

---

ventra

## Ventra XDR-450/D Mobile DVR Software Manual

5CH Hybrid Mobile DVR



**This manual is only for the XDR software. For Hardware manual, please refer to XDR User Guide**

Ventra Technology Inc  
[www.ventrainc.com](http://www.ventrainc.com)  
[info@ventrainc.com](mailto:info@ventrainc.com)

---

---

## Contents

1. Software Overview.....	5
2. Installation Software .....	5
2.1. Software Installation.....	5
3. Ventra XDR Program Log In.....	6
3.1. Log In .....	6
3.1.1. Software Log In .....	6
3.1.2. Advance (Server Management) .....	7
3.1.2.1. Add Server .....	7
3.1.2.2. Delete Server .....	7
3.1.2.3. Edit Sever .....	7
3.2. Software Dashboard .....	8
3.3. Video Playback - Selecting date / Event.....	9
3.3.1. Playback Local SD card / HDD.....	10
3.3.1.1. Select Channel.....	11
3.3.1.2. Playback Server.....	12
3.3.1.3. Playback Controls.....	13
3.3.1.4. Playback Controls - CH display, Speed, Progress.....	14
3.3.2. Playback Speed .....	15
3.3.2.2. Playback - Audio, Enlarge, Image Snapshot .....	16
3.3.2.2. Playback - Full Screen, Display Layout .....	17
3.3.2.3. Playback - CH Window Selection, Close Window .....	18
3.3.2.4. Playback - Mosaic / Privacy setting .....	19
3.3.3. Video/Map Mode / Route History.....	20
3.3.3.1 View - Map Only Mode / Video Only Mode.....	21
3.3.3.2. View - Map Only / Frame Information .....	22
3.4. Save / Export Video, Channels.....	23
3.4.1.1. Export Video - Standard, EXE format.....	23
3.4.1.2. Export Video - AVI format.....	24
3.4.1.3. Download Files to Local HD .....	25
3.4.1.4. Download Files to Server .....	26
3.4.2. Search / Add Events .....	27
3.4.2.1. Search Criteria .....	27
3.4.2.2. Add Events – Speed, Alarm .....	27
3.4.2.3. Event Verify, Delete.....	28
3.5. System Setup – Add / Edit User Role, Language, Speed / Temp Unit.....	29
3.5.1.1. User Permission / Add User .....	29
3.5.1.2. Map, Language.....	30
3.5.1.3. Speed, Temperature Unit .....	31
Technical Specification .....	32
Warranty / RMA .....	33

---

---

# 1. Software Overview

Ventra XDR Management is a robust PC-based software ideal for security and fleet management solutions. Features include: playback of video on local PC or server, video archive, set events such as maximum and minimum speed, alarms and user management

## 2. Installation

Computer configuration requirements: Operation system: Windows7 SP1、 Windows 8

CPU: Intel i5 and above

Memory: Minimum 4GB

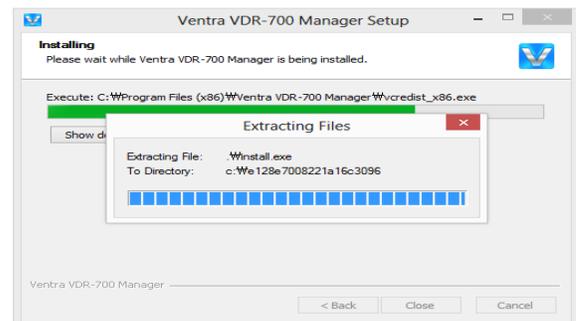
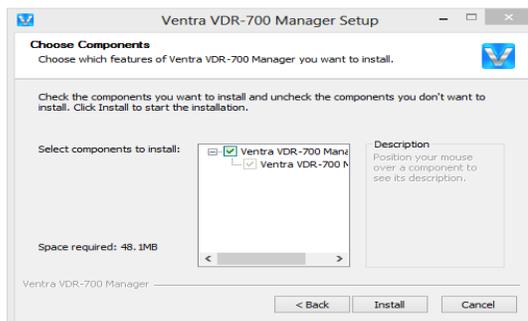
Resolution: 1280\*760

Browser: IE10

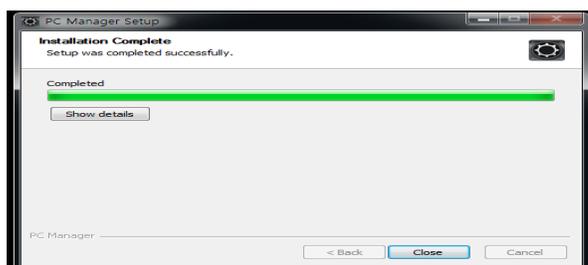
### 2.1. Software Installation

1. Double click the software
2. Select destination location. User can select manually and choose a disk with more free space. Click “Next” to continue
3. Select start menu folder. User can select manually and click Next to continue

Select additional tasks. User can decide whether to create a desktop. Click Next to continue



4. Ready to install. Click Install to continue after making sure the installation information is correct
5. Completing the Ventra program setup. Click Finish to launch program.



---

## 3. Ventra XDR Software Log In

This section covers how to login to the Ventra software to playback recordings on a local PC or sever. Insert SD Card from XDR to view data.

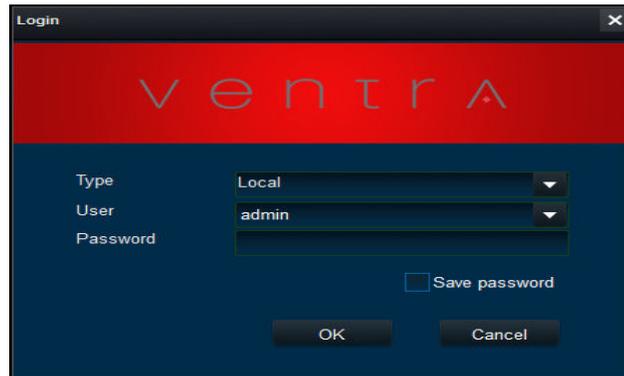
### **NOTICE:**

SD card MUST be formatted in the XDR prior to any recording. XDR utilizes a proprietary file encryption and cannot be recognized in Windows OS. Please refer to XDR User Guide on how to format

### 3.1. Log In

#### 3.1.1. Log In to Ventra XDR Software

1. Double click Ventra software desktop icon



2. Choose connection Type - Local or Server  
**(Choose Local - Typical setup are on local PC)**
3. Enter User and Password  
User ID = **admin** (can change that in User Profile / Add User)  
PW = **there are no password** for the first initial login, can change that in User Profile / Add User
4. If Connecting to Server, enter the IP address of server. (Supports domain name at the same time) or choose the previous server name.  
**Notice: The default port of server is 7264. IP needs to add a new port if the default one is changed in the server.**
5. Click "OK" to enter program
6. If enter wrong IP, User ID or password, Login fail will display
7. User can select the previous IP or user that logged in successfully
8. User can click Save password and keep user & password for future login

---

## 3.1.2. Advance (Server Management)

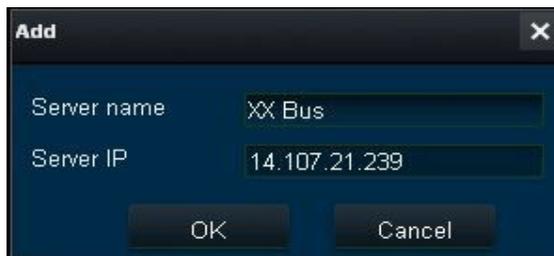
When log in, user can click “Advance” to set advanced settings

### 3.1.2.1. Add Server

Click “Advance” and “Add” to input server name and IP



The screenshot shows the VENTRA Login dialog box. The 'Advanced' checkbox is checked. The 'Server IP' field is highlighted with a red box. The 'Server' dropdown menu is set to 'XX Bus'. The 'User' and 'Password' fields are empty. The 'Save password' checkbox is unchecked. The 'OK' and 'Cancel' buttons are at the bottom.



