

SmartWitness CP1

Device Configuration Guide



CP1S Setup and Configuration

1. Download the CP1 configuration tool by [clicking here](#)
2. Launch the configuration tool then
 1. Click 'Initialize SD Card'
 2. Select the SD card from File Explorer
 3. Allow the card to initialize
3. Select 'Open' before selecting the SD card from File Explorer (the SD card will now be renamed 'FHDRM')
4. You can now set your desired device settings.



*SD cards can also be removed from the camera to review video and data. For this, the SmartWitness PC viewer software is required which you can [download here](#)



Installation guide can be downloaded at <http://install.smartwitness.com>

Device Tab

Configuration Settings

Device | Record | Event | Info. | Connectivity

Camera

Cam Title: CAM1

Sound

Audible Camera Chime: ON

Connection

Type: KP1-INT1-S

Delayed Power Shutdown

Hours: 0

Min: 30

ECall Trigger Level

X Value: 3000 mg (0 ~ 4000)

Y Value: 3000 mg (0 ~ 4000)

Z Value: 0 mg (0 ~ 4000)

G-Sensor Sensitivity

Pre-set

Simple Setting Mode

Sensitivity: 5

Shock: 5

ACCEL/Brake: 5

Turning: 5

Custom

	X	Y	Z
High Impact Micro G (0~4000)	750	750	700
Hz (1~20)	3	3	10
Harsh Accel/Brake Micro G (0~4000)	X		
	190		
Hz (1~20)	10		
Harsh Turn Micro G (0~4000)	Y		
	190		
Hz (1~20)	15		

Auto adjust G-Sensor to Vehicle speed

Turn Z Axis On

Trigger high impact events only

Settings | Initialize SD Card | About | Open | Save | Eject SD Card

*G-Sensor Sensitivity Settings

Turn audible alert on or off here (audible alarms can be individually turned on/off per event, see event tab on pg 5)

Ecall is a severe impact G-Sensor which can be configured to send emergency notifications separately from lower level shock events.

Check this box to increase G-Sensor threshold at higher vehicle speeds.*

When checked, only Ecall and Shock events will trigger (accel, brake, and turn events will be ignored)

Hover over  icons to show more information

Record Tab

Resolution: chose from 1080p, 720p, or VGA (640x480)
Frame Rate: Choose from 30, 15, 10, 5, 4, 3, 2, or 1
Quality: Standard, High, or Super. (The lower the quality, the more compressed/lossy the video output).

Please refer to [SD storage calculator](#) to determine storage times based on the chosen settings here

