ML-9QD

Monitor 9 "with built-in DVR 4 channels

PRODUCT DESCRIPTION

ML-9QD is a monitor with video recorder can handle up to 4 cameras. And 'it developed for use in vehicles such as trucks, motor homes or public transport. E 'able to guarantee viewing and recording in any condition, even in the presence of strong vibrations and mechanical impacts caused by impacts or accidents.

ML-9QD is useful for enhancing the visibility of the driver, with lateral cameras or reverse and also as a "black box" able to document what happened during driving in case of accident.

ML-9QD can also record the vehicle is stationary, with surveillance purposes. E 'can also use it as a compact safety VCR for houses or shops, wherever you are claiming a video surveillance all-in-one system with minimum dimensions.
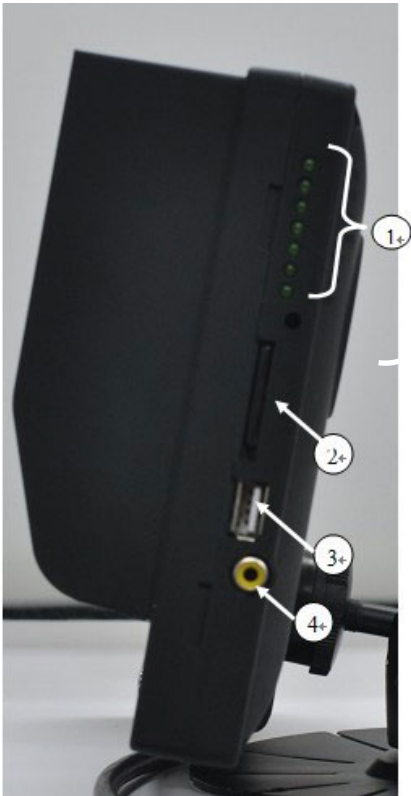
MAIN SPECIFICATIONS

video Inputs	4 female RCA inputs - 1 Vp-p 75 Ohm
audio Inputs	4 audio inputs RCA female - 2V pp 50 Ohms
video Output	1 TV output Conn. RCA-1 Vp-p 75 Ohm
power Output	4 12VDC outputs for cameras
built-in speaker	Yes - Volume adjustable from the front panel
Removable Memory Support	SD Card 4GB SDHC min (order separately)
built-in Monitor	9 "TFT monitor
Digital resolution acquisition	D1: 704x576 @ 25 f / sec
Capture rate	25 frames / second
Compression	H.264 video - ADPCM audio
Recording Capacity	Over 1 hour per GB of space occupied (4 bedrooms)
Infrared remote control	including
USB port	It - Supports USB drives for backing up movies
Video Recording Options	Manual / Timed / Motion Detection
Override automatic	Yes
overlay	Date / Time / Camera name (programmable)
password protection	User passwords with configurable access levels
Playback options	Normal / Slow / Fast forward
Switching on and off automatically	4 programming day / hour
Wiring with the middle unit	Switching on and Reverse (12VDC inputs)
LCD Monitor	9 "LCD 16: 9
Resolution	800xRGBx480
Brightness	300cd / m2
Contrast	150: 1
Supply	8 ... 32 VDC
Absorption	15W
Operating temperature	0 ... + 40 ° C
Operating Humidity	Less than 90%
dimensions	235x158x72,5 mm.
Weight	700 gr.

CONNECTIONS AND ASSEMBLY

ML-9QD is supplied complete with a practical support bracket assembly also with adhesive. The bracket is made up of segments that can

be shaped so as to adapt to any type of surface, even curve.

