

Sensata INSIGHTS CRXS

Device Configuration Guide

v1.1



Model #: CRX-3108



CRXS Setup and Configuration



Download the CRXS configuration tool

- 1. Install and open the configuration tool:
- 2. Insert SD Card into your PC (Max 128GB SD card supported).
 - 1. Click 'Initialize SD Card'
 - 2. Select the SD card from File Explorer.
 - 3. Click "Start" to initialize.
 - 4. Apply your desired settings (or click "Open" to load existing settings).
- 5. Click "Save" to apply to SD card.
- 6. Eject Card safely from your PC.

*SD cards can also be removed from the CRX to review video and data. For this, the INSIGHTS PC viewer software is required which you can <u>download here</u> or visit Support.smartwitness.com





Device Tab - Main

Camera

- Enable the desired camera channels.
- Camera tittle holds up to 10 digits.
- Adjust brightness & contrast levels.
- Specify image transformation as desired (Flip, Mirror, or both).

Signal & RPM(Optional)

These are optional input wires on the CRX I/O harness which can connect to tachometer's to receive the vehicle RPM and/or speed.

Pulse Signal Pull up, Pull Down

Car Pulse Type: 1 ~ 25 Standard: JIS 4W/JIS 2W, 3W/SAE/DIN/ NA/MANUAL

RPM Type: 1 ~ 10

G-Sensor Axis

Set the CRX's installed position. This is Important for proper G-Sensor calibration and accurate drive data reporting.

| mation |
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Device Tab - External

External Devices

Enable the serial ports to connect an external device (such as Battery Backup or BB900 device, RFID reader, and OBD reader).

• Select from S1~S6

| S1 ~ | Example EXT-Device Types: |
|---|---|
| DNMEA ~ | DNMEA: Applicable protocol for BB900 ATBS: OBDII |
| DNMEA ATBS ELM327 OMNICOMM DL550A | ELM327: OBDII OMNICOMM: Fuel level sensor DL550A: DSM (driver status |
| RoadScope7 DDC-200 RoadScope8 MDAS SQUARELL | monitoring) device RoadScope7 : ADAS for HK BUS DDC-200: DSM (driver status monitoring) device ReadScope8 : ADAS device |
| MDSM CA6000 ELA STONKAM GENISYS | RoadScope8 : ADAS device Note: When connecting the BB900 backup battery device, set the S1 and S2 port as seen in the picture to the right. In Type , select DNMEA as the external device protocol. |

| Main | External | | | | |
|------------------|------------------|---------------|-----------|------------------|---------|
| | | EXT-Device 1 | | EXT-Device 2 | |
| Driver ID Device | SD Card 🗸 🗸 | Port | S1 ~ | Port | \$2 × |
| EMS | | Туре | DNMEA 🗸 🗸 | Туре | DNMEA ~ |
| Port Non | ie 🗸 | GPS | RPM | GPS | RPM |
| Acc/Dec 0.4 | G ~ | Speed | Signal | Speed | Signal |
| Speed 80 | km/h | Record Text | | Record Text | |
| BPM 300 | 0 r/m | Send Health I | info | Send Health Info |)) |
| Idling Time 5 | Min | DSM Event | | DSM Event | |
| Buzzer | | Sleeping | | Sleeping | |
| Other Device | | Distraction | | Distraction | |
| EXT-IR Port | None ~ | 🗹 Facial Depa | arture | Facial Depart | ure |
| Use INT-IR | | Smoking | | Smoking | |
| RF-Reader | | Calling | | Calling | |
| Port | None 🗸 | | | | |
| Authority Type | ID 🗸 | | | | |
| Туре | Insertion \sim | | | | |
| Warning Time | ∞ ~ | | | | |
| Use USB Keypad | & Keyboard | | | | |



Device Tab – External Cont.

GPS: When enabled, CRX will use GPS information from the external device.

RPM: When enabled, CRX will use RPM from the external device.

Speed: When enabled, CRX will use Car Pulse speed from the external device.

Alarm: When enabled, CRX will use the external device alarm.

Record Text: Record text into the MDT file.

