# **Car Digital Hard Disk Recorder**

# **User Manual**



Before installing and using, be sure to read the Manual, then you will properly use and protect your machine. The first part of the statement concerns the matters to be attention before installing and using.

#### > Attention

- To protect your rights, before using and installing, please carefully read the contents of the manual.
- This product is used for car inside, in order to prevent short-circuit or the risk of electric shock, do not make the machine in the rain or humidity environment.
- Event of any solid or liquid into the machine, please disconnect the power of the machine immediately, and ask the qualified technical staff to check, then restart it.
- The product is high-tech equipment; machines can not be repaired by users even very small original part. Once failure occurs, please ask for the qualified technical personnel, or contact with the dealer.
   Do not repair it by users themselves.

#### > Installation Environment

- 8-36V DC power supply, please confirm the local power supply before power on.
- If the machine were not used for a long time, please completely disconnect the video's power supply.
- Please select the appropriate location for the installation of the machine, where the air can flow freely around the machine to avoid overheating or water inflow.
- Machine can not be installed near the radiators, or near the ventilation road which is near heat, or directly under sunshine, or too much dust, or rain water, or near the area where the mechanical vibration or impact happens.

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$\succ$	Package L	.ist

Name	Quantity
HDD Mobile DVR	1
User Manual	1
Certificate of approval	1
Remote Control (not include battery)	1
Connecting Cable	3
Кеу	1

#### Note: When the specification or parameters changes, no other announcement in addition.

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### **1** Product Overview

The four-channel /eight –channel /twelve–channel Embedded Digital Hard Disk Video Recorder Embedded Network Hard Disk Video Recorder is designed for car safety. It uses embedded processor and embedded operating system, combined with video / audio compression / decompression, GPS, car recorder, and the capacity hard disk storage technology to confirm the high intelligence and high stability. Widely used for bus, ship, train, and other areas of security.

### 2 Basic functions

#### 2.1 Audio/Video Compression Format

The video adopts latest IS014496-10 (H.264) video compression technology, high compression rate to ensure a better image quality under less storage; the audio adopts G711A compression method, output a better voice with low distortion.

#### 2.2 Audio/video recording mode

- Compression format
   The audio video data are stored through special files, encrypted to prevent data loss under frequent power failure circumstances.
- Compression stream
   Image quality with 8 levels and adjustable
  - 4 Channel SDI 1080P 、 4 Channel 960H: (1.0Mbps-6.0Mbps/channel)
  - 4 /8Channel AHD 720P: (192Kbps-2.0Mbps/channel)
  - 8 Channel 960H、12 Channel 960H: (192Kbps-2.0Mbps/channel)
  - 4 Channel 1080P/960P/720P: (192Kbps-2.0Mbps/channel)
  - 8 Channel 720P、12 Channel 720P: (192Kbps-2.0Mbps/channel)

to meet different requirements.

Storage
 2.5 inch SATA hard disk, 2TB maximum.

### 2.3 Image quality when monitoring, recording, playback

Resolution

Monitoring:

4 Channel SDI 1080P: 1920\*1080/CH; Recording: 1920\*1080/CH; Playback: 1920\*1080/CH
4/8/12 Channel 960H: 960\*576/CH; Recording: 960\*576/CH; Playback: 960\*576/CH
4/8 Channel AHD 720P: 1280\*720/CH; Recording: 1280\*720/CH; Playback: 1280\*720/CH
4 Channel 1080P/960P/720P: 1920\*1080/CH; Recording: 1920\*1080/CH; Playback:1920\*1080/CH
8 /12Channel 720P: 1280\*720/CH; Recording: 1280/720/CH; Playback: 1280\*720/CH

Frequencies

The monitoring, recording and playback are all with 25fps or 30fps

- Horizontal resolution for monitoring
   4 Channel SDI 1080P: 1920\*1080 / channel
   4/8/12 Channel 960H: 960\*576 / channel
   4/8 Channel AHD 720P: 1280\*720/CH
   4 Channel 1080P/960P/720P: 1920\*1080 / channel
   8/12 Channel 720P: 1280\*720/channel
- Horizontal resolution for playback
   4 Channel SDI 1080P: 1920\*1080/ channel
   4/8/12 Channel 960H: 960\*576 / channel
   4/8 Channel AHD 720P: 1280\*720/CH
   4 Channel 1080P/960P/720P: 1920\*1080/ channel
   8/12 Channel 720P: 1280\*720/channel

### 2.4 Total Resources

#### 4 Channel SDI 1080P:

- Support 4 channels 1080P(1920\*1080) simultaneous recording, total 120fps.
- Support 4 channels 1080P(1920\*1080) simultaneous playback, total 120fps.

#### 4 Channel 960H:

- Support 4 channels 960H (960\*576) simultaneous recording, total 120fps.
- Support 4 channels 960H (960\*576) simultaneous playback, total 120fps.

#### 8 Channel 960H:

- Support 8 channels 960H(960\*576) simultaneous recording, total 240fps.
- Support 8 channels 960H(960\*576) simultaneous playback, total 240fps.

#### 12 Channel 960H:

- Support 12 channels 960H (960\*576) simultaneous recording, total 360fps.
- Support 12 channels 960H (960\*576) simultaneous playback, total 360fps.

#### 4Channel AHD 720P:

- Support 4 channels 720P (1280\*720) simultaneous recording, total 100fps.
- Support 4 channels 720P (1280\*720) simultaneous playback, total 100fps.

#### 8Channel AHD 720P:

- Support 4 channels 720P (1280\*720) simultaneous recording, total 200fps.
- Support 4 channels 720P (1280\*720) simultaneous playback, total 200fps.

#### 4 Channel 1080P/960P/720P:

- Support 4 channels 1080P(1920\*1080) simultaneous recording, total 120fps.
- Support 4 channels 1080P(1920\*1080) simultaneous playback, total 120fps.

#### 8 Channel 720P:

- Support 8 channels 720P (1280\*720) simultaneous recording, total 240fps.
- Support 8 channels 720P (1280\*720) simultaneous playback, total 240fps.

#### 12 Channel 720P:

- Support 12 channels 720P (1280\*720) simultaneous recording, total 240fps.
- Support 12 channels 720P (1280\*720) simultaneous playback, total 240fps.

### 2.5 Alarm pre-recording

• Alarm video mode, alarm pre - recorded more than 5s video, audio, positioning data.

### 2.6 Full duplex

• Under full loading status, users can index, playback the recorded data with no frame loss.

### 2.7 Malfunction alarming function

• When the DVR fail to work, the alarm switch is ON, showing alarm information for 5 minutes at least.

### 2.8 Self-test the status and self-recovery

• When in working status, the "RUN" indicator will constantly flashes and check the device. Recovery will take no more than 3 minutes when device crashes.

### 2.9 Front-end device control and multi-channel monitor and switch

The DVR can control PTZ cameras through default protocols (RS-485, PELCO-D, 9600 baud rate),
4 Channel SDI 1080P 、 4 Channel 960H: 4 channels real time, switchable to monitoring mode.
8 Channel 960H: 8 channels real time, switchable to monitoring mode.
12 Channel 960H: 12 channels real time, switchable to monitoring mode.
4 /8Channel AHD 720P: 4 channels real time, switchable to monitoring mode.
4 Channel 1080P/960P/720P: 4 channels real time, switchable to monitoring mode.
8 Channel 720P: 8 channels real time, switchable to monitoring mode.
12 Channel 720P: 12 channels real time, switchable to monitoring mode.

### 2.10 Networking

• Combining the CMS software. With built-in 3G/4G module, the car can be monitored remotely.

### 2.11 Data backup

- To backup the HDD data into computer via HDD card reader.
- Downloading the HDD data remotely through network.
- Transfer the HDD data to computer, download and play the media via our unique DVR player software. Users can also switch the HDD files into universal AVI format to make it workable in other players.

#### 2.12 Authority, encryption, data safety

 Enter the DVR by password, default for "6666". Data is stored in a special file system to ensure it's encrypted and safe.

### 2.13 Log function

• The log includes the alarming and malfunction information, stored into HDD. It can be checked via computer.

### **3** Features

### 3.1 Operating system

- Embedded Linux operating system, high stable, free from virus.
- English/ Chinese/ Russian/ Portuguese menu switchable.
- Graphical user interface.

### 3.2 Compression format

• H.264 format: more excellent frame rate, quality image output.

# 3.3 Monitoring and Recording

Monitor:

4 Channel SDI 1080P: SDI 1080P (1920\*1080)
4 /8/12Channel 960H: 960H (960\*576)
4/8 Channel AHD 720P: 4/8CH AHD 720P (1280\*720)
4 Channel 1080P: 1080P (1920\*1080)
8/12 Channel 720P: 720P (1280\*720)

Record:

4 Channel SDI 1080P: PAL 100fps, NTSC 120fps, full real-time 4CH 1080P recording.
4 Channel 960H: PAL 100fps, NTSC 120fps, full real-time 4CH 960H recording.
8 Channel 960H: PAL 200fps, NTSC 240fps, full real-time 8CH 960H recording.
12 Channel 960H: PAL 300fps, NTSC 360fps, full real-time 12CH 960H recording.
4 Channel AHD 720P: PAL 100fps, NTSC 120fps, full real-time 4CH 720P recording.
8 Channel AHD 720P: PAL 200fps, NTSC 240fps, full real-time 8CH 720P recording.
4 Channel 1080P/960P/720P: PAL 200fps, NTSC 240fps, full real-time 8CH 720P recording.
8 Channel 720P: PAL 200fps, NTSC 240fps, full real-time 8CH 720P recording.
12 Channel 720P: PAL 200fps, NTSC 240fps, full real-time 8CH 720P recording.

- Record mode: by alarm, schedule, manual, motion detection.
- Support

4 Channel SDI 1080P 、 4 Channel 960H : 4CH video and 4CH audio meanwhile recording.
8 Channel 720P、 8 Channel 960H: 8CH video and 8CH audio meanwhile recording.
12Channel 720P、 12 Channel 960H: 12CH video and 12CH audio meanwhile recording.
4 Channel AHD 720P: 4CH video and 4CH audio meanwhile recording.
8 Channel AHD 720P: 8CH video and 8CH audio meanwhile recording.
4 Channel 1080P/960P/720P : 4CH video and 4CH audio meanwhile recording.

- Record image quality: 8 levels adjustable.
- Video recorded in special file system to ensure lifespan and safety of HDD.
- Reliable evidence with unchangeable audio/video data.

## 3.4 Index and Playback

- Index and playback by time.
- Support :

4 Channel SDI 1080P 、 4 Channel 960H : 4CH video, 1CH audio (any channel can be chosen),
8 Channel 720P 、 8 Channel 960H: 8CH video, 1CH audio (any channel can be chosen),
12 Channel 720P 、 12Channel 960H: 12CH video, 1CH audio (any channel can be chosen),
4 Channel AHD 720P: 4CH video, 1CH audio (any channel can be chosen),
8 Channel AHD 720P: 8CH video, 1CH audio (any channel can be chosen),
4 Channel 1080P/960P/720P: 4CH video, 1CH audio (any channel can be chosen),
index and playback at the same time, support amplifying in one channel.

