

UNV - MDVR

Operation Manual

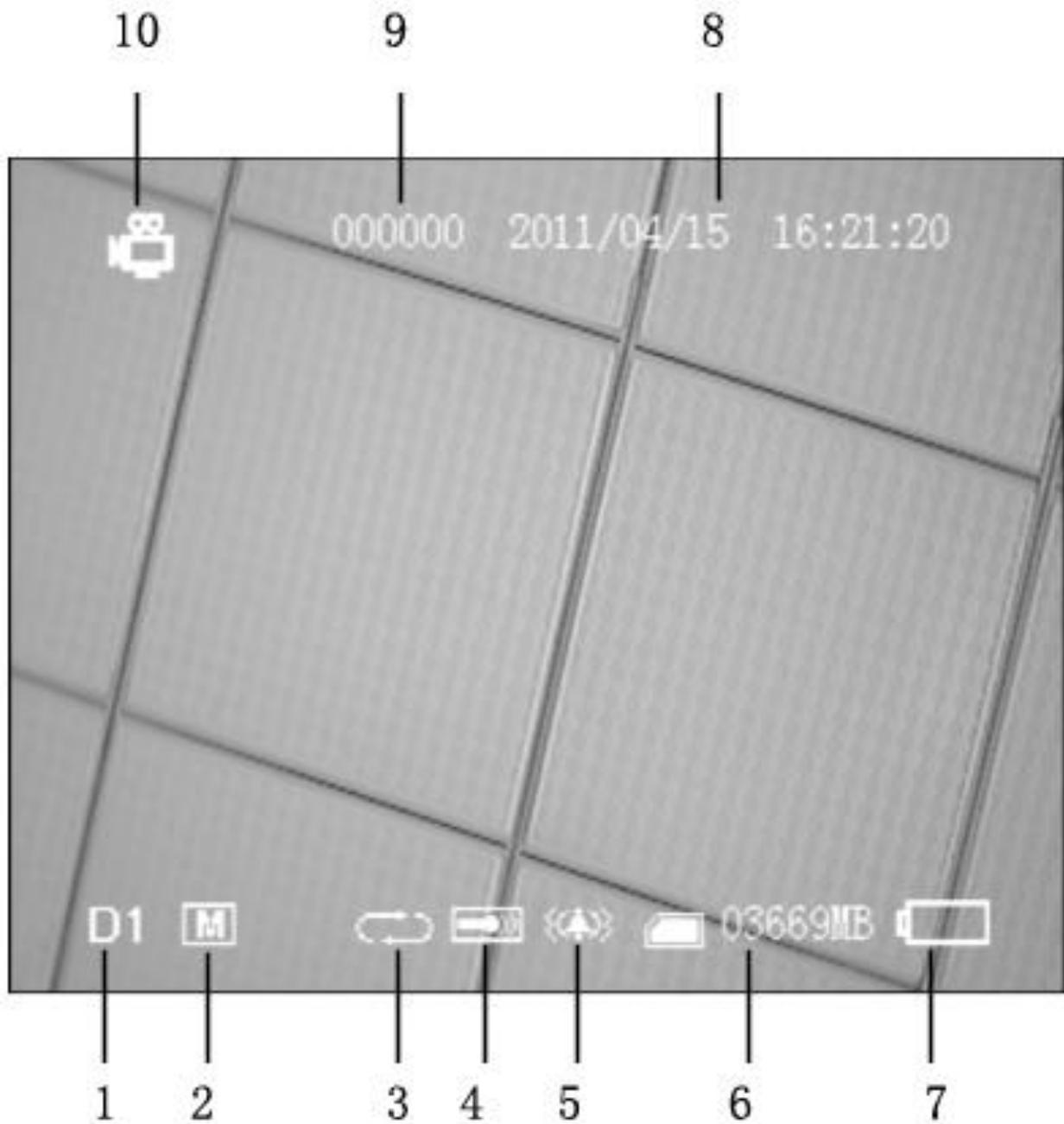
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Hardware Orientation

