

Template:FMA2 System Settings

System settings have 7 configurable parameters:

- Sleep settings, where user can turn GPS sleep/deep sleep on or off;
- Analog Input Settings, where user can choose analog input range 10 V or 30 V, depending on needed accuracy (lower range gives higher accuracy of measurements), and input voltage;
- Object Motion Detection Settings, where user can configure 3 ways how FM36YX will detect stopped movement, and change its working mode;
- Static navigation settings, where user can turn static navigation on or off;
- Records Settings, where user can enable or disable records when GPS is not available (no time synchronization);
- GNSS Settings, where user can choose satellite system and GNSS FIX Timeout Time (if after timeout there will not be synchronized time, it will be synchronized via NTP server);
- **Ignition Settings:**
 - Ignition Source - sets ignition triggered functionalities to be triggered by:
 - Power Voltage (if voltage is between High Voltage Level and Low Voltage Level the ignition is considered to be turned on);
 - Digital Input (DIN1 ON - ignition on, DIN1 OFF - ignition off);
 - Movement (if accelerometer/movement sensor detects movement then ignition is on, if movement stops - ignition is off).
 - Ignition Detection:
 - Manual - user manually selects Power Voltage range;
 - Automatic - automatically detect Power Voltage change.

Stop Detection Source	Vehicle on Stop mode	Vehicle Moving mode
Ignition (recommended)	If ignition (configured Ignition Source) is logic low	If ignition (configured Ignition Source) is logic high
Msensor (movement sensor)	Internal movement sensor does not detect movement	Internal movement sensor detects movement
GPS	GNSS fix is available and vehicle speed is lower than 5 km/h While GNSS fix is unavailable, Object Motion Detection Settings are working like in Msensor mode	GNSS fix is available and vehicle speed is higher than 5 km/h



Static Navigation Mode

Static Navigation Mode is a filter, which filters out track jumps when the object is stationary. If Static navigation filter is disabled, it will apply no changes on GPS data. If Static navigation filter is enabled, it will filter changes in GPS position if no movement is detected (depends on Object Motion Detection Settings). It allows filtering GPS jumps when object is parked (is not moving) and GPS position is still traced.

Automatic Ignition detection:

- When device starts, it determines voltage system it is plugged in. It is done by checking external power voltage - if voltage is between 5 - 8 V, it is 6 V system (ignition is on when power voltage is between 6,1 - 8 V). If voltage is between 8 - 16 V, it is 12 V system (ignition is on when voltage is between 13,2 - 16 V). If voltage is between 16 - 32 V, it is 24 V system (ignition is detected when voltage is between 27 - 32 V).
- If ignition was determined as ON and voltage dropped below the stated threshold, then device starts counting a configured timeout. Only after timeout runs out ignition is determined to be at OFF state. If power voltage goes back to high level before timeout runs out, ignition state should not change.