## Supplement to SD4mX User Manual

## How To Setup SD4mXC DVR & PC for Professional Cellular CMS Server Hosting

Professional Cellular CMS Server Hosting is required for ABV sales, to insure proper function of the product and the least complex mechanism for customers to access Live View Video from their vehicles.

#### Why Professional Cellular CMS Hosting requirement for ABV sales:

IT technical training and support for Cellular CMS Network Servers create considerable costs to a business that must be passed on to their customers in higher product pricing. We have found most potential customers interested in a low cost Live View small fleet solutions are not interested in purchasing additional server related hardware, nor in financing the extremely expensive technical support needs of those who wish "bells & whistles" in their Live View solutions. They want the lowest cost and simplest Live View video access possible and that can only be provided by a Professional Cellular CMS Server Hosted solution.

Those who wish the "Bells & Whistles", who have IT professionals to setup complex networks and prefer to host and manage the servers in-house should consider investing in the customer hosted MVS-SSD4 Professional Series as it offers those capabilities.

#### **Unadvertised Professional Cellular CMS Hosting Features Note:**

ABV does not advertise features the products cannot provide at the time of the advertisement. This is generally referred too as "Vaporware" in the industry and it would be a violation of principal to deceive a customer into a sale based upon a false pretense.

While the manufacturer may work to develop: Voice Intercom, Remote Video Storage, Remote Video Download, Local Video Storage, Local Video Playback and remote Device Upgrade, and list those features in CMS software & documents, it must be emphasized that they are not advertised features, their development is not completed nor is there any assurance being offered they will be completed, so it would be unwise to base a investment decision on any of those possible system features.

#### **AMERICAN BUS VIDEO**

2545 Valley Ridge Drive Cumming, GA 30040 Tel: (770) 263-8118 Fax: (770) 887-5944 <u>http://www.americanbusvideo.com/</u> <u>http://www.vehiclevideocameras.com/</u> <u>http://www.fleetdriverriskmanagement.com/</u> 25 Years of Mobile Digital Sales & Service Experience

## **DVR Setup Professional Cellular CMS Server Hosting**

Required SIM Specs AT&T or T-Mobile Cellular Service Provider SIM cards only

ABV approves & recommends 5G+ or UL data plan with AT&T or T-Mobile only SIM Card Operation Band & Frequency Band Specification Requirements: UMTS 2100/1900/900/850 (WCDMA Only) via AT&T or T-Mobile only Setup SIM card as DATA DEVICE for HOTSPOT

Load a SIM Card into the SIM card slot.



#### Notes for SIM Card Tray Extraction:

The SIM card tray is removed by first powering the DVR down so no LEDs are lit to prevent possible damage to the SIM card or DVR.

Push a metal tip, like paper-clip end into the small yellow hole to the Left of the SIM card bay for SIM card tray extraction.

When reinserting the SIM Card Tray, make sure the SIM card is on the bottom of the tray when it is reinserted with the contacts facing the bottom of the DVR.

Screw the 3G antenna connector into the antenna connection point located on the back panel of DVR system.



*Important Note:* To receive 3G signals, it is necessary to make sure that the 3G antenna is pointed toward the sky whenever possible. We recommend installing on the roof of a vehicle, or on the window.

Power on the DVR system with a "Analog" (meaning BNC or RCA Video Input device) Display or TV connected to access the DVR Main Menu. Press **<MENU>** on the DVR remote to enter system main menu.



Choose "PERIPHERAL" and press <MENU> to enter its sub-menu.

PERIPHERAL

GPS DEVICE	GPS NONE	
GPS BURNIN	₫ ON	$\triangleright $
GPS TIME SYNC	₫ ON	$\triangleright $
BAUDRATE	⊴4800	$\triangleright $
LANC FUNCTION	PANIC ALARM	$\triangleright $
3G MODULE	3G SETUP	<b>∠</b>
BEEPENABLE	ON	Þţ

Choose "3G MODULE 3G SETUP..." and press <MENU> to enter.

					1
		3G MODULE	I ON	$\triangleright$	
	PER	DIAL NUMBER	⊲ *99#	$\triangleright$	
ſ		STATUS	NONE: 0. 0. 0. 0		
	GPS	APN	890	≝	
	GPS	USER NAME		≝	≥₽
	GPS	PASSWORD		≝	ÞŪ
	BAI				DÛ
	LAI				D Û
	<b>3</b> G [				<b>≝</b>
	BEI				DŪ
·					

Please set up your "APN", "USER NAME" and "PASSWORD". If the DVR is connected, the STATUS will display as "10.64.64.64" (this refers to IP address of the 3G server).