- | | | | |
|-------------------------|---|----------------------|-------------------------|
| 1. Power On/Off | 7. Power On/Record LED | 12. Lock Switch | 18. Enter Button |
| 2. Charge Led | 8. DC5V In Jack | 13. Internal Speaker | 19. Esc Button(OSD OFF) |
| 3. Internal Microphone | 9. USB Port | 14. SD Socket | 20. Menu Button |
| 4. AV Input/DC Out jack | 10. AV Out and Remote Trigger Switch Jack | 15. IR Sensor | |
| 5. Low Power LED | 11. Reset Button | 16. Down Button | |
| 6. Record / Stop Button | | 17. Up Button | |



Camera Interface orientation



- 1. Image Size
- 2. Video Resolution
- 3. Overwrite On/Off
- 4. Internal/External Mic

- 5. Vibration alert on
- 6. SD card available memory
- 7. Battery Capacity
- 8. Date and Time Stamp

- 9. User ID
- 10. Recording Mode

An Overview to using your MDVR with Thermal/Digital Night Vision Devices

Navigating the MDVR Menu

Power the MDVR on holding the On/Off switch to on/off for 2 seconds. The MDVR has an easy to use main menu structure consisting of three submenus including Recorder Setting, System Setting, and Even Playback. To navigate these menus use the four buttons located on the bottom of the MDVR. The M/Menu Button will bring up the main menu. The Play/Pause/Enter Button will enter a sub menu when selected. The Up Button and Down Button are used to scroll through menus, turn the audio volume up and down, and fast forward and rewind when viewing a recorded video in the Event Playback menu. The Escape Button will exit or back out of a menu.

Format your SD card(not included)

To ensure proper video recording, you must format your SD card(not included) in the MDVR. Failure to format the SD card will cause dropped frames, missing audio, video, and corrupt files. The default password to format your SD card is 000000.

You can find the format function here:

Main Menu > System Setting > Format

Set the MDVR to Video Recording Mode

The MDVR has video, audio, and image capture modes. To use the MDVR with a thermal or digital scope you will need to set the MDVR to video mode.

You can find the video mode setting here:

Main Menu > Recorder Setting > Mode > Video

Select the Internal Microphone and Microphone Volume

To capture audio while using a thermal or digital scope, select the internal microphone setting. You will also need to select the correct microphone volume level to capture a quality audio recording and avoid audio distortion. The optimum microphone volume setting for night hunting is 5.

You can find the microphone settings here:

Main Menu > Recorder Setting > Microphone Select > Internal Mic

You can find the microphone volume settings here:

Main Menu > Recorder Setting > Audio Record Volume

Turn off the button beep tone

The MDVR has a built in beep tone function that emits a beep tone when any button is pushed. While this can be useful in some situations, you will want to turn the beep tone off for night hunting scenarios.

You can find the beep tone setting here:

Main Menu > System Setting > Beep

Select a time stamp setting

The MDVR has a built in time stamp function that will record the date and time in the upper right hand of any captured video when enabled.

You can find the time stamp settings here:

Main Menu > Recorder Setting > Time Stamp

Enable the vibration alert function

The MDVR has a built in vibration alert function to alert you when a video signal is not present. This is especially useful in the field when night hunting to ensure that you are getting a good video signal from your thermal or digital device. The vibrate alert function will help to alert you when any setting may be incorrect on your thermal or digital scope, or if a video cable is accidentally unplugged or damaged.

You can find the vibration alert setting here:

Main Menu > System Setting > Vide Alert

Select Video Resolution

The MDVR has three built in resolution options to choose from including NTSC 720x480, PAL 720x576, and VGA 640x480. The majority of currently available thermal and digital scopes output an NTSC or PAL signal. You should try all three resolution settings to find the setting that best captures your scope's video output.

You can find the video resolution settings here:

Main Menu > Recorder Setting > Resolution

Select Video Quality

The MDVR has three video quality settings. Low: 2.5mbps, Medium 3.5mpbs, and High: 8mbps. Chose high resolution for the best video quality.

You can find the video quality setting here:

Main Menu > Recorder Setting > Video Quality

Select Frame Rate

The MDVR has a 15 fps and a 30fps setting. Choose the 30fps frame rate for the best video quality.

You can find the frame rate setting here:

Main Menu > Recorder Setting > Frame Rate

Use the trigger switch or record on start-up function to capture video

There are 3 ways to record with the MDVR.

