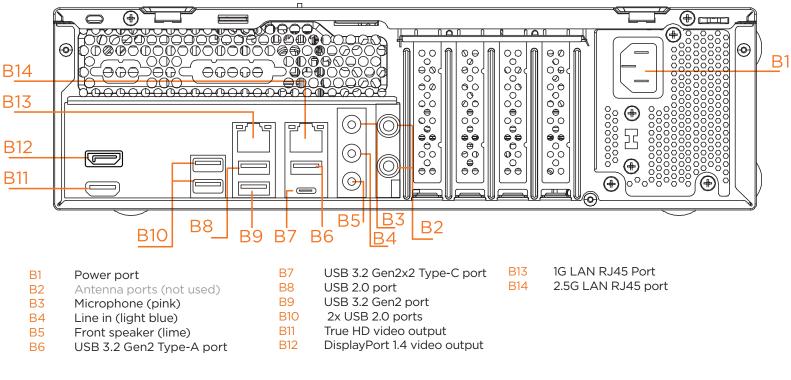


# FRONT PANEL



- F1 Power Button/Power LED
- F2 Mic in (3.5mm)
- F3 Audio out (3.5mm)
- F4 2x USB 3.0 ports
- F5 2x USB 2.0 ports
- F6 HDD Activity LED

# REAR PANEL



Default Login Information for DW Spectrum

Default login information for the server's OS

Username: admin Password: admin12345 Username: dwuser Password: Dw5pect	Username: <b>admin</b> Pa	word: admin12345	Username: <b>dwuser</b>	Password: <b>Dw5pectrur</b>
---	---------------------------	------------------	-------------------------	-----------------------------

# SPECIFICATIONS

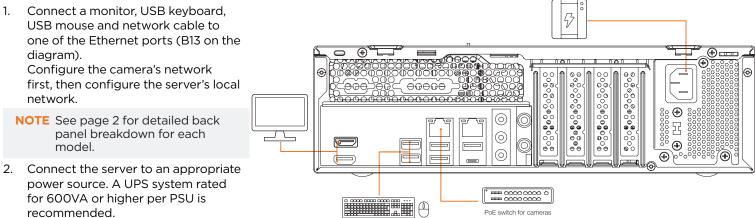
PART NUME	BER	DW-BJDX31xxT (HW Rev. D)	DW-BJDX51xxT (HW Rev. D)	DW-BJDX71xxT (HW Rev. B)			
Included IP	licenses	4	4	4			
Form factor		Slim Desktop	Slim Desktop	Slim Desktop			
Windows 11		DW-BJDX31XXT	DW-BJDX51XXT	DW-BJDX71XXT			
Operating system	Linux Ubuntu	DW-BJDX31XXT-LX	DW-BJDX51XXT-LX				
System	OS on SSD	m.2 SSD	m.2 SSD	m.2 SSD			
CPU		Intel i3 processor	Intel i5 processor	Intel i7 processor			
Memory		DW-BJDX31xxT-LX: 8GB DW-BJDX31xxT: 16GB	16GB	16GB			
Ethernet po	rt		1x 1G Ethernet, 1x 2.5G Ethernet				
System	Max video storage rate (Mbps)	180 Mbps	180 Mbps 360 Mbps 48				
	Maximum HDD	2 x 3.5 SATA HDD	2 x 3.5 SATA HDD	2 x 3.5 SATA HDD			
Chausara	Maximum storage	40TB	40TB	40TB			
Storage	RAID options						
	USB interface	Yes	Yes	Yes			
	Outputs	1x true HD, 1x DP for system configuration. Maximum 1 display output at a time.					
Video-out	Video card	Onboard Intel HD Graphics					
	Resolution	True HD: 4096x2160@60Hz , DP: 7680x4320@60Hz / 5120x3200@120Hz					
Pre-loaded	VMS software	DW Spectrum Server					
Remote clie	nts	Cross-platform - Windows, Linux Ubuntu and Mac					
Mobile apps	5	iOS and Android					
Keyboard a	nd mouse	Included					
Power supp	ly	300W**	300W** 3				
Operating to	emperature	41°F~104°F (5°C~40°C)					
Operating h	umidity		20~90% RH				
Dimension (	(WxDxH)		13.1" x 3.8" x 15.6" (334 x 97 x 402 mm)				
Other certifi	ication		FCC, CE, RoHS, NDAA, TAA				
Warranty		5 year limited	5 year limited	5 year limited			

# SETTING UP THE SERVER

\* UPS recommended

Specifications and components mentioned are subject to change without notice.

