



Cloud-Optimized Video Archiving

4-channel NVR	8-channel NVR	16-channel NVR
DW-COVA4	DW-COVA8	DW-COVA16



User's Manual Ver. 05/26

Before installing and using the camera, please read this manual carefully.
Be sure to keep it handy for future reference.

Cautions

Read Before System Operation. **Follow these details to prevent material damage or personal injury.**

Signs of Caution and Warning

Warning: This sign indicates that the user may die or be seriously injured if the product is **not used or installed properly**.

Caution: This sign indicates that the user may be injured or experience property damage if the product is not used or installed properly.



Warning: Do not expose the product to fog, rain, or too much humidity to decrease the danger of electric shock or fire.

General Warning



Warning

1. Use the power cord supplied or recommended by the supplier, or it may cause a fire.
2. Do not disassemble or reassemble the product. It may cause a malfunction or fire.
3. Enquire with your vendor about the repair. Improper repair may cause an electric shock or fire.
4. Do not touch the product with wet hands. It may cause a malfunction or an electric shock.
5. A professional must ensure product installation, or it may cause malfunction, electric shock, or fire.
6. Ground applies to video products equipped with a 3-wire grounding-type plug having a third (grounding) pin. This plug only fits into a grounding-type power outlet. If grounding is not done, it may cause a malfunction or an electric shock.
7. Ground connection must not touch gas, water pipes, or telephone lines. If grounding is not done properly, it may cause an electric shock.
8. Prevent metallic foreign objects from going inside the product. It may cause a malfunction or an electric shock.
9. Do not spray insecticide or flammable spray while driving. It may cause a fire.
10. Place the system in an open place where air ventilation is guaranteed, or it may overheat and cause considerable damage to the system.
11. Prevent water from entering electrical parts. Clean with a dry towel to avoid an electric shock during cleaning.



Caution

1. Use the power cord supplied or recommended by the supplier. The internal fan rotates at high speed and may cause an accident.
2. Do not drop, give strong vibration, or shock the product. It may cause a malfunction.
3. The air intake in the front panel and the air vent in the back panel must not be blocked during installation. The product's internal temperature would exceed the allowable limit and could cause malfunction or fire.
4. Do not touch the product or the power cord when thunder strikes. It may cause an electric shock.
5. Do not install the product near the heating source. The product's internal temperature would exceed the allowable limit and could cause malfunction or fire.
6. Do not install the product in an inclined or unstable location or where vibration could be caused. It may cause a malfunction.

Cautions about Power



Warning

1. Must use the grounding outlet to connect the power cord, or it may cause a fire.
2. Do not connect the power cord in the middle or use an extension cord. It may generate heat or cause a fire.
3. Do not touch the power cord with wet hands. It may cause an electric shock.
4. Keep the power cord dry and protect it from humidity. It may generate heat or cause a fire. The power cord is not waterproof.
5. Hold the body of the plug while removing the power. Do not pull the power cord. Damage to the power cord may cause overheating or a fire.
6. Check the power plug regularly. Humidity and smoking may cause a fire.
7. Remove the power cord from the outlet when the product is not used for a long time. It may cause a short-circuit or an electric shock.



Caution

1. Do not turn off the power by removing the power plug. To turn off the power, click the power button on the front panel. When the system stops abnormally, the power button might not work. Click the power button for 5 full seconds to turn the power off.
2. Do not cut off the power artificially or shock or vibrate the unit while the HDD is active. It may cause hard disk failure or loss of data.



Remarks

※ Pictures, buttons, functions, or configurations are subject to change or modification according to the different models.

Section 1: Hardware Overview 5

1.1	What's in the Box.....	5
1.2	Parts Identification	5
1.3	Setting up the NVR	6
1.4	Safety Tips.....	6

Section 2: DW Mobile+ App Setup.....7

2.1	Log in to myDW	7
2.2	Find Your COVA Unit.....	8
2.3	Select Language.....	9
2.4	Time Settings.....	10
2.5	Create a New Password	10
2.6	Login.....	11
2.7	Network Settings.....	11
2.8	Register Device	13
2.9	Camera Management.....	13

Section 3: Local Setup Wizard..... 15

3.1	Language.....	15
3.2	Time Settings.....	15
3.3	Create a New Password	16
3.4	Login.....	16
3.5	Network Settings.....	17
3.6	Register Device	19
3.7	Camera Management.....	19

Section 4: COVA Web Client21

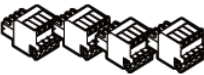
4.1	DW IP Finder	21
4.2	Login/Logout	21
4.3	Main Web Dashboard.....	22
4.3.1	Home.....	22
4.3.2	Layouts.....	22
4.3.3	History/Search	23
4.3.4	Identisee Feature	23
4.3.5	Timeline.....	24
4.3.6	PTZ Control.....	24
4.3.7	myDW Video Share.....	25
4.3.8	Live	26

4.3.9	Playback.....	26
Section 5: COVA Settings		27
5.1	General	27
5.1.1	System	27
5.1.2	User	27
5.1.3	HDD	28
5.1.4	Audio.....	28
5.1.5	Sensor.....	29
5.2	Camera.....	30
5.2.1	Recording Setup	30
5.2.2	Motion.....	31
5.2.3	Upgrade	31
5.2.4	Camera Management	32
5.2.5	Schedule	33
5.3	IdentiSee	33
5.4	Network.....	35
5.4.1	Settings	35
5.4.2	myDW Registration.....	36
5.5	Utility	37
Section 6: Specifications.....		38
Warranty Information.....		40
Limits and Exclusions.....		41

Section 1: Hardware Overview

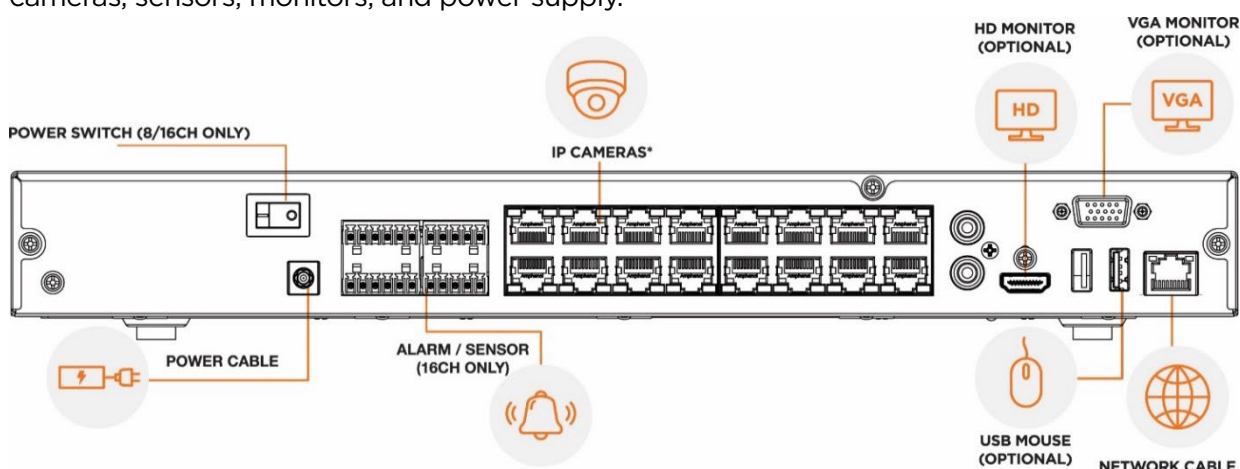
1.1 What's in the Box

When opening the unit for the first time, ensure that the following items are included in the box with your unit.

WHAT'S IN THE BOX					
Quick Setup Guide		1 Set	48V D/C Power Supply and Cable		1 Set
USB Mouse		1	Rack Mount Ears (8- and 16-channel models only)		1 Set
Alarm In/Out Terminal Block (16-channel model only)		4	Rack Mount Screws (PWM3x6mm)		6

1.2 Parts Identification

Refer to the diagram below to identify and locate all necessary ports and connections for external cameras, sensors, monitors, and power supply.



NOTES:

- Features and the number of PoE ports in the back varies by model.
- Alarm in/out is available on the DW-COVA16 model only.
- RS-485 ports are not available on the 16-channel model. For PTZ control, use the ONVF protocol.
- The power switch is available only on the 8-CH and 16-CH models. The 4-CH model powers up automatically when the power cable is connected.
- Only one video output port can be used at a time. This hardware does not support dual monitoring.
- The NVR has a local buzzer alarm that can be activated in case of Network disconnection, IP address conflict, disk I/O error, disk full, no disk / HDD pulled out, disk write failure, and output resolution change.

1.3 Setting up the NVR

1. Place the NVR in its final position. Refer to the safety tips for proper installation below.
2. Connect all necessary cameras, external devices and cables to the NVR.
3. Connect the NVR to an appropriate power supply. The NVR will boot up automatically.

		DW-COVA4	DW-COVA8	DW-COVA16
System	Power Requirements	DC 48V/1.25A	DC 48V/2.5A	DC48V/3.75A
	Power Consumption	≤ 10W	≤ 10W	≤ 20W
PoE	PoE Ports	100M RJ45 × 4	100M RJ45 × 8	RJ 45 100Mbps × 16
	Standards	IEEE802.3AF/AT		
	Max power per port	802.3AT		
	Output Power	≤ 48W	≤ 80W	≤ 150W

1.4 Safety Tips



Do not expose the unit to direct sunlight.



Place the unit in a dust and moisture-free environment.



Do not press any button or turn the unit off during the boot-up process.



Allow at least 3" (7.6cm) of clearance around the ventilation openings.



A max ambient temperature of 104°F (40°C) is recommended.



A UPS (Uninterrupted Power Supply) is recommended.

Section 2: DW Mobile+ App Setup

The COVA bridge NVR is built as a hybrid cloud-based local recording system. All settings, monitoring and configuration are done remotely via the DW Mobile+ app, the system's web browser or your myDW dashboard.

To see the local setup wizard section, go to [Section 3: Local Setup Wizard](#).

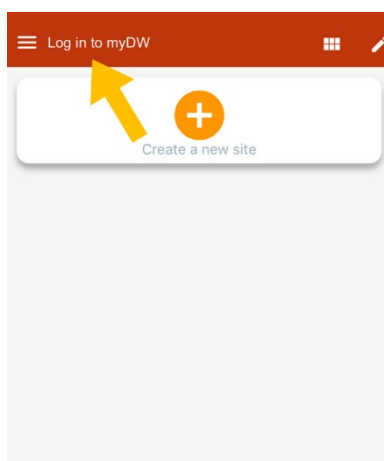
To complete the NVR's setup wizard, download the [DW Mobile+](#) app from the app store by searching for "DW Mobile Plus" or using the links below.



