

Real-Time 960H Recording

VMAX960H CORE™



Please note that the Accessory Kit and Shipping Box contain the following items :

| Items | Photo | Quantity | Items | Photo | Quantity |
|---|-------|----------|------------------------------|-------|--|
| CD (DVR & Software) & Quick Start Guide | | 1 Set | 12V DC Adaptor & Power Cable | | 1 Set |
| IR Remote Control | | 1 Set | Rubber Mount & Screws | | 1 Set (4 Pieces) 4 Pieces (Top cover) |
| | | | USB Mouse | | 1 Set |

Default Login Information (ID: Admin / No Password)

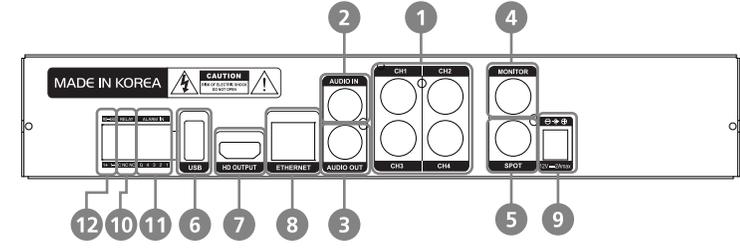
ATTENTION PLEASE !!!

This document is intended to serve as a quick reference page for initial set-up. It is recommended that the user read the entire instruction manual before beginning.

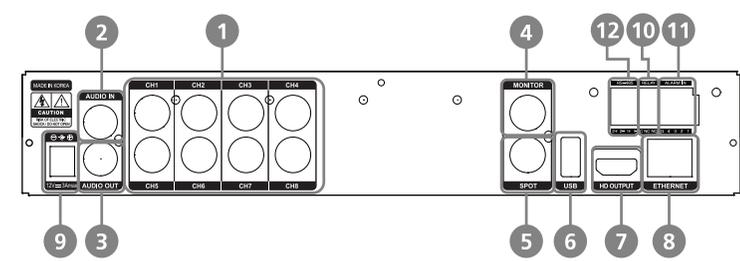
Engineered in U.S.A and Korea
Manufactured in Korea

DW REAR PANEL

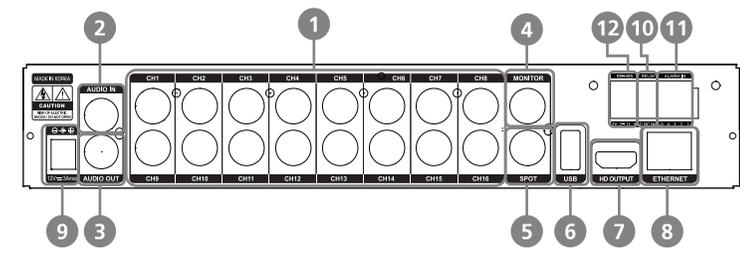
DW 4CH Back Panel



DW 8CH Back Panel



DW 16CH Back Panel



| No. | I/O | Description |
|-----|--------------|---|
| 1 | Video Input | Camera Inputs (Supports NTSC/PAL) |
| 2 | Audio Input | Audio Input (with Amplifier) |
| 3 | Audio Output | Audio Output (with Amplifier) |
| 4 | Video Output | Main Composite Monitor Output |
| 5 | Spot Output | Spot Composite Monitor Output |
| 6 | USB Port | USB 2.0 Port for Mouse Operation, Backup Device, or Firmware Update |
| 7 | HD OUTPUT | HD Output |
| 8 | LAN Port | 4ch : I/10/100M 8ch/16ch : I/10/100/1000M |
| 9 | Power Input | 4ch : 12 VDC at 2Amps 8ch/16ch : 12 VDC at 3Amps |
| 10 | Sensor Input | Sensor Input |
| 11 | Alarm Output | Alarm Output |
| 12 | RS-485 Port | PTZ Camera or External Keyboard Controller Connection |

DW INSTALLATION

DW 4/8/16 Channel DVR Compact Case



| No. | Buttons | Functions |
|-----|---------------|---|
| 1 | LED Indicator | Indicates the system's status. From left to right: Power, Recording, Network Connection |
| 2 | USB Port | USB Port (Ver. 2.0) for Mouse Operation, Backup Device or Firmware Update |

DW Initial Setup

1. Mount and install all necessary cameras and external devices. Refer to their individual manuals for additional information.
2. Place the DVR in its final position. See the Installation Safety Tips below for additional information.
3. When all necessary cameras and monitors are setup in their permanent location, connect them to the DVR using the proper cabling. Use this QSG and refer to the full manual for additional information.
4. When all connections have been made, connect the DVR to an appropriate power supply. The DVR will boot up automatically.
5. When the DVR boots up, it will be in protective mode, and will not allow access to the different menus until a user enters a proper password. To unlock the DVR, right-click anywhere on the screen. The login pop-up window will appear. Enter your username and password. The DVR's default username and password are: admin/ no password.
6. When the DVR boots up for the first time, you will be guided through the Quick Startup Wizard. See the next page for more information.



