Thank you for purchasing our product. Please read this User’s Manual before using the product. Change without Notice.
This label may appear on the bottom of the unit due to space limitations.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of insulated dangerous Voltage within the product’s enclosure that may be sufficient magnitude to constitute risk of electrical shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying the appliance.

Attention: installation should be performed by qualified service Personnel only in accordance with the National Electrical Code or applicable local codes.

Power Disconnect. Units with or without ON-OFF switches have power supplied to the unit whenever the power cord is inserted into the power source; however, the unit is operational only when the ON-OFF switch is the ON position. The power cord is the main power disconnect for all unites.

“CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instruction.”

During the warranty period (one year), we will repair or replace the DVR free of charge. Be sure to have the model number, serial number and vendor stick on hard disk for service representative.
Before installing stand alone DVR, be sure to thoroughly review and follow the instructions in this Users Manual. Pay particular attention to the parts that are marked NOTICE. Also, when connecting with external application, first turn the power OFF and follow manual instruction for appropriate installation.

### About this document

Before reading this document

1. This document is intended for both the administrator and users of stand alone DVR Model.
2. This manual contains information for configuring, managing and using stand alone DVR Model.
3. To prevent fire or electrical shock, do not expose the product to heat or moisture
4. Be sure to read this manual before using stand alone DVR Model.
5. For questions and technical assistance of this product, contact your local dealer.

► Strong recommendation on installation of the DVR unit

1. Check electricity at the place you want to install the DVR unit is stable and meets our electricity requirements.
   Unstable electricity will cause malfunction of the unit or give critical damage to the unit.
2. Several chips on the main board of the DVR unit and hard disk drive inside the unit generate heat, and it must be properly discharged.
   Do not put any objects just beside exhaust port(fan) on the left side of the unit and do not close up an opening (fresh air in-take) on the right side of the unit.
3. Put the DVR unit at well-ventilated place and do not put heat-generating objects on the unit.
   When it is installed inside 19 inch mounting rack together with other devices, please check built-in ventilation fan of the rack is properly running.
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1. : 4 quad screen mode button / Mode function key / 4 or 9 split display on playback mode

2. CHANNEL 1 : Channel 1 full screen button

3. CHANNEL 2 : Channel 2 full screen button

4. CHANNEL 3 : Channel 3 full screen button

5. CHANNEL 4 : Channel 4 full screen button

6. FREEZE : Picture freeze mode button

7. ZOOM : Picture zoom x2 mode button

8. AUTO / W.MARK : Auto sequence mode / Water Mark function button.

9. PIP / BACKUP : Picture in picture mode button / Image backup button

10. UP / STOP : Direction button UP / Playback stop button ▲ / ■

11. REW : Reverse playback choose button / Still playback ◄ / ◄ ◄

12. DOWN / PAUSE : Direction button down / Playback pause ▼ / ■ ■

13. FF : Forward playback choose button / Still playback ► / ► ►

14. ENTER / AUDIO : Sub-menu enter button / Audio on or off button

15. MENU BUTTON : Press this button to display the menu setup

16. ESC/LOCK : Press this button to Key Lock function / Sub-MENU exit button

17. T-SRH : Press this button to playback time search

18. PLAY BUTTON : Press this button to playback

19. DIRECTION BUTTON : Playback speed choose. (Increase) ► or values change.

20. REC BUTTON : Press this button to start recording image

21. DIRECTION BUTTON : Playback speed choose.(reduce) ◄ or values change.

22. CF Card Slot : Compact Flash Card insert
**Unit Description of Rear Panel**

- **Power code in 12V/5A, power switcher (ON / OFF)**
- **Camera 1 ~ 4 in and looping out**
- **75 Ohm ON/OFF (high/low adjust)**
- **Audio channel input x 1 and output x 1**
- **Monitor out**
- **S-Video (Y/C) monitor**
- **VGA output. PC monitor connector. (Optional)**
- **RS-485 control keyboard connector**
- **RS-232 connector (ISP. Firmware upgrade port)**
- **Alarm connector**
- **LAN (Not available)**
Installation

1) Camera Connection
Connect the camera to the CAMERA INPUT on the Rear Panel of the 4 CH DVR.