The screenshot shows the 'Add' dialog box. The 'Server name' field contains 'XX Bus' and the 'Server IP' field contains '14.107.21.239'. The 'OK' and 'Cancel' buttons are at the bottom.

Supports up to 22 letters respectively in the server name and IP. IP address supports domain name

**Notice: The default port of server is 7264. IP needs to add a new port if the default is changed in the server**

Return to Log in interface, click the button to automatically select the added server



The left screenshot shows the VENTRA Login dialog box with the 'Server IP' field highlighted. The right screenshot shows the 'Edit' dialog box with empty 'Server name' and 'Server IP' fields. The 'OK' and 'Cancel' buttons are at the bottom.

### 3.1.2.2. Delete Server

Click “Advance”, then click “Delete” to delete the server

### 3.1.2.3. Edit Sever

Click “Advance”, then click “Edit” to input server name and IP

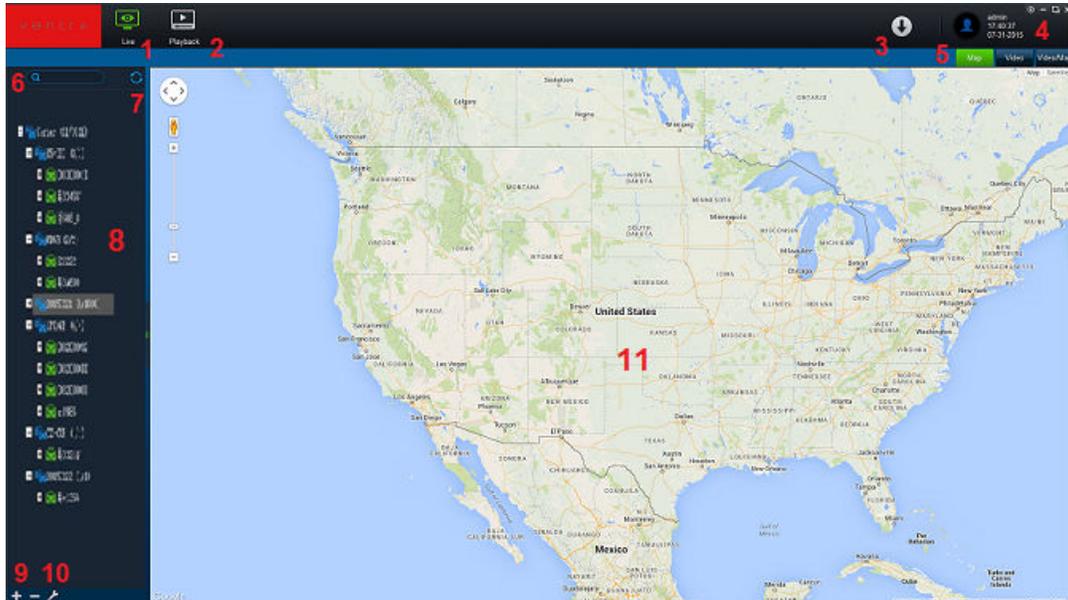
---

## 3.2. Software dashboard

The software dashboard displays playback mode, vehicle list, download options, as well as options, settings and map.

Data can be viewed, and accessed either from a local computer or server, where the information is stored.

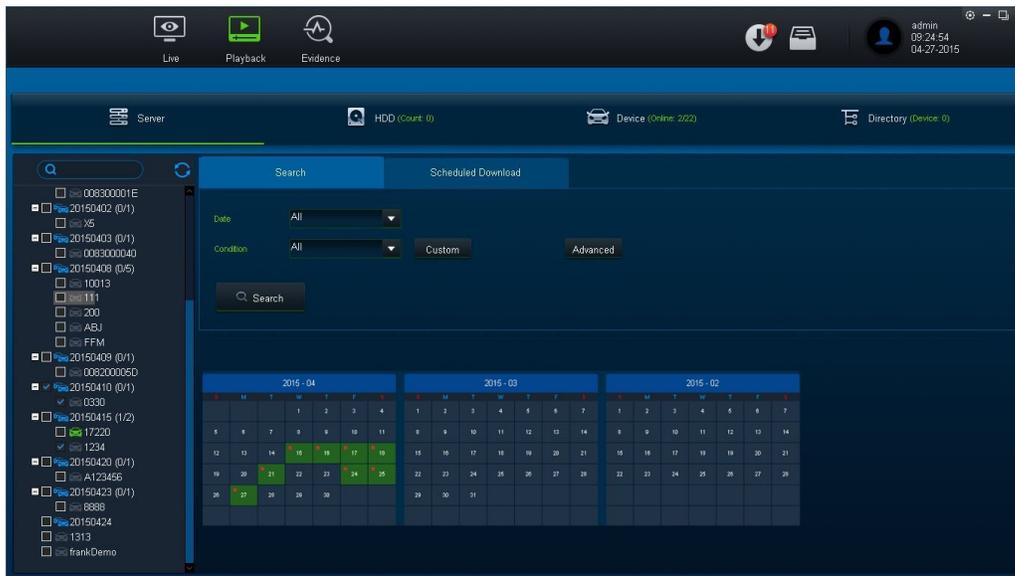
\*Local computer access is most common



1. **Live:** Applicable ONLY for XDR models with cellular connection for remote viewing. Not available on the XDR-400 model
2. **Playback:** Playback of recordings from SD cards / HDD, or data previously stored on server
3. **Download:** Download and save individual files/recordings
4. **Setting:** System setting / configuration
5. **View Mode:** Displays viewing in Map, Video, Video and Map
6. **Search:** Search for vehicles
7. **Refresh:** Refresh vehicle or storage list
8. **List:** Displays vehicle list in Live Mode (XDR models with 3G viewing), or displays list of SD card / HDD in playback mode
9. **Add / Delete:** Add / Delete vehicle groups
10. **Server configuration:** Manage / Set IP address and Ports

### 3.3. Playback – Selecting Date / Event

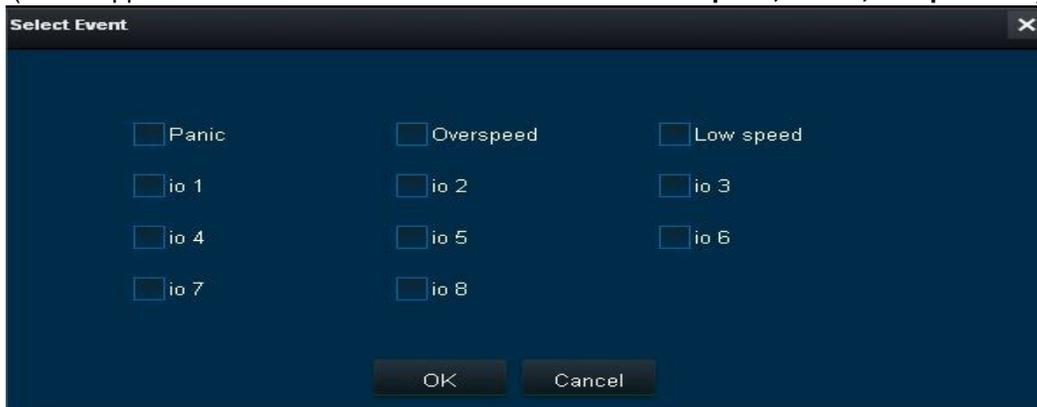
1. Choose a vehicle or SD card from HDD Tab
2. Choose date and Event - if applicable
3. Double click “Search” to display calendar



