User's Manual

Please read the instruction manual completely
before use and retain it for future reference

Contents

1. Chapter 1 Product Overview

1.1Product Description

RM-901QDVR   is specifically designed for trucks, SUV, Police Patrol vehicle, school bus, Jeeps and others, to recording the traffic video into SD card and play back by the integrated monitor, It adopts industry standard shock proof technology to decrease damage of recording devices and recording data.

RM-901QDVR   can also be used for home security, public security, connect to different kinds of cameras, it is a low cost video recording device, can be installed very quickly and easily.

1.2 Specification

Digital Panel 800x480xRGB resolution
16:9 display
System resource: 4 Channel real time recording.
Video Format: PAL、NTSC
Video compression   H.264
Audio Compression   ADPCM
Recording by: Manual, timer, alarm(option)
Searching by: Time, Channel, Event.
Back up: Through USB
Video Input   4 Channel with 4 pin connector
Video Output   1 Channel with RCA connector
Audio Input   4 Channel with 4 pin connector
Audio Output   1 Channel with 4 pin connector
Display   Single, Quad picture
 Recording speed   PAL:25 FPS (adjustable)   NTSC : 30 FPS (adjustable)
Video Save: SD card, U disc
Play back   1 channel, 4 channels
Alarm input: 4 triggers (Optional)
Save interface: 1 USB and 1 SD
Ignition Signal   1
Power supply   DC 8V~32V.
 Working temperate : 0℃～60℃
Storage temperate :-10℃～70℃
 Dimension : 138×120×40mm

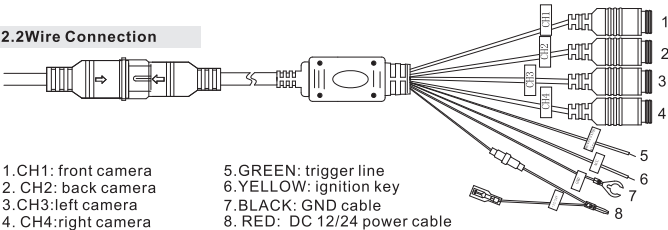# 2. Chapter 2 Structure Introduction

2.1 Interface

Front View

1）LCD panel   6)Menu

2）IR zone   7)Positive increase

3)Power   8)Mode selection

4)VI/V2 change   9)window remocon

5)Negative Decrease

1   2   3 45 67 8 9

Side Introduction

1

2

3

4

1. LED Definition:
Power lights: boot light; Soft shutdown,
power supply lamp.
RUN the lamp: normal work, the flashing lights; Soft shutdown after, this ChangLiang lamp.
ALM: The light will be on when any alarm was input.
VLOSS: when Video channel was lost, the light will be on.
REC: When start recording, the light will be on.
SD: When the SD card was inspected, the light will be on.
NC: Not used
2. SD card slot
3. USB interface
4. AV out with RCA connector

2.2Wire Connection

1.CH1: front camera   5.GREEN: trigger line
2. CH2: back camera   6.YELLOW: ignition key
3.CH3:left camera   7.BLACK: GND cable
4. CH4:right camera   8. RED: DC 12/24 power cable

Front View

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REC: When start recording, the light will be on.
SD: When the SD card was inspected, the light will be on.
NC: Not used
2. remote control window
3. SD card slot
4. DVR packet lock
5. USB interface
6. AV output RCA mouth
7. audio and video input/output interface
8. the power input interface: black line grounding, yellow connected 8 V-35 V, red connected ignition signal ACC

2.4 Input and output lines that connect

VIN1-VIN4 meet aviation security camera

VOUT meet LCD monitor

video
audio
4
3
1 +12V
2 GND

video
audio
4
3
1 +12V
2 GND

3. Chapter 3 Operation Instruction

3.1 Remote controller

1. Power: to turn off the DVR, press longer than 5s to take effect.
2.FN:
To select the file in the recording file list, for back up.
Switch the input method for the soft key board.
Moving the detect area set up, and change the status of select area.
3.MENU:
Enter the Set up Menu
Exit from soft key board
Clear all area set up
4.MULTI: Set up for quad pictures
5.SHIFT：When playback, can display and hide control bar.
6.ESC：Exit from set up menu
7.●:Manually start the video recording.
8. ►:Search and Play video.
9.VOIP: Select all when set the detection area.
10.MUTE： When play back， enable and disable the voice.
11.OK：Display the system information

4. Main function introduction

4.1 Power On

After connect with 12V DC power supply, system start power on, after start up finished, "power" light will display green color, and "Run" light will be blinking. There will be 3 ways to start up the system:
1, Press "Power" in remote controller and hold for more than 5s;
2, the ignition signal trigger from the car;
3, System setup timely power on.

