



Single Camera Full HD Mobile Digital Video Recorder

Model: MDVR-HDV4
USER MANUAL



Product Overview:

The MDVR-HDV4 in-car recorder is capable of providing full-HD video recording and 5 megapixel still-images. These can be viewed on the 2 inch rotatable LCD screen from the included 4GB SD card or viewed on a larger display via the mini-HDMI output, with clear audio playback recorded via the built-in microphone. The MDVR-HDV4 begins recording automatically on starting the vehicle and will overwrite older videos as the SD card is filled.

Product Features

- ◆ 120-degree wide-angle lens;
- ◆ 5 Megapixel, 1/3.2" low noise CMOS sensor;
- ◆ Records at range of resolutions (.AVI format, H.264 encoding):
 - 1080FHD(1920*1080)
 - 1080P(1440*1080)
 - 720P(1280*720)
 - WVGA(848*480)
 - VGA (640*480)
 - QVGA(320*240)
- ◆ 2 inch rotatable TFT LCD screen for video/image playback;
- ◆ Mini-HDMI output to HD TV (cable not included);
- ◆ Time and Date Watermark;
- ◆ Automatic cycled recording to overwrite old videos when memory is full;
- ◆ Built-in microphone and speaker;
- ◆ Supports up to 32GB SD Card;
- ◆ Anti-Shake still-image stabilization;
- ◆ Motion detection recording;
- ◆ 4x Digital Zoom;
- ◆ Face Detection on still images;
- ◆ Adjustable windscreen mount and car charger.

Product structure:



1. 4-direction button (up, down, left, right and in for 'OK/Record' button)
2. Mode key
3. Power key
4. Menu key
5. SD card slot
6. USB interface
7. HDMI interface
8. Lens
9. IR Lights
10. Display
11. Reset
12. Mic
13. Charging indicator
14. Work LEDs

Button Functions

Button name		Descriptions
4-Direction Button	OK/Record (push button in)	<ol style="list-style-type: none"> 1. Short press to begin recording or to take photos (depending on current mode). 2. Short press to select items when in menu. 3. Short press Play/Pause videos when in playback mode.
	Down	<ol style="list-style-type: none"> 1. Scroll down through menu functions. 2. Press and hold to ZOOM OUT in video/photo mode. 3. Decrease the volume when in playback mode.
	Up	<ol style="list-style-type: none"> 1. Scroll up through menu functions. 2. Press and hold to ZOOM IN in video/photo. 3. Increase the volume when in playback mode.
	Left	<ol style="list-style-type: none"> 1. Switch between IR AUTO, IR OFF, and IR ON when in video/photo mode. 2. Fast rewind video when in playback mode.
	Right	<ol style="list-style-type: none"> 1. Turn LCD Screen ON/OFF in video/photo mode. 2. Fast forward video when in playback mode.
MODE Button		Switch between VIDEO, PHOTO AND PLAYBACK modes and their corresponding menus.
Power Button		Power MDVR-HDV4 ON and OFF
Menu button		<ol style="list-style-type: none"> 1. Enter, select and exit menu, 2. Short press can lock/unlock video files.

Light Indicators:

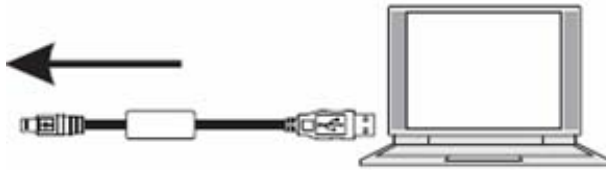
Name	Description
LED indicator	Red LED indicates device is charging; LED will turn off when charged.
	Green LED indicates device is powered on.