Send Health Info: Only for the D-TEG standard protocol. Send CRX status information to an external device

Other Device:

- RF-ID Card: You can connect to a serial port or a USB port.
- Authority Type:
 - ID: a normal RF ID card.
 - JP License: Japanese driver license ID.
- Type:
 - Insertion: Insert type reader. Touch: Touch type reader.
- Warning Time: ∞ Warning continuously just after ignition on until ignition off.
- USB Key pad & Keyboard: You can connect the USB external keypad.

| Device | Record | Eve | ent | System | Conne | ctivity | Server | |
|------------------|----------------|--------|-------|------------------------|--------|---------|--------------------------|--------------|
| Main | External | | | | | | | |
| | | | EXT-D | evice 1 | | | EXT-Device 2 | |
| Driver ID Device | SD Card | ~ | Port | | None | \sim | Port | None 🗸 |
| EMS | | | Туре | 1 | DNMEA | \sim | Туре | dnmea \sim |
| Port | None 🗸 🗸 | | GPS | 6 | RPM | | GPS | RPM |
| Acc/Dec | 0.4 G | | Spe | ed | Signal | | Speed | Signal |
| Speed | 80 | km/h | Rec | ord Text | | | Record Text | |
| RPM | 3000 | r/m | Sec | d Health Info | | | Send Health Inf | 0 |
| Idling Time | 5 | Min | | | | | | 0 |
| Buzzer | | | | Event | | | DSM Event | |
| | | | | leeping listraction | | | ✓ Sleeping ✓ Distraction | |
| Other Device | | ~ | | acial Departure | | | Facial Depart | |
| EXT-IR Port | None | ~ | | moking | - | | Smoking | are |
| Use INT-IR | | | | alling | | | Calling | |
| Port | None | ~ | | | | | | |
| | | | | | | | | |
| Authority Type | e ID | | | | | | | |
| Туре | Insertion | \sim | | | | | | |
| Warning Time | 00 | \sim | | | | | | |
| Use USB Key | pad & Keyboard | | | | | | | |
| | | | | | | | | |

Note: When using external device GPS, RPM, Speed and 'Alarm In', we cannot use the GPS, RPM, Speed and 'Alarm In' which connected to the CRX.



Record Tab

<u>Channel</u>

Resolution: Chose from CIF, HD1, D1, WD1, HD (720p), _ FHD (1080p), 3M, 4M or 5M. If using 1080p camera, it will occupy two channels (i.e. 1080p in Ch1, then Ch2 is not usable).

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 the video output).

Audio: Enable recoding for cameras with built in mic (Optional).

Record Modes

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

Continuous: Records video continuously, no events (events can still be sent to SmartAPI server if configured on the Server tab).

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

Event Recording Duration Settings

Pre Rec-Time: To have a set of pre-recorded data for an event. Select from 0~5 seconds.

Post Rec-Time: To have a set of post-recorded data for an event. Select from 10~3600 seconds.

<u>SD Dual Record</u>: If SD card is connected to CRX, it can be used in the following ways:

Off: No data is being recorded (set if no SD card if being used).

Driving: Only driving data (DRV) is being recorded.

Event: Only Event video is saved to the SD card.

Continuous: 1FPS footage of continuous footage is saved to the SD.

| Devic | - | Event | System | Network | DMS5 | |
|---------|-----------------------|------------|-------------------|----------------|---------------------|-----|
| Channe | Record Mode | Resolution | NTSC (PAL) FPS | Quality | Data Usage Calculat | ion |
| CH1 | Continuous(All)+Event | √ 720p ~ | 5 ~ | Normal 🗸 🗹 | Audio HDD 1 TB | ~ |
| CH2 | Continuous(All)+Event | √ 720p ~ | 5 ~ | Normal 🗸 | Audio | |
| СНЗ | Continuous(All)+Event | √ 720p √ | 5 ~ | Normal 🗸 | Audio | |
| CH4 | Continuous(All)+Event | √ 720p ~ | 5 ~ | Normal 🗸 | Audio Calculate | |
| CH5 | Continuous(All)+Event | √ 720p ~ | 5 ~ | Normal 🗸 | Audio | |
| CH6 | Continuous(All)+Event | √ 720p ~ | 5 ~ | Normal 🗸 | Audio | |
| CH7 | Continuous(All)+Event | √ 720p ~ | 5 ~ | Normal 🗸 | Audio | |
| СНВ | Continuous(All)+Event | √ 720p ~ | 5 ~ | Normal V | Audio | |
| Misc | | | | SD Dual Record | | |
| Pre Rec | Time 5 Sec | \sim | | Туре | Off ~ | |
| Post Re | ec Time 10 Sec | ~ | | Record Channel | CH1~(| сна |
| Encrypt | tion No. | 1000 ~ 9 | 999 | FPS | Key Frame 🗸 🗸 | |
| ✓ Over | write | | | Resolution | REC-Config 🗸 | |
| | | | | Pre Rec Time | 5 Sec 🗸 🗸 | |
| | | | | Post Rec Time | 5 Sec 🗸 | |
| | | | | ✓ Overwrite | | |



