

OzSpy DVR Manual



This product is designed especially for the security and surveillance field and is an outstanding digital surveillance product. It introduces embedded LINUX operating system which is more stable. It also introduces standard H.264mp video compressed format and G.711A audio compressed format which insures the high quality image and low error coding ratio. Strong network services greatly enhance the network data transmission capacity and remote control capabilities.

The First Part: Basic Operation

1 Basic Installation

1.1 Hard Disk Installation

For the first use please install the hard disk.

Full Function series DVR supports 2 Sata hard disks, the Simple Function series DVR supports 1 Sata hard disk.

Note: DVR can run and monitor normally without hard disk, it can't record and playback.

1.2 Mouse Connection

Full Function series DVR has 1 USB connection on the back panel and 1 USB connection on the front panel, the 2 USB connections could be used for mouse, USB stick, 3G&WIFI module, portable HDD and USB DVR-RW.

Simple Function series has two USB connections on the back panel for mouse and USB stick.

2 Turn on

Plug the power lead in and turn on the power supply switch. When the DVR is turned on the power supply indicator light will come on. After starting up, you will hear a beep, the default setting of video output is multiple-window mode.

Note: Restarting the DVR after abnormal power off, the DVR will automatically recover the state before power off.

3 Turn off

There are two methods to turn off the DVR which are soft switch and hard switch. Entering [Main menu] and choosing [Logout] in the [turn off the system] option is called soft switch.

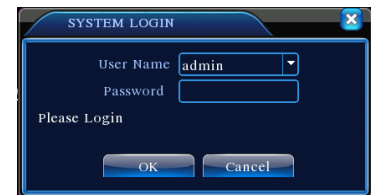
Turning off at the power supply switch is called hard switch.

Note: The settings must be saved before replacing the battery otherwise the information will be lost.

4 Login

When the DVR boots up, user must login and the system provides the corresponding functions with the user purview. There are two user settings which are admin, and guest; and they have no passwords. "Admin" is the super user purview; "Guest" is the common user purview.

Password protection: If the password is continuously wrong three times, the alarm will start. If the password is continuously wrong five times, the account will be locked. (Through reboot or after half an hour, the account will be unlocked automatically).





For your system security, please modify your password after first login.

5 Preview

Picture1. Login

Login normally and choose the multi-menu preview status.

The system date, time and channel name are shown in each viewing window. The surveillance video and the alarm status are shown in each window.

1		Recording	3		Video loss
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2		Motion	4		Camera
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Table1 Preview icon

6 Recording Config

Set the recording parameters in the surveillance channel. You can enter [Main Menu]> [Record]> [Record Config] to set. The system's default setting is 24 hours continuous recording.

Note: There is at least one read-write hard disk if the DVR records normally.


Picture 2

Channel - Choose the corresponding channel number to set the channel. Choose the "all" option to set all channels.

Redundancy - Choose the recording file and backup in two hard disks. The first one is read-write disk, the other is redundant disk.

Length - Set the time length of each video file. 60minutes is default length.

PreRec - Record 1-30 seconds before the action. (file length is decided by the code stream)

Schedule - Record according to the set video type (regular, detect and alarm) and time section.

Manual - Click the "all" button and the corresponding channel will record no matter what state it is in.

Stop - Click the "stop" button to stop the recording in any state.

Period - Set the time for recording, the recording will start only in the set range.

Recording Type: regular, detection or alarm.

Regular - Perform regular recording in the set time section. The video file type is "R".

Detect - Select the "Detect" to start the motion detection recording. The video file type is "M".

Alarm - Select "Alarm" to activate the external alarm when the motion detect has been activated during the set time selection. The video file type is "A".

7.Snapshot Storage. (partial devices supported)

Setup snapshot parameters for different channels. First time it's set for 24hours snapshot continuously, please go to Main Menu->Record->Snapshot Storage for appropriate settings.

Note: If normal snapshot storage, please setup Snap at Main Menu->Advanced->HDD Manage->Snapshot.



Picture3 Snapshot Storage

8 Video Playback

There are two methods for you to play the video files on the hard disk.

1. In the desktop shortcut menu.

Note: The hard disk that saves the video files must be set as read-write or read-only state.



Picture4 Video Playback

Picture's 3 and 4.

- 1.Playback control 2. Operating Tips 3. Record type
- 4.Time progress bar options 5. Switching time or file mode
- 6.File Search 7. Channel option 8. Date option 9. Storage Device option 10. File information 11. File Option 12. Time

【File information】 Start time, end time and size.

