Examples for installstion





Monitor system use in truck, bus, express car, special vehicle

User Manual

1080P Freight Car Recorder





Before operating the Monitor, please read this manual thoroughly and retain it for future reference.

PRODUCT INTRODUCTION

This series of products is a cost-effective SD vehicle-mounted monitoring video recorder specially designed for the mobile monitoring mass market, which supports wide power input, large-capacity SD card video recording and USB backup (some models). Equipped with professional and reliable aviation plug connectors, combined with advanced embedded application software and a series of detailed considerations, this product has more outstanding effects; It is small in appearance, compact in structure and ultra-low in power consumption; Specializing in vehicle-mounted design, its operation and installation are simple and its stability is extremely strong; It is widely used in buses, buses, taxis, school buses, logistics vehicles, dangerous goods vehicles, private cars, ships and so on.

PRODUCT SPECIFICATION PARAMETERS

ITEM		PARAMETERS
Scheme		Heise hi3520 (V300) HD solution
Screen size		7"9"10.1" H video display screen
Resolution		1024*R.G.B*600
Back Light		LED,500cd/m2 500:1
System language		Chinese, Traditional Chinese, English, others (customizable)
OSD		Character overlaying function, support time and date, channel characters, segmentation boarder, vehicle information and other image overlaying
Video and camera system	Video input	4 channels of AHD1080P/960P/720P and 960H, D1 (CVBS) and other video input; 6-channel / 8-channel split (optional) Compatible with mixed input of CVBS signals and AHD signals Compatible with mixed input of PAL and NTSC
	Video compression format	H.264 compression mode
	Preview function	Preview function Previewing of spliced 12 multi-screen modes, supporting manual/voltage triggered full-screen display function
	Video resolution	1920*1080
	Video image quality	4 levels adjustable: super - clear, HD, standard, common video
	Video recording mode	Video recording activated upon start up
Audio	Audio input	Support 1 channel audio input (CH1 interface) (Customization optional)
	Video image quality	G.726 compression format

Trigger input		4 set I/O trigger, support 12-24V power triggered full-screen indication (optional)
Storage card	SD card	Support 2-512G storage card, full disc automatic deleting, cyclic coverage
	Upgrade mode	Support SD video card
	Storage mode	Exclusive bare disk storage mode, real-time storage, without omission at the second-level
Video playback	Video search	Possible to set the period of last three days, last week, last two weeks, last month, all and etc.
	Playback	It supports single-channel or 4-channel synchronous playback, and support pause, fast forward and fast backward.
	,	Support 2-fold, 4-fold, 8-fold speed fast forward or backward
Power supply and consum ption	Power management	Self-adaptive wide-range power input, with under - voltage protection, over - voltage protection, reverse short-circuit protection and other protections;
	Input voltage	DC + 12v \sim +36V (For operation with a camera, the required input voltage is 13V and above)
	Output voltage	+11.5V/3A
	Power consumption	Normal operation status $<5\mbox{W}$ (not including the display screen and the camera)
Work environ ment	Temperature	-20 °C to +70 °C
	Humidity	20% to 80%
Others	Auxiliaries	Power cord, remote controller, instruction manual, bracket, screw pack

BRIEF INTRODUCTION OF KEY FUNCTION





- 1:Under monitor Quad style ,short press the MENU, enter into MENU interface; Under MENU interface, short press the MENU button, exit the MENU interface, press for a long time to switch the lock for the keys.
- 2: Under monitor Quad style, short press CH1 button, the picture CH1 full screen / Under MENU interface, short press CH1, button face the left, the lock key is turned on, and the parameter value for sound is set to -1 (equivalent to the down arrow of the remote controller)

1

2

- 3: Under monitor Quad style, short press CH2 button, the picture CH2 full screen / Under MENU interface, short press CH2, button face the right, the lock key is turned on, and the parameter value for sound is set to increase +1 (equivalent to the up arrow of the remote controller)
- 4: Display (On/Off) (Standby)
- 5: Under monitor Quad style, short press Ch3 button, the picture CH3 full screen / Under MENU interface, short press CH3, button face down
- 6: Under monitor Quad style, short press CH4 button, the picture CH4 full screen / Under MENU interface, short press CH4, button face up
- 7: Under monitor Quad style as change button /Under MODE interface short press as confirm button

