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The author assumes no responsibility for any errors or omissions that may appear in this document nor does it make a commitment to update the information herein.
1. SAFETY PRECAUTIONS

WARNING: This symbol is intended to alert the user to the presence of un-insulated “dangerous voltage”.

CAUTION: This symbol is intended to alert the user to presence of important operating and maintenance (Servicing) instructions in the literature accompanying the appliance.

Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems).
This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

The power cord is the main power connection. Therefore, constantly plug and unplug of the power cord might result in malfunction of the product.

Do not install the product in an environment where the humidity is high.
Unless the product is waterproof or weatherproof, otherwise it can cause the image quality to be poor.

Do not drop the product or subject them to physical shocks.
Except for vandal-proof or shockproof product. Otherwise it will result malfunctions to occur.

Never keep the product to direct strong light.
It can damage the product.

Do not spill liquid of any kind on the product.
If it gets wet, wipe it dry immediately. Alcohol or beverage can contain minerals that corrode the electronic components.

Do not expose to extreme temperatures.
Use the product at temperatures within 5°C ~ 40°C.
2. INTRODUCTION

2.1 Product Introduction

The product is perfect for office safety, personnel home security, public environments, industry surveillance, school, and so on. Quick and simple installation is the best choice for your own ultimate protection.

The state-of-art 4-channel M-JPEG digital video recording that replaces the old conventional video recorders and supports Chinese user interface. Using time and event to playback recorded materials, efficient live recording and playback function, supports SATA hard disk. The administrator can freely setup administrator password to prevent any user randomly changing the setup.

2.2 Application

- **Security:**
  ATM (auto teller machine), bank, gas station, shop and parking lot.

- **Factory/ Office:**
  Factory, warehouse, remote technology support, conference room, and outdoor parking lot.

- **Education/ Military/ Government Organization:**
  Important facilities, important areas, rapid transit system, and railroad safety.

- **Recreation/ Activities:**
  Sports and news broadcast.

- **Home:**
  Elevator, doorway, community safety, and hotels.

- **Hospital/ Kindergarten:**
  Hospital and isolated ward, home for the aged, kindergarten, and baby nourishing center.
3. FEATURES

- **Video system auto detection**
  Auto detects video input (NTSC/ PAL) and supports combine use of color and b/w cameras.

- **Supports high quality digital video recording**
  Adopts M-JPEG compression technology (NTSC: 60 IPS/ PAL: 50 IPS).

- **Video Size**
  **Video Resolution**
  - NTSC: 640x 224
  - PAL: 640x 272
  **Monitoring Resolution**
  - NTSC: 720x 480
  - PAL: 720x 576

- **1CH audio recording and playback function.**

- **Replaces the conventional VCR.**
  Stores video on hard disks instead of VCR tapes, with large disk capacity, there is no need to replace the recording medium.

- **Built-in motion detection function.**
  Motion detection and sensitivity rate may be setup under motion detection function.

- **High efficient event recording, saving storage capacity.**
  Motion detection function enables recording only when system detects motion, thus increases the amount of time available for recording.

- **Easy access to the desired record.**
  Time & date search supports instant retrieval of images and alarm event search makes searching simpler.
Check to make sure all of the items shown below are included in your product package. If something is missing, contact your dealer as soon as possible.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Item Picture</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVR</td>
<td>![DVR Image]</td>
<td>1</td>
</tr>
<tr>
<td>DC 12V/ 2.5A Power Adapter</td>
<td>![Power Adapter Image]</td>
<td>1</td>
</tr>
<tr>
<td>Input: AC 100~240V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output: DC 12V/ 2.5A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power Cord</td>
<td>![Power Cord Image]</td>
<td>1</td>
</tr>
<tr>
<td>CD-ROM</td>
<td>![CD-ROM Image]</td>
<td>1</td>
</tr>
<tr>
<td>Quick Installation Guide</td>
<td>![Quick Installation Guide Image]</td>
<td>1</td>
</tr>
<tr>
<td>Remote Control</td>
<td>![Remote Control Image]</td>
<td>1</td>
</tr>
</tbody>
</table>
5. NAME and FUNCTION of EACH PART

5.1 Front Panel

(1) □: Record LED indicator.

(2) ▶: Rewind button.

(3) ▶: Fast forward button/ Enter Selection.