4. In calendar, **GREEN** indicates normal recording; **RED** indicates alarm recording; Red dot indicates black box data

5. Select desired day

(XDR supports various Event Customization – **Over / Low Speed, Alarm, Temperature**)



Events parameters can be programmed in Section 3.4.2.1 – Search / Advance Setting

## 3.3.1 Playback Local SD / HDD

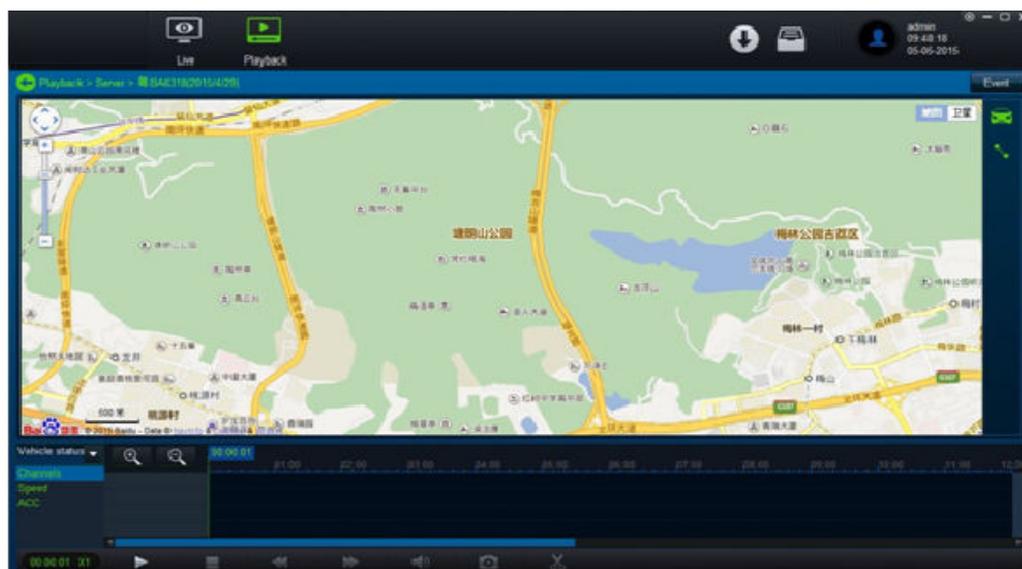
### 3.3.1.1 Select channel

1. After selecting search criteria, double click the date in the calendar. If there is video data, it will go to the channel choice page (as shown in pic 1 and pic 2), choose the channel to playback (default is all channels with data); If only with black box data, then go directly into the map page.
2. Click Play button and go into the video playback page

(Picture 1, Video and Map - with GPS signal for black box metadata)



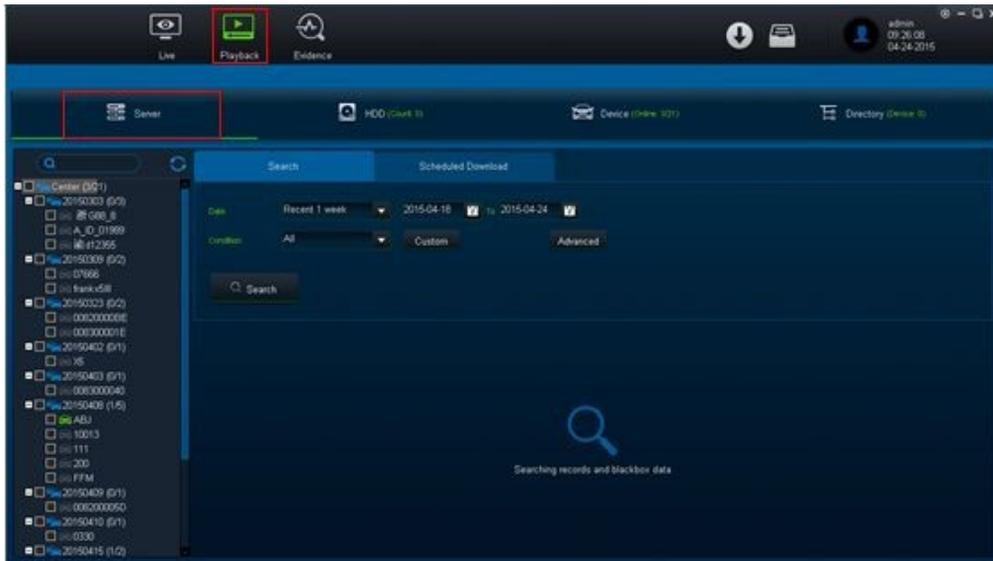
(Picture 2, Video only data)



### 3.3.1.2 Playback - From Server

Playback via server requires files to be previously saved on a server for archiving purpose.

Vehicle list only shows vehicle groups within management and devices under the groups.



The number after title shows the total number of vehicles

## 3.3.2 Playback Controls

1. Select the desired vehicle from the list
2. Play / Pause

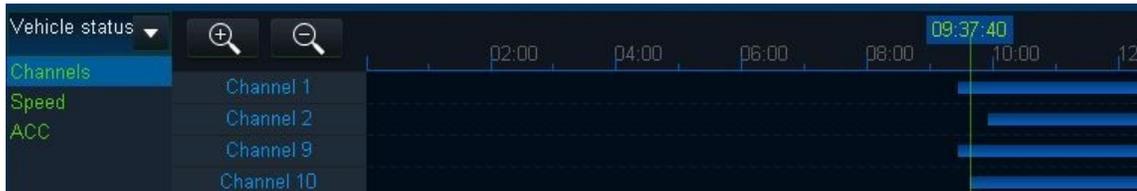
Click  to play, press  to pause, click  to resume playback

Click  to stop playback.

1. Select the opened channel, Click  to turn of sound, and it turns to 
2. After activation of sound, click  to turn on sound
3. Main stream has better sound quality than sub stream

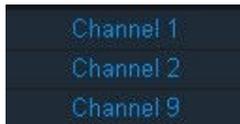


### 3.3.2.1 Playback Controls - Continue



#### 1. Channel display

Only shows channels with data



Blue indicates normal video, orange indicate alarm video



#### 2. Zoom in, Zoom out, time graph

Click  or upper scroll mouse, can zoom in time bar (maximum 24 hours)

Click  or down scroll mouse, to zoom out time bar (maximum 1 minute)

#### 3. Play progress

Green vertical line shows playing progress, left click on the mouse to the desired playback time

#### 4. Right Click – Mouse

Press right key of mouse, and drag mouse - left/right to move the progress of playback

---

### 3.3.2.2 Playback Speed



Without GPS receiver black box data, the speed curve shows blank.

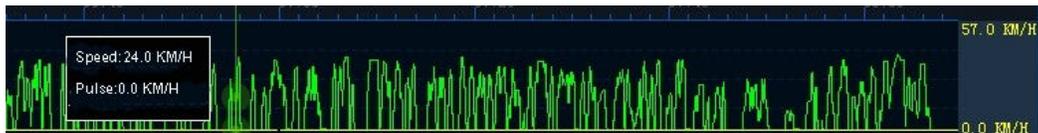
1. Zoom in, zoom out channel bar

Click  or upper scroll mouse, can enlarge speed's time bar (maximum is 24 hours).