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【File option】 Choose the file to playback/backup.

【playback control】 Refer to the following sheet for more information.












Button	Function	Button	Function
	Play/Pause		Backward
	Stop		Slow Play
	Previous Frame		Fast Play
	Next Frame		Previous File
	Repeat Playback		Next File
	Full Screen		

Table2 Playback control key

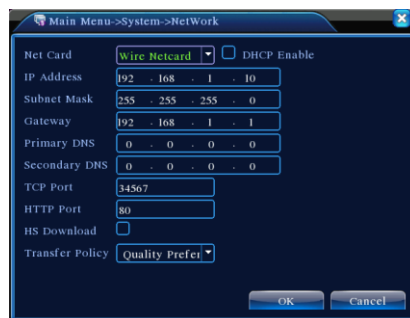
Note: Frame by frame playback is only performed in the "pause" playback state.

Special functions:

Partial enlarged: single pictures full-screen playback, can use the left mouse button to choose any size area on the screen, click the left mouse button, the selected area will enlarge the regional image, double click the left mouse button to exit the partial enlarged images.

Note: If the current resolution of one channel is beyond maximum resolution, it will be displayed as a red "X" when playback.

9 Network Setup



Picture5 Network Setup

Doing network setup through Main Menu>System>Network

【IP address Set the IP address. Default: 192.168.1.10.

【Subnet Mask Set the subnet mask code.

Default: 255.255.255.0.

【Gateway Set the default gateway. Default: 192.168.1.1.

Make the equipment's IP address and the router in the same network segment. For example, the router IP address is 192.168.1.1, and the subnet mask is 255.255.255.0. According to the default setup, generally the default gateway is the router IP address.

10. Alarm Setup



Picture 6 Motion Detection

Motion detection setup- Set DVR equipment making it alarm, linkage record and make the PTZ turn to preset position when there is a moving object in designated areas during Monday to Friday.

Step1. Choose 【Main Menu】 > 【Alarm】 > 【Motion Detect】 , then enter the setup interface;

Step2. Choose one channel and adjust sensitivity level, then set the time period of alarm surveillance. Set the monitor area (click the “set” button, choose the areas you want, and the “default” means choose all areas, then rig click to choose "up window").

Step3. When in alarm state, the DVR can take linkage measures. Alarm output, recording, tour, PTZ activation, snapshot, show message, sending email and buzzer.

Step4. Set other channels alarm parameter following step 2 and step 3.

Note: video block, video loss and alarm input’s setup method are similar with motion detection.

10 PTZ Control

Step1. Set basic parameter such as channel and protocol. 【Main Menu】 > 【System】 > 【PTZ Config】

Step2. At the state of menu preview, enter the PTZ operation menu.

Step3. One method is "right click" mouse, choose the "PTZ control" and you can then control PTZ general operation. The other method is "right click" mouse, choose "High Speed PTZ". Control the left button and move it to control the PTZ direction directly. Use the mouse wheel to zoom in/out the controlled camera.

The Second Part: Remote Control

1 Network Connection

Before web operation, you need to connect the equipment with the internet.

Step1. Connect the equipment with the internet correctly.

Step2. Set LAN following step 9 details- Network Setup in reference manuals first part.

Step3. when Lan is connected, it needs to set up port mapping for public network access.

Step4. DDNS Application. You can apply for DDNS in the <http://www.3322.org/> and <http://www.oray.com/>

Step5. DDNS Setup. Make sure to fill the right info in the Main Menu->System->NetService->DDNS

Note: The device must be in the same network with PC, if cannot connect, please check the device IP if it works fine.

2. Remote Monitoring

After connecting the network, two kinds of methods can be used for remote monitoring which are client software and common browser. Client software(CMS) is professional software used in multi-equipment monitoring, which is safe, convenient and stable. It is the better one that we advise customers to use. And the browser comes with system such as IE browser.

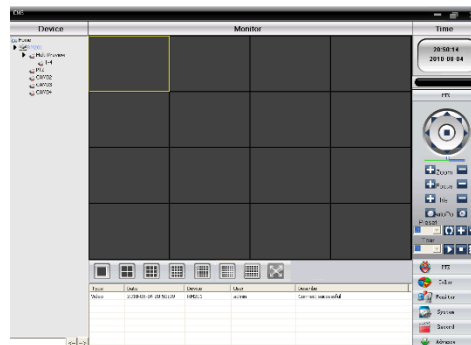
2.1 Client software

CMS software is used in a computer, and manipulates several DVR at the same time.