Event Tab – Motion

<u>Motion</u>

- **Use:** Enable the desired cameras to trigger motion.
- **Sensitivity:** Adjust sensitivity level ("1" less sensitive ~ "5" more sensitive).
- **Area:** Motion trigger area is set as the whole camera view by default, but it can be readjusted.
- **Record Channel:** Enable the camera(s) to record when the motion sensor is being triggered.
 - The record channel boxes are CH 1~8 from left to right.
 - Only channels that are selected from Device tab can be selected.
- Enable SD card record (Optional).
- Stop/Enable: The motion trigger.
- Alarm Out if selected will send 5V output from CRX to 3rd party device, for the duration selected in dropdown.
- Liveout Channel: Determine which camera channel will be displayed on LDC monitor when trigger is activated.

| Device | | Re | cord | Event | System | N | etwork | | DMS5 | | | | | |
|--------|--------|--------|---------|----------------|-----------|----------------|--------|------|--------|--------|-------|--------|-----------------|---|
| Motion | | Δ | Jarm In | Signal | Etc | | | | | | | | | _ |
| Use | Sensit | | Area | Record Channel | SD Record | Stop Enable | Alarm | out1 | Alarmo | out2 | Liveo | | Liveo Durati | |
| | | ~ | Set | | SD Record | | None | V | None | ~ | None | ~ | 5 Sec | ~ |
| CAM2 | 3 | \sim | Set | | | | None | | None | ~ | None | \sim | 5 Sec | |
| САМЗ | | \sim | Set | | | | None | | None | ~ | None | \sim | 5 Sec | |
| CAM4 | | \sim | Set | | | | None | | None | ~ | None | \sim | 5 Sec | |
| CAM5 | 3 | \sim | Set | | | | None | | None | ~ | None | \sim | 5 Sec | |
| CAM6 | 3 | \sim | Set | | | | None | | None | \sim | None | \sim | 5 Sec | |
| CAM7 | 3 | \sim | Set | | | | None | | None | \sim | None | \sim | 5 Sec | |
| CAM8 | 3 | \sim | Set | | | | None | | None | ~ | None | \sim | 5 Sec | |
| | | | | | | | | | | | | | | |
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Event Tab – Alarm In

<u>Alarm In</u>

- **Use:** Enable the boxes for the alarms that will be used.
- Tittle: Provide a tittle up to 10 digits (Optional).
- **Type:** Specify the voltage type.
 - Alarms (1~4) can be set to trigger when (Voltage-Off/Voltage-On).
 - Alarms (5~7) can be set to trigger (N-Open/N-Close).
 - Note: Panic alarm trigger must be connected to alarm "5".
- **Record Channel:** Enable the camera(s) to record when the alarm is being triggered.
 - The record channel boxes are CH 1~8 from left to right.
 - Only channels that are selected from *Device* tab can be selected.
- Enable SD card record (Optional).
- Alarm Out if selected will send 5V output from CRX to 3rd party device, for the duration selected in dropdown.
- Liveout Channel: Determine which camera channel will be displayed on LDC monitor when trigger is activated.

