FCC Compliance Statement

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

(1) This Device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

Caution : Any changes or modifications in construction of this device which are not expressly approved the party responsible for compliance could void the user's authority to operate the equipment.

NOTE : This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications, However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

CAUTION

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type.

Disposal of used batteries according to the general recommendations against the environmental pollution.

Important Notice

1. When using DS412, do not put heavy monitor or others on DS412.

2. DS412 is indoor use and all the communication wirings are limited to inside of building. Therefore you should consider environmental specifications that are included in the manual. For DS412 cleaning, gently wipe the outside with a clean dry cloth.

3. Be sure to use a DC adapter that is provided by Web Gate Inc. Connecting DS412 directly to a AC current, may cause electric damages to DS412.

4. Be cautious of handling DS412. Physical shocks may harm the product.

5. DS412 is made with a metal case. When installing the camera, be sure it is attached securely to avoid any injures. Be careful to locate the camera where children cannot reach it

6. If DS412 does not operate properly, please contact the closest local WebGate distributor for after sales service. In all cases, you are prohibited to disassemble the product. If so, WebGate is not responsible for any malfunction nor service warranty.

7. Security surveillance laws may differ for each country. Therefore, please contact the local region first to avoid any surveillance law violations and to apply for authorized purposes only.

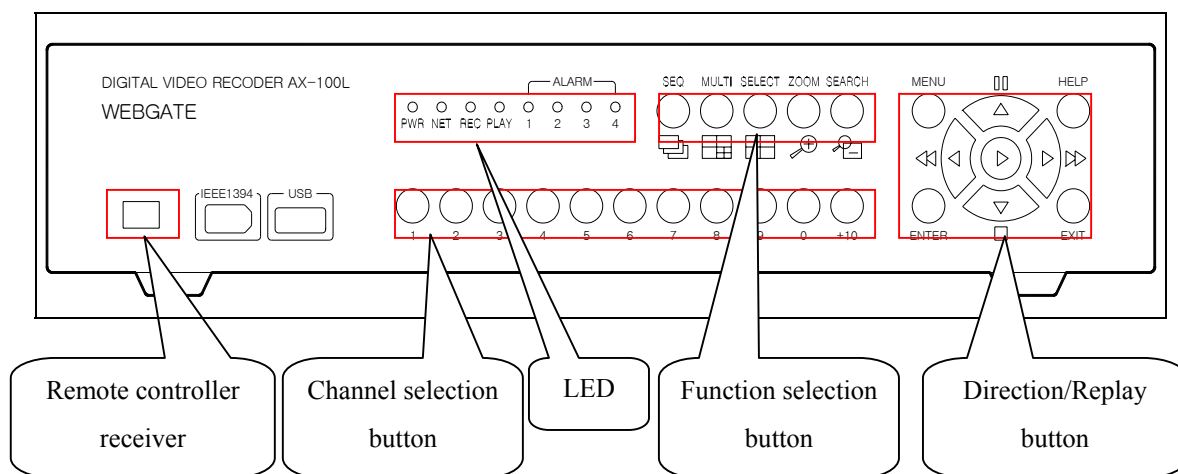EDVR Manual

Version : 0.4

Making Date : January, 28, 2003

Revision Date : February, 25, 2003

1. Install & Run

1.1. Descriptions

A. Front Panel

(1) Remote Controller Receiver

(2) Channel Selection Button

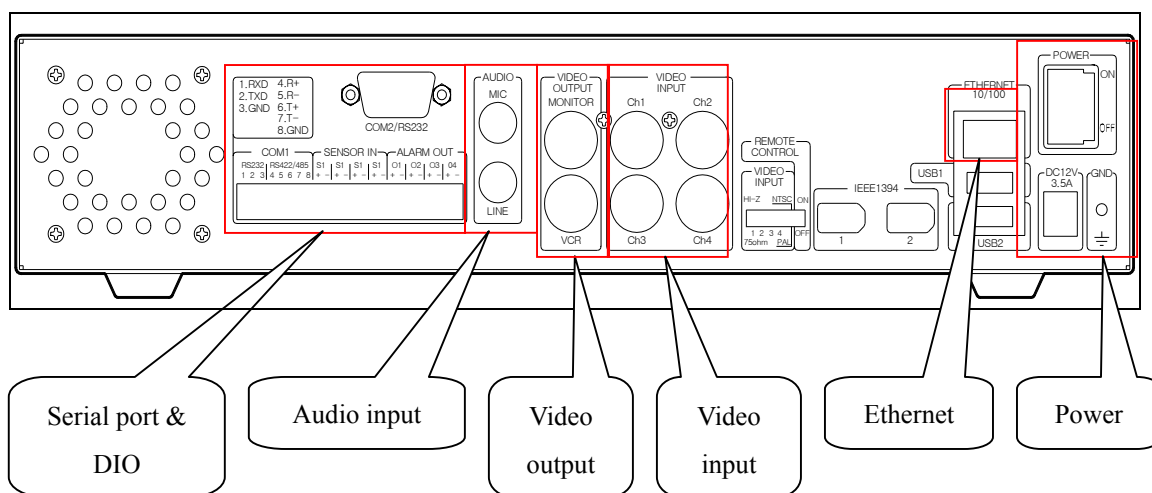- To select video input channel in monitoring and playback mode

(3) LED

- PWR : To show power supplying status. "ON" means to supply power.

- NET : To show the status of Ethernet and communication. It blinks as many as transmitted frames per second.

- REC : To show frame recording status. It blinks as many as recording frame per second.

- PLAY : To show playback mode. It blinks as many as replaying frame per second.

- ALARM 1~4

(4) Function selection button

- SEQ : To show with converting all connected video channels

- MULTI : To show multi channels (4-9-16-13 divided screen)

