DVR Installation Manual

4/26/2013

V1.1

HDE-X DVRs

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Workflow

1. **Network Setup**: Setting a Static IP, enabling external access via port forwarding
   a. **LAN Setup:** static IP address assigned by site IT staff
   b. **Port Setup:** forward ports to allow Device commands to be sent from I-View Now
2. **Configure SMTP email:** This will be used to communicate alerts and alarms to I-View Now. The SMTP server and SMTP ID provided on the "Installer Data" Worksheet will be used here
3. **User Setup**: Change the default administrator password. I-View Now will be using this password to log into the device. I-View Now suggests using the suggested password on the "Installer Data" worksheet.
4. **Recording Setup:** The DVR will be set to record by schedule or by events. Event recording will only record when either a motion or alarm event is detected. Scheduled recordings occur during the scheduled time.
5. **Alarm Input Setup:** Here the technician will be setting up the alarm inputs on the back of the DVR to perform two actions: 1) Trigger recording on all connected cameras. And most importantly, 2) Send SMTP (email) alert to I-View Now upon the event of an alarm.
6. **Motion Detection Setup:** activate video motion recording for desired cameras.
7. **Configure I-View Now Entry Delay**: Entry delay is configured through the I-View Now portal.
8. **Test**: Here you will test the individual inputs on the DVR as they are connected to your alarm panel relays or other input devices. It is recommended that you test all inputs for functionality and to ensure the proper configuration has been setup in the I-ViewNow portal.
9. **Trouble Shooting:** This section is provided to help the technician troubleshoot common problems encountered while installing S series DVR's.

Installation Worksheet

The I-View Now Portal will provide an Installation Worksheet after entering the DVR make and model into the system. This sheet will contain configuration information for the DVR's notifications area, and provides a form to fill in details about the site setup (alarms, zone names). An example worksheet is printed below.

You will need to retrieve the IP address while on-site. Either ask the customer/IT department for the IP address, or visit http://whatismyip.org while on-site for the correct address.

Default DVR Login

Plug a monitor into the VGA output on the DVR. Also, plug the mouse provided with the DVR into the front side USB port of the DVR unit. The default password is admin. Be aware that the Menu's presented in this manual can vary slightly depending on the exact model and firmware version.

User Name: admin
**Password**: admin

**USB Mouse**

VGA Cable

VGA Port

Network Setup

After logging into the device for the first time, the first setting that should be changed is the IP address. The DVR requires a static internal IP address because one or more communication ports will have to be forwarded to it from the firewall/router on site.

- Right Click anywhere
- Login with User: admin Pass: admin
- Click Main Menu
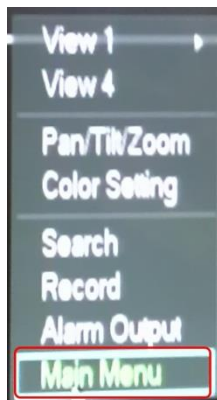
- From the Main Menu click Settings
- From the Settings Menu click Network
- **Continued Next Page…**
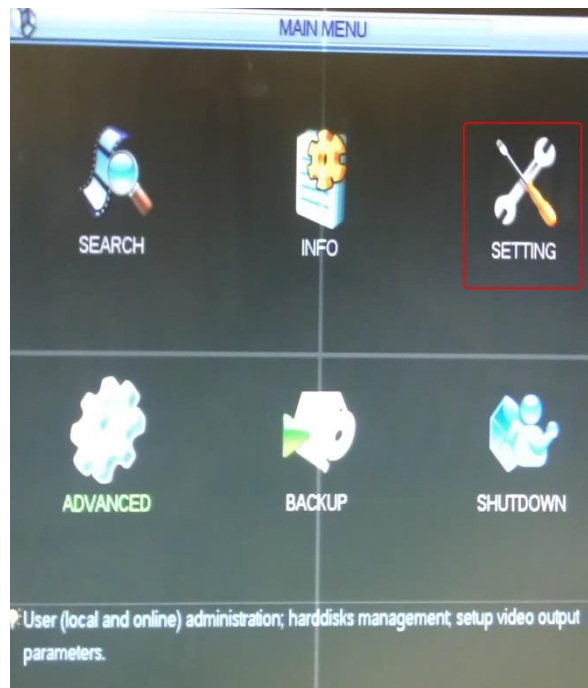
This is the Main Menu

This is the Settings Menu from which most device programming will be initiated

- Get an available Internal Static IP Address from the Site's IT staff
- Also ask for the default gateway(router address) and subnet mask.
- Uncheck DHCP
- Enter the IP Address
- Enter the Gateway Address
- For the DNS server either ask the Site's IT staff for a preferred DNS server or just use the Google public DNS server at 8.8.8.8 and 8.8.4.4
- If the default TCP port 37777 is already in use it can be changed here as well
- Set Max Connections to 20(this determines the number of concurrent connections that the device allows)
- Click save to ensure no settings are lost before proceeding

This is the general network settings interface. All network settings programming is initiated from this interface.

