CP2 CONFIGURATION TOOL GUIDE
v 3.9.2

A jumpstart to video telematics configuration

Sensata **IN**

Table of Contents

Introduction

1 Welcome to Your CP2 Configuration Guide

This guide aims to inform users of the proper processes involved in setting up your Sensata INSIGHTS CP2 device.

This step-by-step walkthrough will act as your teacher as you learn our product's layout, functionality, and configuration settings. Each section shown in this guide features the CP2's default settings.

You can find an overview of the configuration tool's layout in **section 3**.

The fastest way to find information in this document is through the Table of Contents.

We hope this training document will remove common end-user pain points involved with the setup process. If you experience any issues with this guide, please lend us your feedback and/or contact our **support** teams.

Note: Use this configuration guide with at least version 3.9.2.0 of the CP2 Configuration Tool. Content in this guide was released in coordination with CP2 firmware version 3.9.2.

CP2 Download & Installation

2   CP2 Configuration Tool Installation

Goal: Find your configuration wizard and learn about your device's capabilities

2.1   Downloading & Installing Your Configuration Tool

- Download configuration software **here**.

1. After downloading, proceed to installation.
2. Open the configuration tool and insert your SD card*.
3. Click **Initialize SD Card.**
4. Select the **SD Card** from your preferred internet browser.
5. Click **Start** to initialize.

Note: SD cards from Sensata INSIGHTS come pre-installed and initialized.

*The maximum size supported for your SD card is 128 GB.

CP2 Configuration Tool Layout

3   Configuration Tool Layout & Settings
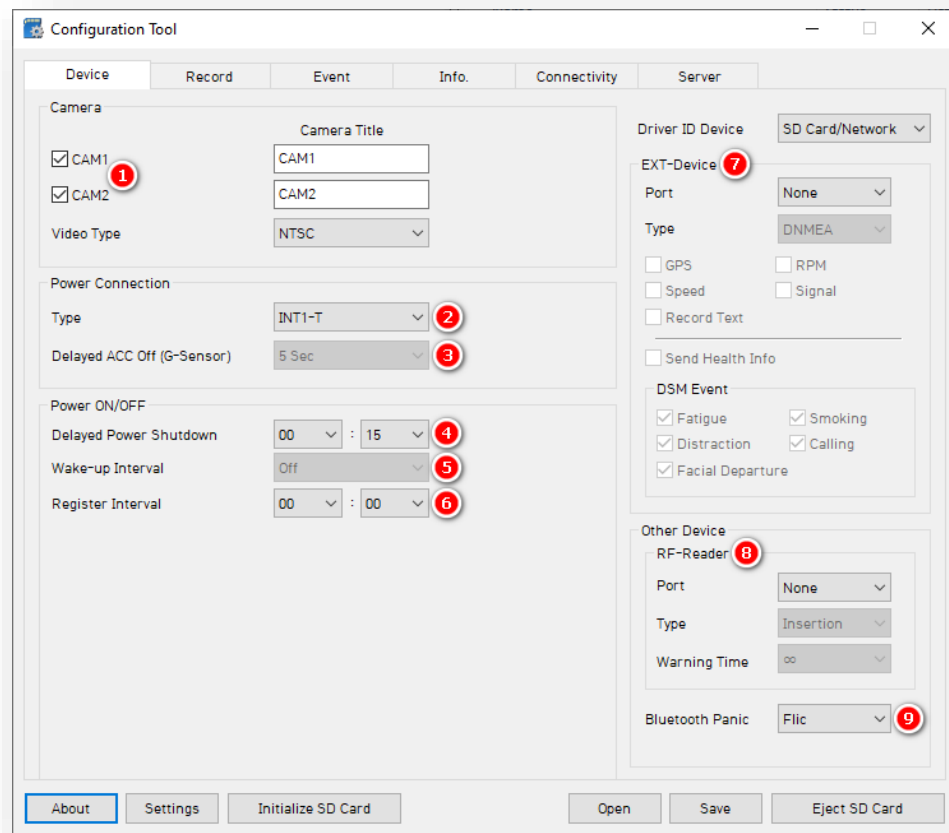**Goal**: Understand your tool's main features

Device

4   Configure your Device
Goal: Personalize and optimize device settings
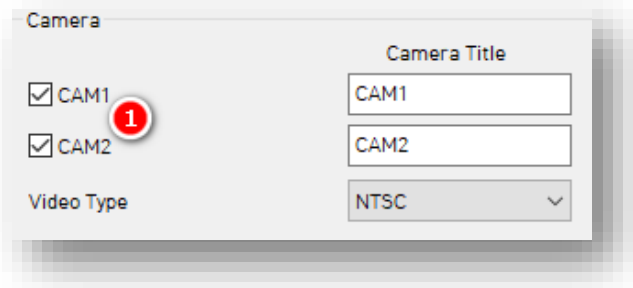
4.1 How to Configure Device Tab
Device Tab Layout: At a Glance

Device

Camera

1. Activate both primary and secondary cameras by checking **CAM 1** and **CAM 2.**
   - Set the second camera video standard via **Video Type.**
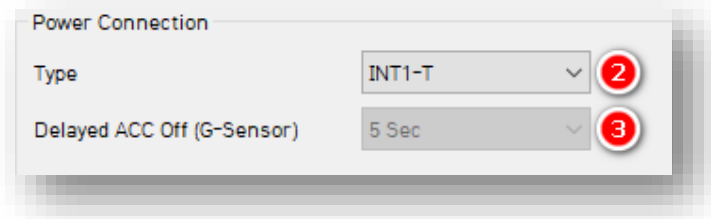   - NTSC is the default for 5V Sensata INSIGHTS driver-facing cameras.

Power Connection

2. Select the device's power **type** from the dropdown options.
   - INT1-T is CP2's standard.
3. To enable CP2's G-Sensor wake-up function, select from **Delayed ACC Off (G-Sensor)** options. There are certain conditions that must be activated before this feature is operational.
   - Check **Wake-up** in the **G-Sensor** tab.
   - **Type** in **Power Connection** must be **Cigar/Direct.**

Device

Power On/Off

4. Select the time your CP2 remains on after ignition off via **Delayed Power Shutdown's** dropdown options.
5. Set the time, or **Wake-up Interval**, until your CP2 powers on again after shutting down.
6. Set the time, or **Register Interval**, that your CP2 stays on during its Wake-up Interval.

EXT-Device

7. To allow external devices to work with your device, select from **EXT – Device's** list of accessory devices and relevant data points. Add-ons connect to the device's serial input once you choose the **S1** port.