- SELECT : To select video channel for PTZ control

- ZOOM : To show expanded image via one channel mode

-        SEARCH : To search the recorded image in Playback mode

(5)   Direction/Replaying Button

-        MENU : To set PTZ and configuration menu

-        ENTER : To confirm the selected menu

-        HELP :

-        EXIT : To exit form the selected menu

-        Arrow key : Replay function or menu moving function

B. Rear Panel

(1)   Serial Port & DIO

-        Serial : RS232 9Pin D-Sub Connector & RS232/422/485 terminal block

-        Sensor In : 4 sensor inputs

-        Alarm Out : 4 Alarm Relay outputs

(2)   Audio In/Output

-        1 audio input & 1 output

(3)   Video Output

-        1 monitor output & 1 VCR output

(4)   Video Input

-        4 video inputs

(5)   Ethernet

(6)   Power

1.2. Connect Device

A. Connect Video

B. Connect Monitor

C. Connect Ethernet

D. Connect Audio

E. Connect Power & Run

2. Monitor

It is to monitor real time image. Ch. 1~4 are for analogue image input via BNC cable, and Ch. 5~16 are for digital image input of network camera via network.

A. View basic screen (quad-split)

    (1) Supply power.

    (2) Power LED is on, and DVR starts booting.

    (3) After booting, basic screen (quad-split) shows.

    ※ If user password is set, a dialogue for entering password will be indicated.

B. View full screen

    (1) Press the button of channel that user wants to view from multi screen (4/9/16/13).

    (2) When selecting one between channel 10 and 16, press the [+10] button at first then the other number.

    (3) Screen changes into 1 channel full screen, and the related channel shows.

    (4) If pressing the [MULTI] button, full screen moves to the previous multi screen.

C. View multi screen

(1) Press the [MULTI] button for viewing several channels simultaneously.

(2) Whenever pressing the [MULTI] button, 4-9-16-13 split screens are changed in due order.

(3) In quad-split mode, images of channels 1 to 4 show. Channels 1 to 9 in 9-split mode, channels 1 to 16 in 16-split mode, and channels 1 to 12 in 13-split mode.

D. View all channels with automatic converting

(1) All channels can be viewed in due order automatically with using the [SEQ] button.

(2) Press the [SEQ] button from current multi screen (except 16/13-split screen).

(3) Show [SEQ] mode in the right of screen and sequential images as much as the configured 'Auto SW Interval' value.

(4) If connected channels are smaller than number of current split screen, SEQ function will not run.

(5) Set 'Auto SW Interval' value in menu. Default value is 3 seconds.

(6) To shut down [SEQ] function, press the [SEQ] button.