Click  Or down scroll to zoom out speed's time bar (maximum 1 minute).

2. Maximum value and minimum value

When playback, user can see GPS speed and pulse's maximum value and minimum value



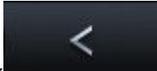
### Slow Playback

Click  to slow playback, click one time to slow one time, maximum support 1/32 speed playback. This function does not support if recording only contains black box data

### Fast Playback

Click  to fast play during playback, click one time to fast double, maximum support x32 speed playback. This function does not support if recording only contains black box data

### Last Frame

Click  to shows the last frame image, and pause playback, this function do not supported if only with black box data.

---

## Next Frame



Click  during playback, this function cannot supported if only with black box data.

## Sound



Click  during playback, , drag bar to adjust the volume of. This function does not support if recording only contains black box data

## Digital Enlarge

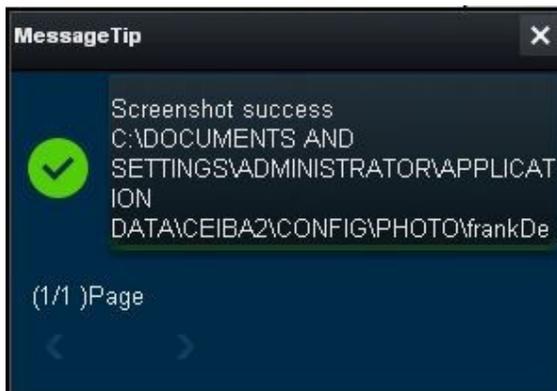


Click , and then drag the mouse left key, select the district need to be enlarge, double click enlarge area, will resume to normal playback

## Snapshot – Image



1. Choose the displayed video channel, click  on the bottom right corner. The snapshot window will prompt up



2. The prompt message will disappear in 6 seconds
3. Click the content from the prompt up, the picture will open



4. Snapshot will be saved at the selected directory

### 3.3.2.3 Full Screen

1. Click  on the bottom right corner to view full screen
2. Click the ESC or double click  to exit full screen

### Window Number Setting

1. Click  to set the window number of video
2. The video display supports up to 36 windows
3. The last opened windows will cover the first window if exceeds 36 windows

### Window Switch

1. Click  to scroll to next page, the last page is gray and cannot be selected
2. Click  to page up to the next page, the first page is gray and cannot be clicked

### Close Video

1. Choose the video window, then right click mouse. Choose "Close Video" from menu
2. After closing the video channel, the program will record the vehicle and channel, user can use the "Open Video" function

---

## Close All Video

Choose any window, right click the mouse. Choose “Close All” on the prompt up menu to close all videos

## Open Video

Choose desired video channel, then right click the mouse, choose “Open Video” on the prompt menu

## Open All Video

Choose any window, then right click the mouse, choose “Open All” on the prompt menu

## Clear Video

1. Choose opened video window or closed window, then right click on mouse, choose clean history” on the prompt menu
2. After clean up of video, program will no longer record vehicle and channel number, so the “open video” function can’t be used

## Full Screen

Click  to full screen, press “ESC” key to exit full screen. Press “blank” key to pause/play video

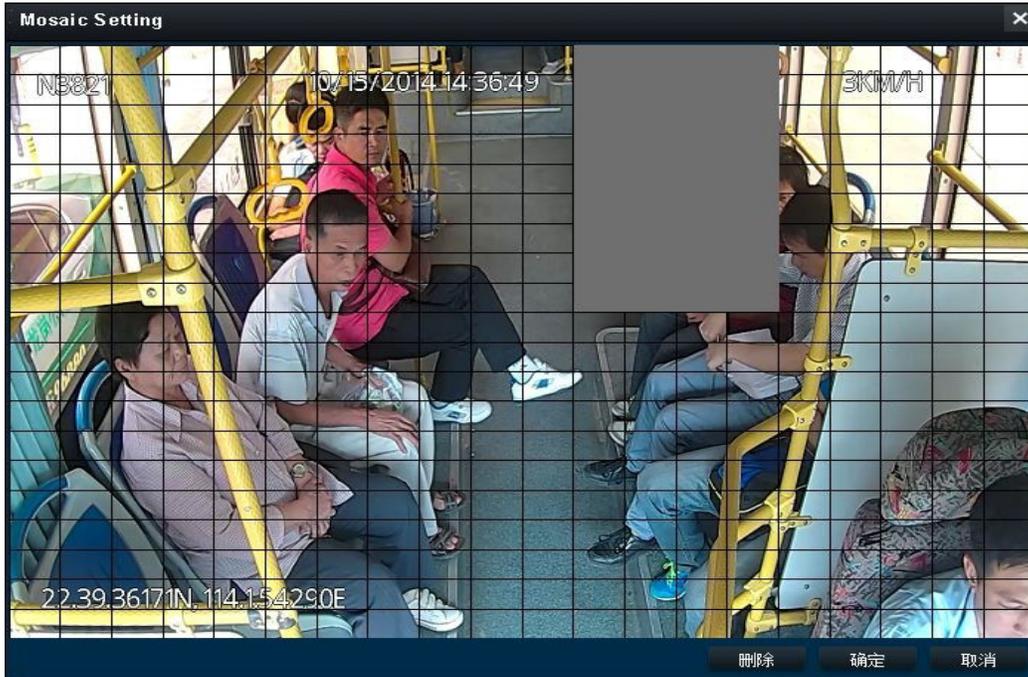
## Enlarge Single window

Double click single window to enlarge screen. This will display frames, resolutions, rates of this channel video. Double click again return to multi-channel display screen



### 3.3.2.4 Mosaic Setting

Click  on the upper right of window to pop up dialog for mosaic setup. Drag mouse to setup area and confirm. Every channel supports maximum 20 points of mosaic



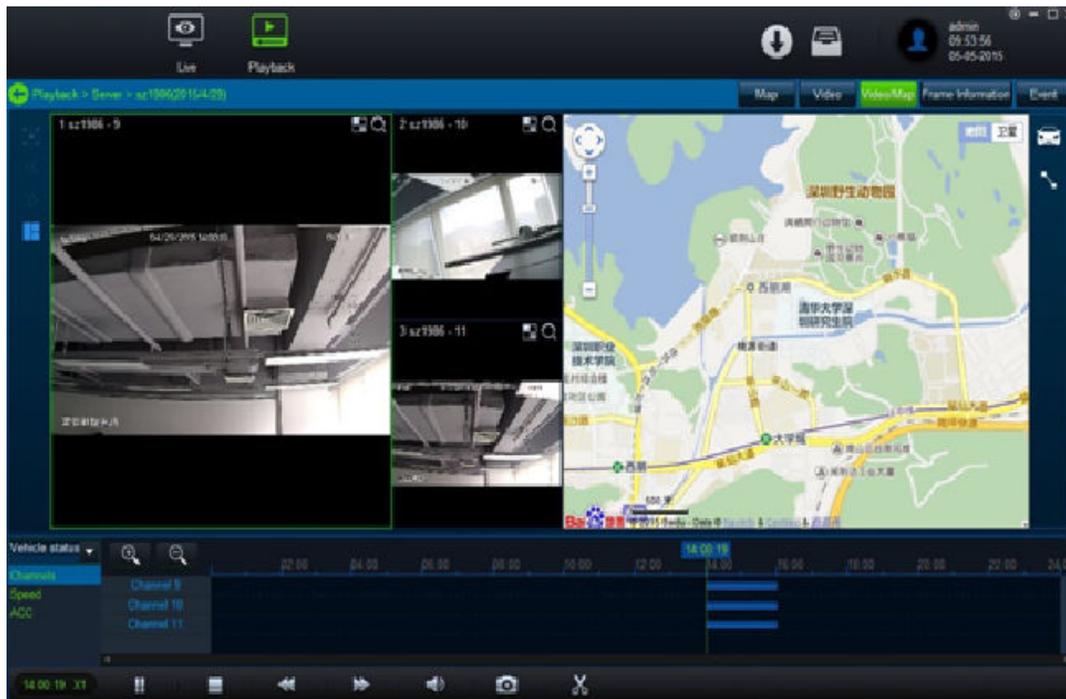
After setting



Click won't save the mosaic setup. Real time setup can be done during playback.