(4) ◀: Left direction button / CH 2 screen display

(5) ▲ / ▼: Up direction button / CH 1 screen display

(6) ◁: Right direction button / CH 4 screen display

(7) ▼ / ▶: Enter / Exit Menu

(8) ▼ / ▶: Down direction button / CH 3 screen display

(9) ▼ / ▶: Record / Stop button

(10) ▼ / ▶: Play / Pause button

(11) □: Power LED indicator
### 5.2 Rear Panel

1. **DC 12V [Power Input terminal]:** power socket.
2. **Video Input [VIDEO IN]:** Connect to cameras.
3. **Video Output [VIDEO OUT]:** Connect to the monitor.
4. **Audio Input [AUDIO IN]:** RCA input port for an audio signal
5. **Audio Output [AUDIO OUTPUT]:** RCA output port for an audio signal
6. **USB:** Connect to external USB storage device (Plug and Play).
7. **VGA:** VGA signal output.

**NOTE:** For VGA function, you need to separately purchase a DVR with VGA function.
6. INSTALLATION

6.1 System Configuration

Please setup the connection by following the illustration shown below: Connect camera, monitor and power to enter monitoring mode. To backup images, connect the USB storage device. The DVR also supports VGA video output.

Disconnected USB storage device

Note:
1. Extension cord is suggested not to exceed 90cm.
2. Remove the USB only after the disconnection process has been completed.
6.2 Hard Disk Installation

Step 1: Remove the 3 screws from DVR as cycled below (PIC 1).

Step 2: Remove the front cover from DVR as indicated by the arrow (PIC 2).
Step 3: Place the HDD on the HDD plate and connect the power, SATA cable and the keyboard cable in place (PIC 3).

NOTE: Connect one end of the ribbon cable to the connector on the main board (A) and the other to a keyboard socket (B). Both ends of the cable should always be connected. The Red stripe on the cable MUST be aligned with Pin 1 on both side of the cable (cable as shown above).

Step 4: Secure the screws back in position, as indicated below (PIC 4).
7. OPERATING PROCEDURE

7.1 Power On

After power on, DVR will auto-detect its peripherals (self-testing, auto detects the hard disk, and etc.).

The system will detect the video input and judge whether the video system is NTSC or PAL. When video input is unable to be detected (VIDEO LOSS), the system will send out an alarm (it will not affect the actual recording, but when all (1CH-4CH) video images disappears, the DVR will stop recording).

7.2 Monitoring Mode

This mode is a default status after power on. Under this mode, system supports live view for monitoring. Press 《》 button, the system enters the manual record mode, press 《》 button to start playback, press 《》 button to enter the menu setup display. During playback, press 《》 button to return to monitoring mode. Under Manual Record mode press 《》 button to stop recording and return to monitoring mode or press 《》 button under main menu also returns to monitoring mode.

During playback, press Stop button to return to monitoring mode or press 《》 button to fast forward: FF1 (►), FF2 (►►) or FF3 (►►►) and press 《》 to rewind playback.

To restore default value: Enter MENU and select item EXIT, proceed “Load Setup Default” to return to factory default settings (Default Password : 111111). After returning to LIVE display it will return to factory default setting (111111).
7.3 Record Mode

**Icon Description**

CH2 : Black screen indicates display and record function switched OFF.
CH3 : Blue screen indicates video-loss.
    Symbol [S] indicates schedule recording.
    When both manual and schedule recording has been enabled, manual
    recording will be the first priority to be displayed.
: Currently under recording.
: Motion event detected.
: Video input unable to be detected (video-loss has occurred).
: HDD is overwriting data.
7.4 Playback Mode

1. Press Play 《》 button to enter “Time Search” display.
2. Press Fast Forward 《》 button to enter Time Setup mode. After time setup has been completed, press 《MENU》 button to return to Time Search display and press Play 《》 button again to playback the selected time.
3. During playback press 《》 button to pause and press again to playback.
4. Press 《》 button to fast forward playback and 《》 button to rewind.
5. Press 《》 button to stop playback.
8. SYSTEM SETUP

8.1 Menu Setup

(1) MAIN MENU: Item subject (First menu layer does not have a subject).
(2) Menu Layer Indication: The device consists of four menu layers.

- : First Menu Layer (Main Menu)
- : Second Menu Layer
- : Third Menu Layer
- : Fourth Menu Layer
(3) Menu Operation and Setup

Press 《▲》 or 《▼》 button to move the cursor.

Press 《》 or 《►》 button enter the sub menu.

Press 《MENU》 button.

- Under second or third menu layer, the system will return to the previous menu layer (second layer to first layer or third layer to second layer) and auto updates the modified data.
- Under main menu (first menu layer), the system will enter live mode.
  Press 《►》 button, to increase or decrease the setting values that has been highlighted.

(4) Menu Layer Operation Guide.

**Item Description**

[CAMERA] Use this option for video to adjust Channel, Display & Record, Brightness, Contrast, Hue and Saturation.