• Data only played by DVR playback software.

### 3.5 HDD storage and data backup

- Support 2.5inch HDD max 2TB.
- The HDD data can be backed up via PC software.
- Support USB backup.

### 3.6 Control

- Dual MCU control, to ensure DVR stability.
- Support remotely control by remote controller.

## 3.7 Others

- Upgrade through USB , easy to maintain.
- Protect by password, to avoid data damage.
- Delayed shutdown: default for 5s, adjustable.
- Anti-pulse and low voltage protection.
- Real-time timer.
- Anti-shock for the PCB panel and parts.
- Watch dog function to avoid system crush.

# **4** Technical Parameters

Device parameters	DVR Performance index						
Model	4CH 1080P-SDI	4CH 960H	8CH 960H	12CH 960H			
Product Name	4 Channel Mobile DVR(HDD Storage)	4 Channel Mobile DVR(HDD Storage)	8 Channel Mobile DVR(HDD Storage)	12 Channel 960H Mobile DVR(HDD Storage)			
Operation System	Linux						
Operation Interface		Graphical Interfaces, (	Chinese/English option	al			
File System		Proprieta	ary Format				
System Privileges	User Password						
Video Input	Independent Input:Independent Input:Independent Input:Independent Input:Independent Input:1.0Vp-p, 75Ω.Both1.0Vp-p, 75Ω.Both1.0Vp-p, 75Ω.Both1B&W and ColorB&W and ColorB&W and ColorB			12ch 960H Independent Input: 1.0Vp-p, 75Ω.Both B&W and Color Cameras			
	1 Channel	PAL/NTSC Output, 1.0	- Vp-p,75Ω, Pin Aviat	ion Connector			
Video Output	1 Channel	/GA Support 1920*108	0 ,1280*720 ,1024	*768 Resolution			
Video	1 Or 4 Screen	1 Or 4 Screen	1 /4/8Screen	1 /4/8/12Screen			
Display	Display	Display	Display	Display			
Video Standard	PAL:25frames/Sec;NTSC:30frames/Sec						
SystemPAL:100 Frames;PAL:100 Frames;ResourcesNTSC:120 FramesNTSC:120 Frames		PAL:200 Frames; NTSC:240 Frames	PAL:300 Frames; NTSC:360 Frames				

I		4 Channels	8 Channels			
Audio Input	4 Channels Independent Input	12 Channels Independent Input				
		Dendent InputIndependent InputIndependent Input $600\Omega$ $600\Omega$ $600\Omega$				
				600Ω		
Audio Output	1 Channel(4 Channels Can Be	1 Channel(4 Channels Can Be	1 Channel(8 Channels Can Be	1 Channel(12 Channels Can Be		
	Convert Freely)	Convert Freely)	Convert Freely)	Convert Freely)		
Basic Output		1.0-	–2.2V			
Level Distortion						
Plus Noise		≤-3	30dB			
Recording						
Mode		Sound And Imag	ge Synchronization			
Audio						
Compressio		G7	711A			
n						
Image						
Compressio		H.264 Fixed	Code Stream			
n		i	i	i		
line o cuo	4*40000	4*00011 (000*570)	0*00011 (000*570)			
Image Format	4*1080P	4*960H(960*576),	8*960H (960*576), 8*D1 (704*576)	12*960H (960*576)		
Format	mat (1920*1080) 4*D1 (704*576) 8*D1 (704*576)		8 DT (704 570)			
Video	1.0M-6.0Mbit/s	192K-2.0Mbit/s	192K-2.0Mbit/s	192K-2.0Mbit/s		
Stream	1.0101-0.0101010/5	1921(-2.0101010/3	1921(-2.01010103	192K-2.0101010/S		
Video Taking	450M-2.6GByte/hou	85M-900MByte/hou	85M-900MByte/hou			
Up Of Hard	r	r	r	85M-900MByte/hour		
Disk						
Playback Resolution	1or4*1080P	1or4*960H, 1or4*D1	1or8*960H, 1or8*D1	1or12*960H, 1or12*D1		
Audio Bitrate		/KByte /	ls / channel			
Audio Bitrate Audio Taking		4NDyte /				
Up Of Hard		14MBvte / ł	nour / channel			
Disk		, <b>_ ,</b> .				
HDD		0				
Storage		Suppon	Max 2TB			
Image		Fight Grad	es to Choose			
Quality						
Alarm in	8 (	•	Input. High Voltage Tri	gger		
Alarm out			lependent output			
Move Detect			ilable			
Host Access		Can Expand One F	For USB Disk Backup			
Wire line		Can Expand One	RJ45 Ethernet Port			
Access						
Wifi	Can Expand One Wifi Module Inside					
3G	3G Can Expand One FDD-LTE/TD-LTE/WCDMA/CDMA2000 Module Inside					

GPS	Can Expand GPS Module Inside						
RS232	Extensible	e,it is convenient to cor	nnect with other vehicle	e equipment			
RS485	Extensible,it is con	venient to connect with	n other vehicle equipme	ent and PTZ Camera			
Intercom		Can Expand Inter	com Module Inside				
G-Sensor		Can Expand G-Se	ensor Module Inside				
Canbus		Can Expand Car	bus Module Inside				
Power							
Consumptio		DC8-36V	5% ≤12W				
n							
Working	-20°C ~ +85°C ≤80%						
Temperature	-20 C ~ +83 C <00%						
Clock	Built-In Clock, Calendar						
Product Size		245(L)*190(W)*71(	H)mm (with Holder)				
Product	2.8KG(without HDD)	2.8KG(without	3.0KG(without	3.4KG(without HDD)			
Weight	HDD) HDD)						
Package	Each In a Box, 5 sets/ Canton						
Box Size	245(L)*190(W)* 71(H)mm						
Carton Size	650(L)*375(W)* 255(H)mm						
Carton							
Weight	14kgs/ 18kgs (without HDD)						

Device parameters	AHD Performance index				
Model	TS-910-AHD-720P	TS-918-AHD-720P			
Product Name	4 Channel Mobile DVR(HDD Storage)	8 Channel Mobile DVR(HDD Storage)			
Operation System	Li	nux			
Operation Interface	Graphical Interfaces, C	Chinese/English optional			
File System	Proprieta	ary Format			
System Privileges	User Password				
Video Input	4CH AHD Independent Input: 1.0Vp-p,8CH AHD Independent Input: 1.75Ω.Both B&W and Color Cameras75Ω.Both B&W and Color Car				
Video Output	1 Channel PAL/NTSC Output, 1.0	Vp-p, 75Ω, Pin Aviation Connector			
Video Display	1 Or 4 Screen Display	1 Or 8 Screen Display			
Video Standard	PAL:25frames/Sec;	NTSC:30frames/Sec			
System Resources	PAL:100 Frames; NTSC:120 Frames	PAL:200 Frames; NTSC:240 Frames			
Audio Input	4 Channels Independent Input 600Ω	8 Channels Independent Input 600Ω			
Audio Output	1 Channel(4 Channels Can Be Convert Freely) 1 Channel(8Channels Can Be Convert Freely)				

Basic Output Level	1.0—2.2V			
Distortion Plus Noise	≤-30dB			
Recording Mode	Sound And Image	e Synchronization		
Audio Compression	G7	11A		
Image Compression	H.264 Fixed	Code Stream		
Image Format	4*720P (1280*720)	8*720P (1280*720)		
Video Stream	192K-2	.0Mbit/s		
Video Taking Up Of Hard Disk	85M-900MB	Byte/hour/CH		
Playback Resolution	1or4*720P	1or8*720P		
Audio Bitrate	4KByte / s	s / channel		
Audio Taking Up Of Hard Disk		our / channel		
HDD Storage	Support	Max 2TB		
Image Quality	Eight Grade	es to Choose		
Alarm in	8 Channels Independent Input. High Voltage Trigger			
Alarm out	2 Channels Independent output			
Move Detect	available			
Host Access	Can Expand One For USB Disk Backup			
Wire line Access	Can Expand One RJ45 Ethernet Port			
Wifi	Can Expand One Wifi Module Inside			
3G	Can Expand One FDD-LTE/TD-LTE	/WCDMA/CDMA2000 Module Inside		
GPS	Can Expand GP	PS Module Inside		
RS232	Extensible, it is convenient to con	nect with other vehicle equipment		
RS485		with other vehicle equipment and PTZ nera		
Intercom		com Module Inside		
G-Sensor	-	nsor Module Inside		
Canbus	-	bus Module Inside		
Power Consumption	DC8-36V			
Working Temperature	-20°C ~ +85°C ≤80%			
Clock	Built-In Clock, Calendar			
Product Size	245(L)*190(W)*71(H	•		
Product Weight	2.8KG(without HDD)	3.0KG(without HDD)		
Package	, , ,	5 sets/ Canton		
Box Size		W)* 71(H)mm		
Carton Size		√)* 255(H)mm		
Carton Weight		(without HDD)		

Items	Device parameters	eters NVR Performance index						
Name	Product Name	4CH 1080P Mobile NVR	8CH 1080P Mobile NVR	12CH 720P Mobile NVR				
	Operation System		LINUX					
	Operation Interface		Graphical Interfaces	3				
System	Operation Interface	Graphical Int	Graphical Interfaces, Chinese/English optional					
	File System		Proprietary Format					
	System Privileges		User Password					
	Video Input	4CH 1080P Digital 4CH 960P Digital 4CH 720P Digital	4CH 1080P Digital 4CH 960P Digital 4CH 720P Digital	12CH 720P Digital				
	VGA Output	1CH Support 1920*108 1024*768 Re		1CH Support 704*576 Resolution				
Video	CVBS Output	1 Channel PAL/NTS	C Output, 1.0Vp-p, Connector	75 $\Omega$ , Pin Aviation				
	Video Display	1 Or 4 Screen Display	1 /4/8Screen Display	1 /4/8/12Screen Display				
	Video Standard	PAL:25fra	mes/Sec;NTSC:30fr	rames/Sec				
	System Resources	1080P/960P/720P PAL: 100fps, NTSC: 120fps	1080P PAL: 200fps,NTSC: 240fps	720P PAL: 300fps, NTSC: 360fps				
	Audio Input	4CH independent8CH independentinput, 600Ωinput, 600Ω		12CH independent input,600Ω				
	Audio Output	1ch CV	BS output, $600\Omega$ ,	1.0-2.2V				
Audio	Distortion Plus Noise	≪-30dB						
	Recording Mode	Sound And Image Synchronization						
	Audio Compression	G711A						
	Image Compression	H.264						
	Image Format	4*1080P (1920*1080) 4*960P (1280*960) 4*720P (1280*720)	8*1080P (1920*1080)	12*720P(1280*720)				
Digital	Video Taking Up Of Hard Disk		1-8 adjust	1				
Processing	Video Stream	192K	bps-2.0Mbit/s (each	n ch)				
Storage	Video Taking Up Of Hard Disk		5MB-900MByte/hou					
	Playback Resolution	4*1080P (1920*1080) 4*960P (1280*960) 4*720P (1280*720)	8*10800P (1920*1080P)	12*720P (1280*720)				

