SmartWitness CP1

Installation Guide

v.1.2

Model #'s:

- **CP1** (AT&T, T-Mobile, N. & S. America HSPA networks)
- **CP1-VZ** (Verizon)
- **CP1-SP** (Sprint)

WARNING: SmartWitness installations should be performed by a qualified individual or installation professional only. Working with a vehicle's power system can be dangerous to both you and your vehicle. This installation is intended only to be a guide since vehicle designs and power/input sources can vary significantly from vehicle to vehicle.

If you need to schedule a professional installation service in the USA for your SmartWitness device(s), please visit http://smartwitness.com/scheduleinstall and submit the online form.

1. Overview:

The SmartWitness CP1 is the world's most advanced incident camera with powerful 3G video transmission, built-in GPS tracking and drive data. Developed to provide evidence of events leading up to and during a road traffic accident, the CP1 provides instant notifications and videos of incidents in less than a minute.

CP1 features a 1080p wide angle HD camera, 3-Axis G-Sensor, Microphone, SD storage, SIM card slot, integrated GPS receiver, permanent power cable with optional vehicle input sensors, and a tamper-resistant design.

➢ Benefits:

The CP1 features a 1080p HD wide angle (170°) lens to provide a comprehensive view of any road event. The CP1 will record exactly what happened before, during and after an incident. It does this by recording the following information: Drivers view of the road, Vehicle Location, Impact Force of Accident, Audio, and Driving Style (speed, acceleration, braking, and steering).

This evidence can protect a driver from many of the issues faced on the roads today: Insurance fraud, Staged Accidents, False/Exaggerated Whiplash Claims, Conflicting Reports of Actual Events, Driving Offence Allegations (speeding, traffic signal violations, swerving, etc.).

When a 3G SIM card is inserted, CP1 is able to send video and driving data via a cellular network (T-Mobile or AT&T in USA, Bell or Rogers in Canada). North American customers can use the CP1 to transmit safety critical video directly to a server (SmartWitness server software required), or integrate with Telematics Software (Please contact us for a list of compatible telematics software). The CP1 can also be used as a stand-alone system utilizing only the SD cards to review video and data with SmartWitness' free PC analysis software.

➢ Features:

Recording	Playback & Analysis
170° Wide Angle Lens.	PC analysis Software Included.
Full HD Recording: 1920x1080 (resolution is adjustable).	Compatible with DMS Server Software.
30 Frames per second recording (FPS is adjustable).	Compatible with SmartWitness Smart API for AVL/Telematics Integration.
Dual Record mode (Continuous + Event).	Real-time notification of events and images during road incidents.
Optional Audio Recording.	Live tracking location and live streaming video available.
Connects directly to vehicle ignition power, automated operation.	Filter Data Search by Time/Date, Event, Vehicle Speed, G-Force level.
Tamper-Resistant Design, secure cover encloses SD card and SIM card.	AVI Conversion Tool. Data Remains Watermarked.
GPS data records full time to provide location data, vehicle speed, and accurate time/date.	Privacy masking feature for blurring out faces or license plate numbers.
Built-in G-Shock Sensor and Gyro (adjustable sensitivity).	Google Maps Integration for Route Tracking.
Built-in temperature monitor and intelligence in high-temp environments.	Advanced Driver Behavior Analysis & Reporting Software.
Delay power shutdown feature enables recording for up to 24 hours after ignition off.	Save/Print Event Reports.
RESTful/JSON API available for system integration.	OTA Software & Firmware Updates.

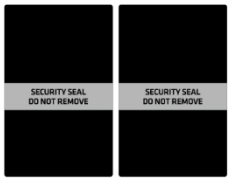
➢ Package Contents:

CP1 Recorder

Power Adaptor (model # INT1S)

Side Cover Plate

SD Card*



Security Seal (2ea)