[RECORD] Under this selection user may setup the following function: Record Frame, Record Quality, Event Record Duration, and Record Schedule.

[MOTION DETECTION] Under this selection user may setup the following function: Channel, Sensitivity and Motion Area.

[SCREEN] Under this selection user may setup the following function: Border, Video Adjustment and Auto Switching.

[AUDIO] Under this selection user may setup the following function: Record & Mute, Input Volume, and Output Volume.

[SYSTEM] Under this menu user may the following function: Hard Disk Setup, Password Setup, Time Set, Event List, Loss Alarm, Motion Alarm, Alarm Duration, and F/W Upgrade.

[LANGUAGE] You can choose either English or Chinese OSD display. You can change it by pushing “►” to select between English/ Chinese.

[REMOTE CONTROL ID] Setup DVR Remote Control ID.

(EXIT) After changes have been made on the DVR menu, you need to confirm the changes under EXIT menu.
8.2 Camera Setup

1. Press 《▲》 and 《▼》 button to move up and down the menu item.
2. Press 《}》 or 《►》 button to make changes.
3. Press 《MENU》 button to exit “Camera Setup” menu.
4. [Camera Setup] is situated on the second menu layer. Under this selection user may setup the following function: Channel, Display & Record, Brightness, Contrast, Hue and Saturation.
8.3 Record Setup

1. Press 《▲》 and 《▼》 button to move up and down the menu item.
2. Press 《▶》 or 《X》 button to make changes or to enter a next menu layer.
3. Press 《MENU》 button to exit “Record Setup” menu.
4. [Record Setup] is situated on the second menu layer. Under this selection user may setup the following function: Record Frame, Record Quality, Event Rec Duration, and Record Schedule.

**Item Description**

<table>
<thead>
<tr>
<th>Record Frame</th>
<th>Record frames per second.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record Quality</td>
<td>Select Video Quality: [High/ Normal/ Low] .</td>
</tr>
<tr>
<td>Event Rec Duration</td>
<td>When schedule recording is under motion detection mode, system starts recording when motion event has been triggered.</td>
</tr>
<tr>
<td>Record Schedule</td>
<td>Three Types of Schedule Record – No Record/ Time Record/ Motion Detection</td>
</tr>
</tbody>
</table>
8.3.1 Record Frame

1. Press 《▲》 and 《▼》 button to move up and down the menu item.
2. Press 《►►》, 《◄◄》 or 《►》 button to make changes.
3. Press 《MENU》 button to exit “Record Schedule Setup” selection.

Maximum frames for all 4 channels are 60 (NTSC)/ 50 (PAL) frames.

Note: Recording frames for each channel is (0 frames) or 3 ~ 30 frames.
8.3.2 Record Schedule

1. Press 《▲》 and 《▼》 button to move up and down the menu item.
2. Press 《►►》 or 《◄◄》 button to make changes.
3. Press 《MENU》 button to exit “Record Schedule Setup” selection.

**Color Bar Description**

- **[Grey]** Indicates no record will be made for this time period.
- **[Orange]** Indicates recording is made for this time period.
- **[Green]** Indicates built-in motion sensor recording (For more information, please refer to 8.4“MOTION DETECTION”).
8.4 Motion Detection Setup

1. Press 《▲》 and 《▼》 button to move up and down the menu item.
2. Press 《►》 or 《▶》 button to make changes or to enter a next menu layer.
3. Press 《MENU》 button to exit “Motion Detection” menu.
4. [Motion Detection Setup] is situated on the second menu layer. Under this selection user may setup the following function: Channel, Sensitivity and Motion Area.

**Item Description**
- [Channel] Select the channel (1,2,3,4) for recording mode by internal motion sensor.
- [Sensitivity] It adjusts the sensitivity of the built-in motion sensor on the DVR system while recording. The lower the number, the higher the sensitivity rate (maximum sensitivity level is 4).
- [Motion Area] Use this option to select the range of motion detection area. Use the keypad button, remote control button to assign the area.
8.4.1 Motion Area

1. Press 《▲》 and 《▼》 button to move up and down the menu item.
2. Press 《➡》 button to setup the starting point of the motion area.
3. Press 《▲》 and 《▼》 to select the range of motion detection area.
4. Press 《➡》 button to setup the ending point of the motion area.
5. Press 《MENU》 button to exit “Motion Area” selection.