Please note Cellular Service Provider (CSP) account requirements vary, but on ABV installed vehicles we were not required to enter a "APN", "USER NAME" or "PASSWORD". Therefore your settings may not require the "APN", "USER NAME" or "PASSWORD" either, but if they do, this information can be requested from your Cellular Service Provider (CSP).



If the "3G STATUS" displays as "None: 0.0.0.0", it means the connection is failed. You may check with your 3G service provider for correct APN, USER NAME and PASSWORD.

Please note Cellular Service Provider (CSP) account requirements vary, but on ABV installed vehicles we were not required to enter a "APN", "USER NAME" or "PASSWORD".

Therefore your settings may not require the "APN", "USER NAME" or "PASSWORD" either, but if they do, this information can be requested from your Cellular Service Provider (CSP).

### **Professional Cellular CMS Server Hosting Login Information**

Username, Password & Server ID are provided after payment of Professional Cellular CMS Server Host annual fee. Those systems purchased without Professional Cellular CMS Server Host annual fee, will not have the Username, Password & Server ID decal.

Customers who purchase the Professional Cellular CMS Server Host annual fee will have the Username, Password & Server ID decal attached to their DVR ready to activate.

## PC Setup Professional Cellular CMS Server Hosting

Download the Client Server CMS from ABV Resource ABV Link for Professional Cellular CMS Server software http://www.americanbusvideo.com/CUSTOMER-FTP/SD4mXC/

Folder named: Client CMS Software 2 different file types of the software are in the folder, one zipped in case your filters prevent "exe" files.

## **CMSV6** Installation Instructions

Double-click the installer file (with the .exe extension) to start the installation process.



Choose the language to be "English", click "OK". It will show the Setup Wizard window.



Click "Next" to select the location to save the file. The Default location is: C: \Program Files\CMSV6. To change the installation path, click on the "Browse" button to select a different path.

Setup - CMSV6
Select Destination Location Where should CMSV6 be installed?
Setup will install CMSV6 into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Program Files\CMSV6 Browse
At least 27.2 MB of free disk space is required.
< Back Next > Cancel

## Set a folder name in Start Menu.

Setup - CMSV6	<u> </u>
Select Start Menu Folder Where should Setup place the program's shortcuts?	
Setup will create the program's shortcuts in the following s	Start Menu folder.
To continue, click Next. If you would like to select a different folder	r, click Browse.
CMSV6	Browse
< Back	Next > Cancel

Create a desktop icon

ſ	Setup - CMSV6	J
	Select Additional Tasks Which additional tasks should be performed?	
	Select the additional tasks you would like Setup to perform while installing CMSV6, then click Next.	
	Additional icons:	
	☑ Create a desktop icon	
	< Back Next > Cancel	
Click "Next".		
	Setup - CMSV6	J
	Ready to Install Setup is now ready to begin installing CMSV6 on your computer.	
	Click Install to continue with the installation, or click Back if you want to review or change any settings.	
	Destination location: C:\Program Files\cmsv6	
	Start Menu folder: CMSV6	
	Additional tasks: Additional icons: Create a desktop icon	
	-	
	< Back Install Cancel	

Click "Install" to proceed.

Setup - CMSV6	- • ×
Installing Please wait while Setup installs CMSV6 on your computer.	
Extracting files	
	Cancel

## Click "Finish" and launch CMSV6.

Setup - CMSV6	
	Completing the CMSV6 Setup Wizard
	Setup has finished installing CMSV6 on your computer. The application may be launched by selecting the installed icons.
	Click Finish to exit Setup.
	Launch CMSV6
	Finish

## CMSV6 PC Login

Once the CMS program has been downloaded to your PC you will see the shortcut on the desktop: Click the



icon to launch the CMS program. Once the program has launched you will see the Login screen below. This is where you will enter your User name, Password & Server

100 10101 10140011	
User	shuttleone
Password	+•••••
Server	ezview.3322.org
	Remember password 🗌 Automatic login
	Login Exit

## **CMSV6** Operation Instructions

## **CMSV6** Introduction

CMSV6 uses many methods including GPS satellite positioning system, the Internet, mobile communications and cloud computing to build a remote monitoring platform for customers. You can manage vehicle/person in different regions by CMSV6.

## Main Functions

CMSV6 includes some functions: wireless remote real-time video surveillance, GPS map positioning, vehicle history running track playback, voice intercom, alarm linkage, remote video storage, remote download video, remote video playback, local video storage, local video playback, regional management of the vehicle, the device remotely upgrade, etc.

