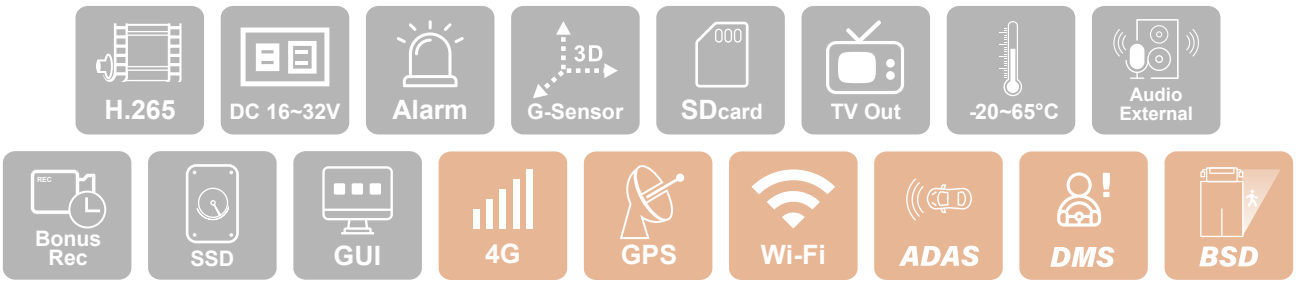
VACRON
ADVANCES IN SECURITY SOLUTIONS

Mobile DVR Monitoring System

12CH H.265 1080

User Manual

2024 JUN. V1.0



(Optional)

CAUTION

Please try to record and playback first to ensure the device is in good condition.
Manufacturers, dealers, and the subsidiary are not committed to improper device accessories-oriented, memory cards included, failure.

Please read cautions below before using this product
Please confirm that operations are carried correctly.

- Please store the equipment at places out of the reach of children and infants.
- Please use regulated power supply only.
- Do not try to detach, refit or heat the product.
- Keep the equipment from drop or hit.
- To avoid injury, keep your hands away from the inner parts after drop or damage.
- Stop using in case of smoke, smell or things unusual from the equipment.
- Do not use organic solvents such as alcohol, benzene, or paint thinner to clean the product.
- Do not let the product come into contact with water (such as seawater) or other liquids.
- Do not let any liquid or foreign material enter the machine.
- Do not place batteries near heat sources, or be exposed to flame.
- Do not touch the power cord with wet hands.
- Do not use this equipment with power outlets or wiring accessories that exceed the specified voltage.
- Do not use a damaged power cord or plug, or it is not fully plugged into a power outlet.
- Keep the terminals or plugs away from metal objects (such as pins or keys) or dirt.
- Avoid using, placing, or storing the product in wet or dusty areas.

Before using 3G/4G product, make sure you have read the following safety precautions.

- Applied with certificated low-power radio frequency motors. Companies, trade names, or users are not allowed to change frequencies, increase power, or change the characteristics and functions of the original design without permission.
- The use of low-power radio frequency motors must not affect flight safety or interfere with legitimate communications. When interference is detected, they should be immediately deactivated and improved until no interference occurs.
- Legal communications in the former paragraph refer to radio communications that are operated under the telecommunications law.
  Low-power radio frequency motors have to withstand the interference of legitimate communications or radio waves in industrial, scientific and medical applications.

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A. Accessories

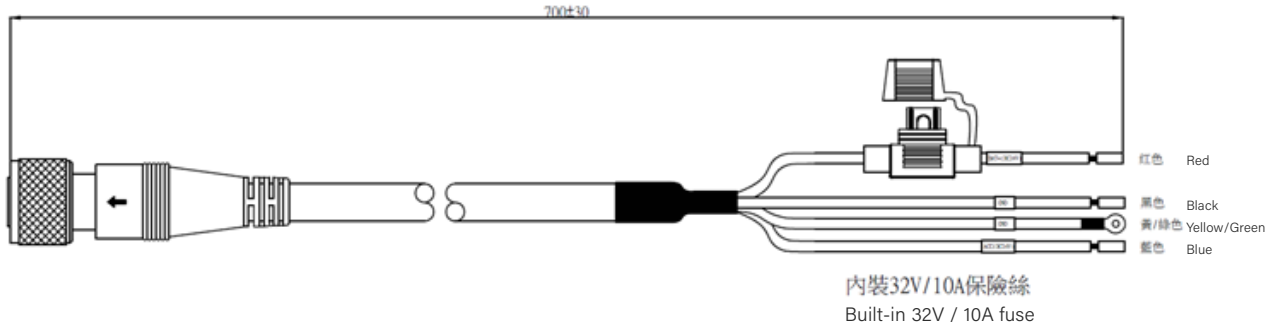
・The product contains the following accessories:

MDVR / Power lead / RJ45 internet wire / VGA wire / USB wire / ALARM wire
Image wire*6 (2ch) / CVBS OUT wire (Audio in/out)
G-MOUSE and RS-232 wire /G-MOUSE / Remote control(with battery) / Antenna
Antenna extension wire

・Optional accessories:

Speaker / Camera extension wire / Automotive monitoring MIC / Memory card / SSD / Module

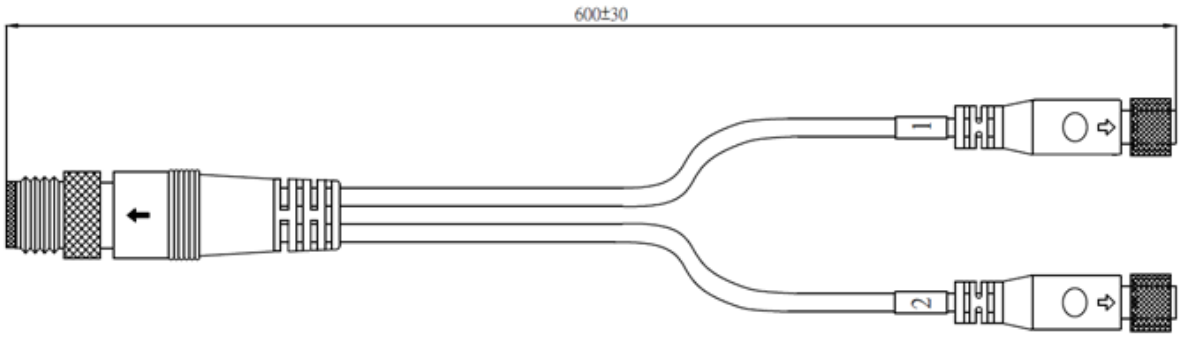
・Power lead (standard)



・Alarm wire (standard)

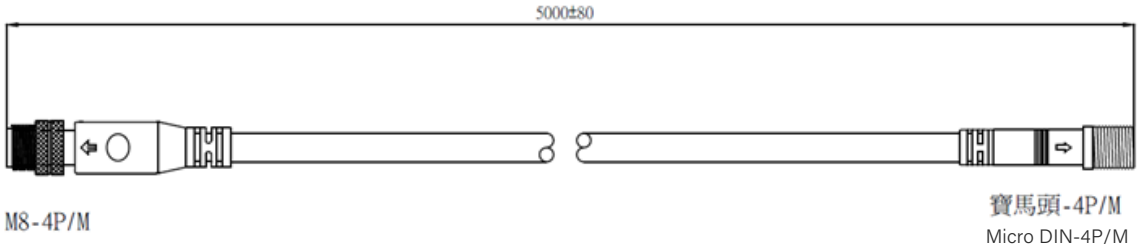
When equipped with the ADAS system: ALARM IN 3 should be linked with the left turn signal, and ALARM IN 4 with the right turn signal to avoid the LDW trigger when regular lane switching.

・Lens wire (Standard 6 PCS): Could connect to two M8-4P cameras each.

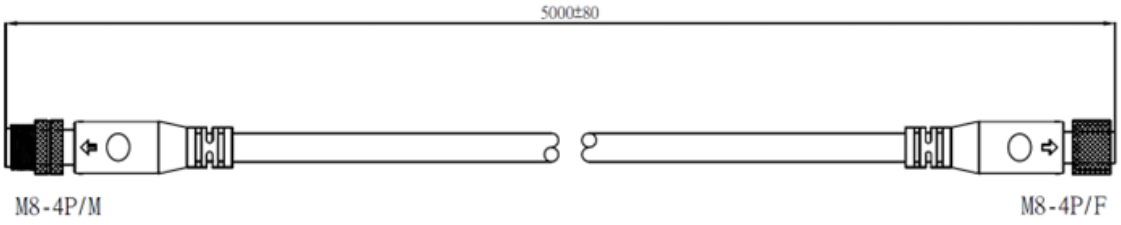


・Lens extension wire (optional): Please make a separate procurement.

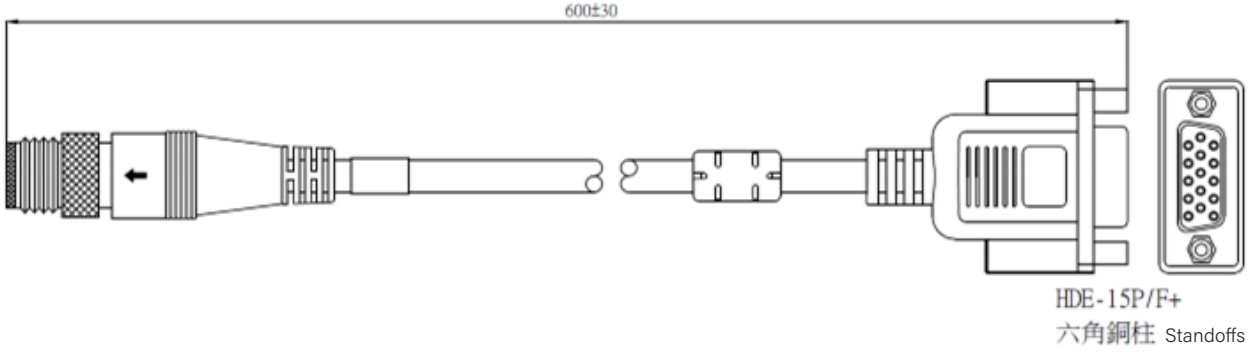
A (Micro DIN Lock Camera)(Optional): M8 to BMW (Micro DIN Lock) / Length: 5M, 10M, 15M, 20M