To cancel the mosaic, click  on the upper right hand corner and click "Clear" button. This will then cancel the settings for mosaic

### 3.3.3 Video/ Map - Route History



In this mode, the program displays both video and map simultaneously

#### View Vehicle Route History

##### 1. Lock the vehicle:

Click  on the upper right and can cancel the vehicle locked, and the icon will change

to . Click again to lock the vehicle, In playback,  in the map will move with the map.

##### 2. Route display and hide:

Select the icon on the right side of the map, click on the icon  to hide the vehicle route, and the icon will change to ; Click again to display the route

##### 3. Alarm group:

Vehicle route, If there is only one alarm in a dot, Shown as ; If multiple alarms are in a dot, shown as . The number it indicates the alarm No..

### 3.3.3.1 Map Only Mode

On upper right hand corner, click Map button and switch to Map page, hide video with only map. If without black box data, the button will not be display and cannot be selected



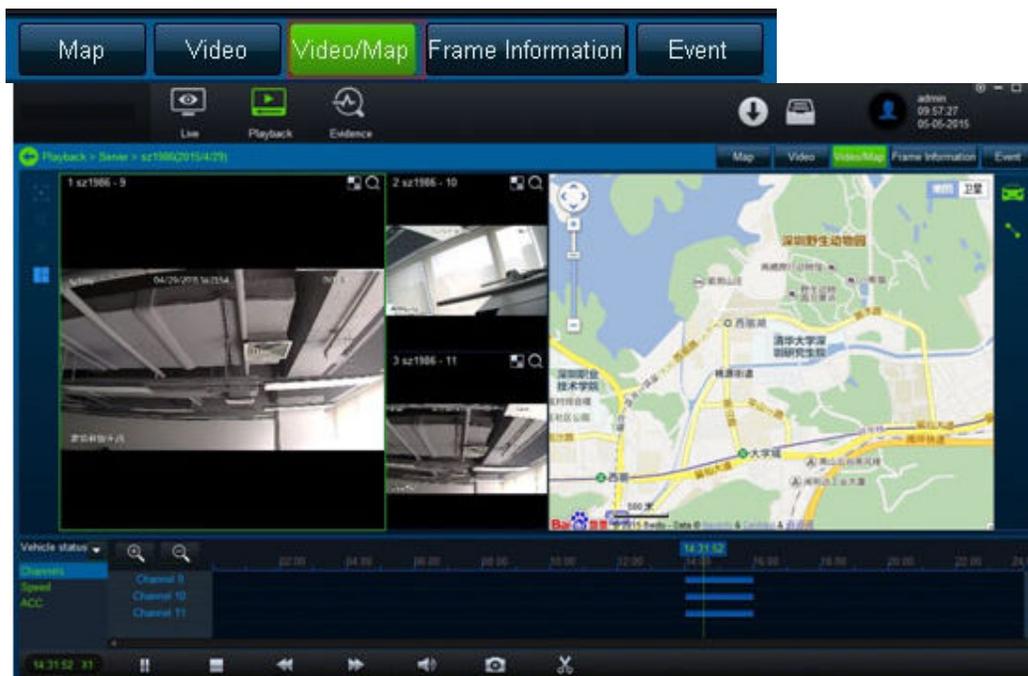
### Video Only Mode

Click Video in the upper right corner and switch to video page, hide the map and show only video. If no video data, the button will not display and cannot be selected.



### 3.3.3.2 Video/Map Mode

Click Video/Map button in the upper right hand corner to switch to Video/Map page view. If there is no video or black box data, the button is unavailable and cannot be selected.



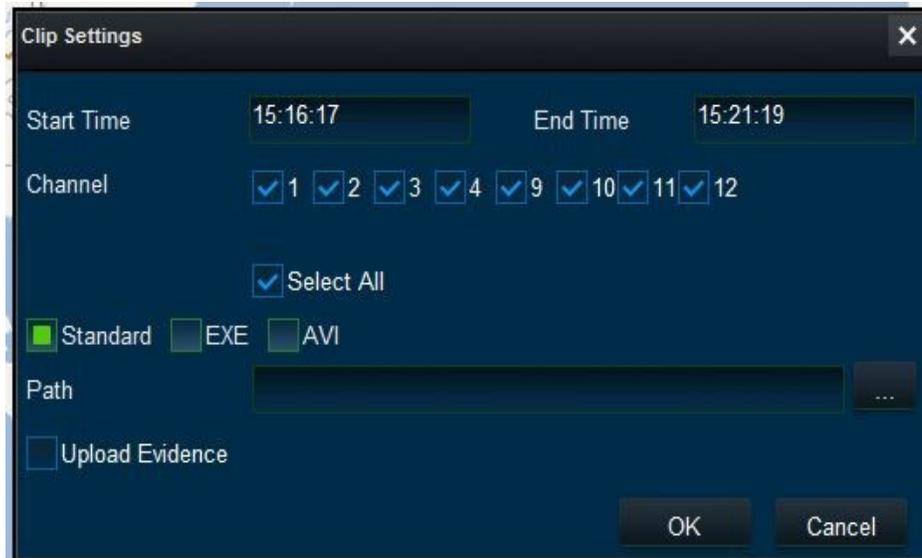
### Frame Information

Click frame Information on the upper right hand corner to display Black Box metadata



### 3.4.1 Export / Save Video

#### Standard Clip (Default Type)



Download H.264 file in the server to specified path of current PC

1. In the clip setting page, adjust start and end time again
2. Choose channel. All data channel have been chosen by default

3. Select Standard



4. Revise local save path.

5. Click "OK", number in the download icon will become "+1"



6. Following download status please refer to local download in download center.

#### Export EXE File

1. Transfer H.264 file in the server to EXE format file, then download to specified path in local PC
2. In the clip setting page, adjust start and end time again
3. Choose channel. All data channels have been chosen by default

4. Select Standard



5. Revise local save path

6. Click "OK", the number in the download icon will become +1



Following download status please refer to local download in download center.

---

### 3.4.1.2 AVI Export AVI

1. Transfer H.264 file in the server to AVI format file, then download to specified path in local PC
2. In the clip setting page, adjust start and end time again
3. Choose channel. All data channel have been chosen by default
4. Select AVI 
5. Revise local save path

6. Click "OK", the number in the download icon will become +1 . Following download status please refer to local download in download center

### Editing

Click  during playback, then playback will pause, "curve control" and "playback bar" will look like this(see picture below).



The green dotted line on the left is the video clip start time, and green solid line is the middle of playback time, while green dotted line on the right is the end of the video clip to be exported.