Record Modes

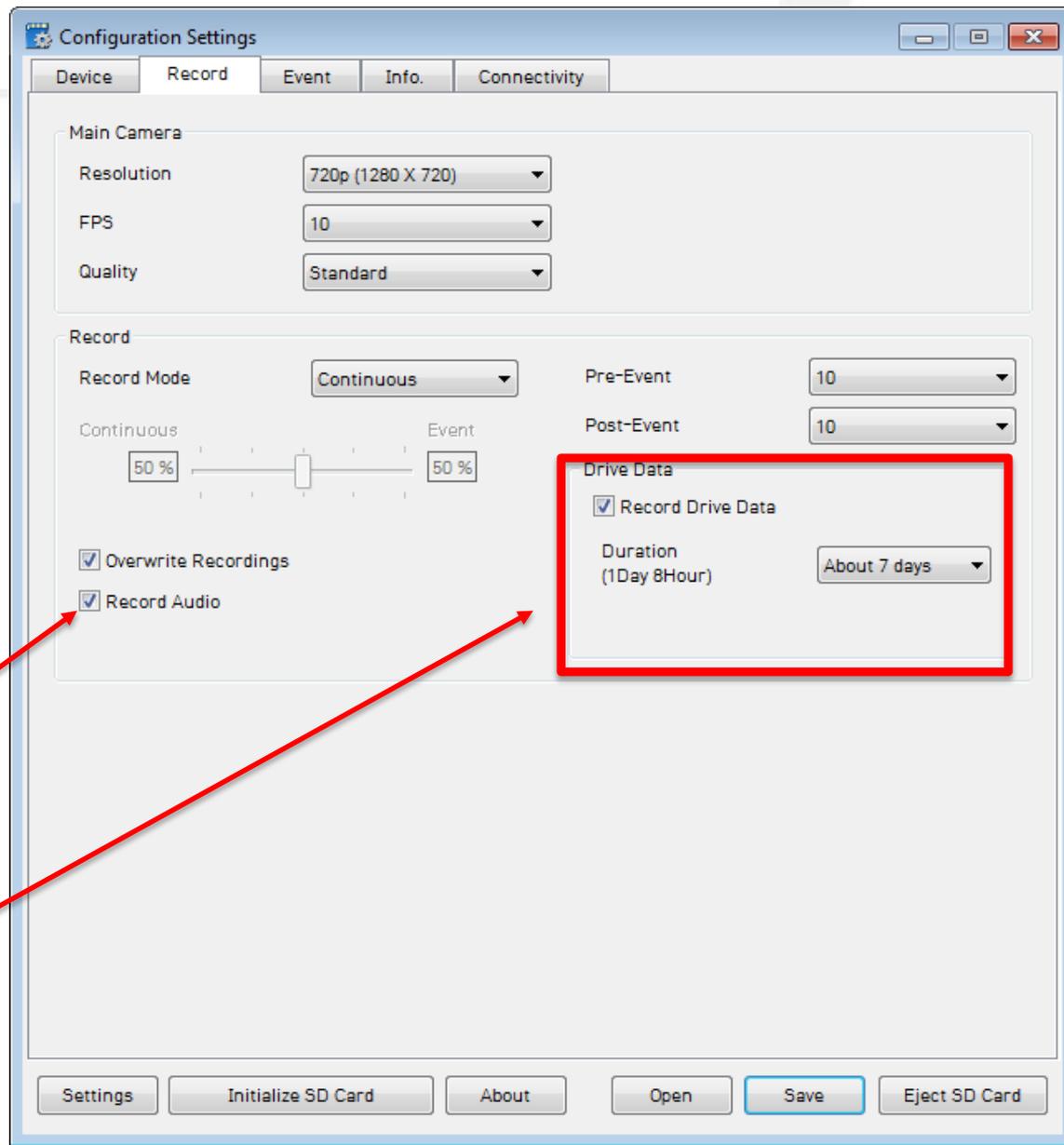
Event: Only events are recorded, event video duration determined by the pre & post event setting

Continuous: Records video continuously, no events

Dual Mode: Records continuous at 1FPS + events at the specified FPS

Audio recording can be turned on or off here

Driving data is recorded and stored separately from video and events. Set the local storage retention here. Average Value sampling is recommended



The settings shown here are recommended for Telematics solutions using Smart API

Event Tab

The Event tab will allow you to specify which events will trigger a recording (Event record mode or Dual record mode only).

Check the boxes next to each event you want triggered.

You can also set speed thresholds here if you'd like to record overspeed events. (This is raw vehicle speed and does not account for road/posted speed limits)

Check "Beep" if you'd like an audible chime to alert the driver when the event occurs

If using the optional alarm input triggers (Green and Orange wires on the INT1S power adaptor), then you need to check the box(es) here and label them according to the input type (i.e. horn, door open, etc)

Also the input type should be selected (NC/NO, or 12V ON/OFF)

Alarm Out, if selected, will send a 5V output from the Yellow wire to a 3rd party device for the duration selected in the dropdown.

