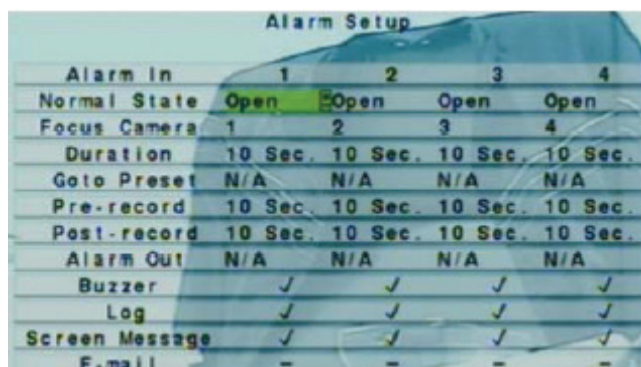The general operations are as below:

- ▲ ▼ ◄ ► - Press these buttons to select the items. The display will scroll left/right if the selected item is not shown on the screen.
- **Numeric (CH1-CH4) -** Press these buttons to select the camera.

- **COPY (🖼) -** Press this button to copy all the settings - excluding detailed Motion settings, Video Loss settings, Title/Audio - of the focus camera to all the following cameras. (E.g. focus camera is 1, its settings will be copied to those of cameras 2-4.)

- **ESC (MENU/ESC) -** Press this button to escape from this screen, and return to Setup Menu display. If the Save dialog is shown, press ENTER to exit and save, ESC (MENU/ESC) to exit without saving.

ALARM SETUP

In Setup Menu display, press ▲ ▼ to change the highlighted option to **Alarm**, and then press **ENTER** to call up Alarm Setup display as shown. The Alarm Setup allows the administrator to define the attributes for each alarm input, and the actions if it's triggered. There are up to 4 alarm inputs which can be connected to the system.

Following is a brief description for each item and its specific operations:
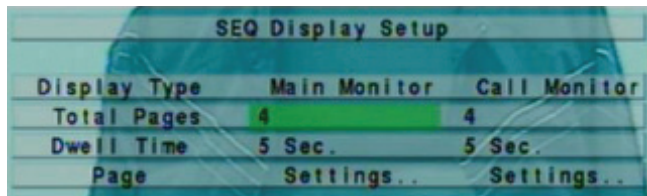
- **Normal State** – press +/- buttons to select **N/A, Close** or **Open**. Please check the signal type, normally close or normally open, connected to the alarm input terminal on the rear panel of the system. If there's no signal connected, please select **N/A** – Not Available, and the following items will not be setup. The default setting is **Open.**

- **Focus Camera** – the camera corresponding to this alarm input.

- **Duration** – response duration to define how long (in seconds) the Alarm Out relay and the Buzzer will stay on for after this alarm input is triggered. However, the Alarm Out relay and the Buzzer will be reset immediately once this alarm input returns to normal. Press +/- buttons to adjust the value (3-60 seconds, discrete).

- **Goto Preset** – to define the preset position to go to for the Focus Camera if this alarm input is triggered (only available for PTZ cameras).

- **Pre-record** – to define how long before this alarm input is triggered the Focus Camera will be recorded at pre-record IPS. Press +/- buttons to adjust the value (0-10 seconds, discrete). Please note that the actual pre-record time may be shorter than the value set if the total size of the pre-record pictures exceeds the pre-record buffer size of the system.

- **Post-record** – to define how long after this alarm input is triggered the Focus Camera shall be intensively recorded at Event Record IPS. Press +/- buttons to adjust the value (0 second - 60 minutes, discrete).

- **Alarm Out** – to define which Alarm Output will be triggered when this alarm input is triggered. Press +/- buttons to select none (N/A) or one of the Alarm Outputs (1-2).

- **Buzzer** – to activate the internal Buzzer or not when this alarm input is triggered. Press **ENTER** or +/- to check/uncheck this item. The default setting is " ✔ " - checked.

- **Log** – allows you to either log an event or not. Press **ENTER** or +/- to check/uncheck this item. The default setting is " ✔ " - checked.

- **Screen Message** – to display the event message on the screen or not. Press **ENTER** or +/- to check/uncheck this item. The default setting is " ✔ " - checked.

- **E-mail** – to send an event e-mail to a pre-determined email or not. The e-mail will be sent to the predefined receivers when the event is triggered. Press **ENTER** or +/- to check/uncheck this item. The default setting is "–" - unchecked.

The general operations are as below:

- ▲ ▼ ◄ ► - Press these buttons to select the items.

- **Numeric (CH1-CH4) -** Press these buttons to select the alarm input.

- **COPY (📋)** - Press this button to copy the settings of the focus alarm input to all the following alarm inputs. (E.g. focus alarm input is 1, its settings will be copied to those of alarm inputs 2-4.)

- **ESC (MENU/ESC) -** Press this button to escape from this screen, and return to Setup Menu display. If the Save dialog is shown, press ENTER to exit and save, ESC (MENU/ESC) to exit without saving.

SEQ DISPLAY SETUP

In Setup Menu display, press ▲ ▼ to change the highlighted option to SEQ Display, and then press ENTER to call up SEQ Display Setup as shown.

The SEQ Display Setup allows the administrator to define the display pages while in SEQ Display for main monitor and call monitor. There are 1 display type - 1-Window for main monitor, and 1 display type for call monitor.

MAIN MENU

MAIN MENU

SCHEDULED RECORD SETUP

Weekday	Start	Alarm	Motion	Normal
SUN	00:00	A/V	A/V	A/V
MON	00:00	A/V	A/V	A/V
TUE	00:00	A/V	A/V	A/V
WED	00:00	A/V	A/V	A/V
THU	00:00	A/V	A/V	A/V
FRI	00:00	A/V	A/V	A/V
SAT	00:00	A/V	A/V	A/V

Scheduled Record Setup — T1

In Setup Menu display, press ▲ ▼ to change the highlighted option to **Scheduled Record,** and then press **ENTER** to call up Scheduled Record Setup as shown

The Scheduled Record Setup allows the administrator to define when and how to record with the system. There are up to 16 time segments (T1 – T16) for each weekday. Each time segment will allow you to set up recording settings for certain periods of the day.