WIRE, M12 AVIATION INTERFACE DEFINITION



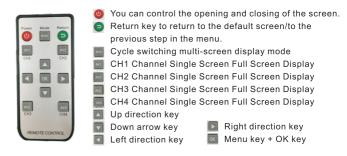
- 1)CH1\CH2\CH3\CH4 12M Interface: Four-way Video Input Interface
- 2)CH1\CH2\CH3\CH4\CH5\CH6:Eight -way Video Input Interface(optional)
- 3)CH1\CH2\CH3\CH4\CH5\CH6\CH7\CH8:Eight -way Video Input Interface(optional)
- 4) ACC Yellow cable: 12V-36V power input (connected to"+" battery)
- 5) BAT Red cable: 12V-36V Power Input (Connect Key Ignition cable)
- 6) GND black cable: negative electrode of power supply (connected to negative electrode of battery "-")
- 7) Forward Wire Brown cable: Connect the positive electrode of the turn signal, triggering CH1 single screen to be full screen(optional)
- 8) Reversing Wire Green cable: Connect the positive electrode of the turn signal lamp, triggering CH2 single picture full screen
- Turning Lamp Wire White cable: connect the positive pole of reversing lamp to trigger CH4 single picture full screen

Note: BAT red line can be connected with ACC yellow cable for power supply, which will cause 24-hour delay video recording function to be ineffective. All other functions are normal. Please wire for power supply according to usage requirements.



It is recommended that :the power cord be directly connected to the positive and negative poles of the vehicle battery, or after the battery is connected to the safety box, connect the positive and negative poles of the power supply. It is forbidden to connect the metal conductor inside the vehicle as the ground wire, otherwise negative pulse will be generated to interfere with the normal operation of the main engine.

REMOTE CONTROLLER



INTRODUCTION TO THE MAIN MENU

After entering the system main interface menu, it includes four function modules, as shown in the following figure:



INTRODUCTION TO OPERATION

Video Playback Video Query

Click to enter "Video Playback" to select playback conditions: "Channel Selection", "Sound Output", "Video Type", "Query Date", "Start Time", "End Time" and "Storage Device" related settings, as shown in the following figure:





(1) Playback Channel

Select the channel to be played back and watched, and press the confirmation key to enter the channel selection. You can press the up and down keys to select CH1 to CH8 to press the confirmation key for single channel playback, or you can select CH1 to CH4 and CH5 to CH8 to press the confirmation key for multi-channel playback. The default channel of the system is CH1-CH4.

(2) Sound Output

Sound output channel selection, press the OK key to enter the channel selection, you can press the up and down keys to select CH1 channel, or close, the default is CH1

(3) Video Type

Select the video type to be queried, press the up and down keys to select the video type, press the OK key to enter and select the video type to be queried, press the up and down keys to select different types of video files, press the OK key to confirm, the system defaults to all videos.

(4) Query Date

Select the date to query. Press Up and Down to select the query date. Press OK and then press Left and Right to select Year, Month and Day. Press Up and Down to add or subtract Year, Month and Day, the default is the time of the day.

(5) Start Time

Start time selection: press the up and down keys to select the start time. After pressing the OK key, you can press the left and right keys to select hours, minutes

and seconds. Press the up and down keys to add and subtract hours, minutes and seconds. The default is 00:00:00.

(6)End Time

End time selection: use the up and down keys select the end time. After pressing the confirmation key, you can press the left and right keys to select hours, minutes and seconds. After connecting the up and down keys to add and subtract hours, minutes and seconds. the default is 23:59:59.

(7) Storage Device

Storage device selection, press the up and down keys to select the storage device, press the confirmation key, and then press the up and down keys to select the storage device type, which defaults to the memory card.

Video File Selection

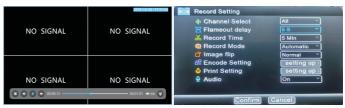
After setting the query criteria, click "Query" to enter the video file list, press the up and down keys to select the video file, and press the confirmation key to select the video file. At the bottom of the list are: "Home Page", "Last Page", "Next Page", "Play", "Select All" and "Exit" shortcut keys, as shown in the following figure:

Playback Preview

After selecting the file to be played, click "Play" to enter the playback preview, as shown in the following figure:

Video Settings

Click to enter "Video Settings" to select video-related configurations, including: "Channel Selection", "Flameout Video Delay" Video Duration "," Video Mode "," Image Flip "," Code Settings "," Watermark Settings "and" Audio "as shown in the following figure:



(1) Channel Selection

Select the channel to be set, and press the confirmation key to enter the channel selection interface. You can press the up and down keys to select all or CH1 to CH8 channels and press the confirmation key to confirm.

