

TrimTrac Pro V3.08 & higher– Ignition Sense Override.

This Technical Note attempts to clarify the usage of *Ignition Sense Override* & how *GPS Fix Rate* affects its behaviour regarding motion driven reports.

This note assumes the customer is using Trimble's 3 wire VAM (54208-15) & HPA & MPA Mode are both disabled (=1).

With *GPS Fix Rate* =1 or 2, *Ignition Sense Override* =2, *LPA Mode* =4 then:

- With Ignition off, Motion will cause Report Messages to be transmitted.
- Status messages transmitted when Ignition changes state.
- Ignition on overrides Motion Sensor and all reports are transmitted at T4/T5 intervals.

With *GPS Fix Rate* = 1 or 2, *Ignition Sense Override*=2, *LPA Mode* =4 & *Engine Idle Reporting/Threshold* set then:

- With Ignition off, Motion will cause Report Messages to be transmitted
- Status messages transmitted when Ignition changes state.
- Idling reports will be transmitted as per *Engine Idle Reporting/Threshold* configuration.
- Ignition on overrides Motion Sensor and all reports are transmitted at T4/T5 intervals.

With *GPS Fix Rate* = **3**, *Ignition Sense Override*=2, *LPA Mode* =4 & *Engine Idle Reporting/Threshold* & *GPS Velocity Move Qualifier* =3 set then:

- Status messages transmitted when Ignition changes state.
- Idle reports will be transmitted as per *Engine Idle Reporting/Threshold* configuration.
- Ignition on overrides Motion Sensor & all reports are transmitted at T4/T5 intervals **only when GPS Velocity exceeds 3 Mph.**

The change to *GPS Fix Rate* combined with **Ignition Sense Override* allows the major move from Reports being driven by Motion to all Reports being driven by GPS velocity.

Pros:

- No nuisance reports when vehicle is stationary but being loaded.
- Clear route reporting when vehicle > x Mph.

Cons:

- If vehicle is stolen by 'towing' the GPS sensor is never enabled so the vehicle must be tracked by Query_Position message from your Application server (only available if *Anytime Polling* is enabled).

*Note: Disabling (=0) *Ignition Override Sense* still allows Reports to be transmitted when Velocity exceed x Mph but motion must first wake the GPS sensor. This allows another Reporting option if *Ignition Sense Override* is not used. *Ignition Sense Override* **MUST** be used to allow *Engine Idle Reporting* & *LPA Change Of State Reporting*.