E. View an alarm triggered channel

(1) Set 'Alarm Pop-up Screen' function in menu.

(2) When alarm is triggered, the related channel pops up automatically.

(3) According to alarm triggered channel number, a split screen shows automatically. For example, if alarm triggered channels are three, the images show in quad-split screen.

(4) Show type of alarm trigger in the left of screen.

F. View extended image

(1) Extended image can be viewed with [ZOOM] button from 'Full screen' mode.

(2) Press the [ZOOM] button.

(3) Extended image shows by twice size.

(4) Default place of extended image is on the center of screen. And it can move each 10th step to left and right and 4th to up and down.

(5) To move it, use the [Arrow] button.

(6) If repress the [ZOOM] button, the function is cancelled.

G. View with connecting PTZ

(1) When PTZ controller is connected to eDVR and "Serial Conf." is set in menu, PTZ can be controlled.

(2) Press the [SELECT] button in monitor mode.

(3) Channel selection menu shows.

(4) Select a channel with [Arrow] button.

(5) Press the [MENU] button.

(6) PTZ menu (PAN/TILT, ZOOM/FOCUS, Preset, Preset Save) shows.

(7) Press the [ENTER] button after selecting one.

(8) When selecting 'PAN/TILT' or 'ZOOM/FOCUS', [UP/DOWN] arrow key is for 'TILT/FOCUS' and [LEFT/RIGHT] arrow key for 'PAN/ZOOM'.

(9) When selecting 'Preset', a dialogue for selecting stored preset shows.

(10) When selecting 'Preset Save', a dialogue for storing current point as preset shows.

H. View network camera's image

(1) Channels 5 to 16 are for input of network cameras (WebEye Series, I-Rec Series).

(2) eDVR should be connected to Ethernet and the related channel be set in MENU.

3. Playback

It is to replay recorded images via full screen or quad split screen.

A. Playback via basic screen (full screen)

(1) Press the Play [▶] button.

(2) Play [▶] button is to replay as 1x.

(3) The recorded image of channel 1 before 1 minute 45 seconds is displayed.

B. Playback via split screen

(1) Press the [MULTI] button from basic screen playback mode.

(2) Channels 1 to 4 shows in quad-split screen.

(3) To move into basic screen playback, press the related channel number.

C. Playback with extending

(1) Press the [ZOOM] button from basic screen playback mode.

(2) Extended image shows by twice size.

(3) Default place of extended image is on the center of screen. And it can move each 10th step to left and right and 4th to up and down.

(4) To move it, use the [Arrow] button.

(5) If repress the [ZOOM] button, the function is cancelled.

D. Various playback modes

(1) ▶ (PLAY) : To replay as 1x.

(2) ■ (STOP) : To stop replaying

(3) ▐▐ (PAUSE) : To pause replaying

(4) ►►(FAST FORWARD) : Whenever pressing the button, replaying speed increases gradually (x1, x2, x4, x8, x16)

(5) ◄◄ (FAST REWIND) : Whenever pressing the button, reverse replaying speed increases gradually (x1, x2, x4, x8, x16)

(6) STEP FORWARD : When pressing [►, Replay] or [►►, FAST FORWARD] button from pause status, image is replayed frame by frame.

(7) STEP REWIND : When pressing [◄◄, FAST REWIND] button from pause status, image is replayed frame by frame.

4. Search

It is to search any image in playback mode.

(1) Press the [SEARCH] button in playback mode.

(2) Search something with entering date/time or selecting log in log browser.

(3) Searching channel is current playback channel.

(4) Press the [ENTER] button after entering the related value or selecting log.

(5) The searched image is replayed.

(6) To exit from search mode, press the [EXIT] button.

5. Setting menu

It is to set channel and recording schedule with using [MENU] button. There are total seven menus (Camera, Normal Rec., Alarm Rec., Relay, Monitor, System, Utility)

A. Descriptions

(1) Press the [Menu] button of front panel.

(2) Enter Admin password, if it is set.

(3) Main menu can be selected with 'left/right' button. To move to the sub menu, press the [Enter] button.

(4) To move to upper menu, press the [Exit] button.

(5) A changed value is applied instantly.

(6) Status bar indicates value of selected menu or help.