(2) Flameout Video Delay

Select the delayed recording time after disconnecting ACC, press the up and down keys to select the delayed recording time after flameout, and you can select 5S, 10S, 3min, 10min, 30min, 1H, 2H, 6H and 12H.

(3) Video Duration

Select the recording duration of each file package, press the up and down keys to select the recording duration, press the confirmation key, and then press the up and down keys to select 3min, 5min, 10min, 15min, 20min and 30min to confirm. The default is 5min.

(4) Video Mode

Select the video recording mode, press the up and down keys to select the video recording selection mode, press the confirmation key, and then press the up and down keys to select Close, Automatic Video Recording, Planned Video Recording, Alarm Video Recording, Automatic + Alarm, Planned + Alarm Press the confirmation key to confirm. The default is automatic video recording.

(5) Image Flip

Select the image flip mode, which can be set as follows: Normal, Horizontal, Vertical, Horizontal and Vertical, 90° and 270°, press the up and down keys to select the image flip, press the OK key and then press the up and down keys to select the mode, and the default is "Normal".

(6) Code Settings

The coding setting can select the recording quality. Press the up and down keys to select the coding setting and press the confirmation key to enter the coding setting interface. Channel selection, resolution (720P or 1080N can be set), image quality (poor, average, good and very good can be set) and advanced setting (frame rate and frame interval can be set) can be set. Default resolution: 720P, image quality: very good, as shown in the following figure:



(7) Watermark Settings

Select the pictures and characters superimposed on the video, press up and down to select watermark setting, press OK to enter the watermark setting interface,

channel selection can be set. All or CH1 to CH8 single channel watermark display can be set. Time watermark on/off, vehicle watermark on/off, position watermark on/off, speed watermark on/off. Press Confirm to save the settings. Default channel watermark, time watermark, vehicle watermark on, position and speed watermark off, as shown in the following figure:

(8) Audio

Select whether to record or not when recording, press the up and down keys to se lect audio, press the confirmation key to turn on or off audio, and the default is "on".

Display Settings

Click to enter "Video Settings" to set "Display Adjustment", "Channel Name", "Cycle Preview", "Transparency", "Installation Method", "Automatic Brightness", "Time Display" and "Screen Settings", as shown in the following figure:

(1) Display Adjustment

Display adjustment includes "Scene Mode", "Screen Margin" and "Channel Adjustment". Press the up and down keys to select, and press the OK key to enter one of them:

1 Scene Mode:

In the scene mode, several preset modes can be selected: standard, highlight, movie, bright, cool, warm and custom. The default is standard, as shown in the following figure:



2 Screen Margin:

The screen margin can adjust the zoom of the display screen, and the horizontal position and vertical position screen movement are 0 by default, as shown in the following figure:

③ Channel Adjustment

Channel adjustment can adjust the brightness, contrast, saturation and hue of all channels or a single channel. The default channel is "All" and the parameter is "50"

by default, as shown in the following figure:



(2) Channel Name

The channel name can be customized to set the displayed characters. Press the up and down keys to select the channel name, press the OK key to enter the channel name modification setting interface, and press the up and down keys to select channels 1 to 8. Press the OK key to enter the modified channel name and confirm on the pop-up soft keyboard, and then press the OK button to save the settings, as shown in the following figure:

(3) Cyclic Preview

After the cyclic preview is set, the picture will be played cyclically in sequence within the set time. Press the up and down keys to select cyclic preview, press the confirmation key, press the up and down keys to select off or 3S, 5S, 8S, 10S, 15S, select any one of the times, and the channel picture display in the preview interface will automatically cycle and switch according to the selected time. The default is OFF. (4) Transparency

Transparency can set the visibility of the menu. Press the up and down keys to select transparency. Press the OK key and then press the up and down keys to select 0%, 10%, 20%, 30%, 40%, 50%. Press the OK button to confirm the effect. The default is "0%".

(5) Installation Mode

Enter the menu and set: "Installation Method", "Reversing Line", "Turn Signal Mode" and "Reversing Priority". Press the up and down keys to select and press the confirmation key to select, as shown in the following figure:

① Installation selection: Press the left and right keys to select Normal or Inversion, and press the Confirm button to confirm that the restart equipment takes effect. The default is Normal.