	Audio Bitrate	4KByte/s (each ch)				
	Audio Taking Up Of Hard Disk	14MByte/hour(each ch)				
	HDD Storage	1 SATA,2.5"HDD , Max capacity 2TB;				
alarm	Alarm in	8 Channels Independent Input. High Voltage Trigger				
interface	Alarm out	2 Channels Independent output				
interface	Move Detect	available				
USB interface	Host Access	Can Expand One For USB Disk Backup				
network	Wire line Access	Can Expand One RJ45 Ethernet Port				
interface	Wifi	Can Expand One Wifi Module Inside				
Interface	4G/3G	Can Expand FDD-LTE/TD-LTE/WCDMA/CDMA2000Module Inside				
GPS interface	GPS	Can Expand GPS Module Inside				
	RS232	Extensible, it is convenient to connect with other vehicle equipment				
extend	RS485	Extensible, it is convenient to connect with other vehicle equipment and PTZ Camera				
interface	Intercom	Can Expand Intercom Module Inside				
	G-Sensor	Can Expand G-Sensor Module Inside				
	CANBUS	Can Expand Canbus Module Inside				
	Power Consumption	DC8-36V 5% ≤12W				
others	Working Temperature	-20~85℃ / ≤80%				
	Clock	Built-In Clock, Calendar				
	Carton Size	245 (L) *190 (W) *71 (H) mm				

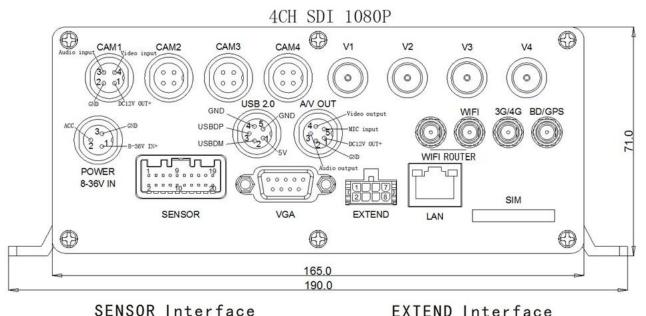
#### **Optional functions:**

Basic Type (Pin Aviation Connector)

- +A: GPS Function+B: 3G/4G Function+E: Lan Port+F: HDD + SD Card+J: Fireproof Box+K: Canbus
- +L: Wifi hot-Spot +P: POE
- +W: Wifi Function

# **5** Instruction of Installation

#### Instruction of External Interface Wiring 5.1

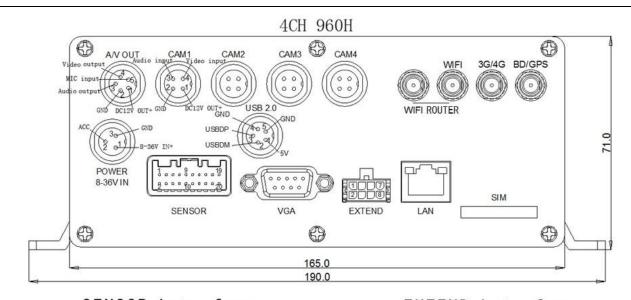


# SENSOR Interface

### definition:

LA	ILND	Inc	e i	Tau	5
	def	init	t i	on:	
1	DOIOU	OTTO .			

1	Canbus+	11	Alarm	input	1	1	DC12V 0U1+
2	Canbus-	12	Alarm	input	3	2	DC12V OUT-
3	RS485+	13	Alarm	input	2	3	Audio input
4	RS485-	14	Alarm	input	4	4	Audio output
5	Alarm outputCOM1	15	Alarm	input	GND	5	RS232(RX)
6	Alarm outputCOM1	16	Alarm	input	GND		Video output
7	Alarm outputCOM2	17	Alarm	input	5		RS232(TX)
8	Alarm outputCOM2	18	Alarm	input	7	8	Video/Audio GND
9	Alarm input GND	19	Alarm	input	6		
10	Alarm input GND	20	Alarm	input	8		

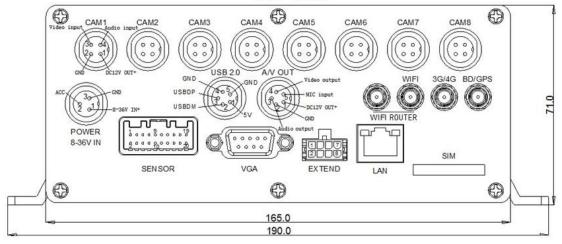


# SENSOR Interface definition:

#### EXTEND Interface definition:

1	Canbus+	11	Alarm	input	1	1	DC12V OUT+
2	Canbus-	12	Alarm	input	3	2	DC12V OUT-
3	RS485+	13	Alarm	input	2	3	Audio input
4	RS485-	14	Alarm	input	4		Audio output
5	Alarm outputCOM1	15	Alarm	input	GND	5	RS232(RX)
6	Alarm outputCOM1	16	Alarm	input	GND		Video output
7	Alarm outputCOM2	17	Alarm	input	5		RS232(TX)
8	Alarm outputCOM2	18	Alarm	input	7	8	Video/Audio GND
	Alarm input GND						
10	Alarm input GND	20	Alarm	input	8		

#### 8CH 960H

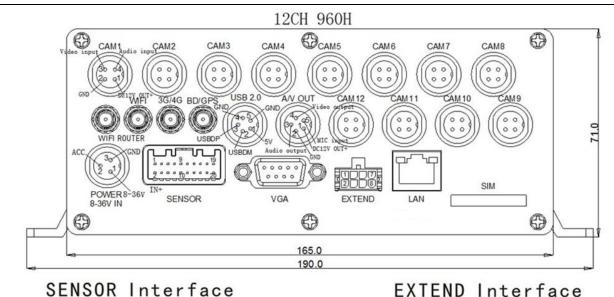


### SENSOR Interface definition:

1	Canbus+	11	Alarm	input	1
2	Canbus-	12	Alarm	input	3
3	Canbus- RS485+	13	Alarm	input	2
	RS485-	14	Alarm	input	4
5	Alarm outputCO	M1 15	Alarm	input	GND
6	Alarm outputCO	M1 16	Alarm	input	GND
	Alarm outputCO				
8	Alarm outputCO	M2 18	Alarm	input	7
9	Alarm input GNI	) 19	Alarm	input	6
10	Alarm input GNI	D 20	Alarm	input	8

### EXTEND Interface definition:

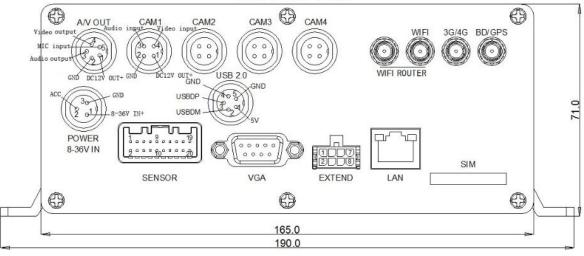
1	DC12V OUT+
2	DC12V OUT-
3	Audio input
4	Audio output
5	RS232 (RX)
6	Video output
7	RS232(TX)
8	Video/Audio GND



#### SENSOR Interface definition:

	1	Canbus+	11	Alarm	input	1	1	DC12V OUT+
	2	Canbus-	12	Alarm	input	3	2	DC12V OUT-
	3	RS485+	13	Alarm	input	2	3	Audio input
	4	RS485-	14	Alarm	input	4	4	Audio output
	5	Alarm outputCOM1	15	Alarm	input	GND	5	RS232(RX)
1	6	Alarm outputCOM1	16	Alarm	input	GND		Video output
		Alarm outputCOM2				5		RS232(TX)
	8	Alarm outputCOM2	18	Alarm	input	7	8	Video/Audio GND
1	9	Alarm input GND	19	Alarm	input	6		
	10	Alarm input GND	20	Alarm	input	8		

4CH AHD 720P



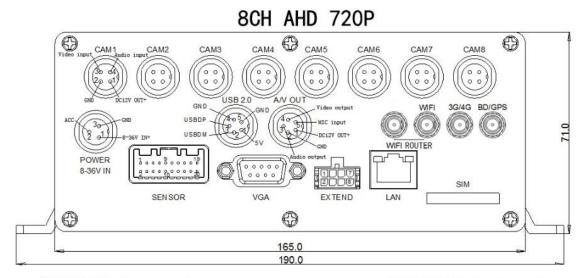
#### SENSOR Interface definition:

1	Canbus+	11	Alarm	input	1	1	DC12
2	Canbus-	12	Alarm	input	3	2	DC12
3	RS485+	13	Alarm	input	2	3	Audi
4	RS485-					4	Audi
	Alarm outputCOM1						RS23
	Alarm outputCOM1					6	Vide
7	Alarm outputCOM2	17	Alarm	input	5	7	RS23
8	Alarm outputCOM2	18	Alarm	input	7	8	Vide
9	Alarm input GND	19	Alarm	input	6		
10	Alarm input GND	20	Alarm	input	8		

#### EXTEND Interface definition:

definition:

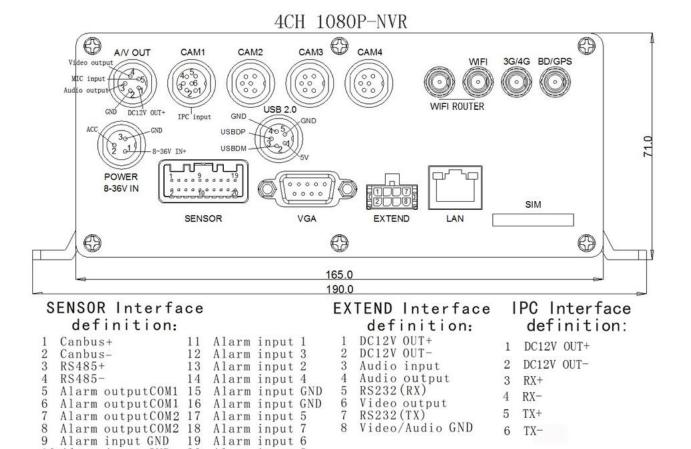
- 2V OUT+ 2V OUT-
- o input
- io output 32(RX)
- eo output 32(TX)
- eo/Audio GND



#### SENSOR Interface definition:

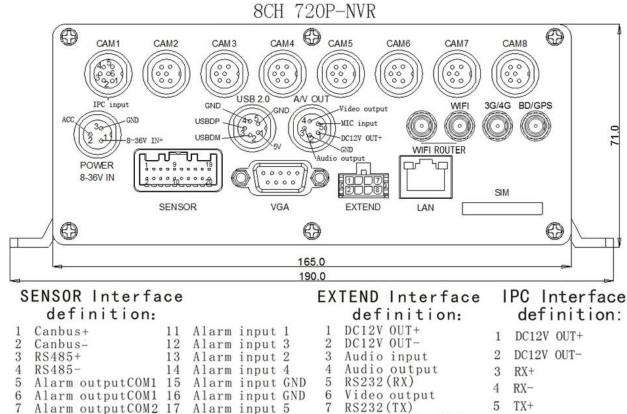
# EXTEND Interface definition:

1	Canbus+	11	Alarm	input	1	1	DC12V OUT+
2	Canbus-	12	Alarm	input	3	2	DC12V OUT-
3	RS485+	13	Alarm	input	2	3	Audio input
4	RS485-	14	Alarm	input	4		Audio output
5	Alarm outputCOM1	15	Alarm	input	GND	5	RS232 (RX)
6	Alarm outputCOM1	16	Alarm	input			Video output
7	Alarm outputCOM2	17	Alarm	input			RS232(TX)
8	Alarm outputCOM2	18	Alarm	input	7	8	Video/Audio GND
9	Alarm input GND	19	Alarm	input	6		
10	Alarm input GND	20	Alarm	input	8		



20 Alarm input 8

10 Alarm input GND



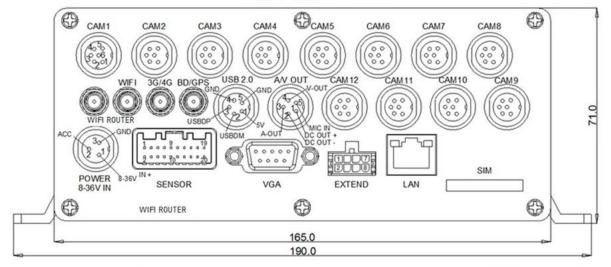
6	Alarm	outputCOM1	16	Alarm	input	GND
7	Alarm	outputCOM2	17	Alarm	input	5
8	Alarm	outputCOM2	18	Alarm	input	7
		input GND		Alarm	input	6
10	Alarm	input GND	20	Alarm	input	8

### 12CH 720P-NVR

6

7 8

Video/Audio GND



4

5

6

7 8

#### SENSOR Interface definition:

1	Canbus+	11	Alarm	input	1
2	Canbus-	12	Alarm	input	3
3	RS485+	13	Alarm	input	2
4	RS485-	14	Alarm	input	4
5	Alarm outputCOM1	15	Alarm	input	GND
	Alarm outputCOM1				
7	Alarm outputCOM2	17	Alarm	input	5
8	Alarm outputCOM2	18	Alarm	input	7
9	Alarm input GND	19	Alarm	input	6
10	Alarm input GND	20	Alarm	input	8

EXTEND Interface definition: DC12V OUT+ 1 DC12V OUT-2 3 Audio input

Audio output RS232(RX) Video output RS232(TX) 5 Video/Audio GND

**IPC** Interface definition:

- DC12V OUT+ 1 2 DC12V OUT-
  - RX+
- RX-4

3

6

5 TX+

6 TX-

> TX+ TX-

Remarks:

- If the power supply is 12V, then the current of 12V output can be just 1A. So if there are more than 3pcs cameras, we suggest customers to get power for other cameras from the 12V vehicle power directly or use Our special car power supply.
- RS485 
   RS232 
   LINK, CANBUS interface are optional interface, available only when you listed in the order for this interface.
- Ports:

DEBUG: testing port EXTEND: intercom connecting port SENSOR: alarm port

### 5.2 Instruction of HDD Installation

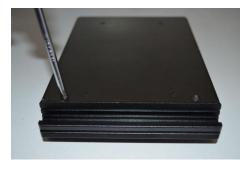




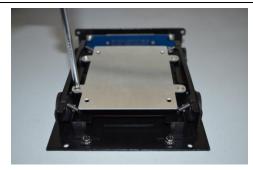
2





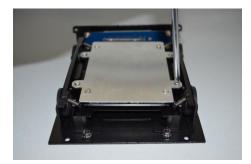


4



















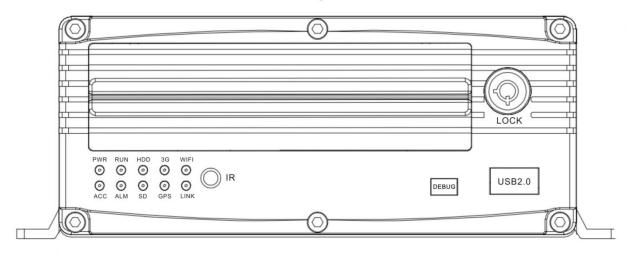
Make sure whether power switch is turned on or turned off, if it is turned on, please use the key, turn the indentation on the "turn off" position.

- Pull the front panel of the hard drive box. Carry out the hard drive and drop it on the table.
- Set down the two screws of the hard drive by cross-screwdriver.

- Drop the under backer of hard drive box, and then check the line whether it is on top of the under backer or not.
- Bring here the SATA hard drive which needs installation; connect the line joint of hard drive box to the hard drive. Please note the heading of the line while connecting. Make sure all of the connecting is complete done.
- Put the hard drive in the hard drive box. The obligate line of hard drive needs longer, the line of hard drive needs to lie on the right position.
- Let the four white screws of the machine through the center hole of the four shockproof rubber pads.
   Fix hard drive on the four holes of hard drive box, do not make the screws too taut, leave a little space for hard drive to move. So it can reach a perfect effect.
- Insert the hard drive under backer which has hard drive to the hard drive top backer, and then, use cross screwdriver and the screw to fix the under backer and the top backer.
- Aimed the hard drive box towards the groove of the front board, level push. Please note the face and back while pushing. Upturn the silk-screen on the right position.
- Wring the lock of the front board by key. Turn the groove on the "turn on" position, lock hard drive box to prevent hard drive from moving out.
- Note : Hard drive fixing lock besides fixing the hard drive, also take the place of host power switch .So do this operation, make sure all lines are completely connected. Otherwise, if car's power have been connected with the standard input voltage, the machine should be destroyed. So while installation, if the line has not been completely connected, please stop to do this step. More careful when installation. The hard drive can not roll out even it has not been locked.

### 6 Instruction of Using

### 6.1 Instruction of Front Panel



#### Front plate

#### LED

- ✓ **PWR LED**: lighting while work starts. Power LED on.
- ✓ **RUN INDICATOR**: flashing when machine work well
- ✓ HDD INDICATOR: record, play, backup data flashing
- ✓ 3G INDICATOR: When with 3G/4G or WIFI module, or with LINK, this led will be on if the settings are all right and the network connects well
- ✓ Wifi INDICATOR: When with WIFI module, it will be on if WIFI module works well.
- ✓ ACC INDICATOR: ACC controller signal regularly, it would indicate
- ALM INDICATOR: When have alarm signal, it would be on, when alarm signal disappear it would be off.
- ✓ SD INDICATOR: When the model has SD card storage function, SD card read normally then it would indicate.
- ✓ GPS INDICATOR: with GPS moduel, DVR work well indicate
- ✓ LINK INDICATOR: when wired network connect normally, it would indicate.
- Key and Other Descriptions
  - ✓ **DEBUG:** Debug interface.

- ✓ **SIM interface:** 3G/4G interface.
- ✓ **IR:** infrared receiving window.
- ✓ **LOCK:** while removing the hard drive, use the key to unlock in order to remove the hard drive, unlock after machine's auto-disconnects the power, the power auto-connect after being locked.
- $\checkmark$  USB: backup the video data of hard drive via USB .
- NOTE: Recommend to use the SanDisk brand of the USB disk , the minimum volume 256M, must support the FAT32 file system.

## 6.2 Instruction of Remote Control Operation

	MENU	①Lead to menu; ②Return
() (K) (F1) F2 F3 F4	REC	Record
	ОК	Enter the sub-menu to set and confirm
PSet PDel Pgo Scan	Q	Playback on the mobile DVR
MENU ESC		①Stop when recording or playback; ②Delete
<(ок) <b>•</b>	►II	Pause/Play when playback
PIZ L.	₩	Fast-forward when playback video , play speed can be x2, x4, x8,
		press one time is x2, press two times is x4, and press 3 times is x8.
Iris+ Zoom Focus Iris-	•	Fast Backward when playback video, one press back for 10seconds
1. /@ Zabc 3def	F1	For PTZ wiper (customized)
4ghi 5jki 6mno	PTZ	Enter PTZ control mode.
7pqrs Btuv 9wxyz ← 0 #	+ Zoom -	Control PTZ Zoom
	+ Focus -	Control PTZ focus

	Mute key, to turn on or turn off audio output when playback videos with audio.(The audio input of the playback device must be connected to the audio output of the DVR.)
ESC	(1) Exit when video playback or backup. $(2)$ Exit from PTZ mode.
	① Upward for MENU selection. ② "UP" direction for PTZ control mode.
	① Downward for MENU selection. ② "Down" direction for PTZ control mode.
	① Towards to left for MENU selection or MENU setup. ② "Left" direction for PTZ control mode.
	① Towards to right for MENU selection or MENU setup. ② "Right" direction for PTZ control mode.
1./@	<ol> <li>①screen zoom the first channel video when surveillance, record</li> <li>② Enter password or set system password.</li> <li>③shortcut keys, press the first key shortcut to switch the number 1, press the second key shortcut to switch the capital letter a, press the third key shortcut toggles the lowercase letters a, press the up and down keys to change value.</li> </ol>
0	① 4 channel display when surveillance, record and playback. ② Enter password or set system password.
Other numbers button	Press 1, 2, 3, 4, 5, 6, 7, 8 switch to CH1, CH2, CH3, CH4, CH5, CH6, CH7, CH8
Other buttons	Not mentioned buttons, not in use.

Remark: When the DVR is in alarm condition, the remote control is invalid.

## 6.3 Menu Setting Instruction:

(Our company system support remote control and mouse to operation, This document introduces the operation of the remote control, the left click of mouse means to confirm or enter, and the right click means exit or return)

First press" "key, then press"	to enter the default password"6666",
User Passw 0	
then press" or "to enter the main menu	interface;
There are "System"、"Disk"、"Record"、"	'Playback"、"Network" and "Alarm" options, select the option by
pressing these buttons"	, <b>ν</b> , then press <b>"</b> σκ"to enter.
J	Main menu
Ö	
System	Disk Record
Playback	Network Alarm
•	

System Settings: includes options of "Setup", "Vehicle", "Other", "System info", "Log", "Config".



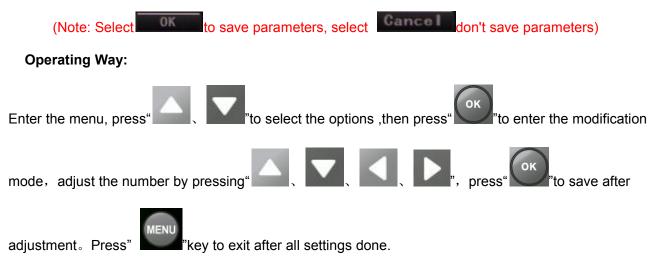
■ Setup setting: includes options of "Base", "User", "Serinal", "PTZ", "GPS", "G-sensor" and "NTP"



• **Base setting:** Set the System time, TV system, Language, etc.

