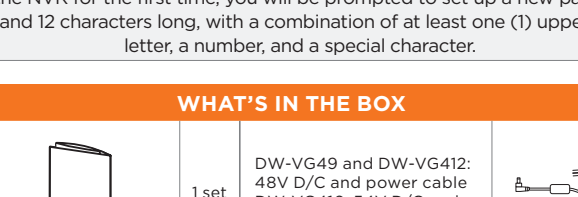


VMAX[®] ip G4[™]

Complete IP Video Solutions

9-channel NVR	12-channel NVR	16-channel NVR
DW-VG494P	DW-VG4128P	DW-VG41616P
DW-VG492T4P	DW-VG4122T8P	DW-VG4162T16P
DW-VG494T4P	DW-VG4124T8P	DW-VG4164T16P
DW-VG496T4P	DW-VG4126T8P	DW-VG4166T16P
DW-VG498T4P	DW-VG4128T8P	DW-VG4168T16P
DW-VG4910T4P	DW-VG41210T8P	DW-VG41610T16P
DW-VG4912T4P	DW-VG41212T8P	DW-VG41612T16P
DW-VG4916T4P	DW-VG41216T8P	DW-VG41616T16P
	DW-VG41220T8P	DW-VG41620T16P
	DW-VG41232T8P	DW-VG41632T16P



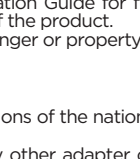
When logging into the NVR for the first time, you will be prompted to set up a new password. The password must be between 8 and 12 characters long, with a combination of at least one (1) uppercase letter, lowercase letter, a number, and a special character.

WHAT'S IN THE BOX

Quick setup and download guides		1 set	DW-VG49 and DW-VG412: 48V D/C and power cable DW-VG416: 54V D/C and power cable		1 set
USB mouse		1	Rubber mounts - 4pcs		1 set

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

- Go to: <http://www.digital-watchdog.com/resources>
- 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.
- Click 'Search'. All supported materials, including manuals and quick start guide (QSGs) will appear in the results.



Attention: This document is intended to serve as a quick reference for the initial set-up. It is recommended that the user read the entire instruction manual for complete and proper installation and usage.

SAFETY AND WARNING INFORMATION

Read through this Installation Guide carefully before installing the product. Keep the Installation Guide for future reference. See the user manual for more information on the proper installation, use and care of the product. These instructions are intended to ensure that users can use the product correctly to avoid danger or property loss. Warnings: Serious injury or death may occur if any of the warnings are neglected. Cautions: Injury or equipment damage may occur if any of the cautions are neglected.

WARNING

- In the use of the product, you must strict compliance with the electrical safety regulations of the nation and region. When the product is mounted on a wall or ceiling, the device shall be firmly fixed.
- Be sure to use only the standard adapter specified in the specification sheet. Using any other adapter could cause fire, electrical shock, or damage to the product.
- Make sure the power supply voltage is correct before using the camera.
- Incorrectly connecting the power supply or replacing the battery may cause an explosion, fire, electric shock, or damage to the product.
- Do not connect multiple cameras to a single adapter. Exceeding the capacity may cause excessive heat generation or fire.
- Securely plug the power cord into the power source. An insecure connection may cause a fire.
- When installing the camera, fasten it securely and firmly. A falling camera may cause personal injury.
- Do not install in a location subject to elevated temperature, low temperature, or high humidity. Doing so may cause fire or electric shock.
- Do not place conductive objects (e.g. screwdrivers, coins, metal items, etc.) or containers filled with water on top of the camera. Doing so may cause personal injury due to fire, electric shock, or falling objects.
- Do not install in humid, dusty, or sooty locations. Doing so may cause fire or electric shock.
- Do not install near any heat sources such as radiators, heat registers, or other products (including amplifiers) that produce heat.
- Keep out of direct sunlight and heat radiation sources. It may cause a fire.
- If any unusual smells or smoke come from the unit, stop using the product at once. Immediately disconnect the power source and contact the service center. Continued use in such a condition may cause fire or electric shock. If this product does not operate normally, contact the nearest service center. Never disassemble or change this product in any way.
- When cleaning the product, do not spray water directly onto parts of the product. Doing so may cause fire or electric shock.