1. LED indicators:

   PWR: Power LED. It lights up when power is present RUN: Flashes when the DVR is in operation. ALM:
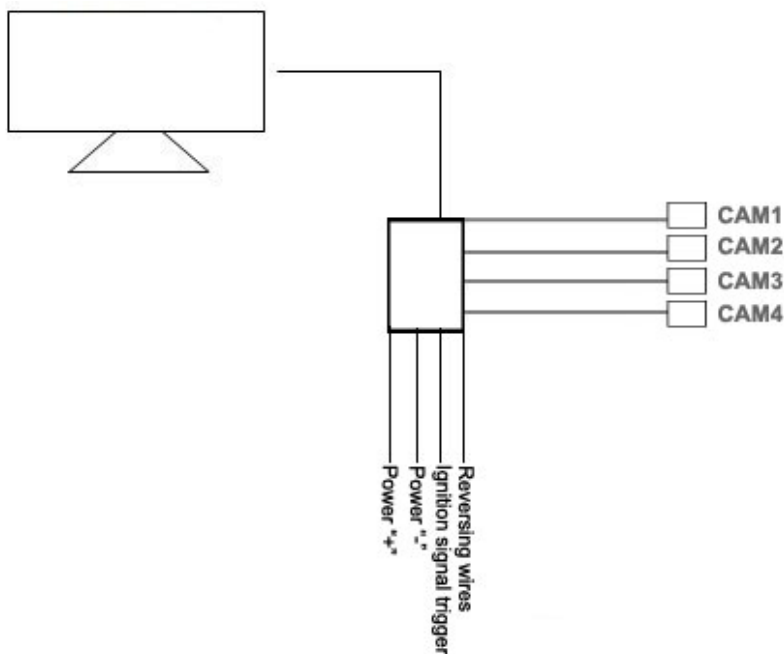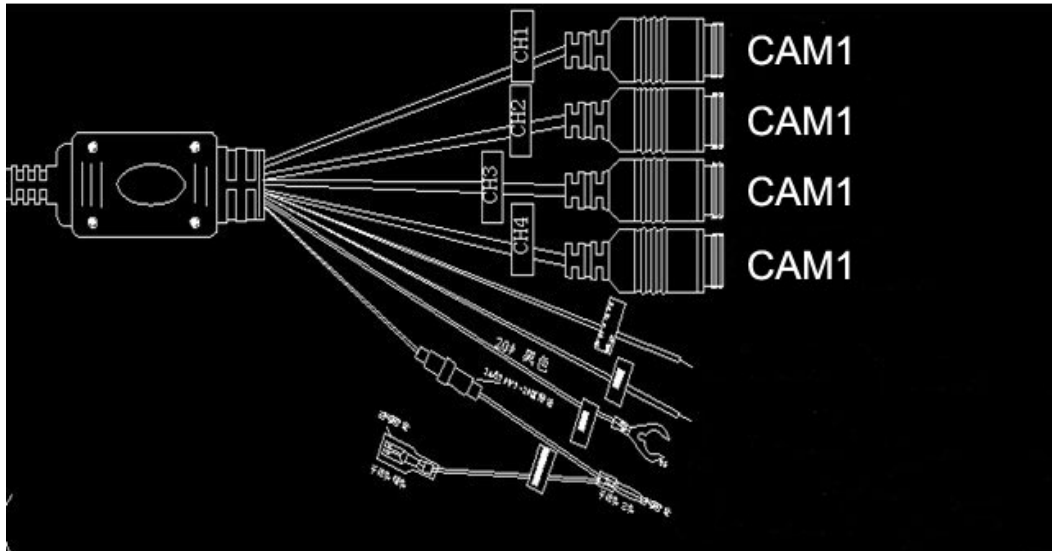
   Lights in Alarm

   VLOSS: Lights in case of lack of a video input REC: Lights when the DVR is recording

   SD: It lights up if there is an SD memory card support. NC: Not used

2. SD card slot. Insert the SD memory card (not included)

3. USB port for computer

4. Video output for external devices

CAMERAS - For each camera it is provided equipped with a DC jack adapter cable for the 12VDC power supply of the camera, yellow RCA connector for video and white RCA connectors for audio. There are 4 endings CH1,2,3,4 to extend at will.

SUPPLY - Apply the battery positive (or 12VDC power supply) to the red wire + 12V and the negative to the black wire GND. The ACC yellow wire must be connected to the ignition cable or also to the positive 12VDC battery.

REMOTE CONTROL

1. Power: Turn on and turn off the DVR. Must hold **for at least 5 seconds**

   because the command to take effect.

2. FN: Several functions in the setup menu displayed on the screen.

3. MENU: Accesses the Control menu that lets you change the view (quad / full screen),

   operating mode (record / playback) and enter setup

4. MULTI: Back to quad display

5. SHIFT : During playback, displays the control bar

6. ESC : He exits the mask in which there is located

7. REC : Start manual recording

8. : Research and plays movies

9. VOIP: It has the function of the mask adjustment

10. MUTE: In active play and mute the sound

11. OK : Displays system information

SD CARD

ML-9QD can record to an SD card which is slotted into the side slot. You can use an SD card of any brand as long as **greater than 4 GB.** Before

you can use the SD card for recording must format by accessing the HDD menu that will be described later.