Charging the Battery

1. Car charging – connect car charger via mini-USB port;

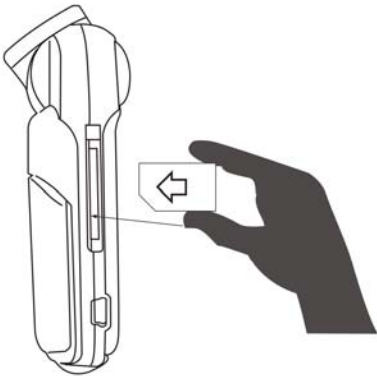


2. USB Charging – connect to computer via mini-USB port:



Installation and Removal of the SD card

1. Insert the SD memory card in the slot in the appropriate direction indicated by the image next to the slot;
2. To remove the card, gently push it inward and remove after it pops out of the slot;




Notes

1. Data previously accessible on an SD card may not be accessible following installation in the MDVR-HDV4;
2. Format SD card before using it in MDVR-HDV4; if the card is still incompatible, please re-insert again or use another card;
3. The MDVR-HDV4 operates best using high-speed SD cards.

User Guide

Power ON/OFF

Short press  power button to turn on device; long press to turn off device.

Switching Operation Mode

Short press “MODE” button to switch modes,  recording mode,  camera mode,  playback mode, these icons will displayed on the top left corner of screen.


Change System Settings

Press the MENU button twice to enter into the “System Settings” Menu:

- Date/Time: Set the date and time;
- Auto power off: Set automatic shutdown time;
- Beep sound: Turn on/off ;
- Language: Set the language;
- TV mode: NTSC/PAL;
- Frequency: Set 50Hz/60Hz;
- Image rotation:on/off;
- G-sensor:off/high/medium/low;
- Screensaver setting:off/1min/3min/5min;
- Format:format SD Card;
- Default: Return to factory settings;
- Version: Software version number

Video/Recording Mode

Recording


When in recording mode, indicated by  on the left top of the screen, press the OK/Record button to start recording. The red ● recording indicator will flash next to the icon. When you press the OK again, recording will stop and the red ● recording indicator will disappear.

Video Options and Settings

Press MENU button to enter Video Options/Settings:

- Resolution:
 - 1080FHD(1920X1080P), 1080P(1440x1080), 720P (1280X720)WVGA(848x480), VGA(640x480), QVGA(320X240)
- Loop recording: Off /5 minutes/10 minutes/15 minutes
- Exposure: -2.0- +2.0
- Motion detecting: ON/OFF
- Record Audio: ON/OFF
- Date Stamp: ON/OFF

Camera/Photo Mode



Turn the power on, the device will enter recording mode. Short Press the MODE button to switch camera mode and this icon  will appear on the top left of the screen. Press the OK/Record button (push in on the 4-direction button) to capture an image. You can digital zoom on the subject by pressing the 4-direction button UP and DOWN.

Video Options and Settings

After selecting Camera/Photo Mode, press MENU button to enter the photo settings.

- Capture mode: Select time delay in capturing image, Single (instant), 2 sec, 5 sec, 10 sec.
- Resolution: 12M(4032X3024)
 - 10M(3648x2736)
 - 8M (3264X2448)
 - 5M(2592x1944)
 - 3M(2048x1536)
 - VGA(640X480)
 - 1.3M(1280X960)
- Sequence: Capture 5 images in quick succession
- Quality: fine, normal and economy
- Sharpness: Strong, normal and soft
- White balance: Auto/daylight/cloudy/tungsten/fluorescent
- Color: Normal/black-white/sepia
- ISO: Auto/100/200/400
- Exposure: -2.0- +2.0
- Face detection: Off/face detection/smile detection
- Anti-shaking: Off / On
- Quick review: Off /2 seconds /5 seconds
- Date stamp: Off/Date/ Date & time