- 1) Set the Record/Stop button to stop. Power the MDVR on, then set the Record/Stop button to record. To stop the recording set the Record/Stop button to stop.
- 2) Set the Record/Stop button to record, then power the MDVR on. When you power the MDVR on with the Record/Stop button set to record, the MDVR will automatically begin recording. To stop the recording set the Record/Stop button to stop.

- 3) Plug the remote recording trigger switch  into the AV Out port.  When the MDVR is off, activating the remote trigger switch (flipped to the I position on the trigger switch) will turn the MDVR on and send into recording mode immediately. Deactivating the remote recording trigger switch (flipped away from the I position) will stop recording and power off the MDVR. NOTE: Do not plug the remote recording trigger switch into the AV out port while the MDVR is on. Do not pug the remote recording trigger switch into the AV out while the switch is set to the I position. See pg 8 for full instructions.

Included Accessories



- MDVR Case
- Trigger Switch
- Remote
- RCA Video Cable
- USB Cable
- Charger

Remote Control



1. Record/Stop button
2. Up Button
3. Enter Button
4. Down Button
5. LCD/TV Switch Button
6. Exit Button(OSD OFF)
7. Menu Button
8. LCD Off Button

The remote control is useful to display recorded images and playback video on an external monitor. You can connect the MDVR to any standard signal TV to playback videos and view images. You can also choose TV/LCD settings with the wireless remote by pressing the LCD/TV Switch Button. Using the wireless remote will change the TV/LCD settings in this order: LCD--> TV PAL-->TV NTSC→LCD.

MDVR 5V Charger

Only charge your MDVR with the included 5v charger. Charging with any other charger could damage the electronics and void your warranty. The MDVR does not charge via the usb connection.

USB Cable

The USB cable can be used to connect the MDVR to a computer, but will not charge the MDVR through the USB port.

Remote Recording Trigger Switch



Activating the remote recording trigger switch (switched to the I position down) will power on the MDVR, and begin a video recording immediately. Deactivating the trigger switch (switched to the I position up) will complete and save the video recording and power down the MDVR. When properly set up, the trigger switch will allow the user to leave the MDVR powered off to save battery life, and use a seamless one-button operation to record video.

BEFORE using the trigger switch **ALL** of the following steps must be completed to ensure a quality video is captured.

- SD card inserted and formatted
- All other MDVR and thermal/digital device settings are correct including:
 - o video signal present/video export mode selected on thermal digital/device
 - o video mode(video record) selected on MDVR
 - o proper resolution(NTSC/PAL) selected on MDVR
 - o video quality(high) selected on MDVR
 - o frame rate(30fps) selected on MDVR
 - o microphone(internal Mic) selected on MDVR

Operating the trigger switch:

To operate the remote recording trigger switch follow the steps below:

- 1) Turn the MDVR off, set the lock button to the unlocked position, and set the record/stop button to the stop.
- 2) Deactivate the trigger switch (switched to the I position up). Plug the switch cable into the AV Out Jack.
- 3) **To begin recording a video**, activate the trigger switch (switched to the I position down)
- 4) **To complete and save a video recording**, deactivate the trigger switch (switched to the I position up).

IMPORTANT NOTE: Do not plug the remote recording trigger switch into the AV out port while the MDVR is on. Do not plug the remote recording trigger switch into the AV out while the switch is activated (set to the I position).

Basic Operation

IMPORTANT NOTE: Format your SD card in system settings before recording any video or audio files to ensure proper recording. Failure to format SD card can result in file corruption Default password is 000000.

How to turn the MDVR on and off:

ON - To turn the MDVR on, hold the Power On/Off  to On/Off for 2 seconds or until the RED power led light appears.

OFF - To turn the MDVR off, hold the Power On/Off  to On/Off for 2 seconds or until the RED power led light disappears.