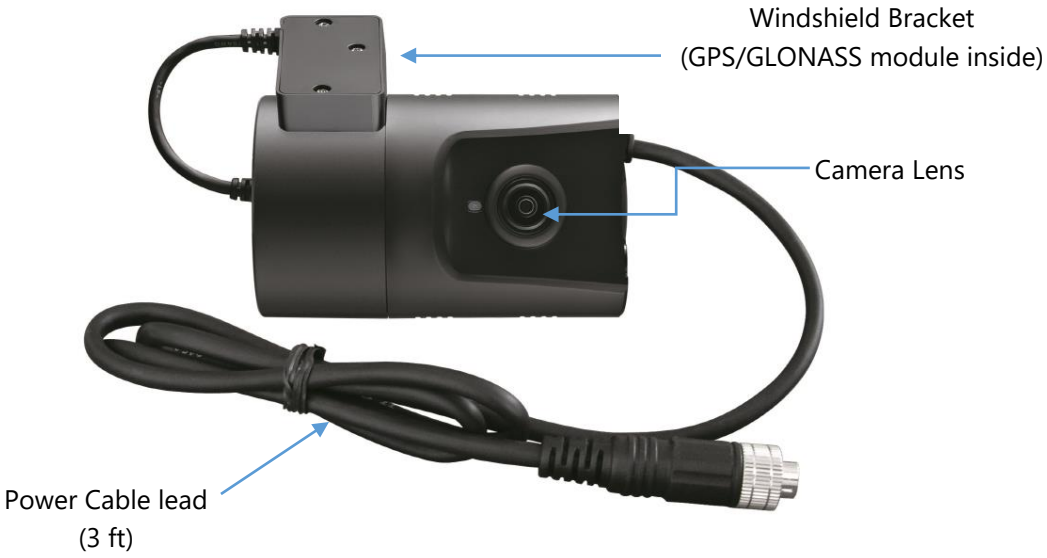
3M Windshield Adhesive (2ea)

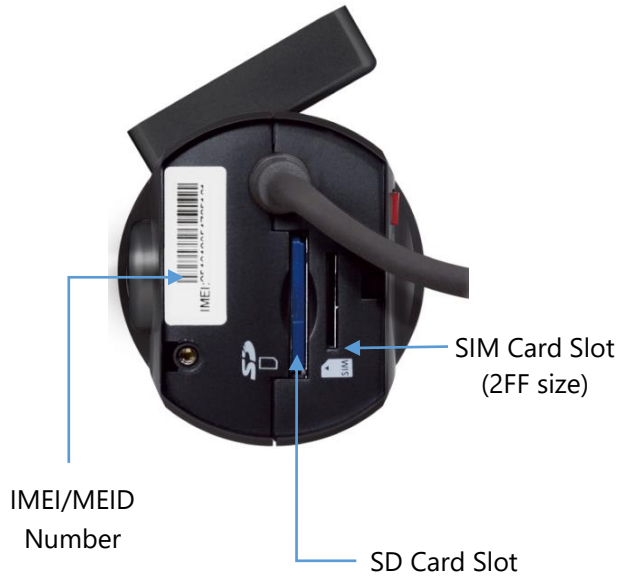
Torx screw & Key

Sim Card*

***Depending on the order, the SD Card and Sim card may not be included or they may be in a separate package from the CP1 (common in large, bulk orders).**

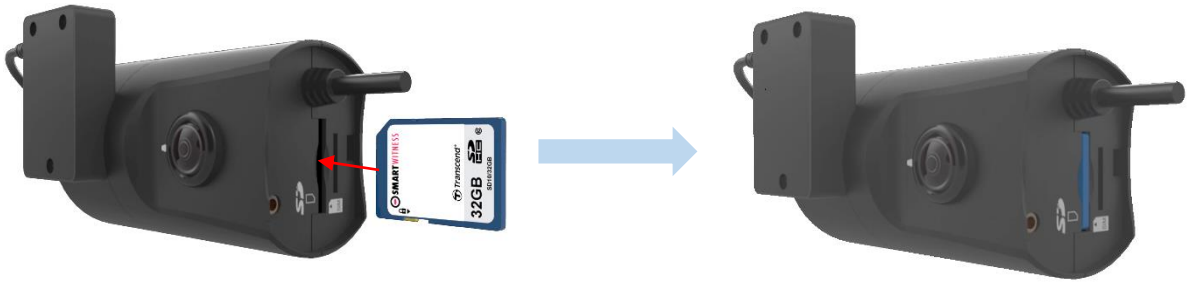
2. CP1 Structure:



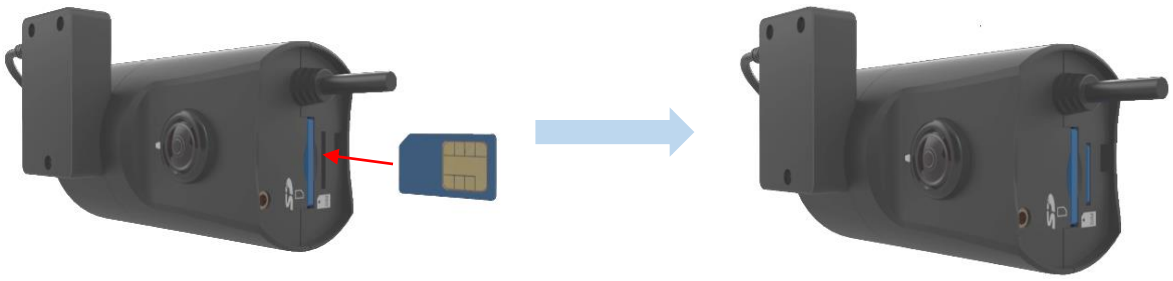


3. Installation: First Steps

- Insert the provided SD card into the Sd card slot, as shown below. Make sure the yellow SD lock is set in the "unlocked position"



- Then insert the provided Sim card into the second, smaller slot as seen below:



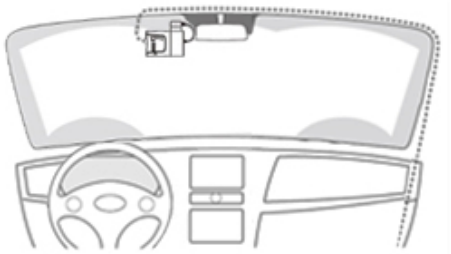
Verizon (CP1-VZ) and Sprint (CP1-SP) versions do not utilize SIM cards. The CP1 MEID # must be provided to Verizon and Sprint for activation.

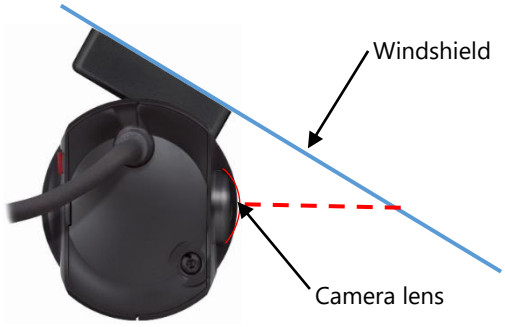
- After instructing the SD & SIM cards, attach the side cover plate as seen below. Use the provided torx screw & key to secure the side cover plate to the CP1:

- Attach the provided 3M adhesive pad to the CP1 bracket and press firmly.

- Adjust the bracket by rotating it to the desired angle (use the windshield as a guide to determine the angle (see the image below). The bracket can be adjusted up or down based on specific slope of the vehicle's windshield:

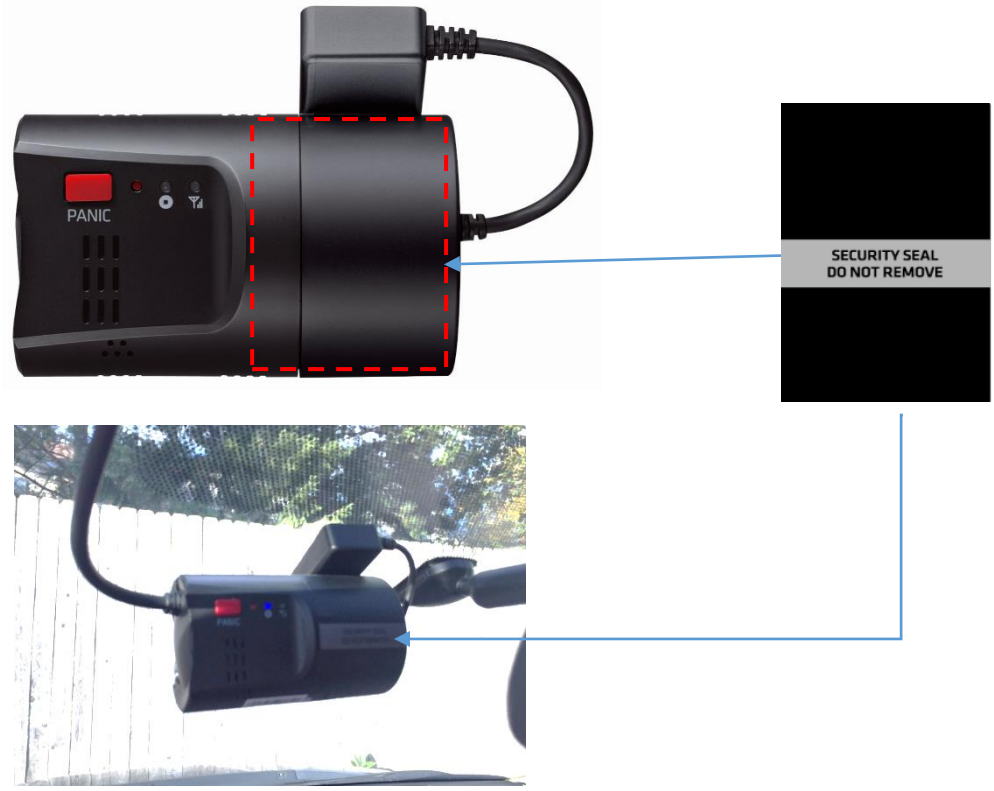
- Secure the CP1 to the windscreen behind the rear view mirror, below the AS1 line. The camera lens should be as high on the windshield as possible, but still within the windshield wiper zone. **If installing KP1S into a truck, FMCSA mandates that the camera portion of the device should reside in the top 2 inches of the vehicle wiper sweep.**