| Motion Alarm In Signal Etc Use Title Type Record Channel SD Record Alarm out1 Alarm out2 Channel Duration Alarm1 V-Off Image: Channel SD Record Alarm out1 Alarm out2 Channel Duration Alarm1 V-Off Image: Channel SD Record None None None Sone Sone Alarm2 V-Off Image: Channel SD Record None None None Sone Sone Alarm3 V-Off Image: Channel None None None None Sone Sone Alarm3 V-Off Image: Channel None None None None Sone Sone Alarm4 V-Off Image: Channel None None None None Sone Sone Alarm6 N-O Image: Channel Image: Channel None None None Sone Sone Alarm6 N-O Image: Channel Image: Channel None None None Sone Sone Alarm6 N-O | | | ecord | Event | System | N | letwork | | DMS5 | | | | | |
|---|---|--------|-------|--------------------|--------|-----------|---------|--------|------|--------|------|--------|-------|----|
| Alarm1 V-Off None None None None 5 Sec Alarm2 V-Off None None None None 5 Sec Alarm3 V-Off None None None None 5 Sec Alarm4 V-Off None None None None 5 Sec Alarm5 N-O None None None None 5 Sec Alarm6 N-O None None None None 5 Sec Alarm7 N-O None None None None 5 Sec | | | | _ | | | | | | | | | | |
| Alarm2 V-Off None None None None 5 Sec Alarm3 V-Off None None None None 5 Sec Alarm4 V-Off None None None None 5 Sec Alarm5 N-O None None None None 5 Sec Alarm6 N-O None None None None 5 Sec Alarm7 N-O None None None None 5 Sec | _ | | | Record C | hannel | SD Record | | | | | | | | on |
| Alarm3 V-Off None None None None 5 Sec Alarm4 V-Off None None None 5 Sec Alarm5 N-O None None None 5 Sec Alarm6 N-O None None None 5 Sec Alarm6 N-O None None None 5 Sec Alarm7 N-O None None None None 5 Sec | | Alarm1 | V-Off | | | | None | \sim | None | \sim | None | \sim | 5 Sec | |
| Alarm4 V-Off None None None None 5 Sec Alarm5 N-O None None None None 5 Sec Alarm6 N-O None None None None 5 Sec Alarm6 N-O None None None None 5 Sec Alarm7 N-O None None None None 5 Sec | | Alarm2 | V-Off | | | | None | \sim | None | \sim | None | \sim | 5 Sec | |
| Alarm5 N-0 None None None S Sec Alarm6 N-0 None None None S Sec Alarm7 N-0 None None None S Sec | | Alarm3 | V-Off | Image: 100 million | | | None | \sim | None | \sim | None | \sim | 5 Sec | |
| Alarmó N-O N-O None None None 5 Sec Alarm7 N-O None None None 5 Sec | | Alarm4 | V-Off | | | | None | \sim | None | \sim | None | \sim | 5 Sec | |
| Alarm7 N-0 None None None 5 Sec | | Alarm5 | N-O | - | | | None | \sim | None | \sim | None | \sim | 5 Sec | |
| | | Alarm6 | N-O | - | | | None | \sim | None | \sim | None | \sim | 5 Sec | |
| Alarm8 N-0 V DONE None V None V None V 5 Sec V | | Alarm7 | N-O | - | | | None | \sim | None | \sim | None | \sim | 5 Sec | |
| | | Alarm8 | N-O | | | | None | \sim | None | \sim | None | \sim | 5 Sec | |
| | | | | | | | | | | | | | | |



Event Tab – Signal

<u>Signal</u>

- **Use:** Enable the boxes for the alarms that will be used.
- **Tittle:** Provide a tittle up to 10 digits (Optional).
- **Record Channel:** Enable the camera(s) to record when the alarm is being triggered.
 - The record channel boxes are CH 1~8 from left to right.
 - Only channels that are selected from *Device* tab can be selected.
- Enable SD card record (Optional).
- Alarm Out if selected will send 5V output from CRX to 3rd party device, for the duration selected in dropdown.
- Liveout Channel: Determine which camera channel will be displayed on LDC monitor when trigger is activated.

| ġ | CRX3108 Con | figuration Tool | | | | | | | | | _ | | \times |
|---|-------------|-----------------|-----------------|-----------|-------|--------|-------|--------|-----------------|--------|---------------------|---|----------|
| | Device | Record | Event | System | | Netv | work | | DMS5 | | | | |
| | Motion | Alarm In | Signal | Etc | | | | | | | |] | |
| | Use | Title Re | cord Channel | SD Record | Alarm | n out1 | Alarm | out2 | Liveou Chann | | Liveout Duration | | |
| | Left | | | | None | \sim | None | \sim | None | \sim | 5 Sec 🖂 | | |
| | Right | | | | None | \sim | None | \sim | None | \sim | 5 Sec \sim | | |
| | Brake | | | | None | \sim | None | \sim | None | \sim | 5 Sec \sim | | |
| | Revers | e | | | None | \sim | None | \sim | None | \sim | 5 Sec \sim | | |
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| | About | Settings Ini | tialize SD Card | | | | | | Open | | Save | С | lose |



Event – Etc.

| G-Sensor | You can set up a threshold for each G-sensor event from 0.1G to 1.0G. |
|--------------------|---|
| Speed | You can set up the over speed threshold. (This is raw vehicle speed and does not account for road/posted speed limits). |
| Video Loss | You can set a Video loss as an Event. |
| Record Channel | You can select a camera channel for alarm-in event recording. |
| SD Record | You can enable/disable SD card recording for alarm-in event. |
| Alarm out1 | You can set up alarm-out to external device connected to Alarm-out 1 port. Alarm-out duration is [N/A, 1sec, 5sec, 10sec~60sec, ∞] |
| Alarm out2 | You can set up alarm-out to external device connected to Alarm-out 2 port. Alarm-out duration is [N/A, 1sec, 5sec, 10sec~60sec, ∞] |
| Liveout Channel | You can select a channel for liveout video when alarm-in event occurs. [N/A / 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 / 2×2-1 / 2×2-2 / 3×3] |
| Liveout | You can set up the duration for liveout. |