2) Monitor Connection (Composite Connection Method)
Connect the monitor to the MONITOR OUT on the Rear Panel of the 4 CH DVR.

3) Monitor Connection
Connect S-VIDEO Monitor to MONITOR OUT on the Rear Panel of the 4 CH DVR.

4) Sensor Connection
Connect the Sensor to the SENSOR INPUT/OUTPUT on the Rear Panel of the system

13,12,11,10,9,8,7,6,5,4,3,2,1
25,24,23,22,21,20,19,18,17,16,15,14

- Relay output: COM+NC, COM+NO
- Alarm input: Short-circuit between Alarm0, Alarm1, Alarm2 or Alarm3 and GND is recognized as alarm by default. Alarm0~3 will be corresponding to Camera1~4.
NOTICE: Sensor input is RECOGNIZED as LOW when alarm signal is on a level with GND, and it is recognized as HIGH when alarm signal is FLOATING or 5V. Following is internal circuit.

Thus, there is a danger of damage, when the sensor input goes to a Negative level or voltage higher than 5V.

5) HDD connection

![Diagram of HDD connection]

1. Make sure the HDD is MASTER.
2. Make sure the cable connector is correct.
3. Please check the HDD panel for Master set up.

![Diagram of HDD connection]

1. Make sure the HDD is MASTER and SLAVE.
2. Make sure the cable connector is correct.
3. Please check the HDD panel for Master and Slave set up.

Notice:
- Maximum 2 internal hard drives installed.
- Hard Disk Master and Slave jumper pin must be set correctly, otherwise it makes DVR react faulty.

Hard Disk testing table:

<table>
<thead>
<tr>
<th>Brand</th>
<th>Model</th>
<th>Capacity</th>
<th>Notice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seagate</td>
<td>Barracuda</td>
<td>80 GB</td>
<td></td>
</tr>
<tr>
<td>IBM</td>
<td>DeskStar</td>
<td>80 GB</td>
<td></td>
</tr>
<tr>
<td>WD2000</td>
<td>Caviar</td>
<td>200 GB</td>
<td></td>
</tr>
<tr>
<td>Hitachi</td>
<td>DeskStar</td>
<td>80 GB</td>
<td></td>
</tr>
<tr>
<td>Maxtor</td>
<td>MaxLinell</td>
<td>300 GB</td>
<td></td>
</tr>
</tbody>
</table>
Full screen or quad screen display

Press quad button to display 4 quad screen.
Press numeric 1 / 2 / 3 / 4 buttons to display a desired camera image in full screen.

1.) FREEZE Mode
1. In live and the quad mode press (FREEZE) button to freeze image.

   Press again to cancel freeze mode.

2. On the full screen display, press (FREEZE) button to freeze full screen image.

2.) Zoom Mode (Display Enlargement.)

   Go to full screen mode with numeric buttons at live or playback mode, then press ZOOM button to display screen Enlargement.

   Use button to move position.

3.) Auto Mode

   Press (AUTO) button to start screen auto sequencing, and press it again to cancel auto mode.

4.) W.MARK. Water Mark mode.

   Water Mark protection function on or off. To prevent hacker using special software to modify the image data.
   System Setup → Watermark Check mode On. Press W.Mark button to on or off. (Playback mode only)

5.) PIP (PICTURE IN PICTURE)

   1.) Press (PIP) button. Press (AUTO) button to start sub-screen auto sequencing.

   2) With button, select the main channel screen, press button to select desired camera channel in small screen.
6.) **BACKUP** / PIP. Image backup mode. (Image back up must be done on playback mode only.)

Locate the playback point of which you want. Press BACKUP, the BACKUP CAUTION window pop-up. Press ENTER to begin data back up. Capacity of CF card is not limit, but the maximum capacity display is 9999MB. On playback mode, presses BACKUP:  

**BACKUP CAUTION**

ALL DATA IN THE CF CARD

WILL BE CLEARED.

PRESS [ENTER] TO BACKUP.

PRESS [BACKUP] TO CANCELE.