To set up the time segments:
- Select the day of the week you wish to setup.
- Choose what time you want this segment to start (e.g. 9 am, when you open your business)
- Set up the alarm, motion and normal recording settings for this time. A/V stands for Audio and Visual, A for audio, V for visual, No for no alarm. (e.g. you may wish to set them all for no, since you will be there at 9 am)
- Set up the next time segment the same way. The end time of this time segment is implicitly set as the start time of next time segment, or the start time of the first time segment of the same weekday if it is the last one. (e.g. you may wish to set up the motion and alarm settings to start at 12 noon, since you will be gone for lunch. Therefore, from 9 am to 12 noon, there are not alarm or motion settings, at 12 noon it will start to detect motion and alarms)
- Continue to do this until you have scheduled the entire day. (e.g. Noon-5 no action, 5pm-midnight motion and alarm, start the next day at midnight until 9 am etc.)

Following is a brief description for each item and its specific operations:

- **Start** – the start time of the time segment, which will go up in increments of 30 minutes. (The end time of this time segment is implicitly set as the start time of next time segment, or the start time of the first time segment of the same weekday if it is the last one.) Press +/- buttons to select the desired start time.

   Example: If the user sets the start time of T1/MON as 9:00, T2/MON as 18:00, T3-T16/MON as N/A (Not Available), then T1/MON is 9:00-18:00, T2/MON is 0:00-9:00, and 18:00-24:00.
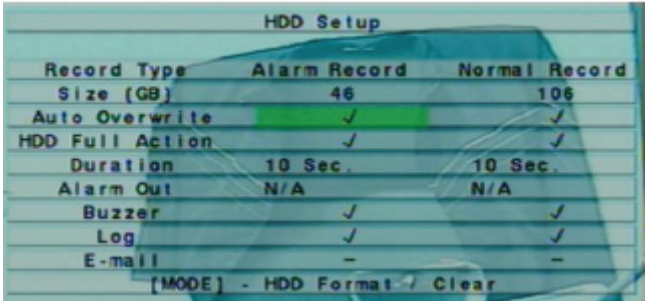
- **Alarm** – record mode (No, Video, or Audio/Video) when certain alarm input is triggered. Press +/- buttons to change the value.

- **Motion** – record mode (No, Video, or Audio/Video) when motion is detected for a selected camera. Press +/- buttons to change the value.

- **Normal** – normal record mode, including, A/V (Audio/Video), V (Video only), or No (No Video). Press +/- buttons to change the value.

The general operations are as below:

- ▲ ▼ ◄ ► - Press these buttons to select the items. The display will scroll left/right if the selected item is not shown on the screen.

- **COPY (   ) -** Press this button to copy the settings of the focus weekday to all the following weekdays. (E.g. focus weekday is TUE, its settings will be copied to those of weekdays WED-SAT.)

- **ESC (MENU/ESC) -** Press this button to escape from this screen, and return to Setup Menu display. If the Save dialog is shown, press **ENTER** to exit and save, **ESC (MENU/ESC)** to exit without saving.

HDD SETUP

In Setup Menu display, press ▲ ▼ to change the highlighted option to **HDD**, and then press **ENTER** to call up HDD Setup as shown.

The Clearvu11 has a unique function that allows you to adjust the DVR to partition your hard drive to store a certain amount of normal recording and a certain amount of alarm recording. In the surveillance applications, alarm video/audio can be much more important than normal video/audio. So, this digital video/audio recorder is designed to allow the user to divide each HDD into alarm partition and normal partition. Alarm video/audio will be recorded in alarm partition, normal video/audio in normal partition. This will prevent the hard drive from filling up with normal recording and tape over the important alarm recordings.

The HDD Setup allows the administrator to format/clear each HDD, set Alarm Record size and Normal Record size of each HDD, and define the behaviors for Alarm Record and Normal Record if it reaches the end of the last HDD in the system.

The following is a brief description of each item and its specific operations:

- **Size (GB)** – the total HDD storage in GB (Giga-Byte) for Alarm Record and Normal Record respectively. This item is just for information. Please refer to the section on HDD format/clear for detailed information and setup.

- **Auto Overwrite** – allows you to automatically overwrite the recorded video/audio from HDD#1 when the Alarm/Normal Record disk drive capacity is full. If Auto Overwrite is disabled and the Alarm/Normal Record disk drive capacity reaches the end, the system will not overwrite the recorded video/audio, and hence not record Alarm/Normal video/audio, until the user presses the **Alarm Reset** button. Press **ENTER** or +/- to check/uncheck this item. The default setting is " ✔ " - checked.

- **HDD Full Action** –Activates certain actions when Alarm/Normal Record disk drive capacity reaches the end of the last HDD. Press **ENTER** or +/- to check/uncheck this item. The default setting is " ✔ " - checked.

- **Duration** – response duration to define how long (in seconds) the Alarm Out relay and the Buzzer will keep being triggered after the corresponding selection, Alarm Record or Normal Record, is full. Press +/- buttons to adjust the value (3-60 seconds, discrete).

- **Alarm Out** – to define which Alarm Output will be triggered when the corresponding selection, Alarm Record or Normal Record, is full. Press +/- buttons to select none (N/A) or one of the Alarm Outputs (1-2).

- **Buzzer** – to activate the internal Buzzer or not when the corresponding partition, Alarm Record or Normal Record, is full. Press **ENTER** or +/- to check/uncheck this item. The default setting is " ✔ " - checked.

- **Log** – to log to event logs or not. Press **ENTER** or +/- to check/uncheck this item. The default setting is " ✔ " - checked.

- **E-mail** – to send the event e-mail to a pre-determined email address or not. The e-mail will be sent to the predefined receivers when the event is triggered. Press **ENTER** or +/- to check/uncheck this item. The default setting is "–" - unchecked.

The general operations are as below:

- ▲ ▼ ◄ ► - Press these buttons to select the items.
- **MODE** - **Format/Clear** - Press this button to format/clear the HDDs as described in the next section.
- **ESC (MENU/ESC) -** Press this button to escape from this screen, and return to Setup Menu display. If the Save dialog is shown, press **ENTER** to exit and save, **ESC (MENU/ESC)** to exit without saving.