IMPORTANT: Make sure that the glass is clean and dry before attaching. Hold the camera in position with firm pressure for 30 seconds. The glass temperature should not be too hot or cold. Please install in moderate temperature (recommended between 50°F ~ 80°F)

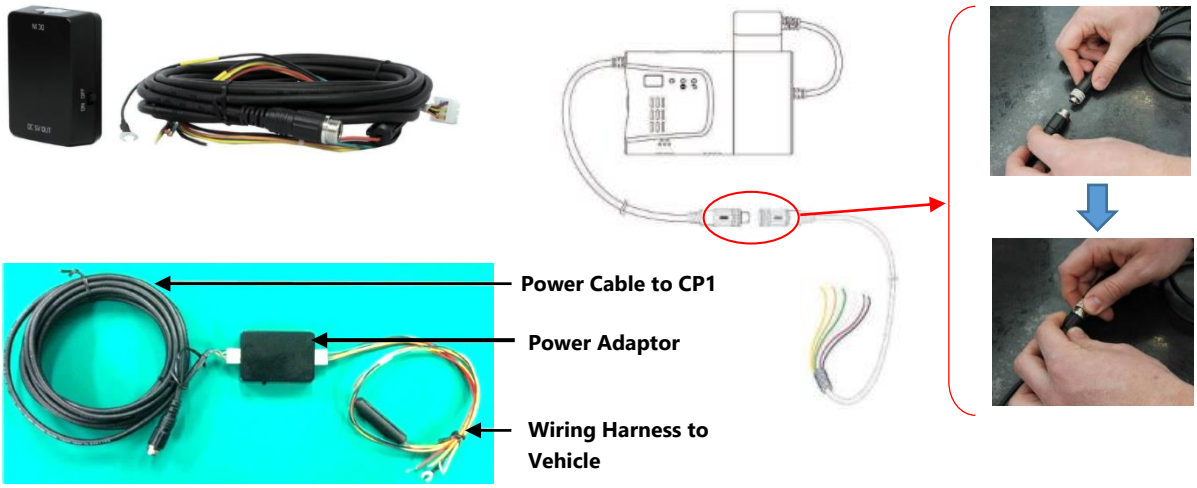
- Once the CP1 is secured to the windshield the user must attach the security seal sticker for angle lock for more protection at the backside of the camera as follows:



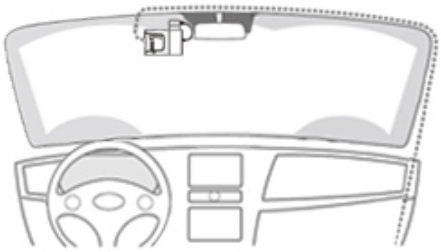
Note: If the security sticker is removed, it will reveal "VOID / OPEN" text, indicating the camera angle may have been tampered with (see below picture for example).

4. CP1 Power Adaptor and Wiring:

- To connect the CP1 lead cable to the INT1S power adaptor, lining up the arrows on the silver cable connectors and then push together. Twist the silver plate as shown below to secure the connection.