Lower-Right corner of the screen:

```
0000M / 0256M
```

0000M / 0256 (Presently back up progress / Total capacity of CF card)

**Important:**

If the CF card contains old data, please format CF card to FAT or FAT 32 on computer before insert to DVR CF card slot. Otherwise, DVR would not detect correct CF card format. Any brand of CF card is acceptable.

**Additional:**

During playback, CF card is full or user press BACKUP button screen display a “PAUSE” caption, User takes out the CF card to computer USB slot then save data to hard disk. After, re-insert CF card to DVR slot, user press BACKUP again. Press ENTER to continue backup or backup button to cancel.

**BACKUP CAUTION**

ALL DATA IN THE CF CARD

WILL BE CLEARED.

PRESS [ENTER] TO BACKUP.

PRESS [BACKUP] TO CANCEL.

**CF card testing table:**

<table>
<thead>
<tr>
<th>Brand</th>
<th>Model</th>
<th>Capacity</th>
<th>Notice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannon</td>
<td>FC-8M</td>
<td>8 MB</td>
<td></td>
</tr>
<tr>
<td>PQI</td>
<td></td>
<td>32/128 MB</td>
<td></td>
</tr>
<tr>
<td>Nikon</td>
<td></td>
<td>16 MB</td>
<td></td>
</tr>
<tr>
<td>KingMax</td>
<td></td>
<td>16 MB</td>
<td></td>
</tr>
<tr>
<td>Apacer</td>
<td></td>
<td>1 GB</td>
<td>40x support, 66x error</td>
</tr>
<tr>
<td>Sandisk</td>
<td>F1 x24</td>
<td>512 MB</td>
<td></td>
</tr>
<tr>
<td>Transcend</td>
<td>F1 x45</td>
<td>256 MB</td>
<td></td>
</tr>
</tbody>
</table>
7.) Alarm Sensor Recording
   >See the alarm recording setup page

8.) Scheduled Recording
   >See the scheduled recording setup page

9.) Motion detection Recording
   >See the motion detection recording setup page

10.) Key Lock function
     >On the Live or Playback mode, press (lock), Only, numeric, freeze, auto, pip, and zoom buttons could work. Press lock key again to enter the login-in window. Enter admin or user password to unlock. Key lock function only accept password correct log in even re-boot DVR power.

11.) AUDIO function ))))

   Audio playback: Press AUDIO / ENTER, )))) displays on the Upper-left of screen. At that time, audio will playback. Press it again to turn it off.

Notice
Audio playback only on normal( x 1 ) playback.
1. Playback Mode
   1) Press \( \text{PLAY} \) button to begin playback. (System playback the images backward)

2. T-SRH button
   1) T-SRH: Playback by time search.
      Press T-SRH button to active playback function.

   Press direction button UP/DOWN to choose items.

1) TIME LIST (Playback image by Time-Search): Recorded images list (by hours)

   Press direction button \( \text{values change} \) button to change to previous / next page.
2) EVENT LIST (Alarm List): Event source- Video loss / Alarm trigger / Motion / Record

10 items display on each page / Total 5000 items display for 500 pages. When event list is out of compass, the total items are less than 5000.

Y / M / D / M : Year / Month / Day Hour / Minute
>Event happens time.

_ _ _ _ : Event Channel Display.
>1 CH, 2 CH, 3 CH, 4 CH.

Motion: Event type.
>Includes Motion / Alarm / V-Loss / Record

Press direction button UP/DOWN to choose items.
Press ◀ ▶ values change button to change page. Press ENTER to start playback.

>Special time search playback:

Go TO DATE : 2 0 0 2 / 1 2 / 1 2
-Choose year / month / day
>Press direction button Left / Right to choose items, press values change button ◀ ▶ to change value.
GOTO TIME : 1 2 : 1 2
-Choose hour and minute
>Press direction button Left / Right to choose items, press values change button ◀ ▶ to change value.
GOTO PLAY
-Press ENTER button to start playback.
Notice: Playback speed change by ◀ ▶ . Speed is x 1, x 2, x 4, x 8, x 16.
1) Press \( \text{MENU} \) button to enter into menu. You could do the system function setup in MENU.

2) Password enter window pop-up:

3) Press numeric (1 ~ 4) button or remote controller (1 ~ 4) to choose password.