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



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).



## STEP 2: Configure date and time

Windows OS:

4.



- 1. Double-click on the **Date and Time** icon on the desktop.
- 2. The default time zone is UTC-08:00 Pacific Time. Click **Change time zone...** to change to the correct time zone.
  - Time Zone Settings

    Set the time zone:

    Time zone

    (UTC-0800) Pacific Time (US & Canada)

    (UTC-0700) Anoma (UTC-0700) Chinabua, La Paz, Mazatlan
    (UTC-0700) Mountain Time (US & Canada)
    (UTC-0700) Chinabua, La Paz, Mazatlan
    (UTC-0600) Central America
    (UTC-0600) Saster Island
    (UTC-0600) Guadalajara, Mexico City, Monterrey
    (UTC-0500) Bogota, Lima, Quito, Rio Branco
    (UTC-0500) Eastern Time (US & Canada)
- 3. Click **OK** after selecting the correct time zone.
  - Click **Change date and time...** to update the date and time if they are not correct. **Change date and time... NOTE:** Verify the time zone before updating the date and time. Time may show 2 or 3 hours off due to an incorrect time zone.

							Time:
I		М	ay 20	18		۲	New York
u		Tu	We				
9	30	1	2	3	4	5	
6		8	-	10	11	12	
3	14 21		23	17	18 25	19 26	
7			30		1	20	The day have
3	4	5	6	7	8	9	
	-		-	-		-	11: 16: 32 AM
							•
-	de ca	alend	lar si	etting	15		
an	ge ca	alen	dar se	etting	<u>15</u>		

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

## Linux OS:

1. Open Settings and go to Details > Date &Time.



2. Turn OFF Automatic Date & Time and Automatic Time Zone

Automatic Date & Time Requires internet access	
Automatic Time Zone Requires location services enabled and internet access	$\bigcirc$
Date & Time	16 February 2023, 10:39
Time Zone	PST (Los Angeles, United States)
Time Format	24-hour 👻

3. Click Date & Time and set correct date and time.

	Da	te & Time			
+	+	Month	Februa	ary	•
10:	42	Day	16	-	+
-	-	Year	2023	-	+

4. Click Time Zone and set to correct Time zone. (Type one of the largest cities in the time zone).



5. Close Settings.

## **STEP 3:** Configure network

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

	Camera network	Local network (LAN)
IP address		
Subnet mask / Netmask		
Default gateway / Gateway	N/A	
DNS servers	N/A	

\* Camera network and local network cannot be on the same network.

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

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

## Windows OS:

1.



2. Right-click Ethernet (connected) and click Properties.





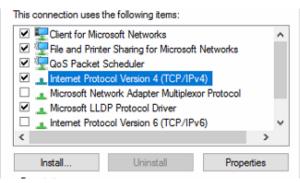
3. Select Internet Protocol Version 4 (TCP/IPv4) and click Properties.

- 4. Click the Use the following IP address: radio button Use the following DNS server addresses: will be selected automatically.
- 5. Enter the IP address, subnet mask, and preferred and alternate DNS server addresses for the local network.
- 6. Click OK to close the window, and again for the properties window.

**NOTE** It must be the same network as the cameras and must not be the same network as the local network. Contact your network administrator for more information.

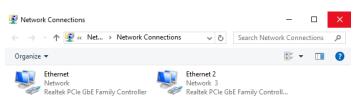
### Local Network

- 7. Right-click on the Ethernet (Network cable unplugged) and click Properties.
- 8. Select Internet Protocol Version 4 (TCP/IPv4) and click Properties.



- 9. Click the Use the following IP address: radio button Use the following DNS server addresses: will be selected automatically.
- 10. Enter the IP address and subnet mask of the camera network. Leave the default gateway and preferred and alternate DNS server fields blank.
- 11. Click **OK** to close the window, and again for the properties window.
- 12. Connect a network cable to Ethernet port B14 (2.5G LAN) on the rear panel diagram to activate the local network connection.

13. Close the network connections window.



## Linux OS:

1. Open Settings > Network



2. Click Setting of the Realtek Ethernet.



- Change to Manual then enter Address, Netmask , Gateway.
   \* Do not enter Gateway information if there is no Gateway in this network.
- 4. Click Apply to save.