KEYBOARD FRONT

On the front of the monitor are 6 buttons with the following functions:

ON / OFF - Use this button to turn off the monitor while maintaining the DVR recording. To fully turn off the device must hold the remote control button for at least 5 seconds.

V1 / V2 - Not used

- / + - Adjusting the volume

MENU - Adjusts the +/- buttons the following parameters: Brightness, Contrast, Saturation, Volume, Language.

MODE - Select 4 different modes of video output.

OPERATION

POWER ON

There are three ways to start the DVR:

> 1, press the "Power" button on the remote control for 5 seconds.

> 2, Activation via the ignition signal from the cable ACC

> 3, timed activation on an hourly basis.

At the end of the start-up the POWER LED will be on and the RUN LED will be flashing.

SHUTDOWN

There are 3 ways to stop the DVR:

> 1, press the "Power" button on the remote for 5 seconds

> 2, Automatic shut off via the auto stop signal

> 3, timed shutdown on an hourly basis.

It is recommended to perform one of the 3 Shutting options indicated before the DVR power off to avoid damaging the SD card.

HOW TO OPERATE IN THE CONFIGURATION

In the configuration menu it is operating with the remote control navigate the arrow keys and the ENTER button, keeping in mind the following instructions:

> 1. In enabling panes: "√" means selected. Working with the navigation arrows and with
>
>   the OK button

> 2. In the selection panes: they provide 2 or more options and it is possible to choose one acting with the
>
>   remote control arrows [↑], [↓].

> 3. In the list boxes: It lists various items and you can select only one with
>
>   arrows or other with the "0" or FN. Example list pane is the list of files being played

> 4. Boxes added: To enter the text you are working with the following commands.

> to) Press the [FN] button to change input modes (letters, numbers, symbols, etc.)

> b) Press [VOIP] to delete the character before the cursor
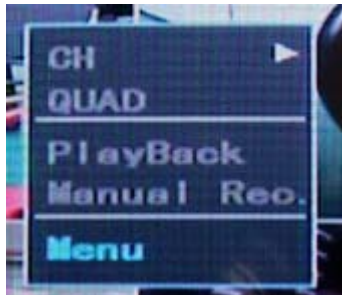
> c) Press [MENU] to exit and save typing

MAIN MENU

to press 【 MENU 】 to access the control menu

It is prompted for an administrator password if you have not made customizations you can leave unchanged:
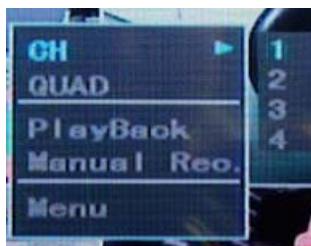
AMMMINISTRATORE PASSWORD: XXXXXX

The menu includes three sections.

CH: You can select the full screen channels 1,2,3 or 4. The QUAD: Porta-screen

multivision quad PlayBack: Access to the reproduction of recorded movies. Manual

REC .: Starts manual recording Menu: Enters configuration

CHANNEL SELECTION

Select the channel to select the full screen. to press 【 Multi 】 to return to

quad.

PLAYBACK - REPRODUCTION

Pressing Playback opens the playback window that lets you search for movies recorded on SD card.

E 'can choose the channels to be reviewed and the type of recording. In the spaces START TIME and END TIME to set the time period over which

to search. In MEDIA space select SD card. E 'then you can also choose which types of recording search: MANUAL: Recording started with manual

control ALARM: Off

MTD: Recordings made on the basis of motion detection (see below) SCH: Recordings made on the basis of the time

programmer.

The SEARCH button displays the available video files and lets you select them. The PLAY BY TIME button start directly the playback of the selection.

The BACKUP button allows you to save movies on a USB stick. E 'should only use the SEARCH button which then allows you to view video files and

select them using the remote control button FN. Once csleti movies, you can proceed to the reproduction or the Backup to USB.

Movies are saved on the USB stick into IFVs formed.