SMTP Settings

This section describes how to set up SMTP (email) on the DVR to allow Alarm notifications to be sent to I-View Now.

- Navigate back to the general network settings interface
- Under the network settings submenu use the scroll bar to scroll down to EMAIL.
- Double click EMAIL to enter EMAIL setup
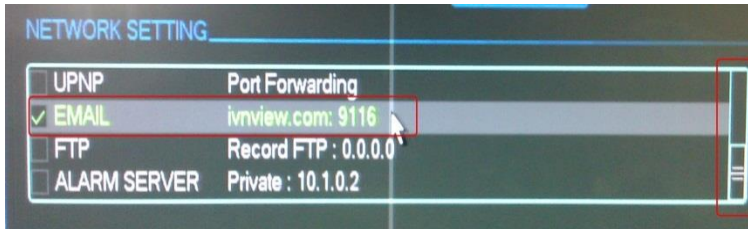
- Enter **ivnview.com** for the **SMTP server**
- Enter **3480** for the **Port**
- For Sender, Enter the SMTP ID from the Installer's Worksheet.
- For Receiver, Enter the SMTP ID from the Installer's Worksheet.
- **Yes, Sender and Receiver are the same**
- Ensure **Enable SSL is NOT Checked**
- Set Event interval to 5
- Click Test
- Click OK

Test Failure can occur if the SMTP Server, SMTP Port, SSL/TLS, DNS, or Firewall settings are incorrect. This Test will not verify that the Sender and Receiver are correct. It just verifies connectivity to the I-View Now SMTP Server.
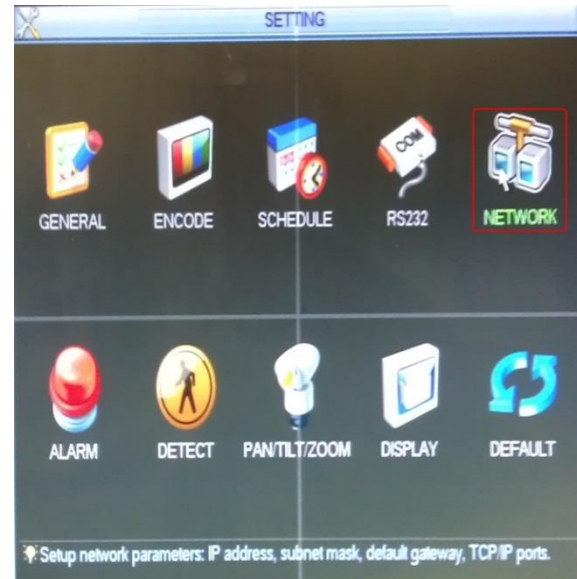
**Network settings can be reached from the settings menu**

Email Setup Interface. Reachable through Network Settings interface

Network Port Setup

I-View Now utilizes one of the device's network ports. The TCP port, which has a default of 37777, must be forwarded from the Router/firewalls external interface to the DVR's static internal address. Ideally, this port can be left as the default value, but on a network where this external port is already in use. It may be necessary to change them. **In the I-View Now Portal, the TCP Port should be set as the Video port.**

- If the ports must be changed
- Navigate back to the Network Setup
- Enter the new TCP Port number
- Click OK to save settings
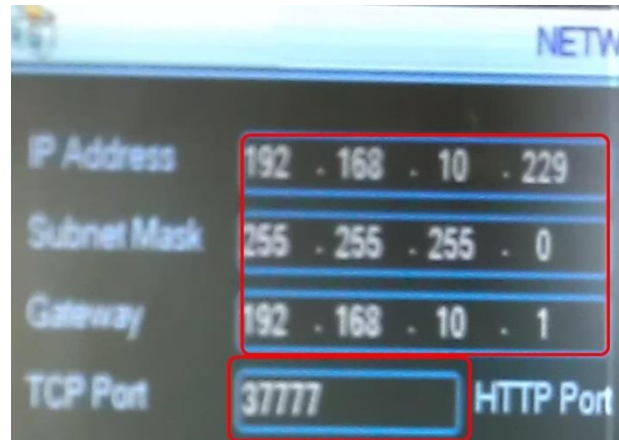
The TCP Port Setting Can be found in the Network Settings interface