Step1. Please take CD out of the accessory box, then copy CMS installed software in it.

Step2.After installing this software to the local PC, then open the operation system as in picture 6, Enter the add device interface through **System】 > 【Device Manager】 > 【Add area/device】** , and enter DVR information which needs changing following the prompts, in that way, you can manipulate any specified equipment. And the method is the same with web manipulation's.

Step3. You can add several DVR's to do monitor operation if you repeat this operation.



Picture 7 CMS Interface

2.2 WEB

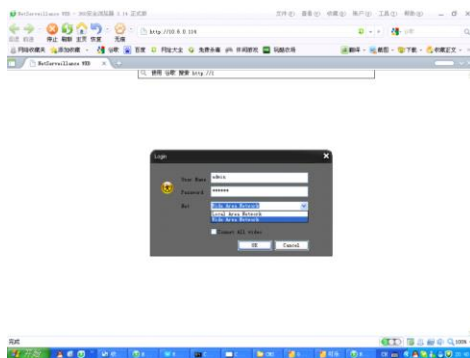
After the network connects, using the browser that comes with computer login DVR to do remote monitoring.

Step1. install the plug. Open the disk, then get General_IE_V2.0.0.35_20111222.exe and install.

Step2. Connect the equipment. Open web browser, then enter IP address on the address bar of the equipment. For example, the IP address of the equipment is 10.6.0.114, then you should enter `http://10.6.0.114` on the address bar to connect.

Pop up as follows interface after connecting successfully.

Note: when you first login, see below picture



Picture 8. Web login interface



Picture 9. Web operation interface

Step3. Login. Enter user's name and password, the default Administrator User ID is admin, and the password is admin. The user should change the administrator's password straight after logging in. **(If you choose "Local Area Network", it's Main streams, if "wide Area Network", it's Sub streams.)**

You will see as follows interface after logging in. Picture 9 WEB operation interface

3. Basic Web Operation

1) Screen Split

Choose image preview mode;

2) Playback

Enter playback mode, which supports multi-channel playing back simultaneously.

3) Log

Display log information;

4) Local Config

Alarm and System setting

5) Channel operation

Open the videos. Left click and choose a window in the left, then choose the corresponding channel in the right, then double click the video. Open the second channel's video, choose the left window, then select the corresponding channel in the right, then double click the video. Opening other channels is the same way. If you have chosen the window of opened video, then open other channels in the right, the system will close all the channels and open new channel. Customers can adjust image mode upon opened video channels.

Close the channel. Right click mouse on the channels which are needed to be closed. Or choose to close all the windows to close opened video channels.

The Third Part: Special Function

This series has a more personalized design and visualization operation, enlarge any areas in preview interface, timing start up and shut down, FTP upload, 3G&WIFI and so on. Now let's introduce Encode, Multi channels playback and mobile monitor setup.

1 Coding Config

This DVR has functions such as high quality playback and remote monitoring by coding parameter Config.



1.1 Encode setup for every channel

Note: Only part of DVR mode supports resolution switch.

Step1. Local operation through 【Main Menu】 > 【System】 > 【Encode】 (remote setup right click mouse and choose “Config” in 【System】 > 【Encode】) .

Step2. Choose channel 1, set the resolution as D1 (25fps, 1536Kb/s)

Step3. Choose channel 2, set the resolution as CIF (25fps, 512Kb/s). Right click mouse or choose “Advanced” then click “Copy” button.

Step4. Choose channel 3, click the right button or choose the local “Advanced”, then choose “Stick”. Channel 4’s operation is the same with channel 3.

Step5. Click “save”, then exit.

Note: standard parameter between resolution and Kb/s.

Resolution	Kb/S
D1	512~2560
HD1	384~2048kbps
CIF	64~1024kbps
QCIF	64~512kbps

1.2 Extra Stream Setup

Extra stream is used for remote client monitor and mobile monitor area.

Step1. Enable extra stream

Step2. Set frame rate and bit rates, operation is the same as main stream.

2 Multi-channel Playback Simultaneously

This DVR introduces the newest combination coding technique to allow videos of all channels to play simultaneously.

4 channel DVR can support 4channels playback simultaneously,8 channel DVR can support 8channels playback simultaneously, channel number can be chosen.