4.2 Power Off

3 ways to power off without disconnect the power:
1. Press the "Power" button in remote controller and hold for more than 5 seconds.
2. Turn off signal from the car
3. System set up for timely power off
Power off by disconnect the power supply, please power off by remote controller first then do the power supply disconnect, incase the damage of SD card or HDD.

4.3 Menu operation

4.3.1 Enter Menu

Press the [MENU] button to enter the main system menu as below picture

4.3.2 Notes for the Menu
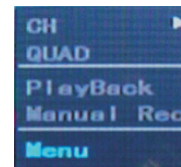Menu has different kinds of operation ways as below:
1）Multi-check box: "√" means selected, blank means not used. Operated by the remoter controller button [ok] and [↑], [↓].
2）Select box: providing 2 or more selections but only select 1 of these. Operated by the remoter controller button [↑], [↓].
3）List box: Display the searching area in the list box, user can select one of these from the list box and press [OK] to play, if press "0" or [FN] to select/de-select the files, to do the video back up.
4）Edit box:
a) By the [FN] button in remote controller to switch the input method and character type, including number, letter and symble.
b) Moving the cusor position by press the [←], 【→】 on remote controller.
c) By press【viop】to delete the character before the current cusor.
d) By press【MENU】to exit the edit status and save.
5）Press【OK】to enter the sub-Menu.

4.3.3 Exit the System Menu
By press 【ESC】to exit the system menu and switch to pre-view model.

4.4 Main Menu

Press【MENU】button in remote controller will display the below menu, including 3 parts.

CH: Switch the display channel from 1 to 4.
QUAD: Switch the display mode from single picture to quad pictures
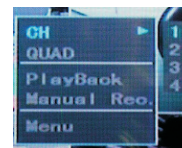PlayBack: to play the recording video back.
Manual REC.: to start recording by manual setting.
Menu: this will including all the system settings as below pictures

4.5 Channel display

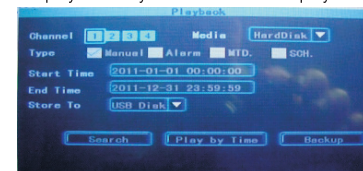Select the number in remote controller to view the selected channel.
Quad picture: press 【Multi】 button goes to quad picture.

4.6 Playback

Enter the play back menu
Select the channel and play media by remote controller to play back

4.7 Manual recording

Enter the Manual Rec. Menu
Press remote controller button 【 ● 】 to start recording.
User has to select the channels for recording, by check the box to select, green means it is started.
Remind: Manual recording require the user has the right to do this operation, and make sure the recording media like SD card or HDD has been installed correctly.

4.8 Menu

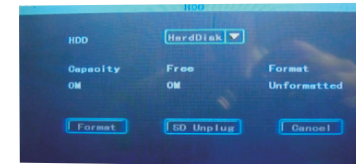Main menu including the information of tools, setup, PTZ, Log, Shutdown, Timing, Businfo.

4.8.1 Tools

Including information HDD, User, Default, Clear, Update, Time, Export, Info.

4.8.1.1 HDD
Check the HDD status, HDD capacity, space can be used, and do the HDD format.

Format: To do the format of HDD or SD card.
SD Unplug: To unplug the SD card by use this command, to avoid the damage of SD card, if the SD card was not unplugged in 10s, the SD card will be re-loaded again.
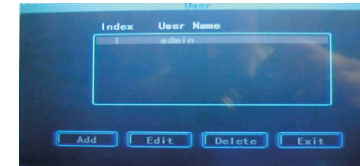
Note: 1. Please do the format when connect with new HDD or SD card.
      2. Stop any recording when do the format.

4.8.1.2 User Management

Add user and set the user permission and password
Add user
Enter the menu of User management.