Setting Record Modes

There are three recording modes – Record(video), Photo(still images), and Audio(sound only)

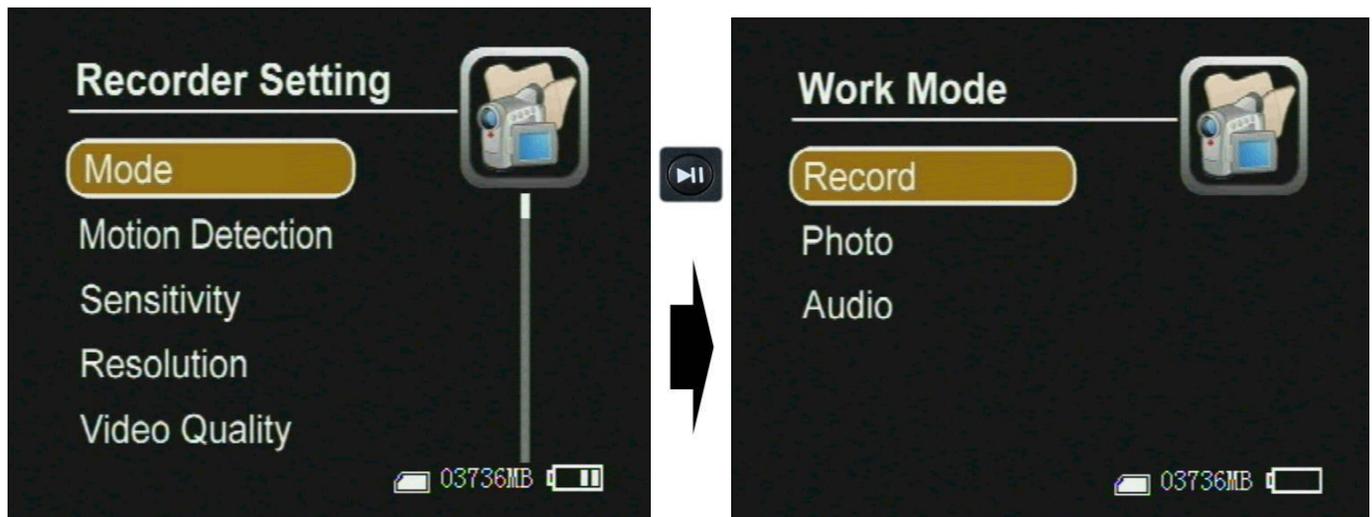


Figure 0

- Record - Use this mode for video and audio recording, the video files will be saved as AVI files in the Record Files folder
- Photo - Use this mode to capture still photons. The photos will be saved as JPG files in the Photo Files
- Audio - Use the audio recording mode to record audio files without video. The audio files will be saved as .WAV files in the Audio Files folder.

How to capture video and audio

Recording when the MDVR is powered on

When powered on, push the Record / Stop switch to Rec to start a recording. The red power led and the red dot icon on the left upper corner of the LCD screen will flash until the Record/Stop switch is pushed to Stop.

Recording when the MDVR is powered off

If the Record / Stop switch is set on Rec **before the MDVR is powered on**, the MDVR will begin recording immediately when powered on if the SD card is available. To stop the recording set the record/stop button to stop.

Using the Remote Recording Trigger Switch

Activating the remote recording trigger switch (switched to the I position down) will power on the MDVR, and begin a video recording immediately. Deactivating the trigger switch (switched to the I position up) will complete and save the video recording and power down the MDVR. When properly set up, the trigger switch will allow the user to leave the MDVR powered off to save battery life, and use a seamless one-button operation to record video.

BEFORE using the trigger switch **ALL** of the following steps must be completed to ensure a quality video is captured.

- SD card inserted and formatted
- All other MDVR and thermal/digital device settings are correct including:
 - o video signal present/video export mode selected on thermal digital/device
 - o video mode(video record) selected on MDVR
 - o proper resolution(NTSC/PAL) selected on MDVR
 - o video quality(high) selected on MDVR
 - o frame rate(30fps) selected on MDVR
 - o microphone(internal Mic) selected on MDVR

Operating the trigger switch:

To operate the remote recording trigger switch follow the steps below:

- 5) Turn the MDVR off, set the lock button to the unlocked position, and set the record/stop button to the stop.
- 6) Deactivate the trigger switch (switched to the I position up). Plug the switch cable into the AV Out Jack.
- 7) **To begin recording a video**, activate the trigger switch (switched to the I position down)
- 8) **To complete and save a video recording**, deactivate the trigger switch (switched to the I position up).

IMPORTANT NOTE: Do not plug the remote recording trigger switch into the AV out port while the MDVR is on. Do not plug the remote recording trigger switch into the AV out while the switch is activated (set to the I position).