The CD is a utility to be used for playback of movies IFV (PLAYBACK / OPEN button)

MANUAL RECORDING

To start manual recording, you can press Menu and select RECORD, or directly press the button 【 REC 】 the remote control. It appears the

channel selection window.

Select the cameras you want to record and start recording with START ALL. It is necessary that the user has the authority to start recording and an SD

card is inserted into the slot.

To stop recording, press STOP ALL.

CONFIGURATION - TOOLS

To configure the DVR programming, press the MENU button on the remote

The menu includes several categories TOOLS the first icon gives access to another mask

HDD

This section displays the status of the storage medium. As no hard disk embedded in this product you can only view the SD card support. The picture

shows CAPACITY ', and FREE SPACE FORMATTING OF STATE.

Because these data are visible to the formatting of the SD card it is necessary to proceed with the FORMAT button.

Make sure that the recording is not active while operating functions that relate to the SD card. The SD UNPLUG button allows for safe removal

of the SD card without turning off the DVR

USER

It allows you to insert users who can access the DVR.

Click on the ADD button to add a new user

And 'possible to enter a user name with characters and numbers (change modes with the fn key) and the access password. Then they define the

authorized access. This DVR, in consideration of its use, does not allow remote connection for which you can only define LOCAL RIGHTS (Local

Rights). RECORD (check register), PLAY (watch recordings), the SET (programming), LOG (event memory), TOOLS (voice of programming TOOLS).

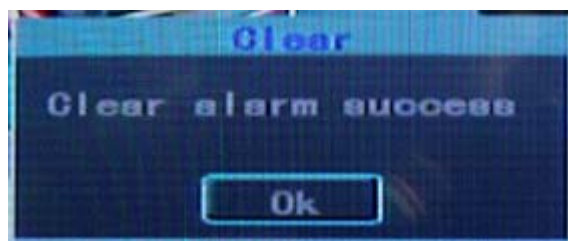CAUTION. Only the ADMIN user can change the level of access of other users.

DEFAULT

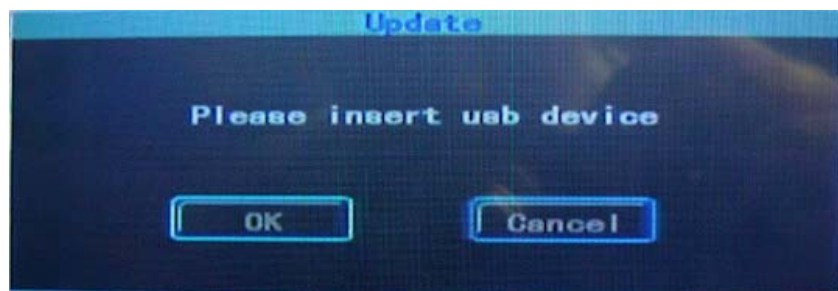Restore the factory settings. After restore the DVR reboots.

CLEAR ALARM

Reset and erases all the alarm signals.

UPGRADE

After receiving the firmware update file (**MDVRB_V version number. Bin)** you can upgrade procedures uploading it to a USB stick and some acting

in this part of the menu.

It 'also possible to an automatic update procedures by inserting the key and starting the DVR. In this way, if the system finds in stick a newer firmware

will automatically upgrade

TIME

It allows you to insert date, time and format. You must stop recording to be able to change the system time.

ABOUT

Show the product version

EXPORT

It allows export DVR configuration on a USB stick, which can then be imported to another device.

SETUP - SET UP

Press the MENU button on the remote

and then the SETUP button. The window that appears offers several option icons.

See above is the system setup menu

SYSPARAM - SYSTEM

Standard: It defines the camera video standard: PAL or NTSC. The factory size is the Italian PAL standards.

Overwrite: By choosing "Yes" when the space available on the SD card will be exhausted overwrites the oldest data. "No" stops recording.

Lock Time: If no command is given to the system for the set time, the DVR performs a LOG OFF automatic and requires a new log-in to access. Choose and NEVER want the DVR does not execute the automatic LOG OFF.

Auto Switch: This function allows the automatic scanning between the cameras with a scan time of your choice. Select NEVER if you do not want the autamatica scanning video cameras.

Transparency: adjusts the OSD transparency.

Language: Select the overlays (available only English language)

To Disk: The write range of SD card for memory protection. Recommended to keep the factory setting.