1. Users management
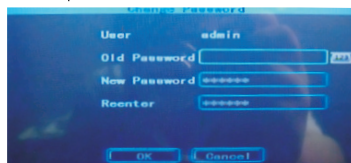By chose the Add, Edit, and Delete command to manage the user account.
2. Set password
User can set the password after "Add" was selected
3. Set up the user permission

Change password

Attention: Admin can modify the permission of other users, other no-admin users can only modify it's own password and permission.
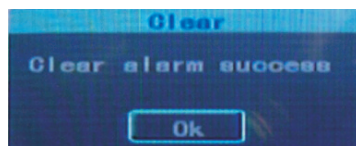
4.8.1.3 Default
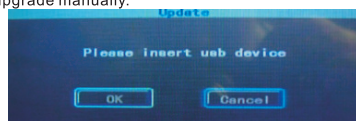Set the system parameter to the factory default setting, after it is done, system will be re-booted.

4.8.1.4 Alarm Clearance

Manually clear all alarm output, after all are cleared, system show " Clear alarm success" and goes back to main Menu.

4.8.1.5 Software upgrade
Manually upgrade: System support USB upgrade, to plug in the U disc with the upgrade file, and select "OK" to upgrade manually.
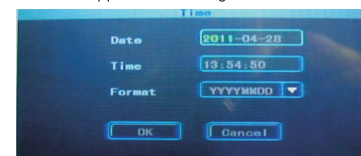
Automatic upgrade: Plug-in the U-disk with the upgrade file, and re-boot the system, during re-boot, system will check the software version, if the version in U-disk is different with the system version, upgrade will be done automatically, and a beep will be heard after the upgrade finished. If the software version is the same, there will be no upgrade.
Attention: System software name will be "MDVRB_V version number. bin

4.8.1.6 Date and Time
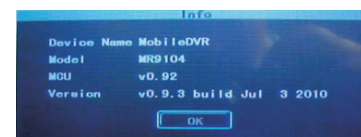Enter the menu of system date and time, user can change the format of date and time.
Note: Recording should be stopped when change the date and time.

4.8.1.7 System information
Display the system information including the device name, device type, MCU type and softer ware version.
Attention: in the pre-view mode press the button of 【OK】in remote controller can go to this interface directly.
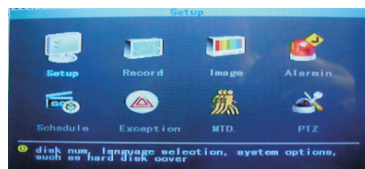
4.8.1.8 Import and export
To export the system configuration to disc for back up or import the configuration from disc for easy and fast configuration.

4.8.2 System set up

See above is the system setup menu

4.8.2.1 Setup

Standard: for the picture format, with PAL and NTSC, default is PAL.
Overwrite: Select "Yes" when the SD card or HDD has been full of recording and the system will be started recording again by erasing the earliest video automatically. When select No, the recording will be stopped if the HDD or SD card has been full of recording.
Lock Time: when this time was set, if no operation occurred during this time, the system will lock the current user and user has to be login again to do the operation. Select "Never" will never lock the user account.
Auto switch: The preview switch time between each channels, Never will be no switching.
Transparency: adjust this for the transparency of the menu display.
Language: Select the language as user's requirement.
To Dick: Set up the interval to write to the HDD, for the HDD protection.
Show status: To display the current settings in the pre-view status, select by check the box.
Quad Delay(s): Setup the delay time for the Quad picture display after the device power on

4.8.2.2 Recording

Channel: Select the recording channel.
Type: Select the main stream and slave stream, master steam is for the recording, slave stream is for the data transmission to lower the load of hardware.
Stream: Video or AV, Video will be only Video, AV will have both Audio and Video.
CBR/VBR: If set to VBR, can set the image quality.
Bit rate: set up the bit rate base on the camera to get good image quality.
Frame Rate: PAL 25 f/s、NTSC 30 f/s
Image quality: when set with VBR, the image quality can be set from worse to best.
Copy to: can copy this setting to other channel for fast configuration.