As shown above, color blue indicates motion area.
8.5 Screen Setup

1. Press 《▲》 and 《▼》 button to move up and down the menu item.
2. Press 《➡️》 or 《➡️》 button to make changes or to enter a next menu layer.
3. Press 《MENU》 button to exit “Screen Setup” menu.
4. [Screen Setup] is situated on the second menu layer. Under this selection user may setup the following function: Border and Auto Switching.

**Item Description**

<table>
<thead>
<tr>
<th><strong>Border</strong></th>
<th>You can make the white border line around each channel to appear or disappear (On/ Off).</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Auto Switching</strong></td>
<td>This is for auto screen switch rotation.</td>
</tr>
</tbody>
</table>
8.5.1 Video Adjustment

1. Press 《▲》，《▼》，《◄》 or 《►》 button to adjust the screen.
2. Press 《MENU》 button to exit “Video Adjustment” selection.
8.6 Audio Setup

1. Press《▲》and《▼》button to move up and down the menu item.
2. Press《 ► 》or《 ▶ 》button to make changes
3. Press《MENU》button to exit “Audio Setup” menu.
4. [Audio] is situated on the second menu layer. Under this menu user may setup the following function: Record, Mute, Input Volume and Output Volume.

Item Description

[Record] Setup audio recording for Channel 1 On/ Off.
[Input Volume] Setup volume input for Channel 1 High/ Low.
[Output Volume] Setup volume output for Channel 1 High/ Low. When the output volume is at its minimum level, mute function is auto started.

NOTE1 : Audio recording is made available fixed only in Channel 1.
NOTE2 : Move the sound input and output volume cursor more to the right, the greater the volume.
NOTE3 : Input volume is at its maximum volume when under Live mode.
NOTE4 : Output volume is at its minimum volume when under Playback Control mode.
8.7 System Setup

1. Press 《▲》 and 《▼》 button to move up and down the menu item.
2. Press 《》 or 《►》 button to make changes or to enter a next menu layer.
3. Press 《MENU》 button to exit “System Setup” menu.
4. [System Setup] is situated on the second menu layer. Under this menu user may setup the following function: Hard Disk Setup, Password Setup, Time Set, Event List, Loss Alarm, Motion Alarm, Alarm Duration and F/W Upgrade.

Item Description

<table>
<thead>
<tr>
<th>Hard Disk Setup</th>
<th>Overwrite and format HDD.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Password Setup</td>
<td>Password must be 6 digits. Default Password: 111111.</td>
</tr>
<tr>
<td>Time Set</td>
<td>You can adjust the current time, date, and year at any time by region.</td>
</tr>
<tr>
<td>Event List</td>
<td>EVENT LIST function enables playback by event.</td>
</tr>
<tr>
<td>Loss Alarm</td>
<td>Decides whether to trigger buzzer or not when video loss occurs.</td>
</tr>
<tr>
<td>Motion Alarm</td>
<td>Decides whether to trigger buzzer or not when motion is detected.</td>
</tr>
<tr>
<td>Alarm Duration</td>
<td>Decides the duration time when buzzer is triggered.</td>
</tr>
<tr>
<td>F/W Upgrade</td>
<td>Upgrade DVR system through USB host (USB memory stick).</td>
</tr>
</tbody>
</table>
8.7.1 Hard Disk

1. Press 《▲》 and 《▼》 button to move up and down the menu item.
2. Press 《》 and 《X》 button to make changes or to enter a next menu layer.
4. [Hard Drive Setup] is situated on the third menu layer. Under this menu layer user may setup to overwrite or format the hard disk.

Item Description

[Overwrite Enable] Setup whether or not to overwrite recording when the hard disk is full.

[Format HDD] If you format the hard drive, all the video data stored on the hard disk drive will be deleted. Remind that the system has no restore option once the hard drive is formatted.

When the hard disk is full and overwrite function is set to No, the following display appears:
HDD FULL, Stop Recording!
REVIEW: Quit Page
8.7.1.1 Format HDD

1. Press《▲》，《▼》，《►》 or《◄》 button to move to the desired password number.
2. Press 《》 button enter password (must be 6 digits).
3. After entering 6 digits password, use 《▲》/《▼》/《◄》/《►》 button to move the cursor to “Enter”.
4. Press 《》 button to confirm password.
5. Press 《MENU》 button to exit “Format HDD” selection.

When password entered is incorrect, the screen will display “Incorrect Password” (Fig 1), and when password entered is correct, the screen will display the message “HDD Was Formatted” (Fig 2 & Fig 3), indicates hard disk format is successful and returns to “HARD DRIVE SETUP” selection.