Configuration Settings

Device Record **Event** Info. Connectivity

Event Triggered by

G-Sensor

Record Beep

Alarm Out N/A

Panic Button

Record Beep

Alarm Out N/A

Overspeed 1

Record Beep

Speed Limit 100 km/h Over

Alarm Out N/A

Overspeed 2

Record Beep

Speed Limit 120 km/h Over

Alarm Out N/A

Alarm Input 1

Enable Record Beep

Title Alarm1

Type V-Off

Alarm Out N/A

Alarm Input 2

Enable Record Beep

Title Alarm2

Type N-O

Alarm Out N/A

Alarm Out

Title AlarmOut1

Settings Initialize SD Card About Open Save Eject SD Card

Info Tab

Time setting is not necessary as the PC Viewer software and Smart API both adjust the standard UTC time to local time automatically

SD Card auto format feature enables the CP1 to perform automatic maintenance on the SD cards when there is an issue. SD cards need to be re-formatted occasionally over time. This unique feature reduces the administrative burden of managing SD card formatting amongst your fleet

NOTE: SD card data will be deleted when an auto-format occurs

Vehicle No & Driver ID can be added here. These values will be able to be watermarked on the AVI converted video using the PC software.

Configuration Settings

Device Record Event **Info.** Connectivity

Date / Time

Daylight Saving Time Retrieve time settings from my PC

Start Month: 1 Week No.: 1 Day of Week: Sunday Hour: 0

End Month: 1 Week No.: 1 Day of Week: Sunday Hour: 0

Time Zone (UTC): 0 : 00

GPS Time Sync: At Start Up

Manual Time Setting

11/15/2016 9:46:44 AM

System

Speed Format: km/h

SD Card Auto Format Feature

ID

Vehicle ID:

Driver ID:

Settings Initialize SD Card About Open **Save** Eject SD Card

Connectivity Tab

When using CP1 as a connected device, "Enable" the connectivity here

"Server" should be selected as the service type

Add Mobile Network provider details here

If using SmartWitness SIM (AT&T), the APN should be as shown

Configuration Settings

Device Record Event Info Connectivity Server

Connectivity Type

Enable

Service Type: Server

Mobile Network

Dial No.: +99#

APN: smartwitness.com.attz

User ID: [Empty]

Password: [Empty]

Authentication: NONE

SMS Center Number: [Empty]

Settings Initialize SD Card About Open Save Eject SD Card

Server Tab

SmartWitness or your service provider will provide you the URL and (if necessary) the License Key to enter here.

Transmit Live Tracking Data: Check to enable http posts from the CP1 to server. Livetrack2 contains GPS coordinates. LiveTrack3 does not.

Transmit Event Data: Check to enable CP1 posting event notification and images to the server

Transmit Telematics Data: Check to enable CP1 to send DRV data (static/compressed file containing drive data from every second the vehicle is in operation

NOTE: the frequency setting of the LiveTrack and DRV posting is controlled by the server.

Select the events here which the CP1 will transmit to the server in real-time. These events will transmit instantly even if CP1 is set as "Continuous" record mode

Click 'Save' and select the "FHDRM" SD drive when prompted. This will save your configuration to the card. Wait for the software to confirm the settings have been applied to the SD Card.

You can now eject the SD from your PC and insert into CP1 and power on. **Or you can copy the contents of the setting.ini text file and copy to the Smart API workstation**

Configuration Settings

Device Record Event Info. Connectivity Server

DMS4

Domain/Static IP and Port # ex) http://DomainName:5000

License Key

Transmit Live Tracking Data

Live Tracking Type

Transmit Event Data

Transmit ECall Notification

Transmit Telematics Data (DRV)

Event Images

Main Camera

Pre-Event

Post-Event

Event/Snapshot Quality

Event Triggered by

Panic Button

G-Sensor Alarm1

Over Speed1 Alarm2

Over Speed2

Settings Initialize SD Card About Open **Save** Eject SD Card

You can also save the settings as default to the config tool software by clicking "settings" and "Save current settings as default"