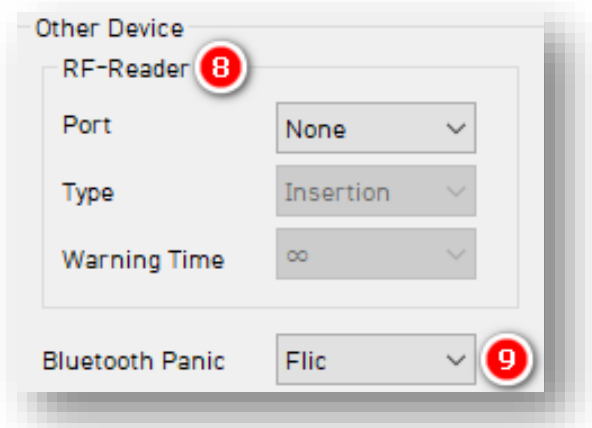
Note: DSM event access requires specific "Driver State Monitoring" AI camera models like KP2.

Device

Other Device

8. **(Optional)** Set up an accessory device (Radio Frequency Reader) that connects to the serial input. Set reader **Type** and **Warning Time**.
9. Allow your device to operate with a wireless **Bluetooth Panic** button. Locate setup specifications **here.**

Note: Contact Sensata INSIGHTS about RFID system compatibility. INSIGHTS' SmartID replaces the need for RFID systems to manage driver identification.
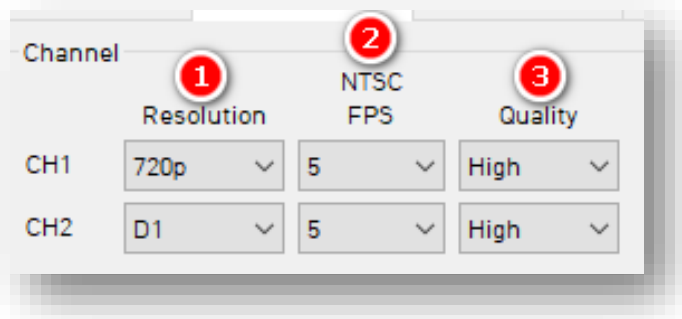
Record

4.2 How to Configure Record Tab

**Record Tab Layout**: At a Glance
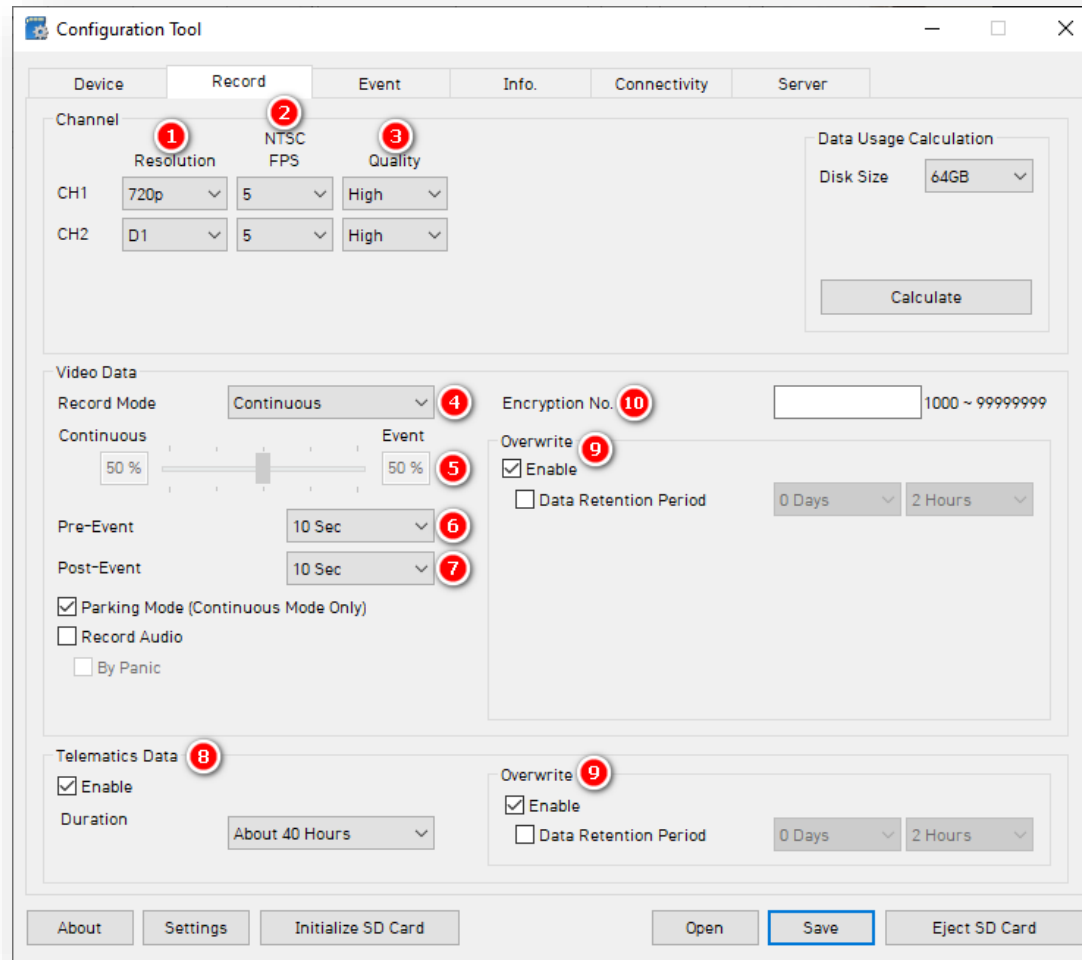
Record

Channel

1. Select your **Resolution** from the following options:
   - CH1: **VGA**, HD (**720p**), FHD (**1080p**).
   - CH2: **D1** (720 x 480).
2. Select from the following **Frame Rate** (**FPS**) options:
   - **30, 15, 10, 5, 4, 3, 2, 1** and **0.**
3. Choose your default video **Quality** from the following:
   - **Normal**, **High** or **Super** Bitrate. Higher-quality video contains more detail but consumes more storage space on the SD card.