5. Restart the connection by switching OFF then turn ON. If the connection is off, connect the network cable.

Connected - 1000 Mb/s	ON	*
-----------------------	----	---

- 6. Click Settings of the Intel Ethernet.
- 7. Change the settings if needed to access the Internet and for remote access from a local network.
- 8. Click Apply to save.
- 9. Restart the connection by switching OFF then turn ON. If the connection is off, connect the network cable.



**NOTE** If you are not connecting to the Blackjack<sup>\*</sup> from 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



## 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.

# SETTING UP DW SPECTRUM MEDIA SERVER

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

## STEP 1: Login from the Blackjack' server



- 1. Open the DW Spectrum client.
- 2. Click on the pre-configured server.
- 3. If it does not log in automatically, enter the default password and click **Connect**.

<b>w</b> spectrum				trum	
			BJAIHDX		
			localhost:7001		
BJAIHDX	-		admin		
Log in to DW Cloud	Connect to Server				
	CONFECT TO SERVER		•••••		
		A state of the			<b>_</b>
		Log in to DW Cloud	Connect		Connect to Server

### **STEP 2:** To rename the server

- 1. Right click on the server name in the resource list on the left side and click Server Settings...
- 2. Enter the new server name in the name field and click **OK**.

III NewLaport1 x +		○ - ? _ <i>@</i> ×	W Server Settings - Server DW-BIAHDX5108T - DW Spectrum Client	×
Q,- Seenth		🐥 serrections 🥂 🕱 🔺		
		Check out DW Cloud - connect to your System from anywhere!	General Storage Management Storage Analytics Backup	
- E Server Die GAARDIGSTO	there are a	pour System from anywheret Learn more Connect	Name Server DW-BJAIHDX5108T	
Overser     Web Pages	They Proceed Resources	A Grand survey is not set	Name Server DW-BJAIHDX31081	
<ul> <li></li></ul>	Manitor Moving Tab	Automatic client speakers New client only updates will be installed automatically Visi can change this in the	IP Address 192.168.5.165	Ping
	Marilar in New Window	setings.	Port 7011	
	Revue F2	Updates Settings		
	Australia Lativ Inver		Certificate O DW Spectrum	
+ de seron-occi	Saver Lope		Autodetect built-in and USB webcams	
License	Server Web Page.		◯ Failover ◎	
		Ε	Max cameras on this server: 256 💲	
			Server Location ID: 0	
			Failover Priority	

#### STEP 3: To check for updates

- 1. Click the main menu icon in the upper-left corner of the DW Spectrum window, and click System Administration...
- 2. Click the **Updates** tab. If the system needs to be updated, click on the **Update** button.

New Layout 1 $\times$ +	~										
Connect to Another Server Disconnect from Server	Ctrl+Shift+C Ctrl+Shift+D										
	>										
en art Screen Recording	Alt+R		Administration - DW					<b>-</b>	D 11		
ystem Administration	Ctrl+Alt+A		User Management					Time Sync	Routing	Plugins	ſ
er Management		~	he latest ve	reion ie alı	roadvi	inetal	امط				
Local Settings		$\bigcirc$		13101113 di	leauy	instai	ieu				
Audit Trail		Undata	to Specific Build	🗘 Check Aga							
Bookmark Log	Ctrl+B	opdate	to specific Bulla	🗸 спеск Aga							

\* If the latest version is already installed, the message "The latest version is already installed" will be visible at the top.

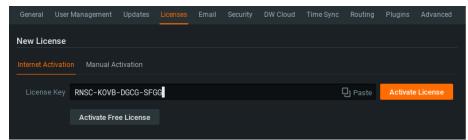
3. Click **OK** when the update is complete.

