Quick Start Guide

DIGITAL WATCHDOG
Complete Surveillance Solutions

Full HD Network Video Recorder

VMAX ip™

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 & POE Adaptor		1 Set
Rubber Mount & Screws		1 Set (4 Pieces) 4 Pieces (Top cover)	USB Mouse & Power Cable		1 Set 2 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. Basic programming can be accomplished by simply reading the appropriate instructions first, then scroll through the easy to operate " On Screen Display " and make changes.

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

HARDWARE OVERVIEW

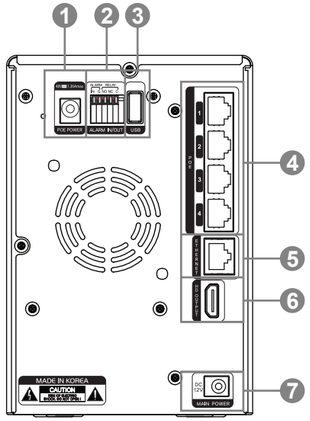
FRONT PANEL VIEW

(1)LED Indicator :
Indicate System status Power, Record, Network

(2)USB :
USB Port(Ver2.0) for mouse operation, backup or F/W upgrade

(3)Standby Button :
One-click to Standby System, and another-click to restart System

REAR PANEL VIEW



(1)PoE Power :
PoE Power Input (48V/1.4A)

(2)ALARM IN/OUT :
Alarm Input/Output (1Relay output)

(3)USB : Mouse Input

(4)PoE : PoE Camera Input

(5)Ethernet : WAN Port

(6)HD OUTPUT : True HD Output

(7)DC12V : Main Power Input (12V/3A)

INSTALLATION

Camera Mounting

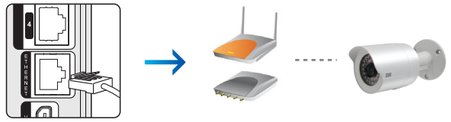
[Camera Bracket Adjustment]

To adjust an axis of the camera head, please loosen a cross head screw.

The VMAXIP includes 4, 2.1MP Bullet cameras, especially engineered to work with the NVR. The cameras can be powered directly from the NVR.
To mount the camera:
1. Use the camera's mounting template or the camera's housing to mark the drilling holes in the mounting surface.
2. Drill holes into the drywall using the included dry wall anchors.
3. Pull wires through and make connections, then mount the camera to the wall or ceiling using the screws provided with the camera.
4. To adjust the camera's bracket, loosen the screw on the side of the camera's bracket before mounting the camera.
5. Once the camera's bracket angle has been adjusted, tighten the stopper screw back to secure the camera in its position.

Camera Connection

[Connection with Hub, Router or Switch]



1. Connect the network camera to the NVR, using a hub, a router or switch.
2. If the camera is connected to the NVR through the hub, router or switch, each camera adapter is required additionally to get the power.

[Connection without Hub, Router or Switch]

1. Connect the network camera directly to the PoE port of the NVR.
2. In this case, the PoE adapter should be plugged-in to the NVR in order to get the power.

There are two ways to connect the cameras to the NVR, using a router or hub switch, or connecting the cameras directly to the NVR.

INSTALLATION

NVR Installation Tips:

1. Make sure the cameras and the monitors are properly connected to the NVR.
2. The NVR 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 NVR to become unstable.
3. During the boot process, the NVR should not be interrupted by pressing any buttons on the mouse, or remote controller. Do not unplug the power adapter or turn the NVR off during the boot process.
4. A UPS (Uninterruptable Power Supply) is highly recommended to prevent of the NVR during a power outage.

QUICK SETUP WIZARD

The Quick Startup Wizard is designed to make the installation process of your NVR as quick and easy as possible. This startup wizard will automatically appear when you first boot up your NVR. It will guide you through setting up the NVR's Network Settings and finding and registering your cameras.

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 NVR's main menu.