LiveoutYou can set up the duration for liveout.Duration $[1,3,5,10,20,30,40,50,60 \text{sec}, \infty]$

| | Record | Event | System | N | etwork | DMS5 | | |
|------------|-----------|----------|-----------------|------------|------------|------------|--------------------|---------------------|
| Motion | Alarm In | Signal | Etc | | | | | |
| | | Record C | hannel SD | Record | Alarm out1 | Alarm out2 | Liveout Channel | Liveout Duration |
| G-Sensor | | | | | None 🗸 🗸 | None 🗸 🗸 | None \sim | 5 Sec 🗸 |
| Trigger +X | 0.40 | 14 km/t | n (Speed change | e per seco | ond) | | | |
| Trigger -X | 0.40 | 14 km/t | (Speed change | e per seco | ond) | | | |
| Trigger Y | 0.40 | L | | | | | | |
| Trigger Z | | L | | | | | | |
| Speed | 80 km/h 0 | | | | None 🗸 | None 🗸 🗸 | None 🗸 | 5 Sec 🗸 |
| Video Loss | | | | | None 🗸 | None 🗸 | None 🗸 | 5 Sec 🗸 |
| | | | | | | | | |
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System Tab – Date/Time

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

DST (Optional)

Check the box to enable the daylight saving time. Input the start & end date.

*DO NOT USE IF CRXS IS CONNECTED TO SmartAPI

| 3 | CRX3108 Con | figurati | on To | ol | | | | | | | | - | | Х |
|---|-------------|----------|--------|------|---------|---------|---|-----------|---------|------------------|-----------|-------|-------|----|
| | Device | | Record | ł | - | Event | S | ystem | Network | DMS5 | | | | |
| | Date/Time | | Serv | ice | | Screen | | Etc | | | | | | |
| | Date Format | | | YYYY | /MM/D | | | | | Retrieve time se | ettings f | rom m | ny PC | |
| | Time Zone | | | UTC | | ~ | | | | | | | | |
| | Daylight S | aving Ti | me | | | | | | | | | | | |
| | Start | Jan. | \sim | 1st | \sim | Sunday | | 0 o'clock | | | | | | |
| | End | Jan. | \sim | 1st | \sim | Sunday | | 0 o'clock | | | | | | |
| | Time Sync | : | | | | | | | | | | | | |
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| 1 | About | Setting | 15 | Init | tialize | SD Card | 1 | | | Open | Sav | e | Clo | se |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |



System Tab – Service

<u>Service</u>

- Default values set as shown.
- **Delay Power Shutdown:** Amount if time CRX stays on after ignition is turned off.
- **Wakeup Interval:** Time interval in which CRX will automatically power up again after shutdown.
- **Register Interval:** Time interval in which CRX stays powered on during wakeup interval.
- Auto Format: Allows CRX to perform automatic maintenance on the SD cards when there is an issue. SD cards need to be re-formatted occasionally over time.

Note: SD/SSD card data will be deleted when an auto-format occurs.

System Warning

- Provides an alert in case of system failure.
- Source:
 - HDD: HDD/SSD is not recognized or writing is failed.
 - SD Card is not recognized or writing is failed.
 - Temperature: Alerts when device temp is over 80°C
 - Video Loss: Video signal loss from camera(s)
 - AUX: External device is disconnected
- Events:
 - Beep: Audible chime to alert the driver when failure occurs.
 - Alarm LED: CRX "Alarm" LED will blink red.
 - Popup: A notification message will be displayed on LCD monitor

| Device | Record | Event | System | Network | DMS5 | | |
|--|----------------|---------------------------|----------------|---|------|--|--|
| Date/Time | Service | Screen | Etc | | | | |
| Service Speed Source | | GPS | ~ | System Warning | | | |
| Speed Unit Language Delayed Power | Shutdown | km/h English 00 ~ : | ~ ~ 15 ~ | Source ☑ HDD ☑ SD Card | | ☑ Temperature ☑ Video Loss ☑ Aux | |
| Wakeup Interva Register Interv Auto Recove Auto Forma | al ery | Off 00 ~ : | ~ 00 | Event Alarm out1 Alarm out2 Popup 5 Sec | ~ | ☐ Beep ☑ Alarm LED | |
| Auto Remove | 0 Day 0 Day | | | | | | |
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System Tab – Screen

Liveout Priority

- Display on CRX can be prioritized from "1" highest priority
 - ~ "16" lowest priority.
 - Example: If CH 2 & CH3 both triggered an event the same time, CH2 has the priority to display on the monitor.

2

5

8

1

4

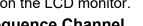
7

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6

Display Order

• The order of cameras as they are displayed on the LCD monitor.



Sequence Channel

- Selected channels will be displayed in sequential order based on dwell time (Default Channel must be set to SEQ).
 - Dwell Time: Set display time per selected channel (Off/1~5 seconds).