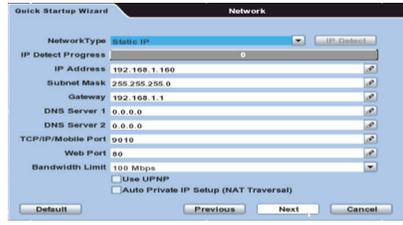
DW DVR Installation Safety Tips

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

DW INITIAL SETUP

DW Quick Startup Wizard

The Quick Startup Wizard is designed to make the installation process of your new DVR as quick and easy as possible. This startup wizard will automatically appear when you first boot up your DVR. It will guide you through setting up some of the DVR's more critical features required for its proper function. The Quick Startup Wizard will take you through setting up Date & Time, Recording Setup, Network Setup and Quick Setup.



If you do not want to follow the Startup Wizard you can disable it by clicking the [CANCEL] button and adjusting your settings manually via the DVR's main menu.

DW Main Menu

The Main Menu (Setup Menu) system includes six (6) sub-menus: System, Device, Record, Network, Backup, & O. Setup. To access the Setup Menu, right-click anywhere on the screen and select 'Setup Menu'. The DVR's default user ID and password are: admin/ no password.

DW Navigation

- Use the supplied USB mouse for easy operation. Alternatively, use the following remote controller key pad.
- Use the [Enter] button to select or enter edit mode for a highlighted selection.
 - Use the directional keys to move through a menu or list.
 - Use the [Menu] button to enter or exit a menu or setup window.

DW Date and Time Setup

1. Go to the System Menu and select SYSTEM INFO. Click on the pencil icon next to the Date/ Time to enter edit mode.
2. Select the proper display format from the [DATE/TIME FORMAT] drop down lists.
3. Select the appropriate date and local time in the [DATE/ TIME] section.
4. Select the appropriate time zone from the [TIME ZONE] drop down list.
5. If applicable, enable Daylight Savings mode.



DW Formatting the Hard Drive Disk

- After adjusting the time and date for the first time, it is highly recommended to format your Hard Disk Drive.
1. Go to the System Menu and select the HDD submenu.
 2. Select the Check box next to the HDDs.
 3. Click the [HDD Clear] button.
 4. When the HDD formatting is complete, exit the main menu to save all changes.

DW RECORD SETUP

DW Recording Configuration

- Go to the Main Menu and select RECORD.
- In the record window, select the Record Setup submenu.
- Choose the desired resolution, frame rate, quality and recording type for continuous recording. (Continuous)
- Choose the desired frame rate, quality and recording type for Event recording. (Event)
- Individually configure the settings for each channel, or use the [COPY SETTINGS] button to apply changes to multiple cameras.
- To setup a specific recording schedule, go to the SCHEDULE submenu. You can setup the record schedule by applying different recording modes at different days and times.
 - Select a record mode from the options on the top of the screen.
 - Using your mouse, click, hold, and drag to select multiple days & hours.
 - You can setup a unique recording schedule for each channel or apply the same recording settings to all channels.
 - You can setup special days as "holidays" either by their date (December 24th) or by their time of the month (Third Thursday of November).



DW Quick Setup

The Quick Setup Menu offers an automatic recording and HDD calculator. By entering your anticipated recording days, or the desired recording resolution, the DVR will provide you with the estimated days recorded on your current HDD space.

To setup recording based on recording day: Select how many days you wish to record on your current storage. The system will populate recommended recording resolution, frame-rate, and quality.

To setup recording based on recording resolution: Select the desired recording specifications. The system will display the number of days that will be recorded on your available storage.



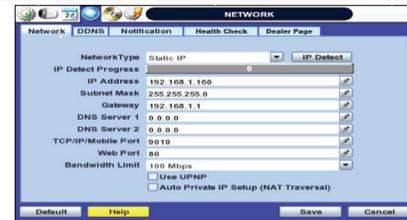
Note: To manually setup recording configurations, Quick Setup must be DISABLED. If the "Use Quick Setup" option is enabled, the system will ignore all other configurations set manually.

DW NETWORK SETUP

DW Network Setup

The Network setup menu allows you to configure the DVR's network settings to allow remote connection from within the same network or externally via the Internet. To setup the DVR's network settings, right click anywhere on the screen and go to Setup Menu > Network.

Note: The following information are general guidelines. These may vary by network and router specifications. Contact your installer or ISP for additional information.