## **CMSV6 Main Interface**

CMSV6 main interface includes these: toolbar, device list, map window, video windows, information display windows (vehicle running information, real-time alarm information, system events), PTZ controller, etc.



### **Function Introduction:**

Toolbar: in the top of the window includes buttons: Map, Video, Track, Record, Other, etc. Map: View on the map the location of the vehicle and other information

Device List: The list information of the vehicle

Video Polling List: CMSV6 will switch these custom-channel video within the specified time. My Map: Point, surface, a recording of the area marked by the user on the map

System: The overall situation of the vehicles and surveillance video

Voice: Voice speaking and listening

PTZ: Rotation angle, focus, aperture, lights, wipers

Vehicle Monitoring: Display the vehicle information, such as longitude, latitude, the driver, the speed, the vehicle state

Alarm Information: Display the contents of the alarm

System Events: Recording system events, such as login records

## **Vehicle Query**

#### **Device online status**

Different color of the node means different status. Green means online, Red means alarm and online. Gray means offline.

When the user logs in, the system automatically gets the vehicle list and updates the state of each vehicle.



Device alarm online status

#### **Vehicle Search**

Input a key word of vehicle name in the edit box. It will show a list. Select a vehicle in the list and press Enter to confirm it. The color of the node of the selected vehicle will be darker.



Vehicle search

## **Video Preview**

#### Functions:

Video Monitoring: open the real-time video, play the sound. Sound and video are synchronized. Real-time Record: You can save the video into a record file in local disk. **Notes:** 

Make sure the device is online. Make sure the camera is fixed.

#### Toolbar in top of video form

**Video window mode:** 1,4,6,8,9,16 sub form(s):



Video window page up/page down:

Video screen display mode: 1-full video window 2- 16: 9,3- 4: 3.



## **System Settings**

Click the menu item "System Settings" (Settings -> System Settings) in the menu of main interface.

System Setting	la l	×
-System Parameters		
Language	english 💌	
VI Style	Default 💌	
Image Capture	C:\GPS_DOWNLOAD\CAPTURE_IMAGE\ Browse	]
-Video Parameters -		
Connect Mode	TCP	
Video Buffer Time	4 _ 8 Unit:Second (2 - 20)	
Polling Durate	30 Unit:Second (20 - 300)	
Close Setting	Not Close After open talkback or monito	r
Close Setting	Not Close 💌 After Opening video preview	
Close Setting	Not Close 💌 No Operate Condition	
	Use RGB16	
	Video without preview, can try to check this item	
Map Parameters		
Мар Туре	Baidu 💌	
	GPS Fix	
	── ₩hether to activate the Google map access accelerat:	i
Speed Unit	km/h 💌	
	Save	

System Configure

Language: you can choose Chinese or English, save it and reboot CMSV6.

**Connect Mode:** Only TCP in current version.

Video Buffer Time: Set video buffer time to make real-time video play smooth.

**Image Capture:** Set the Image storage path.

**GPS Fix:** If one vehicle is offset from road, check this option to fix it.

Speed Unit: Km/h or mph

**Polling time:** It will show next batch of channel video if the time reaches the value.

**Close Settings:** Automatically stop the video after the video is open or the user dose nothing

#### **Non-Advertised Features of CMS Server**

ABV does not advertise features the product cannot provide at the time of the advertisement. There are additional features of the product that are not fully developed at this time. While the manufacturer may work to develop: Voice Intercom, Remote Video Storage, Remote Video Download, Local Video Storage, Local Video Playback and remote Device Upgrade, and mention them in CMS related software and documentation, it must be emphasized that they are not advertised features, their development is not completed nor is there any assurance offered they will be completed, so it would be unwise to base a investment decision on any of those possible system features.

# **Geo-Fence Setup & Function**

Should there be reasons to restrict vehicle operation or travel into geographic areas those restrictions can be enforced via a Geo-Fence. Geo-Fence is a virtual territory, permission or boundary that once violated can trigger an Alarm to the CMS.

## To setup a Geo-Fence territory, open your CMS software and login.

## Area Setting (CMSV6 client)

Client Left panel select the "My Maps", There are three buttons on the top of the map ,They are "point", "rectangle", "polygon", to set electronic fence area.



Above are the Geo-Fence tools; Point, Rectangle, Polygon, Search, Full screen map and Set as default.

## Area Setting (CMSV6 client)

Client Left panel select the "My Maps", There are three buttons on the top of the map ,They are "point", "rectangle", "polygon", to set electronic fence area.



Select "rectangle", Drag on the map, draw a rectangle, the Regional Settings dialog box pops up; Then input the name of the area choose the color of the area and the type and description of the area. "Allow other users to view" If this option is selected other users can see the rectangular area of the current user settings, or other users do not see this area, Click "OK", My map on the left shows the just regional information added.