Router Settings

Router settings must be examined on a case by case basis. I-View Now requires one port to be forwarded to the Device. This can be done Either through port forwarding or NAT (Network Address Translation) depending on what the installation site's router supports. With either of these router features, any unused/unfiltered External Port can be forwarded to the TCP Port(also referred to as the video port). For example External Port 9000 could be forwarded to the DVR on port 37777 internally. In this case, the default TCP port on the DVR itself could be left alone.

The other approach would be to forward external ports to the DVR using the same External Port and Internal Port. In this case, the ports must be set on the DVR through Network Settings. Common ports used for forwarding the HTTP port are 1024, 1025, 1026, 1027 or 8080. Common ports used for forwarding the Video/TCP port are 8010, 8011, 9000, and 9010.

For any of these situations it is the External IP Address and External Port numbers that must be entered into the I-View Now "Installer's Portal."

Note: Any ports used must be unblocked in any firewall devices (typically just the router).

User Settings

This section instructs the tech on how to setup a user account for customer usage. The reason for setting up a separate account is not to lock them out of the DVR, it is to prevent them from making changes to the DVR that would inhibit the DVR's use with I-ViewNow.

- Navigate to the Advanced Menu
- Click the account icon
- Click Add User
- Enter the desired user name
- Enter the desired password
- Enter the password again to confirm
- Select Group User
- This process can be repeated for more additional users if necessary
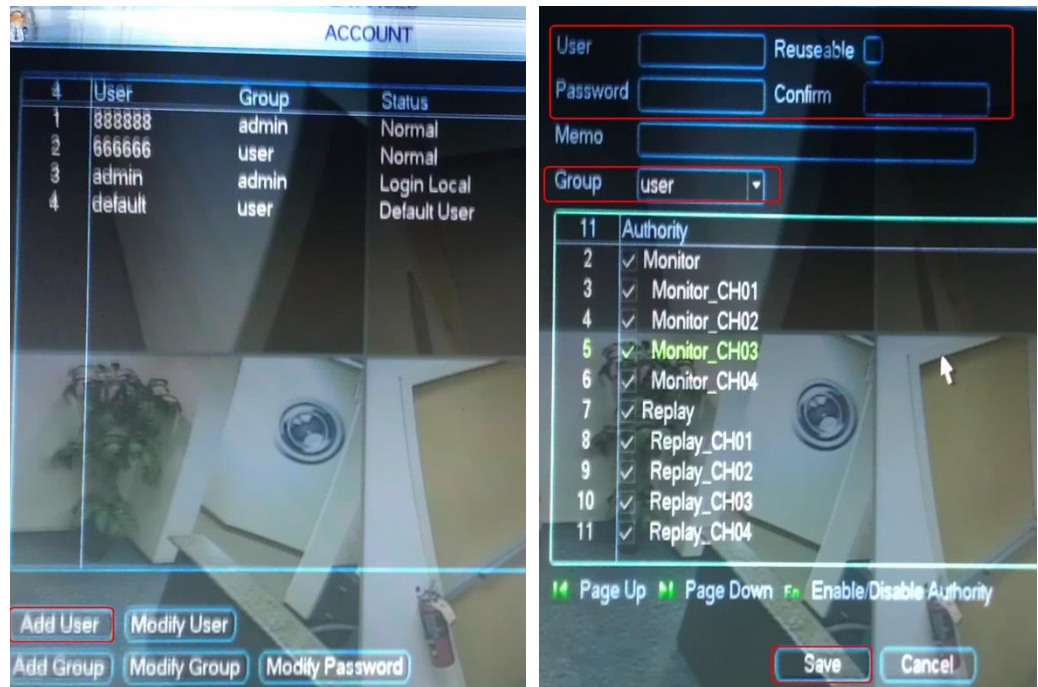
Clicking Add user will bring you to the interface on the right

User Setup interface

Changing Admin Password

Groups are denoted by a dash next to their name. Users have no dash.