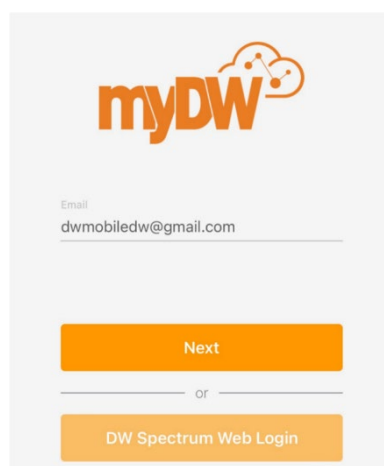
2.1 Log in to myDW

To register the COVA unit with Digital Watchdog with the DW Mobile+ app:

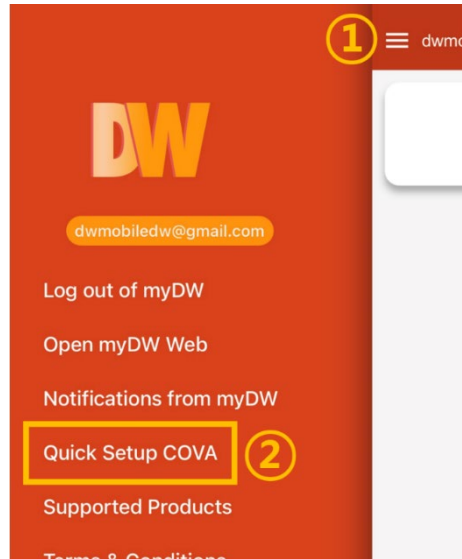
1. Open the DW Mobile+ app and select "Login to myDW" in the top-left corner.



2. Enter the username and password for your myDW account.



3. Tap the 'Menu' button and select the 'Quick Setup COVA' option.



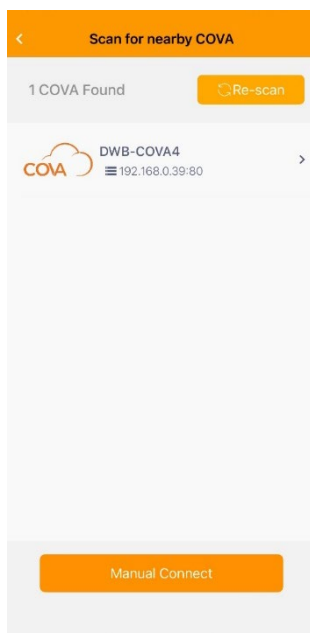
2.2 Find Your COVA Unit

Follow the instructions in the app to find and register your COVA unit with Digital Watchdog.

IMPORTANT: The NVR must be connected to the same local network as the DW Mobile+ app for initial detection to occur. Users can complete the setup wizard locally at the NVR or via the web client if no Wi-Fi network is available for mobile connection.



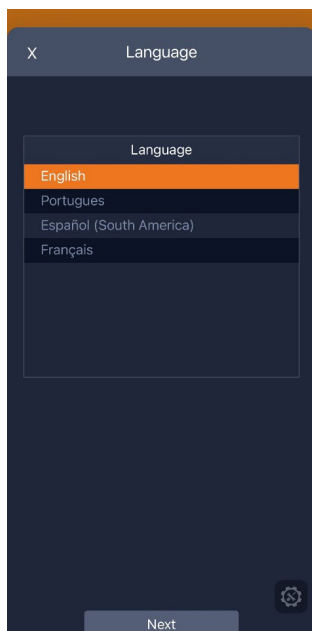
Tap on the unit once it shows up in the scan result, and complete the setup process.



NOTE: The unit's setup wizard can be completed from the unit itself, the DW Mobile+ app, or the COVA unit's web client.

2.3 Select Language

Choose your preferred language from the drop-down options. Tap 'Next' to save and move to the next step.



2.4 Time Settings

Select the system's time zone, date, and time format, turn Daylight Saving Time on or off, or manually enter the date and time. You can also select to synchronize the NVR with an NTP server, automatically syncing your NVR's date and time settings.

Tap 'Next' to save and move to the next step.

The screenshot shows the 'Time Settings' screen. It has a dark blue background with white text. At the top, there's a title bar with 'X' and 'Time Settings'. Below it, there are several settings: 'Timezone' with a dropdown menu showing 'GMT-08 Las Vegas, San Francisco, Var'; 'Time Format' with a dropdown menu showing '12-Hour'; 'Date/Time' with a text field showing '02/11/2025 02:43:33 PM' and two clock icons; 'DST' with a dropdown menu showing 'ON'; 'Time Sync Mode' with a dropdown menu showing 'NTP'; 'Date Format' with a dropdown menu showing 'Month/Day/Year'; and 'NTP Server' with a dropdown menu showing 'pool.ntp.org'. At the bottom, there are two buttons: 'Previous' and 'Next'.

2.5 Create a New Password

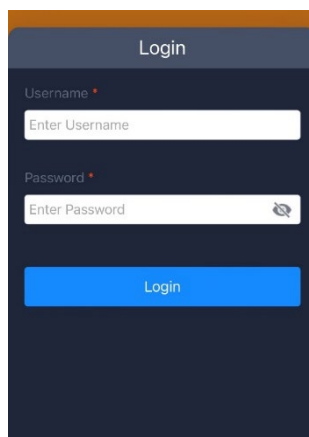
You will be asked to set up a new password when you log in to your unit for the first time. The password must be between 8 and 12 characters long, with a combination of at least one (1) uppercase letter, a lowercase letter, a number, and a special character. Acceptable special characters are 『~!\$^()_-|{}[];.:?/』.

Tap 'Next' to save and move to the next step.

The screenshot shows the 'Create a New Password' screen. It has a dark blue background with white text. At the top, there's a title bar with 'X' and 'Create a New Password'. Below it, there are three input fields: 'Username' with the value 'admin', 'New Password' with the placeholder 'Enter Password', and 'Confirm Password' with the placeholder 'Confirm Password'. Below the 'New Password' field, there are four small gray squares. Below the 'Confirm Password' field, there's a note: 'Length: 9 to 16 characters Contains numbers, lowercase letters, uppercase letters, and symbols.' At the bottom, there are two buttons: 'Previous' and 'Next'.

2.6 Login

After setting up the new password, you must log back into the system to continue with the setup wizard.

A screenshot of a login interface. At the top, there's a title bar with the word "Login". Below it, there are two input fields: "Username" and "Password". The "Username" field has a placeholder text "Enter Username". The "Password" field has a placeholder text "Enter Password" and a small eye icon to its right. Below these fields is a blue button labeled "Login".

2.7 Network Settings

Select the network parameters as required.

A screenshot of a "Network Settings" screen. At the top, there's a title bar with "X" and "Network Settings". Below it, there's a section titled "Ethernet Port (Online)". Under this section, there are several fields: "IPv4 Address" with the value "192.168.0.39", "Subnet Mask" with the value "255.255.255.0", and "Gateway" with the value "192.168.0.1". There is a checkbox labeled "DHCP (Obtain an IP address automatically)" which is checked. Below this, there are fields for "Preferred DNS" with the value "192.168.0.1" and "Alternate DNS" with the value "0.0.0.0". At the bottom, there is a checkbox labeled "Obtain DNS automatically" which is checked, and a "Next" button.

Ethernet Port (Online)

Select "DHCP" to allow the unit to retrieve its network settings automatically. To enter the network settings manually, ensure that "DHCP" is unchecked. Enter the IP Address, subnet mask, gateway and DNS information.

- **IP Address:** displays the unit's IP address. If DHCP is selected, the IP address will automatically adjust to match the network's requirements.
- **Subnet Mask:** The subnet mask determines the address class of the subnet to which the system belongs. For more information, please consult your network administrator or your Internet provider.
- **Gateway:** This is the IP address of the router or gateway server. It is required when

connecting to the NVR through the external router over the Internet (from an external network). For more information, please consult your network administrator or Internet service provider.

- **Preferred and Alternate DNS:** Enter the IP address of the Domain Name Server. Input the DNS Server information to use DDNS, Email Notifications and NTP Server. For more information, please consult your network administrator or your Internet provider. Users can check the “Obtain DNS Automatically” box to allow the unit to obtain the DNS information automatically.

Internal Ethernet Port

This section shows the IP Address and subnet mask for the IP cameras connected directly to the back of the unit. This can be manually adjusted as needed.

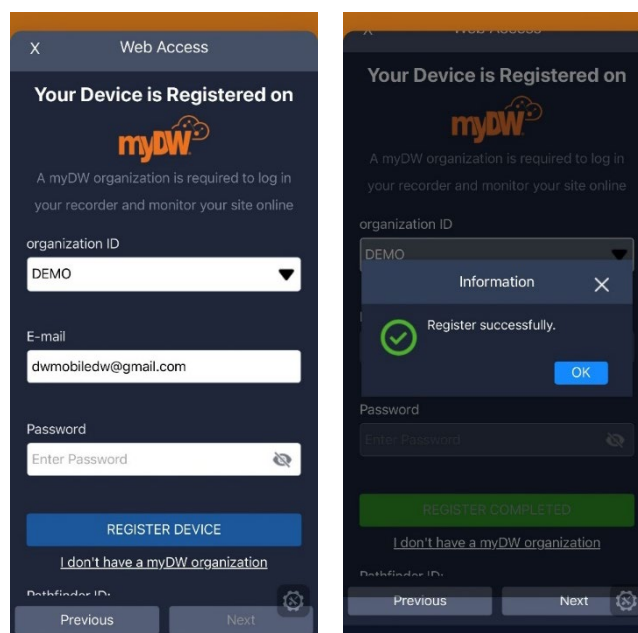
- **HTTP Port:** The default HTTP port is 80. The port number can be changed to another number, such as 81. The port is mainly used for web client access. To access the unit through a web browser, enter the IP address and the HTTP port into the address bar of a web browser. For example: `http://192.168.11.61:81`
- **Server Port:** The default server port is 6036. The server port number can be changed as needed. The port is mainly used to access the unit via a network video management system.
- **HTTPS Port:** The default HTTPS port is 443. HTTPS provides website authentication and protects user privacy. You can enter the IP address, along with the HTTPS port, in the web browser’s address bar. Then, enter your username and password to log in.

NOTE: The HTTP and server ports must be mapped to the router before accessing the unit via WAN. Please contact your network administrator for further information.

Tap ‘Next’ to save and move to the next step.

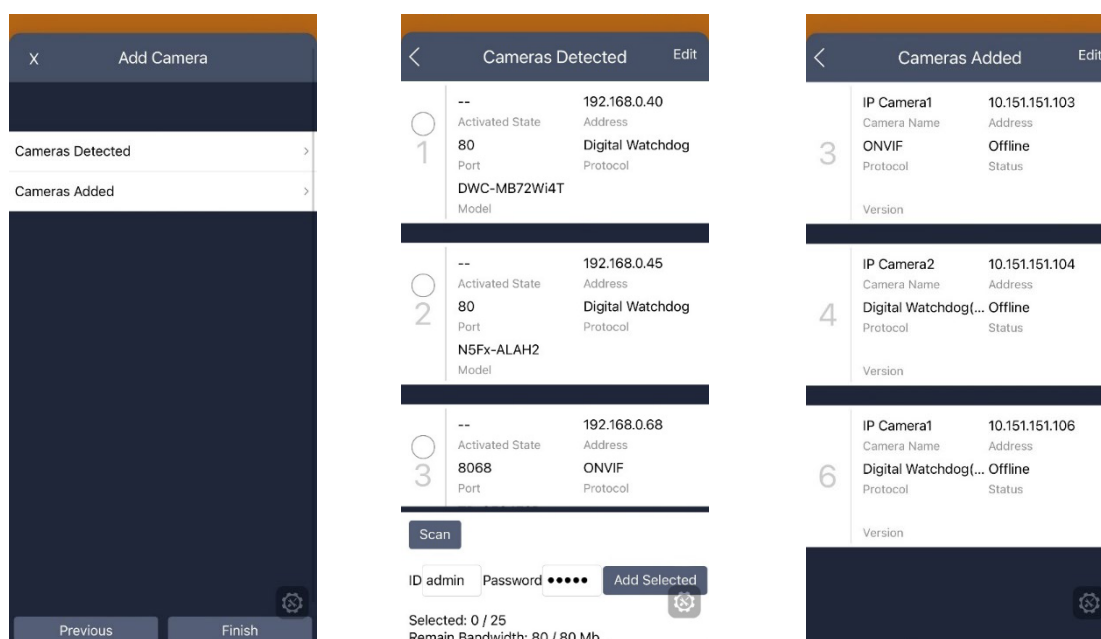
2.8 Register Device

The myDW username entered in the app will be applied automatically here. Re-enter the password and click 'Next.'



