DIGITAL VIDEO RECORDER

QUICK START

Please read instructions thoroughly before operation and retain it for future reference.
1. FRONT AND REAR PANELS

1.1. Front Panel

1) 1~4
   Press one of the channel number buttons to select and display the channel you want.

2) LED Indicators
   HDD: The HDD is reading or recording.
   TIMER: Timer recording is activated.
   PLAY: The DVR is in the playback mode.
   POWER: The DVR is powered on.

3) MENU
   Press to enter the main menu.

4) ENTER
   Press to confirm the setting.

5) LIST
   To quickly search the recorded files by events, press “LIST” to show the following lists:
   RECORD LIST List all the manual recording data.
   MOTION LIST List all the motion recording data.
   TIMER LIST List all the timer recording data.
   FULL LIST List all the recording data.
   QUICK SEARCH Enter the time search menu. For details, please refer to “4.1 QUICK SEARCH” in the user manual.

   Choose & enter the list you want. Select one event item, and press “ENTER” to start video playback.

6) SLOW
   In the playback mode, press to show slow playback.

7) ZOOM
   In the live or playback mode, press to enlarge the image of the selected channel.

8) □
   Press to switch to 4-cut display mode.

9) SEQ.
   Press to display each channel one by one in the full screen, and press again to escape the sequence mode.

10) SNAP
    Press “SNAP” to take a snapshot.

Note: Before taking a snapshot, insert a compatible USB flash drive into the DVR USB port for snapshot saving. For the compatible USB flash drive list, please refer to “APPENDIX 2” in the user manual.

11) PLAY
    Press to playback the recorded data.

12) PAUSE / STOP / REW / FF
    In the playback mode, press one of these buttons to pause / stop / fast rewind / fast forward the playback file.

13) ▲ / ▼ / ◄ / ►
    Press one of these buttons to move the highlight up / down / left / right.
    In the function setting mode, press ▲ / ▼ to change the setting value.

14) USB port
    To quickly backup or upgrade firmware/OSD, you can insert a compatible USB flash drive into this USB port.
    Before using the USB flash drive, please use your PC to format the USB flash drive as “FAT32” first.
1.2. Rear Panel

1) VIDEO IN (1 ~ 4)
   INPUT: Connect to video sources, such as cameras.

   Note: If you want to make a video backup with audio, please make sure whether your DVR supports the audio function, and connect audio cameras to the channels which support the audio function.

2) VIDEO OUT
   Connect to MAIN monitor for video output.

3) AUDIO OUT
   Connect to an audio device, such as a speaker.

4) AUDIO IN
   Connect to an audio source, such as a camera equipped with the audio function.

   Note: The camera must also be connected to VIDEO INPUT 1 for the audio recording function to take effect.

5) LAN
   Connect to Internet by LAN cable.

6) LINK ACT.
   When your DVR is connected to the Internet, this LED will be on.

7) DC 19V
   Connect to the supplied adapter.

2. CONNECTION AND SETUP

   Note: The DVR is designed to automatically detect the video system of the connected cameras (NTSC or PAL). To make sure the system detection is correct, please check if the cameras are connected to the DVR and power-supplied before the DVR is powered on.

2.1. HDD Installation
   The HDD must be installed before the DVR is on.
   Step 1: Loose the screws on the upper cover and open the upper cover of the DVR.
   Step 2: Remove the HDD bracket.
   Step 3: With the PCB side facing up, connect the HDD to the power connector and the DATA BUS connector.
   Step 4: Slide and fasten the HDD to the HDD bracket, two screws for each side.
   Step 5: Replace the HDD bracket back to the DVR base.
   Step 6: Close the upper cover of the DVR, and fasten all the screws you loosened in Step 1.

2.2. Camera Connection
   The cameras must be connected and power-supplied BEFORE the DVR is powered on. The DVR will automatically detect the video system of the connected camera(s) (NTSC / PAL), and switch itself to the correct system.

1) Video cable connection
   Connect the camera video output to the DVR video input port with a coaxial cable or RCA line with BNC connector.
2) Audio cable connection (For cameras which supports audio recording only)
   Connect the camera audio output to the DVR audio input port with a coaxial cable or RCA line with BNC connector.

3) Power connection
   Connect the camera with indicated power supply and make sure it’s power-supplied.

2.3. Power Setup
   This device should be operated only with the type of power source indicated on the manufacturer’s label. Connect the indicated AC power cord to the power adapter, and plug into an electrical outlet. The power LED will be on.

   **Note:** Before the DVR is powered on, make sure the cameras are connected and power-supplied for the detection of the camera video system to be correct.

   **Note:** To ensure that your DVR works constantly and properly, it’s recommended to use an UPS, Uninterruptible Power Supply, for continuously operation. (Optional)

2.4. Date and Time Setting
   Before operating your DVR, please set the date and time on your DVR FIRST.

   **Note:** Please DO NOT change the date or time of your DVR after the recording function is activated. Otherwise, the recorded data will be disordered and you will not be able to find the recorded file to backup by time search. If users change the date or time accidentally when the recording function is activated, it’s recommended to clear all HDD data, and start recording again.

   Press “MENU” and enter the password to go to the menu list. The default admin password is 0000. Move to “DATE” and you can set the date / time / daylight saving in the “DATE” menu list.