<u>Misc</u>.

- Default Channel: Specifies default video output channels:
 - 1x2-1: CH1 & CH2.
 - 1x2-2: CH3& CH4.
 - 1x2-3: CH5 & CH6.
 - 1x2-4: CH7 & CH8.
 - 2x2-1: CH 1~4.
 - 2x2-2: CH 5~8.
 - 3x3: All channels.
 - SEQ: Appears only when "Sequence Channel" is enabled.
- TV Out OSD: Determine which information to be displayed on LCD monitor.
 - Level 1(Full): Time, Disk Space, Camera Tittle, Camera/Event Status.
 - Level 2: Time, Disk Space, Camera Tittle.
 - Level 3: Time, Disk Space.
 - Level 4(Off): No data output from CRX unit.

| Device | Record | Eve | ent | System | Network | DMS5 | | |
|---------------|-----------|--------|----------|--------|------------------|---------------|--------|--|
| Date/Time | Service | S | creen | Etc | | | | |
| Liveout Prior | ty | | | | Sequence Channel | | | |
| CH 1 1 | ∨ 1x2-1 (| 9 ~ | 2x2-1 13 | ~ | Dwell Time | Off | \sim | |
| CH 2 2 | ∨ 1x2-2 | 10 ~ | 2x2-2 14 | \sim | CH1 | 1x2-1 | 2x2-1 | |
| СН 3 3 | ∨ 1X2-3 | 11 🗸 🗸 | 3x3 15 | ~ | CH2 | 1x2-2 | 2x2-2 | |
| CH 4 4 | ✓ 1x2-4 | 12 ~ | SEQ 16 | ~ | CH3 | 1x2-3 | 3x3 | |
| CH 5 5 | ~ | | | | CH4 | 1XZ=4 | | |
| CH 6 6 | ~ | | | | CH6 | | | |
| CH 7 7 | ~ | | | | CH7 | | | |
| сн в в | ~ | | | | CH8 | | | |
| cho o | | | | | | | | |
| Display Order | | | | | Misc | | | |
| | | | Auto | | Default Channel | 3x3 | \sim | |
| 1 CH1 🗸 | 2 CH2 🗸 | 3 CH3 | ✓ 4 CH | 4 ~ | TV Out OSD | Level 1(Full) | \sim | |
| 5 CH5 🗸 | 6 CH6 🗸 | 7 CH7 | ✓ 8 CH | 18 ~ | | | | |
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System Tab – Etc.

| User | Vehicle No.: You can register the vehicle |
|------------|---|
| Management | number up to 10 characters. |
| | Use the alphabet and numbers only |
| | (maximum of 10 characters.) |

- **Driver ID** You can set the Driver ID of the SD card. If you want to use RFID card for the Driver ID, no need to fill in.
- Enter menu: Password is required for entering menu on LCD screen
 - Search: Password is required for search menu.
 - Log View: Password is required for log view.
 - Playback: Password is required for playback.
- **Hazard Area** You can register a zone to monitoring vehicles get in/out. You need to make a hazard map with MAP Maker program supplied separately.

| Device | Record | Event | System | Network | DMS5 | |
|-----------------------|---------|-----------|----------|---------|------|--|
| Date/Time | Service | Screen | Etc | | | |
| User Manager | nent | | | | | |
| Vehicle No | | | | | | |
| Driver ID | | | | | | |
| Authority | | | | | | |
| Enter M | 2011 | | | | | |
| Search | | og View 🗸 | Playback | | | |
| e searci | | y new V | _ ayback | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| Hazard Area | | | | | | |
| Hazard Area Radius | Of | f v | | | | |
| | Of | f ∽ | | | | |
| | D | f v | | | | |
| | 0 | f v | - | | | |
| | о | f v | | | | |
| | D | f v | | | | |
| | O | f v | 2 | | | |
| | O | f v | | | | |



Connectivity Tab

When using CRX as a connected device, "Enable" the connectivity here, and specify the connectivity type (LAN, Mobile Network or Wi-Fi).

- **LAN** DHCP: Receive the IP address from Router.
- Wi-Fi NETWORK: You can register up to 10 AP. SSID: Please enter SSID. PASSWORD: Please enter password of AP.
- **3G / LTE** DONGLE: Please set up a type of 3G/LTE dongle. (Default: TYPE0) APN, DIAL NO. USER/PASS: Please inputs settings according to carrier information of SIM.