Default Password: 111111
8.7.2 Password Setup

1. Press 《▲》 and 《▼》 button to move up and down the menu item.
2. Press 《》 or 《X》 button to make changes or to enter a next menu layer.
3. Press 《MENU》 button to exit “Password” selection.
4. [Password Setup] is situated on the third menu layer. Under this selection user may setup the following function: Password Change, Menu Password and Record Password.

Item Description

[Menu Password] Setup menu password, password is required every time you enter the menu.
[Record Password] Setup record password, password is required every time you stop manual recording.
[Copy Password To USB] Setup copy password to USB, password is unnecessary if menu password item function has been set to “On”.

When copy password to USB function has been applied, Fig. 7 is shown.
8.7.2.1 Password Change

1. Press 《▲》, 《▼》, 《←》 or 《→》 button to move to the desired password number.

2. Press 《↓》 button and enter password (must be 6 digits).

3. After entering 6 digits password, use 《▲》 / 《▼》 / 《←》 / 《→》 button to move the cursor to “Enter”.

4. Press 《↓》 button to confirm password.

5. Press 《MENU 》 button to exit “Password Change” selection.

Password change requires entering a total of three groups of password. That is “Current Password”, “New Password” and “Confirm Password”. When password entered is incorrect or the password format does not match (Less than 6 digits, Fig 1 is shown), system returns to password change selection menu. When “Current Password” entered is correct, but “New Password” and “Confirm Password” entered does not match (Fig 2 is shown), system returns to password change selection menu. When password change is successful (Fig 3 is shown), system returns to password change selection menu.

Default Password : 111111
Fig 6

Fig 7
8.7.3 Time Set

1. Press 《▲》 and 《▼》 button to move up and down the menu item.
2. Press 《►》 or 《X》 button to make changes or to enter change mode.
4. [Time Set] is situated on the third menu layer. Under this selection user may setup the following function: Time Zone, Time Set, Daylight Saving Time and Apply.

**Item Description**

- **[Time Zone]** Setup Time Zone
- **[Time Set]** Setup Time
- **[Day Light Saving Time]** Day Light Saving Time Setup.
- **[Apply]** Once you’ve completed time setup, press “Apply” button. Then press “《►》” button to apply the new time set.
8.7.4 Event List

1. Press 《▲》 and 《▼》 button to move to the desired event item or use 《◄》 and 《►》 button to move to the previous or next event list page.
2. Press 《》 button to playback event.
3. Press 《▶》 button to Fast Forward, press 《◄》 button to Fast Rewind and press 《►/◄》 button to Pause/Stop playback.
4. Press 《∥/∥》 button to stop playback and return to “Event List” selection.
5. Press 《MENU》 button to exit “Event List” selection.
8.7.5 Software Update

Fig 8

Fig 9
1. When entering software update selection and the USB storage device has firmware image files stored, Fig 6 is shown and followed by Fig 7.
2. Press 《》 button to update software.
3. During update process, Fig 8 is shown.

4. Press 《MENU》 button to exit “Software Update” selection.
5. When the USB storage device has no firmware images stored, Fig 9 is shown.

NOTE 1: Please do not remove the USB storage device while the firmware has started updating, otherwise system damage may occur.
NOTE 2: No USB storage device has been connected when entered Firmware Update selection, Fig 10 is shown.
NOTE 3: Please stop recording before proceeding firmware update, otherwise Fig 11 is shown.
NOTE 4: Please Connect the HDD before proceeding firmware update, otherwise Fig 12 is shown.
8.8 Exit

1. Press 《▲》 and 《▼》 button to move up and down the menu item.
2. Press 《 ► 》 button to confirm.
3. [Exit] is situated on the second menu layer. Under this selection user may setup the following function: Exit & Save Changes, Exit & Discard Changes and Load Setup Default.

**Item Description**

- **Exit & Save Changes**: Save new parameter and return to LIVE mode.
- **Exit & Discard Changes**: No change and return to LIVE mode.
- **Load Setup Default**: Load default setting.

**NOTE**: Factory Default Setup – Enter MENU and select item “EXIT”, proceed “Load Setup Default” to return to factory default (Default Password: 111111). System returns to factory default (111111) after returned to LIVE display.
8.9 Backup via USB Memory Stick

1. In order to save the video data with USB memory stick, you should first stop record and enter playback mode, as shown below (Fig 13).

2. Press 《MENU》 button to setup the start and end time period of recorded video data that you want to save on the USB memory stick.

3. Press 《》 button to enter backup mode, as shown below (Fig 14).

4. Press 《》 button again to start backup, as shown below (Fig 15).

5. When backup has been completed a window appears as shown below (Fig 16).

6. Press 《MENU》 button to exit “USB Backup” selection.

---

NOTE 1: When applying USB backup function for the first time, please proceed using your PC to format (FAT32/ FAT16) the USB storage device.