CP1 G-Sensor Threshold Table

Low Speed Table

Level	axis	ACCSENX		ACCSENY				ACCSENZ	
		Impact		Sudden start/ sudden stop1		Sudden start/ sudden stop2		Quick Turn	
		G(mg)	Hz	G(mg)	Hz	G(mg)	Hz	G(mg)	Hz
1 (less sensitive)	X	950	1	450	8	500	5~7	-	-
	Y	950	1	-	-	-	-	350	15
	Z	1050	1	-	-	-	-	-	-
2	X	900	1	420	8	470	5~7	-	-
	Y	900	1	-	-	-	-	340	15
	Z	1000	1	-	-	-	-	-	-
3	X	850	1	390	8	440	5~7	-	-
	Y	850	1	-	-	-	-	320	15
	Z	950	1	-	-	-	-	-	-
4	X	800	1	360	8	410	5~7	-	-
	Y	800	1	-	-	-	-	310	15
	Z	900	1	-	-	-	-	-	-
5	X	750	1	330	8	380	5~7	-	-
	Y	750	1	-	-	-	-	300	20
	Z	850	1	-	-	-	-	-	-
6	X	700	1	310	8	360	5~7	-	-
	Y	700	1	-	-	-	-	280	20
	Z	800	1	-	-	-	-	-	-
7	X	650	1	240	10	-	-	-	-
	Y	650	1	-	-	-	-	230	20
	Z	750	1	-	-	-	-	-	-
8	X	600	1	190	10	-	-	-	-
	Y	600	1	-	-	-	-	190	15
	Z	700	1	-	-	-	-	-	-
9	X	550	1	170	10	-	-	-	-
	Y	550	1	-	-	-	-	170	15
	Z	650	1	-	-	-	-	-	-

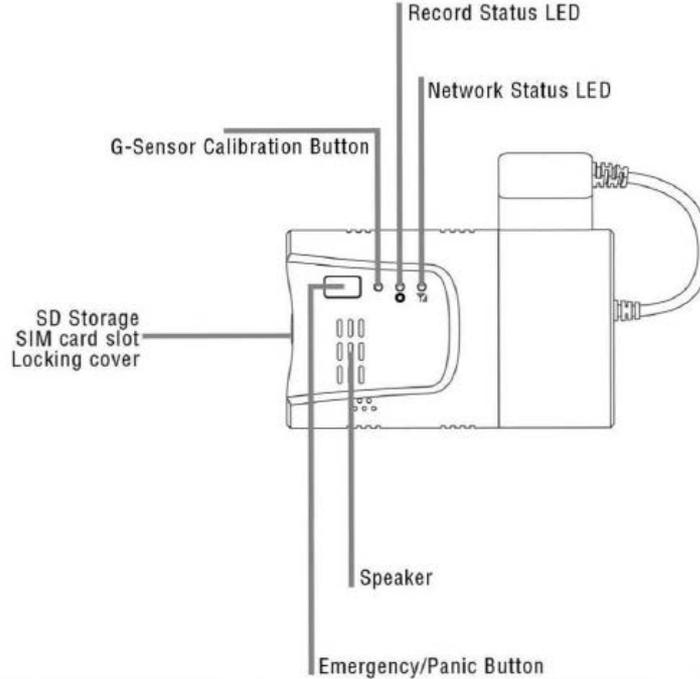
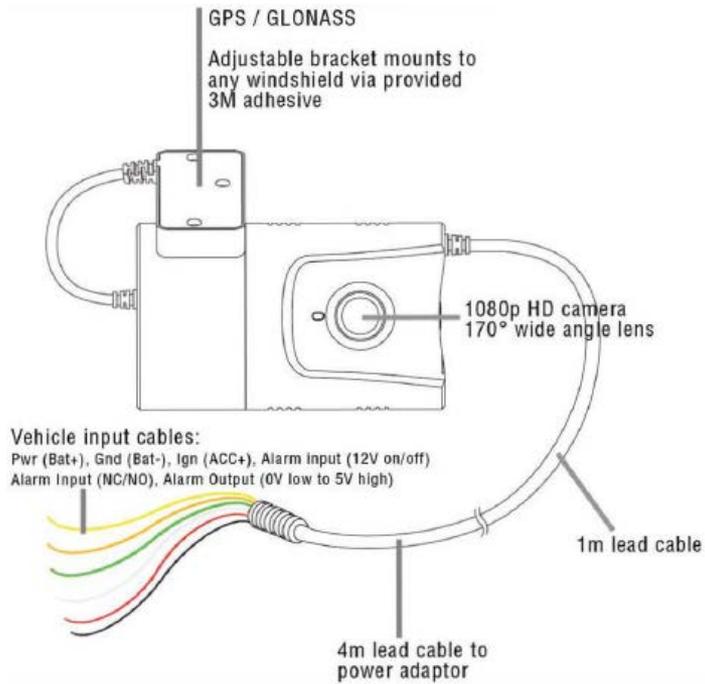
High Speed Table