Specific Build ~ (3) Advanced settings. 6.0. XXXXXXX Biology rocks	Ready to update to 6.0.X.XXXXX References roles	DW DW Spectrum Client ? >
BIGLANN CHANNES: * Support for Manzachi Nordman 8.1 and Manzachi Windows Simer 2019 In discontinued. * Support for Manzachi Nordman Simon Simon Manzachi (S.1) * Support for Manzachi Pil and Manzachima dei the neur major Holmade (S.1) * Support for Manzachim Pil and Manzachima dei the neur major Holmade (S.1) * Support for Manzachim Pil and Manzachima dei the neur major Holmade (S.1) * Support for Manzachim Pil and Manzachima dei the neur major Holmade (S.1) * Support for Manzachima dei the neur major dei the neur major Holmade (S.1) * Support for Manzachima dei the neur major dei the nei the neur major	BREAKING CHANGES: "Support for Microsoft Windows & 1 and Microsoft Windows Server 2012 is discontinued. "Support for Bashery P12 and all discontinued in the next micro relative (L6) AL	DW Spectrum Client will be restarted to the updated version.
<ul> <li>Subject for Rasjberrý OS 10 mil be discontinued in the mest major release (6-1).</li> <li>Downlead          <u>±</u> Oset lopdate File</li> </ul>	Support for Rappberry OS To will be discontinued in the next major release (a.1)      Instal under     Cancel	ок

## **STEP 4:** Activate licenses

**NOTE** An active Internet connection is required.

- 1. Click the main menu icon in the upper-left corner of the DW Spectrum window, and click System Administration...
- 2. Click the Licenses tab. Enter the license key and click Activate License.



- \* Click Activate Free License to use a free, four channel license for 30 days.
- 3. Click **OK** when all necessary license keys are activated.

DW DW Spectrum	Client	?	×
$\checkmark$	License activated		
		ок	

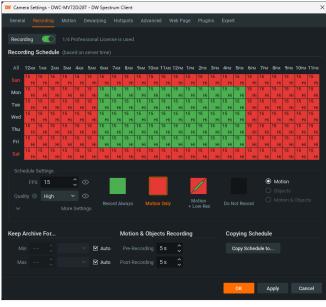
## STEP 5: Configure recording

- 1. Right click a camera in the resource list on the left side and click **Camera Settings...**
- 2. Click the **Recording** tab.

# **Blackjack<sup>®</sup>DX<sup>™</sup>**

=	New Layout 1 $ imes$			DW Came	ra Settings - DW	C-MV72Di2I	BT - DW Spec	trum Client				×
Q.~	Search			Genera								
	BJAIHDX admin			Recor								
	Server DW-BJAIHI	DX5108T		All Sun Mon								
•	DWC-MV72D     Web Pages	от Open Open in New Ta	b	Tue								
•	Other Systems DW_Building MYDW-GA0	Open in New Wi	indow	Thu Fri								
►	MYDW-GA0	Create Group Delete	Ctrl+G Del	Sat								
►	MYDW-GB01	Rename	F2	Qual								
	▲ MYDW-GB0: ▲ MYDW-GC01	Replace Camera Check Camera I		Keep /								
	Local Files	Camera Rules Camera Setting										
										ок	Appl	Cancel

- 3. Click the **Recording** toggle to activate recording for that camera.
- 4. Set quality, FPS, and recording type.
- 5. Click and drag over the recording schedule to apply the settings to any number of days and times.



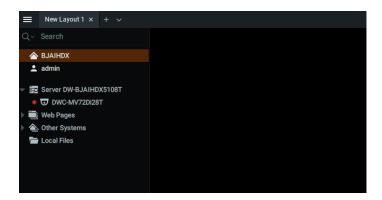


\* Click All to apply the recording settings to the entire schedule.

Genera	al R	cordi	ng											age			Exper							
Reco	Recording 1/4 Professional License is used																							
Recor	ding	Sche	dule																					
All	12ам		2ам	Зам	4ам	5ам	бам	7ам	8ам	9ам	10ам		12рм		2рм	Зрм	4рм	5рм	6рм	7рм	8рм	9рм	10рм	
Sun	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi
Mon	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi
Tue	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi
Wed	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi
Thu	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15	15 Hi												
Fri	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi		15 Ні	15 Hi	15 Hi		15 Hi									
Sat	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi	15 Hi		15 Hi	15 Hi	15 Hi	15		15 Hi			15		15 Hi						
	_																							
	edule : FPS	15	5												/						) Mot			

6. Click OK when the necessary recording schedule is set. A red circle will appear next to the camera in the resource list.

## **Quick Start Guide**



**NOTE:** A Recording License is required to allow a camera to record to the archive.

## STEP 6: Backup database

- 1. Click the main menu icon in the upper-left corner of the DW Spectrum window, and click System Administration...
- 2. Click the Advanced tab. Click Create Backup...
- 3. Select the location to save the database, and enter a name for the backup file. Click Save.
- \* Creating a database backup to external storage before and after every update is strongly recommended.