NOTE 2: Maximum data size is 1GB per every image data backup (data exceeding 1GB, a message “Data Size Is Too Big To Copy” appears.

NOTE 3: During the process of USB backup, it will also copy the remote PC client software to the USB flash drive.

NOTE 4: Please do not unplug the USB in the process of backup!

NOTE 5: The system will restart in a minute after file copy abnormality occurs. When this happens, it is suggested to replace the USB flash drive, and then restart back-up.
Fig 18
9. REMOTE CONTROL (option)

Remote Control ID

<table>
<thead>
<tr>
<th>Button Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 CHECK ID</td>
<td>Remote Control ID</td>
</tr>
<tr>
<td>2 ◀</td>
<td>Rewind</td>
</tr>
<tr>
<td>3 ▶</td>
<td>Fast Forward/ Enter Selection</td>
</tr>
<tr>
<td>4 MENU</td>
<td>Enter / Exit Menu</td>
</tr>
<tr>
<td>5 ▲/1</td>
<td>Up direction button / CH 1 screen display</td>
</tr>
<tr>
<td>6 ▼/3</td>
<td>Down direction button / CH 3 screen display</td>
</tr>
<tr>
<td>7 ◄/2</td>
<td>Left direction button / CH 2 screen display</td>
</tr>
<tr>
<td>8 ▶/4</td>
<td>Right direction button / Enter Selection/ CH 4 screen display</td>
</tr>
<tr>
<td>9 ◁/II</td>
<td>Play/ Pause</td>
</tr>
<tr>
<td>10 ●/■</td>
<td>Record/ Stop</td>
</tr>
</tbody>
</table>

Enter MENU and select item Remote Control ID to setup remote controller ID.

(1) Enter MENU find item Remote Control ID and setup a set of number for CHECK ID (Remote control ID consists of 10 sets of the numbers: ALL, 11, 12, 13, 21, 22, 23, 31, 32, 33).
(2) After Remote Control ID setup, you must return to LIVE monitoring mode. Because the setup is only effective if you return to LIVE mode after the setup.
(3) After returning to LIVE monitoring mode, press remote control CHECK ID (ALL, 11, 12, 21, 22, 23, 31, 32, 33) to confirm synchronization. When the message “REMOTE ID IS CORRECT” appears, indicate synchronize function setup is complete. Now you are able to control the DVR using remote control.
(4) Each time, synchronization allows only one single device to be controlled by a single remote control.
10. HDD Player Software Description

System Requirement
OS (Operating System) Windows XP.

Hardware Requirement
※CPU 2.8GHz or higher.
※RAM 1GMBYTE or higher.

1. Installation
Software Installation
1. During installation, you will need a desktop or laptop computer that meets these minimum requirements: Windows XP.
2. Run the program “Vx4CViewer-setup.exe” on the supplied CD by double clicking the icon shown below:

Remote Software Installation

[Image of Setup Wizard window]

After the software installation is complete; open-upVx4CViewer and then move the cursor to [Viewer] button. Left mouse click to enter Viewer User Interface, as shown below:
User Interface

Viewer Function Button Description

- Press this button to enter player window.
- Press this button to enter DVR login window.
- Fast rewind (similar to DVR front panel function button).
- Play/ Pause (similar to DVR front panel function button).
- Up Direction/ CH1 (similar to DVR front panel function button).
- Left Direction/ CH2 (similar to DVR front panel function button).
- Main Menu (similar to DVR front panel function button).
- Press this button to minimize Viewer window.
- Press this button to enter DVR Viewer connection window.
- Press this button to disconnect from DVR.
- Fast forward (similar to DVR front panel function button).
- Record/ Stop (similar to DVR front panel function button).
- Down Direction/ CH3 (similar to DVR front panel function button).
- Right Direction/ CH4 (similar to DVR front panel function button).
- Press this button to close Viewer software.

Mouse Right Button: Activate Viewer setup menu
2.1 DVR Connection (Applicable only to Network DVR)

After pressing the connection button, a Login window appears. Please enter DVR IP address, remote-site Password, and Port to enter DVR connection window.
After entering DVR LIVE display, use panel button for operation control.

Connection Status: Display current connection status (figure shown above), system indicates either connected or disconnected. When the Viewer network disconnects, Viewer tries to automatically re-connect.

Screen Switching Button: Enables screen switching between Quad-Screen display/Single-Screen display and activates DVR setup menu.

DVR Player Operation Button: Enables playback control on the DVR-site.