B. Dialogue for entering word

(1) When setting value is a word, the related dialogue box is indicated.

(2) To set a word, use direction arrow keys and number keys "0" to "9".

(3) The matching point between horizontal and vertical bar is selecting value.

(4) Or enter the related numbers in order of horizontal/vertical. (For example, in order to select "N", press [4] and [3] button.)

(5) Press the [ENTER] button in order to confirm the selected value.

(6) After setting all values, press the [Exit] button.

C. Camera setting

(1) Analogue Video (Ch1 – Ch4) Input

- All setting menus for analogue video input are same like picture above.

- If pressing [Enter] key after selecting a channel, user can move to the sub-menu.

- Name: If pressing [Enter] key, the related dialogue box is indicated.

- Activity: Set "On/Off" with using ◄◄ button or ►► button after pressing [Enter] key.

- Type: It only shows input video signal(NTSC/PAL). To set it, use dip switch on the rear of DVR.

- Color: Set "Color/Mono" with using ◄◄ button or ►► button after pressing [Enter] key.

- Gain/Bright/Contrast; Set the value between –9 and +9 with using ◄◄ button or ►► button after pressing [Enter] key.

- PTZ Port: Set the value with using ◄◄ button or ►► button after pressing [Enter] key.

- Address: If pressing [Enter] key, the related dialogue box is indicated.

(2) Network Camera Video (Ch5 – Ch16) Input

* There are 'Login' menu and 'Network' menu.

  1) Login menu

- Name: If pressing [Enter] key, the related dialogue box is indicated.

- Activity: Set "On/Off" with using ◄◄ button or ►► button after pressing [Enter] key.

- Access Token: If the related network camera is encrypted, the same value that is set in its admin menu should be configured. Default value is "NULL".

- User ID/Password: The related network camera's ID/Password should be entered. Default value is "guest/guest".

- Type: Set "WebEye/I-Rec" with using ◄◄ button or ►► button after pressing [Enter] key.

- CH: Set one between Ch1 and Ch6.

- IP Address(URL): If pressing [Enter] key, the related dialogue box is indicated.

- Port: If pressing [Enter] key, the related dialogue box is indicated. The default values are different according to camera type; "8080" in "WebEye" and "8001" in "i-Rec".

2) Network menu

- Refresh: If selecting it, all local cameras are listed up. If using this menu, it is needless to enter each local camera's IP address manually in "Login" menu.

D. Normal Recording

* There are four types (Weekday Day/Weekday Night/Weekend Day/Weekend Night).

- Normal Recording: There are five conditions
   (No Rec./Low/Standard/High/Custom). All conditions except "Custom" operate together with "Frame Rate" and "Quality" automatically; 3fps/Q1 in "Low", 10fps/Q3 in "Standard", and 20fps/Q5 in "High". When setting "Custom", Frame Rate and Quality can be set separately.
- Special Time Recording: There are five conditions
   (No Rec./Low/Standard/High/Schedule). It can be set in 'System' menu.
- Alarm Recording: Set "On/Off" with using ◄◄ button or ►► button after pressing [Enter] key.

E. Alarm Recording

* Among these menus, some menu may not be activated. Namely, setting menus are different according to camera type(analogue camera/network camera). In addition to that, WebEye series doesn't support "Alarm Recording" currently. WebEye can support this menu after upgrading Firmware in July.

- IP Cam Event: It is only for I-Rec series(Ch.5 ~ Ch.16) currently. If setting as "On" after registering I-Rec series, its related data are recorded according to setting menu in camera's admin menu.
- MD/S1/S2/S3/S4: It is only for analogue cameras(Ch.1 ~ Ch.4). Be carious that DVR is set on the base of NO(Normal Open) type sensor.
- Alarm Recording: There are five conditions.
   (No Rec./Low/Standard/High/Custom) All conditions except "Custom" operate together with "Frame Rate" and "Quality" automatically. When setting "Custom", Frame Rate and Quality can be set separately.
- Pre/Post Alarm: Maximal 10 seconds can be set.

F. Relay

* There are four types(Weekday Day/Weekday Night/Weekend Day/Weekend Night).

- Setup: It can be set from Relay1 to Relay4. It is for sending digital output signal in case of alarm triggered event(MD or Sensor).
- Special Time: It is for setting in 'Special Time' zone.