- Click on the 'admin' user(login local)
- Change the password to the password provided by the dealer's web portal
- Confirm change
- Click OK
- Click Save

Recording Setup

The Gen IV DVR records video VIA 3 different stream types. Regular Type is a continuous recording mode. Alarm Type records on Alarm input trips. And, Motion Type records on motion events. I-ViewNow utilizes Extra Stream1 to stream live video from the DVR. Depending on the DVR configuration I-ViewNow can use Regular, Alarm or Motion recording streams to retrieve Pre-Event Video Clips.

Encoding Settings

The Encoding setup determines format of the video record onto the DVR. For clips to be decoded properly the frame rate must be set to 15 FPS on the recording channel being utilized. I-View Now suggests setting up all recording channels in this manner to avoid any potential issues when upgrading or adding cameras to the system.
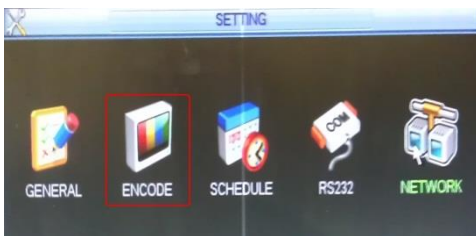
- Navigate to the Settings Menu
- Select Encode
- Select Channel All
- Select Type Regular
- Set Compression H.264
- Set D1
- Set Extra Stream Resolution CIF
- Set FPS 15
- Set Extra Stream FPS 7
- Set both Bit Rate Type to CBR
- Set Regular Stream Bit Rate to 1024
- Set Extra Stream Bit rate to 160
- Click OK

- **Repeat these steps for all types IE Regular, Alarm, Motion**
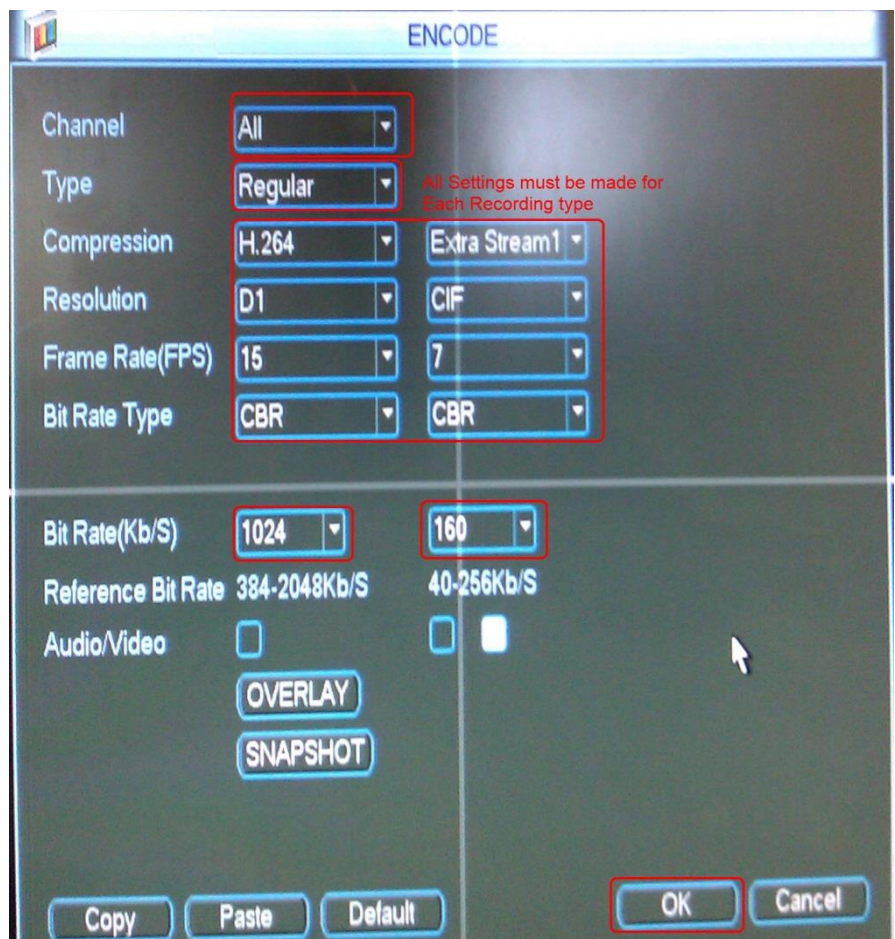
Encoding types are determined by what triggers the recording IE Alarm, Motion or Scheduled (Time Based recording)