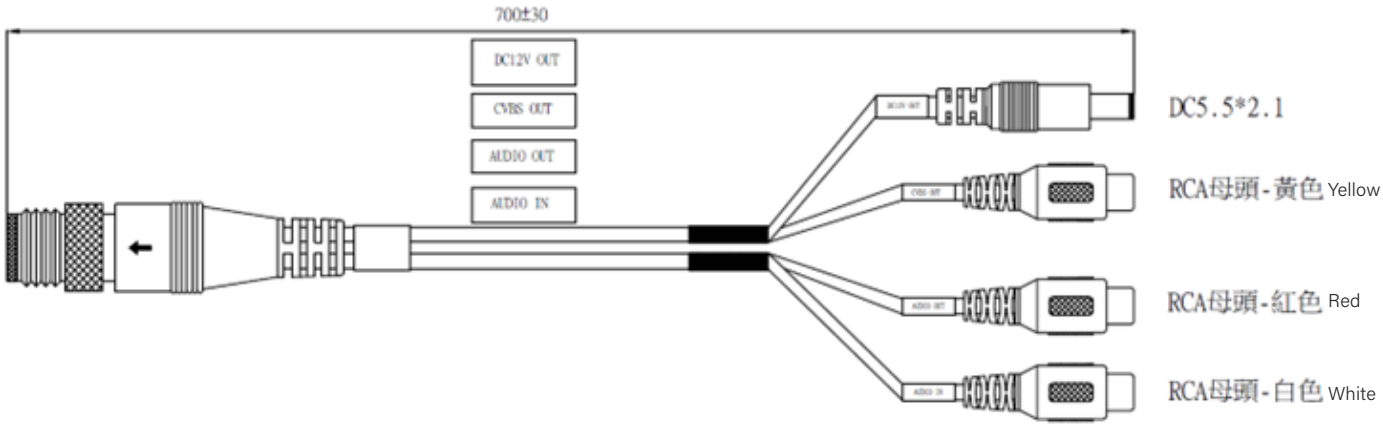
B (M8 Camera)(Optional)：M8 Extension wire/ Length: 5M, 10M, 15M, 20M



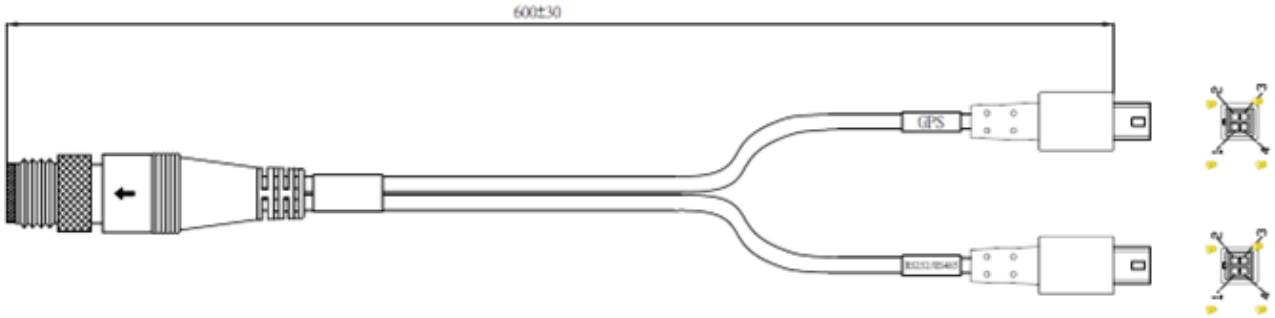
・VGA output wire : (standard)



• CVBS output wire (Monitor power supply 12V/0.5A included) and audio wire : (standard)

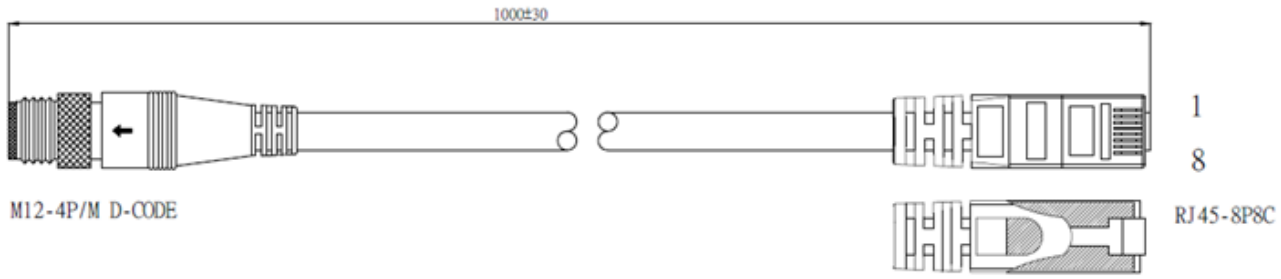


• GPS and RS-232/RS-482 wire connector (RS-232 by default for HW): (Standard)

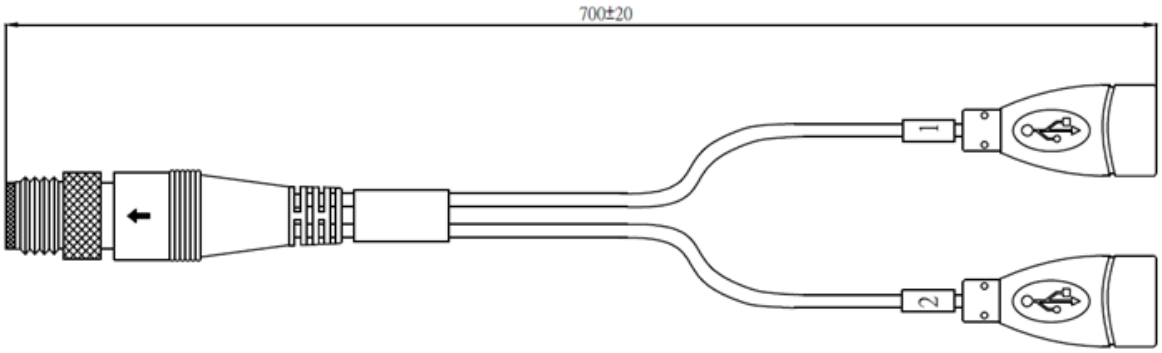


With RS-232 bare adapter wire (standard)

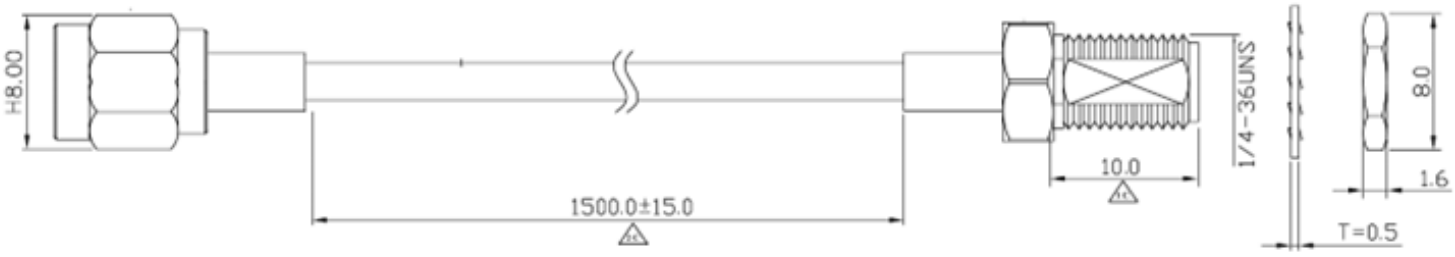
• **Network wire (standard)**



• **USB Wire (Standard)**

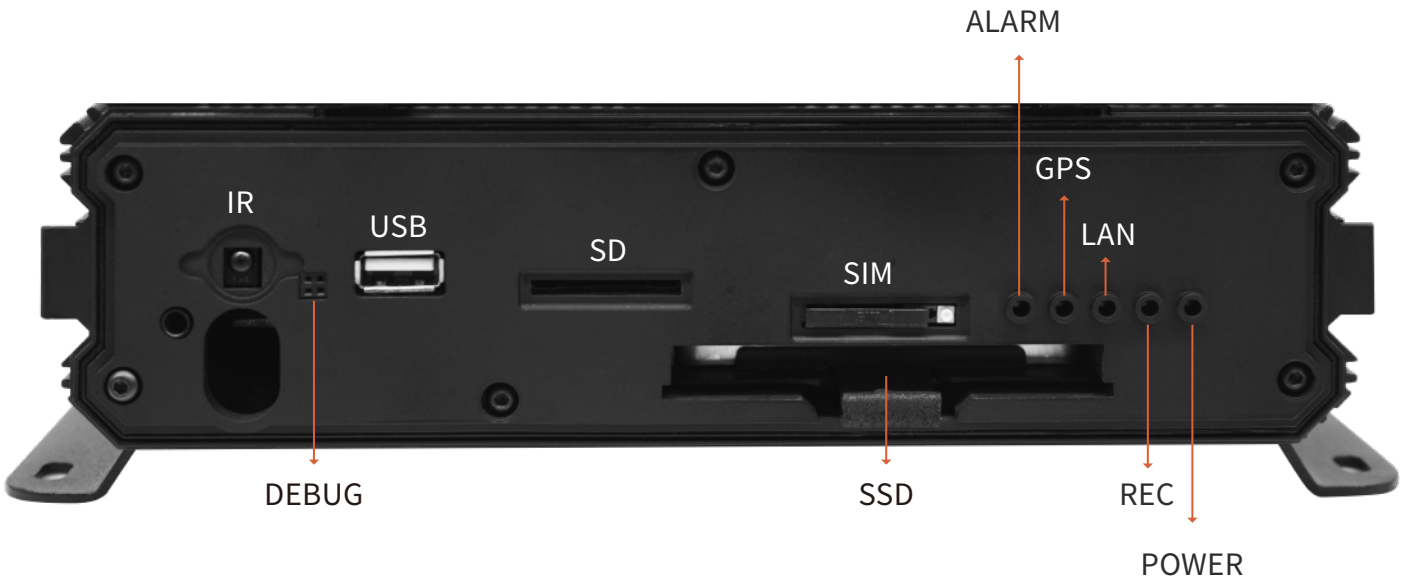


• **Antenna extension wire (Standard)**



B. Appearance

• **Front Panel**



• **Rear Panel**

* The GPS / 4G / WiFi function is optional.

C. Boot and Shutdown

1. Boot

After inserting the SSD into the slot on the local side, power up and wait for about 30 seconds.
When the recording light is lit, the system booting is complete.