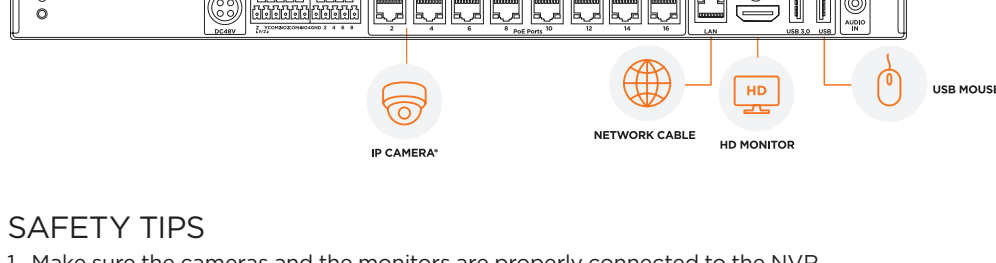
CAUTION

- Use proper safety gear when installing and wiring the product.
- Do not drop objects on the product or apply strong shock to it. Keep away from a location subject to excessive vibration or magnetic interference.
- Do not use this product near water.
- The product shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the product.
- Avoid aiming the camera directly towards extremely bright objects such as the sun, as this may damage the image sensor.
- The Main plug is used as a disconnect device and shall stay readily operable at any time.
- Remove the power adapter from the outlet when there is lightning. Neglecting to do so may cause fire or damage to the product.
- Do not block any ventilation openings. Install following the manufacturer's instructions.
- A polarized or grounding-type plug is recommended for this product. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. If the provided plug does not fit into your outlet, consult an electrician for replacement.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the product.
- If any laser equipment is used near the product, make sure the surface of the sensor is not exposed to the laser beam as that may damage the sensor module.
- If you want to move the already installed product, be sure to turn off the power and then move or reinstall it.
- Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.
- If cleaning is necessary, please use a clean cloth to wipe it gently. If the device will not be used for a long time, please cover the lens cap to protect the device from dirt.
- Do not touch the camera's lens or sensor module with fingers. If cleaning is necessary, please use a clean cloth to wipe it gently. If the device will not be used for a long time, please cover the lens cap to protect the device from dirt.
- Use only attachments/accessories not specified by the manufacturer.
- Always use hardware (e.g. screws, anchors, bolts, locking nuts, etc.) compatible with the mounting surface and of sufficient length and construction to ensure a secure mount.
- Use only with cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the product.
- Unplug this product when a cart is used. Use caution when moving the cart/product combination to avoid injury from tip-over.
- Refer all servicing to qualified service personnel. Servicing is needed when the product has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the product, the product has been exposed to rain or moisture, does not operate normally, or has been dropped.

STEP 1 – CONNECTING THE NVR

- Mount and install all necessary IP cameras and external devices. Refer to their individual manuals for additional information.
- Place the NVR in its final position. See safety tips for proper installation below.
- Connect all necessary cables and external devices to the NVR. Follow the back panel diagram below.
- Connect the NVR to an appropriate power supply. The NVR will boot up automatically.

Model	Power Requirement	PoE Power Budget
DW-VG49xT4P	48V DC, 1.25A, 60W total power budget (recorder + PoE ports)	12W per PoE port, total 48W, max 30W per port
DW-VG412xT8P	48V DC, 2.5A, 60W total power budget (recorder + PoE ports)	12W per PoE port, total 96W, max 30W per port
DW-VG416xT16P	54V DC, 3.33A, 180W total power budget (recorder + PoE ports)	9.37W per PoE port, 150W, max 30W per port



SAFETY TIPS

- Make sure the cameras and the monitors are properly connected to the NVR.
- The NVR should be placed in a dust and moisture-free environment. It must never be directly exposed to sunlight. Server room temperature is highly recommended to reduce the chance of overheating, which may cause the NVR to become unstable.
- During the boot-up process, the NVR should not be interrupted by pressing any buttons on the mouse. Do not unplug the power adapter or turn the NVR off during the boot-up process.
- A UPS (Uninterrupted Power Supply) is highly recommended to prevent damage to the NVR during a power outage.

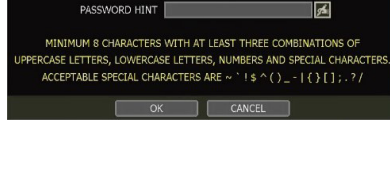
NOTE:

- True HD monitor output and VGA output cannot be used at the same time for dual monitoring.
- The audio input port at the NVR is disabled. For audio recording, use audio input supported IP camera.
- To connect additional IP cameras to the NVR, connect a PoE switch to the NVR's network port.

STEP 2 – POWERING UP THE NVR

When the NVR boots up, it will be in protective mode and the password setup screen will appear.

- You will be asked to setup a new password. The password must be between 8 and 12 characters long, with a combination of at least one (1) uppercase letter, lowercase letter, a number, and a special character.
- When the NVR boots up for the first time, you will be guided through the startup wizard.



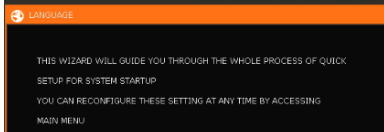
To prevent the NVR from overheating, do not operate it in an area that exceeds the maximum recommended ambient temperature of 104°F (40°C). To prevent airflow restriction, allow at least 3 inches (7.6 cm) of clearance around the ventilation openings.