MAIN MENU
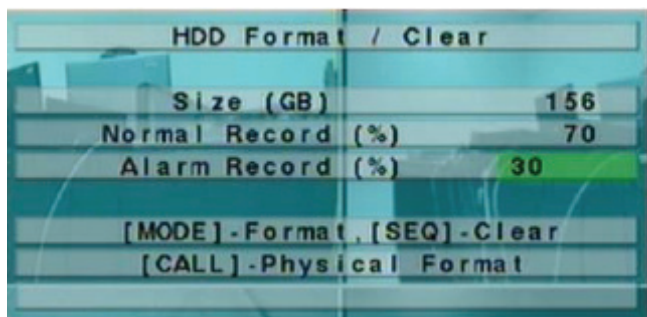
HDD FORMAT/CLEAR

In HDD Setup display, press **MODE** to call up HDD Format/Clear screen as shown.

The HDD must be formatted before it can be used to record video/audio. The HDD Format/Clear screen allows the administrator to format and/or clear each HDD, and set the size for Alarm Record option and Normal Record option for each HDD.

The general operations are as below:

- **MODE - Format**
  Press this button to format the HDD. A confirmation dialog will be shown on the screen, press **ENTER** to confirm, or **ESC (MENU/ESC)** to cancel. **Please note that it will take a few minutes to format the HDD.**

> **NOTE:** If the HDD has not been formatted yet, it will be formatted and split up with default record size, 30% for Alarm record and 70% for Normal record. If it has been formatted before, it will be formatted according to the Alarm REC Size (%) and Normal REC Size (%) displayed on the screen, but the previously recorded contents within the new size won't be cleared and will be accessible.

- **SEQ - Clear**
  Press this button to clear the HDD. A confirmation dialog will be shown on the screen, press ENTER to confirm, or ESC (MENU/ESC) to cancel.

- **CALL - Physical Format**
  Press this button to physically format the selected HDD. A confirmation dialog will be shown on the screen, press ENTER to confirm, or ESC (MENU/ESC) to cancel. Please note that the recording will be always optimized for performance & lifetime no matter if it's the first time or the one hundredth time. The formatting of the HDD would only take about 1 minute. We strongly recommend that the user use this physical format function to format the HDD for the first time.

> **NOTE:** The HDD will be physically formatted and split up with default record size, 30% for Alarm record and 70% for Normal record. All the previously recorded will be erased.

- **ESC (MENU/ESC)** - Press this button to escape from this screen, and return to HDD Setup display. If the Save dialog is shown, press ENTER to exit and save, ESC (MENU/ESC) to exit without saving.

Following is a brief description for each item and its specific operations:

- **Size (GB)** – the total storage in GB (Giga-Byte) for the HDD if it has been formatted. This item is just for information.
- **Alarm Record(%)** – Alarm Record Size (in percentage) for this HDD. Please follow the Text Input method described in Section 4.1 to change the value.
- **Normal Record(%)** – Normal Record Size (in percentage) for this HDD. This item is just for information.

PASSWORD SETUP

In Setup Menu display, press ▲ ▼ to change the highlighted option to Password, and then press **ENTER** to call up Password Setup menu as shown.

The Password Setup allows the administrator to add new users, delete existing ones, and/or modify the user's name, password, and/or level.

There are three password levels in the system, including **Administrator** (highest), **Supervisor**, and Operator (lowest). The Operator can operate live video display, the Supervisor live video display, image playback and archive, and the Administrator everything. The system allows up to 18 different user accounts.

The preset administrator login name is "aa" and the passowrd is "11". The user can use this username to login to the system for the first time.

The general operations are as below:

- ▲ ▼ ◄ ► - Press these buttons to select the items. The display will scroll up/down if the selected item is not shown on the screen.
- **MODE** => Select/Deselect as default - Press this button to select this user as the default one at login, or deselect if this user is the default login user. An asterisk (*) will be shown preceding the number for the default login user. This login name/password will be the default one each time the login dialog is shown, so the user doesn't have to bother to enter the text to login the system every time.
- **ESC (MENU/ESC) -** Press this button to escape from this screen, and return to Setup Menu display. If the Save dialog is shown, press ENTER to exit and save, ESC (MENU/ESC) to exit without saving.

NOTE: If the asterisk (*) is removed from all users there is no default username or password saved when loggin into the DVR

Following is a brief description for each item and its specific operations:

- **Login Name** – please follow the Text Input method
- **Password** – this item accepts numbers only. Please follow the Text Input method.
- **Level** – the password level (Administrator, Supervisor, or Operator) for this user. Press +/- buttons to change the level

SYSTEM SETUP
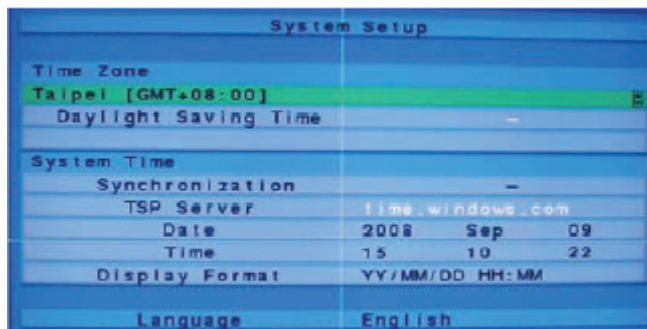
In Setup Menu display, press ▲ ▼ to change the highlighted option to **System**, and then press **ENTER** to call up System Setup as shown.

The System Setup allows the administrator to set the system time, time zone, time synchronization, language, etc.

Following is a brief description for each item and its specific operations:

- **Time Zone** – press +/- buttons to select the time zone for the system.
- **Daylight Saving Time** – press ENTER or +/- to check/uncheck this item to set the timezone that the DVR will be located.
- **System Time**
- **Synchronization** – time synchronized with TSP Server. Press **ENTER** or +/- to check/uncheck this item. The default setting is "–" - unchecked.
- **TSP Server** – TSP (Time Synchronization Protocol) server name if Time Synchronization is enabled. The system will try to do time synchronization with the specified TSP server at the system preset interval.
- **Date** – system date. Press +/- buttons to modify each of these items.
- **Time** – system time. Press +/- buttons to modify each of these items.
- **Display Format** – format used for the system time displayed on the lower-left corner of the main screen. Press +/- buttons to select the desired format.
- **Language** – press +/- buttons to select the language for the system. The languages supported include: English, Turkish, simplified Chinese, Russian, Portuguese, and Italian

The general operations are as below:

- ▲ ▼ ◄ ► - Press these buttons to select the items.
- **ESC (MENU/ESC) -** Press this button to escape from this screen, and return to Setup Menu display. If the Save dialog is shown, press **ENTER** to exit and save, **ESC (MENU/ESC)** to exit without saving. Please note that if the selected language is changed, the user will be asked to reboot the system for the newly selected language to take effect.