2. Shutdown

After power-off, the shutdown is completed when the light signal is extinguished.
SSD can only be removed and applied to computer for reading by then.

3. Indicator Lights

・Power Supply Indicator (Green):
Un-lit indicating that there is no power supply.
Constant lit indicates that the power supply is operating.

・Record Indicator(Red):
Unlit indicator for the recording is not working
Flashing for the recording is proceeding.
Flashing in high speed for the event recording has been triggered, or the software requires update.

・LAN Indicator (Blue Light)
Unlit indicator for disconnection to the Internet.
Constant lit indicator for successfully connected to the Internet.

・GPS Indicator(Green Light)
Unlit indicator for not locate GPS
Constant lit indicator for location complete.

・ALARM Indicator (Green Light)
Unlit indicator for no ALARM occurred
Constant lit indicator for ALARM occur.

D. System interface and operation

Live view display

Live view display - 12 split screen display

(1) Icon Instructions:

: It is currently recording, exclamation mark appears when it is event recording.

: GPS location successes, X for not.

: Audio recording operating, "X" for audio recording closed.

: Internet connection success

: Alarm triggered

Remote control

Mobile DVR system supports "Device playback" and "Computer playback".

Remote Control buttons			
Numbering	Functions	Numbering	Functions
1	Split Channel Display	7	Confirm
2	Force Recording Button	8	Reverse
3	4 Split Channel Display	9	Fast Forward
4	Mute	10	Playback mode, Play
5	Menu	11	Pause
6	Arrow key	12	Stop, Exit

Remote Control Examine	
?	✓ Check the polarity of the battery ✓ Check if the battery is depleted. ✓ Check if the remote control sensor is blocked. ✓ Check if there is fluorescent lamp light operating nearby.

Camera Types:

A. Camera types settings for each channel.

B. Supports 1080P / 720P / D1

C. Supports AHD / TVI

Image settings：Recording frame and Data rate (2M preset)

Image Adjustment

A:Image adjustment of cameras for each channel.

B:Configurable brightness, contrast, shade, and saturation.

Caption embed： Preset to be activated (same as time and other concerning functions)；

Images overlay GPS and Speed (preset to be halted).

Channel Settings: Set whether to mirror or record of each channel.

Image mirroring: Preset to be "Standard", the options are: Standard, Mirror, Flip, Mirror and Flip.

Channel Recording: "ON" is preset, and can be turned off.

Time Settings: Date, Time, Time Zone.

GPS Settings

Moving Speed: "ON" is preset, and can be turned off.

Unit: "Km/H" is preset, the options are "Km/H", "Mile/h" and "Kont".

Baud Rate: "9600" is preset, the options are "4800", "9600".....115200

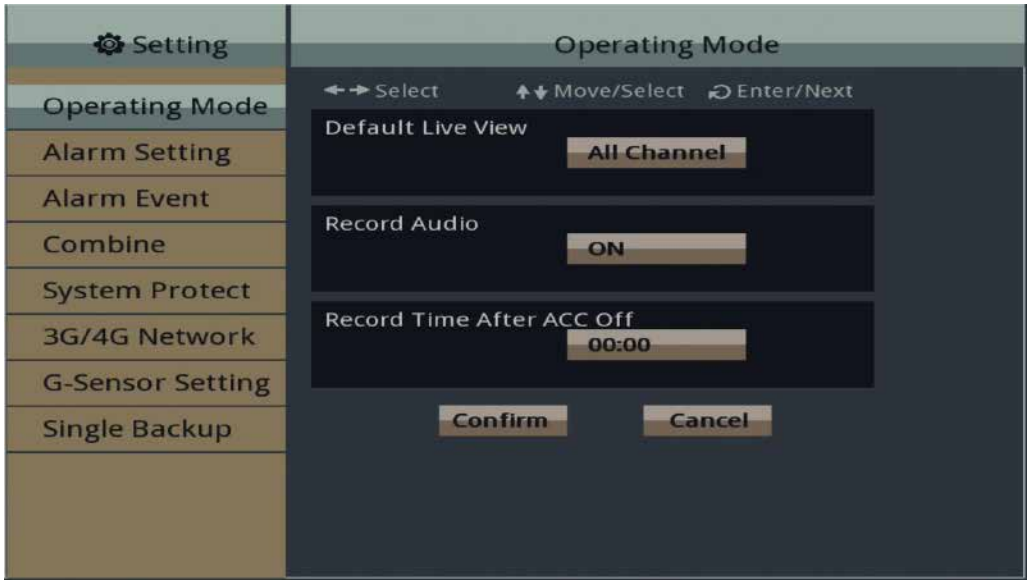
License Plate: Is preset to display.

Operating Mode:

The preset display of channels is 12-split, which could be 1-4 ch, 5-8 ch, 9-12 ch, and single channel.

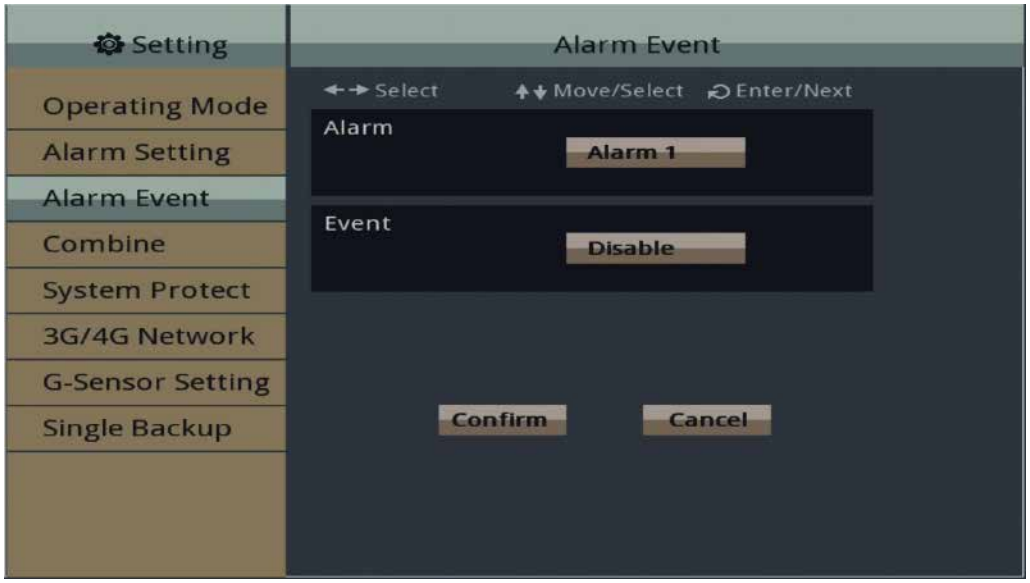
Audio Recording: "ON" is preset, and can be turned off.

Recording time after the engine is off: "0" is preset, and options can be "5 minutes", "10 minutes"...."24 hours", or even "continued".



Alarm settings: Set the Channel popping of Alarm IN1~Alarm IN6 and priorities. (Can't be repeated)

Alarm event settings: Set the alarm triggering of Alarm IN1~Alarm IN6 to be Event Recording. Deactivate is preset.

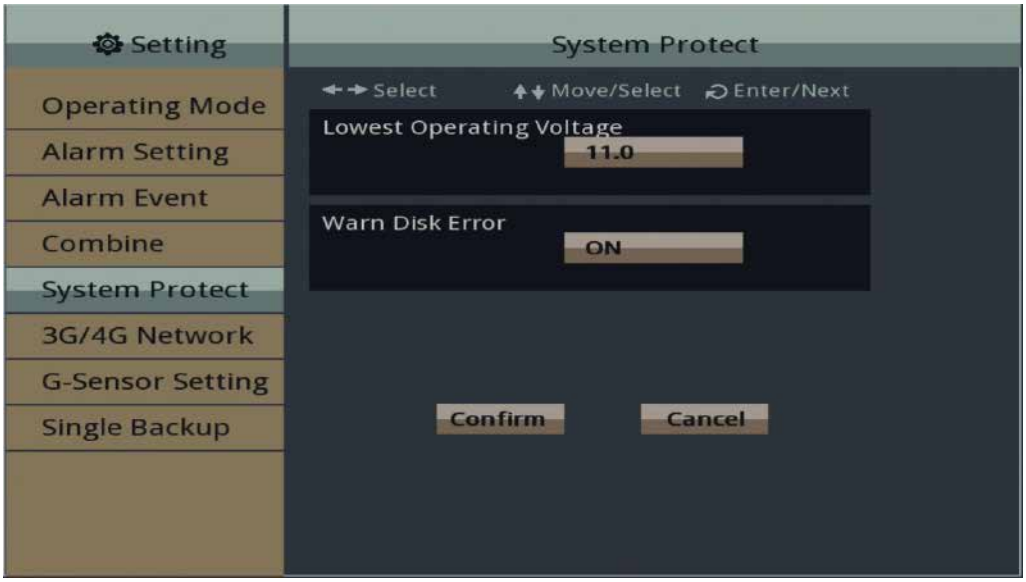


Group Alarms: When two alarms are set to activate simultaneously, the group with the higher priority is preset to be 12-split when triggered.

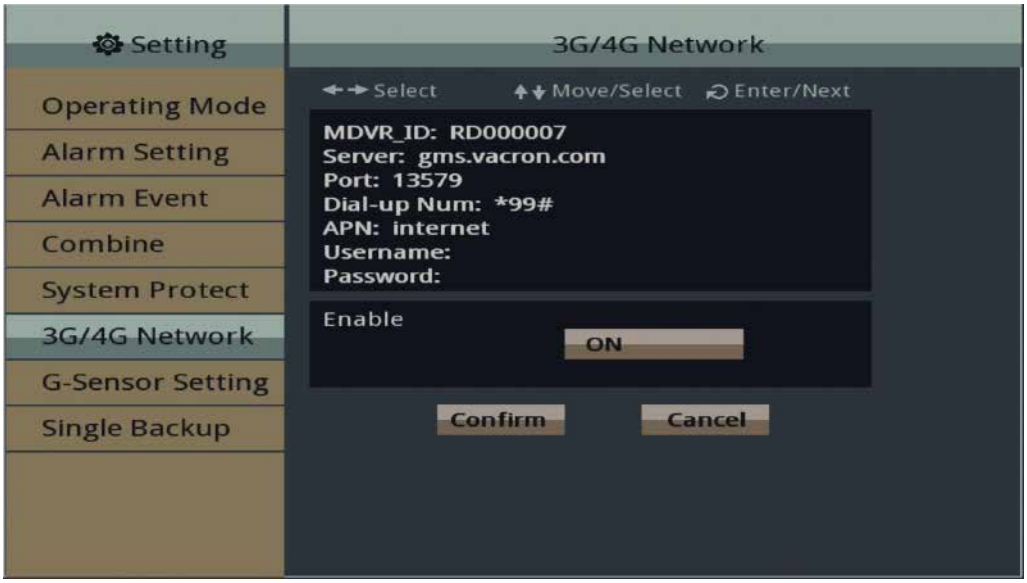
System protection:

A:Forced Shutdown Voltage: The default is 11V. When ACC OFF is set with a power-off delay, if the B+ voltage falls below this threshold, the power-off delay countdown will stop, and the system will shut down immediately.