Playback Mode

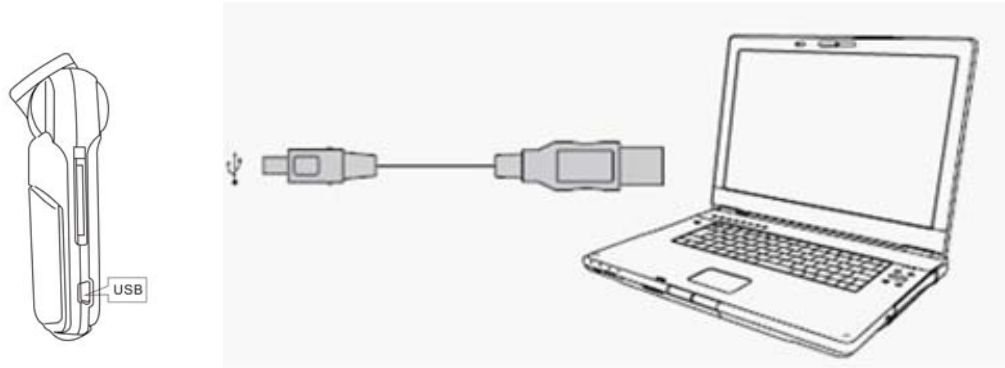
From Video/Recording mode, press the MODE button twice to select Playback mode. Scroll through videos using LEFT and RIGHT on the 4-direction button. Press UP or DOWN to see a tiled overview of the recorded material on the SD card. When reviewing individual files, videos are indicated by this icon  and image files are indicated by this icon . Videos can be played and paused by pressing the OK button or fast-rewind/fast-forward using the left and right buttons respectively.

Playback Options and Settings

- Press the MENU button in playback mode to see the delete and formatting options; you can delete the current file or delete all files stored on the SD card.
- Additional Options include
 - Protect: Lock Current/Unlock Current/Lock All/ Unlock All
 - Slide Show: 2sec/5sec/8sec (delay between images)

Transfer Files to PC

Using the mini-USB to USB cable, connect the MDVR-HDV4 to PC. Select 'Mass Storage' on the unit when it appears on the screen and press the OK button. Autoplay will detect the SD Card, select "Open folder to view files" to remove the recorded content. The content can also be accessed via My Computer, in a similar manner to a removable disk/flash drive.



Additional Notes:

- Compatible with computers running Windows 2000 or later or Mac OSX 10.3.6 or later.
- MDVR-HDV4 can also be used as a web cam by selecting "PC Camera" when connecting to computer via USB cable.
- The unit will power off upon removal of USB cable.
- The device can also be used as portable disk when not in use as a recorder.

Connect to TV/Monitor via HDMI

- The MDVR-HDV4 can be connected to a HDTV or computer monitor via HDMI for playback of videos and images.

Technical Specifications

Screen	2" TFT LCD
Lens	120 degrees wide angle lens
Language	English, French, Spanish, Germany, Italian, Traditional Chinese, Simplified Chinese, Russian, Japanese
Video	1080FHD(1920*1080P)/1080P(1440*1080)/720P(1280*720)/WVGA(848*480)/VGA(640x480)/QVGA(320*240)
Video format	H.264
Photo Size	12M/10M/8M/5M//3M/VGA/1.3M
Photos format	JPEG
Flash record	1 sec flash record
Storage medium	SD/SDHC Card (Up to 32GB)
Mic/Speaker	Built-in
Camera mode	Single shoot, timer and burst shooting
Light Frequency	50Hz/60Hz
Television Output	NTSC/PAL
USB interface	USB 2.0
Power	5V 1A
Battery	3.7V 650mAh

Appendix Troubleshooting Guide

Operating Troubles	Possible Causes
Cannot power on	<ul style="list-style-type: none">• Battery may be too low, recharge the battery.
Battery doesn't charge	<ul style="list-style-type: none">• Ensure charger is connected to PC/car and the device correctly.
Cannot Record	<ul style="list-style-type: none">• Check SD card is inserted into device;• If there is any further indication that something is wrong with the SD card, format the card from the unit and try again.
Blurry images	<ul style="list-style-type: none">• The lens may be dirty or plastic covering still in place.
Cannot connect to PC	<ul style="list-style-type: none">• The USB cable may be connected incorrectly.• Ensure unit is powered on
No images on TV via HDMI	<ul style="list-style-type: none">• HDMI cable may not be connected tightly and correctly.
System crash (no pictures or pictures don't move and also don't work after pressing any button)	<ul style="list-style-type: none">• Unplug the power, press the reset button.