4) Remote controller function buttons are same as DVR panel function buttons.

Default password (Account-Admin) : 44444
Default password (Account-User) : 11111
Press MENU button to enter MAIN SETUP PAGE.

MAIN SETUP PAGE
1. HDD INFORMATION
2. DATE-TIME SETUP
3. DISPLAY SETUP
4. CAMERA SETUP
5. BUZZER SETUP
6. SYSTEM SETUP
7. ADVANCED SETUP

MENU, ESC: EXIT, ENTER: RUN

1) Use direction button up/down button to select setup item.

2) Press button to enter into sub-menu function setup.

3) Press sub-menu item with direction button up/down or left/right button.
And change the value with values change button or turn inner-shuttle.

4) Press ESC to go back to main / sub menu or exit menu.

Notice:
1. ADMIN level can setup all DVR menu functions.
2. USER level cannot setup ADVANCED page of DVR main menu function.
1. HDD INFORMATION

- 2 hard disk information display.

Information display: POSITION SIZE USED BRAND

>POSITION: Master / Slave

>SIZE: Hard Disk capacity. xxGB. Maximum display is 999MB

>USED: 00 ~ 100 %. Hard disk overwrites always on 100 %.

>BRAND: DVR auto detect hard disk brand.

>LAST TIME: The last record time display.
2. DATE-TIME SETUP

1. DATE
2. TIME: > Use direction button up/down choose position, values change button to change date and time values.

3. DISPLAY AT xx LINE(S)
   - Date and Time position on screen xx line(s). 00 ~ 23.

4. DAY LIGHT SAVING:
   - Day light saving function on or off.

The Day light Savings function that enable two special updates when it sets to “ON”.
On the first Sunday in April, the time increments from 1:59:59 AM to 3:00:00 AM.
On the last Sunday in October when the time first reaches 1:59:59 AM, it changes to 1:00:00 AM.

Press direction button up/down/left/right to choose items or move date-time position.
3. DISPLAY SETUP

Press direction button up/down to choose the desired item.

Press << >> values change button to change values.
4. CAMERA SETUP

CAMERA COLOR SETUP PAGE

**CH CAMERA 01**
1. BRIGHTNESS 00
2. CONTRAST 00
3. SATURATION 00
4. HUE 00
5. GAIN 00

>>DEFAULT RESET<< : Press ENTER button to reset DVR values.

MENU, ESC: EXIT, ENTER: RUN

CAMERA-COLOR SETUP PAGE:

CAMERA-COLOR SETUP : Adjust Camera Image

CH NUMBER : Select camera
BRIGHTNESS : Adjust screen brightness (-31 ~ +32)
CONTRAST : Adjust color contrast (-31 ~ +32)
SATURATION : Adjust color saturation (-31 ~ +32)
HUE : Adjust color hue (-31 ~ +32)
GAIN : Adjust image signal level (-31 ~ +32)

>>DEFAULT RESET<< : Press ENTER button to reset DVR values.

Press direction button up/down to choose items.

Press ❯❮ values change button to change values.

>Right adjustment of each element in COLOR setup will increase picture quarterly displayed. We recommend you to adjust each element of COLOR SETUP for cameras and monitor to be connected to the DVR unit.
(2.) TITLE SETUP: Input TITLE of each camera. 18 characters can be input.

Characters choose:

Numeric: 0 / 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 9

Capital letter: A / B / C / D / E / F / G / H / I / J / K / L / M / N / O / P / Q / R / S / T / U / V / W / X / Y / Z
1. Press direction buttons up/down/left/right to move screen position.

2. Press ENTER button for default.

3. Press ESC button to quit.
**VLOSS FUNCTION: ON / OFF**

CH1 VLOSS DISPLAY: ON / OFF

CH2 VLOSS DISPLAY: ON / OFF

CH3 VLOSS DISPLAY: ON / OFF

CH4 VLOSS DISPLAY: ON / OFF

Press direction buttons up/down/left/right to choose items.