Step I: Network Configuration

The Network Setup menu allows you to configure the NVR's network settings for remote connection. You can access this setup menu anytime by right-clicking anywhere on the screen and selecting: Setup Menu > Network > Network.
To setup the NVR's network settings:
1. Set "Network Type" to [Dynamic IP] and click [IP DETECT]. The NVR will automatically configure its settings to match your network's requirement. when all information is detected, you can change the Network Type to Static. This will save all the correct network settings and the IP address will not be changed by the network (on DHCP networks).
2. You can also set the Network Type to Static and manually enter the NVR's information.
   a. IP Address: the NVR's address in the local network.
   b. Subnet Mask: usually 255.255.255.xxx
   c. Gateway: your router's external IP address.
   d. DNS Server 1 and 2: quired if connecting to the DVR over the Internet.
   e. Switch Setting: if the camera's are connected directly to the NVR, this is the internal IP address settings for those cameras.
   f. TCP/IP and Web Port: default values are 9010 and 80, respectively. These ports need to be opened in your router to connect to your NVR over the Internet. See your Network Administrator for more information.
3. Enable UPnP and Auto Private IP Setup if these features are supported by your network.
4. To connect to the NVR remotely, open an Internet explorer page and enter your router's external IP address:DVR's port number (Example: 72.243.193.215:81). If you are accessing the NVR over the Internet, make sure the ports are properly setup in your router. See your Network Administrator for more information.

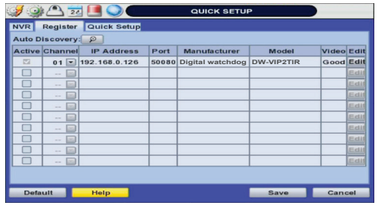
QUICK SETUP WIZARD

Step 2: Camera Registration

To add cameras to the NVR, the system will scan your network for all supported devices. The cameras connected directly to the NVR will appear at the top of the list, with the IP Address credentials set in the Switch Settings in the previous step.

To add a camera:

1. The system will automatically scan the netowork for supported devices. you can also press the search button next to Auto Discovery.
2. Supported devices will appear in the results table.
3. Check the box next to the cameras you wish to assign to the NVR.
4. Select from the 'Channel' drop-down menu which camera to assign to which channel.
5. Press 'Save' to save all changes or 'Cancel' to exit the registration screen.
6. You can always access the registration setup screen to change cameras by right-clicking anywhere on the screen and selecting Setup Menu > Camera > Register.



CAMERA & SCHEDULE SETUP

Camera Setup

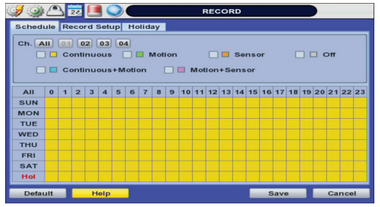
Once all cameras have been properly registered with the NVR, you can adjust the camera's image, title, and network information under the camera's setup menu.

1. Go to Setup Menu > DEVICE > Camera
2. Select the channel for the camera you want to modify.
3. Press the pencil icon next to the camera's title to edit the camera's name.
4. Set the camera's motion detection and sensitivity. By default, motion is enabled on the entire camera view. Block marked in yellow indicates motion is ON for that area. To disable, click on the yellow box.
5. If applicable, enable the camera as a covert channel. If enabled, the camera's image will not be available for users that have been setup with covert channel restrictions.
6. Adjust the camera's image using the brightness, contrast and hue settings.
7. Press 'Advanced Settings' to access the camera's network settings, adjust the Auto Iris, Flicker, BLC, WDR, and AWB settings, or view the camera's firmware version.

Note: Advanced Settings are available only on cameras sold with the NVR.

Recording Configuration – Schedule Setup

Users can use "Schedule" settings to define the time range of the scheduled recording for each channel.



Users can use "Schedule" settings to define the time range of the scheduled

1. Go to the Setup Menu and select Record.
2. In the record window, select the Record Setup submenu.
3. Chose the desired resolution, frame-rate, and quality from the drop-down list for each of the recording modes (Continuous/ Event).
4. Individually configure the settings for each channel, or use the [COPY SETTINGS] button to apply changes to multiple cameras.
5. 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.
   a. Select a record mode from the options on the top of the screen.
   b. Using your mouse, click, hold, and drag to select multiple days & hours.
   c. You can setup a unique recording schedule for each channel or apply the same recording settings to all channels.
   d. You can setup special days as "holidays" either by their date (December 24th) or by their time of the month (Thursday of every 3rd week of November).