B:Disk Error Warning: "ON" is preset. When abnormalities occur in the storage device, a continuous beeping alert will be emitted.



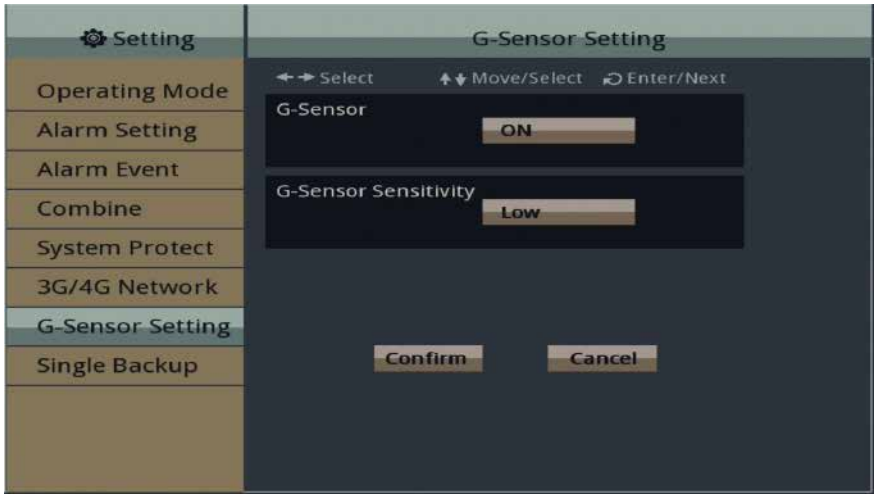
4G Network Function: The 3G-CONFIGTOOLS tool can be used for setting.
(The file is stored in a USB drive and can be set via the front panel USB port)



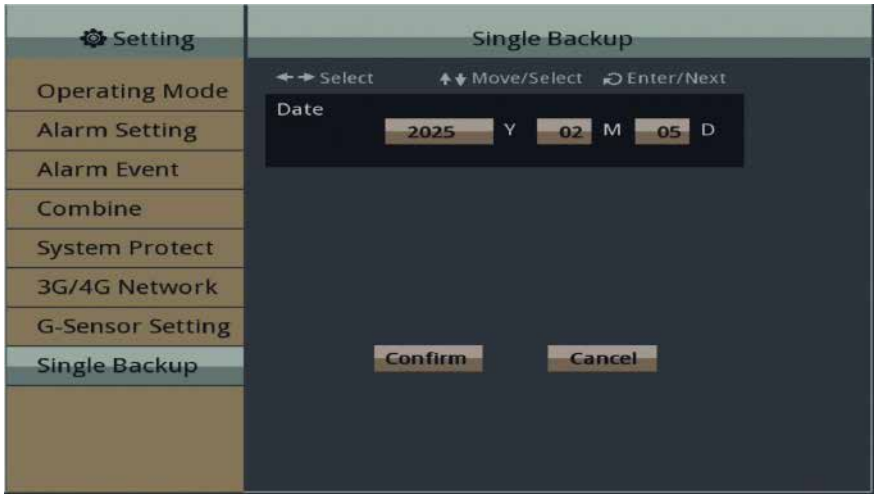
G Value : Setting G-SENSOR

The default setting of the G-Sensor is ON and can be turned off."

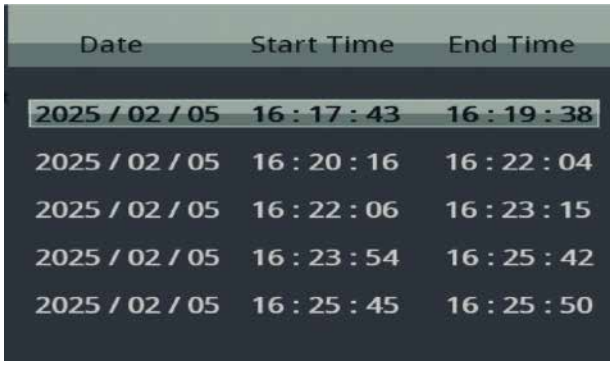
The Sensitivity is preset to be "Low", and can be adjusted to "Low", "Normal", or "High" via the interface or the player.

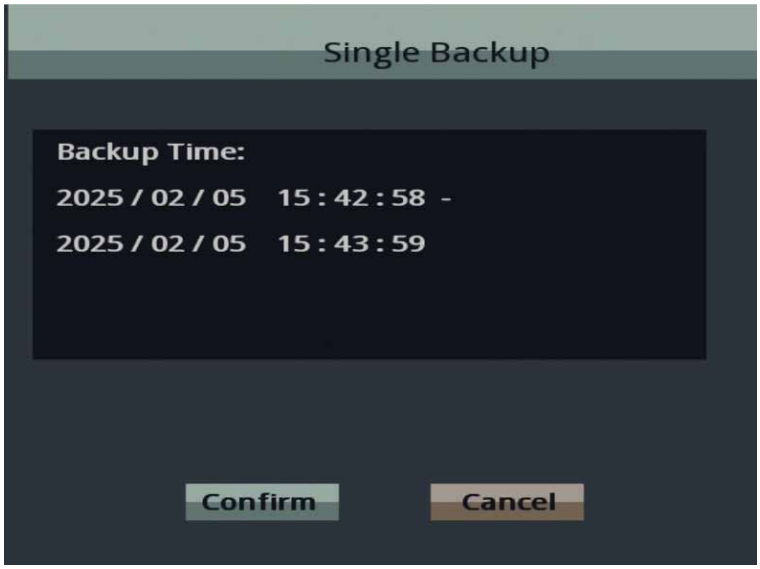


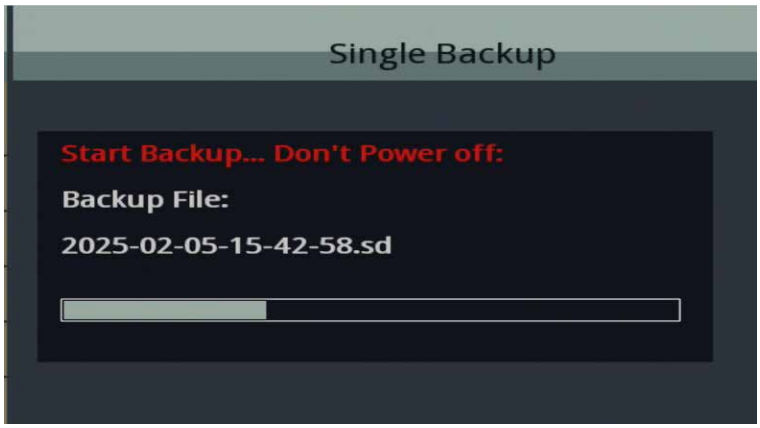
Single Backups:

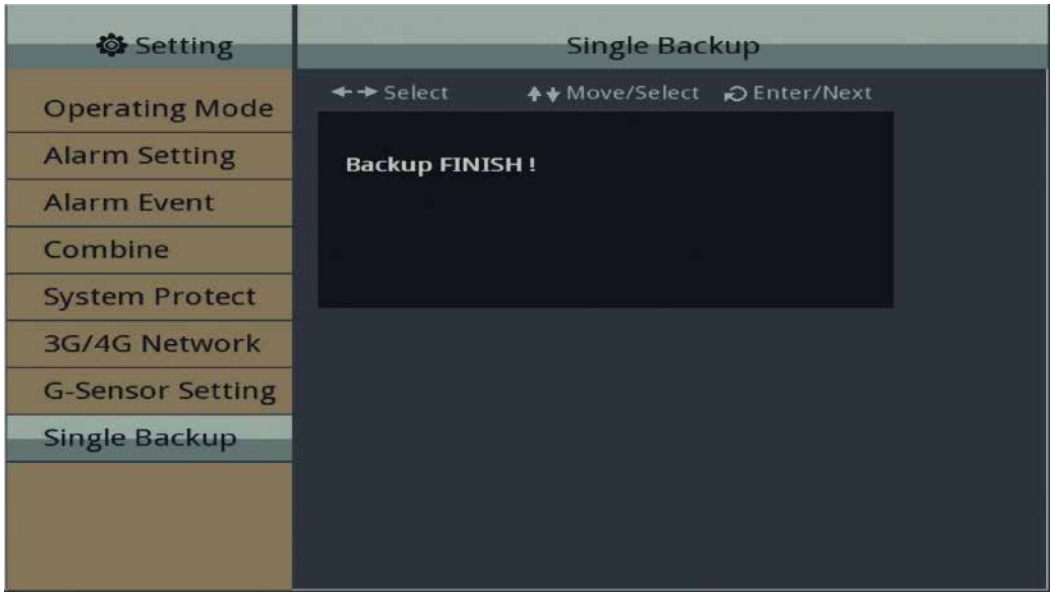


Select a single time to backup









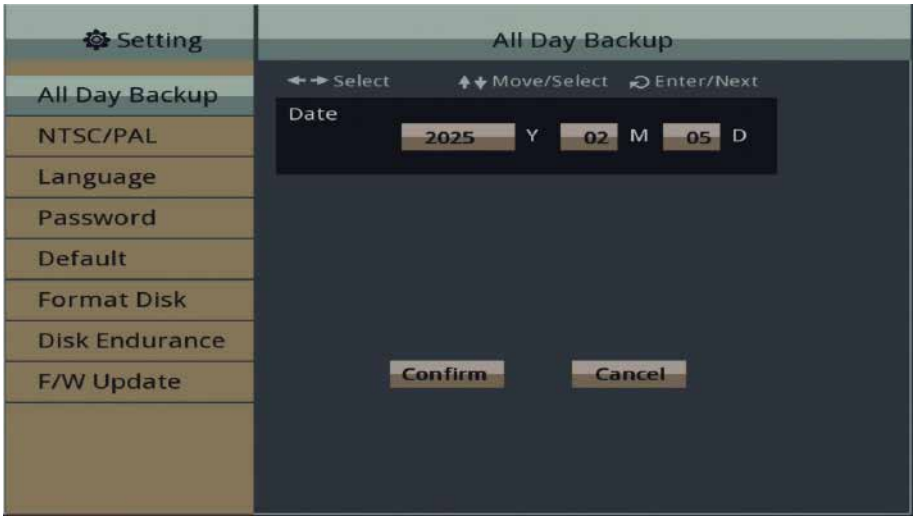
CAUTION:

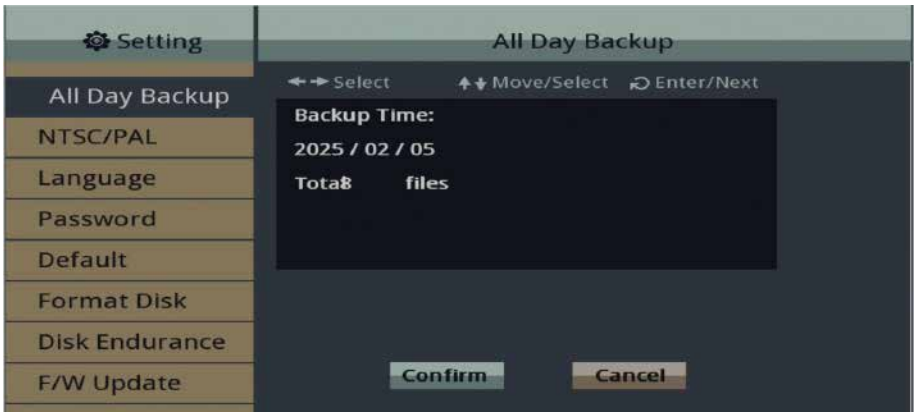
USB of front panel

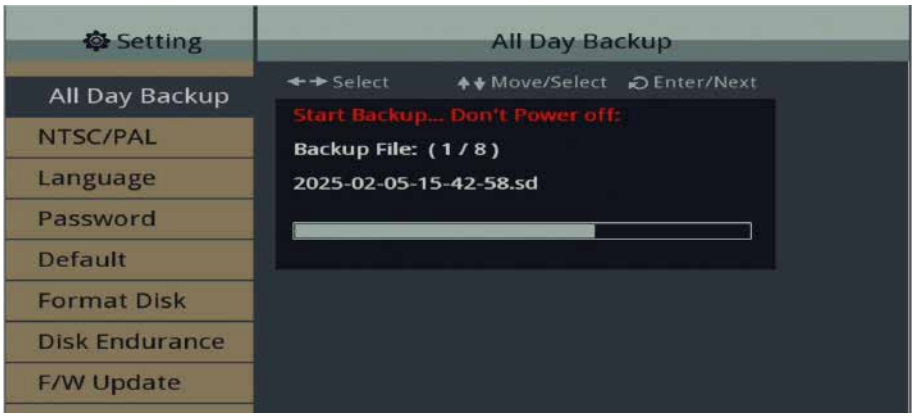
USB format : FAT32

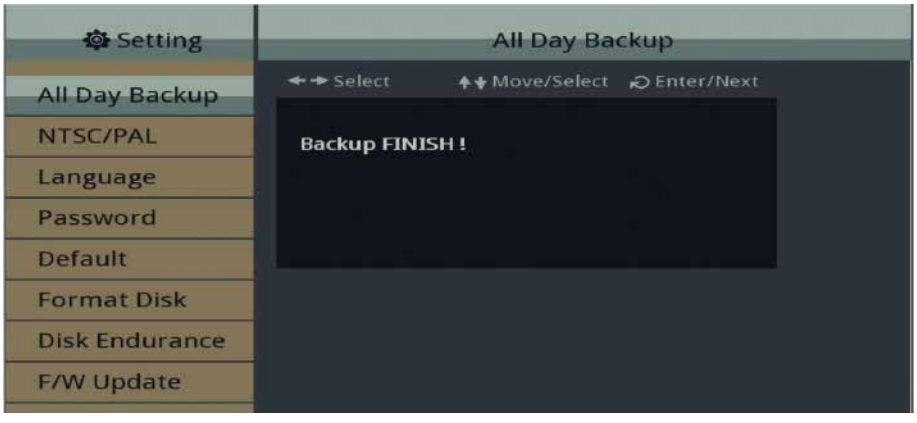
Once the backup is complete, the files can be played using a compatible media player.

Full-Day Backup: Insert a USB drive and ensure sufficient storage space for the full-day backup.







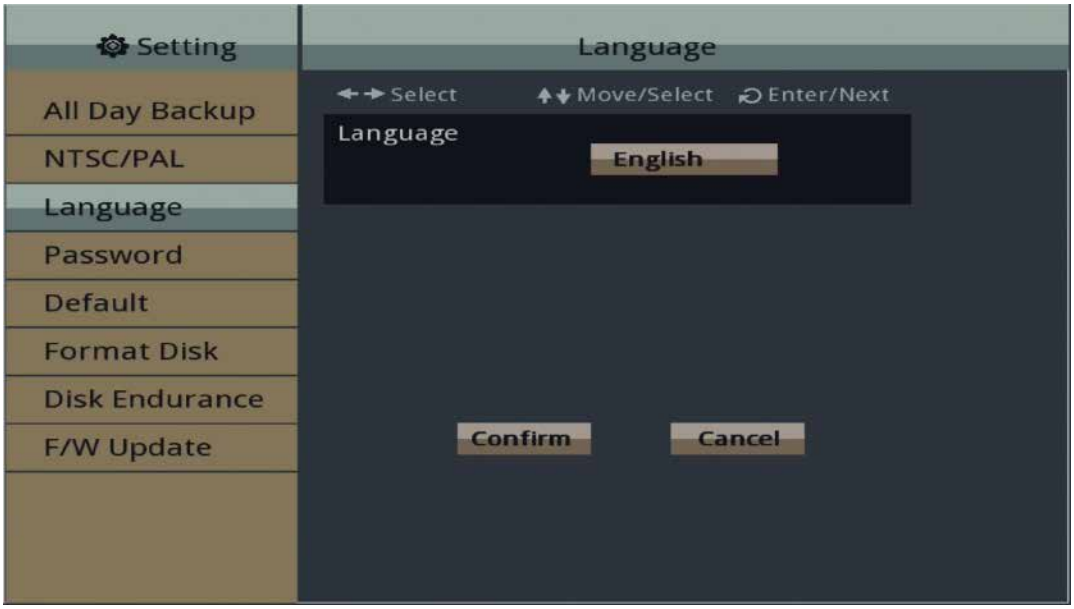


NTSC/PAL System Selection:

The system can be switched between NTSC and PAL as needed.

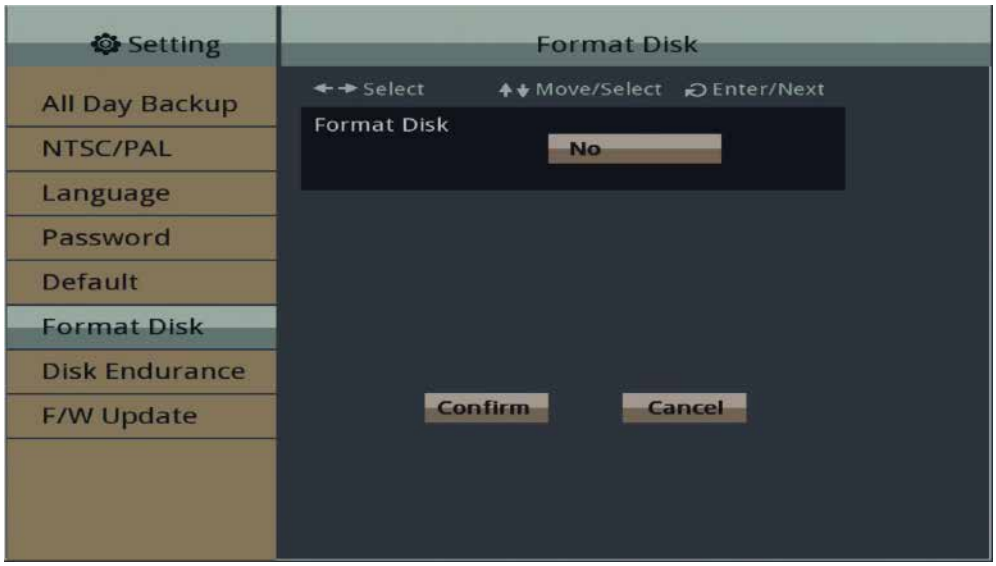
Language Selection:

Available languages: Traditional Chinese, Simplified Chinese, English, and Japanese.