### Electronic fence alarm configuration (web frontend)

A http://localho	st/index.html?lang=en		and the second sec	
Vehicle Management Sys	. ×			
Vehicle Manage	Repo <mark>rt Di</mark> vice U	Jser		🚆 Welcome! client   Manager   Exit
Device Vehicle Parameter Mobile Parameter	C Pence Alarm	Search Cristig Fence Alarm cle Region gion Alarm Spi 0 Record Current 0 Page Go	Delete Soloct ed Alarm Speed Max(RM/H) Speed Min(RM/H) Park Alarr	n Park Delay(Second) Alarm Time
Aooule Param fer Device Group Fence Alarm Wifi Download Plan Snapuhot Plan Record Plan Alarm Management		Config Fence Alarm Find Device:	Region:       area         Region Alarm:       None @ Regional Alarm @ Outer Alarm         Speed Alarm:       None @ Regional Alarm @ Outer Alarm         Speed Alarm:       None @ Regional Alarm @ Outer Alarm         Speed Mar:       4         MMH(0: no limit)         Park Alarm:       @ KM/H(0: no limit)         Park Alarm:       @ None @ Regional Alarm @ Outer Alarm         Park Delay:       60         \$(60.9999)         Alarm Time:       00:00.00         During this time period to determine the feace alarm         Save	

Below is an example of a polygon territory labeled "Lake Zone". This is an area the company management does not want their vehicles at. Each time a vehicle enters this forbidden territory the CMS is alerted and the violation documented.



### To remove Geo-Fence territory Right Click to clear.

Dev List	Polling		Му Мар	
Point	Poly	ygon	Line	
Name Lake Zor	<ul> <li>Type</li> <li>Delece Fen</li> </ul>		ce Dork	

## To set the alarm function for the Geo-Fence violation, go to:

<u>http://ezview.3322.org:8088</u> and login with username and password. On the top of the page select "Devices", then on the left of the page select "Config Fence Alarms".



This is where you select Alarm preferences.

Should you need to Restart the DVR while on the CMS Right click on the vehicle in the left column for a pull down window of options



#### **Non-Advertised Features of CMS Server**

ABV does not advertise features the product cannot provide at the time of the advertisement. There are additional features of the product that are not fully developed at this time. While the manufacturer may work to develop: Voice Intercom, Remote Video Storage, Remote Video Download, Local Video Storage, Local Video Playback and remote Device Upgrade, and mention them in CMS related software and documentation, it must be emphasized that they are not advertised features, their development is not completed nor is there any assurance offered they will be completed, so it would be unwise to base a investment decision on any of those possible system features.

# **Panic Button Setup & Function**

**Driver Event Marker aka DEM**, is a device that the driver can use to verify DVR operation via the status indicating LEDs, and can also be used to trigger a Panic alert to the CMS that some problem has occurred that may require attention. Common uses for Panic alerts are driver assault, hijacked vehicle, medical emergency and crash or vehicle related problem.

To setup the Panic alarm for a vehicle go to: <u>http://ezview.3322.org:8088</u> for VMS login, select "Device" tab at the top of the page, then select "Alarm Linkage Setup" from the left column, and select the vehicle (Device) and select the type of alarm "Emergency Button" See image below.

000	Vehicle Management System		
	ezview.3322.org:8088/index.html?lang=en		
C III Obama incomnce	poster InterTran - tation result 800 NOTE	ES Who called me? Amazon.com	Defense Techal Security
Vehicle Managem	ent System		
- F	Report Device		
Device Vehicle Parameter Dvs Parameter Dvs Parameter Dovice Group Fence Alarm Wifi Download Plan Snapshot Plan Record Plan Alarm Management	Alar Alarm Linkage Configurat	ion Select Alarm Select Alarm	Send SMS Mobile: Number use ; separated Sms Content: If the content is empty, the content of the message: terminal + time + alarm description  ✓ Send E-mail E-mail: Sales@americanbusvideo.com;SNAFU@americanbusvid eo.com Address use ; separated Alarm Time: 00:00:00 To 23:59:59
			During this time period before the implementation of the linkage
			Save

Then select "Alarm Management" to review the alarms you have selected and verify they have been entered properly. See below image.