If using Mobile Network (USB modem connected to blue USB1 port), you must add Mobile Network provider details here



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

| Device Rec | ord Event | System | Network | DMS5 | |
|-----------------|--------------------------|--------|-------------------|-------------|------------|
| Network | | | | | |
| Device | 3G/LTE/Wi-Fi | \sim | | | |
| Lan | | | 3G/LTE | | |
| Protocol | DHCP | \sim | Dial No. | *99# | |
| IP | | | APN | smartwitnes | s.com.attz |
| Subnet Mask | | | User ID | | |
| Default Gateway | | | Password | | |
| DNS Server | | | USB protocol Type | 0 | ~ |
| DING GEIVEI | · · · | | oop protocor type | U | * |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Wi-Fi | | | | | |
| АР | 1 | ~ | | | |
| | 1 | ~ | | | |
| АР | | | | | |
| AP SSID | 1 Passwords must be a | | acters. | | |
| AP SSID | | | acters. | | |
| AP SSID | | | acters. | | |
| AP SSID | | | acters. | | |

NOTE: if using Huawei modem, the USB Protocol type should be set to "2".

Please contact INSIGHTS before you select a Wi-Fi dongle or 3G/LTE dongle. CRX only supports the pre-tested dongles.



Server Tab

INSIGHTS 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 CRX to server. Livetrack2 contains GPS coordinates. LiveTrack3 does not.

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

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

Note: The frequency interval of LiveTrack and DRV uploads are controlled by the server.

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

Click 'Save' and select the "AVFILE3" 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 CRX and power on.

| 🛃 CRX3108 Confi | iguration Tool | | | | | | | - | | × |
|-----------------|-------------------|-------------------|------------|-------------|----------|-------------------|----------|------|------|----|
| Device | Record | Event | Sy | stem | Network | DMS5 | | | | |
| DMS5 | | | | | | | | | | |
| 🗹 Enable | | | | | | | | | | |
| Domain/Static | IP and Port # | http://sv.smar | twitness.c | :o:5000/api | e | x) http://Domain! | Vame:500 | 0 | | |
| License Key | | | | | | | | | | |
| Transmit | Live Tracking Dat | a | | | 🗹 Transm | it Event Data | | | | |
| Live Trackin | g Data Type | LiveTrack2 | \sim | | 🗹 Transm | it Telematics Da | ta (DRV) | | | |
| Event Image | 5 | | | | | | | | | |
| CAM1 | CAM2 | Самз ⊡с | AM4 | CAM5 | CAM6 | CAM7 | | 8 | | |
| Pre-Event | | 5 Sec | \sim | | | | | | | |
| Post-Event | | 5 Sec | \sim | | | | | | | |
| Event Trigge | red by | | | | | | | | | |
| G-Sensor | - | Overspeed | | | | | | | | |
| Motion1 | | Motion2 | | Motion3 | | Motion4 | | | | |
| Motion5 | | Motion6 | | Motion7 | | Motion8 | | | | |
| Alarm1 | | Alarm2 | | Alarm3 | | Alarm4 | | | | |
| Alarm5 | | Alarm6 | | Alarm7 | | Alarm8 | | | | |
| Signal1 | | Signal2 | | Signal3 | | Signal4 | | | | |
| About | Settings Ir | nitialize SD Card | | | | Open | | Save | Clos | se |
| | | | | | | | | | | |

Sensata IN

CRX G-Sensor Threshold Table

Low Speed Table

| | | ACCS | ENX | | ACC | ACCSENZ | | | | |
|------------|--------|------------|-----|------------------|---------|------------------|-----|----------|-----------|--|
| Level | axis | Impact | | Sudder sudden | | Sudder sudder | | Quick | iick Turn | |
| | | G(mg) | Hz | G(mg) | Hz | G(mg) | Hz | G(mg) | Hz | |
| 1 | Х | 950 | 1 | 450 | 8 | 500 | 5~7 | - | - | |
| (less | Y | 950 | 1 | - | - | - | - | 350 | 15 | |
| sensitive) | Z | 1050 | 1 | - | - | - | - | - | - | |
| | Х | 900 | 1 | 420 | 8 | 470 | 5~7 | - | - | |
| 2 | Y | 900 | 1 | - | - | - | - | 340 | 15 | |
| | Z | 1000 | 1 | - | - | - | - | - | - | |
| | Х | 850 | 1 | 390 | 8 | 440 | 5~7 | - | - | |
| 3 | Y | 850 | 1 | - | - | - | - | 320 | 15 | |
| | Z | 950 | 1 | - | - | - | - | - | - | |
| | Х | 800 | 1 | 360 | 8 | 410 | 5~7 | - | - | |
| 4 | Y | 800 | 1 | - | - | - | - | 310 | 15 | |
| | Z | 900 | 1 | - | - | - | - | - | - | |
| | Х | 750 | 1 | 330 | 8 | 380 | 5~7 | - | - | |
| 5 | Y | 750 | 1 | - | - | - | - | 300 | 20 | |
| | Z | 850 | 1 | - | - | - | - | - | - | |
| | Х | 700 | 1 | 310 | 8 | 360 | 5-7 | - | - | |
| 6 | Y | 700 | 1 | - | - | - | - | 280 | 20 | |
| | Z | 800 | 1 | - | - | - | - | - | - | |
| | X | 650 | 1 | 240 | 10 | - | - | - | - | |
| 7 | Y Z | 650 750 | 1 | | - | - | - | 230 | 20 | |
| | X | 600 | 1 | - | - 10 | - | - | - | - | |
| | Y | 600 | 1 | 190 | - | - | - | - 190 | - 15 | |
| 8 | T Z | 700 | 1 | - | - | - | - | 190 | 10 | |
| | X | 550 | 1 | 170 | 10 | - | - | - | - | |
| | Ŷ | 550 | 1 | - | - | _ | - | - 170 | - 15 | |
| 9 | Z | 650 | 1 | - | - | - | - | - | - | |
| | - | 000 | | | | | | | | |