2.9 Camera Management

All cameras connected directly to the unit will appear on the 'Cameras Added' tab. You can also scan the network for additional cameras by clicking the 'Cameras Detected' tab.

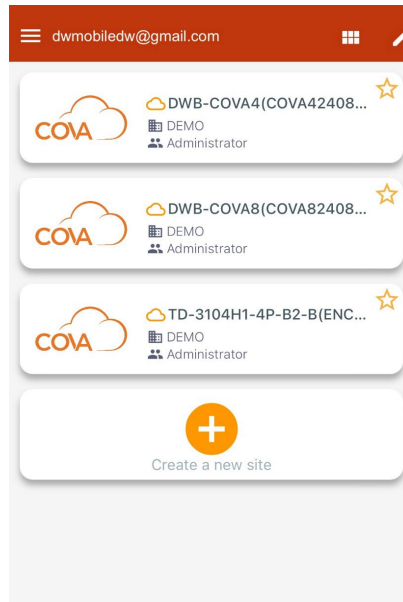


To manually add cameras:

1. Go to the 'Cameras Detected' tab.
2. Check the boxes next to the cameras you want to add to your recorder.
3. Enter the admin password for the cameras and click the 'Add Selected' button.

4. Registered cameras will appear in the 'Cameras Added' tab. Click 'Finish'.
5. Tap the 'Edit' button on the top right to edit the camera name.

Once the setup wizard is done, you can see the new unit added to the app's main screen, as shown below:

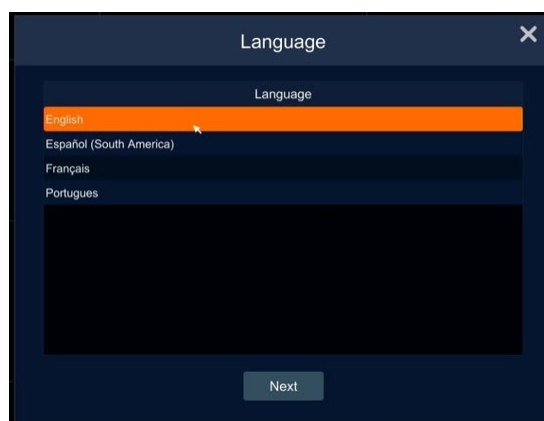


Section 3: Local Setup Wizard

Administrators can operate the COVA unit directly at the recorder itself. A display monitor must be connected to view the local user interface.

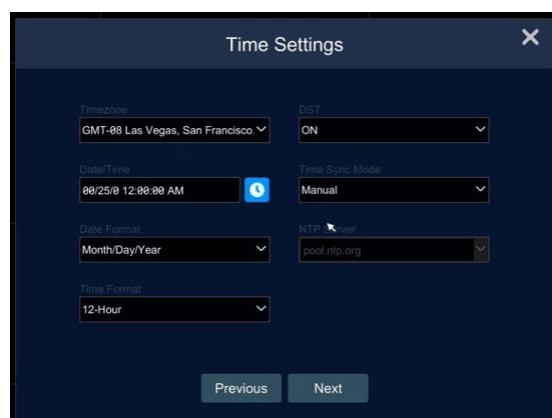
3.1 Language

Choose your preferred language from the drop-down options. Click 'Next' to save and move to the next step.



3.2 Time Settings

Select the system's time zone, date, and time format, toggle daylight saving on or off, or manually enter the date and time. You can also select to synchronize the NVR with an NTP server, automatically syncing your NVR's date and time settings.



Click 'Next' to save and move to the next step.

3.3 Create a New Password

You will be asked to set up a new password when you log in to your unit for the first time. The password must be between 8 and 12 characters long, with a combination of at least one (1) uppercase letter, a lowercase letter, a number, and a special character. Acceptable special characters are 『~!\$^()_-|{}[];.:?/』.

Tap 'Next' to save and move to the next step.

The image shows two side-by-side screenshots of the 'Create a New Password' dialog box. Both screens have a dark blue background and a title bar with a close button (X). The left screen shows the 'Username' field with 'admin' entered. Below it are 'New Password' and 'Confirm Password' fields, both with 'Enter Password' placeholder text and eye icons. A 'Log In Automatically' checkbox is unchecked. At the bottom are 'Previous' and 'Next' buttons. The right screen shows the same fields, but the password fields are now filled with dots, indicating that a password has been entered. The 'Next' button is highlighted in orange.

3.4 Login

After setting up the new password, you must log back into the system to continue with the setup wizard.

The image shows a 'Login' dialog box with a dark blue background and a title bar with a close button (X). It contains a 'Username' dropdown menu with 'admin' selected. Below it is a 'Password' field with 'Enter Password' placeholder text and an eye icon. A 'Log In Automatically' checkbox is unchecked. At the bottom are three buttons: 'Retrieve Password', 'Next' (highlighted in orange), and 'Cancel'.

3.5 Network Settings

Ethernet Port (Online)

Select “DHCP” to allow the unit to obtain its network settings automatically. To enter the network settings manually, ensure that “DHCP” is unchecked. Enter the IP Address, subnet mask, gateway and DNS information.

- **IP Address:** displays the unit’s IP address. If DHCP is selected, the IP address will automatically adjust to match the network’s requirements.
- **Subnet Mask:** The subnet mask determines the address class of the subnet to which the system belongs. For more information, please consult your network administrator or your Internet provider.
- **Gateway:** This is the IP address of the router or gateway server. It is required when connecting to the NVR through the external router over the Internet (from another network). For more information, please consult your network administrator or Internet service provider.
- **Preferred and Alternate DNS:** Enter the IP address of the Domain Name Server. Input the DNS Server information to use DDNS, Email Notifications and NTP Server. For more information, please consult your network administrator or your Internet provider. Users can check the box for “Obtain DNS Automatically” to enable the unit to obtain DNS information automatically from the network settings.

Internal Ethernet Port

This section shows the IP Address and subnet mask for the IP cameras connected directly to the back of the unit. This can be manually adjusted as needed.

- **HTTP Port:** The default HTTP port is 80. The port number can be changed to another number, such as 81. The port is mainly used for web client access. To access the unit through a web browser, enter the IP address and the HTTP port in the address bar of a web browser—for example, <http://192.168.11.61:81>.
- **Server Port:** The default server port is 6036. The server port number can be changed as

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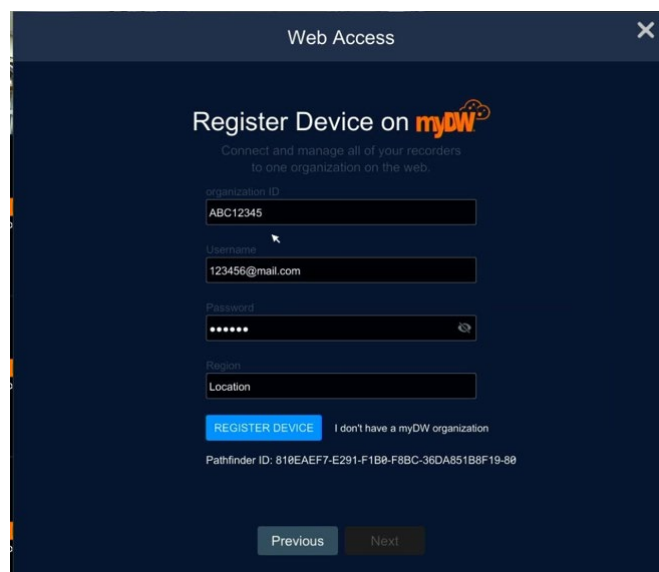
- **HTTPS Port:** The default HTTPS port is 443. HTTPS provides website authentication and protects user privacy. You can enter the IP address, along with the HTTPS port, in the web browser's address bar. Then, enter your username and password to log in.

NOTE: The HTTP and server ports must be mapped to the router before accessing the unit via WAN. Contact your network administrator for more information.

Click 'Next' to save and move to the next step.

3.6 Register Device

To access your unit remotely and add it to your myDW ecosystem, register your device with your myDW account. If you do not have a myDW account, contact your system administrator.

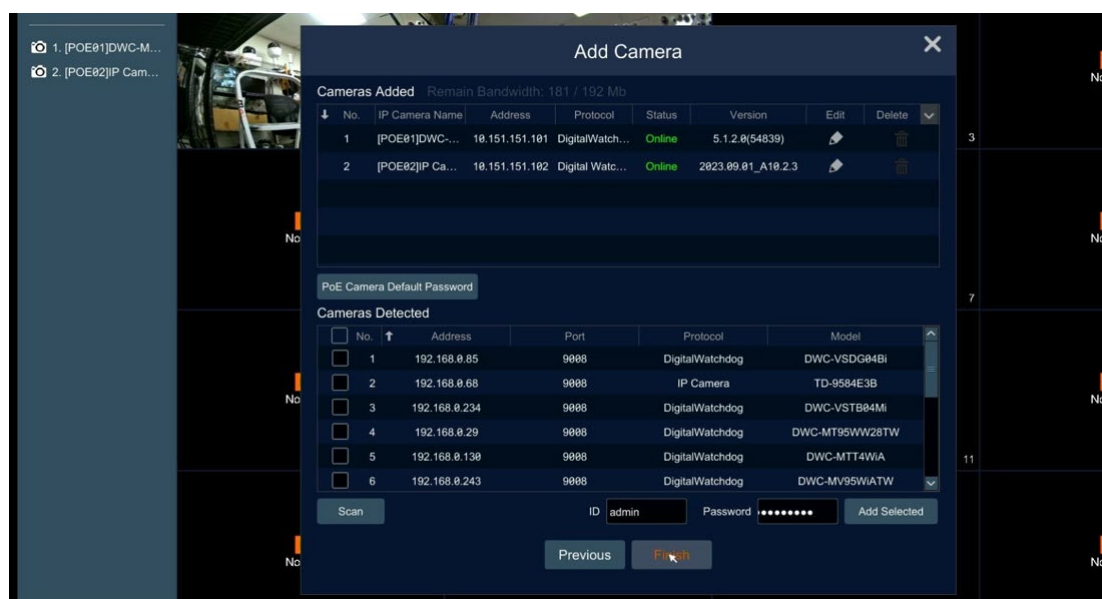


The 'Web Access' window displays the 'Register Device on myDW' interface. It includes fields for 'organization ID' (ABC12345), 'Username' (123456@mail.com), 'Password' (masked with dots), 'Region', and 'Location'. A blue 'REGISTER DEVICE' button is present, along with a link 'I don't have a myDW organization'. At the bottom, there is a 'Pathfinder ID: 818AEF7-E291-F1B8-F8BC-36DA851B8F19-88' and 'Previous'/'Next' navigation buttons.