Level	axis	ACCSENX		ACCSENY				ACCSENZ	
		impact		Sudden start/ sudden stop1		Sudden start/ sudden stop2		Quick Turn	
		G(mg)	Hz	G(mg)	Hz	G(mg)	Hz	G(mg)	Hz
1 (less sensitive)	X	1350	1	480	10	-	-	-	-
	Y	1350	1	-	-	-	-	420	15
	Z	1450	1	-	-	-	-	-	-
2	X	1300	1	450	10	-	-	-	-
	Y	1300	1	-	-	-	-	410	15
	Z	1400	1	-	-	-	-	-	-
3	X	1250	1	420	10	-	-	-	-
	Y	1250	1	-	-	-	-	380	15
	Z	1350	1	-	-	-	-	-	-
4	X	1200	1	390	10	-	-	-	-
	Y	1200	1	-	-	-	-	370	15
	Z	1300	1	-	-	-	-	-	-
5	X	1150	1	360	10	-	-	-	-
	Y	1150	1	-	-	-	-	340	20
	Z	1250	1	-	-	-	-	-	-
6	X	1100	1	340	10	-	-	-	-
	Y	1100	1	-	-	-	-	320	20
	Z	1200	1	-	-	-	-	-	-
7	X	1050	1	270	10	-	-	-	-
	Y	1050	1	-	-	-	-	270	20
	Z	1150	1	-	-	-	-	-	-
8	X	1000	1	190	10	-	-	-	-
	Y	1000	1	-	-	-	-	220	15
	Z	1100	1	-	-	-	-	-	-
9	X	950	1	170	10	-	-	-	-
	Y	950	1	-	-	-	-	200	15
	Z	1050	1	-	-	-	-	-	-

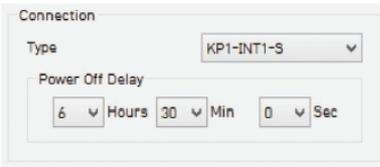
Speed Mode: When auto adjust G-Sensor to vehicle speed is checked, G-Sensor threshold will increase to levels specified in the right table when the vehicle reaches 20 KMh. The threshold will go back to settings in the left table when vehicle goes below 10 KMh.

Auto adjust G-Sensor to Vehicle speed

CP1 Hardware



Shutdown Delay Time Set using Configuration Tool



Power Specifications
Input: DC 10-32V, 2000mA
Output: DC5V, 2500mA

Optional Accessory:
Remote Panic Button (P/N: SW-PB)



Installation guide can be downloaded at <http://install.smartwitness.com>



SmartWitness UK

Unit 2 Valley Point, Beddington Farm
Road, Croydon, CR0 4WP, UK
+44 (0)

sales@smartwitness.com

SmartWitness USA

1016 Lunt Avenue
Schaumburg, IL 60193 USA
+ 1 (312) 981-8774

sales.usa@smartwitness.com

SmartWitness Canada

Metrotower 2, 2600-4720 Kingsway
Burnaby, BC, V5H 4N2, Canada
+ 1 (778) 994-6670

sales.can@smartwitness.com

www.smartwitness.com