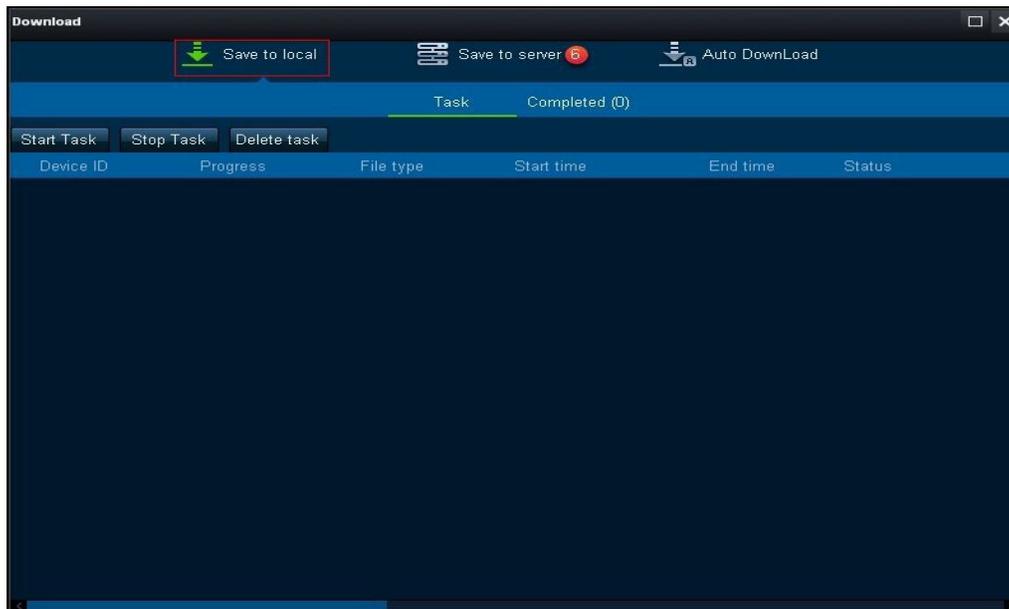
To adjust the time, simply drag the dotted lines on each side to desired time.

---

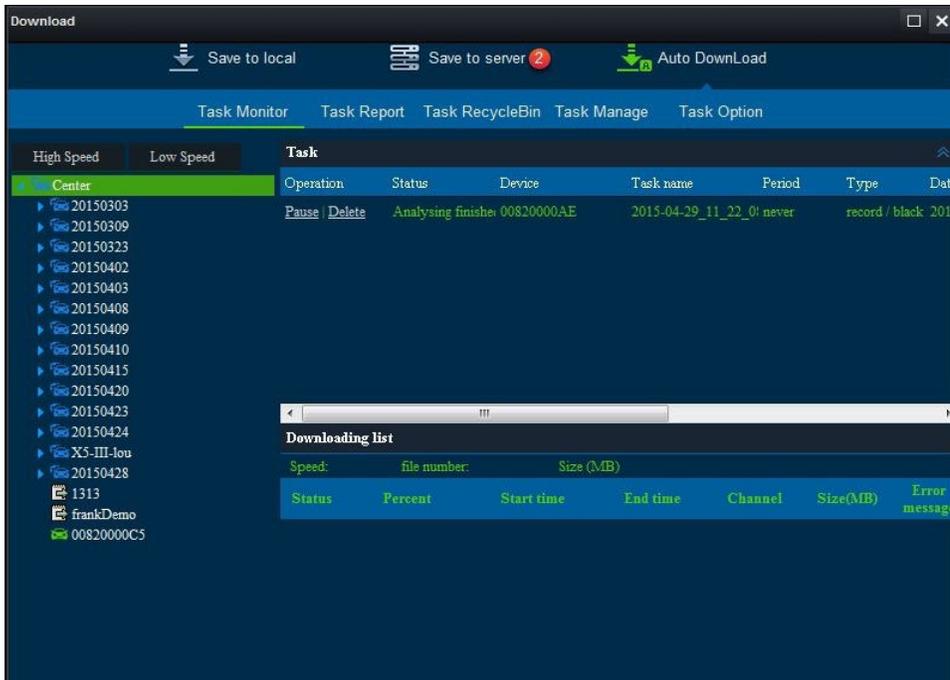
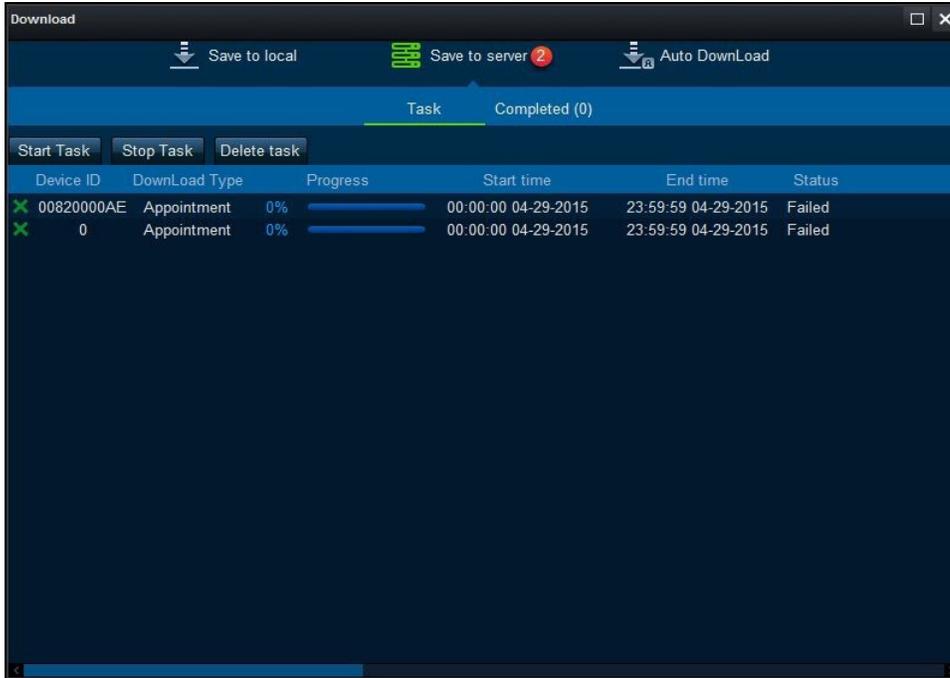
### 3.4.1.3 Download Center

#### Save to Local

Only one record can be downloaded at a time



### 3.4.1.4 Save to Server



---

## 3.4.2 Search / Add Event

### 3.4.1.1. Search Parameter

Date: One day, recent 3 days, recent 5 days, recent one week, recent 2 weeks, recent one month, all, user-defined

Speed: >, >=, <, <=, between, except

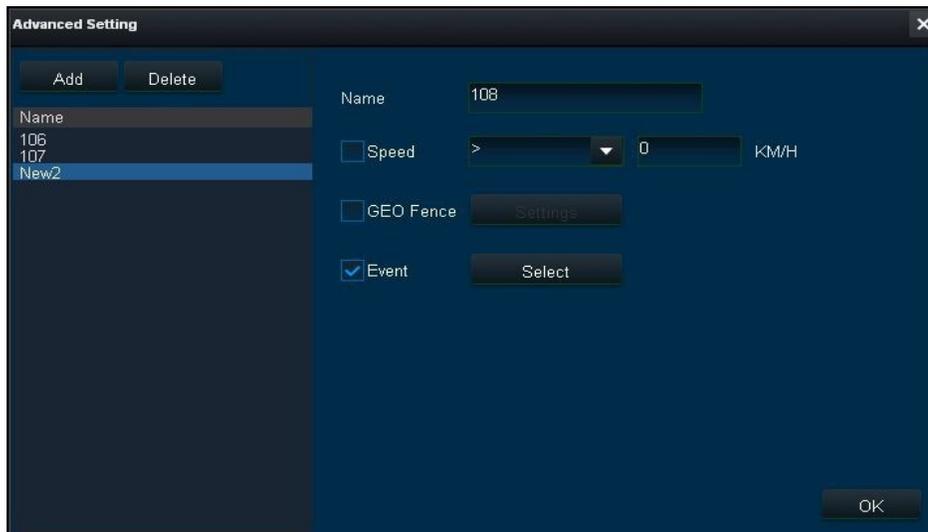
GEO Fence: (Not Available for XDR-400)

Event: Emergency, high speed, low speed, IO1, IO2, IO3, IO4, IO5, IO6, IO7, IO8.