Managing and playing back video files

Press the Menu Button , scroll to Event Playback and select Event Playback. All files on the SD card are sorted in folders by file type. Select a file type as shown in the following figure, then select a file to play. The files will be saved in separate folders for each date they are recorded and the folder name will be the numerical date with no spaces.

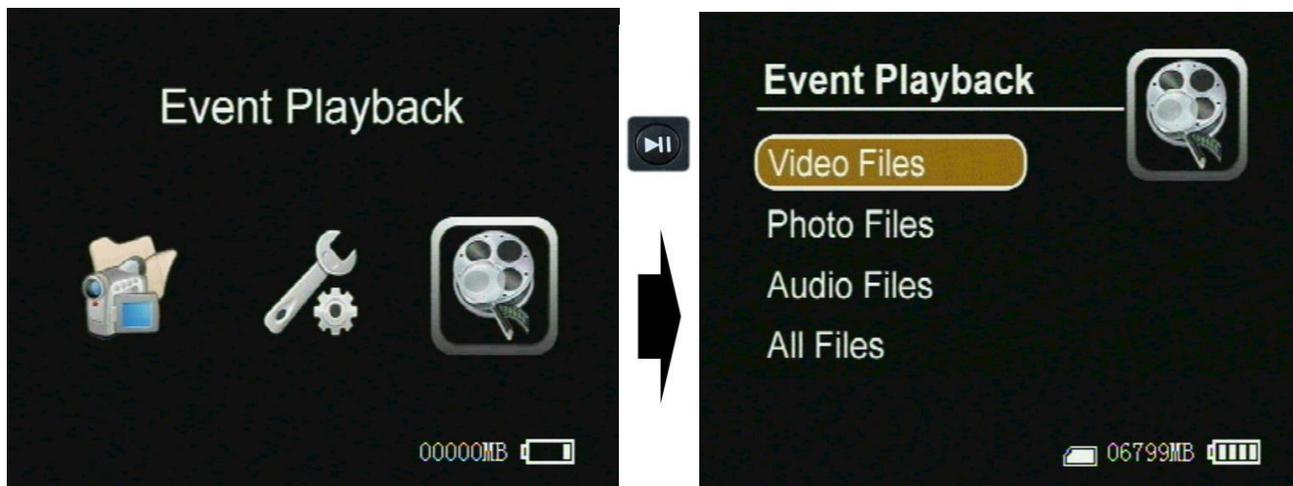


Figure 8

Playing back recorded files

To play back your recorded files select the file and press the Play / Pause button .

You can select fast forward or reverse by using the up and down buttons, and stop playing the file to return to the file folders by pressing the esc button.

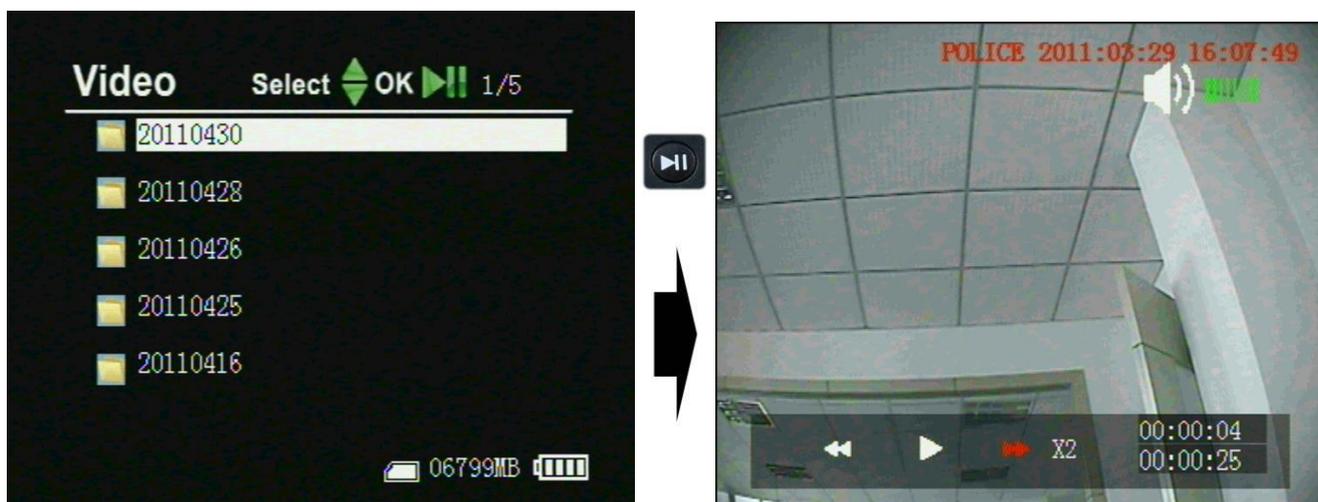


Figure9

Browsing still photos

Press the select button  on the image Viewer item to browse the still photos, press the up or down key   to view last or next picture;