1. Enter your myDW username and password.
2. Enter the organization ID located in your myDW dashboard.
3. You can also add the unit's location.
4. Click on 'Register Device.' Once the unit is registered successfully, the 'Register Device' button will appear green.

3.7 Camera Management

All cameras connected directly to the unit will appear on the 'Cameras Added' section at the top of the screen. You can also scan the network for additional cameras in the 'Cameras Detected' section of the menu.



The 'Add Camera' window shows two main sections: 'Cameras Added' and 'Cameras Detected'.

Cameras Added: This section displays a table of currently added cameras. The 'Remain Bandwidth' is 181 / 192 Mb.

No.	IP Camera Name	Address	Protocol	Status	Version	Edit	Delete
1	[POE81]DWC-M...	18.151.151.101	DigitalWatch...	Online	5.1.2.0(54839)		
2	[POE82]IP Ca...	18.151.151.102	Digital Watac...	Online	2023.09.01_A10.2.3		

PoE Camera Default Password:

Cameras Detected: This section displays a table of cameras detected on the network.

No.	Address	Port	Protocol	Model
1	192.168.0.85	9008	DigitalWatchdog	DWC-VSDG04Bi
2	192.168.0.68	9008	IP Camera	TD-9584E3B
3	192.168.0.234	9008	DigitalWatchdog	DWC-VSTB04Mi
4	192.168.0.29	9008	DigitalWatchdog	DWC-MT95WW28TW
5	192.168.0.138	9008	DigitalWatchdog	DWC-MTT4WA
6	192.168.0.243	9008	DigitalWatchdog	DWC-MV95WATW

At the bottom, there is a 'Scan' button, fields for 'ID' (admin) and 'Password' (masked), an 'Add Selected' button, and 'Previous'/'Finish' navigation buttons.

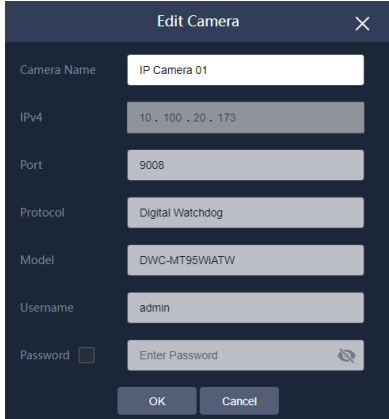
NOTE: DW COVA is designed to deliver optimal performance with DW cameras. Third-party IP cameras can also be integrated, with support available through standard protocols such as RTSP.

To manually add cameras:

1. Press the 'Scan' button at the bottom of the 'Camera Detected' table. All cameras located on the same network as the NVR will appear in the results table.
2. Check the box next to the cameras you wish to add.
3. Enter the camera's admin password and click the 'Add Selected' button. Registered cameras will appear at the top of the window. Click 'Finish'.

Click  to edit the added camera. Enter the new camera name, IP address, port, username and password. Click "OK" to save the settings.

NOTE: Only the camera's name can be edited if the camera is added online via the mobile app or web browser. Click "Next" to continue.



The 'Edit Camera' dialog box is a dark-themed window with a title bar containing 'Edit Camera' and a close button (X). It contains several input fields for camera configuration:

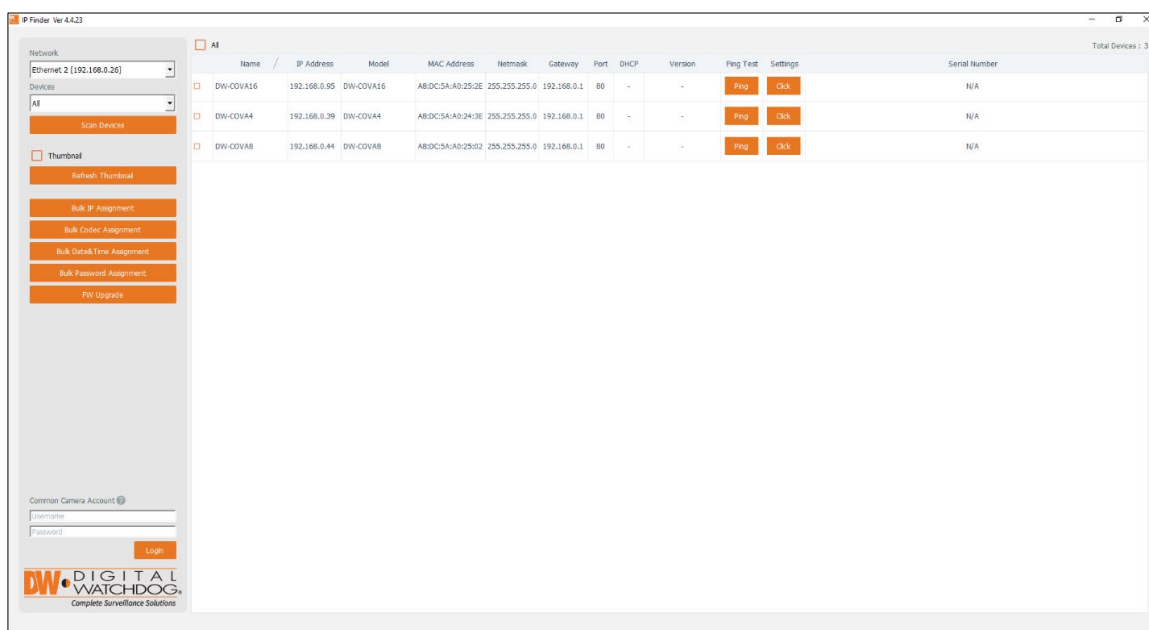
Field	Value
Camera Name	IP Camera 01
IPv4	10 . 100 . 20 . 173
Port	9008
Protocol	Digital Watchdog
Model	DWC-MT95WIATW
Username	admin
Password	Enter Password (with a toggle icon)

At the bottom of the dialog are two buttons: 'OK' and 'Cancel'.

Section 4: COVA Web Client

4.1 DW IP Finder

1. [Download](#) the latest version of DW IP Finder from the DW website.
2. Install and launch DW IP Finder on a computer in the same network as the COVA NVR.
3. All supported devices in the network will appear in the results table. Click the 'Click' button next to the COVA NVR to open the unit's web client.



4.2 Login/Logout

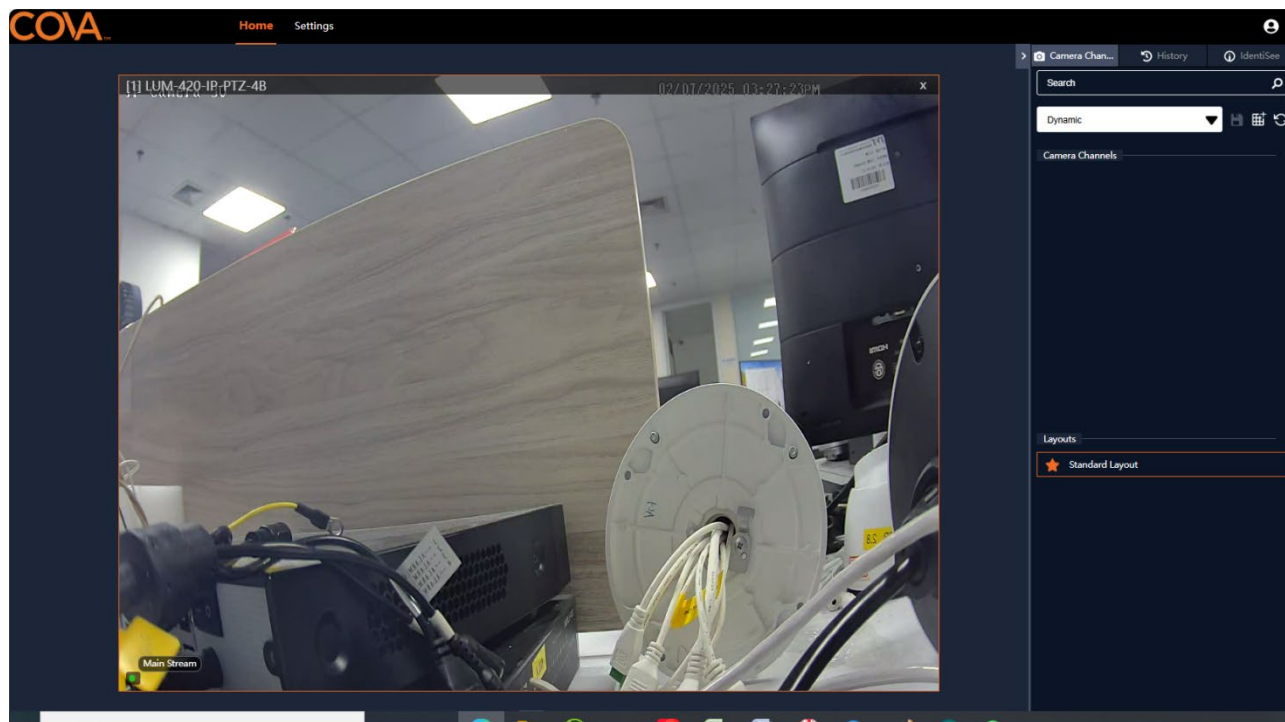


- Click on the  button on the top right corner of the home page. A drop-down list will be shown.
- Click 'Help' to access technical information, videos and support.
- Click 'Logout' to log off.
- To log back into the web client, enter the username and password for the system.
- The system will log out automatically after five (5) minutes of inactivity locally, or 30 minutes when accessing the system via the web client.

NOTE: User management is completed from the myDW dashboard.

4.3 Main Web Dashboard

4.3.1 Home



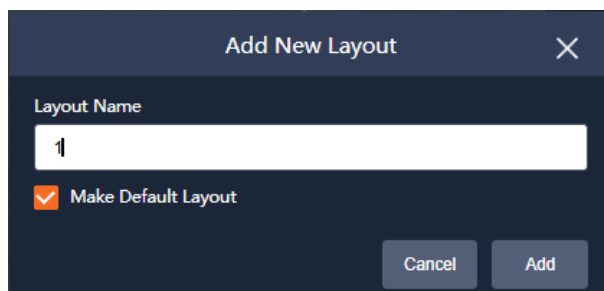
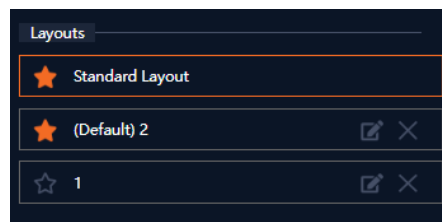
Drag a window to change its position. Double-click a window to view the single-channel image. Other cameras will be listed on the right.

