Release Notes for AP1 Firmware 1.2.1

September 30, 2022

Change	What Is It?	Customer Benefits	Enablement Instructions
Delayed Power Shutdown **New Feature**	The AP1 now has the capability to stay online for a configurable period after ignition off	Users can retrieve video at the conclusion of trips prior to device shutdown The device can now record as the driver exits the vehicle post-ignition off, providing an additional layer of security and surveillance	To apply this new feature to active AP1 devices, please contact Sensata | SmartWitness support
Refined OBD Ignition Logic **Improvement**	Improvement in logic to detect vehicle ignition via OBDII	Faster start to recording, more accurate trip data and better ignition sensing from the vehicle bus	No action needed
J1939 Support **New Feature** **Beta**	AP1 is now plug-and-play compatible with J1939 connection types for the following functions: - Power connection - Ignition detection - ADAS speed	AP1's simple installation method can now be applied to heavy-duty vehicles	J1939 plug-and-play compatibility requires a JBUS-to-OBDII adapter or splitter cable
GPS-Based Speed for ADAS Functions **New Feature**	AP1 is now capable of ADAS event detection using GPS speed for installations or situations when OBDII or J1939 speed is unavailable	You can utilize ADAS functions no matter the installation method	No action needed

Support Contacts:

- Email: support@smartwitness.com
- Phone (North/South America, APAC): +1 (312) 981-8774
- Phone (Europe): +44 (0) 1483 397005

Frequently Asked Questions

1. Are there any prerequisites for this update?

G-sensor calibration is required for AP1 devices currently on firmware version 1.1.5 or earlier. Calibration is not required if your device was updated to firmware version 1.1.6 and underwent recalibration prior to 1.2.1.

Calibration requires AP1 installation on the windshield, with power applied, and a stationary vehicle.

To follow proper firmware update processes, abide by the following guidelines for your specific circumstances. Ensure updates are passed to devices in conditions where driver safety is prioritized.

Upgrades for installed AP1 units

- When we upgrade AP1 firmware to 1.2.1 on your behalf, this calibration will be managed remotely and requires no intervention.
- If you are updating AP1 firmware manually through the Workstation, the command to calibrate the g-sensor must be queued immediately after the firmware update command. Queued requests are implemented in the order received by the device.

Handling uninstalled AP1 units received prior to October 2022

- Install the device normally and follow steps the above for upgrading installed AP1 units.

Handling AP1 units received October 2022 or later (firmware 1.2.1 preinstalled)

- If you are using the AP1 Calibration mobile app for installation, g-sensor calibration occurs automatically.
- If installing an AP1 and performing configuration updates through the Workstation, queue the g-sensor calibration command after installation.

2. How has AP1 startup time improved with this new firmware version?

AP1 startup times can vary due to GPS acquisition and vehicle bus communication variations; we expect a typical startup time reduction of 10 seconds for most customers with firmware 1.2.1 versus 1.1.5. Our engineering team continues to work towards startup time improvements in future firmware.

3. Does Sensata | SmartWitness have a cable to support J1939 connection for AP1?

We expect availability for the Sensata | SmartWitness J1939-to-OBDII adapter in late October 2022. In the interim, partners are free to source their own harnesses and undertake compatibility testing.

4. What does “Beta” mean for J1939 support?

J1939 support in AP1 is production ready. Sensata | SmartWitness will assist early adopters with installation and feature testing in a broad base of vehicle types and scenarios. We value all partner feedback from beta testing, as it helps us improve and harden products to reach the highest levels of efficacy and compatibility.

5. **How does GPS speed for ADAS compare to ADAS using OBDII speed? Do I need to change my configuration to accommodate this feature?**

   GPS speed for ADAS serves two roles:

   1. Enables ADAS features for installation types without OBDII or J1939 connection.
   2. Acts as a backup speed source whenever AP1 devices connected to OBDII or J1939 cannot pull speed information from those data sources.

   GPS reception degrades in areas with many tall buildings (the “urban canyon” effect) and enclosed spaces like tunnels and parking garages; ADAS functions may be temporarily disabled when GPS is the speed source. No configuration change is needed for this feature.