4.8.2.3 Image Set

Channel: To select the target channel.
Name: set up the channel name as the users requirement.
Show name: set up if the name need to be displayed, and the position to be displayed.
Show Time: set up if the time need to be displayed, and the position to be displayed.
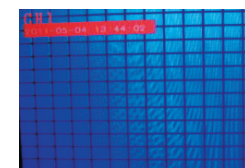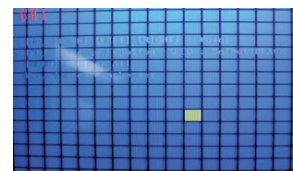Brightness: adjust the image brightness.
Contrast: adjust the image contrast.
Hue: adjust the image hue.
Saturation: adjust the image saturation.
Blind: to set up the blind position which the information like time, channel in display will blind the preview images, goes to the blind setting when check the box.
Set up blind area: Move the yellow box to desired position, press 【FN】 the box color will be changed to red color, （red and yellow can be switched by pressing this button）, and press the directional button to set up the space. Maxima 4 blind area can be set.

Clear the blind area: Move the yellow box to the area you want to clear, to press 【FN】 to clear the blind area setting, and then press 【OK】 to go back to Image setting meanu.
Clear all: press 【MENU】 to clear all blind area.

Select all: press 【VOIP】 to select all area.
Copy to: copy the set up to other channel for fast configuration.

4.8.2.4 Alarm input (optional)

Input: Set up the target channel for alarm input.
Type: set up the alarm type if it is low volt or high volt.
PTZ: Not used
Duration: after the alarm finished, how long will the action be continued(Alarmbuzzer, recording)
Buzzer: should the buzzer be actived.
Rec CH: Set up the recording channel when alarm input.
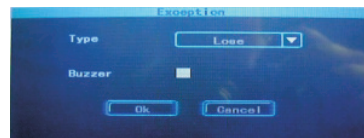Copy To: copy to other channel for fast configuration.

4.8.2.5 Schedule

To set up the recording schedule for each channel
Channel: set up the recording channel from 1 to 4
Week: set up the date in the week.
Set up the 4 time intervals as requirement, SCH means recording on schedule, MTD means recording by moving detected, Alarm means recording by alarm input.
Copy to: copy the configuration to other channel for fast set up.

4.8.2.6 Exception

When system has the exception, the action will be taken.
Type: the exception type including lost video, disc full, disc error, etc.
Buzzer: when the exception happen, the buzzer will be enabled if it is selected.

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4.8.2.7 MTD(No this functions)

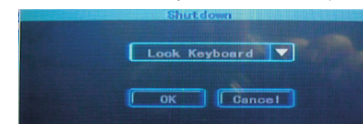**4.8.2.8 PTZ(No this functions)**

4.8.3 PTZ(No this functions)

4.8.4 Log information
Check the log information base on the start and end time to search

4.8.5 Shutdown
To setup the shutdown actions for lock keyboard or re-start or power off.

4.8.6 Timing startup
Set up the time for power on or off automatically.

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4.8.7 Bus info

Set the bus info as user requirement.

5. Chapter 5 FAQ

1、How to edit the information in edit box by remote controller?

　　Press【FN】to switch the input method, after edit press 【MENU】to exit the edit mode.

2、After the HDD was connected, no recording after the recording function enabled, why?

　Please check below 3 possibilities:

A, If it is a new HDD, you can not recording before you do the HDD format, please format the try again.

B, When system parameter "Overwrite" set to no, the recording will be stopped if the HDD are full.

C, Please check if the HDD working in good condition.

3、Why SD card can not be formatted?

　If the SD card less than 4G, then can not be formatted.

4、Why the HDD or U disc can not be back up?

　If the file system in HDD or U disc is NTFS, can not be back up in this file system.

5、Why sometime the device shut off suddenly?

　When ACC is off status, and the delay for shut off reached, it will be shut off automatically.

6、Why sometimes the device will be power on automatically?

　When shut off the device by remote controller, but ACC still in on status, the device will be power on automatically.

7、Why ACC of but the device will not be shut off?

　In system there is a parameter of delay setting, default is 5 minutes, which means after 5 minutes the device will be shut off, please set it to 0 if you need to shut off immediately.

6. Chapter 6 Accessories

1. Stand 566	2. Power cable
3. Remote controller	4. User manual

3. Installation procedures and instructions CD player