RS-232/422/485 SETUP

In Setup Menu display, press ▲ ▼ to change the highlighted option to **RS-232/422/485**, and then press **ENTER** to call up RS-232/422/485 Setup as shown.

The RS-232/422/485 Setup allows the administrator to setup RS-232 control port, and RS422 or RS-485 control port. Please refer to the manuals for the connected devices - PTZ cameras – to set these items in RS-232/422/485 Setup.

Following is a brief description for each item and its specific operations:

- **Device Type** – **PTZ** or **N/A** (Not Available). Press +/- buttons to change the type. **Please note that PTZ can only be selected for either RS-232 or RS-485, but not both.**
- **Model** – PTZ model of the connected devices. The PTZ models supported include **Pelco D protocol Dome, SamSung SCC-641P**, etc. Press +/- buttons to change the supported model (or protocol).
- **Baud Rate** – press +/- buttons to change the value. This is a specific value defined by your PTZ camera. Please consult your PTZ manual for the baud rate and protocol.
- **Data Bit** – press +/- buttons to change the value.
- **Stop Bit** – press +/- buttons to change the value.
- **Parity** – (Odd, Even, or None). Press +/- buttons to change the value.
- **DVR/Camera ID** – for PTZ - the device ID for this digital video/audio recorder, and it must not conflict with the other devices connected in the same control port. Press +/- buttons to change the ID. Consult your PTZ manual for instructions on changing the PTZ ID.

The general operations are as below:

- ▲ ▼ ◄ ► - Press these buttons to select the items.
- **MODE -** Press this button to call up Optional RS-232 Setup screen if it's built in the DVR. The operations for Optional RS-232 Setup are the same as RS-232/422/485 Setup.
- **ESC (MENU/ESC) -** Press this button to escape from this screen, and return to Setup Menu display. If the Save dialog box is shown, press ENTER to exit and save, ESC (MENU/ESC) to exit without saving.

NETWORK SETUP

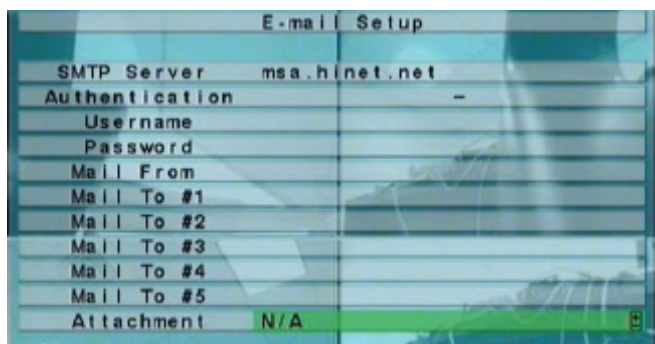The general operations are as below:

- ▲ ▼ ◄ ► – Press these buttons to select the items.

- **ESC (MENU/ESC) -** Press this button to escape from this screen, and return to Setup Menu display. If the Save dialog is shown, press ENTER to exit and save, ESC (MENU/ESC) to exit without saving.

Following is a brief description for each item and its specific operations:

- **Net Type** – Static IP, PPPoE, or DHCP. DHCP can only be used for intranet (LAN) access, while Static IP and PPPoE can be used for both internet & intranet access. Press +/- buttons to change the Net Type. Please contact your network administrator for this.

- **IP Address** – Ethernet IP address for the system. To get a static IP address, please contact your local ISP (Internet Service Provider). Please follow the Text Input method described in the begining of the manual to modify these items.

- **Net Mask** – Net Mask for the IP address. Please follow the Text Input method described at the begining of the manual to modify these items.

- **Gateway** – Gateway IP address for the system. Please follow the Text Input method described in the begining of the manual to modify these items.

- **DNS** – DNS (Domain Name Server) IP address for the system. Please follow the Text Input method described in the begining of this manual to modify these items.

- **Username** – PPPoE username for the system if PPPoE is used. Please follow the Text Input method described in the begining of this manual to modify this item.

- **Password** – PPPoE password for the system if PPPoE is used. Please follow the Text Input method described in the begining of this manual to modify this item.

- **DDNS Type** – Dynamic, Static, or Custom DDNS (Dynamic Domain Name Server) type. Please contact your local DDNS Service Provider to get the DDNS URL, username, and password. Press +/- buttons to change this item.

- **URL** – the URL (Uniform Resource Locators) for the system if PPPoE is used. Please follow the Text Input method described in the begining of this manual to modify this item.

- **DDNS Username** – DDNS username for the system if PPPoE is used. Please follow the Text Input method described in the begining of this manual to modify this item.

- **DDNS Password** – DDNS password for the system if PPPoE is used. Please follow the Text Input method described in the begining of this manual to modify this item.

- **Use the** ◄ ► keys to navigate over to E-mail or Adv.

E-MAIL SETUP

In Network Setup, press ENTER to call up E-mail Setup as shown when the highlighted option is E-mail.

The E-mail Setup allows the administrator to set all e-mail related parameters. When an event occurs and E-mail is enabled for the corresponding action, an e-mail will be sent based on the parameters set here. Contact ISP or E-mail provider to acquire the SMTP server and authentication information.

The general operations are as below:

- ▲ ▼ – Press these buttons to select the items.
- **ESC (MENU/ESC) -** Press this button to escape from this screen, and return to Network Setup display. If the Save dialog is shown, press ENTER to exit and save, ESC (MENU/ESC) to exit without saving.