	Da	ise		_
Date FMT	YYYY-MM-DD •	DST	OFF	•
Date	2016-04-01	Time	13:47:4	9
Language	ENGLISH	Video mode	NTSC	
Delay time	0005s 🔻	Speed unit	MPH	
		_	OK Car	ncel

- ✓ **Date format:** Offer 3 display methods like "y/m/d, m/d/y, d/m/y" for personal habit.
- ✓ **Daylight saving time:** suitable for according countries or areas.
- ✓ **Date**: Adjust the date of HDD recorder
- ✓ **Time:** Adjust the time of HDD recorder
- ✓ Language: Set "Chinese", "English", "Portuguese", "Russian" and "French", have to restart the DVR after setting.
- ✓ Video Mode: Set "PAL" or "NTSC", have to restart the DVR after setting.
- Delay Time: DVR Time-lapse turn off function after the car ignition off, the default time is 5S, and 30s,1min,2min,5min,10min,20min,30min,2hour,4hour, The longest time is 24 hours, all could be set, have to restart the DVR after setting.



• **User settings**: Set up the user name and password of administrator and common.

		User
Admin user Password	Ad∎in	New password
Common user Password	User	New password
		OK Gancel
		OK Cancel

- ✓ Admin user: set up the user name of administrator
- ✓ **Password:** Enter the default password before changing the new password.
- ✓ **New password:** Enter the new password.
- ✓ **Common user:** set up the user name of common.
- ✓ **Password:** Enter the default password before changing the new password.
- ✓ **New password:** Enter the new password.
- Serial setting: this is Serial setting to set up the communication protocol with external equipment.

RS232 set	DISPATCH	Bitrate	9600bps •
Data bit Verify	8 NONE	Stop bit RTS/CTS	1 NONE
RS485 set	and see the second s	Bitrate	9600bps •
			OK Cancel

- ✓ **RS232 set**: support dispatch, led panel, ID card, OBD, person count.
- ✓ **Bitrate**: support 2400bps,4800bps,9600bps,19200bps and 38400bps.
- ✓ **Data bit**: the default value is 8.

- ✓ **Stop bit**: the default value is 1.
- ✓ Verify: the default value is none.
- ✓ **RTS/CTS**: the default value is nont.
- ✓ **RS485 set**: support PTZ, led screen, oil sensor, ID card, OBD, person count.
- ✓ **Bitrate**: support 2400bps,4800bps,9600bps,19200bps and 38400bps.
- **PTZ setting**: Adjust and control the camera with external PTZ device.

	Р	TZ		
	Protocol	PELCO-D	•	
	CH1 address	001		
	CH2 address	002		
	CH3 address	003		
	CH4 address	004		
			OK	Gancel
>				

- ✓ **Protocols**: default PELCO-D, support PELCO-D.PELCO-P.
- ✓ Channel-Address: Channel one-Device address.
- ✓ Channe2-Address: Channel two-Device address.
- ✓ **Channe3-Address**: Channel three-Device address.
- ✓ **Channe4-Address**: Channel four-Device address.
- GPS setting:



- ✓ **Time zone**: different by countries, e.g: China for UTC+08
- ✓ **GPS Interval**: GPS Data upload interval, used with other system interface.
- G-sensor setting:

6-5	ensor	
X: 0062mg Y:-	0062 <b>m</b> g	Z:-0062mg
GSensor-X	2000	=g
GSensor-Y	2000	≡g
GSensor-Z	2000	∎g
	Adjust	OK Gancel
•		

- ✓ G Sensor-X: 2000mg( default value, this value will change accordingly if the X direction gravity accelerated speed value is changeable).
- ✓ G Sensor-Y: 2000mg(default value, this value will change accordingly if the Y direction gravity accelerated speed value changeable ).
- ✓ G Sensor-Z: 2000mg(default value, this value will change accordingly if the Z direction gravity accelerated speed value is changeable).

(note: Press the **adjust** to adjust G-sensor parameters when first installed)

• NTP setting:

Ти	P		
NTP Server	218.	189.210.3	
Server port	123		
NTP timing	0FF		
NTP Interval	OFF		
		OK	Cancel
· •			

- ✓ **NTP server**: the NTP server ip
- ✓ Server port: default port is 123
- ✓ **NTP timing:** different by countries, e.g: China for UTC+08
- ✓ **NTP Interval**: time data upload interval, used with NTP server.
- Vehicle information: details of car plate number, route and driver code.

	Vehicle		
Car ID	NONE 000000		
A-person	50		
Line Num	00000000		
Driver ID	00000000		
		0K	Gancel

- Car ID: can be showed by English, Chinese simplified language, Numbers or common symbols.
- ✓ **A-person**: setup the original carried person for the vehicles.
- ✓ Line Num: the driving route and code.
- ✓ **Driver ID**: set up the driver code information.

• Other information:



- ✓ VGA Output: 1920\*1080,1280\*720,1024\*768,no output
- Zoom in CH: Choosing which channel to see when power on each time. This is also useful when backing the car. Eg .when you choose CH 1 as the Zoom , when you start the device , it will show CH1 in the whole screen .
- ✓ Alarm Phone: set the action of alarm or not.
- ✓ **Phone number:** click alarm function, set the phone number for alarm.
- System information: Display DVR hardware code number, software version information( only view, couldn't be changed)



- ✓ **Device encoding**: only for this DVR, the code is unique.
- ✓ **Software version:** the version No. of DVR software.

- ✓ IMIE: IMIE No. of 3G/4G network or module
- ✓ Strength of 3G/4G signal: strength value:99, unknown: 0-31
- Strength of GPS signal: AA-BB(AA: GPS No ;BB: GPS strength. Show signal strength of max3).
- ✓ **WIFI MAC**: the MAC address
- LOG information

(man)		
og type ALL	• Fi	nd
2016-04-01	11:00:36	Video loss
2016-04-01	11:00:54	Power ON
2016-04-01	11:00:54	Start REC
2016-04-01	13:39:41	Power ON
2016-04-01	13:39:41	Start REC
2016-04-01	13:44:35	User Reset
2016-04-01	13:46:04	Power ON
2016-04-01	13:46:04	Start REC
Back	Ne	t Export Eixt

- ✓ Log type: User action log, alarm logging, equipment status log.
- Configuration management

J	Config	
	Inport	
	Export	
	Renew	
		Eixt
•		
V		

- ✓ **Import**: Import the configuration parameters
- ✓ **Export**: Export the configuration parameters
- ✓ **Renew**: Restore the factory parameter

**Disk:** Check and format

Đ	isk		
Disk name	HDD		
Overwrite	0FF	•	
Total size	465GB		
Free size	457GB		
Free record time	13025MIN		
	Format	ОК	Gancel

- ✓ **Disk Name:** Display the system recognized HDD name.
- ✓ **Overwrite:** Choose on and off
- ✓ **Total Size:** Display the total size of HDD.
- ✓ **Free Size:** Display the remaining Capacity of HDD.
- ✓ **Free record time:** It is only an estimate.
- ✓ Format: Format HDD(only format the head files of HDD).

Select this item, there is a format interface after press", confirm to format, cancel to return the original interface.

	ALL	data	will	be	lost
_					
	OK			C	ancel

■ Record: the video files setting, It includes "codec", "channel" and "record plan".



• Codec:

Channe I	CH1	•	Copy	to all	
	Main stre	ea∎		Sub stre	a
Resolution	960P			D1	
Fra∎e	25fps	•		25fps	•
Stream mode	CBR			CBR	•
Quality	1.0Mbps			256kbps	•
Audio					
JPEG	30s				
Input ∎ode	Analog	•			
			Sav	e OK	Gance
nput ∎ode	Analog	•	Sav	e OK	Gance

- ✓ **Channel:** select the channel setting (the information of each channel could be set independently)
- ✓ **Resolution:** CIF/HD1/D1/960H/720p/1080p;

The left side is the local storage information,

The right side is network transmission information; local "CIF,HD1,D1" is optional, only "CIF" for network transmission.

✓ Frame: 1-25/30fps

The left side is local storage information,

The right side is network transmission information.

Stream mode: Constants Bit Rate and Variable Bit Rate.

✓ Quality: Video quality setting

The left side is the local video quality(total 10 grades,

192kbps/320kbs/512kbps/768kbps/1Mbps/1.2Mbps/1.5bps/2Mbps/3Mbps/4Mbps)

The right side is the network transmission quality( total 13 grades,

32kbps/48kbs/64kbps/80kbps/112kbps/144kbps/192kbps/256kbps/320kbps/384kbps/512kbps/76 8kbps/1024kbps)

- ✓ **Audio:** Select to record audio or without audio.
- ✓ JPEG: set captured of time and interval, Select a Trigger for alarm triggering to capture, choice time 10s, 30s, 60s, 120s, 300s.
- ✓ Input mode: Analog, AHD, SDI or IPC
- ✓ Copy to all: Copy to all channels

Note: save after finished video parameter setting (have to restart the DVR after setting.)

• Channel:

	Channe I
Channel CH1 Channel name CH01	• Copy to all
OSD Ti∎e 🗹 Channel	name ✔ Car ID & GPS ✔
	Save OK Cancel

- Channel: select the channel setting (the information of each channel could be set independently)
- ✓ Channel name: the name of each channel
- $\checkmark$  **OSD**: choose to add the character information or not.
- ✓ Copy to all: Copy to all channels
- Record plan

Channe I	CH1	٠	Copy to all	
Record mode	REALTIME	•		
File length	5MIN	•		
Prerecord	10s	•		
vent REC time	30s			
Schedule 📕	Timer	S/	larm	
0				23
			Save OK	Cancel

- ✓ **Channel:** select the channel setting (the information of each channel could be set independently)
- ✓ **Record mode:** real time and event or no record
- ✓ File length: the packaged video files length setting (5/10/15/25/30/60 minutes optional)
- ✓ **Prerecord:** Before the alarm recording time(no,5s,10,15s)
- ✓ Event REC time: Alarm-triggered video duration (30-330s optional, 30s unit).
- ✓ **Schedule:** the timer is timing recording, the alarm is alarm recording.
- ✓ **Copy to all**: Copy to all channels.
- Save: save after finishing video parameter setting (have to restart the DVR after setting.)

The operating method is similar to the "basic settings" operating

■ **Playback:** the recorded video Playback

2016-03-31	File source	HDD	
2016-04-01	File type	ALL	
	Start time	00:00:00	
	End ti∎e	23:59:59	
Back Next			
		Eis	ĸt

There is video date in the menu, it will show the vide time after press "Search", choose the playback time

range according to require time ,then press "Play "button to replay the video.

File format suffix "\_P" is power off video file , suffix "\_S" indicates an alarm trigger video files, suffix "\_T" indicates an timing video files.

08:26:47_P 08:30:50 T	09:04:13_T 09:08:59_T	
08:35:36_T	09:13:45_P	Channel ALL
08:40:22_T	09:16:37_T	Play
08:45:08_T 08:49:54_T	09:21:29_P 09:23:11_T	Export
08:54:41_T	09:23:47_P	
08:59:27_T	09:24:59_P	
Back	Next	
		Eix

- Channel: 1CH/4CH/8CH/12CH Video playback; video playback on each channel or full screen, playback and record simultaneously
- ✓ **Play:** Select the video files and channel to replay
- ✓ **Export:** Select the HDD video files backup to USB Disk

The operating method refers to "local video playback instruction"

#### Network Setting: LAN, 3G, WIFI, IPC



- ✓ LAN: connecting via RJ45.
- ✓ **3G/4G:** insert 3G/4G SIM card into the slot.