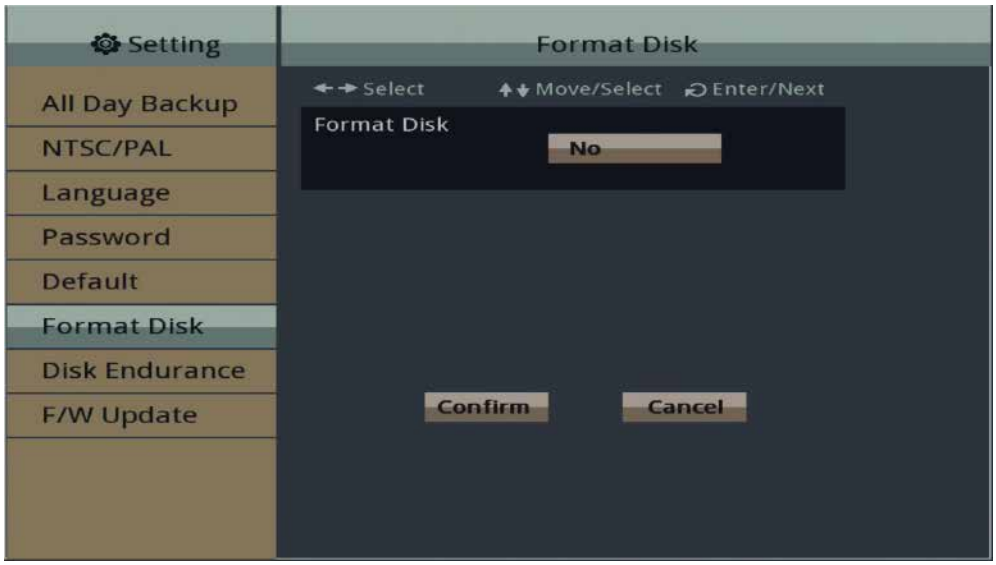


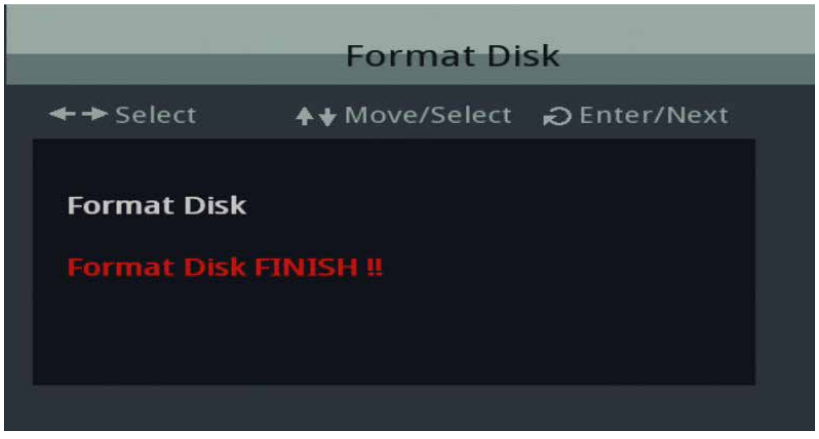
Restore Default Settings:

To restore the default settings, select "YES" and confirm. The system will then revert to its default parameters.



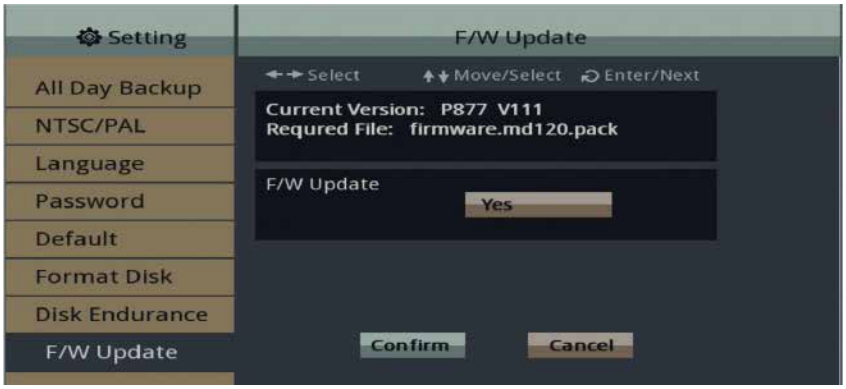
Format Storage Drive: Select "YES" and confirm to format the storage drive. Once the formatting is complete, the system will return to live recording mode.





Software Update: You can check the current software version.

To update the software, place the update file on a USB drive (front panel). Then, select "YES" and confirm to proceed with the update.



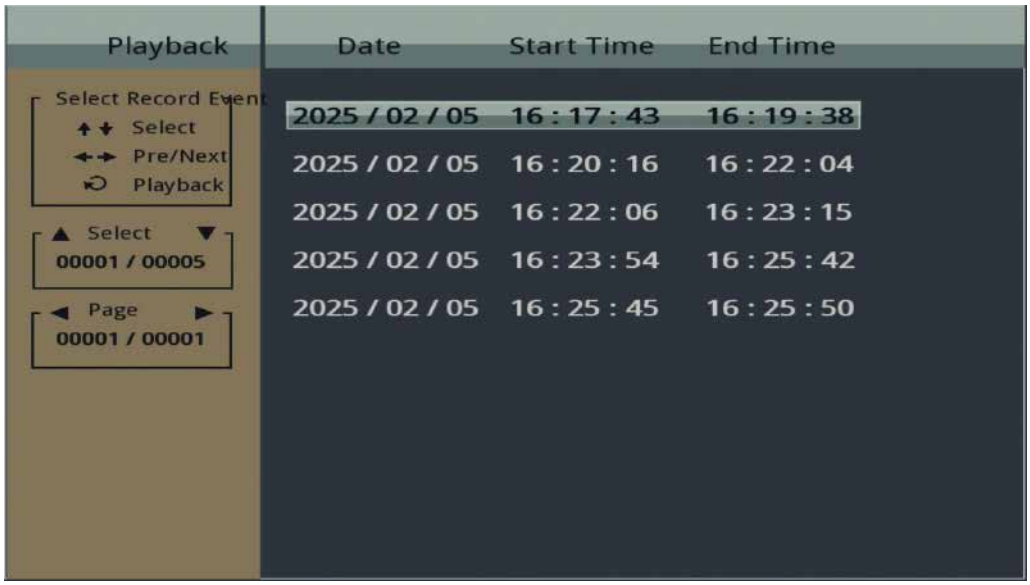
Playback Mode

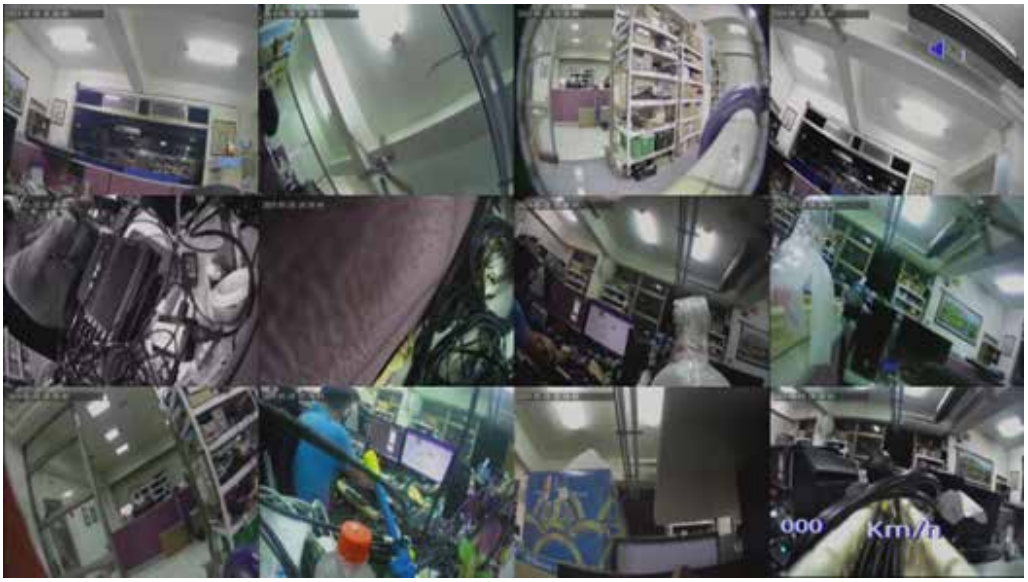
There are two playback methods: Local playback and PC playback.

Local Playback:

(1) While in live monitoring mode, press the "Play" button to enter the playback screen.

(2) Select a search method and press "Confirm" to access the file list.





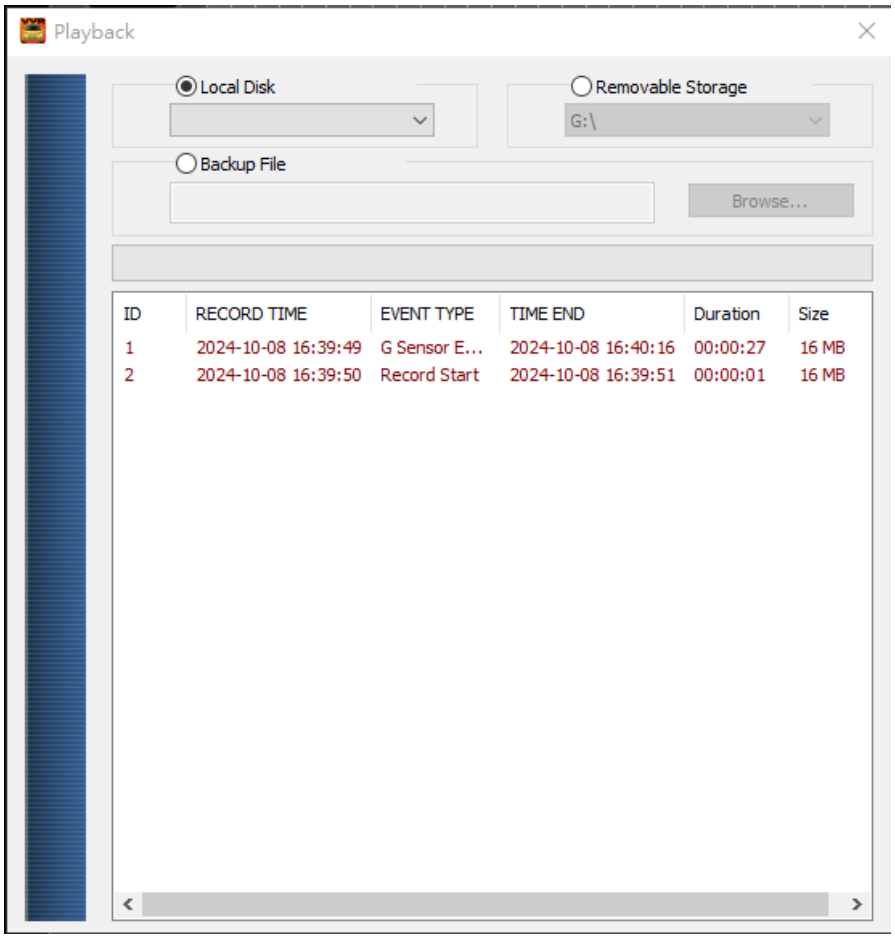
(3) Choose the file you want to play back and press "Confirm" to start playback.

PC Playback: Reading the Hard Drive for Playback

(1) Connect the hard drive containing the recorded video files to the computer and open the playback software IBoxPlayer2.exe.

(2) Click "Playback Video" to open the playback menu.

(3) Select the hard drive, and a file list will appear. Choose the desired recording file to start playback.



Recording List

Note: If the recording list cannot be read on a Windows operating system, right-click the IBoxPlayer2 icon and select "Run as administrator" to launch the program.

E. Computer Player

Once the playback software is running, IBoxPlayer2.exe the playback screen will appear as shown below.

Note: DirectX 11 or above is required to run this software.