Press values change button to change values.
(5.) VIDEO MASK SETUP

CAMERA SETUP
1. COLOR SETUP
2. TITLE SETUP
3. SCREEN POSITION SETUP
4. V-LOSS DISPLAY SETUP
5. VIDEO MASK SETUP

VIDEO MASK SETUP PAGE

CH1 VIDEO MASK
CH2 VIDEO MASK
CH3 VIDEO MASK
CH4 VIDEO MASK

MENU, ESC: EXIT: < > : MODIFY

CH1 VIDEO MASK: ON / OFF
CH2 VIDEO MASK: ON / OFF
CH3 VIDEO MASK: ON / OFF
CH4 VIDEO MASK: ON / OFF

MASK means this channel would not display on the live screen, but it still recording.

Press direction buttons up/down/left/right to choose items.

< > Press values change button to change values.
5. BUZZER SETUP

**SYSTEM BUZZER: Buzzer function
   >ON / OFF
1. BUTTON BUZZER?
   > ON / OFF
2. ALARM BUZZER?
   > ON / OFF
3. MOTION BUZZER?
   > ON / OFF
4. VLOSS BUZZER?
   > ON / OFF

Press direction buttons up/down to BUZZER SETUP items.

Press values change button to change values.
6. SYSTEM SETUP

MAIN SETUP PAGE
1. HDD INFORMATION
2. DATE-TIME SETUP
3. DISPLAY SETUP
4. CAMERA SETUP
5. BUZZER SETUP
6. SYSTEM SETUP
7. ADVANCED SETUP

MENU, ESC: EXIT, ENTER: RUN

SYSTEM SETUP
1. DWELL INTERVAL:
   - 0 ~ 999SEC

2. LANGUAGE
   - ENGLISH / CHINESE / JAPANESE

3. VIDEO INPUT: NTSC / PAL system detection,
   - AUTO / NTSC / PAL

4. WATERMARK CHECK:
   - ON / OFF

5. RS-485 ID:
   - 01 ~ 16

6. RS-485 PROTOCOL
   - KEYBOARD / LILIN / PELCO-P / PELCO-D / NICECAM

7. RS-485 BAUD RATE
   - 1200 / 2400 / 4800 / 9600

RS-485 ID and protocol is the command for system control keyboard. If user has no keyboard to control then does not have to care.

Press direction buttons up/down to choose items.

Press values change button to change values.
8. ADVANCED SETUP

### MAIN SETUP PAGE
1. HDD INFORMATION
2. DATE-TIME SETUP
3. DISPLAY SETUP
4. CAMERA SETUP
5. BUZZER SETUP
6. SYSTEM SETUP
7. ADVANCED SETUP

MENU, ESC: EXIT, ENTER: RUN

### ADVANCED SETUP PAGE
- **1. ALARM SETUP**
- **2. MOTION SETUP**
- **3. RECORD SETUP**
- **4. PASSWORD SETUP**
- **5. HDD FORMAT**
- **6. FACTORY DEFAULT**

### ALARM SETUP PAGE
1. **ALARM FUNCTION** ON / OFF
2. **ALARM DURATION**
3. **ALARM RELAY SETUP**
4. **ALARM POLARITY SETUP**

MENU, ESC: EXIT, < >: MODIFY

---

1. Alarm function: ON / OFF
2. Alarm duration: 0 ~ 999

### ALARM RELAY SETUP PAGE
- ALARM01: ON / OFF
- ALARM02: ON / OFF
- ALARM03: ON / OFF
- ALARM04: ON / OFF

### ALARM POLARITY SETUP PAGE
- ALARM01: NO / NC / OFF
- ALARM02: NO / NC / OFF
- ALARM03: NO / NC / OFF
- ALARM04: NO / NC / OFF

Press direction buttons up/down to choose items.

Press values change button to change values.
2. MOTION SETUP

**MOTION FUNCTION (For all channel)**
- ON / OFF

**MOTION DURATION**
- 0 ~ 999

**CHANNEL NUMBER**
- Ch 1 / Ch 2 / Ch 3 / Ch 4

1. SENSITIVITY Adjusts motion Detection Sensitivity.
- 1 ~ 32 (low → high)

2. VELOCITY Adjusts motion object slow / fast speed detection
- 1 ~ 10 (slow speed → fast speed)

3. MOTION ACTIVE (For each channel)
- ON / OFF. The function only for channel motion detect active, not for motion record per each.