Picture11. Video Playback

Step1. Set every channels encode parameter by 【Main Menu】 > 【Record】 > 【Encode】 .

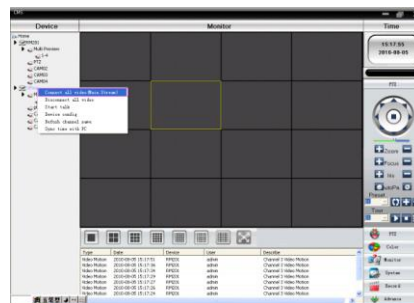
Step2. Enter video playback interface, click **Search** button.

Step3. Choose **File Type, All** and **time period**, then click **OK** in **Search Condition** interface.

Step4. Choose the record file, then click **Play** or double click the file to playback in playback interface.

3 Multi-channel Real-time Monitor remotely

Introduce extra-stream techniques to get multi-channel remote monitoring simultaneously in the condition of narrow band (poor network speed)



Picture12. CMS Interface

Step1. Enable extra streams (Main Menu->System->Encode)

Step2. Open CMS, and then login.

Step3. **After you add devices, right click device name to select "Connect all video (Main stream)"**

4 Mobile Monitoring

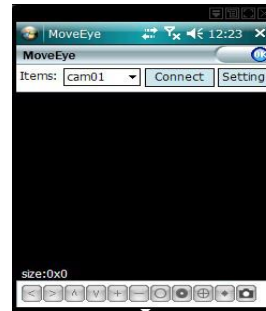
It introduces extra stream techniques when mobile monitoring, support channels switch (egg. Windows mobile)

Step1. DVR Config, go to Main Menu->System->Encode->

Extra Stream, enable it.



Picture 13 Mobile Client Software Interface



Picture 14 Mobile Client software setting 1

Step2. Setup mobile monitor, go to Main Menu->System->

Net Service->Mobile Monitor, choose "Enable"

Note: Please map the mobile monitor port in the router first, then you can use mobile to visit it.

Step3. Install the corresponding mobile monitoring software through CD (Software->Mobile Monitor->MEYE->MEYE_WM.cab)

Step4. After successfully installing the software, finding and running "e.g. windows mobile-move eye" software through [start]->[procedure] in the mobile, see picture 14

Step5. Mobile setup. Click "setting" button at the right corner

User name: login name of DVR

Password: password of DVR

Server: IP address or domain name of DVR

Port: mobile monitor port of DVR, please refer to Step 2.

Auto Connect: If selected, then it will auto connect to the DVR and auto display cameras.

Note: DVR needs to be connected to the internet when using mobile monitor

Similar setup between different operation system:

Symbian S60 the 3rd operation system mobile monitoring client software:
MEYE_SB_S60_3rd.sisx

Symbian S60 the 5th operation system mobile monitoring client software:
MEYE_SB_S60_5th.sisx

Android mobile monitoring client software: vMeyeCloud

Blackberry mobile monitoring client software: MEYE_RIM.cod

iPhone mobile monitoring software: use mobile to search "vMeyeCloud" in the appstore and install it online.

5 Flexible File Storage and Backup

DVR introduces several unique storage and backup techniques to achieve multiple modes of storage and backup.

Real-time storage

Redundant storage. DVR introduces **RAD 1** storage technique to achieve two hard disks storing simultaneously and mutual backup.

USB HDD and movable hard disk. DVR introduces the storage technique, supporting video files which are real-time written in storage devices.

DVD-RW. DVR introduces the newest real-time storage technique, supporting video file which are burnt real-time to CD.

Real-time remote storage. DVR supports video files real-time storing to computer devices (Disk C/D/E/F) at the remote client.

File download

Using U disk and movable hard disk download at local device, DVR supports the chosen file are high-speed backup to the storage devices.

DVD-RW. DVR supports the chosen video file are burnt and stored as CD.

Network high-speed download. DVR supports high-speed down loading the chosen file at remote client.

Appendix 1. Mouse operation *Take right hand as an example

Operation	Function
Double left click	Double click one item in the file list to playback the video Double click the playback video to zoom in or out the screen
	Double click the channel to make it full screen display in preview double click again to resume the multi-channel display
Left click	Choose according option in the menu
Right click	Pop desktop shortcut menu in preview state
	Current shortcut menu in the menu
Wheel button	Add or subtract number value in the number setting
	Switch the items in the combo box
	Page up or down in the list
Move mouse	Choose the widget or move the item in the widget
Drag mouse	Set the motion detect area