(1).Playback Toolbar

: Save the currently playing video frame as an image.

: Configure device-related settings.

: Video Backup

: Read storage devices or backup files for playback.

: Format storage devices and adjust language settings.

: Play the previous video segment.

: In pause mode, move the video backward by one frame.

: Reverse Playback

: Pause the currently playing video.

: Stop the currently playing video.

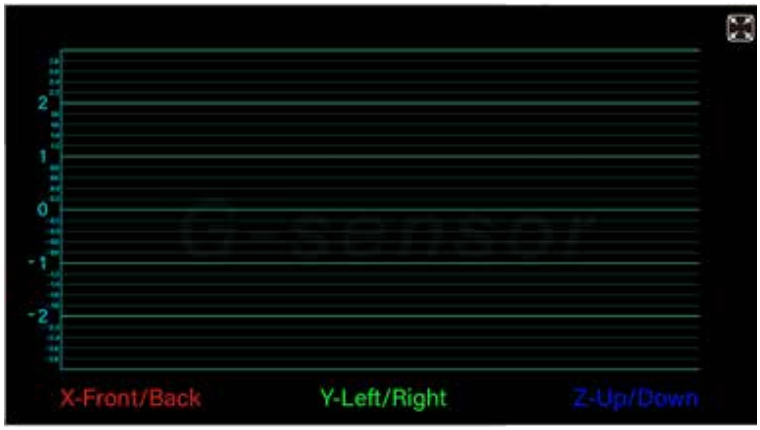
: Start video playback.

: In pause mode, move the video forward by one frame.

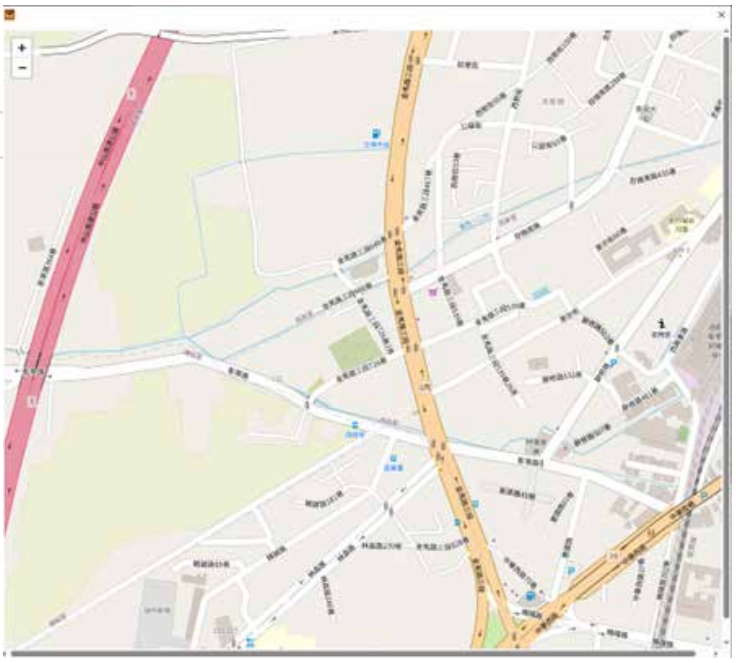
: Play the next video segment.

(2).Other Toolbars

A. G-SENSOR Icon

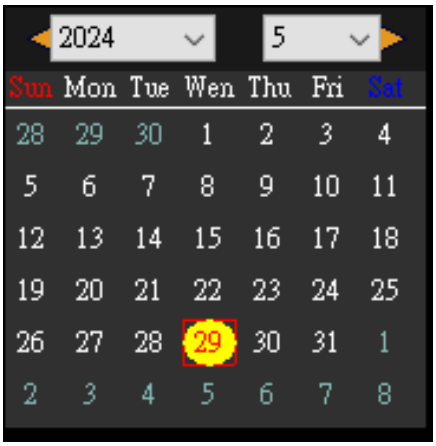


B. Opens the map and compass (latitude and longitude coordinates).



C. Adjust the volume and display the current speed.

D. Perpetual Calendar: The perpetual calendar allows you to select a specific date and time, enabling quick playback of recorded footage from that moment.



E. Time Icon

F. Adjust playback speed and track the progress with a visual progress bar.

Playback Speed: Default is 1x

Playback Progress Bar: Allows manual selection and playback from the desired position.

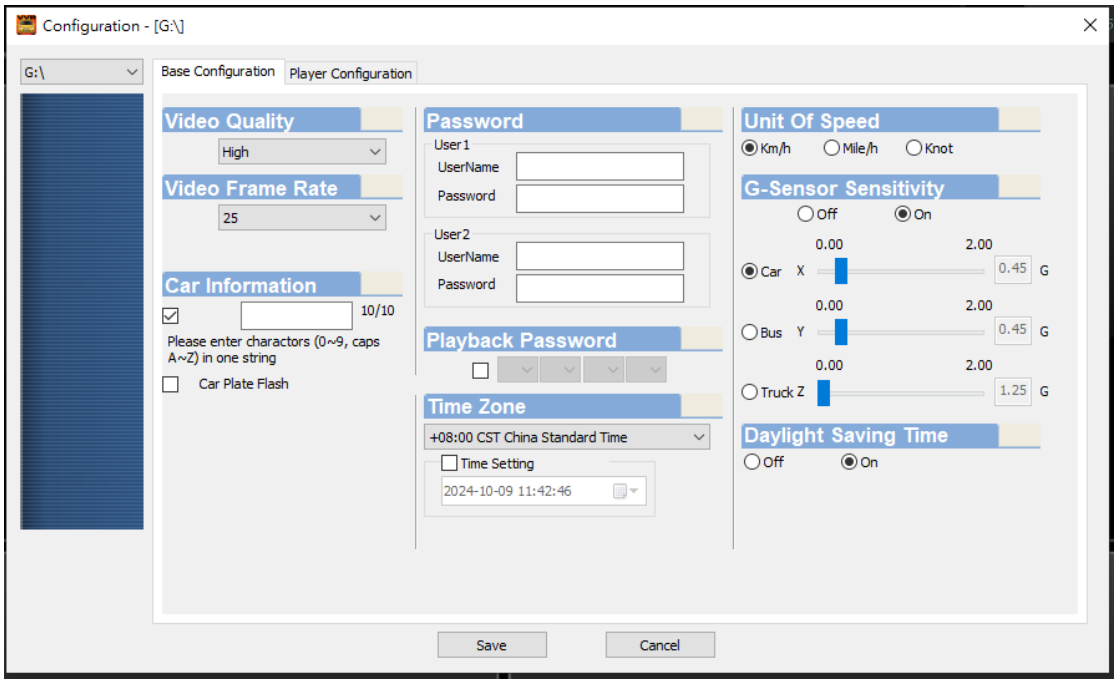
G. Split Screen Icon Introduction:

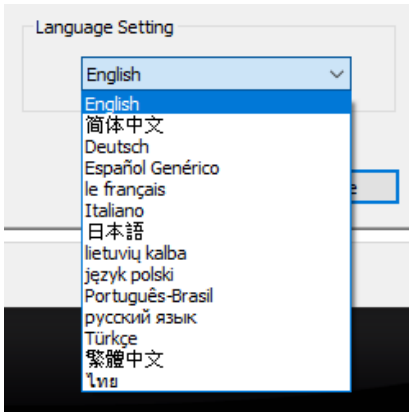
16-Split, Next 16-Split

PC Playback

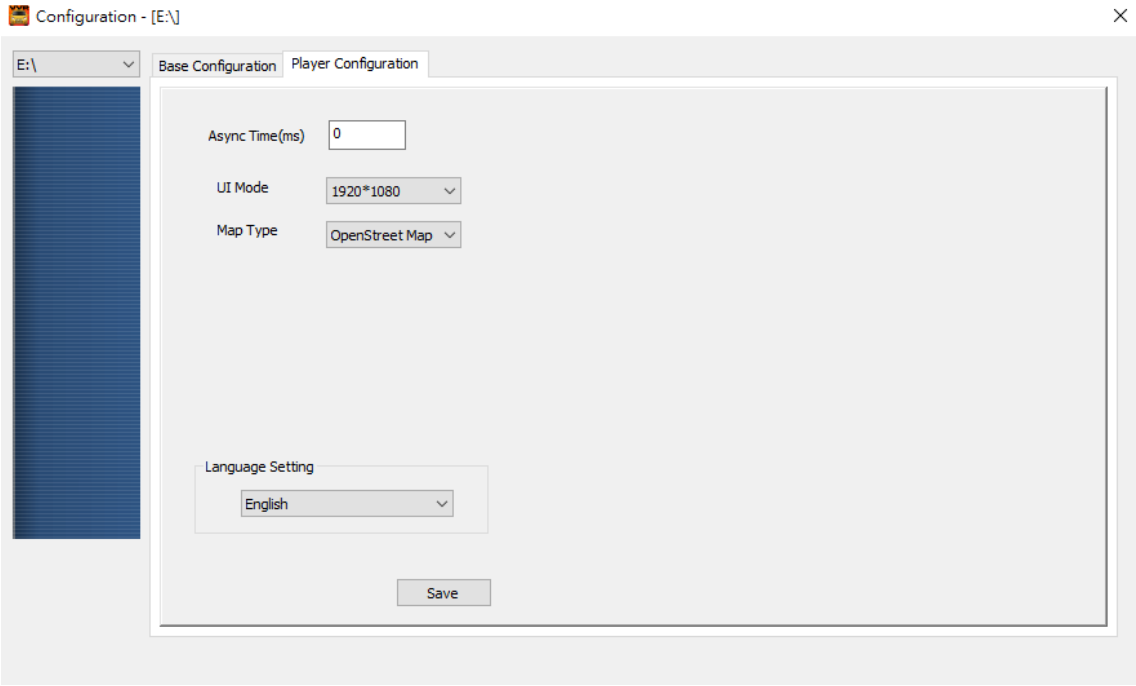
Click to enter the settings options , customize the settings as needed, and save. After saving, reconnect the storage device to the main unit to start recording based on the user's configured format.

Note: To read the hard drive on a computer, you can use a SATA to USB adapter to directly read the drive via USB.