4. MOTION RELAY
- ON / OFF

5. >MOTION AREA SETUP<

Press direction buttons up/down to choose items.

Press values change button to change values.
> MOTION AREA SETUP <

All area detect with factory default. Press quad button to change mode and then increase or reduce.

For example:
Clear lattices  \[\rightarrow\] Press value change button to reduce. \[\leftarrow\]

Add lattices  \[\rightarrow\] Press value change button to reduce. \[\rightarrow\]

Icon: \[\begin{array}{|c|c|c|c|}
\hline
\hline
\hline
\end{array}\] Press \[\uparrow\] to increase all area, press \[\downarrow\] to reduce all area.

Icon: \[\rightarrow\]
Press Up / Down / Left / Right direction key to move, press \[\uparrow\] to increase lattices; press \[\downarrow\] to reduce lattices.

Icon: +
Press Up / Down / Left / Right direction key to move and increase area.

Icon: X
Press Up / Down / Left / Right direction key to move and reduce area.
3. RECORD SETUP

1) HDD FULL: When hard disk is full, DVR next step is kept overwrite record or stop record?
   -OVERWRITE / STOP REC

2) RECORD SPEED: Record FPS setup
   -1/30 (1/30), 1/15 (1/15), 1/10 (1/10), 1/5 (1/5), 1/3 (1/3), 1/2 (1/2), 1 (1), 2 (2), 3 (3.13), 5 (5), 10 (8.33),
   15 (12.5), 30 (25), 60 (50), 120 (100).

3) RECORD MODE: Record mode setup.
   -ALWAYS / SCHEDULE / EVENT / EVENT ON SCHEDULE / EVENT + SCHEDULE

4) RECORD AUDIO: Audio record setup (After 1 speed, audio record is not available.)
   -ON / OFF

5) QUALITY: Record image quality setup
   -SUPER / HIGH / FINE / NORMAL / LOW

6) SCHEDULE SETUP

---

Press direction buttons up/down to choose items.

Press values change button to change values.
**Additional:**

2. **RECORD SPEED.** 1/30(1/30), 1/15(1/15), 1/10(1/10), 1/5 (1/5), 1/3 (1/3), 1/2 (1/2), 1(1), 2(2), 3(3.13), 5(5), 10 (8.33), 15(12.5), 30(25), 60(50), 120(100).

-120 for the real time recording. When playback, it displays 30 frames per each channel on FULL screen, 15 frames per each channel on 4-split screen.

3. **RECORD MODE.** ALWAYS / SCHEDULE / EVENT / EVENT ON SCHEDULE / EVENT + SCHEDULE.
   -Always: 24 hours recording. Manual record or stop.
   -Schedule: Date and time schedule recording mode.
   -Event: Alarm / Motion / V-Loss event mode recording.
   -Event on schedule: Event record only on schedule time.
   -Event + Schedule: Except event on schedule recording, it would still do record if event happens not on schedule time.

4. **RECORD AUDIO: ON / OFF.**
   -Choose on, DVR would do audio recording.
**SCHEDULE SETUP**

CURSOR STEP

<table>
<thead>
<tr>
<th>SUN</th>
<th>MON</th>
<th>TUE</th>
<th>WED</th>
<th>THU</th>
<th>FRI</th>
<th>SAT</th>
</tr>
</thead>
</table>

**RECORD SETUP**
1. HDD FULL
2. RECORD SCHEDULE
3. RECORD MOTION
4. RECORD ALARM
5. RECORD POWER ON
6. RESOLUTION

Press direction buttons up/down to
SCHEDULE items.

Press values change button to change values.

Factory default is everyday all schedules time on
recording.

**SCHEDULE SETUP**

Press direction buttons up/down/left/right to see
date and time difference.

Press values change left/right button to change 30MIN or 6 MIN

++ / - - : Increase / Reduce. Every day record with factory default.

On ▶▶, use up/down button to choose date, press mode button to change on
++ or - -. After, use direction left / right button to start increase or reduce time area.