Video Data

4. Select your preferred **Record Mode** from the following:
   - **Event:** Events only. The pre & post-event setting determines settings.
   - **Continuous** (Default)**:** Video continuously records, with no events recorded separately on the SD card (Events are still sent to SmartAPI if configured in the [Server](#) tab). This setting renders pre and post-event capture settings void.
   - **Continuous+Event:** Video continuously records at 1 FPS. Events will record at your specified FPS.
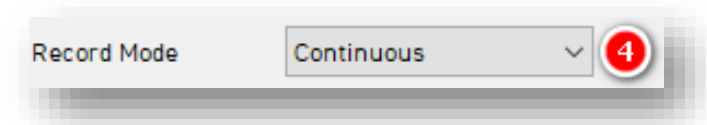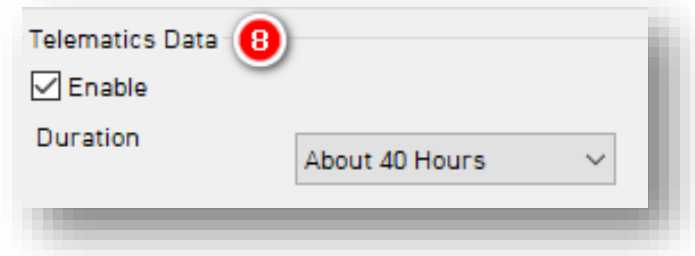
Record

5. If you choose **Continuous + Event** mode, set the SD card's ratio of video data recording.
6. Determine the time video records before an event and set your **Pre-Event Setting.**
7. To set the time video records after the event, choose your **Post–Event Setting.**
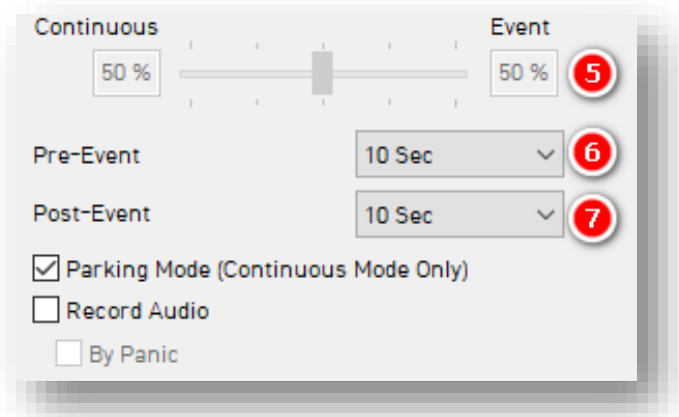
Note: Pre/post time settings do not apply to "Continuous" record mode. **Parking Mode** reduces FPS to 1 when the vehicle idles for 5 min.

Telematics Data

8. Set the duration of your DRV Storage by clicking **Enable** and selecting **Duration**. DRV files record and are stored from video/event logs separately.
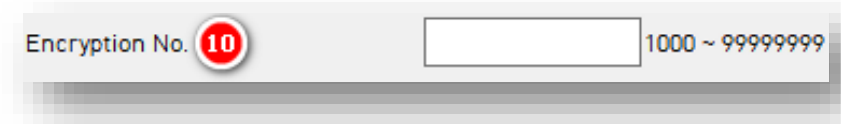
Record

9. To turn on the device's overwrite feature, click **Enable.** This automatically rewrites SD card video footage and telematics data.

- **Data Retention Period** determines how long video and telematics data remains on the SD card before being rewritten.
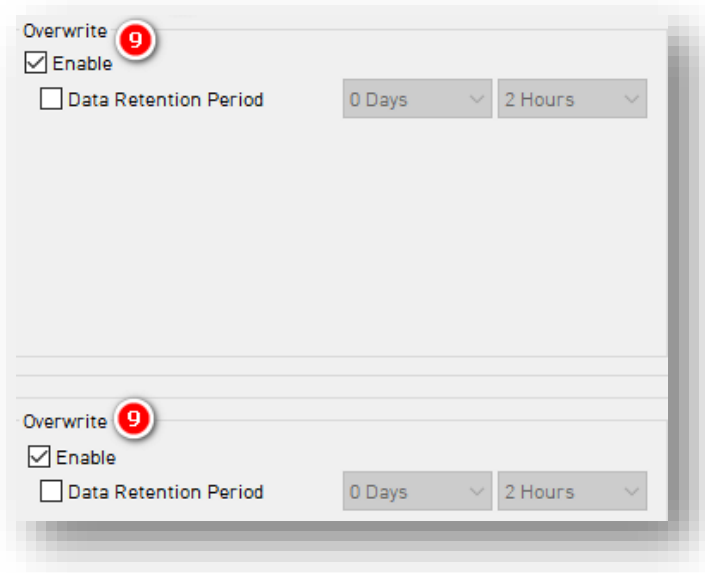
10. Protect SD card data from being easily viewable by entering an 8-digit **Encryption No**.

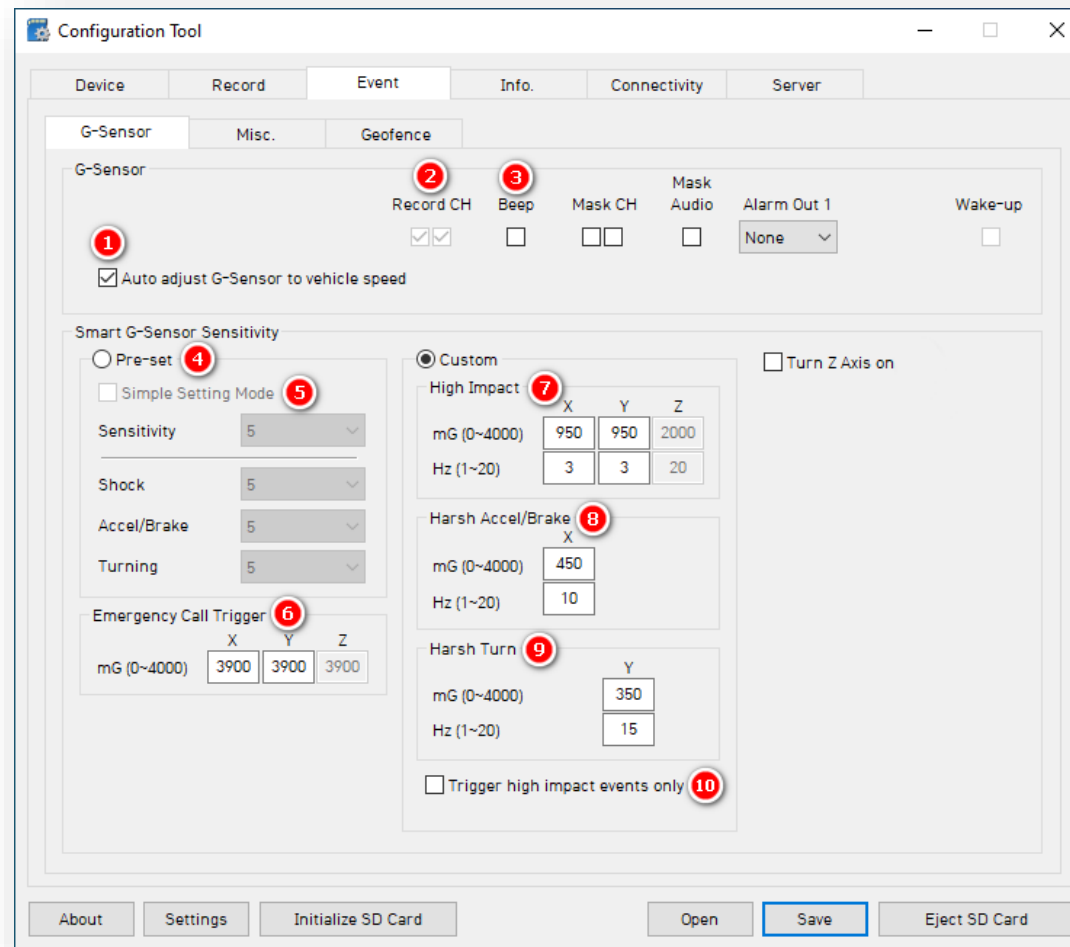**Note:** Use the **Data Usage Calculation** to estimate your SD card's storage capacity based on your applied recording settings.
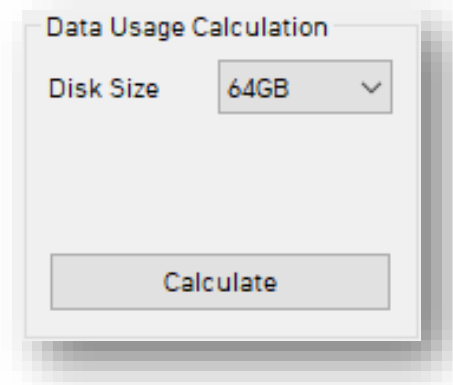
Event