Following is a brief description for each item and its specific operations:

- **SMTP Server** – SMTP mail server name. Please contact your email provider for this information.
- **Authentication** – whether the SMTP mail server requires authentication. Press ENTER or +/- to check/uncheck this item.
- **Username** – username if the SMTP mail server requires authentication.
- **Password** – password if the SMTP mail server requires authentication.
- **Mail From** – the e-mail address of this DVR unit, i.e. the sender of the e-mails
- **Mail To #1-5** – the receivers' e-mail addresses. The system can send the e-mails originated from the triggered events to up to 5 different receivers.
- **Attachment** – attached picture for the e-mail sent. The value could be (N/A, Original picture, QCIF picture). Press +/- buttons to change this item.

MAIN MENU

ADVANCED NETWORK SETUP

In Network Setup, press **ENTER** to call up Advanced Network Setup as shown when the highlighted option is **Adv.**

The Advanced Network Setup allows the administrator to set advanced network parameters. If the user is not familiar with network administration, please DO NOT modify the items in this dialog.

The general operations are as below:

- ▲ ▼ - Press these buttons to select the items.
- **ESC (MENU/ESC)** -Press this button to escape from this screen, and return to Network Setup display. If the Save dialog is shown, press ENTER to exit and save, ESC (MENU/ESC) to exit without saving.

Following is a brief description for each item and its specific operations:

- **Control Port** – the control port for remote access. The default value is 67. Please follow the Text Input method described in the begining of this manual to modify this item.
- **Data Port** – the data port for remote access. The default value is 68. .
- **HTTP Port** – the HTTP (web page) port for remote access. The default value is 80..
- **WAP Picture** quality press+/- to change the initial value. Options are normal, fine, and superfine.

NOTE: If the control port or data port is not available or accessible during remote access, the system will reset the ports to their default values, i.e. 67/68.

FACTORY DEFUALTS

If you choose to reset your DVR, highlight the Factory Default tab. You will be prompted to either confirm or cancel resetting to factory defaults. Press ESC to cancel or Enter to fully restore your DVR to the factory settings.

SOFTWARE UPGRADE (Administrator mode only)
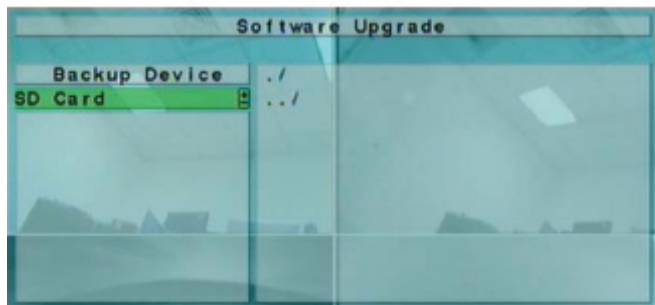
In Menu display, press ▲ ▼ to change the highlighted option to **Software Upgrade**, and then press **ENTER** to call up Software Upgrade display as shown.

Please note that a backup device must be connected to complete the software upgrade.

The operations are as below:
- ▲ ▼ ◄ ► - Press these buttons to select the items.
- **ESC (MENU/ESC)** - Press this button to escape from this screen, and return to Menu display.

Following is a brief description for each item and its specific operations:
- **Backup Device** – press ENTER to call up Backup Device dialog (if there is a backup device connected).
- **Disk Storage** – to select the disk storage to upgrade. Press +/- buttons to select the available storage.
- **Upgrade File** – press ENTER to start the upgrade process when the highlighted file is a correct upgrade file. A confirmation dialog will be shown on the screen, press ENTER to confirm to upgrade the system software.

NOTE : After the software is upgraded, the system will restart immediately. The split window display will be shown after restart, this may take a few minutes to complete.

SYSTEM SHUTDOWN (Administrator mode only)

In Menu display, press ▲ ▼ to change the highlighted option to **Shutdown**, and then press **ENTER** to shutdown the system. A confirmation dialog box will be shown on the screen, press **ENTER** to confirm the shutdown. The system will save all the files and all the settings, and then display a power-off message in the rolling screen message area. The user may power off the system safely when the power-off message is shown.

Before you start let's make sure that you have everything you need to do this properly. You should have these ready and connected before beginning:

☐   DVR connected to a router.

☐   Router connected to the Internet.

☐   A PC or laptop that is connected to the same router that the DVR is connected to. The PC can be connected by a wired or wireless connection.

☐   Internet Explorer 5.0 or greater (To check the version of Internet Explorer: Open IE. In the top menu bar click on "Help" and then click on "About Internet Explorer". The version of IE will be displayed).

☐   A genuine and fully updated version of Windows XP or Vista.

Important: The computer and DVR need to be connected to the same router. A computer will not always be necessary at the location to view the DVR.

> **NOTE:** This guide was created using a cable modem and some procedures will be slightly different depending on your hardware. If you are using a DSL modem, you may need to enter your PPPoE settings into the DVR (User name and password provided by your ISP). For more information refer to your modem's manual or contact your Internet Service Provider (ISP).
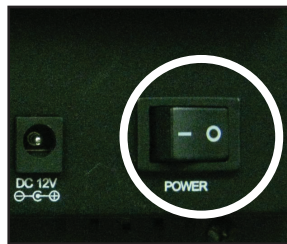
CONNECTING YOUR DVR TO THE ROUTER
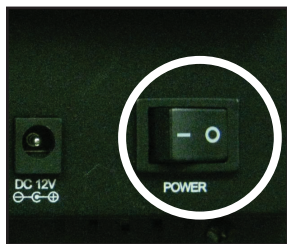
1.   Power off the DVR by using the power switch on the back of the DVR.

2.   Connect the included network cable to the back of the DVR in the LAN port.

3.   Connect the other end of the network cable to an available port on the router. The port on the router should be labeled 1-4, or 1-8.

4.   Once both ends are connected, power on the DVR by using the power switch on the back of the DVR.

> **NOTE:** If you look at the router there should be a green "link" light indicating that the DVR is properly connected to the port that it was plugged into. If this light is on, you can proceed to finding the DVR's IP Address.

FINDING THE DVR'S IP ADDRESS

Once the DVR is connected to the router you will need to find the IP address of the DVR. This is referred to as the "Internal IP Address" of the DVR.