Mode function button
+ + increase
- - reduce
For example: TUE ~ SAT, all day schedule time recording, but SUN 07:00 ~ 22:00 and MON 01:30 ~ 11:30 do schedule recording. User can press ENTER to see the schedule time area difference.
5. PASSWORD SETUP

1) LEVEL (Log In level ID type setup)
   >NONE / ADMIN / USER
   -ADMIN:
   -USER
   -NONE, user does not need to insert password before enter in MENU.

2) ADMIN password
   >44444 (Factory Default)

3) USER password
   >11111 (Factory Default)

Choose ADMIN: Only admin password can login advance menu.
Choose User: Both user and admin password can login menu but can not go advance menu.
6. HDD FORMAT

Advanced Setup Page
1. Alarm Setup
2. Motion Setup
3. Record Setup
4. Event
5. Password Setup
6. HDD Format
7. Factory Default

HDD Format Caution!!:
** HDD FORMAT CAUTION!!**
ALL DATA IN HDD WILL BE DESTROYED!!
Press [Enter] to format.
Press [Esc] to cancel.

Press direction buttons up/down to HDD FORMAT items position.
Press ENTER to format all HDD.
Caution: User can format HDD only when all HDD stop record or playback.

7. Factory Default

Advanced Setup Page
1. Alarm Setup
2. Motion Setup
3. Record Setup
4. Event
5. Password Setup
6. HDD Format
7. Factory Default

** CAUTION!!**
ALL SETUP VALUE WILL BE CLEAR, AND RESTORE FACTORY DEFAULT!!
Press [Enter] to restore.
Press [Esc] to cancel.

Press ENTER button to restore.
Press ESC button to cancel.
1. CD folder, save setup.exe to PC hard disk or double click it.
2. Acrobat Adobe PDF installed in PC is necessary

2. Install Shield Wizard processing.
3. Click Next.

4. Choose folder.
5. After choose folder, click OK.

6. Click install to start.
7. Installing

8. Click Finish
Start ➔ Program ➔ Video Viewer ➔ Video Viewer

Click Local Search.

Left key of mouse click Local Search.
Click folder.

Choose new removable hard disk → BACKUP.DVR file → OPEN.
Start to playback

Left key of mouse click play

Icon:

Folder  Play  Stop  First  Forward / Reverse  Still playback  End
Picture capture save. (.JPG file saves.) Only camera full channel save, no quad pictures save.

For example: Channel 1 .jpg save. Mouse click 1 channel once, then click mouse right button.
Choose save as → choose the folder you want to save.

Type any file name you want, and then click save.
Or choose save all. Save all cameras full channel picture.

Choose folder and type file name.
Click mouse left button, blue bar display. Click mouse right button to choose 1 ~ 4 cameras to change position.

Icon function:

Setting:
Video Format: NTSC or PAL.
Choose Codec: AVI encode format.
Show Watermark: Water mark function on or off.
Video Format: Choose NTSC or PAL.

Choose Codec: File format.
Show Watermark: Water mark function or off.
To check file has been modify or not.

AVI file save:

Choose folder and type file name
Click save:

Choose 1 ~ 4, and then click OK.

Click OK, and then AVI red light on:

Click play button to start record, Click AVI button to stop.

AVI red light on, start to record.
JPG file save:

Choose folder and type file name
Choose camera 1 ~ 4 or save all.
1. Take HDD out from DVR to personal computer. Make sure hard disk in PC is Master or Slave, switch hard disk jumper to Master or Slave.
2. Computer power on, do not need to BIOS setup, just login Windows system.
3. Start → Program → Video Viewer → Video Viewer
4. Click HDD Scan.

Left key of mouse click HDD Scan.  

Click here, hard disk list on. Click the correct DVR hard disk, data will not loose if choose wrong HDD.
Hard Disk list on:

Click here, hard disk list on. Click the correct DVR hard disk, data will not loose if choose wrong HDD.