RECORD & NETWORK SETUP

Recording Configuration – Record Setup

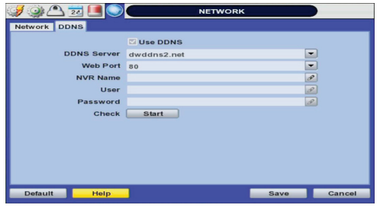
The Record Setup Menu offers streaming configuration per channel for both the first and second streams.

1. Right-click anywhere on the screen and go to Setup Menu> Record > Record Setup.
2. Select the channel to setup from the drop-down menu.
3. Setup the channels main and secondary stream settings, including resolution, quality, FPS, and pre and post alarm recording.
   a. Resolution: select from 1920x1080, 1280x720, or 640x360. Secondary stream is set by default to 640x360.
   b. Codec: the codec is set by default to H.264 on the main stream, and MJPEG on the secondary stream.
   c. Quality: set the image quality to Low, Normal, High, Highest
   d. FPS: set the stream's frames per second speed from 0 to 30. Main stream's FPS is set by default to 25fps, secondary stream's FPS is set by default to 5fps.
   e. Pre Alarm: if applicable, select from 3-5 seconds.
   f. Post Alarm: if applicable, select from 5-15 seconds.

Note: Due to system performance, BitRate per channel must be limited to 4,000kbps/CH for Main Stream and 512kbps for Secondary Stream.

NETWORK SETUP

Registering DDNS



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

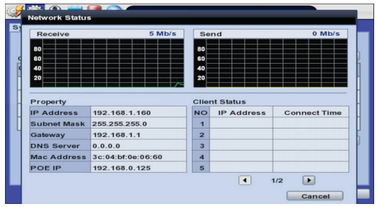
1. Go to the Network setup menu, and select the 'DDNS' tab.
2. Check USE DDNS to enable.
   (Make sure the NVR's web port has been properly setup in your router).
3. Select DWDDN2.net (default).
4. Enter a name for your NVR and click the CHECK button.
   If the name is available, the system will display the following message:
   "THIS NVR NAME CAN BE USED". Click SAVE to save all changes.
5. To use your DDNS, open an Internet Explorer page and enter the DDNS in the address bar: NVRname.dwddns2.net:port-number.(example: http://vmaxip.dwddns2.net:1234)

SPECIAL FUNCTION

Monitoring

The monitoring menu allows you to view the cameras and network status as well as connection log and events.

1. Right-click anywhere on the screen and go to Setup Menu > System > Monitoring.
2. The table will display the cameras assigned to each channel (see Camera Registration for more information), their IP address, vendor and model, event notification and status.
   a. IP Address: The camera's address. If the camera's are connected directly to the VMAXIP NVR, the IP address will be set according to the switch settings in the network setup page.
   b. Vendor and Model: the camera's make and model will be displayed in the table.
   c. Events: if the cameras are set to record events, notifications will appear every time an event occurs such as motion, sensor activation, etc. Please note that all external devices must be set accordingly to event recording and notifications for the event notification to work.
   d. Status: displays the camera's connect/ disconnect status.
3. You can refresh the table to view any changes in the network.
4. Network Status: View send and receive traffic charts for the VMAXIP in Mb/s.
   a. VMAXIP's Receive chart: displays the data received at the NVR from the cameras in MB/s.
   b. VMAXIP Network Properies: VMAXIP's network settings, including IP and MAC addresses, gateway, subnet mask, DNS server, and PoE IP.
   c. Remote Client's Send chart: displays data transmission from the NVR to a remote client in Mb/s.
   d. Client's Status: The system can monitor up to ten remote connections to the VMAXIP, displaying their IP addresses and connection time.
5. Connection Log: displays the IP cameras' connection to the VMAXIP NVR in log format. Press the 'Connection Log' button, then press the 'Search' button to display all log results.



Help

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.