<table>
<thead>
<tr>
<th>MENU</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUICK SEARCH</td>
<td>DATE: 2008/FEB/15</td>
</tr>
<tr>
<td>RECORD</td>
<td>19:15:27</td>
</tr>
<tr>
<td>TIMER</td>
<td>YYYY/MM/DD</td>
</tr>
<tr>
<td>DATE</td>
<td>DAYLIGHT SAVING: OFF</td>
</tr>
<tr>
<td>ADVANCE</td>
<td>PLEASE CONSULT YOUR INSTALLER FOR ADVANCE SETTING</td>
</tr>
</tbody>
</table>

   **Note:** Please DO NOT change the date or time of your DVR after the recording function is activated. Otherwise, the recorded data will be disordered and you will not be able to find the recorded file to backup by time search. If users change the date or time accidentally when the recording function is activated, it’s recommended to clear all HDD data, and start recording again.

2.5. Password Setting
   Press “MENU” and enter the password to go to the menu list. Then, Move to “ADVANCE” to enter the advanced setting menu.

   In the “ADVANCE” menu, move to “SYSTEM”. Select “PASSWORD” and press “ENTER” to enter the submenu to set the password (four digits). The default admin password is 0000.
3. BASIC OPERATION

3.1. Live Page

- **System time**
- **Status bar**
- **Available HDD capacity**
- **Recording**
- **Motion**
- **Channel title**

<table>
<thead>
<tr>
<th>Icon</th>
<th>Function</th>
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<th>Function</th>
<th>Icon</th>
<th>Function</th>
<th>Icon</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>🗝️</td>
<td>Key lock</td>
<td>🗝️</td>
<td>Key unlock</td>
<td>🎧</td>
<td>1st live audio channel</td>
<td>🎧</td>
<td>1st playback audio channel</td>
</tr>
<tr>
<td>🎧</td>
<td>Audio channel unselected</td>
<td>📱</td>
<td>Digital zoom mode</td>
<td>📱</td>
<td>Digital zoom unselected</td>
<td>🕒</td>
<td>Timer recording</td>
</tr>
<tr>
<td>🤔</td>
<td>Motion</td>
<td>🎼</td>
<td>Recording</td>
<td>🟢</td>
<td>HDD overwrite</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.2. Recording

When the recording and the pre-alarm function are activated, this device will overwrite 8GB data from the oldest for continuous recording without notice.

1) **Manual Recording Icon**
   By defaults, when the DVR is properly connected with cameras and the HDD is installed, you can see 🎼 (recording) on the screen.

2) **Event Recording Icon**
   When the motion detection function is activated, you will see 🤔 (motion) on the screen for any motion event.

3) **Timer Recording Icon**
   When the timer record is activated, you will see the LED light of “Timer” is on, and 🕒 (timer) on the screen.

3.3. Playback

Press “PLAY” on the DVR control panel, and the device will playback the latest recorded video.

**Note:** There must be at least 8192 images of recorded data for playback to work properly. If not, the device will stop playback. For example, if the IPS is set to 30, the recording time should be at least 273 seconds (8192 images / 30 IPS) for the playback to work properly.

1) **Fast Forward / Fast Rewind**
   You can increase the speed for fast forward and rewind on this device. In the playback mode:
   - Press “FF” once to get 4X speed forward and press twice to get 8X speed, etc. And the maximum speed is 32X.
   - Press “REW” once to get 4X speed rewind and press twice to get 8X speed, etc. And the maximum speed is 32X.

**Note:** During playback, the image size of the recorded data will be shown on the screen.
2) **Pause / Image Jog**

Press “PAUSE” to pause the playback.

In the pause mode:

Press “▶” once to get one frame forward.

Press “◀” once to get one frame rewind.

3) **Stop**

Press “STOP” under the playback mode, and the screen of this device will return to live monitoring mode.

4) **Slow Playback**

Press “SLOW” to get 1/4X speed playback and press twice to get 1/8X speed playback.

### 3.4. Search

1) **Search by List**

To quickly search the recorded files by events, press “LIST” to show the following lists:

- **RECORD LIST** List all the manual recording data.
- **MOTION LIST** List all the motion recording data.
- **TIMER LIST** List all the timer recording data.
- **FULL LIST** List all the recording data.
- **QUICK SEARCH** Enter the time search menu. For details, please refer to "4.1 QUICK SEARCH" in the user manual.

Choose & enter the list you want. Select one event item, and press “ENTER” to start video playback.

2) **Search by Time**

Press “MENU”, and select “QUICK SEARCH” to enter the quick time search menu. You can search any specific events by time (Year / Month / Day / Hour / Min) and directly play the file you find.

### 3.5. Firmware / OSD Upgrade

By using USB flash drive

Step 1. Format the USB memory device as FAT 32 format first.

Step 2. Get the upgrade files from your distributor, and save the upgrade files in your USB flash device (do not change the file name).

Step 3. Insert your USB flash drive into the USB port. Wait till the DVR detects your USB flash drive.


Step 5. Select “YES”, and press “ENTER” to confirm the upgrade.

Step 6. Wait till the DVR is rebooted and initialized.