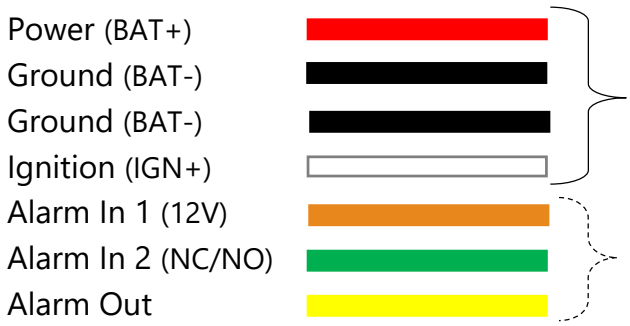


- After Connecting the INT1S power cable to the CP1 power lead, lay out the power cable roughly where it will run once hidden behind the vehicle's interior panels. This gives you an idea of where to route the cable and how much slack to leave on the way down to the vehicle's power source. Secure the power cable extension into the headliner and down the A-Pillar. Route the power cable around the side and behind the rest of the interior panels down towards the fuse box / power source. Make sure the vehicle is off and then connect the 4 required wires to the vehicle, as shown below in the wiring diagram.



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

1. Wiring Harness Diagram

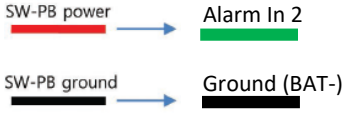


Required

Optional (verify with customer if orange, green, or yellow wires will be used)

2. OPTIONAL: remote switch installation (your CP1 may not include this accessory)

Model # *SW-PB*



5. Final Steps

After installation of the CP1 into the vehicle, you can turn on vehicle ignition and the camera will power on. There will be a sequence of BLUE/GREEN LED lights cycling during boot process. **Once boot up is complete. There will be a solid blue light. This means proper operation and recording. The Green light should become steady shortly after. If blue and green LEDs are not both solid after bootup, there is an error. Please refer to the LED reference table in section 6. If you cannot resolve the issue, contact your supplier or SmartWitness.**

1) After the camera has been booted completely, press the G-Sensor calibration button once (small red button to the right of the panic button).

There will be a beep and LED light blink to indicate the G-Sensor calibration has registered.

2) Give the provided torx screw and any extra parts to the fleet owner / administrator as well as a copy of the installation report. If you do not have an installation report template, you can visit http://install.smartwitness.com and complete the installation form there.

6. LED Reference Table

7.

Status/Step			LED			Buzzer
			Record	Communication	Front LED	
			Blue	Green		
						
Start-up	Booting step1		On	Off	On	
	Booting step2		On and Off		Off	
	Booting Finished		On		Off	「beep」(1time)
Power off	Power off		Simultaneous Flashing (Blink rate: fast)		Off	
Record	Continuous Record	Recording	Flashing (Blink rate: Slow)		Off	
	Event Record	Stand by	Flashing (Blink rate: Very Slow)		Off	
		recording	Flashing (Blink rate: fast)		Off	
	Dual Record	Continuous Recording	Flashing (Blink rate: Slow)		Off	
		Event recording	Flashing (Blink rate: fast)		Off	
Communication	3G Network Device Ready			On		
	Communication			Flashing (Blink rate: fast)		
Function	SD Format		Simultaneous Flashing (Blink rate: normal)		Off	(Beep, 1time) and then repeat
	G-Sensor Calibration					「Beep→(3seconds later) Be、BeBeep」
	FW Upgrade		On and Off	Off and On	Off	
Warning	SD Card	SD Card Full	Flashing (Blink rate: Slow) 3times, and off 3seond. And then repeat		Off	「BeepBeepBeepBeep」(3times)
		without setting file	Simultaneous Flashing (Blink rate: Normal) 4seconds and then repeat it every minute.			
Error	Record Error	No SD, SD error, SD Lock, Write fail, No folder	Simultaneous Flashing (Blink rate: Slow)			「BeepBeepBeepBeep」(3times)
	Communication Error	3G Network Device error		Off		「BeepBeep」(3times)
		Data Network connection error		Off		
		DMS communication error		Flashing (Blink rate: Slow)		
Event Trigger	G-Sensor, Rec Button, Alarm-In					「DingDong, DingDong」(1time)
	Over Speed					「Be, Beep, Be, Beep」(1time)

For Technical Support, please visit support.smartwitness.com