: Close the window.

4.3.2 Layouts

The Standard Layout cannot be deleted. You can add new layouts as needed.

1. Click  to add a new layout.
2. Click  to add cameras to the left window.





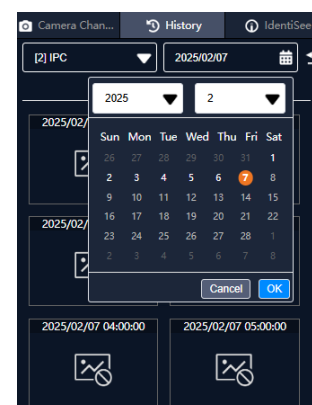
3. Click  to save the layout.
4. Click the layout name to view quickly.

4.3.3 History/Search

In the “History” tab, users can view recorded data.

Use the calendar drop-down to set a time range for the data search. Results will display a thumbnail preview image with the date and time stamp.

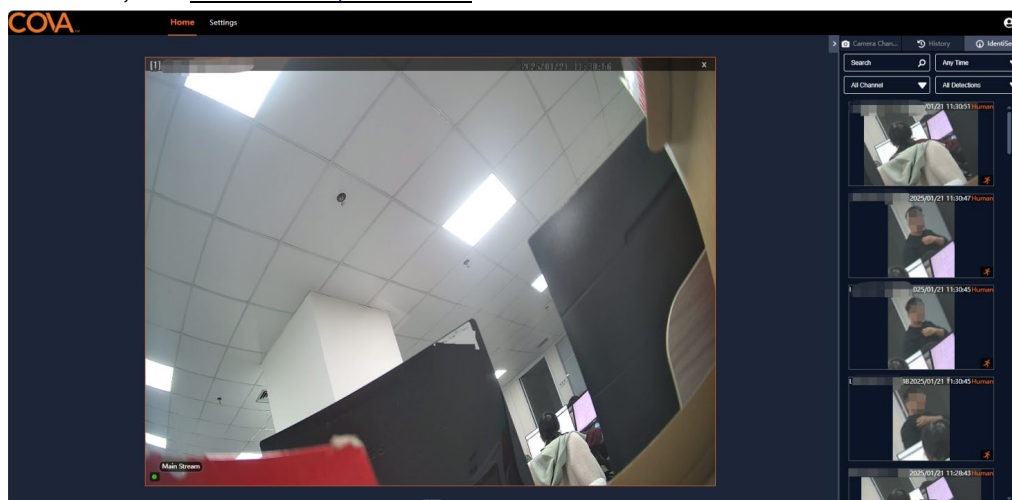
Click on any search results to open the related video on the main viewing panel.



4.3.4 Identisee

Identisee is a unique AI-powered search tool that detects and classifies humans and vehicles. This feature shows detected humans or vehicles as thumbnail previews in the camera's detection zone. Clicking on any of the previews will open the corresponding playback of the event.

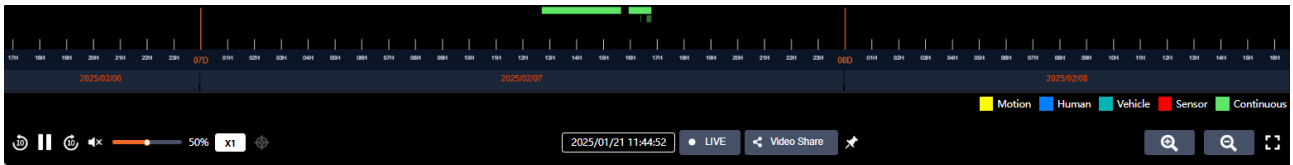
To set up Identisee, see [Section 5.3, Identisee](#).



NOTE: Identisee works best with DW AI (X-Class), IVA and V-Class IP cameras. IVA cameras support Identisee analytics but will not show the thumbnail previews. A “Snapshot not supported” message will appear instead of the thumbnail view.

4.3.5 Timeline

The timeline bar is located at the bottom of the viewing area. It can be shown or hidden by clicking the arrow at the bottom of the viewing area.



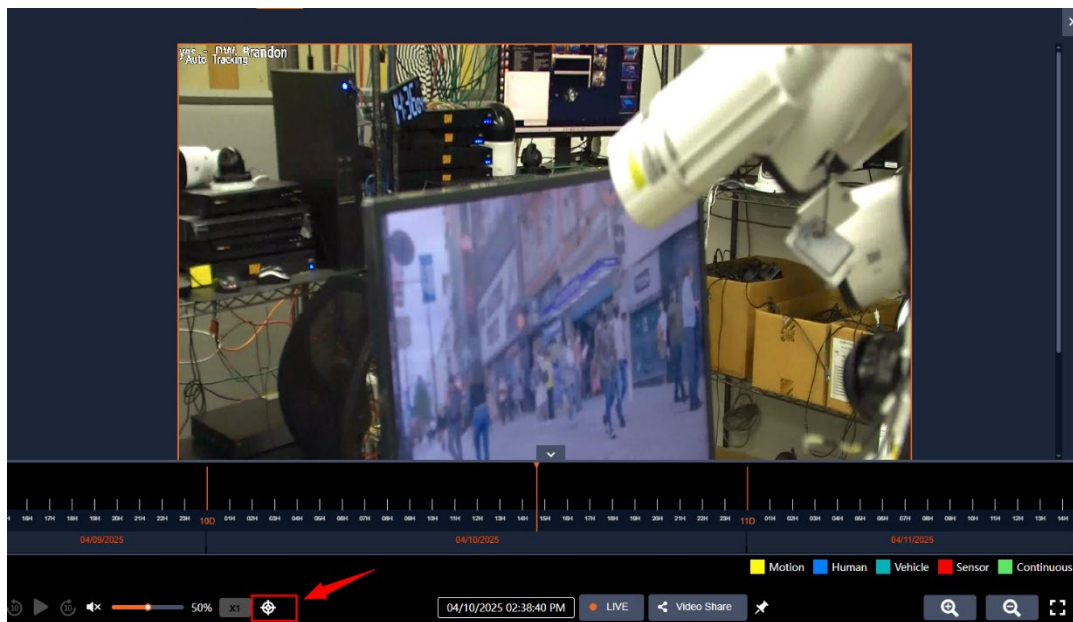
Click  to zoom in on the timeline; click  to zoom out of the timeline

Different-colored blocks represent different record types.

- **Green:** Schedule record
- **Yellow:** motion record
- **Red:** sensor record
- **Dark Blue:** Human
- **Cyan:** Vehicle

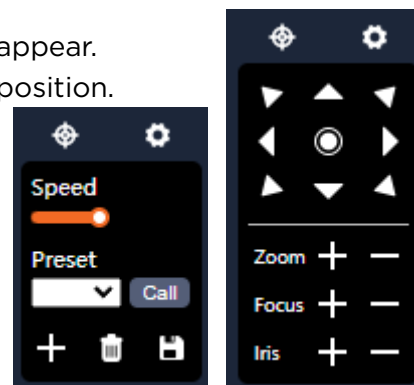
4.3.6 PTZ Control

The PTZ Control button is below the timeline at the bottom of the toolbar. The PTZ control button can be enabled only on supported IP cameras.



To control a PTZ camera:

1. Click on the PTZ Control button. The control panel will appear.
2. Users can use the arrow buttons to move the camera's position.
3. On supported models, use the + and - buttons to zoom in and out and adjust the focus or the iris.
4. The gear icon opens the speed settings, allowing users to create and save new presets.
 - a. Use the speed bar to adjust the speed at which the camera will move.
 - b. Select a preset from the drop-down menu. Click the 'Call' button to move the camera to the selected preset.
 - c. Press the '+' button to create a new preset.
 - d. Press the 'Delete' button to delete the selected preset.
 - e. Press the 'Save' button to save the camera's current position as a new preset.



4.3.7 myDW Video Share

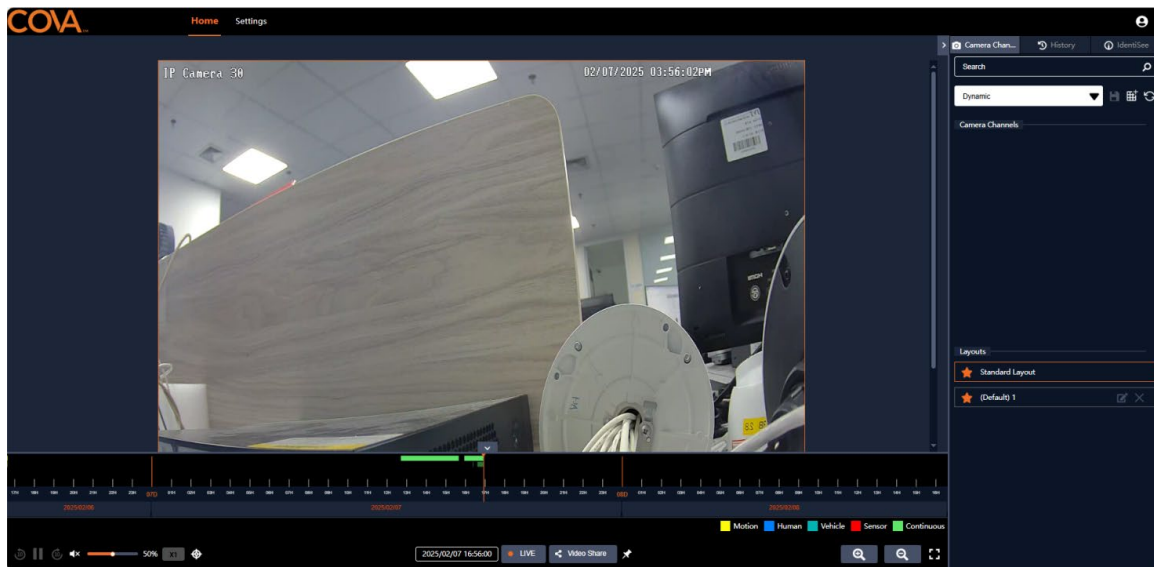
Users can upload videos of events to their myDW Clip Share storage. Once uploaded, users can share the clips with other users within the organization, collaborate on tasks, or share them with law enforcement. COVA users get complimentary 4GB (DW-COVA4 models), 8GB (DW-COVA8 models), or 16GB (DW-COVA16 models) of myDW storage for Clip Share.

When selecting a video to upload to Clip Share, enter a video title (up to 256 characters). Enter the start and end time for the video range. It is not recommended to upload large time periods. Enter a few keywords for the Video Tag (up to 256 characters) if needed.

When ready, click on the 'Upload to myDW' button. The progress bar will show the upload process. When the upload is complete, click the 'Close' button.