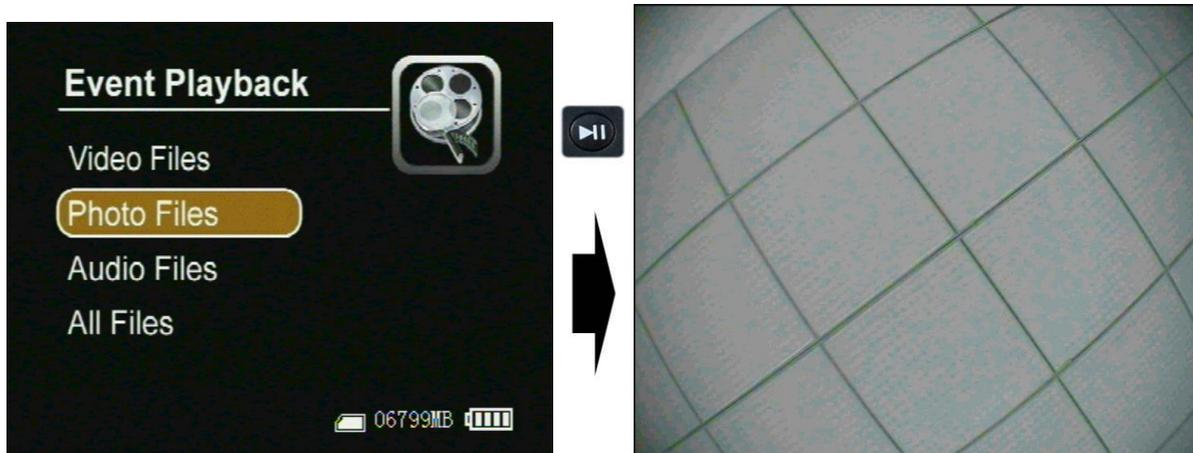


Figure10

Play back the audio files: Press the select button  on the Voice Player item to play back the audio files;



Figure11

Managing recorded files

Move the cursor onto the Files Brower, then press Select Button  to select the storage media, (the usb is a attached USB storage media), the sd is SD card, as shown in Figure 22) Folders and files will appear the screen, as shown in Figure 23; the recorded files will be listed by the order of record time, as shown in Figure 23, move the cursor to select a file, when press the Menu Button , the file manager menu will pop-up on the screen, as shown in Figure 25, you can play back, copy, paste, delete the file, or view a files attribute.