4.3 How to Configure Event Tab

4.3.1 G-Sensor Fields

Event > G-Sensor Tab Layout: At A Glance

Event

G-Sensor

1. Automatically scale G-Sensor speed thresholds by clicking **Auto adjust G-Sensor to vehicle speed.** This increases your G-Sensor event threshold on each axis by 300mcg when the vehicle exceeds 20 km/h.
2. Turn on/off event recording for cameras 1 and 2 by checking **Record CH.**
   - Only available for Event and Continuous + Event mode.
3. To enable in-vehicle notifications for G-Sensor event triggers, click **Beep.**
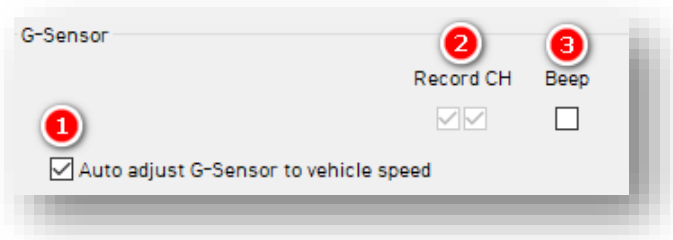
Note: Individual selection of camera channels disables when your device is in "Continuous" mode.
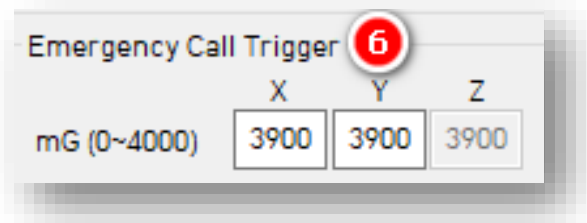
Smart G-Sensor Sensitivity

Determine your G-Sensor sensitivity with **Pre-Set** or **Custom** options.

4. To set general sensitivity settings, check **Pre-Set**. Lower sensitivities result in fewer G-Sensor-related events. Higher sensitivities result in more events.
   - Disable **Simple Setting Mode** to set **Shock**, **Accel/Brake** and **Turning** settings.
5. To set an overall G-Sensor sensitivity, click **Simple Setting Mode,** then **Sensitivity**.
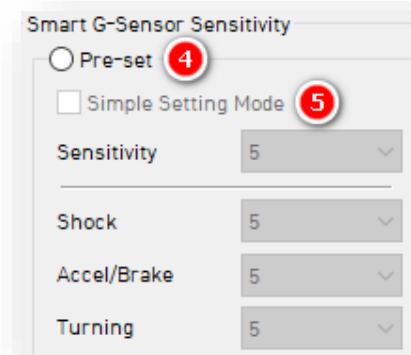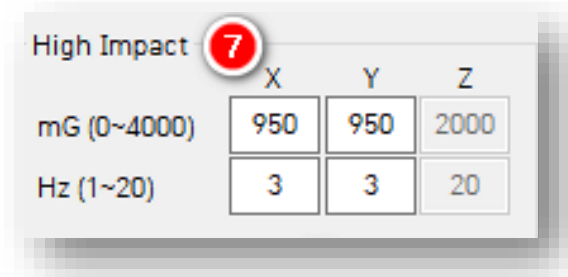
Event > G-Sensor

6. Events generate when the X, Y or Z axis acceleration exceeds the set G-Sensor threshold for **Emergency Call Trigger** (Severe Shock).
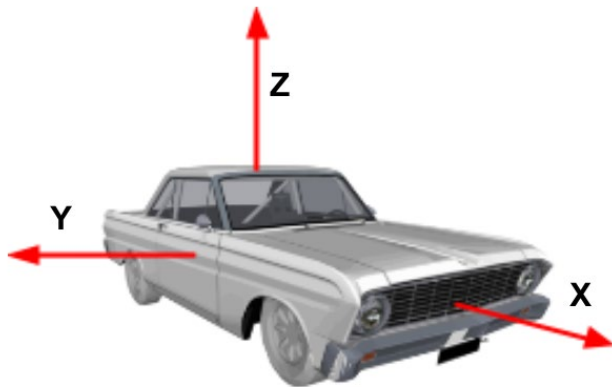
Custom

Click **Custom** to set personalized G-Sensor sensitivity settings.

7. **High Impact** events occur if acceleration exceeds the X, Y or Z axis threshold (Activate the Z axis via **Turn Z Axis on**).
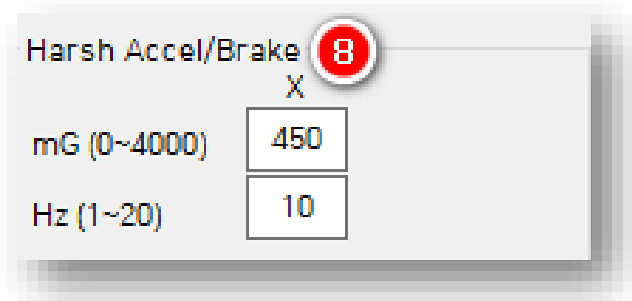

Note: Hz values set the number of times in a row the device's G-Sensor must exceed the X, Y or Z thresholds to trigger a harsh event. "Simple Setting Mode" is fixed at 1Hz. "Custom" is adjustable.
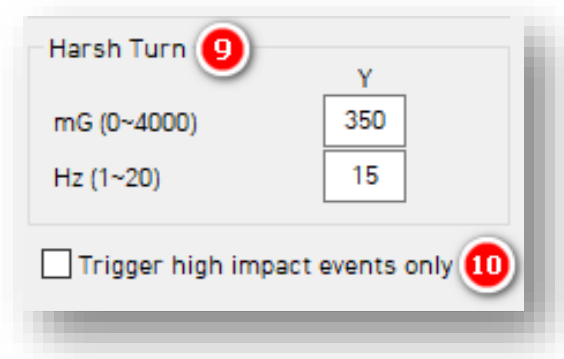
Event > G-Sensor

8. **Harsh Accel/Brake** events generate if acceleration exceeds the X axis threshold.