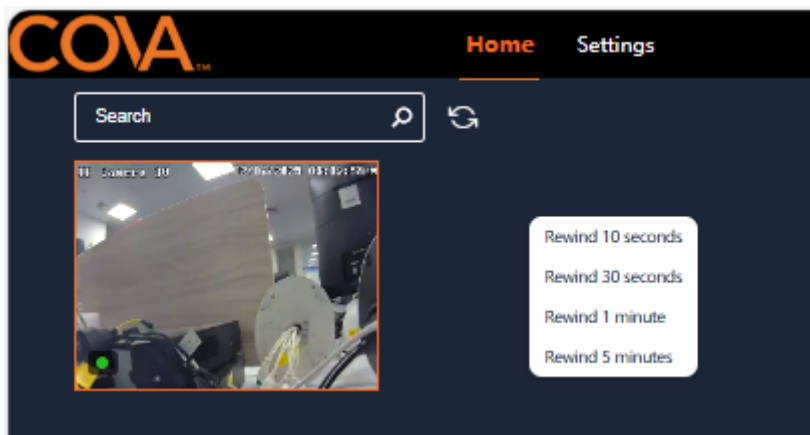
4.3.8 Live

Clicking the 'Live' button updates all camera previews to display live video.



4.3.9 Playback

To play back video for a camera in the viewing area, right-click anywhere on the screen to view the playback options below.



Users can also use the timeline or Identisee event search to playback videos and search through events.

Section 5: COVA Settings

The COVA's settings include 5 sub-menus: General, Camera, Identisee, Network, and Utility.

5.1 General

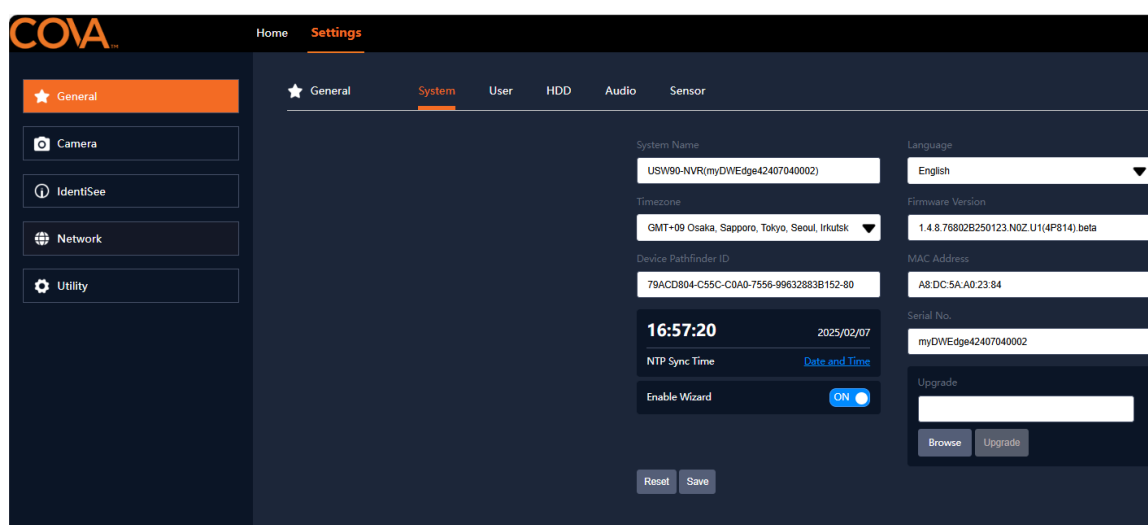
5.1.1 System

Click **Settings** → **General** → **System** to enter the system configuration interface.

In this interface, users can set the video format, time zone, time, date, language, and other settings, as well as perform a firmware upgrade.

NOTE: Firmware upgrade via the local monitor is not supported.

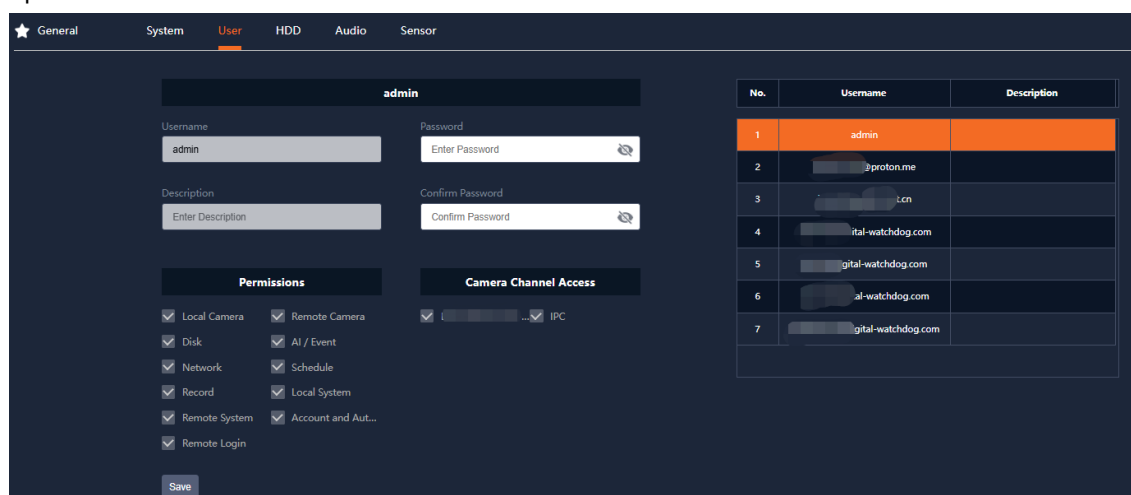
NOTE: Even if Enable Wizard is set to ON, the Wizard screen only appears the first time an admin user logs in or after a reboot.



5.1.2 User

Click **Settings** → **General** → **User** to go to the interface shown below.

User management should be completed from the myDW dashboard. The local User menu on the COVA NVR's web client allows viewing of all existing users (created in myDW) and updating the admin password.



5.1.3 HDD

Click **Settings** → **General** → **HDD** to go to the interface shown below.

The COVA NVR comes with a single or double HDD (based on the model).

No.	Disk	Free/Capacity[GB]	Disk Serial No.	Disk Model	Cycle Record	Record Period	Operation
1	Disk1	0/931	Y1MU0V1MS	Generic S100 Hard drive	ON	2024/12/12~2025/02/07	Format

When HDD is full: Overwrite data retention: None

- Users can view the HDD's serial number, capacity, etc.
- Click “Format” to format the HDD.
- Users can also decide whether to overwrite old video or stop recording once the HDD is full.
 - **Overwrite:** the earliest recorded data will be replaced by the latest once the HDDs are full.
 - **Stop Recording:** The system will stop recording new videos when the HDDs are full.

5.1.4 Audio

Click **Settings** → **General** → **Audio** to go to the interface shown below. **Audio Recording:** The COVA NVR supports audio recording from cameras that have audio input and output capabilities. Ensure the camera has audio input and output capabilities to add audio recording.

Audio Recording

Camera: DWC-VSDG04M

☒ Enable Audio Device

Audio IN Device: MIC(built-in)

Input Volume: 75

Speaker(built-in): -

LOUT(external): -

Audio Out Volume: 0

Audio IN Encode: G711A

Reset Settings Save

1. Select the camera from the drop-down menu and check the box to enable audio.
2. Check the box “Enable Audio Device” to enable audio from the camera.
3. Audio IN Device: Please select it according to the actual device configuration.
 - a. MIC(built-in): Enable the microphone built into the camera (on supported models)
 - b. LIN(external): Enable an external microphone connected to the camera (on supported models)
4. Input Volume: Adjust the audio volume from the camera as needed.
5. Speaker (built-in): Compatible with cameras that have a built-in speaker.
6. LOUT (Line Output): Available for cameras with an audio line output.
7. Audio Out Volume: Adjust the audio volume from the camera as needed.
8. Audio IN Encode: G711A/G711U

NOTE: Some cameras cannot simultaneously enable the speaker (built-in) and LOUT (external). See the camera’s user manual for more information.

5.1.5 Sensor

Click **Settings** → **General** → **Sensor** to go to the interface shown below.

The DW-COVA16 model supports up to 4 alarm outputs and 8 alarm inputs.

No.	Name	Enable	Schedule	Type	Duration	Record	Audio	Push	Alarm-out	Preset Name	Buzzer	Pop-up Video	Pop-up
Virtual-1	Virtual Alarm1	ON	24x7	NO	30 Secs	Configure	<None>	ON	Configure	Configure	OFF	OFF	ON
Virtual-2	Virtual Alarm2	ON	24x7	NO	30 Secs	Configure	<None>	ON	Configure	Configure	OFF	OFF	ON
Virtual-3	Virtual Alarm3	ON	24x7	NO	30 Secs	Configure	<None>	ON	Configure	Configure	OFF	OFF	ON
Virtual-4	Virtual Alarm4	ON	24x7	NO	30 Secs	Configure	<None>	ON	Configure	Configure	OFF	OFF	ON
	Sensor1	ON	24x7	NO	30 Secs	Configure	<None>	ON	Configure	Configure	OFF	OFF	ON
IPC-1	Sensor1	ON	24x7	NO	30 Secs	Configure	<None>	ON	Configure	Configure	OFF	OFF	ON

Reset Apply

- **Duration:** This refers to the interval of time between adjacent detections.
- **Record:** If checked, the “Trigger Record” window will open automatically (you can also click the “Configure” button to open the window). Select a camera on the left side and then click  to set the camera as the trigger camera. Select the trigger camera on the right side or click  to cancel the trigger camera. Click “OK” to save your settings. The trigger camera will record automatically when the sensor alarm is triggered.
- **Audio:** If selected, the camera will broadcast the set audio.
- **Push:** If checked, choose ON or OFF. If ON, the system will send messages when the sensor alarm is triggered.

- **Alarm-out:** If checked, the “Trigger Alarm-out” window will open automatically. The system will trigger the alarm-out automatically when the sensor alarm is tripped. You need to set the delay time and the alarm output schedule.
- **Preset:** The “Trigger Preset” window will automatically open if checked. Here, you can configure the trigger preset for each camera.
- **Buzzer:** If enabled, the system will emit an audible buzz when the sensor alarm is triggered. To set the delay time for the buzzer,
- **Pop-up Video:** After camera setup, the corresponding video will pop up automatically when the sensor alarm is triggered.
- **Pop-up Message Box:** If enabled, the system will automatically pop up the corresponding alarm message box when the sensor alarm is triggered.

5.2 Camera

5.2.1 Recording Setup

Click **Settings** → **Camera** → **Setup** to go to the interface below.

In this window, users can set the recording parameters for each camera, including the encoding, resolution, FPS, GOP, bitrate type, quality, max bitrate, and audio for the Main Stream in each camera.

NOTE: The settings displayed for each camera in the Camera Setup menu are imported from the values configured at the time the camera was initially registered.

NOTE: For the second stream, COVA automatically applies default values for certain settings (e.g., resolution, FPS) during registration.

NOTE: If a setting is changed in COVA, the change is applied to the camera. If a setting is changed directly on the camera’s web page, COVA will push the value stored in the Camera Setup menu back to the camera, overwriting the change.

The screenshot shows the 'Camera Setup' interface with a 'Recording Setup' tab selected. It displays a table with recording parameters for two cameras: an unnamed camera and an 'IPC' camera. The parameters include Stream Type, Encode, Resolution, FPS, Bitrate Type, Quality, Max Bitrate, Bitrate Limit Recommended..., Audio, GOP, Motion, Upgrade, and ADVANCE.