- ✓ **WIFI:** connecting the network of WIFI.
- ✓ **IPC:** To connect the IPC camera Settings.
- ✓ **SIP:** Chinese goverment standard platform
- ✓ **CH ID**: Chinese goverment standard platform infomation
- Local Network Setting (LAN):

		L	AN		
Net type	LAN	•	DHCP	OFF	•
Static IP	192.168.	002.246	Net mask	255.25	5.255.000
Gateway	192.168.	002.100	DNS	202.09	6.134.033
Sever IP	cvideovi	ew.com	Sever por	t8101	
				OK	Cancel

- ✓ **Network Type:** LAN and 3G/4G-WIFI optional.
- ✓ DHCP: Automatically get the IP address( in order not conflict with the LAN, please enable ON, and also enable DHCP on the router, P.S, only one DHCP server can be enable in one LAN).
- ✓ Static IP: setup under LAN and WIFI mode.
- ✓ **Net mask:** Subnet mask under LAN or WIFI mode.
- ✓ **Gateway:** gateway under LAN or WIFI mode.
- ✓ **DNS:** please input when the server IP is DNS, and not necessary when IP is static.
- Server IP: If the units login on our server, please use cvideoview.com, and if the units login on your own server, please use yours.
- ✓ Server Port: Keep it as default of 8101.
- 3G Network Setting:
  - ✓ **Net type:** select 3G-WIFI if you are going to use 3G mode.
  - ✓ DHCP: ON

	L	AN		
Net type	3G/4G-#1F1 •	DHCP	ON	•
Static IP	192.168.002.246	Net mask	255.2	55.255.000
Gateway	192.168.002.100	DNS	202.0	96.134.033
Sever IP	cvideoview.com	Sever por	t 8101	
			ОК	Gancel

✓ Access into "Network"→"3G"

	36/46	
APN	3gnet	
Dialup Num	*99#	
User na∎e	3gnet	
Password	3gnet	
		OK Gancel

- ✓ **APN:** Access Point Name.
- ✓ **Dialup Num:** Get this info from your carrier.
- ✓ **User Name:** Fill in if you have.
- ✓ **Password:** Fill in if you have.

**Note:** please make sure you select the proper SIM card fit for 3G/4G module.

#### • WIFI Setting:

- ✓ **Net type:** Select 3G-WIFI when the type is under LAN.
- ✓ DHCP: ON

	L	AN		
Net type	3G/4G-#1F1 •	DHCP	ON	•
Static IP	192.168.002.246	Net mask	255.	255.255.000
Gateway	192.168.002.100	DNS	202.	096.134.033
Sever IP	cvideoview.com	Sever port	8101	
		_	OK	Gancel

✓ Access Network setup →"WIFI"

		RIFI		
	SSID	Tenda		
	Password	hesitech		
	Certifica	t WPA-PSK		
	Encryptio	ON COMP TKIP		
			ОК	Gancel
181				

- ✓ **SSID:** WIFI router device name.
- ✓ **Password:** using password for SSID.
- ✓ Certificate: Support both "WPA-PSK" and "WPA2-PSK".
- ✓ Encryption: Support both "CCMP" and "TKIP".

Access router, check its "WIFI "encryption.

WIRELESS SECURITY MODE	
wireless security modes, including WE wireless encryption standard. WPA pr	igure wireless security features. This device supports three P, WPA-Personal, and WPA-Enterprise. WEP is the original ovides a higher level of security. WPA-Personal does not WPA-Enterprise option requires an external RADIUS server.
Security Mode :	WPA-Personal 👻

	your wireless security settings. Please print this page out, or write per, so you can configure the correct settings on your wireless
Wireless Band :	2.4GHz Band
Wireless Network Name (SSID) :	dink
Security Mode 2 :	Auto (WPA or WPA2) - Personal
Cipher Type :	TKIP and AES
Pre-Shared Key : c47086hee2650742883d5hb36da	53356e51407f1635855aa7cbef92b5598bf6c

#### Notes:

Please make sure the router WIFI encryption keep the same with the setup in MDVR if the units use WIFI.

• IPC Setting(This function can only suit for Mobile NVR )

Channel IPC Addr User Name	CH1 192.168. admin	•	Time Sync IPC Port Password	80 admin
192. 168. 2.	83:8899	192. 168.	2. 142:8899	192.168.2.75:80
192.168.2.	117:80	192.168.	2.220:80	192. 168. 2. 150:80
Search IPO	end!	Search	Save	OK Cancel

- ✓ **Channel:** main channel , different channel set can choose.
- **Time Sync:** turn on/off means if open the time synchronization between ipc and device.
- ✓ **IPC Addr:** put and modify ipc address when the ip camera and device in one network area.
- ✓ **IPC Port:** the device port which connect with ip camera.
- ✓ **User Name:** the user name which connect with ip camera.
- ✓ Password: the user names password
- Search: it is can search the local network ipc when click the search button
- ✓ Save: click the save button to keep the sets after set

Note: the network type must be changed to LAN when connect with ipc.

SIP: Foreign users can't use this standard, it's just suit for chinese client .

- CH ID: Foreign users can't use this standard, it's just suit for chinese client .
- Alarm setting : Sensor alarm, Motion detecting alarm and other alarm setting



- ✓ Sensor: An external sensor alarms.
- ✓ **MD:** Motion detecting alarm.
- ✓ Other: other alarm setting.
- Sensor Setting

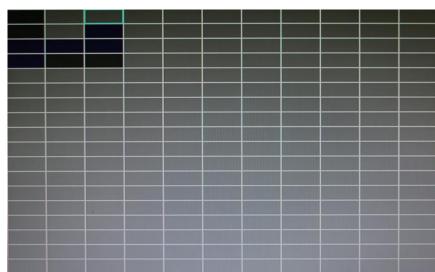
6		Ser	isor		
	Channe I	S1 •	Copy to all		
	Enable				
	Sensor Name				
	Triger level	HIGH LEVEL			
	Linkage	OFF 💽			
	OSD		Lock		
	Alar∎		Alar∎ out		
			Save 0	K	Gancel

- ✓ **Channel:** main channel , different channel set can choose.
- ✓ **Enable:** turn on/off means if open the sensor alarm.
- ✓ Sensor Name: put and modify the name of sensor.
- ✓ **Trigger level:** High or low level trigger the alarm.

- ✓ **linkage:** Set up ON/ OFF video linkage function.
- ✓ **OSD:** Choose whether to overlay alarm information.
- ✓ **Lock:** Won't cover this alarm video after choose this lock.
- ✓ **Alarm:** Choose whether to overlay alarm information.
- ✓ Alarm Out: Choose whether to alarm out .
- ✓ **Save:** click the save button to keep the sets after reboot
- **MD:** Motion detecting alarm.

	l	ID		
Channe I Enable	CH1 • • Area setup	Copy to	all	
		Save	ОК	Cancel

- ✓ **Channel:** main channel , different channel set can choose.
- Enable: Open and close motion detect record and motion detect sensitivity selection such as "off",
   "high", "low". Opening motion detect recording, also need to set the icon "S"(alarm record)for time range of the detect record in "Record Setting" status except select "High", "Low". "High", "Low" is the grade of detect sensitivity, higher grade record easier.



✓ Area setup

: No detect : Low sensitivity : High sensitivity

• **Other:** other alarm setting.

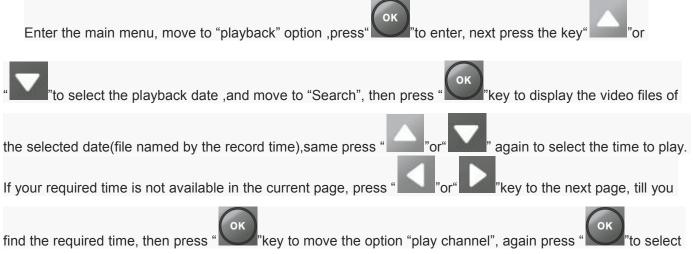
Alarm out	ti∎e <mark>5</mark> s	•	Low vo	Itage 8.	50 V
Low spee	⊧d 000	MPH 0	High s	peed 08	8 MPH
Alarm ou	-		_		_
Speed		G-sensor		Video I	ost
MD		HDD Fail		Power	
				OK	Cance

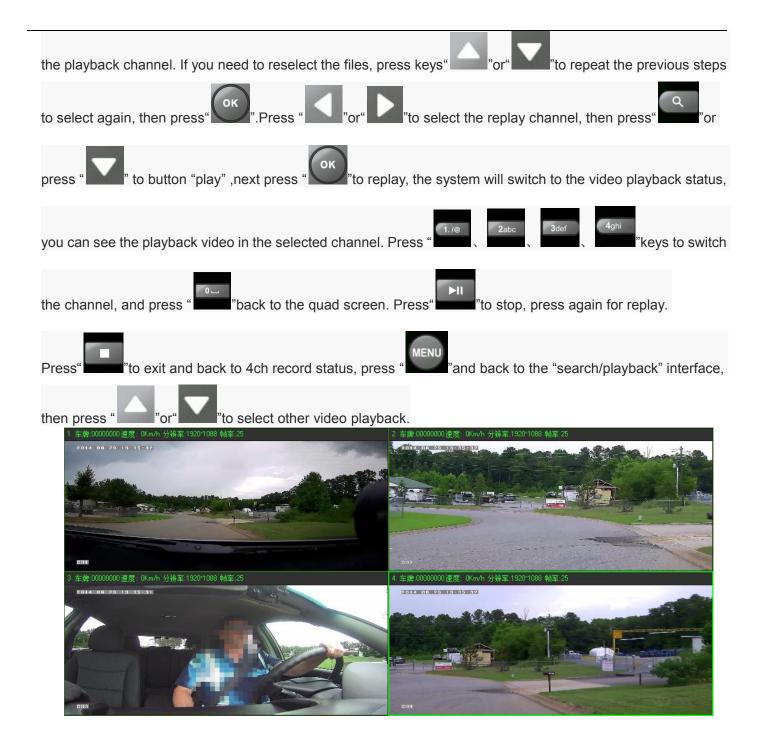
- ✓ Alarm out time: Alarm output time (5s-900s).
- ✓ Low voltage: The low voltage alarm about car battery.
- ✓ Low speed: The low speed alarm.
- ✓ High speed: The high speed alarm.
- Alarm out enable: setup the types of alarms linkage, speed, G-sensor, video lost, Motion detecting alarm, HDD fail, power.

## 6.4 DVR Video Playback Instruction

Our company System support 2 video playback ways.

1) Users can watch the video playback with the IR remote control, the specific steps are as follows:







2) User can watch the video playback with the mouse, the specific steps are as follows:

Enter the main menu, Click on the "playback" option to enter, next select the playback date, file type and time frame ,then press "Search" to display the video files of the selected date(file named by the record time). After selected the time and channel , press "Play" to play. If your required time is not available in the current page, press "Back" or "Next" to the other page, till you find the required time.



User press " on the playback interface, and then use the mouse to click" **CONTRACTOR** "to implement different functions, such as: before, stop, play, pause, a frame play, fast forward, next and audio(each channel).

#### 6.5 Video Backup

Our company System support 2 video backup ways.