To check the DVR's IP address:

1. Press the Menu button.
2. Select Login / Logout.
3. Type in your username and press ENTER. Type in your password and press ENTER.
4. Select Setup and press ENTER.
5. Select Network and press ENTER. You are now at the network setup screen.
6. Make sure the "Net Type" is set to DHCP. This setting is acceptable for most users. If your router does not support DHCP or the DVR needs to store PPPoE (ADSL) settings contact your network administrator or ISP (Internet Service Provider) for the proper IP address settings.
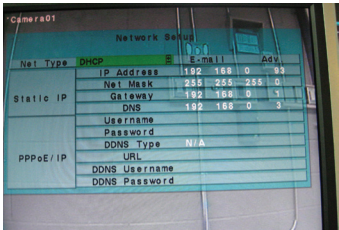
> **NOTE**: By default, the DVR network settings are set to DHCP. This means the DVR will automatically get an IP address from the router when it is connected properly.

7. Write down your IP address, Subnet Mask, Default Gateway, and DNS on the notes section. This information will be used to view the DVR on your computer and also assist in being able to view the DVR over the Internet.

8. Press "ESC" to exit out of Menu. Press ENTER to save changes.

9. Once you see confirmation, Press ENTER again. You have successfully configured your network settings.
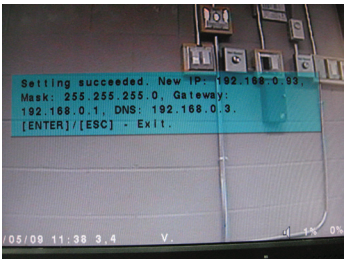
PREPARING YOUR COMPUTER FOR VIEWING THE DVR

Any computer that is accessing the DVR will need to be configured to install and run ActiveX controls and the Microsoft Visual C++ 2005 SP1.
(This will require you to be logged into the computer as an Administrator).

Either of the following 2 methods will prepare your computer for this:

Method 1 (Recommended):
Add the DVR's IP address to the Trusted Sites in Internet Explorer.

1. Open up Internet Explorer.

2. Click on Tools.

3. Click on Internet Options.

4. Click on the Security Tab.

5. Click on Trusted Sites.

6. Click on Sites.

7. Type in the IP address of the DVR in the following format: http://192.168.0.93 and click Add.

8. If "Require server verification (https:) for all sites" is selected you will need to uncheck the selection box.

*   The IP address used in the example above is for internal network viewing. If you are trying to access the DVR from a location other than where the DVR is located than you will be adding the "External IP Address" to the trusted sites list (see "Finding your External IP Address").

9. Now you need to change the default settings for the Trusted Sites zone. Click on Default level and change the security level of the zone to Low. This is done by sliding the slider security level to the bottom.

    (This will allow ActiveX controls to be downloaded and installed on your computer).

10. Click Apply.

11. Click OK.
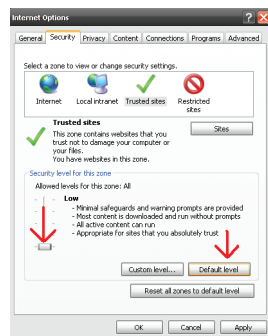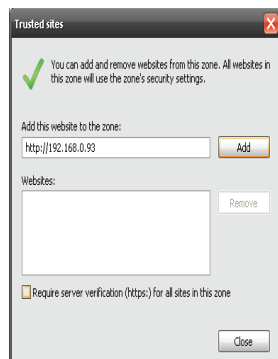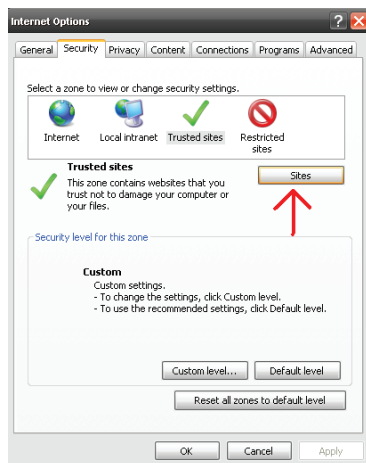
Method 2:

1. Open Internet Explorer. Go to the drop down menu in the Tools area and select Internet Options.

2. Select the Security Tab and then click on the Custom Level button in this tab.

3. Change the ActiveX Settings to the ones seen in the image:

   • Download signed ActiveX controls: **PROMPT**
   • Download unsigned ActiveX controls: **PROMPT**
   • Initialize and script ActiveX controls not marked as safe: **PROMPT**
   • Run ActiveX controls and plug-ins: **ENABLE**
   • Script ActiveX controls marked as safe for scripting: **ENABLE**
    If this is an option:
   • Allow automatic prompting for file and code downloads: **ENABLE.**

4. Press OK.
5. Press APPLY.
6. Close out of the Options window.
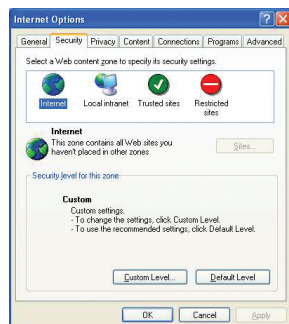
NOTE: You will need to complete the steps above for every computer you wish to view the DVR from.

NOTE: If you do not have the ActiveX installed and the previous step did not download it, go to http://www.download.com and search for ActiveX. Download the ActiveX Download control.

VIEWING YOUR DVR ON YOUR COMPUTER

Now that the proper settings have been set up on the DVR and the computer has been configured to download the proper controls, you are ready to view the DVR on your computer. Type in the IP address of the DVR in the Internet Explorer browser in the following format: http://192.168.0.93

* The IP address used in the example above is for internal network viewing. If you are trying to access the DVR from a location other than where the DVR is located than you will be typing in the External Address (see "Finding the DVR's IP Address").

INSTALL THE ACTIVEX CONTROLS AND MICROSOFT VISUAL C++ 2005 SP1

After typing the IP address into the Internet Explorer address bar and pressing ENTER:

1.   There will be a yellow information bar that pops up below the address bar in Internet Explorer. Click on the yellow information bar and then select "Install ActiveX control". Please be patient as the installation process can take 1-2 minutes.

2.   Read the terms of the License agreement and press "YES" to continue with the installation.

3.   After the Microsoft Visual C++ 2005 SP1 has been installed, you will be prompted to install the CMSPlugin.cab software. This is required to view and control the DVR. Select "INSTALL" to begin the installation.