Show status: Shows or hides the status of the camera icon on the live screen.

Dual Delay (s): Delay in seconds reported the following entry PREVIEW

preview: E 'Please select Additional which can display automatically activated at start of the DVR (Quad, 1, 2, 3, 4). This view is automatically activated after the delay set in the previous Dual Delay box.

ACC DELAY: The ACC yellow wire must be connected to the ignition cable that provides tension when the car is running. If this voltage is missing the DVR will automatically turn off after a period of time that you set here in minutes. If you do not want to tie the operation of the DVR to the operation of the means to connect the ACC cable together with the positive 12VDC power supply.

STARTUP MODE: Defines the DVR start mode. In the ACC mode DVR will automatically start to reach the positive 12VDC on the ACC input which is connected to the ignition signal of the car unit. In the DVR mode SCH starts on ignition basis programmed in TIMING section or following a manual command from the remote control. If you use the SCH ACC yellow cable mode is permanently connected to the positive 12VDC.

VALID CHANNEL: Not used

REGISTRATION

This section allows you to set the video parameters of the 4 channels

Channel: Choose the channel to be configured 1,2,3,4

Stream: Select MAIN. SUB Channel unused

Stream: = Only Video Record Video, AV = Record Video + Audio.

CBR / VBR: Select between constant bit rate (CBR) or variable bitrate (VBR). If you select CBR streaming video will occupy the bit rate to be set later in

BitRate box. If you select VBR you can choose the image quality.

Bit rate: The higher the bit rate higher video quality and memory occupation.

Frame Rate: The number of frames per second as a rule is left on a maximum of 25 f / s but it can be reduced to save memory.

Image quality: VBR setting for the option

Copy to: Copy the channel's configuration to another to save time.

VIDEO

In this section you can adjust the video made by acting on the parameters of the image.

Channel: Choose the channel to be configured 1,2,3,4

Name: Set the camera ID name.

Show name: Press ENTER to choose the arrows show the position where the camera name overlay

Show Time: By pressing ENTER you can with the mouse to choose the position to display the date and time stamps
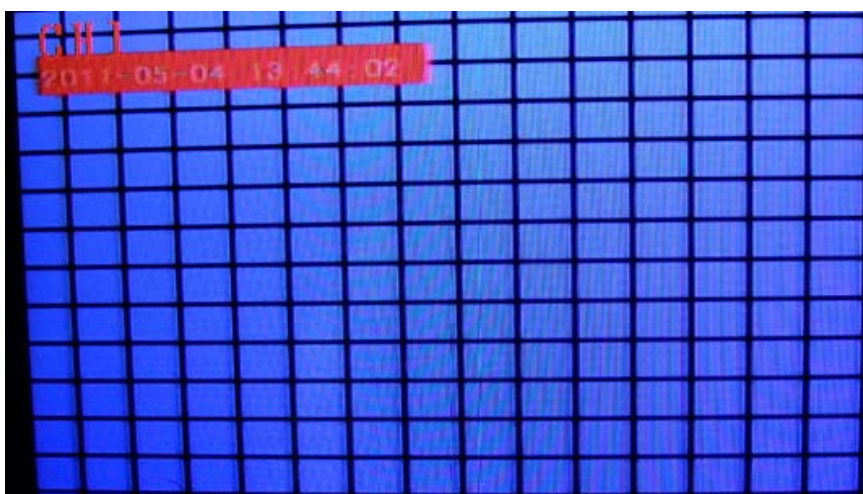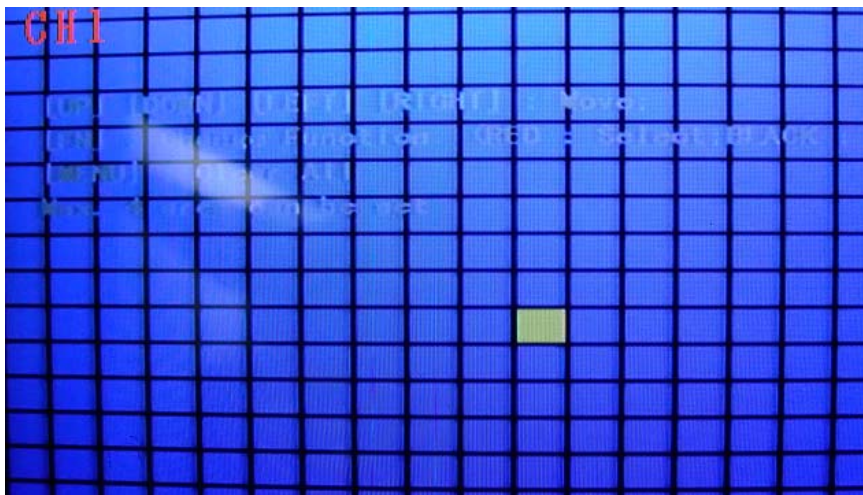
Brightness: adjusts the brightness.