- 1) Connect the USB disk to the DVR's USB port for backup (Ports on Demand); Operating method as follows:
  - Connect USB disk to the DVR's USB port (FAT32 format, backup Max.20G).
  - On the video playback interface, select the backup video files first, then move to "Export" option,

and press "OK "to backup, "Export END" display after backup finished, the USB disk could be taken

away, then press" to exit if no other operations.

- If you need to backup another files, press" Lever "to repeat the previous steps to backup.
- 2) Take the HDD box out from DVR, then connect the HDD reader to the PC, you can check the video playback on PC via the installed our company's local playback analysis software .( Suitable for large amount data backup, simple and flexible. The proprietary data files also could be converted to the common format, suitable for different reading demands). Specifics refer to the local playback analysis software instruction).

### 6.6 PTZ control

This function just used to has PTZ function models, there is two ways. Operations are as followings:

1) User can control PTZ camera with the IR remote control, the specific steps are as follows:

the control board; Control over if wanna quit at all, click"

2) User can control PTZ camera with the mouse, the specific steps are as follows:

When DVR is working, Click the mouse left button, then the screen would show this picture

click "PTZ", There is PTZ control icon would display, the PTZ camera would rotate after each command by clicking PTZ icon; the PTZ control icon will be displayed on the channel which your mouse to click; Control over if want to quit at all, click the mouse right button.



# 6.7 Video Data Volume

The required volumes of video and video-related settings , please see the following table:

4 CI	H SDI 1080	)P		4CH 960H		8CH	960H	12	2CH 960H	
VIDEO QUALIT Y	Total Record Frame	Data Size Per Hour	VIDEO QUALITY	Total Record Frame	VIDEO QUALITY	Total Record Frame	Data Size Per Hour	VIDEO QUALITY	Total Record Frame	Data Size Per Hour
6.0 Mbps	100	10.8GB	2.0 Mbps	100	3.6GB	200	7.2GB	2.0 Mbps	300	10.8GB
	frame			frame	J.00D	frame			frame	
5.5 Mbps	100	9.9GB	1.5 Mbps	100	2.65GB	200	5.3GB	1.5 Mbps	300	7.95GB
	frame			frame	2.05GD	frame			frame	
5.0 Mbps	100	9.0GB	1.2 Mbps	100	2.1CB	200	4.2GB	1.2 Mbps	300	6.3 GB
	frame			frame	2.1GB	frame			frame	
4.5 Mbps	100	8.1GB	1.0 Mbps	100	1.8GB	200	3.6GB	1.0 Mbps	300	5.4 GB
	frame			frame	1.0GD	frame			frame	
4.0 Mbps	100	7.2GB	768 Kbps	100	1 25 C D	200	2.7GB	768 Kbps	300	4.05GB
	frame			frame	1.35GB	frame			frame	
3.0 Mbps	100	5.4GB	512 Kbps	100	0.9GB	200	1.8GB	512 Kbps	300	2.7 GB
	frame			frame	0.966	frame			frame	
2.0 Mbps	100	3.6GB	320 Kbps	100		200	1.1GB	320 Kbps	300	1.65GB
	frame			frame	0.55GB	frame			frame	
1.0 Mbps	100	1.8GB	192 Kbps	100	0.00500	200	0.67GB	192 Kbps	300	1.01GB
	frame			frame	0.335GB	frame			frame	
	Note: Ba	sed on use	ers matching	condition	s to apply th	e appropri	ate drive a	and related s	ettings.	

4CH 1080P-NVR	8CH 720P-NVR	12CH 720P-NVR

VIDEO QUALITY	Total Record Frame	Data Size Per Hour	VIDEO QUALITY	Total Record Frame	Data Size Per Hour	VIDEO QUALITY	Total Record Frame	Data Size Per Hour
2.0 Mbps	100frame	6.1GB	2.0 Mbps	200frame	10.32GB	2.0 Mbps	300frame	15.48GB
1.5 Mbps	100frame	4.58GB	1.5 Mbps	200frame	7.74GB	1.5 Mbps	300frame	11.61GB
1.2 Mbps	100frame	3.65GB	1.2 Mbps	200frame	6.18GB	1.2 Mbps	300frame	9.27GB
1.0 Mbps	100frame	3. 05GB	1.0 Mbps	200frame	5.16GB	1.0 Mbps	300frame	7.74GB
768 Kbps	100frame	2. 3GB	768 Kbps	200frame	3.86GB	768 Kbps	300frame	5.79GB
512 Kbps	100frame	1.5GB	512 Kbps	200frame	2.58GB	512 Kbps	300frame	3. 87GB
320 Kbps	100frame	1GB	320 Kbps	200frame	1.62GB	320 Kbps	300frame	2.43GB
192 Kbps	100frame	0. 58GB	192 Kbps	200frame	0.96GB	192 Kbps	300frame	1.44GB

Note: Based on users matching conditions to apply the appropriate drive and related settings.

# 6.8 Extranet Port Mapping

- ✓ Install the CMS server in LAN, please refer to the manual how to install CMS server.
- ✓ First, make sure the PC which installed the server use Static Public IP, not automatically get.

	automatically if your network supports ed to ask your network administrator for
Obtain an IP address autom	atically
• Use the following IP addres	s;
IP address:	192.168.2.33
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	192.168.2.100
O Obtain DNS server address	automatically
• Use the following DNS serv	er addresses:
Preferred DNS server:	192.168.0.1
Alternate DNS server:	

✓ Access into "**Program**"→"**Run**"→"CMD", fill in "ipconfig"→"Enter" to see if the server IP has been set

successfully.

✓ Open the file of "DVR\_Server.cfg" in the server installation path, can check whether the ports have been

set successfully.

Port: 8001, 9001, 8101

DVR_Server.cfg - 记事本	
文件 (2) 编辑 (2) 格式 (2) 查看 (2) 帮助 (3)	
[Server] Server_port=8001 Client_port=9001 TCPServer_port=8101 UseName_Num=1 UpdatePass=0 GpsPlayer_dis=30 [SendGPS] Gps_IP=127.0.0.1 Gps_Port=9009 Gps_Stauts=2 debug_status=0 [UserName00] Name=admin Password=admin MaxNum=0	
Ln	16, Col 2 .

✓ Access into router→"Advanced"→ "Port forwarding ":

DIR-835		SETUP	ADVANCED		TOOLS	STATUS	SUPPORT
VIRTUAL SERVER	POP	RT FORWARD	ING RULES :				Helpful Hints
PORT FORWARDING	This	option is used to	o open multiple ports or a r	ange of p	orts in your route	r and redirect data	Check the
APPLICATION RULES	thro	ugh those ports	to a single PC on your netw ling, Port Ranges (100-150	vork. This	s feature allows yo	ou to enter ports in	Application Name
QOS ENGINE		20-5000, 689).	ung, Port Kanges (100-150	), maivia	uar Ports (80, 68,	ooo), ur mixeu	drop down menu for list of predefined
NETWORK FILTER		Save Settings	Don't Save Settings	1			applications. If you select one of the
ACCESS CONTROL	-	save seconds	Durit bave Seconds				predefined
WEBSITE FILTER	24	PORT FOR	WARDING RULES				applications, click the arrow button next to
INBOUND FILTER	1 inter				Ports to Oper	0	the drop down men to fill out the
FIREWALL SETTINGS		Name			TCP	Schedule	corresponding field.
ROUTING	_	<b></b>			0	Always 💽	You can select a
ADVANCED WIRELESS	10	IP Address			UDP	Inbound Filter	computer from the I of DHCP clients in th
WI-FI PROTECTED		0.0.0	< Computer Name	-	0	Allow All	Computer Name dr
SETUP		Name	-	- Internal	TCP	Schedule	down menu, or you can manually enter t
ADVANCED NETWORK	Г	Landon and Landon			0	Always 💌	IP address of the LA computer to which
GUEST ZONE		IP Address	< Computer Name	-	UDP	Inbound Filter	you would like to op
IPV6 FIREWALL			Computer Mame	-		1	the specified port.
IPV6 ROUTING		Name	< Application Name	-	TCP	Schedule	Select a schedule for
	Г	IP Address		_	UDP	Inbound Filter	when the rule will be enabled. If you do not
		0.0.0.0	<< Computer Name	-	0	Allow All	see the schedule you need in the list of
		Name			TCP	Schedule	schedules, go to the
	_	[	< Application Name	-	0	Always 🔹	Tools Schedules screen and create a new
	1.10	IP Address			UDP	Inhound Filter	schedule.

 $\checkmark$  Add the ports of 8001, 8101, 9001 to the port forwarding.

DIR-835		SETUP	ADVANCED		TOOLS	STATUS	SUPPORT
VIRTUAL SERVER	POR		IG RULES :				Helpful Hints
PORT FORWARDING APPLICATION RULES QOS ENGINE NETWORK FILTER ACCESS CONTROL	throu vario (102	ugh those ports to	open multiple ports or a ran o a single PC on your netwo ig, Port Ranges (100-150), Don't Save Settings	rk. Thi	s feature allows you	to enter ports in	Check the Application Name drop down menu for list of predefined applications. If you select one of the predefined
WEBSITE FILTER	24 -	PORT FORW	ARDING RULES				applications, click the arrow button next to
	1000	1			Ports to Open		the drop down menu to fill out the
FIREWALL SETTINGS		Name			TCP	Schedule	corresponding field.
ROUTING		DVR	<< Application Name	*	9001	Always 💌	You can select a
DVANCED WIRELESS	i Ma	IP Address 192.168.2.33	< Computer Name	•	UDP 9001	Inbound Filter	computer from the lit of DHCP clients in the Computer Name dru
ETUP		Name			TCP	Schedule	down menu, or you
DVANCED NETWORK		DVR	Application Name</td <td></td> <td>8101</td> <td>Always 🔹</td> <td>can manually enter the LAI IP address of the LAI</td>		8101	Always 🔹	can manually enter the LAI IP address of the LAI
UEST ZONE	~	IP Address	_		UDP	Inbound Filter	computer to which you would like to ope
PV6 FIREWALL		192.168.2.33	< Computer Name		8101	Allow All	the specified port.
PV6 ROUTING		Name	_	_	TCP	Schedule	Select a schedule for
		DVR	Application Name	*	8001	Always 💌	when the rule will be
		IP Address		_	UDP	Inbound Filter	enabled. If you do not see the schedule you
		192.168.2.33	<< Computer Name	-	8001	Allow All	need in the list of schedules, go to the
		Name	teral .	Tenta	TCP	Schedule	Tools Schedules
	Г	1	<< Application Name	-	0	Always 💌	screen and create a new schedule.
		IP Address			UDP	Inbound Filter	Jenousion

- a) Name: fill in a name for MDVR port.
- b) **Ports to Open:** 8001, 8101, 9001.

- c) IP Address: Server IP address.
- d) Inbound Filter: TCP、UDP、Allow ALL, please select "Allow All".
- e) Schedule: select "Always".
- ✓ Fill in the ports, and click"Save settings".