Motion Recording Setup (optional)

Motion recording can be configured for any desired camera, but it is not mandatory for the I-ViewNow System. At a minimum I-View Now requires Alarm event recording to be enabled even if motion recording is enabled because it is possible for an alarm event to occur when there is no motion on the correlating camera.
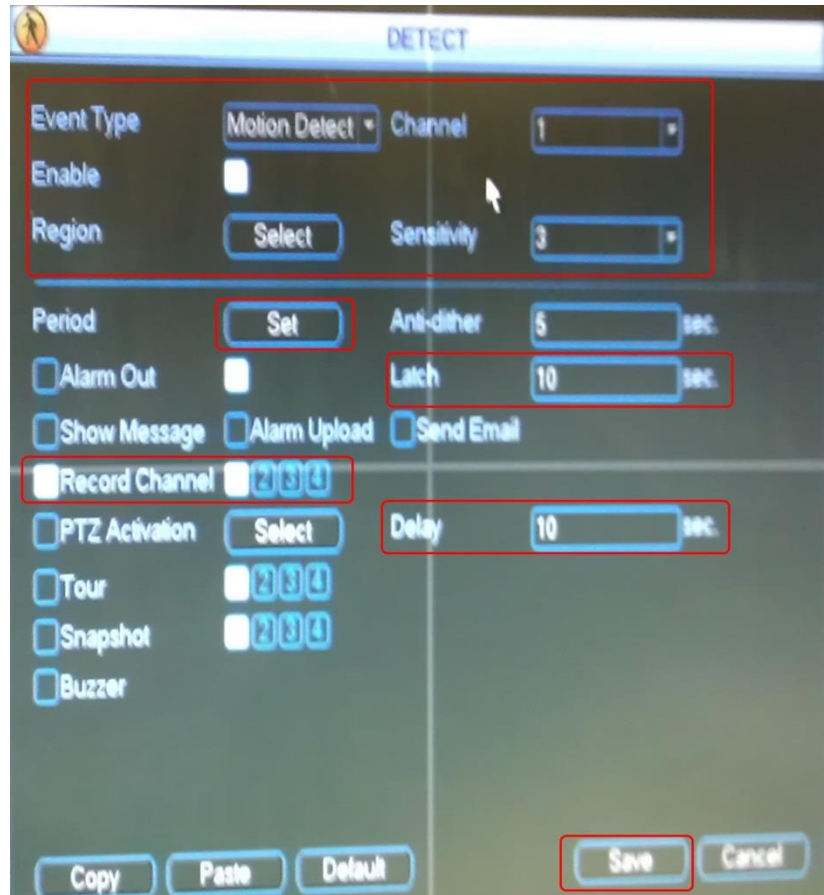
- From the Settings Menu

- Click the Detect Icon
- For each Camera
- Set Event Type Motion Detection
- Set Channel 1
- Set Sensitivity 3(suggested)
- Click Select region

- Selecting the bounding boxes
  Can be utilized to exclude areas from
  Motion detection
- Set record channel to record the channel
  Motion was triggered on. IE Channel 2
  Should record channel 2

Alarm Input Setup

Alarm inputs are to be configured to send SMTP notification to I-View Now whenever an alarm event occurs. I-View Now suggests recording on all camera channels whenever an alarm event is detected.

- From the Main Setup Menu
- Click the alarm Icon

- Select event Type **Local Alarm**
- Select Alarm In **All**
- Check the Enable Box
- Set Type Normal Open
- Set anti-dither 5
- Set Latch 5
- Check Send Email
- Check record channel
- Check all Channels
- Optionally check buzzer
- Checking buzzer makes the DVR
  Beep when an alarm input is fired

Configure I-View Now Entry Delays

Entry Delays are configurable through the I-View Now Dealer Portal. Log in to configure.

Test Settings

Once the DVR has been properly configured and the necessary settings entered into the i-viewnow.com portal, it is a good idea to test each alarm input on the DVR by triggering the corresponding device on your alarm panel.

If relay 1 is connected to input 1 on the DVR and it is supposed to trigger when a panic button is pushed, ensure not only that the DVR has received the signal. Also ensure that the I-ViewNow.com portal has received the signal and correctly identifies the type of alarm.