Harsh Accel/Brake (8)	
	X
mG (0~4000)	450
Hz (1~20)	10

9. **Harsh Turn** events occur if acceleration exceeds the Y axis threshold.
10. Check **High Impact Trigger** to limit alerts to high-impact events. This disables Accel/Brake and Turn events.
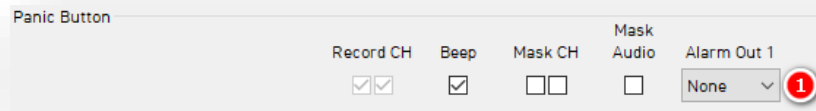
Harsh Turn (9)	
	Y
mG (0~4000)	350
Hz (1~20)	15
☐ Trigger high impact events only (10)	

Event > Misc.

4.3.2 Misc. Fields

Panic Button

1. Determine your **Panic Button** response settings**.**
   - Turn on audible in-cabin notifications for panic events by selecting **Beep**.
   - **Alarm Out** sends a 5V output through Alarm Out (Yellow Wire).

Overspeed

2. Set your speed threshold in the **Speed Limit** field for recording Overspeed events.
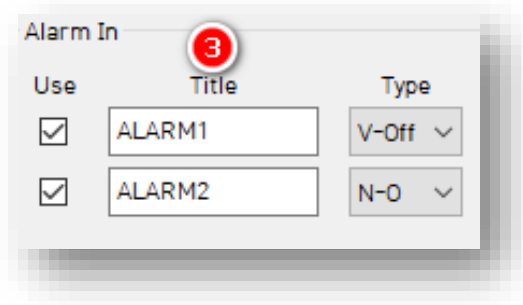   - Accounts for vehicle speed, not regional speed limits.

Event > Misc.

Alarm-In

3. To set your optional alarm input triggers, check **Use**. Label them in the **Title** field according to your input type (i.e., doors, horn, lights, etc.).
   - **Alarm 1** = Orange Wire
   - **Alarm 2** = Green Wire
   - **Input Types:**
     - **N-C** (Normally Closed Circuit)
     - **N-O** (Normally Open Circuit)
     - **V-On/Off** (12V)

4. Select the alarm duration for a third-party device from **Alarm Out 1**.
   - Sends a 5V output through the Yellow Wire to your 3rd party device.
5. Turn on CP2 when an Alarm Input triggers by enabling **Wake-up.**
   - CP2 stays on for the time set in **Register Interval**.

Event > Misc.

EXT-Signal

6. Signal events are reserved for RS232 accessory devices with their own event triggers (like an ADAS or DSM camera). This allows CP2 to configure recording, masking and display rules for accessory devices. EXT-Signal serves no purpose beyond RS232 accessory devices.

| Use	Title	Record CH	Beep	Mask CH	Mask Audio	Alarm Out 1	Alarm Out 2
☐	LEFT	☐☐	☐	☐☐	☐	None ∨	None ∨
☐	RIGHT	☐☐	☐	☐☐	☐	None ∨	None ∨
☐	BRAKE	☐☐	☐	☐☐	☐	None ∨	None ∨
☐	REVERSE	☐☐	☐	☐☐	☐	None ∨	None ∨

Event > Geofence

Set virtual boundaries for your device to record events. Optionally, obscure your camera's field of vision and audio recording.

1. To enable your device's Geofence, click **Use.**
2. Select the **Type** of Geofence.
   - **In** activates a Geofence when the vehicle *enters* the geographic boundary.
   - **Out** triggers when the vehicle *exits* the geographic boundary.
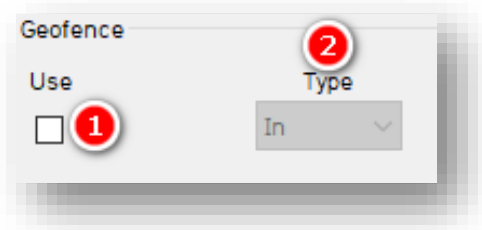
3. Audibly notify drivers that they have crossed the Geofence's boundary by clicking **Beep.**
4. To obscure camera channels 1 & 2, check **Mask CH.**
5. To prevent the device's audio recording, check **Mask Audio.**
6. Set the alarm's duration for a third-party device from **Alarm Out 1**.
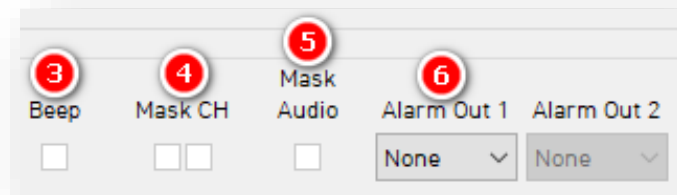
Event > Geofence

Zone Selection

To set geofence boundaries on Google Maps, click on **Zone Selection.** You may set up 40 geofence zones.

1. Search for the geographic region by entering an address into the text field and clicking **Go.**

2. Change the name of your Geofence in the **Title** text field.
3. To set a location-specific perimeter, click on the map.
   - The area in **Red** is your Geofence.
4. Enable your Geofence by clicking **Add.**
5. To remove a Geofence, check the Geofence **No.** and click **Delete.**
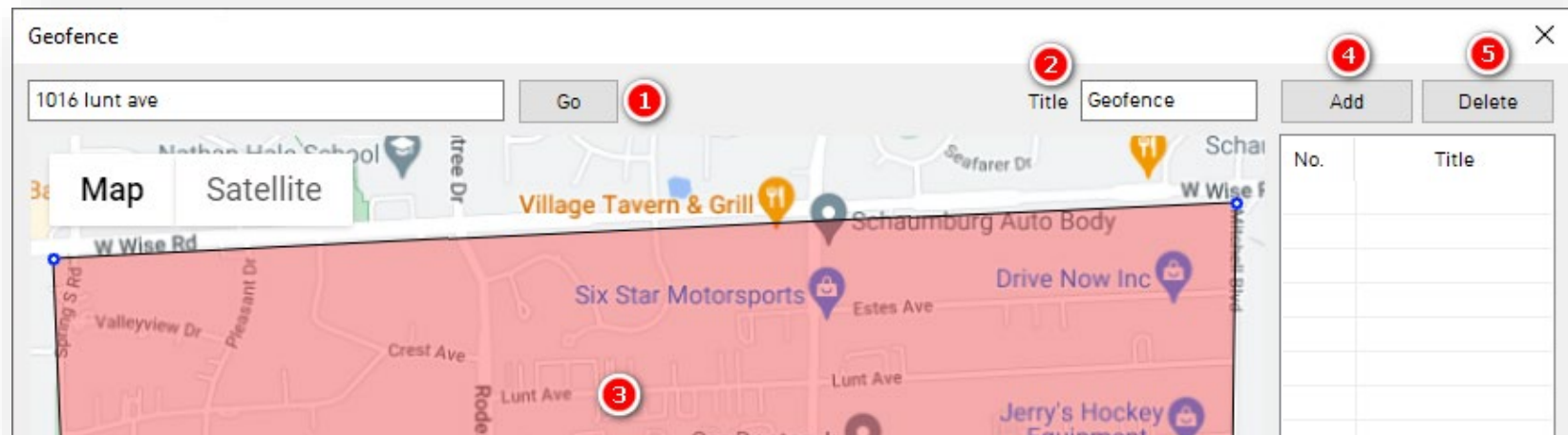
Info