SETUP	ADVANCED	TOOLS	STATUS
PORT FORWARDI	NG RULES :		
through those ports t various formats includi (1020-5000, 689).	open multiple ports or a ran o a single PC on your netwo ng, Port Ranges (100-150),	rk. This feature allows	you to enter ports in
Save Settings	Don't Save Settings		
24 PORT FOR	WARDING RULES		
		Ports to Op	en
Name DVR	< Application Name	• 9001	Schedule
P Address	( ppresent frame	UDP	Inbound Filter
192.168.2.33	Computer Name	9001	Allow All
Name DVR	< Application Name	TCP 8101	Schedule
IP Address		UDP	Inbound Filter
192.168.2.33	<< Computer Name	• 8101	Allow All 💌
Name DVR	< Application Name	TCP	Schedule

After the port mapping settings, find the "IP Address" in the WAN, the IP Address is your CMS server IP.
 login the server IP on the CMS client to access.

DIR-835	SETUP	ADVANCED	TOOLS	STATUS					
DEVICE INFO	DEVICE INFORMA	TION							
LOGS	All of your Internet an	d network connection de	tails are displayed on this	nage. The firmware					
STATISTICS	All of your Internet and network connection details are displayed on this page. The firmware version is also displayed here.								
INTERNET SESSIONS	GENERAL								
ROUTING		The Sile A							
WIRELESS	Firmward	e Version : 1.00 , 12, A	st 12, 2011 7:29:58 PM						
IPV6	2		20. <del>-</del> 1.010.000						
IPV6 ROUTING	WAN								
	Connect	tion Type : DHCP Client							
	Cab	le Status : Disconnected							
	Networ	rk Status : Disconnected							
	Connection	Up Time : N/A							
		DHCP Renew	DHCP Release						
	MAC	Address : 00:01:23:45:6	7:8a						
	IP	Address : 188.38.223.87	·						
	Sub	net Mask : 255.255.255.0	)						
	Default	Gateway: 188.38.223.87							
	Primary DN	IS Server : 202.96.128.16	6						
		IS Server : 202.96.134.13	3						
	Advar	nced DNS : Disabled							

Notes: When extranet access into LAN server, it need do mapping on the router. Then extranet can

access into WAN IP.

Change the Server IP to the related one, Access into MDVR

```
"menu"→"Network setting"→"LAN"→"Server IP"→XXX.XXX.XXX.XXX
```

	L	AN		
Net type	3G/4G-#IFI.	DHCP	ON	•
Static IP	192.168.002.246	Net mask	255.25	5.255.000
Gateway	192.168.002.100	DNS	202.09	6.134.033
Sever IP	cvideoview.com	Sever por	t <mark>8101</mark>	
		_	ОК	Gancel

### 6.9 Domain binding setting

After finished the server set up and the port mapping, you can login via network IP.

There are two ways to access the network as follow.

ADSL dial-up: It will assign a different dynamic IP address for each dial

Leased line: It will assign a static IP address, and you can access directly

So, when set up the server with the way of ADSL dial-up, you can binding DDNS via domain in order to prevent the distribution of different dynamic IP in each dial.

**Note 1**: DDNS is used to mapping the dynamic IP address to a static DNS. Client program will send the dynamic IP to the server program when the user access the network, then the server program will provide the DNS server to realize dynamic DNS.

**Note 2 :** If the dynamic domain name is free, you will temporarily unable to access via the free domain name when things going wrong with the the domain name service provider's server.

The related parameters below is for routers test. Please refer to actual network environment when installation.

✓ Access into router setup, select "Dynamic DNS" to check the related setup.

D-Lin	k				$\prec$
DIR-835	SETUP	ADVANCED	TOOLS	STATUS	SUPPORT
ADMIN TIME	DYNAMIC DNS				Helpful Hints
SYSLOG EMAIL SETTINGS SYSTEM FIRMWARE DYNAMIC DNS SYSTEM CHECK SCHEDULES	name that you have assigned IP address. addresses. Using a D0 your game server no	bws you to host a server (1 purchased (www.whatever Most broadband Internet S DNS service provider, your f matter what your IP addre ree DDNS service at <u>www.</u> Don't Save Settings	yournameis.com) with yo ervice Providers assign dy riends can enter your hos ss is.	ur dynamically namic (changing) IP	you must first have a Dynamic DNS account from one of the providers in the drop down menu. More
	DYNAMIC DNS SE	ETTINGS		-	
	Servi H Userna	namic DNS : er Address : lost Name : me or Key : ord or Key : ind or ind	(hours)	namic DNS Server	

- a) Enable Dynamic DNS: Enable ON if you need to use DDNS
- b) Server Address: Fill in accordingly
- c) Username or Key: Fill in applied user name
- d) Password or Key: Fill in password
- e) Verify Password or Key: confirm the password
- f) Timeout:Timeout setting
- g) Status: Status of connection

Notes: DDNS need to be applied by customers if necessary.

✓ Fill in the user name and password, use DDNS login, it shows connect successfully if login properly, and will display the applied the DNS.

Notes: please refer to the Oray for the DNS apply.

 $\checkmark$  After DNS binding, you can access into server via DNS.

## 6.10 WIFI hotspot

1. To use the Wifi hot spot function, user has to set the "Netype" as "LAN" and the "DHCP" as "ON"in the DVR, see below picture:

-	L	AN		
Net type	LAN	DHCP	0 N	•
Static IP	192.168.002.246	Net mask	255.2	55.255.000
Gateway	192.168.002.100	DNS	202.0	96.134.033
Sever IP	cvideoview.com	Sever por	t 8101	
			ОК	Gancel

Mark: Wifi hot spot only work for the mobile dvr with this function

WIFI hot spot default settings:

SSID: MDVR

Password: admin888

WIFI router default settings:

Router IP: 192.168.10.1

Name: admin

Password: admin

User can modify the SSID name and password by referring to the above settings via connecting with router.

 Input the default router IP 192.168.10.1 in IE and enter the router menu by inputting default user name and password. The device working condition and 3G/4G dial up connection condition can be checked, see below picture:

Summary	Log Interface File Sharing	
	REFRESH	Help
	)	Summary: Show current status and
Work Mode	3G/4G Wireless Router Mode	configurations of the
3G/4G Connect	Auto Select	router.
3G/4G ISP	WCDMA/LTE	
Signal	67%	
SIM/UIM Status	Available	
3G/4G Service	Valid service	
3G/4G Network	WCDMA	
WAN Info:		
Connection Type	3G/4G Wireless Dial Up(Connected) CONNECT DISCONNEC	
IP Address	10.73.124.136	
Subnet Mask	255.255.255.255	
Gateway	10.64.64.64	
DNS 1	210.21.196.6	
DNS 2	221.5.88.88	
MAC Address	00:B0:C0:51:43:0B	
Keep Time	00:00:07	
LAN Info:		
IP Address	192.168.10.1	
Subnet Mask	255.255.255.0	
OHCP Server	Enable	
MAC Address	00:B0:C0:51:43:0A	

Click "mode", there are options "3G/4G Wireless Router Mode", "Standard Wireless Router Mode",
 "Standard Wireless AP and AP Client Bridge Mode" and "Wireless AP Client Mode", default is "3G/4G Wireless Router Mode".

evic	e Work Mode	Help
۲	3G/4G Wireless Router Mode Wireless and ethernet port connect to local network, The 3G/4G USB modem connect to internet.	WorkMode: Choice the device work mode, if choic Smart Mode, The device will detect wan mode automatically. The priority as: 3G/4G > DHCP> PPPoE > AP-Client. Please input parameters if
0	Standard Wireless Router Mode Wireless connect to local network, The ethernet connect to internet.	diffrent mode at first.
0	Standard Wireless AP and APClinet Bridge Mode Wireless work for access point, APClinet connect remote AP, Ethernet connect to local network.	
0	User PC User PC Inductive	

4. 3G/4Gs set up, choose"3G/4G Device" in "Dial Device" and select "Auto select 3G/4G ISP" without changing the default settings.

Status   Mode	3G/4G   VPN   LAN	Wireless   Security   Server   Routing	Admin   Logout
Setup FlowCtrl	Break-Detection	DDNS	
3G/4G setup Dial Device Auto select 3G/4G ISP 3G/4G ISP APN Pin Code Dialed Number Username Password Authentication Auto Dial-up Router will reboot after dial: Extra AT cmd Network of 3G/4G CDMA 1X/EVDO/LTE GSM/TD-SCDMA/LTE	<ul> <li>③ 3G/4G Device ○ UART</li> <li>✓</li> <li>✓&lt;</li></ul>	TI	Help 3G/4G setup: Setup 3G/4G modem dial information.if enable 'Auto select 3G/4G ISP'.The device will automatic input ISP dial information by IMSI. But the fuction olny use for Chinese ISP.
WCDMA/LTE	3G/4G Top-prority 💌		
		APPLY CANCEL	

5. Choose "Lan" to do the related settings.

M2M 3G WiFi Mod	dule	语言/Lan	guage: English	×	Chir	na Unicom Version:	Tull WCDMA 2.1.7.6
Status   Mode	3G/4G   VPN	LAN   Wir	eless   Security	Server	Routing	Admin	Logout
►Setup Bindi	ng DHCP-Table						
LAN						Help	
IP Address	192.168.10.1					LAN: IP	
Subnet Mask	255 255 255 0					modified b	
							Clone' can
DHCP Server Setup							address as
Enable DHCP serv	er					required.	
Start IP Address	192.168.10.2						
End IP Address	192.168.10.254						
Lease time	1440 minute	a(s)					
Note: Addresses that include LAN IP.	can be allocated must	be in the same	segment with LA	N IP and cou	uld not		
			A	PPLY	CANCEL		

6. Choose"Wireless" to modify the SSID name and password.

3G WiFi Module		语言/Lang	uage: English 🛩		na Unicom Version:	Full wcdma 2.1.7.6
Status   Mode   3	3G/4G   VPN   L4	AN   Wire	eless   Security	Server   Routing	Admin	Logout
Basic Security	Advanced	WDS	Station List	Mac Access		
802.11 Mode SSID I Do Not Broadcast SSID I Channel I HT Channel I HT Data Rates I Channel BandWidth ( Guard Interval ( 20/40 BSS Coexistence (	✓ 11b/g/n mixed mode ✓ MDVR 2437MHz (Channel 6) ✓ 2457MHz (Channel 10) ✓ 2457MHz (Channel 10) ✓ 2457MHz (Channel 10) ✓ 2457MHz (Channel 10) ✓ 2457MHz (Channel 20) ✓				Help Basic: 1 SSID, 801 mode.	Setup AP 11n/b/g

7. Choose "Wireless"-- "Security" to modify the "Encrypt type" and "WPA-PSK key", then click "APPLY".

M2M 3G WiFi Modu	le	语言/Lar	ouage: English Y		na Unicom Version:	Titll WCDMA 2.1.7.6
Status   Mode	3G/4G   VPN	LAN   Wi	reless   Security	Server   Routing	Admin	Logout
Basic Security	Y Advanced	WDS	Station List	Mac Access		
Security Security Mode WPA-PSK Encrypt Type WPA-PSK Key Rekey Interval	WPA2-PSK TKIP O AES TKI admin999 (8-63 ASCII character 3600 second(s)			<0-9 or a-f, A-F>) PLY CANCEL	wireless	ty: Setup AP security. 2PSK - AES hoice.