4.   Once the ActiveX control and Microsoft C++ 2005 PS1 have been installed, you will be prompted to type in a username and password. This is the same username and password that is used to access the menu system of the DVR. By default the username is "aa" and the password is "11". Follow any instructions on screen and then log into the DVR by using a proper username and password.
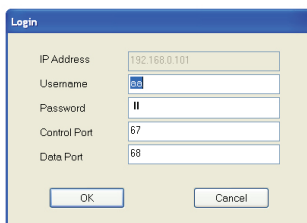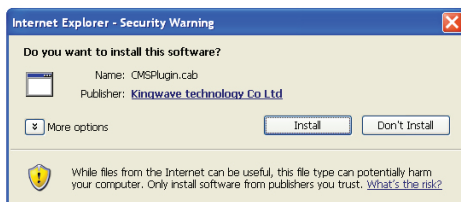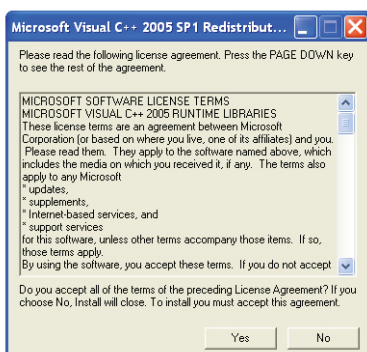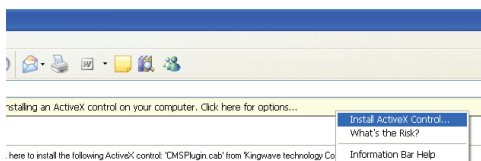
CONFIGURING YOUR ROUTER (PORT FORWARDING) TO VIEW THE DVR EXTERNALLY

* Your router will need to be configured properly before being able to view the DVR from a location different than the DVR*

Port forwarding is a necessary step that opens a path on your home/business network to allow you to view your DVR from outside your network (over the Internet).

There are hundreds of makes and brands of routers on the market and these instructions have been made using a D-Link router (Model DI-604). If you have a router that is different than the example shown, you can find step by step instructions on **www.portforward.com**.

> **NOTE:** SVAT technical support cannot troubleshoot modems, since changing these settings can potentially render your modem inoperable.

ONCE YOU ARE ON PORTFORWARD.COM:

1. Find your router make and model in the list of routers and click on it.
2. If you see an advertisement, click on "Click here to skip this advertisement" in the top right-hand corner.
3. You will see a list of various applications. Any application will outline the port forwarding steps, but it is recommended to find a link for any DVR or IP camera and click that.
4. Follow the instructions but make sure you forward the correct port number (the port number assigned to your DVR). The default port numbers that need to be forwarded are 67, 68 and 80. All three ports need to be configured.

FINDING YOUR DEFAULT GATEWAY (ROUTER'S IP ADDRESS)

Your default gateway can be found by opening up a command prompt window and typing in IPconfig.

Open the command prompt by completing one of these methods:

1. Select Start on your desktop, then select Run. Type in "cmd" and press ENTER.
2. Select Start on your desktop, then select All Programs. Click on Accessories and then select Command Prompt.
3. Hold down the Windows button and press letter "R" on your keyboard.

Once the command prompt is open, type in IPconfig and press ENTER. This will list your computer's IP address, subnet mask and default gateway. Your default gateway is the router your computer and the DVR are connected to. The subnet mask and default gateway on your computer should be the same as the DVR.

CONNECTING THE DVR USING A D-LINK ROUTER (EXAMPLE)

In this example a D-Link D1-604 router was used. The steps for your router may be similar to the following steps. These instructions have also been created without a firewall in place. If you have a firewall, please consult a computer technician or your network administrator.

You need to configure the router to forward the port numbers that the DVR uses. This will allow a computer over the internet to properly communicate with the DVR. The CLEARVU11 by default uses ports 67, 68, 80. All 3 ports need to be configured.

1. Open your web browser. Enter the **ROUTER IP** address (default gateway) in the address bar and press **ENTER.**

2. Enter the user name "admin". Leave the password blank followed by pressing the OK button (unless you have set up a user name and password for your router).

In this situation, our router username is "admin" and the password is blank. Your router's default username and password can be found by visiting
www.portfoward.com and following the steps outlined in "Configuring Your Router."

*If the default username and password are not working, contact your network administrator (or the person who configured your router.)
* It is necessary to log on to your router to configure the port forwarding and access your DVR remotely.

3. Select the Advanced tab.
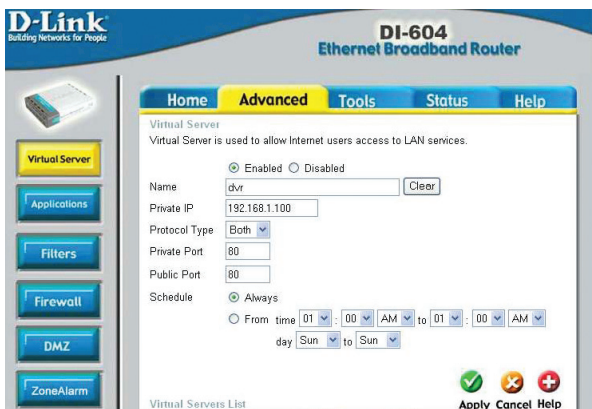
4. Select the Virtual Server tab.

    • Select the Enabled check box.

    • In the Name field type in "DVR80".

    • In the Private IP field enter the DVR's IP address.

    • In the Protocol field, select Both (This will enable both TCP and UDP).

    • In the Private port enter the port number you need to forward. By default this DVR is set to port 80. Use port 80 unless you have a reason to change the DVR to another port (not recommended).

    • In the Public port re-enter the port number you entered in the private port field (e.g. 80).

    • In the Schedule field, select Always.

    • Click "Apply".

5. Repeat all instructions listed in Step 4 (above) twice more, but enter port 67 the second time and port 68 the third time instead of port 80. You will also have to rename these to DVR67 and DVR68.