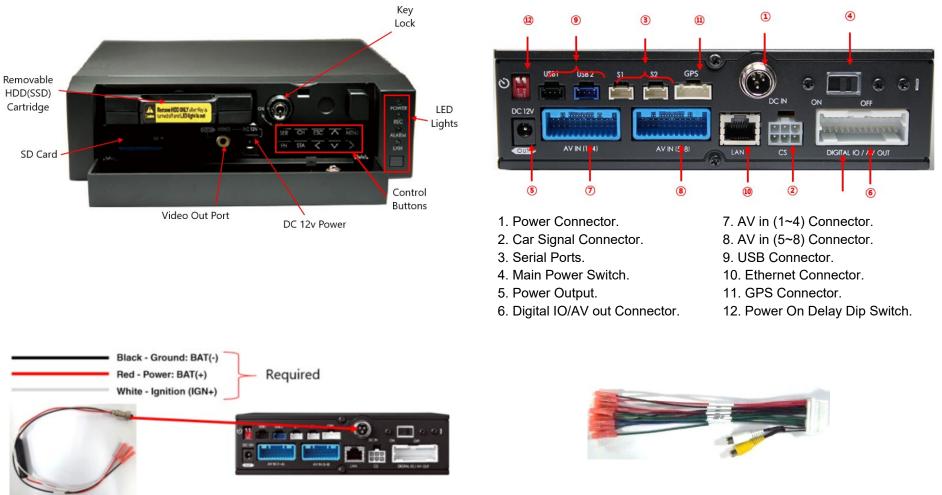
High Speed Table

| Level | axis | ACCS | ENX | | ACC | SENY | | 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 | Х | 1350 | 1 | 480 | 10 | - | - | - | - | |
| (less | Υ | 1350 | 1 | - | - | - | - | 420 | 15 | |
| sensitive) | Z | 1450 | 1 | - | - | - | - | - | - | |
| 2 | Х | 1300 | 1 | 450 | 10 | - | - | - | - | |
| | Y | 1300 | 1 | - | - | - | - | 410 | 15 | |
| | Z | 1400 | 1 | - | - | - | - | - | - | |
| 3 | Х | 1250 | 1 | 420 | 10 | - | - | - | - | |
| | Y | 1250 | 1 | - | - | - | - | 380 | 15 | |
| | Z | 1350 | 1 | - | - | - | - | - | - | |
| 4 | Х | 1200 | 1 | 390 | 10 | - | - | - | - | |
| | Y | 1200 | 1 | - | - | - | - | 370 | 15 | |
| | Z | 1300 | 1 | - | - | - | - | - | - | |
| 5 | Х | 1150 | 1 | 360 | 10 | - | - | - | - | |
| | Y | 1150 | 1 | - | - | - | - | 340 | 20 | |
| | Z | 1250 | 1 | - | - | - | - | - | - | |
| 6 | Х | 1100 | 1 | 340 | 10 | - | - | - | - | |
| | Y | 1100 | 1 | - | - | - | - | 320 | 20 | |
| | Z | 1200 | 1 | - | - | - | - | - | - | |
| 7 | Х | 1050 | 1 | 270 | 10 | - | - | - | - | |
| | Y | 1050 | 1 | | - | - | - | 270 | 20 | |
| | Z | 1150 | 1 | - | - | - | - | - | - | |
| 8 | Х | 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.



CRX Hardware



Installation guide can be downloaded at http://install.smartops.com

Alarm I/O Trigger Harness and & A/V Output for coAlarm I/O Trigger Harness and & A/V Output for connecting an LCD monitor



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