● ○ ○	Vehicle Management System							
	) ezview	.3322.org:8088/i	ndex.htm	l?lang=en				
Obama incomnce	poster	InterTran - tatio	on result	800 NOTES	Who called me?	Amazon.com	Defense Teo	chal Secur
Vehicle Manageme	ent S	ystem						
R	eport	Device		_	_	_	_	
		Alarm Mana	gement	Search	Alarm Linkage	e Configuration	Delete	Select
Device		Operator	Index	Vehicle	Aları	т Туре	Send SMS	Mobile
Vehicle Parameter	6	Edit Delete	1	ShuttleOne 55	Emergency	Button Alarm		
Dvs Parameter	Prev Page Next Page Total I Page 1 Record Current 1 Page Go							
Mobile Parameter								
Device Group								
Fence Alarm								
Wifi Download Plan								
Snapshot Plan								
Record Plan								
Alarm Management								

#### CMS Panic Alarm aka Operator Alarm Shielding Setup

Login to your company CMS and select the vehicle in question on the left side of the GUI (Graphical User Interface) and select the "Setting" command on the top left of the page and pull down window for "Alarm Shielding". Select "Operator Alarm" then select Emergency Button Alarm".

System View Setting	Мар	
Dev List Polling My Map	Alarm Shielding         Speed Alarm         Speed Alarm         Idling is too long alarm         Video Alarm         Wideo Alarm         Disk 1 No Exist         Disk 1 No Exist         Disk 2 No Exist         Disk 2 No Exist         GPS Position Invalid         GPS Signal Loss         GPS Signal Loss         Operator Alarm         Oil Alarm         Temperature Alarm	
DTZ Colex VOID	Save Exit	

Select and save the changes to the vehicle.

#### CMS Panic Alarm aka Operator Alarm Configuration Setup

Select the "Setting" command on the top left of the page and pull down window for "Alarm Config" so you can now setup how the trigger action is received and displayed. Select the vehicle on the left then select "Alarm Type" for "Emergency Button Alarm", then check the "Sound Alarm" box and pick a audio file and "Play Times".

System View Setting	Map Video Track S Record S Other
Dev List Polling My Map	Alarm Type Emergency Button Alarm Alarm Linkage Video Preview Preview Channel CH1 Close Setting Sound Alarm Sound Files Alarm1.wav Listen Browse
	When add alarm sounds, click "Browse" copy *.wav files to         C:\Program Files\CMSV6\AlarmWav         Play Times       5         (1-10)         Alarm Linkage Video         Video Time       30         Video Time       30         Electronic Map Lock
PTZ Color VOIP	Prompt: when the vehicle is not configured to load the default configuration!           Save         Save To Other         Set As Default         Load Default

**DEM Panic alarm** sounds a tone after triggered within the vehicle to confirm the alarm was triggered. You may disable the Beep in the Peripheral/Alarm Menu.

The CMS "Alarm Information" tab at the bottom of the screen turns Red about 5 seconds after the Panic button is triggered.

In addition to the visual textual alert, the user can enable an audio alarm sound if this was setup in the Alarm Config settings window above. Snapshot images from selected channels or cameras will appear so you may quickly view the images from each camera, they are also stored in a folder designated with the days date for the file name.

While the upload of the images occurs the vehicle may appear offline for a period while the high-resolution images are consuming the limited cellular bandwidth. Once the upload is completed the vehicle will resume online status.



When the Driver Panic Alarm is triggered, the audio alert will sound (Alarm Config required) noticed by the CMS operator, by selecting the "Alarm Information" tab a listing of recent alarms shows in red.

#### **Non-Advertised Features of CMS Server**

ABV does not advertise features the product cannot provide at the time of the advertisement. There are additional features of the product that are not fully developed at this time. While the manufacturer may work to develop: Voice Intercom, Remote Video Storage, Remote Video Download, Local Video Storage, Local Video Playback and remote Device Upgrade, and mention them in CMS related software and documentation, it must be emphasized that they are not advertised features, their development is not completed nor is there any assurance offered they will be completed, so it would be unwise to base a investment decision on any of those possible system features.

#### **AMERICAN BUS VIDEO**

2545 Valley Ridge Drive Cumming, GA 30040 Tel: (770) 263-8118 Fax: (770) 887-5944 <u>http://www.americanbusvideo.com/</u> <u>http://www.vehiclevideocameras.com/</u> <u>http://www.fleetdriverriskmanagement.com/</u> 25 Years of Mobile Digital Sales & Service Experience

\*All specifications, features, GUI, hardware subject to frequent change by the manufacturer without notice. 3G/4G SIM card, ISP service to be sourced, supplied, service data plan subscribed to and setup by the customers. SD4mXC Professional Cellular CMS Server Hosting fee is required for ABV sales. Professional Cellular CMS Server Hosting insures proper function of the product Live View & Live GPS Tracking as it was intended.