6. When complete, select the "Apply" button located at the bottom of the page to save your changes.

7. Port forwarding is now complete.
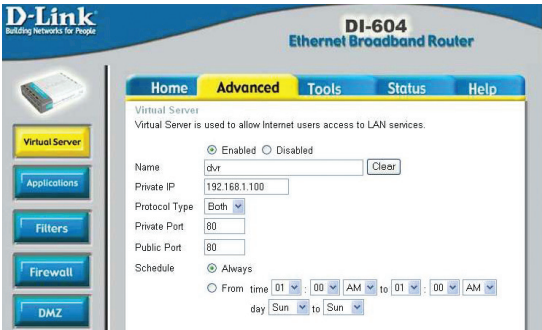
    You are now set up to view your DVR from anywhere in the world!
    To view your DVR remotely, type your External IP Address into the address bar in Internet Explorer.

FINDING YOUR EXTERNAL IP ADDRESS

Your external IP address will be used to access the DVR when the user is not at the same location as the DVR. For example, if the DVR is set up at home and the user wants to view the DVR while they are at work they would type in the External IP address of the DVR. There are many ways to find your External IP Address.

The simplest way is to go to **www.whatsmyip.org**. This site will display your External IP Address in the top portion of the screen. If you go to **www.portforward.com**, it will also display this IP address.
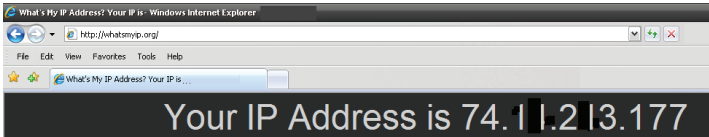
Port forwarding needs to be configured properly before being able to view the DVR externally.

DYNAMIC DNS

Instead of having to remember and enter your IP address every time you want to access the DVR online, you can set up the DVR so that it is associated with a website URL (domain name) that is easy for you to remember.

1. Open internet explorer and type http://www.dyndns.com in the address bar.

2. Create a new account by clicking the "Create Account" link.

3. Enter your preferred user name, email address, and password.

4. The optional information can be left blank, unless you would like to enter it.

5. Read and agree to the Terms of Service by checking the boxes and click "Create Account".

6. Check your email for a confirmation message from the site. You need to click the link in the body of this message in order to activate your account.

7. When you click the link, a window appears that displays "Account Confirmed". Click the "login" link and enter the username and password you created.
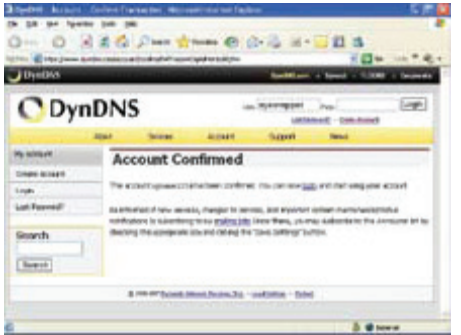
8. Click on the "Services" button located on the top menu bar.

9. Click on the Dynamic DNS link.

10. Click on the "Get Started" link located on the menu on the right side of the screen.

11. Type in a host name (subdomain name). We recommend you use your name, company name, or something that is easy for you to remember.

12. Choose a domain name from the dropdown menu. We recommend using the dyndns.org suffix.

13. In the IP address field, type in your external IP address. You may also have the option to "use detected IP address", which will fill your IP address in for you.

14. Leave all of the other options as is, and click "Create New Host".

If you are having difficulty setting up this account contact DynDNS.com.

This service is not supported by SVAT-USA

To configure the DVR to work with DDNS:

1) Press Menu and Select Login / Logout
2) Type in the username and password. (default username is "aa". Default password is "11"
3) Select Setup
4) Select Network
5) Change the Net Type to static. Note that the DHCP IP information should be copied over to Static.
6) Navigate to DDNS and press - / + to choose the DDNS website you have created. Our instructions were for DynDNS.org.

The following information will be acquired from the DDNS account you have set up online.

7) Enter the hostname of your DDNS account. (ex BriansDVR.dyndns.org)
8) Enter the username of the account you created
9) Enter the password of the account you created

The DVR will now automatically log on to your DDNS account and update the website with your current External IP Address.

IF YOU CANNOT CONNECT USING YOUR EXTERNAL IP ADDRESS

If the Remote Viewing Software does NOT pop up, it could be that:

• Make sure you are using Internet Explorer 6.0 or later.
• Port forwarding is not set up.
• You are not an administrator on the computer and cannot install the Microsoft add-on program.
• A pop-up blocker is preventing the controls or DVR from showing up.
• Your router is blocking your computer from using the External IP Address. Try connecting to this address from a remote computer that is not on the same network.
• A DSL modem is preventing a connection.
• Port 80 is being blocked by your ISP (Internet Service Provider). Try changing the HTTP port to 2000. Port forwarding will need to be set up for this port also.

Check all your network connections and go through the above steps again to make sure a configuration error was not made. You may have to configure PPPoE settings to match the settings provided to you by your Internet Service Provider (ISP). Consult your ISP for more information on your PPPoE settings.

If using a http port other then 80 the IP address must be entered with the port number at the end. (ex. http://74.11.213.177:2000 or http://74.11.213.177 :2000) some Internet Explorer browesers require a space before the port number.

REMOTE VIEWING

Now that you know your external IP address, you can perform a test to ensure your DVR is accessible from outside your network (over the internet).

1. Open Internet Explorer, and in the address bar type in the External IP Address you just acquired from www.whatsmyip.org. It should be similar to the following: http://74.11.213.177

2. Press ENTER.

The video images can be displayed in several types of split-window screens, including 1/4/9/16-Window. And the focus window is surrounded by a frame border. In addition to the video windows, there are different icons on the lower corner and the right corner of the screen for status display and control. (The ".L" following the camera title stands for Live display, ".P" for Playback, and the camera title with white background has detected motion.)

NOTE 1: The frame rate is limited by the bandwidth of the network and the pre-record IPS of the camera
NOTE 2: The picture quality depends on the recording resolution and recording quality of the camera

When the user leaves Internet Explorer. he/she may be asked to save changes to files, please click on OK or Yes to save the changes.

The operations and descriptions for these icons are as below:

1.　　　　　　　　-Click on these icons for 1/4/9/16-Window display.

2.　　　　　　　- Click on this icon to switch to or return from SEQ display mode.

3.　　　　　　　- Click on this icon to toggle between live mode and playback mode for all the video windows.

4.　　　　　　　- Click on this icon to freeze/unfreeze the video images for all the video windows.