### 3.4.1.2. Advance Setting – Event Setting

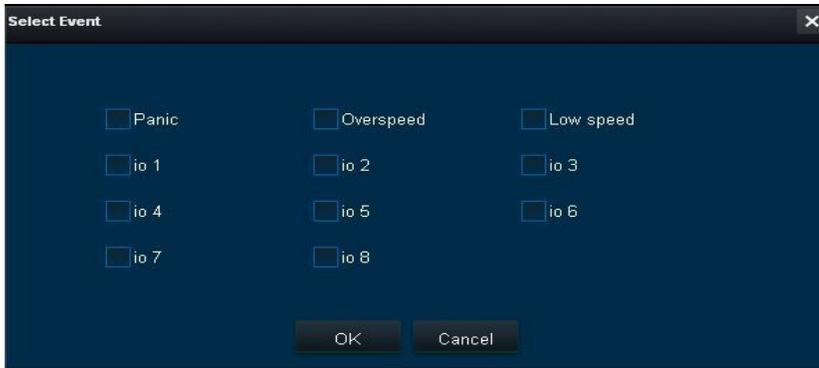
Setting searching condition

Playback searching page, click the “Advance”, open the page as below



### 3.4.2.2 Add Events

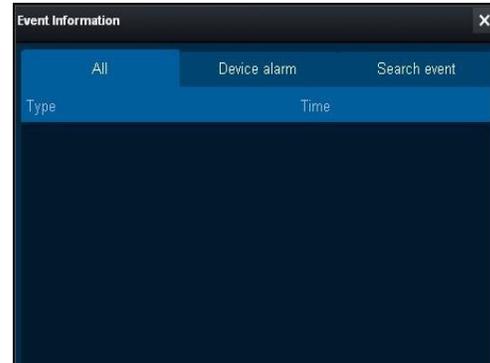
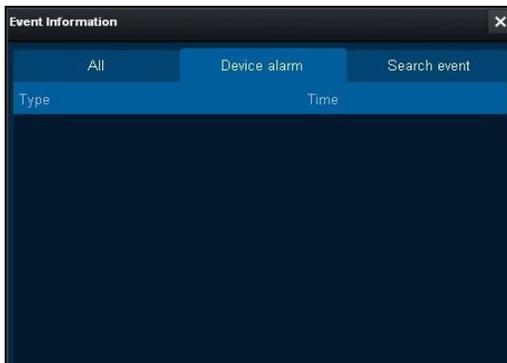
1. In the Advanced Setting page, click “Add”
2. Revise the module name. The default name is New
3. Choose (**Speed, Event**) then set the searching condition (GeoFence feature not available for XDR-400A)
4. Can add more modules at the same time
5. Click “OK” to close the Advanced Setting page
6. The unit of speed can be changed (KM/H or MP/h). After revising the speed, it will switch automatically
7. Set the fence, the map will locate the last operated area
8. The relationship among Speed , GEO Fence and Event is “And”
9. The relationship among each event searching is “And”



### 3.4.2.3 Event

Click “Event” on the upper right hand corner

1. **Search event:** Show the record meeting the search condition
2. **Device Alarm:** Indicates device over speed, low speed, I/O Alarm
3. **All:** Indicate alarm and record that match the search requirements



### Verify

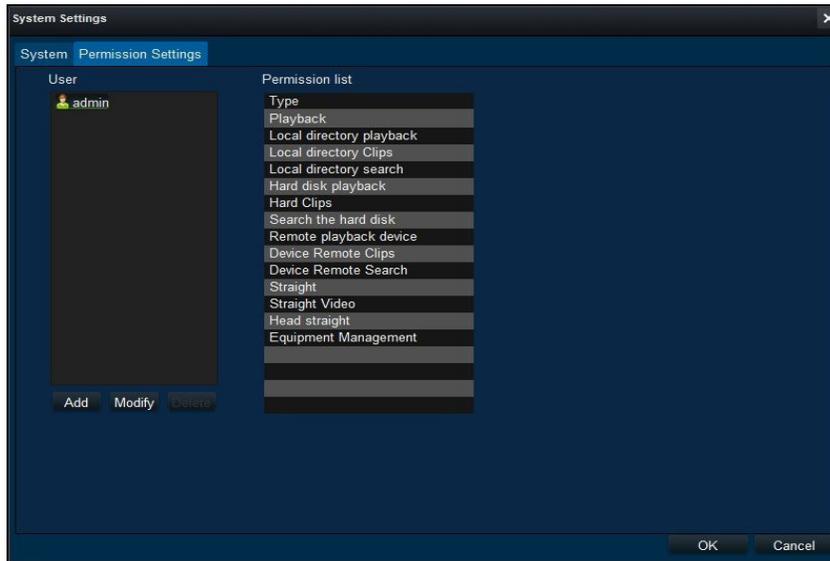
1. In the Advanced Setting page, choose the module name that needs to be verified
2. Verify the module name
3. Verify the searching condition ( speed, event)
4. Click “OK” to close Advanced Setting page

### Delete

1. In the Advanced Setting page, choose the module name that needs to be deleted
2. Click “Delete”

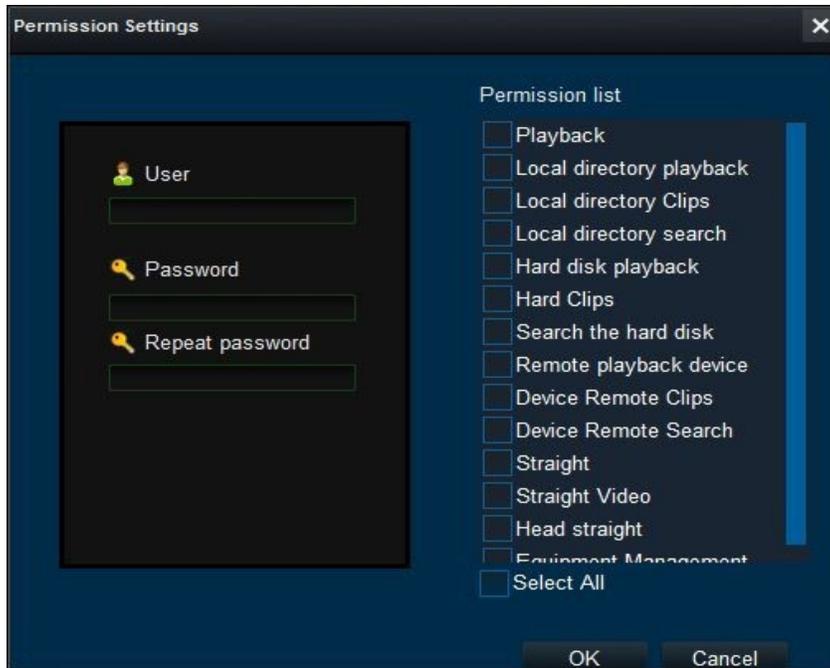
### 3.5.1 User Permission / Add User

XDR allows multiple users to be added to the program for different levels of authorization