4.4 How to Configure Info Tab

Info Tab Layout: At a Glance
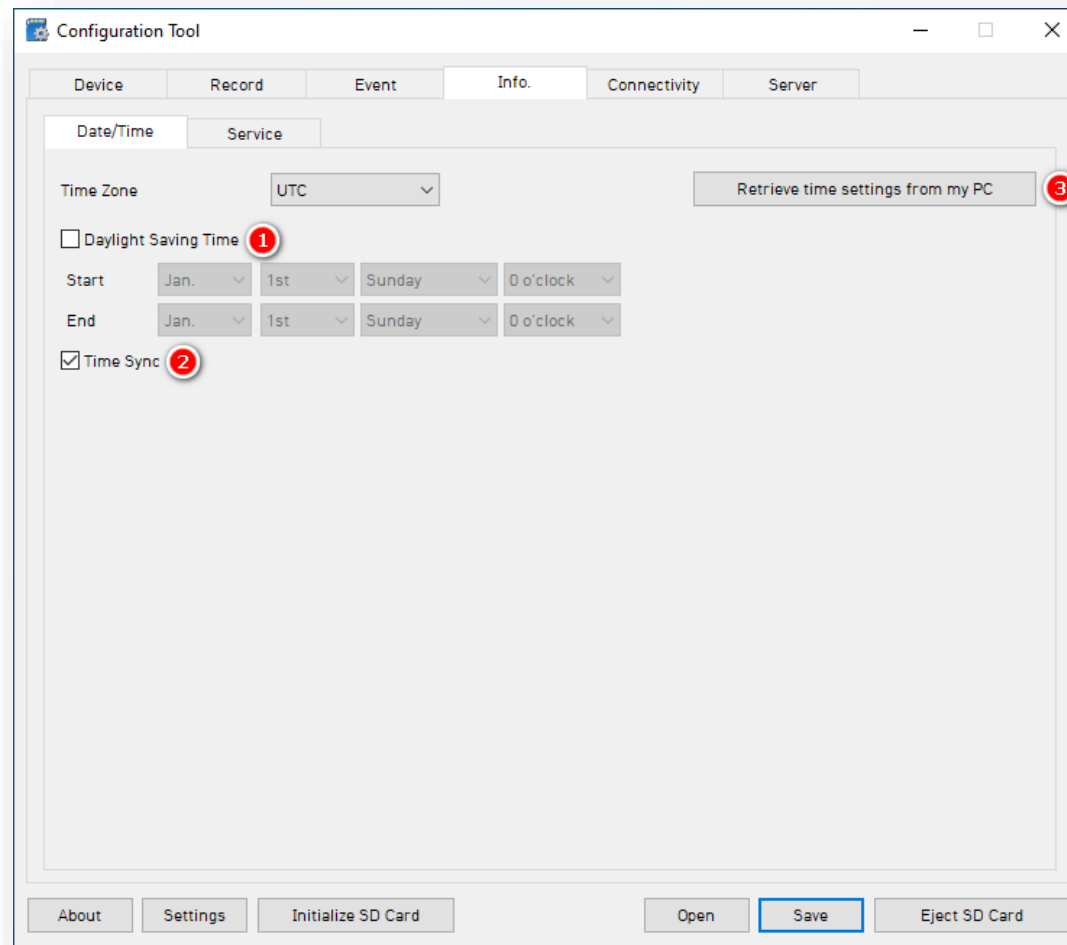
Info > Date/Time

4.4.1 Date/Time Fields

Setting time preferences on your CP2 is **not recommended**. PC Viewer software and Smart API automatically adjust UTC to your local time zone. **If you've connected your CP2 to Smart API, do not set time preferences.**

1. Set a customized date and time range for **Daylight Savings Time.**
2. Ensure GPS time syncs with device OS time by clicking **Time Sync.**
3. Use PC Viewer software to set your device's time zone by clicking **Retrieve time settings from my PC.**
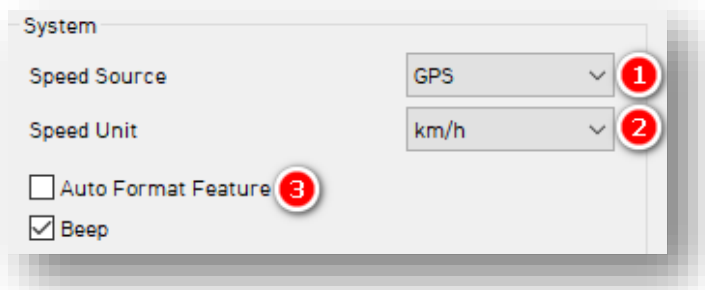
Info > Service

4.4.2 Service Fields

System

1. Determine how your device reads vehicle speed via **Speed Source**.
2. Set a **Speed Unit**.
3. CP2 automates necessary SD card maintenance when the **Auto Format Feature** is on.
   - This feature formats blank SD cards automatically.
   - It will not format corrupted SDs. Instead, the device sends a "Media Error" event to the server. The red LED and an optional audible alarm (See **System Warning**) turn on.
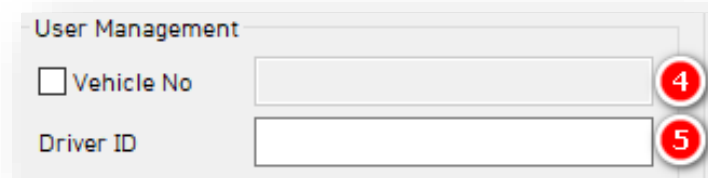
User Management

4. Assign a number to your vehicle by checking **Vehicle No** and entering a numerical value.
5. Write a unique **Driver ID** in the text field for different vehicles.