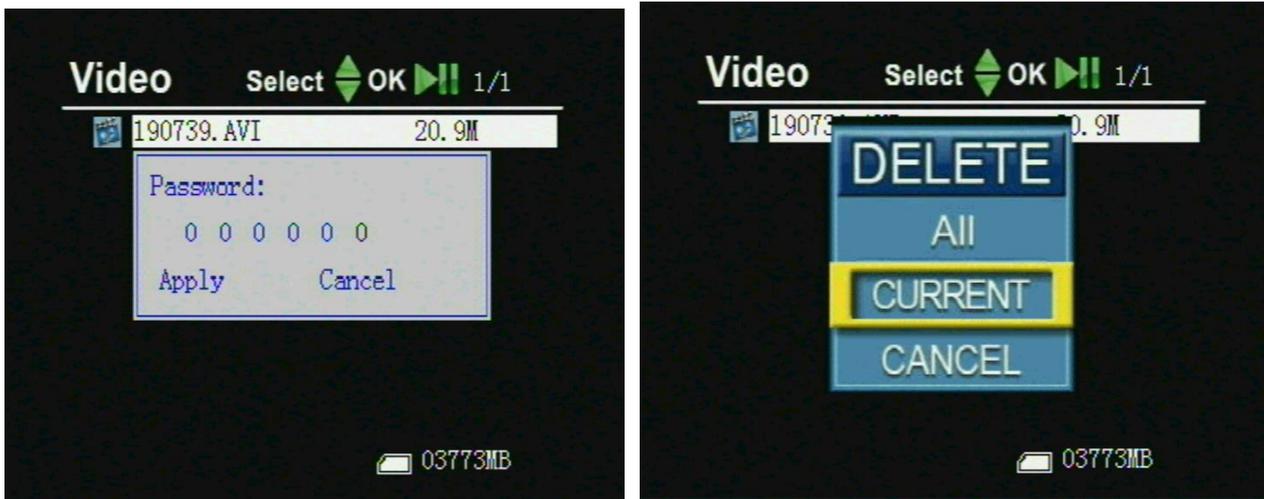


Figure 12

Default Password is 000000

How to change user ID

To change the user ID create a TXT file with your chosen ID. The ID can be up to 6 alpha numeric characters. Name the file PSDVR001.TXT and copy it into an SD card. Insert the SD card into the MDVR and power the MDVR on. The ID will automatically be changed to your chosen ID.

LCD Screen timer - Power Saving function

To save battery life, you can set the MDVR's LCD screen to turn off at 5 seconds, 10 seconds, and 1 minute. Pressing any button will turn the LCD screen back on.

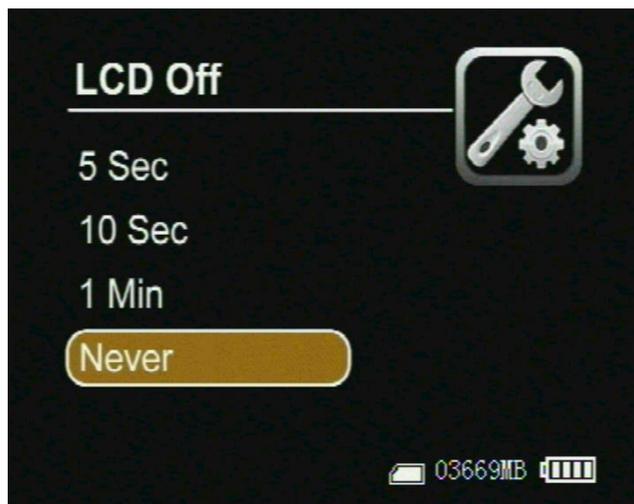


Figure3

Motion Detection

The motion detection setting is used with an external video camera not included with the MDVR. When using motion detection recording, the MDVR will be triggered to record when only the video image is changed in the motion detection area.