- In the [Network] menu set "Network Type" to [Dynamic IP] and click [IP DETECT]. This allows the DVR to scan your network and automatically configure its settings to match your network's requirement. This is recommended to simplify and make sure your DVR's settings are according to the network's requirements.
- Once the system generates all the information based on your network requirements, you can change the Network Type to Static and save all the changes. A static IP address will not be changed by the network.
- In order to view your DVR remotely from within the network or via the Internet, you need to make sure the ports associated with the DVR are opened in your router. Some internet service providers block port 80. It is recommended to change the web port number to 81 or 82.
- Access your router by entering its external IP address in your web browser (this information can be found by running an ipconfig command on your computer's Command Prompt. The router's external IP address is the GATEWAY address.) This step is only necessary if you are planning to connect to your DVR from a different network, over the internet.
- Check the settings in your router and setup the DVR for external connections by performing port forwarding. Contact your Network Administrator and review the manual for more information. Visit www.portforward.com For additional information on how to setup port forwarding in your specific router model.
- Once the router settings have been configured correctly, open an internet explorer page and enter your router's external IP address:DVR's port number (Example: 72.243.193.215:81). See "Web Viewer" in this QSG for more information.

DW Registering DDNS

The DDNS address provides your DVR a URL address, easier to remember than an IP address. This is a free feature supported by Digital Watchdog for its customers.

- Go to the Network setup menu, and select the 'DDNS' tab.
- Check USE DDNS to enable. (Make sure the DVR's web port has been properly setup in your router).
- Select DWDDN2.net (default).
- Enter a name for your DVR and click the CHECK button. If the name is available, the system will display the following message: "THIS DVR NAME CAN BE USED". Click SAVE to save all changes.
- To use your DDNS, open an Internet Explorer page and enter the DDNS in the address bar: DVRname.dwddns2.net:port-number. (example: <http://vmax960core.dwddns2.net:80>)



DW SPECIAL FUNCTIONS

DW Health Check

The VMAX960H CORE™ offers a uniquely true DVR health monitoring, with pop-up messages and e-mail notification on video loss, recording failure, and storage failure. To setup:

- Go to Setup Menu > Network > Health Check.
- Check the box next to "Enable Health Check"
- Check the box next to the conditions you would like to be notified on.
- Set the occurrence intervals. (For Example: when video loss occurs more than 1 time a minute)
- Select whether to receive a pop-up message when conditions are met.
- Go to the Notifications tab in the network setup page.
- Under e-mail notifications, make sure the Health Check option is enabled and your e-mail address is set to receive notifications from the DVR. See the full manual for additional information on e-mail notifications setup. When any of the failures occur beyond the set conditions, the system will display a pop-up alert and send an e-mail notification.



DW Firmware Upgrade

The VMAX960H CORE™ allows for remote and USB firmware upgrade.

To upgrade the DVR using a USB drive:

- Connect a USB drive with the new firmware to the DVR's USB port.
- Right-Click anywhere on the screen and select Setup Menu > System > System Info.
- Press the 'Upgrade' button next to the version number.
- Select USB from the method drop-down menu.
- Press 'Scan' to find the USB device and proper firmware file. The system will display all supported files on the USB in drop down. Make sure you select the proper upgrade file.
- The new firmware version will appear under the current version.
- Press 'Start' to begin upgrade. Do not disconnect the power from the DVR or the USB until the upgrade is completed.

To upgrade the DVR using the FTP Server:

- Right-Click anywhere on the screen and select Setup Menu > System > System Info.
- Press the 'Upgrade' button next to the version number.
- Select FTP from the method drop-down menu. The FTP's login information will automatically be filled out.
- If a new firmware is available, the new firmware version will appear under the current version.
- Press 'Start' to begin upgrade. Do not disconnect the power from the DVR or the USB until the upgrade is completed.



DW REMOTE CLIENT

DW Pivot CMS (Central Monitoring Software)

The Pivot CMS is included with the DVR. Install it on your computer from the accessory CD. After installation, double-click on the Pivot shortcut to launch the software. (Pivot's user/ Password: Administrator/ no password)



To Add a site:

- Right-click on the device list panel and select "Add Site"
- Make sure VMAX960H CORE™ is selected from the Model drop-down list.
- Enter your DVR's information:
 - Name
 - IP Address. If you are trying to connect to the DVR from a PC that is in the same network as your DVR, click "Search" to auto-discover your DVR.
 - Port will be filled out to Default(80).
 - ID and Password- to access the DVR.
 - Channel- enter the span of channels available on your model (ex. I-4).
- Press 'OK' to save, or 'Cancel' to delete all changes.
- To connect to the newly added site, click and hold on the name and drag it into the viewing area. Select to view Live/ Playback.

DW Web

The VMAX960H CORE™ is accessible from a user-friendly web client.

If you are connecting to the DVR using Google Chrome, download the IE Tab extension. If you are connecting to the DVR using IE 9 or newer, you can access the DVR's web client using the compatibility mode.

- Open an Internet Explorer web page.
- Enter the DVR's IP address or DDNS URL and press enter.
- Enter the User ID and Password for the DVR and click Enter.

(Default User/ Password: admin/ no password).
4. The DVR's web viewer will be displayed.



Note: If you are using IE, install all Active-X Control notifications to view video from the DVR.

DW Help

The "HELP" button will help you understand how to setup several important settings such as DDNS, NOTIFICATION, BACKUP, SCHEDULE, NETWORK, and CAMERA. For example, if you need help about how to set "BACKUP", Click "HELP" button at the right bottom of the BACKUP menu.