   Note: You can watermark **Vehicle No** & **Driver ID** on your MP4 converted video feed with desktop analysis software.
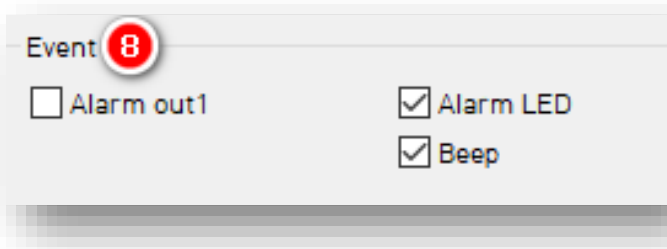
Info > Service

System Warning

6. Provide notifications concerning system component corruption and/or failure by checking **Use.**
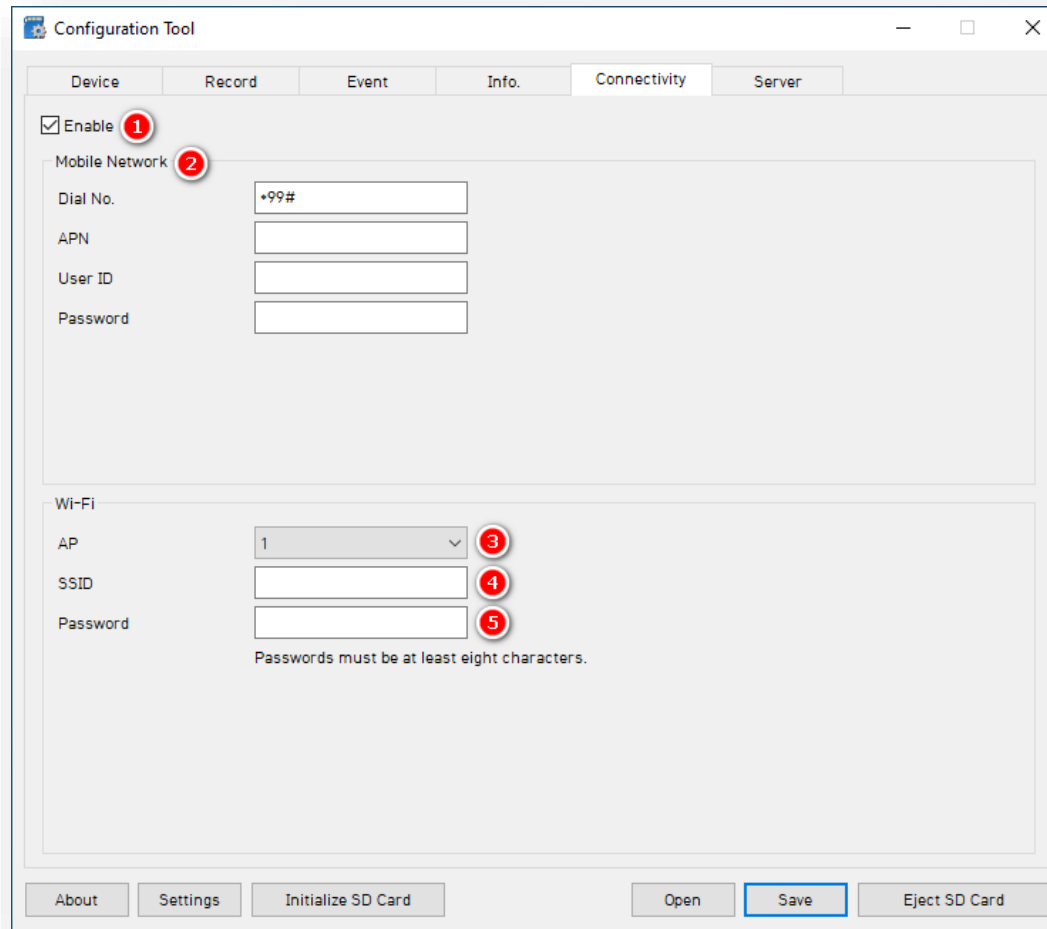7. Check any/all boxes to send alerts of system corruption and/or failure.
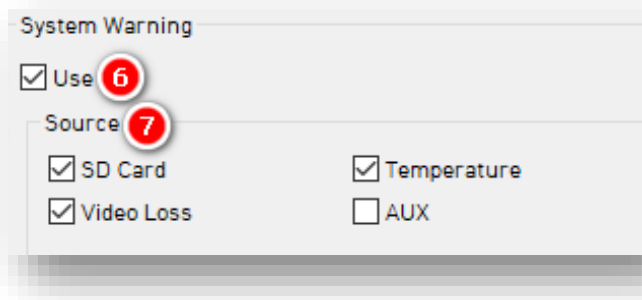
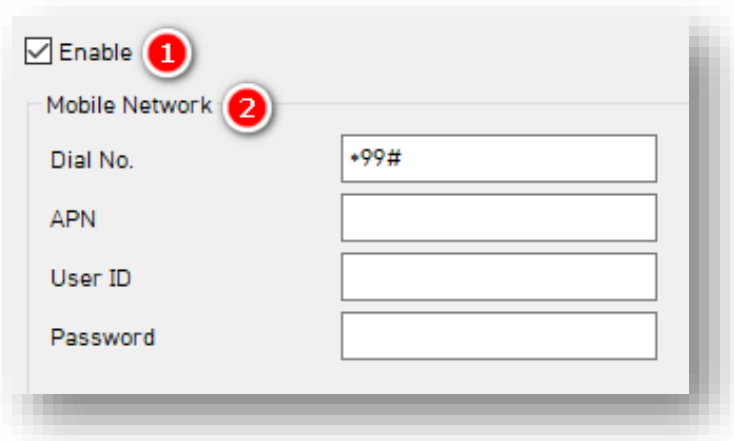8. To enable these event notifications, click **Alarm out1, Beep** and **Alarm LED.**

Connectivity

4.5 How to Configure Connectivity Tab

Connectivity Tab Layout: At A Glance
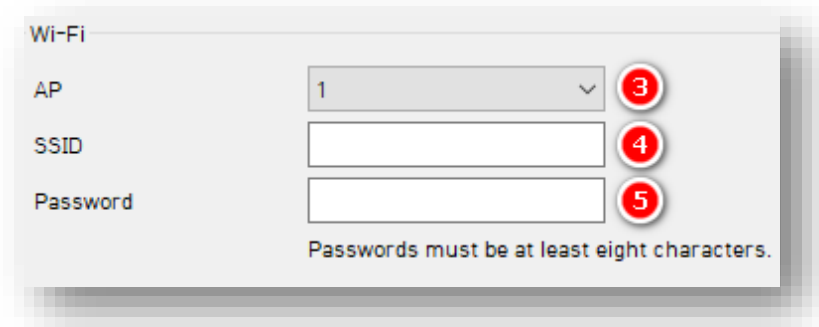
Connectivity

Mobile Network

1. To specify mobile and WIFI network settings, check **Enable**.
2. Add **Mobile Network** details to relevant fields.
   - Ensure the **APN,** if you use a Sensata INSIGHTS AT&T SIM, is "smartwitness.com.attz."