Click correct hard disk model, after function on, user can start to data read. Function access is same as prior pages.
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>REC FPS</td>
<td>120     60  30   15   10</td>
<td>REC FPS</td>
<td>120     60  30   15   10</td>
<td>REC FPS</td>
<td>120     60  30   15   10</td>
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<td>120     60  30   15   10</td>
<td>REC FPS</td>
<td>120     60  30   15   10</td>
</tr>
<tr>
<td>REC Hour</td>
<td>21.7    21.7 43.5 87.1 130.7</td>
<td>REC Hour</td>
<td>18.5    18.5 37   74   111.1</td>
<td>REC Hour</td>
<td>16.8    16.8 33.6 67.3 101</td>
<td>REC Hour</td>
<td>15.4    15.4 30.8 61.7 92.5</td>
<td>REC Hour</td>
<td>11.5    11.5 23.1 46.2 69.4</td>
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<tr>
<td>REC FPS</td>
<td>5       3   2    1    1/2</td>
<td>REC FPS</td>
<td>5       3   2    1    1/2</td>
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<td>REC FPS</td>
<td>5       3   2    1    1/2</td>
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<tr>
<td>REC Hour</td>
<td>261.4   435.7 653.5 1307.1 2614.3</td>
<td>REC Hour</td>
<td>222.2   370.3 555.5 1111.1 2222.2</td>
<td>REC Hour</td>
<td>202     336.7 505   1010.1 2020.2</td>
<td>REC Hour</td>
<td>185.1   308.6 462.9 925.9 1851.8</td>
<td>REC Hour</td>
<td>138.8   231.4 347.2 694.4 1388.8</td>
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<tr>
<td>REC FPS</td>
<td>1/3     1/5  1/10 1/15 1/30</td>
<td>REC Hour</td>
<td>1/3     1/5  1/10 1/15 1/30</td>
<td>REC Hour</td>
<td>1/3     1/5  1/10 1/15 1/30</td>
<td>REC Hour</td>
<td>1/3     1/5  1/10 1/15 1/30</td>
<td>REC Hour</td>
<td>1/3     1/5  1/10 1/15 1/30</td>
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<tr>
<td>REC Hour</td>
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<td>REC Hour</td>
<td>3703.7  5555.5 11111.1 18518.5 37037</td>
<td>REC Hour</td>
<td>3367    5050.5 10101 16835 33670</td>
<td>REC Hour</td>
<td>3086.4  4629.6 9259.2 15432 30864.1</td>
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</tbody>
</table>
Accessories:
1. 20 PIN Male to Female D-SUB pin cable X 1
2. VGA PCB bracket X 1
3. Screws X 4

(only fit on product serials Z7-00-VGA0-00)

1. VGA board introduction.

3. Resolution and NTSC/PAL switcher table

<table>
<thead>
<tr>
<th>Pin 4</th>
<th>Resolution</th>
<th>Pin 1</th>
<th>Pin 2</th>
<th>Pin 3</th>
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</thead>
<tbody>
<tr>
<td>PAL-----ON</td>
<td>640X480 60HZ</td>
<td>ON</td>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>NTSC ---OFF</td>
<td>800X600 60HZ</td>
<td>ON</td>
<td>ON</td>
<td>OFF</td>
</tr>
<tr>
<td></td>
<td>1024X768 60HZ</td>
<td>ON</td>
<td>OFF</td>
<td>ON</td>
</tr>
<tr>
<td></td>
<td>640X480 75HZ</td>
<td>ON</td>
<td>OFF</td>
<td>OFF</td>
</tr>
<tr>
<td></td>
<td>800X600 75HZ</td>
<td>OFF</td>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td></td>
<td>1024X768 75HZ</td>
<td>OFF</td>
<td>ON</td>
<td>OFF</td>
</tr>
</tbody>
</table>

Resolution and NTSC/PAL switcher description

Step. 1 DVR Power off
Step. 2 Pin 4 switcher to NTSC or PAL
Step. 3 DVR Power on
Step. 4 Pin 1 ~ 3 switcher resolution. can not be power off DVR.
Hard Disk x 2 can be installed on DVR base. Both are 2-iron slices immobile type.

2 Iron slices are in the accessories box, please tell supplier if slices are not exist

2-iron slices immobile type:

Slices immobile type: 4 screws hole on each slice. 2 for DVR base fixed. Another 2 for hard disk fixed.

Hard disk install.: Locking hard disk screws, then locking DVR base screws to fixed on.