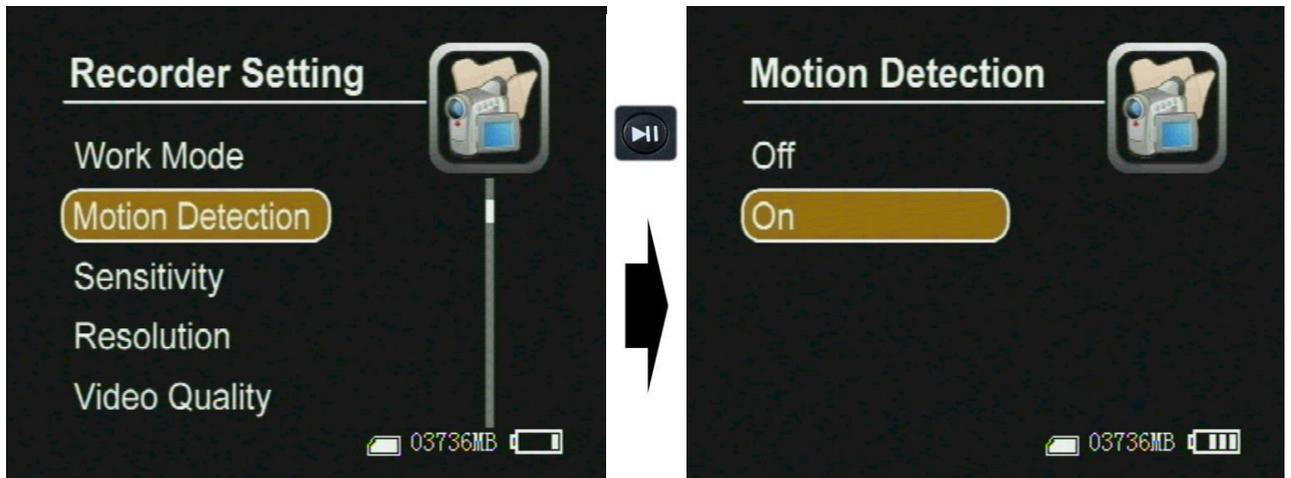


Figure6

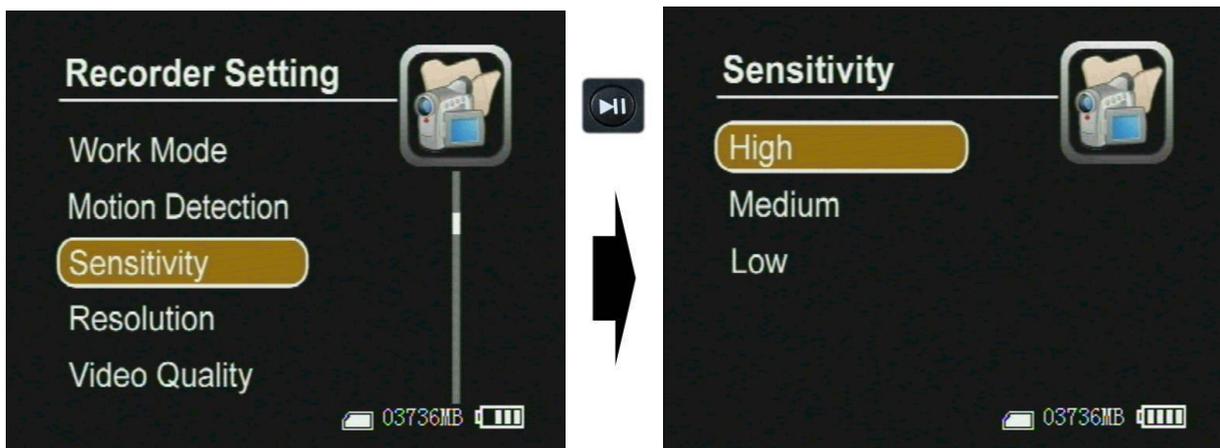


Figure 7

Recorder Settings

Resolution:

720x576(25FPS) or D1:720x480(30FPS) or VGA:640x480(30FPS)

Video Quality:

High: 8Mbps

Medium: 3.5Mbps

Low: 2.5Mbps

FPS:

15 FPS or 30 FPS

Audio Recording Volume:

Adjust volume for internal Microphone or external Microphone

Microphone Selection:

You can choose Internal microphone or external microphone for audio recording

Overwrite:

Off---stop recording when memory card is full; On---Automatically overwrite older date when memory is full and don't stop recording

System Settings

Date Time:set yourself Time and Date

Password Protection: set Password by using the  and  buttons.

Video Output:Display by LCD or TV out(Pal) or TV out(NTSC)

Power Save:set Power off and Lcd off

Vibe Alert will alert you when:

- no video signal
- have no SD card
- a recording is started
- a recording is stopped
- battery power is low

Beep: Off or On

Format: format your SD card(default password is 000000)

Firmware info

SD card info

Default Setup

Version information

DVR Specifications

Video compressed format: MPEG4 , files format: AVI

Photo format: JPGE

High Resolution LCD: 2.5, TFT true color LCD;

Audio and video output: RCA 3-in-1 AV output;

Storage type: hard disk and SD card(FAT 32 ,support over 32G);

Video size and speed: PAL: 720x576(D1)/25FPS, NTS: 720x480(D1)/30FPS

Power supply for external camera is available: Voltage: 5V max. current: 400 mA;

Video format: NTSC/PAL;

Multi record mode: Manual/Auto/Motion detection

Real-time recordings are marked in File;

Compute transfer screen: USB2.0;

Recording time: 1minute~2.5 hours /1G ;:

Power consumption: 200mA , 3.7V 1000 mAH chargeable Li-ion battery, 5.0V 2A AC Adapter;

Size: 79 mm x 51 mm x22 mm;

Weight:85g (including battery);