Wi-Fi

3. Your CP2 has built-in Wi-Fi. Select your **AP** from the options provided. Your **AP** must be secure, accompanied by WPA/WPA2 encryption.
4. You can set up to 10 Wi-Fi **SSIDs**. The CP2 will scan for as many networks as are added in your settings.
5. Enter a **password**.

Server

4.6 How to Configure Server Tab

4.6.1 Main Fields

Server > Main Tab Layout: At A Glance
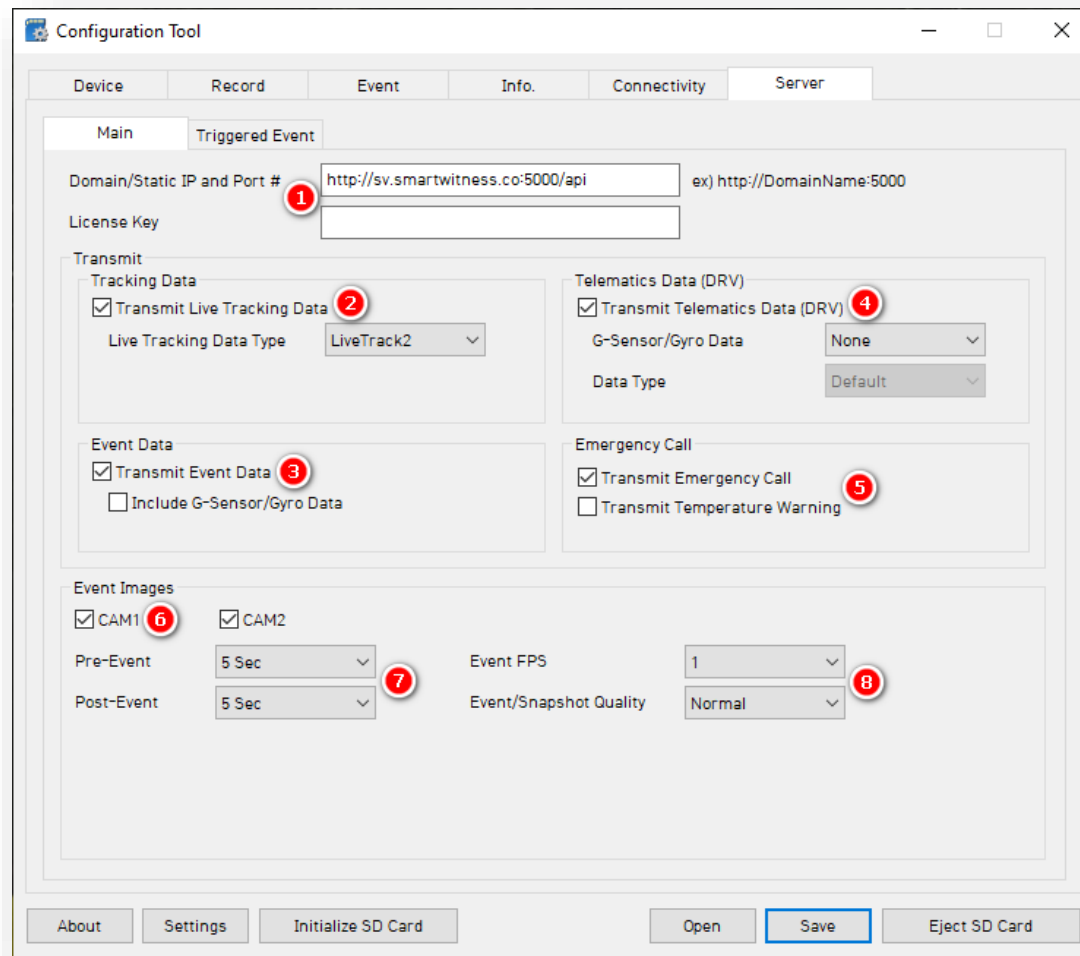
Server > Main

Server

1. Sensata INSIGHTS, or your service provider, will give you the **Domain/Static IP and Port #** URL and the **License Key** (If necessary) to enter here.
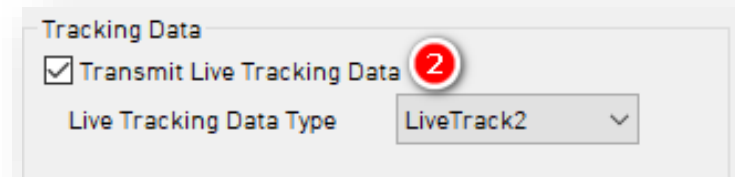

Transmit

2. Use HTTP posts from your CP2 to the server by checking **Transmit Live Tracking Data**. Livetrack2 contains GPS coordinates. LiveTrack3 does not.

3. To send event notifications and images to the server, check **Transmit Event Data.**

Server > Main

4. To send DRV data to the server, check **Transmit Telematics Data (DRV)**.
5. Send emergency notifications like Ecall and over-temperature warnings to the server.

   Note: The frequency interval of LiveTrack and DRV uploads is server controlled.

Event Images

6. Choose which camera channels send event images to the server by clicking **CAM1** and/or **CAM2.**
7. To determine snapshot timing before and after an event, select a **Pre-Event** and **Post-Event** time.

8. Select image capture settings for **Event FPS** and **Snapshot Quality.**

Server > Triggered Event

4.6.2 Triggered Event Fields

Event Triggered By

Select the events your device sends to the server. Events transmit instantly, even in "Continuous" record mode.

Note: SmartAPI Workstation event admin controls dictate what events and event notifications are sent from SmartAPI to our partner's servers

Ignore Time

2. Select an **Ignore Time** or the amount of time repeated events are ignored for event uploads to the server.

Complete Your Configuration

5 Finishing Up/Support

<u>Goal:</u> Finalize your configuration and access support

1. Click **Save** to set your finalized settings configuration.
2. Select **FHDRM** SD drive when prompted. Your configuration saves to your card.
3. Wait for confirmation that the software applied your settings configuration.
4. Click **Eject SD Card**, insert it into your CP2, and power on the device.
5. You have completed your configuration.

Note: Apply device configurations over the air from the SmartAPI Workstation. See the instructions **here**.

5.1 Support Information

If you need additional support or an expert to walk you through this process, please **register** and submit a ticket, or email us at **support@smartwitness.com**. If you are enrolled in SWAT, reach out to the integration team via Teams with any device configuration questions.

Feel free to call our support team:

North America, South America, APAC

- +1 (312) 981 8774

EMEA

- +44 (0) 1483 397005