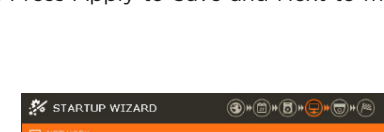
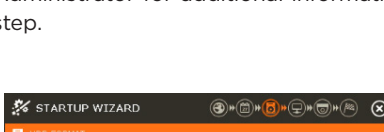
STEP 3 – STARTUP WIZARD



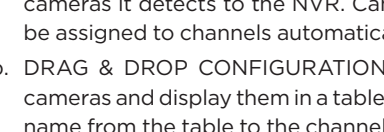
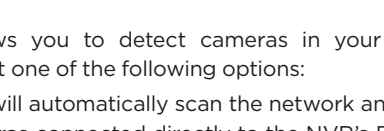
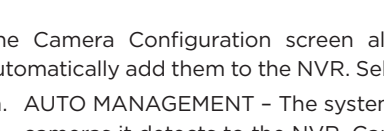
- Follow the startup wizard's instructions to setup the NVR's basic settings, including language, date/ time, network and configure your cameras. At any time, you can skip steps, go back, or exit the wizard and setup the NVR manually.
- Language - Select the appropriate language from the drop-down menu options. Press Apply to Save and Next to move to the next step.
- Set the NVR's date and time, including time zone, Daylight Savings and NTP Time Sync. If needed, set the NVR to sync its time automatically with an external NTP server. Select the server from the TIME SYNC MODE/CYCLE drop-down options and the sync interval. Press Apply to Save and Next to move to the next step.



- Set the NVR's network type to DHCP and let the NVR auto-detect the network's settings by selecting the "IP DETECT" button. Then, change the type to Static. Please contact your Network Administrator for additional information. Press Apply to Save and Next to move to the next step.



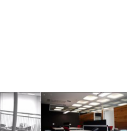
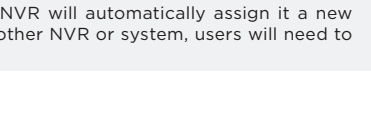
- The Camera Configuration screen allows you to detect cameras in your network and automatically add them to the NVR. Select one of the following options:
 - AUTO MANAGEMENT - The system will automatically scan the network and add the first cameras it detects to the NVR. Cameras connected directly to the NVR's PoE Switch will be assigned to channels automatically.
 - DRAG & DROP CONFIGURATION - The NVR will scan the network for all supported cameras and display them in a table. Select which cameras to add by dragging the camera's name from the table to the channel square in the display area.



NOTE: As part of the cybersecurity settings of the NVR, the VMAX IP Plus will assign passwords automatically to DW IP cameras added with a blank password. If a camera is added to the NVR for the first time, without having its password set from the IP Finder™, the NVR will automatically assign it a new password. If the camera then needs to be connected to another NVR or system, you will need to reset the camera's settings.

STEP 4 – MONITOR YOUR SYSTEM

- NAVIGATION - use the included USB mouse to navigate around the NVR GUI.
 - To access the MENU BAR - move the mouse's cursor to the bottom of the display area to show the menu bar. Press the pin icon on the right side to show it permanently.
 - To access the QUICK MENU - Right-click anywhere on the screen. The quick menu options will appear, including:
 - Display mode options
 - Digital zoom, virtual PTZ, camera image adjustment and setup
 - Bookmark video
 - Instant playback and search
 - Recording, network and PoE status and analysis
 - Main menu



- HELP - The HELP button located at the bottom right of setup screens includes basic information and an explanation of the features and settings on that page, for on-the-go information.

STEP 5 – MOBILE APP REMOTE MONITORING

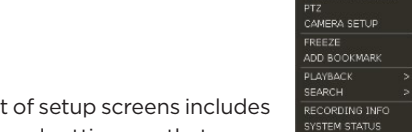
You can monitor your system from DW's Mobile Plus™ app with a simple scan of a QR code.

- Right-click anywhere on the DVR's screen and go to "MENU" > "NETWORK" > "PATHFINDER™"
- Check the box next to 'USE PATHFINDER'. Click Save.
- A mobile access QR code will appear on the right side of the screen. Status at the bottom of the screen should say "PATHFINDER™ SERVICE ACTIVATED".



To view the DVR on your mobile app:

- Download the latest DW Mobile Plus™ app from the Google Play Store or Apple App store.
- Launch the DW Mobile Plus™ application on your device.
- Go to the Site menu to register a new site with the QR code scan.
- Press QR icon next to the Host field.
- Capture the QR code in the DVR's PathFinder settings page. The camera will capture the QR code automatically once all four corners of the code are registered in the camera's frame properly.
- The IP address field will show the DVR's unique PathFinder ID information.
- Complete the new device's registration information by adding the device name, port number, user-name and password. Select "SAVE" to complete the registration.
- The new site will appear in your sites list.



NOTE: Please see the full product manual for web viewer setup, functions and camera settings options.

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