G. Monitor

- Auto Sequence: It is for setting auto sequence cycle in monitoring mode. Its maximal value is 60 seconds.
- Alarm Pop-up: It is for setting automatic video pop-up, when alarm is triggered.
- Pop-up Hold: It is for setting pop-up image's duration among 5/6/7/8/9/10 seconds/Keep.

H. System

1) Audio
- Recording: It is to set whether audio is recorded or not.
- Level: It can be set between –7 and +8.
- +20dB: It is for amplifying audio input signal against low input level.
- Video Link: It is to link with replayed video channel.

2) Time
- Date/Time: It is to set Date and Time.
- Date Format: It is set one between "MM/DD/YYYY" and "YYYY/ MM/DD".
- Weekday Start/End: It is to set a range of "Weekday". The other range will be "Weekend".
- Day Start/End: It is to set a range of "Day". The other range will be "Night".
- Daylight Saving: It is to set daylight saving. If it set as "On", time will be changed automatically in related period.
- Time Zone: It is to set time zone.
- Set time: To set a value, another menu has only to exit from the related menu. But for setting time, user should certainly press this button.

3) Special Time
- It is to set maximal four zones as "Special Time".

4) Security

- User Password: It is to set User's Password only for monitoring and playback.

- Admin Password: It is to set Admin's Password for all controlling.

- Remote Setup: If setting as "Enable", user can set DVR with specific S/W in remote site via network.

- Remote DIO: It is to set DIO menu in remote site.

5) Disk Setup

- Auto Del. Normal: When HDD is full of recorded data, they can be deleted automatically except alarm-triggered data.

- Auto Del. Alarm: If setting it, alarm-triggered data will be also deleted in case of being full.

- Alarm Partition: DVR recognizes all connected HDDs as one. It is to set percentage of HDDs for alarm recording range within HDDs' total sizes.

- Backup Reminder: It is to set backup information showing according to EveryDay, EveryWeek, or EveryMonth.

- Day/Time: According to setting values of "Backup Reminder", setting ranges are indicated differently.

6) Network

6)-1: Network

- Type: It is to set connected network line(Ethernet/xDSL).

- DHCP: It is to set DHCP using or not.

- Network information setting: It is to set IP address, Netmask, Gateway, or DNS server's IP address.

6)-2 xDSL

- User ID/Password: When DVR is connected to xDSL, access ID and Password should be entered.

- WRS Interval/URL/Group: It is to set server registering interval, server's URL, or configured group ID.

- Status: It shows xDSL's accessing status.

* Currently(25, February), eDVR supports only Ethernet, not xDSL. After upgrading xDSL function, WebGate will let you know it instantly.

6)-3 Server

- Monitoring Port/Playback Port: DVR use 8001 port as Monitoring port and 8105 port as Playback port. When selecting one for changing, the related dialogue box is indicated.
- Firewall/Port: When using Firewall, set is as 'Yes' and enter its port.

7) Serial Setup

* There are two RS232 menus (One is for external device via DB-9 pin, and the other is for PTZ setting) and RS 422/485 menu.

- Device: It is to set a connected external device.
- Baud rate/Parity/Stop bit/Data bit: Each value should be set normally according to a connected external device.

8) Miscellaneous

- Remote Control ID: Total sixteen remote control IDs can be set. So with this seeing, maximal sixteen DVRs can be controlled with one remote controller.
- DVR ID: It shows in specific DVR manager S/W in order to manage several DVRs easily.
- Factory Setting: It is for factory setting.

I. Utility

1) Disk Manager

- A connected HDD is detected automatically.
- Action: Set one among "Add/Remove/Format/Confirm Removed".
- Select Disk: It is to select a setting Disk.
- Type: There are several kinds of indicating words.

    [?] : It shows a detected HDD's status before formatting

    [*] : It shows a added HDD's status before formatting

    [R] : It shows a using HDD's status after formatting

    [X] : It shows a not-detected HDD's status that is used previously.

2) Disk Backup

- Start Date/End Date: It is to set backup range.
- Select Disk: The connected backup HDD is detected automatically. At first, backup HDD should be added and formatted in "Disk Manager" menu.