- ② Reversing line: Press the left and right keys to select OFF or 1-8 (channel name). If you select the reversing line at that number (channel name), the reversing line will be displayed in that channel. If you select OFF, there will be no reversing line, and the default is "1".
- ③ Turn signal mode: Press the left and right keys to select OFF or 1-6 (channel name), select more than 1 number (channel name) to trigger one of them, and all other selected numbers will be displayed. For example, if you select 1 and 2 (channel name) in the turn signal mode, if you trigger any one of the numbers (channel name), the screen of these two channels will be displayed. The default is OFF.
- ④ Reversing priority line: Press the left and right keys to select OFF or 1-6 (channel name), and select and check that channel to trigger that channel first. For example, if 1 is selected (channel name), as long as 1 channel and other channels are triggered at the same time, only trigger 1 will be displayed to be valid. The default is OFF.

(6) Automatic Brightness

After the automatic brightness is turned on, the screen brightness can be automatically adjusted according to the ambient brightness. Press the up and down keys to select the automatic brightness, press the confirmation key and then press the up and down keys to select on or off. The default is "OFF".

(7) Time Display

Time display switch. After closing, the main preview page will not display time. Press the up and down keys to select time display, press the OK key and then connect the up and down keys to select OFF or ON, and press the OK button to confirm that the restart equipment takes effect. The default is "ON".

(8) Screen Setting

Enter the menu and set: "Background Color", "Border Color" and "Display Mode". Press the up and down keys to select and press the OK key to select, as shown in the following figure:



① Background color: Press the left and right keys to select black or blue, and press the confirmation key to confirm. If one of the colors is selected without camera access, the background color will be the selected background color, and the default is "blue".

② Border color: Press the left and right keys to select white, red, green and yellow, and press the confirmation key to confirm. If you select one of the colors, the border line of the preview interface will become the selected color, and the default is "white".

③ Display mode: Press the left and right keys to select the display mode, press the OK key to confirm, only when the checked display mode is selected will it be displayed in the preview interface. If it is not checked, it will not be displayed. For example, when I uncheck the nine-split mode in the display mode and switch channels for split display in the preview interface, the nine-split screen will not ap pear. Only the split mode I checked will be displayed, and the default is "Select All".

System Settings

Click to enter "System Settings" to set "Language Selection", "Power Saving Mode", "System Time", "Vehicle Information", "User Management", "Storage Management", "Factory Settings", "System Upgrade" and "System Information", as shown in the following figure:

(1) Language Selection

There are three language choices: Simplified Chinese, Traditional Chinese and English. The default is Simplified Chinese.

Press the up and down keys to select, and press the $\ensuremath{\mathsf{OK}}$ key to confirm.

(2) Power Saving Mode

After the power saving mode is set, the screen will be automatically closed without any operation.

(3) System Time

System time can be set: date setting, time setting, time format, daylight saving time and effective time correction options. Press the up and down keys to select, and

press the OK key to select, as shown in the following figure:

(4) Vehicle Information

The settable items of vehicle information include: equipment number, terminal model, mobile phone number, license plate number, provincial capital ID, manu facturer ID, terminal ID, company name, service telephone number, vehicle type, vehicle color, vehicle frame number, driver number, driver's license number and authentication code information, as shown in the following figure:



(5) User Management

Users can set relevant permissions and login passwords to manage or authorize, as shown in the following figure:

(6) Storage Management

After connecting the storage device, you can view the current storage device status and formatting operation, as shown in the following figu



(7) Factory Settings

By Factory Settings, you can restore the equipment to the factory state, as shown in the following figure:



(8) System Upgrade

When the system has new and optimized applications, it is updated to the best state through "System Upgrade", as shown in the following figure:

(9) System Information

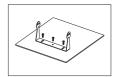
By System Information, you can view all information related to the current system, including the working status information of each module of the system: hard disk information, GPS status, network information and serial port status, as shown in the following figure:



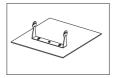
MONITOR STANDARD INSTALLATION

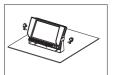
1.Remove the screw around then take out the monitor. Put U type bracket to the right place and adjust angle, prepare 3 screws.(see below pictures)





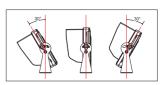
3.Locking the bracket by screws.Put the monitor into bracket,adjust angle and locking it.(see below pictures)





5Finish installation. The adjustable angel is forwad 30° and backward 30°. User can adjust a suitable angle by themself. (see below pictures)





13 14