Async Time(ms)	If the camera's timestamp skips abnormally, you can use this setting to synchronize the video.
UI Mode	1920*1080、1440*800、1024*576
Map Type	OpenStreet Map、Google Map
Interface Language Setting	

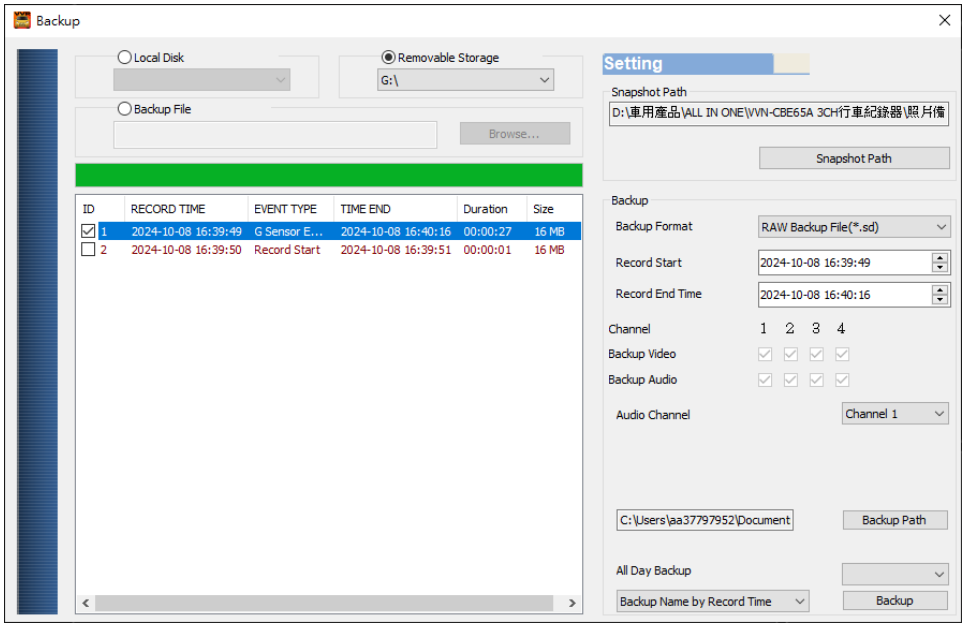
player configuration



Video Quality	Select the recording resolution quality, which includes three options: High, Normal, and Low.
Video Frame Rate	Resolution setting range: 5 to 30 frames.
Device Information	Enter the license plate number or driver's name. Note: When modifying vehicle system information, the "Read-Only" option must be selected to update the system data.
Password	This feature enables hard drive encryption to prevent unauthorized access to any data. The password must be maximum of 15 characters. After setting a password, accessing documents, settings, or formatting the disk will require password entry. Note: Passwords are case-sensitive. Keep your password secure to prevent loss.
Time Zone	Adjust the time zone according to the Greenwich Measure
Speed Unit	Set the speed unit
G-sensor Sensitivity	Adjust the G-sensor mode and sensitivity settings based on vehicle types and driving habits.
Daylight saving time	Applicable to countries that observe daylight saving time.

Backup

Save recorded video data from the storage device to a computer for easy playback.
When selecting disk backup, the following screen will appear, displaying the backup menu.



1. Select the video source.
2. Choose the file time range.
3. Select the backup format.
4. Set the backup time and start the backup.

Note: When backing up in SD file format, the file will include speedometer records, compass, latitude and longitude, and G-sensor data.
If backed up in *.avi format, only video and audio data will be retained. Therefore, it is recommended to use SD format for backup.

F. Format

Formatting the Hard Drive

When should you format the hard drive?

If the storage device's format is different from the required format of the system,

it must be formatted before use.

Most commercially available hard drives must be formatted before they can be used

with in-vehicle systems.

Important: Before formatting, ensure that no important data remains on the hard drive without a backup.

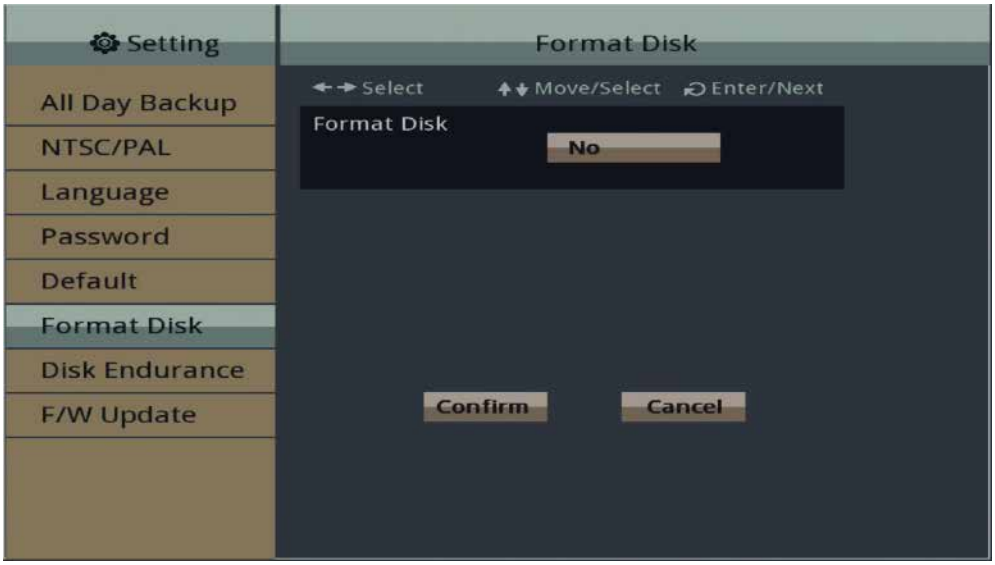
Hard Drive Formatting Methods:

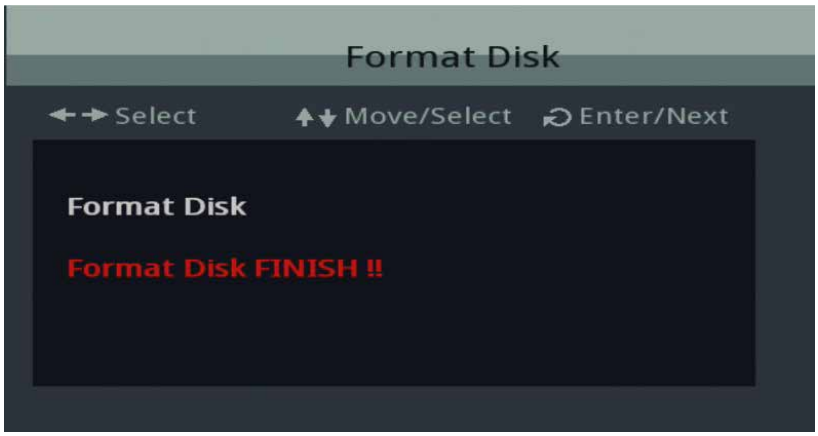
On-device formatting and PC-based formatting

(1) On-Device Formatting

Follow these steps to format the hard drive directly on the system:

Go to Configuration Settings > Storage Device Settings > Select Format.





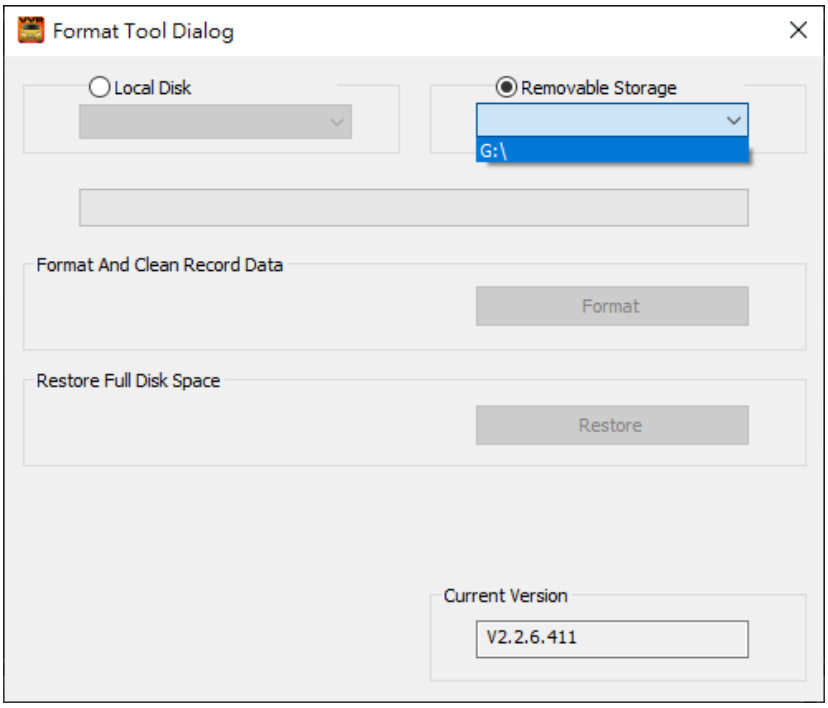
(2) PC-Based Formatting

Follow these steps to format the hard drive using a computer:

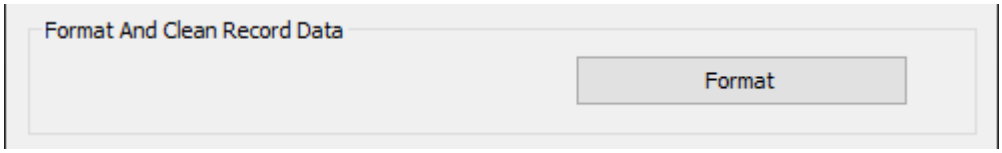
1. Remove the storage device from the system and connect it to a computer.

   Open the playback software on the computer.

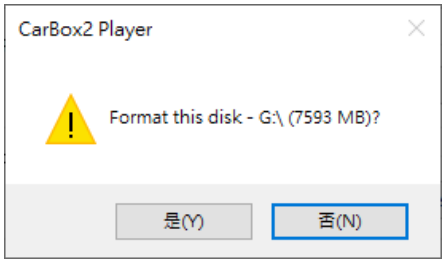
2. Click on the Format Tool to access the formatting menu.

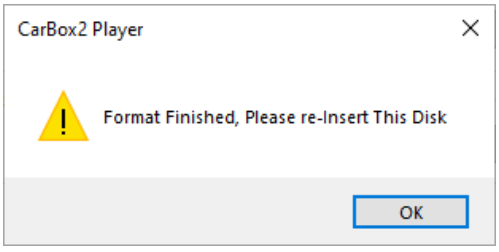


3. Click the "Format" button.



4. Select "Yes" to confirm formatting.





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