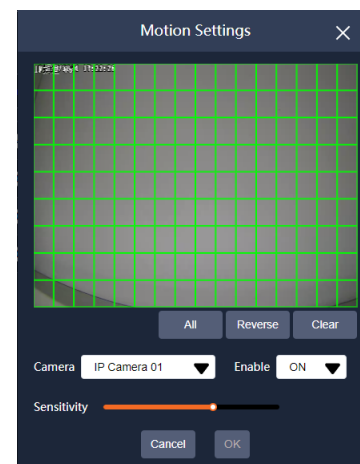
Camera Name	Stream Type	Encode	Resolution	FPS	Bitrate Type	Quality	Max Bitrate	Bitrate Limit Recommended...	Audio	GOP	Motion	Upgrade	ADVANCE
	Main Stream	H.265	2560x1440	25	VBR	Higher	3072Kbps	4245~7075Kbps	ON	50	SET		WEB
IPC	Main Stream	H.265	2160x2160	20	VBR	Higher	3072Kbps	4339~7232Kbps	ON	40	SET		WEB

At the bottom of the interface, there are buttons for 'Camera Management', 'Reset', and 'Apply'.

5.2.2 Motion

Motion Alarm: When motion is detected in the specified area, the alarm will be triggered. It is recommended that users enable motion on all cameras before setting the recording schedule.

1. Select a camera, enable motion detection, and adjust the camera's sensitivity.
2. **Sensitivity:** The higher the value, the more sensitive it will be to motion. You should adjust the value according to practical conditions, as sensitivity is influenced by background color and time (day or night).
3. **Duration:** The interval time between adjacent motion detections. For instance, if the duration time is set to 10 seconds, once the system detects a motion, it will trigger the alarm and not detect any other motion (specific to that camera) for 10 seconds. If another motion is detected during this period, it will be considered continuous movement.
4. Click and drag the mouse cursor across the camera's preview to set the motion area. Click "Reverse" to swap the motion and the non-motion regions. Click "All" to set the entire camera image as the motion area. Click "Clear" to clear all the motion areas.
5. Click "OK" to save the settings.
6. Click "Web" to jump to the camera's web client for additional settings.

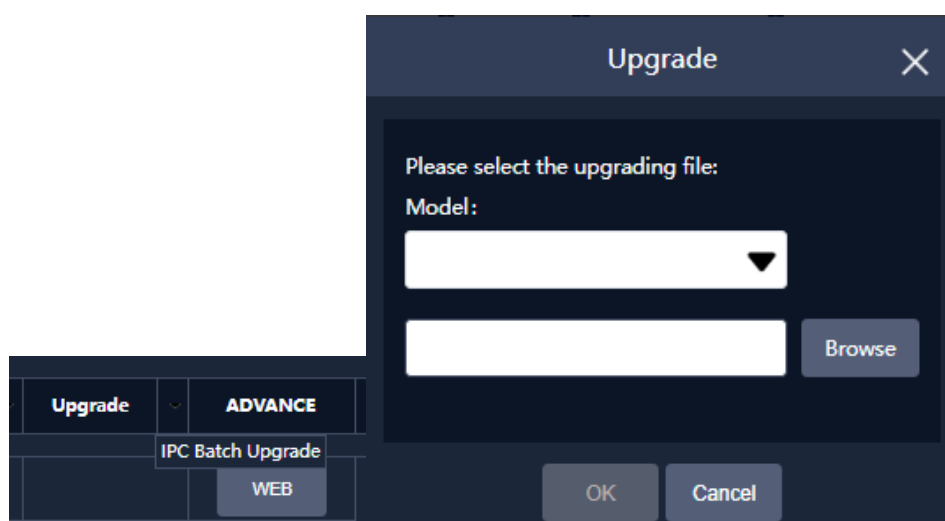


5.2.3 Upgrade

System administrators can update FW for multiple cameras from the COVA menu.

Click  next to "Upgrade" and select "IPC Batch Upgrade."

Upload the new FW file. If users update multiple cameras simultaneously, ensure the FW file is correct for all the models.



5.2.4 Camera Management

Click “Camera Management” to enter the camera-adding interface. This screen displays all currently registered cameras connected directly to the NVR, as well as all cameras located on the same network as the recorder. Users can add, remove, and manage cameras connected to the NVR.

For X-Class / IVA cameras, the AI/IVA plug-in version must meet the minimum requirement listed below. Cameras with a lower plug-in version are not supported and will appear as offline during registration.

- DW MEGApix Ai Camera Plug-in: 1.1.147
- IVA Camera Plug-in: 1.0.147

The screenshot shows the 'Camera' management interface with tabs for 'Camera', 'Setup', and 'Schedule'. The 'Camera' tab is active, displaying two sections: 'Registered Cameras' and 'Unregistered Cameras Detected'.

Registered Cameras:

No.	Camera Name	Address	Model	Protocol	Status	Version	Edit	Delete
1	IPC	10.80.1.222		ONVIF	Online			
2	IPC	10.15.1.88		ONVIF	Online			

Unregistered Cameras Detected:

No.	Camera Name	Address	Model	Protocol
-----	-------------	---------	-------	----------

At the bottom, there are buttons for 'Scan', 'Add Manually', 'Cancel', and 'Add Selected'. The 'Add Manually' button is highlighted.

- Click “Scan” to view the detected cameras.
- Select the desired camera and click the “Add Selected” button.
- Click “Add Manually” to manually add a camera by entering its local IP address, camera protocol, network port, and camera login (user/password).

The 'Add Manually' dialog box is shown with the following fields:

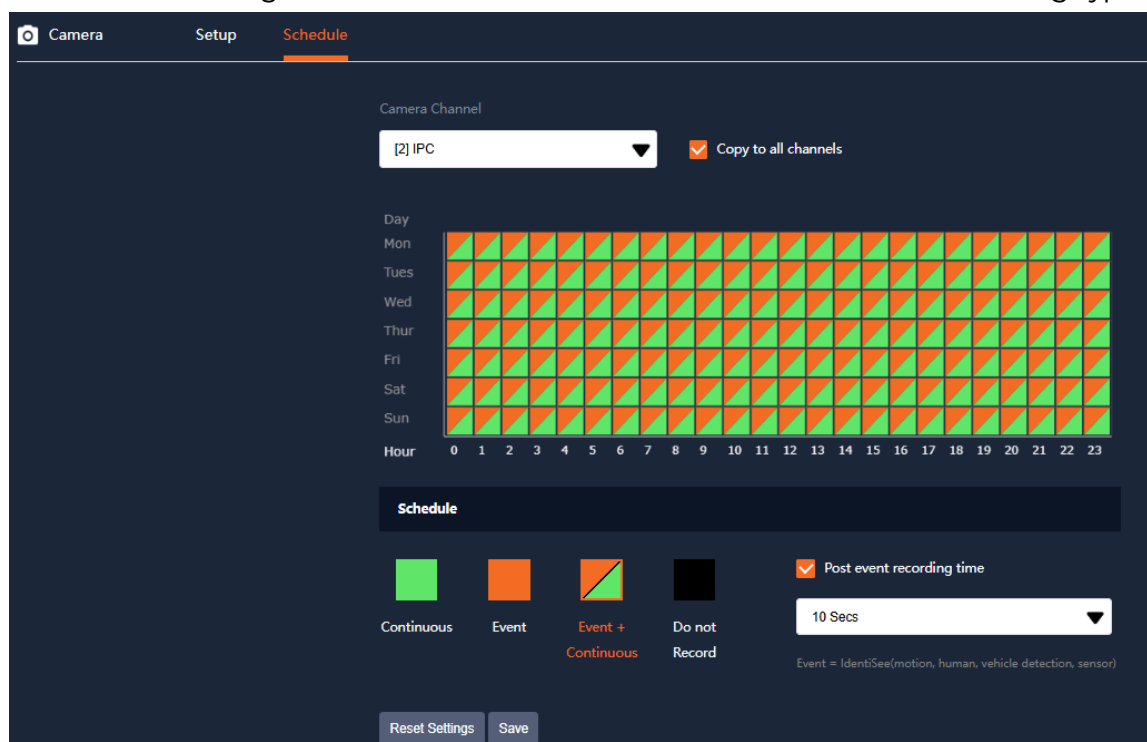
- Address:** A text input field containing '0.0.0.0'.
- Protocol:** A dropdown menu with 'Digital Watchdog(V-Class)' selected.
- Port:** An empty text input field.
- Username:** An empty text input field.
- Password:** A text input field with a password icon (eye) on the right.

At the bottom, there are 'Cancel' and 'OK' buttons.

5.2.5 Schedule

Click **Settings** → **Camera** → **Schedule** to go to the interface below.

Users can set a recording schedule for each camera with motion and event recording types.



To set a recording schedule:

1. Select the camera.
2. Select the recording type (Continuous, Event record, Event + Continuous, Do not Record).
3. Drag the mouse on the timetable to set the corresponding schedule.
4. Post-event recording time: Set the time to record after finishing the recording.

5.3 IdentiSee

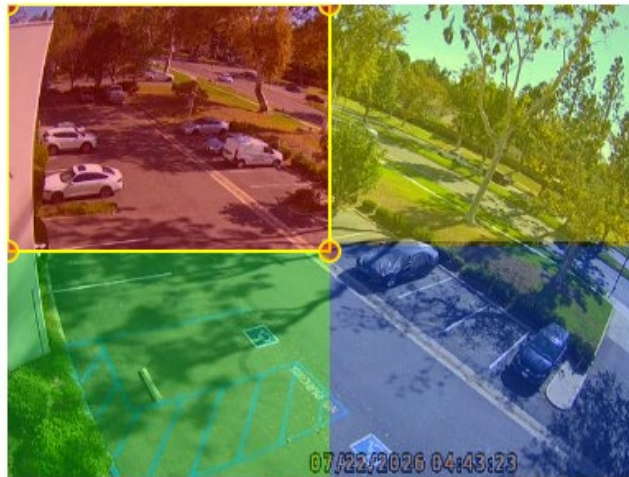
Go to **Settings** → **IdentiSee**. Set the intrusion detection zone for each camera. An alarm will be triggered if people or vehicles cross into the detection zone.



Please note that the motion settings are separate from IdentiSee and can only be turned on or off.

For detailed motion area configuration, go to **Camera → Setup** menu on the camera's web page.

NOTE: For X-Class cameras, turning motion on enables all four detection areas.



The size of the motion area impacts the sensitivity of recognition.

Activation	Area	Sensitivity	Color	Status
☒	Motion area1	- <input type="range"/> + 33	Red	☒
☒	Motion area2	- <input type="range"/> + 32	Yellow	☒
☒	Motion area3	- <input type="range"/> + 33	Green	☒
☒	Motion area4	- <input type="range"/> + 36	Blue	☒

To set Identisee:

1. Select the camera to enable detection by IPC.
2. Check the detection target.
3. Select the alarm area. Up to 4 alarm areas can be set up.
4. Draw the alarm area for region intrusion detection. Select the area within the preview image where you want to set the alarm. The alarm area should be a closed area.
5. Click "Apply" to save the settings.

NOTE: For IVA cameras, the classification setting must be changed to use the Identisee feature.

NOTE: V-Class cameras support Identisee starting from version 5.1.4.0(62531).