Contrast: adjusts the contrast.

Hue: The rule tones.

Saturation: adjusts the color saturation.

Blind: E 'can set up to four masked areas to meet privacy requirements. Press ENTER to access the area definition. To set the area to move the yellow frame to the desired location, then press FN. The box turns red: act on the arrows to define the masked area

To eliminate the masks created press MENU. To select all press VOIP.

Copy to: Copy the channel's configuration to another to save time.

Overtime: not utitlizzato

ALARM IN

Not used on this model

SCHEDULE

For each channel, it is possible to establish programmed recordings depending on the time of day and day of the week.

Channel: Choose the channel to be configured 1,2,3,4

Week: Choose the day of the week

Time 1,2,3,4: They are available 4 time periods per day to be programmed at will. Next to the time slot you can define: SCH recording conitnua, MTD

not used, ALARM unused. The timelime displays the programmed bands.

Copy to: Copy the channel's configuration to another to save time.

EXCEPTION

E 'can sound the buzzer at twenty anomalous. They managed the following events:

Vloss: Video loss

HDD Full: SD card full

HDD Error: Error Writing to SD card

VIDEO COVER: masked Camera

MTD

Here it is possible to set the motion detection parameters in order to activate the recording and the audible alarm if motion is detected.

Channel: Choose the channel to be configured 1,2,3,4

Sensitivity: the detection sensitivity

Duration: Alarm duration in seconds

Recording Channel: Select which channel to record when motion alarm

Buzzer: Activate the buzzer alarm

PTZ

Not available

LOG

It contains all events stored on the DVR that you can search by defining a period of time and pressing SEARCH.
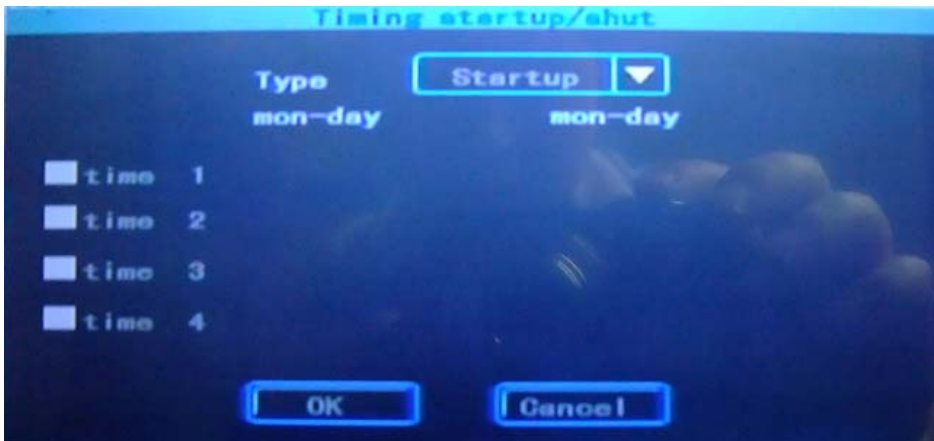
SHUTDOWN

In this window you can do the following

RESTART - Restart

SHUTDOWN - Shut Down

LOGOUT - Exit the menu by requiring a new log in to access

TIMING

And 'possible to program the start and / or the automatic shutdown of the DVR on calendar basis. There are 4 programming (TIME 1,2,3,4). For each of

them first if they define a calendar period of month / day month / day, then press SET to set the days of the week and time.

BUS ABOUT

It contains the information on the device

OVERLAY

In this section you can define which information to keep superimposed and which not. The following overlays are available: Time / Date, Channel Name,

No BUS, Video lost alarm. E 'can choose to view this data or not distinguishing ago visualization in real-time and

recording.