NOTE: DVR screen follows to any changes in the Viewer operation (prior to any screen operation and MENU setup changes).
2.2 DVR Setup (Applicable only to Network DVR)

Press [MENU] button to activate DVR setup menu and precede DVR function setup.

Function Button

CH1 (similar to DVR-site button application)/ UP (similar to menu button application).

CH3 (similar to DVR-site button application)/ DOWN (similar to menu button application).

CH2 (similar to DVR-site button application)/ LEFT (similar to menu button application).

CH4 (similar to DVR-site button application)/ RIGHT (similar to menu button application).

MENU (similar to DVR-site button application). Press to activate DVR setup menu and to precede DVR function setup.
2.3. Viewer Setup (Applicable only to Network DVR)

Right click on the Viewer window, viewer drop down menu appears (corresponding configuration setup can be done).

Player: Switch to Player window.
NetViewer: Switch to NetViewer remote connection window.
Disconnect/ Connect: Select “Disconnect” option under connection status or “Connect” option under disconnection status.
DVR Control: Similar to DVR front panel control button.
Audio: This function is not supported.
Local Recording: Save LIVE video to the PC HDD directory.
Always On Top: Setup window display to always be on top.
Full Screen: Switch to full screen mode.
Maximize: Enlarge the screen display to the maximum size.
Aspect Ratio: Force display aspect ratio to 640x448 or 640x544.
Options: Viewer option setup.
About Viewer: Display Viewer version.
Exit: Exit Viewer.
Viewer Network Options Setup

Always On Top: Setup window display to always be on top.
Use DirectDraw: Enable DirectDraw to accelerate image processing functions (Your operating system and graphic hardware must support DirectDraw).
Path for local recording: Save LIVE video to the PC HDD directory.
3. Player Guide

After the software installation has been completed, open-up Vx4CViewer. Move the cursor to [Player] and then left click to enter Player user operating interface, as show below:

Player Panel Description

- Press this button to enter player window.
- Open file.
- Fast Rewind.
- Play.
- Step Rewind.
- Switch to CH1/ CH2/ CH3/ CH4 full screen display.
- Press to perform video snapshot.
- Press this button to close Player.

- Press this button to enter DVR Viewer connection window.
- Rewind.
- Pause.
- Fast Forward.
- Step Forward.
- Switch to 4-split screen display.
- Press this button to minimize Player window.

Mouse Right Button

Activate Player setup menu.

NOTE: Playback Speed: 1x, 8x, 16x, 32x, 64x and 128x
Press [Open] button to open-up file, a folder appears and you may select a file from the folder to playback.
3.2 Player Control

**Player Main Display**

**Channel Display**: Show channel name of the current playback file. Use right-click menu to Enable/ Disable the function.

**Playback Status**: Current playback speed and related time information.

**Playback Control Button**: Control buttons to proceed file Playback, Pause and Fast Forward.

**Snapshot and Channel Switching Button**: To switch between Single-Full screen and 4-Split screens, also saves player snapshot to specified directory.
3.3. Player Setup

Right click on the Player window, player drop down menu appears (corresponding configuration setup can be done).

Player: Switch to Player window.
NetViewer: Switch to NetViewer remote connection window.
Open File: Open-up a file.
Open Disk: Open-up a disk.
Export: Save the file as AVI format (this function is only effective when playback is paused).
Close: Close-up a file.
Show Channel Title: Display channel title.
Always On Top: Setup window display to always be on top.
Playback: Playback control function.
Capture: Use this function to capture a certain part of the file and save it into a separate file. Application method: First move to the stating point that you wish to retrieve. In the player drop down menu, click item “Capture → Mark In” and then move to the ending point, click item “Capture → Mark Out”. Finally click item “Capture → Export” to decide the disk storage location and file name.

Audio: Volume adjustment.
Full Screen: Switch to full screen mode.
Maximize: Enlarge the screen display to the maximum size.
Aspect Ratio: Force the display aspect ratio to 640x448 or 640x544.
Split Mode: Switch to single channel or 4-split screen display.
Options: Player option setup.
About Viewer: Display Viewer version.
Exit: Exit Viewer software.

NOTE: When using Export function to convert file to AVI format, the encoding format used is Xvid MPEG4 compression format. The system or playback software must support Xvid codec or other compatible MPEG4 codec to playback converted AVI files. You can go to the following website to download Xvid codec: http://www.xvid.org
Player Options Setup

Always on top: Setup window display to always be on top.
Use DirectDraw: Enable DirectDraw to accelerate image processing functions (Your operating system and graphic hardware must support DirectDraw).
Show channel title: Display channel title setup.
Repeat playback: Repeat playback function setup.
On screen display date/time format: To change the time display format.