		Look in:	C:\Users\DWUSER\Documents	$\checkmark \leftarrow \rightarrow$	↑ C; ≣ ፡፡፡
		My Computer	Name <u>-</u>	Size Type	Date Modified
		DWUSER			
General Liser Management Lindates	Licenses Email Security DW Cloud Time Sync Routing Plugins Advanc	at			
ochetar osci management opuates		-			
Backup and Restore	Create a backup of System management data, or restore System management data from existing backup	an File <u>n</u> ame: DB_I	Backup_02142025		Save
Logs Management	Create Backup Restore from Backup	Files of type: Data	abase Backup Files (*.db)		✓ Cancel

NOTE: More information and instructions are available in the DW Spectrum<sup>®</sup> 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
A camera or other device is not automatically discovered.	<ol> <li>The device must be on the same local network as the media server.</li> <li>The device must be compatible with DW Spectrum. Refer to the full list of supported cameras on digital-watchdog.com</li> <li>Update the device with the latest firmware.</li> <li>Ensure ONVIF is enabled on the device.</li> <li>Add the camera manually.</li> <li>Reboot the server after installation. Allow up to 2 minutes for the server to detect all supported devices.</li> </ol>
Slow video	<ol> <li>The same camera(s) could be accessed by multiple clients simultaneously.</li> <li>Check network speed.</li> </ol>
Device appears disconnected	<ol> <li>Ensure the username and password are correct in device settings.</li> <li>Click the ping button in device settings to ensure the camera is connected to the network.</li> <li>Reboot or restore the device to the factory default if its web page is available.</li> <li>Update the device with the latest firmware.</li> <li>The device must be on the same local network as the media server.</li> <li>Ensure ONVIF is enabled on the device.</li> <li>The user may not have the necessary permissions to view that device.</li> </ol>
Cannot view archived video	<ol> <li>Ensure there is an active network connection between the client and server.</li> <li>The user may not have the necessary permissions to view archive from that device.</li> <li>The camera may be set to a recording mode that did not record video for the selected time and environment.</li> <li>Check the log on the media server to ensure the device did not unexpectedly disconnect.</li> </ol>
"Unauthorized" message on device	<ol> <li>Ensure the username and password are correct in the device's settings.</li> <li>Reboot the camera.</li> </ol>

# **DW SPECTRUM SYSTEM REQUIREMENTS**

## **Recommended specs for the full client**

	Minimum	Recommended									
Processor	Intel i5 8th gen processor (or higher)	Intel Core i7 8th gen processor (or higher)									
System RAM	8GB RAM	16GB RAM									
Video card	Integrated Intel graphics	Integrated Intel graphics GeForce GTX 1650 or better									
Network interface	2 x 1 Gbps	2 x 1 Gbps									
OS Drive	256GB HDD	256GB HDD Dedicated 256GB SSD or larger									
OS supported	Microsoft Windows OS (supported by both DW Spectrum® Server • Windows 10 • Windows 11 • Windows Server 2016 • Windows Server 2019 • Windows Server 2022 **NOTE: DW Spectrum for Windows can be installed as a software 1 Ubuntu (Debian-based Linux) OS (supported by both DW Spectru • Ubuntu 18.04 LTS "Bionic Beaver" • Ubuntu 20.04 LTS: "Focal Fossa" • Ubuntu 22.04 LTS: "Focal Fossa" • Ubuntu 22.04 LTS: "Jammy Jellyfish" **NOTE: DW Spectrum for Ubuntu is only available for separate inst Macintosh OS (supported only by the DW Spectrum Client. DW Spe • macOS 11.0, 11.1, 11.2 "Big Sur" • macOS 12 "Monterey" • macOS 12 "Monterey" **NOTE: DW Spectrum for macOS is only supported by the DW Spectrum Spectrum for MacOS is only supported by the DW Spectrum Spectrum Spectrum for macOS is only supported by the DW Spectrum Spectrum Spectrum for macOS is only supported by the DW Spectrum Spectrum Spectrum for macOS is only supported by the DW Spectrum Spectrum Spectrum for macOS is only supported by the DW Spectrum S	bundle, or the Server and Client software can be installed separately. m Server and Client). callations (not bundled). ectrum Server is not available for macOS).									

\* 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