#### Add Users

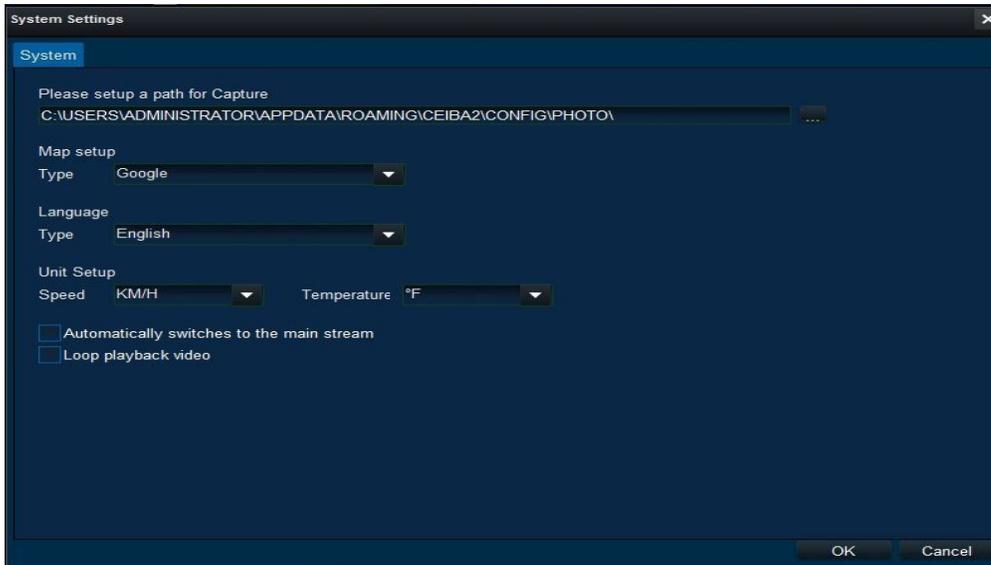
1. Click the button “Add”, then the dialog pop up



2. Input the user name, password, and verify password
3. Select permissions
4. Click “OK”

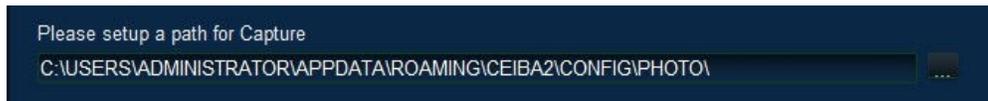
### 3.5.1.2 System Setting

Click  at the top right corner of software to have system setting.



#### Screenshot Path Setting

Setup a path for screenshot of real-time review and playback. (server playback, hard disk playback, remote device playback and directory playback)



#### Map Type Switch

Set the map for real-time review, playback and evidence center. (server playback, hard disk playback, remote device playback and directory playback)



---

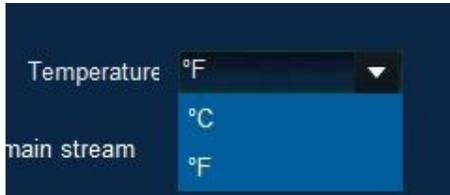
### 3.5.1.3 Speed / Temperature Unit Setting

Set the speed unit when playback. (server playback, hard disk playback, remote device playback and directory playback)



### Temperature Setting

Set the temperature unit when playback. (server playback, hard disk playback, remote device playback and directory playback)



## Technical Specification

<b>Function Overview</b>		Preview, Recording, Playback, Route History
<b>System</b>	OS	Linux 2.6.24
	Control Mode	IR remote control
<b>Video</b>	Input	4 channels
	Output	1 channels
	Video System	NTSC/PAL optional
<b>Audio</b>	Input	4 channels
	Output	1 channel
<b>Display</b>	Display Split	1/4
	OSD	GPS information, alarm, temperature, voltage, device information, firmware version
	Operation Interface	Semi-transparent GUI
<b>Recording</b>	Video/Audio Compression	H.264/ADPCM
	Image Resolution	PAL: D1(704x576), HD1(704x288), CIF(352x288) NTSC: D1(704x480), HD1(704x240), CIF(352x240)
	Image Quality	1~8 levels adjustable (1 is the best)
	Recording Mode	Manual/schedule/Alarm (sensor trigger, speed, acceleration, video loss, temperature)
	Post-recording	Maximum 30 minutes
	Mirror Recording	Yes (Using one of the two SD Cards)
<b>Playback &amp; Backup</b>	Playback Channel	1 channel by local playback, 1/4 channel by software playback
	Search Mode	Date/time, channel, file type
	GPS	GPS location tracking, speed detection and time sync
<b>Storage</b>	SD Card	32GB/64GB/128GB Class 10 SDHC card – Max 128GB per slot
<b>Interface</b>	USB	USB 2.0 × 1
	SD	SD × 2
	Sensor	4 inputs, 2 outputs
	Speed	1 channel pulse speed detection
<b>Power</b>	Input	DC8-36V
	Output	500mA@12V
	Current	Impulse current: input 13.5V@1.3A Working current: input 13.5V@1.2A, 27V@0.5A Standby current: 0A

---

## VENTRA LIMITED WARRANTY

Ventra Technology warrants the system against defects in material and workmanship for a period of **one (1) year** from the date of original purchase. During this period, Ventra's liability for any defective product, or any product part, shall be limited to the repair or replacement of the product, at Ventra's sole discretion.

This warranty does not apply to defects or damages resulting from mishandling, accident, abuse, negligence, lightning, water/liquid, power surges, improper interfacing, operation outside of design limits, misapplication, improper repair, or unauthorized modification.

The term "Ventra Product" is limited to the hardware components and required firmware. It DOES NOT include software applications or programs, non-Ventra products or peripherals. To the extent permitted by local law, all non-Ventra products or non-Ventra branded peripherals - such as external storage SD card are provided provide the respective manufacturer's own warranties directly to you, and are not covered by this Limited Warranty.

To obtain service within the warranty period, please contact Ventra at (888) 418 3833 or tech@ventrainc.com for assistance. If product repair or replacement is necessary, a Return Merchandise Authorization (RMA) will be issued. The Customer will be solely responsible for shipping charges, insurance and proper packaging to prevent breakage in transit, whether or not the product is covered by this warranty. All shipments of repaired or replaced products by Ventra will be F.O.B. California.

**VENTRA MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, AS TO MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF ANY PRODUCT SOLD UNDER THIS CONTRACT. UNDER NO CIRCUMSTANCES SHALL VENTRA BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES INCLUDING, WITHOUT LIMITATION, INFRINGEMENT OF THIRD PARTY RIGHTS, LOST GOODWILL, LOST REVENUES OR PROFITS, WORK STOPPAGE, DATA LOSS, SYSTEM FAILURE, IMPAIRMENT OF OTHER GOODS, COSTS OF REMOVAL AND REINSTALLATION OF THE SYSTEM, LOSS OF USE, INJURY TO PERSONS OR PROPERTY ARISING OUT OR RELATED TO THE SYSTEM WHETHER BASED ON BREACH OF WARRANTY, BREACH OF CONTRACT, TORT OR OTHERWISE. IN NO EVENT SHALL VENTRA'S LIABILITY EXCEED THE ACTUAL PURCHASE PRICE OF THE SYSTEM WITH RESPECT TO WHICH ANY CLAIM IS MADE.**

The information in this specification sheet reflects the current technical specifications at the time of print. **Ventra reserve the right to change** the technical or physical specifications and features without prior notification.

While every effort has been made to ensure the accuracy of the information, certain specifications are based on approximate figures

All trademarks, service marks, trade names, product names and logos are the property of their respective owners.