On Screen Display Date/ Time Format Description:
1. %Y/%m/%d %H:%M:%S
   Year (4 Units)/ Month/ Day Time (24 Hours): Minuit: Second
2. %y/%m/%d %H:%M:%S
   Year (2 Units)/ Month/ Day Time (24 Hours): Minuit: Second
3. %Y/%m/%d %p %I:%M:%S
   Year (4 Units)/ Month/ Day Time (12 Hours): Minuit: Second
4. %y/%m/%d %p %I:%M:%S
   Year (2 Units)/ Month/ Day Time (12 Hours): Minuit: Second
5. %b %d %H:%M:%S %Y
   Month Day Hour (24 Hours): Minute: Second Year (4 Units)
6. %b %d %p %I:%M:%S %Y
   Month Day Hour (12 Hours): Minute: Second Year (4 Units)

Path for still capture: Setup the path for still captures.
## 11. TROUBLESHOOTING

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What brands of hard drives can I use?</td>
<td>WD, Seagate, and Hitachi.</td>
</tr>
<tr>
<td>2. Which storage capacity of a USB storage device is suggested?</td>
<td>8G and below.</td>
</tr>
</tbody>
</table>
## 12. SPECIFICATION

<table>
<thead>
<tr>
<th><strong>Video</strong></th>
<th><strong>Format</strong></th>
<th>NTSC / EIA or PAL / CCIR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Compression</strong></td>
<td>MJPEG</td>
</tr>
<tr>
<td></td>
<td><strong>Input</strong></td>
<td>4 CH, BNC</td>
</tr>
<tr>
<td></td>
<td><strong>Output</strong></td>
<td>1 CH BNC</td>
</tr>
<tr>
<td><strong>Display</strong></td>
<td><strong>Resolution</strong></td>
<td>720x480 (NTSC), 720x576 (PAL)</td>
</tr>
<tr>
<td></td>
<td><strong>Frame Rate</strong></td>
<td>Max. 120 / 100 IPS (NTSC / PAL)</td>
</tr>
<tr>
<td></td>
<td><strong>Division</strong></td>
<td>Single, Quad</td>
</tr>
<tr>
<td><strong>Recording</strong></td>
<td><strong>Resolution</strong></td>
<td>640x224 (NTSC), 640x272 (PAL)</td>
</tr>
<tr>
<td></td>
<td><strong>Frame Rate</strong></td>
<td>Max. 60 / 50 IPS (NTSC / PAL)</td>
</tr>
<tr>
<td></td>
<td><strong>Quality</strong></td>
<td>High / Normal / Low</td>
</tr>
<tr>
<td></td>
<td><strong>Mode</strong></td>
<td>Manual / Schedule / Motion Detection</td>
</tr>
<tr>
<td><strong>HDD</strong></td>
<td><strong>Basic Storage</strong></td>
<td>1x3.5” SATA HDD (Max. 1TB)</td>
</tr>
<tr>
<td><strong>Alarm</strong></td>
<td><strong>Triggered Mode</strong></td>
<td>Motion Detection, Video Loss</td>
</tr>
<tr>
<td></td>
<td><strong>Action</strong></td>
<td>Recording, Sound Alert</td>
</tr>
<tr>
<td><strong>Network</strong></td>
<td><strong>Ethernet</strong></td>
<td>10/100 BaseT Ethernet (RJ-45)</td>
</tr>
<tr>
<td></td>
<td><strong>Protocol</strong></td>
<td>TCP/IP, DDNS, , ICMP, ARP, DHCP</td>
</tr>
<tr>
<td><strong>Audio</strong></td>
<td><strong>Input</strong></td>
<td>1CH, RCA</td>
</tr>
<tr>
<td></td>
<td><strong>Output</strong></td>
<td>1CH, RCA</td>
</tr>
<tr>
<td><strong>Backup Device</strong></td>
<td><strong>USB</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Post Alarm</strong></td>
<td><strong>1 ~ 60sec</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Search Method</strong></td>
<td><strong>By Date, Time, Event</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Power Supply</strong></td>
<td><strong>AC100~240V 50/60 Hz,</strong></td>
<td><strong>DC12V / 2.5A</strong></td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td><strong>2.5 Kg (without HDD)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Dimensions (WxHxD)</strong></td>
<td><strong>195X45X226mm</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Operating Environment</strong></td>
<td><strong>30 ~ 80% RH, 5°C ~ 40°C (41°F ~ 104°F)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Remote Control</strong></td>
<td><strong>IR Transmission</strong></td>
<td></td>
</tr>
</tbody>
</table>