5.4 Network

5.4.1 Settings

Click **Settings** → **Network** → **Settings** to go to the following interface.

The screenshot shows the 'Network Settings' interface. It is divided into two main sections: 'Internet Port (Online)' and 'PoE Port'. The 'Internet Port (Online)' section has two columns of settings. The left column includes a checked 'DHCP (Obtain an IP address automatically)' checkbox, followed by input fields for 'IPv4 Address' (10.15.1.181), 'Subnet Mask' (255.255.255.0), 'Gateway' (10.15.1.1), a checked 'Obtain DNS automatically' checkbox, 'Preferred DNS' (192.168.0.5), and 'Alternate DNS' (114.114.114.114). The right column includes a checked 'IPv6 Address' checkbox, an empty 'Mask Length' field, an empty 'Gateway' field, a checked 'Obtain DNS automatically' checkbox, an empty 'Preferred DNS' field, and an empty 'Alternate DNS' field. At the bottom of this section are 'Reset' and 'Save' buttons. The 'PoE Port' section on the right has input fields for 'IPv4 Address' (10.151.151.1), 'Subnet Mask' (255.255.255.0), 'Port' (80), 'HTTP Port' (80), 'Server Port' (6036), and 'HTTPS Port' (443).

Ethernet Port (Online)

Select “DHCP” to allow the unit to obtain its network settings automatically. To enter the network settings manually, ensure that “DHCP” is unchecked. Enter the IP Address, subnet mask, gateway and DNS information.

- **IP Address:** Displays the unit’s IP address. If DHCP is selected, the IP address will automatically adjust to match the network’s requirements.
- **Subnet Mask:** The subnet mask determines the address class of the subnet to which the system belongs. For more information, please consult your network administrator or your Internet provider.
- **Gateway:** This is the IP address of the router or gateway server. It is required when connecting to the NVR through the external router over the Internet (from another network). For more information, please consult your network administrator or Internet service provider.
- **Preferred and Alternate DNS:** Enter the IP address of the Domain Name Server. Input the DNS Server information to use DDNS, Email Notifications and NTP Server. For more information, please consult your network administrator or your Internet provider. Users can check the box for “Obtain DNS Automatically” to enable the unit to obtain DNS information automatically from the network settings.

Internal Ethernet Port

This section shows the IP Address and subnet mask for the IP cameras connected directly to the back of the unit. This can be manually adjusted as needed.

- **HTTP Port:** The default HTTP port is 80. The port number can be changed to another number, such as 81. The port is mainly used for web client access. To access the unit through a web browser, enter the IP address and the HTTP port in the address bar of a web

browser—for example, <http://192.168.11.61:81>.

- **Server Port:** The default server port is 6036. The server port number can be changed as needed. The port is mainly used to access the unit via a network video management system.
- **HTTPS Port:** The default HTTPS port is 443. HTTPS provides website authentication and protects user privacy. You can enter the IP address, along with the HTTPS port, in the web browser's address bar. Then, enter your username and password to log in.

NOTE: The HTTP and server ports must be mapped to the router before accessing the unit via WAN. Please contact your network administrator for further information.

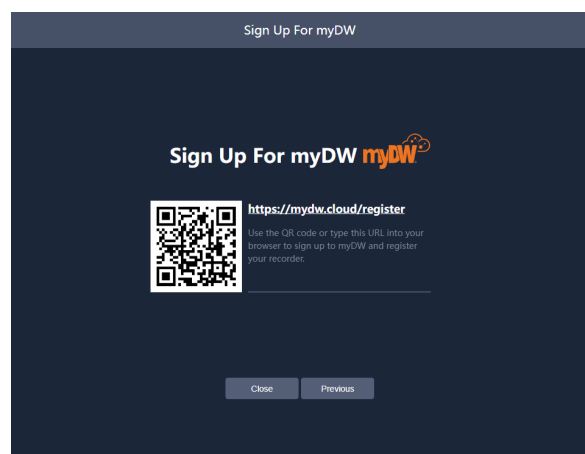
5.4.2 myDW Registration

Click **Settings** → **Network** → **myDW** to go to the following interface.

This screen will show the NVR's myDW registration status. Users can update the location, username, and password as needed.

Users can unregister and transfer the unit to another myDW Organization by entering a new organization ID, username, and password, or scanning the QR code to complete the myDW registration.

NOTE: COVA is a bridge NVR for myDW users. It is not supported as a standalone recording solution.



5.5 Utility

Click **Settings** → **Utility** to go to the following interface.

Note: This will restore the default configuration. Retained settings: language, format, time zone, DST, admin password, date/time format, TCP/IP Port.

Factory Default Except The Basic Settings

Note: This will restore to factory default status. All the previous configuration and logs will be cleared.

Factory Default

Note: The reboot takes about 1 to 3 minutes. The browser will connect to the service automatically after reboot. Please wait!

Reboot

Import System Configuration

Browse **Import**

Export System Configuration

Export

☐ **Include Network Configuration**

Under the Utility menu, users can factory reset the unit, reboot, or import system settings from one recorder to another.

- Select 'Factory Default Except Basic Settings' to restore the recorder's settings to their default state. Settings that will be kept include language, time settings, administrator login, and network settings.
- Select 'Factory Default' to reset all the recorder's settings.
- Click on 'Reboot' to restart the recorder.
- To import settings from another recorder, browse for the configuration file on your computer and upload it to override the current system configuration.
- To export the settings of the current recorder, press the 'Export' button. The file will be saved to your computer.
 - To include the network settings in the export file, check the box 'Include Network Configuration.'

Section 6: Specifications

Model		DW-COVA4	DW-COVA8	DW-COVA16
VIDEO				
Operating System		Embedded Linux	Embedded Linux	Embedded Linux
System	Channels	4 channels	8 channels	16 channels
	No. of PoE	4 PoE ports	8 PoE ports	16 PoE ports
	Supported Camera Resolutions	Up to 8MP		Up to 16MP
Display	Video Output Ports	True HD, VGA		
	Video Output Resolution	True HD: Up to 4K		
		VGA: Up to 1920 x 1080		
	Display speed	Real-time 30fps live display per channel.		
Screen Display Mode		1, 4	1, 4, 9	1, 4, 9, 16
Ports	System Operations	USB mouse, remote controller (optional)		
	USB	USB 2.0 x 2		
	RS 485	NA	NA	Disabled
LOCAL PERFORMANCE				
Recording Resolution		Up to 8MP		Up to 16MP
Recording Speed		Up to 30fps per channel in any resolution		
Max Throughput		80 Mbps	80 Mbps	192 Mbps
Recording Modes		Schedule, continuous, event		
Decoding	Live View/Playback	up to 30fps		
Audio	Network Input	4-channel input from supported IP cameras	8-channel input from supported IP cameras	16-channel input from supported IP cameras
	Local Input/Output	Disabled		
	Compression	G.711(U/A)		
Alarm	Input	N/A	N/A	8 In
	Output	N/A	N/A	4 Out
	Triggering	Record, snap, preset, email, etc.		
Storage	HDD Interface	1x SATA HDD		2x SATA HDDs
	Max. internal storage	Up to 10TB		Up to 32TB
NETWORK PERFORMANCE				
LAN		10/100/1000Mbps Ethernet (JR45)		
Compression		H.265 / H.264		
Protocol		TCP / IP, IPv4, IPv6, UDP, DHCP, DNS, DDNS, UPnP, NTP, HTTP, SMTP, 802.1x, RTSP, RTP, RTCP, WebSocket, ONVIF		
Access	Remote Web Client Features	Live monitoring, remote playback and file backup	Live monitoring, remote playback and file backup	Live monitoring, remote playback and file backup
		Playback up to 4 channels, 30fps per channel	Playback up to 8 channels, 30fps per channel	Playback up to 16 channels, 30fps per channel
		Timeline, calendar (date and time), event search, Identisee		

		Remote system reboot, FW updates, system management and remote PTZ control		
	myDW Monitoring software	Cloud-Base VMS	Cloud-Base VMS	Cloud-Base VMS
		Live monitoring, remote playback and file backup		
		User management, events, and system health notifications, video sharing, and cloud upload		
		Remote system reboot, FW updates, system management and remote PTZ control		
	Max stream connections	Live: up to 16CH Playback: up to 4CH	Live: up to 32CH Playback: up to 8CH	Live: up to 64CH Playback: up to 16CH
Remote Time sync		Time synchronization to an NTP server (pool.ntp.org)		
System recovery after a power failure		Auto-reboot and journaling file system		
Backup		Over the network, video share via myDW cloud-based VMS		
GENERAL				
Operating Temperature		14 ~ 122°F (-10 ~ 50°C)		
Operating Humidity		10% ~ 90% humidity		
System	Power Requirements	DC 48V/1.25A	DC 48V/2.5A	DC48V/3.75A
	Power Consumption	≤ 10W (without HDD)	≤ 10W (without HDD)	≤ 20W (without HDD and PoE power supply)
PoE	PoE Ports	100M RJ45 × 4	100M RJ45 × 8	RJ 45 100Mbps × 16
	Standards	IEEE802.3AF/AT		
	Max power per port	802.3AT	802.3AT	802.3AT
	Output Power	≤ 48W	≤ 80W	≤ 150W
Dimensions (W×D×H)		11.81" × 9.8" × 1.77" (300 × 249 × 45mm)	14.96" × 10.55" × 1.77" (380 × 268 × 45mm)	14.96" × 10.55" × 1.77" (380 × 268 × 45mm)
Certificate		CE, FCC, NDAA, RoHS, REACH and WEEE		
Warranty		5 year warranty		

Warranty Information

Go to <https://digital-watchdog.com/page/rma-landing-page/> to learn more about Digital Watchdog's warranty and RMA.

To obtain warranty or out-of-warranty service, please contact a technical support representative at 1+ (866) 446-3595, Monday through Friday from 9:00 AM to 8:00 PM EST.

Before the warranty service is rendered, a purchase receipt or proof of the original purchase date is needed. This warranty only covers failures due to defects in materials and workmanship that arise during normal use. This warranty does not cover damages that occur in shipment or failures that are caused by products not supplied by the Warrantor or failures that result from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, modification, faulty installation, setup adjustments, improper antenna, inadequate signal pickup, maladjustments of consumer controls, improper operation, power line surge, improper voltage supply, lightning damage, rental use of the product or service by anyone other than an authorized repair facility or damage that is attributable to acts of God.

Limits and Exclusions

There are no express warranties except as listed above. The Warrantor will not be liable for incidental or consequential damages (including, without limitation, damage to recording media) resulting from using these products or arising out of any breach of the warranty. All express and implied warranties, including the warranties of merchantability and fitness for a particular purpose, are limited to the applicable warranty period set forth above.

Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you. This warranty provides you with specific legal rights; you may also have additional rights depending on your state.

If the problem is not handled to your satisfaction, then write to the following address:

Digital Watchdog, Inc.

ATTN: RMA Department

16220 Bloomfield Ave

Cerritos, CA 90703

Service calls that do not involve defective materials or workmanship, as determined by the Warrantor, in its sole discretion, are not covered. The cost of such service calls is the responsibility of the purchaser.