

# GB 060 515 F – Installation and Service of the Fleet Management Unit

The set of GB 060 515 F unit is intended for installation in vehicles integrated in the tracking and supervision system – Transis Tracker. The GB 060 515 unit includes GSM and GPS modules and provides on-line transmission of current position and journey record to the superior server using the GPRS connection. The unit is also capable of the following features: immobilizer, alarm pager, voice communication with dispatch, possibility to safely stopping the vehicle using SMS command, GPS receiver for navigation via connected PDA.

## 1. Basic Description of System

Activation of door contact will “wake” the unit up from the sleep mode for period of 10 minutes. During this time the chip-reader will be active, the unit will connect to the internet via GPRS and start sending ID packets with location to the superior server. Applying the chip to the reader is followed by a short beep of the alarm siren – the driver is identified, immobilization relay will be closed. Starting the ignition key starts recording of the journey into unit’s memory. The position will be recorded every 200 m but not more than once per minute. Switching ignition off ends recording of journey and logs the driver chip off, the superior server will start loading the journey record from unit’s memory, immobilization relay will open after one minute and subsequently the unit will switch into sleep mode and stop sending the ID packets.

If there is no chip applied before starting the ignition then the alarm siren will start a continuous sound for 20 seconds – then it is still possible to apply the chip during this period and the siren will stop. After 20 seconds the unit will start recording journey without identification of the driver.

If the Dallas chips are not used for driver identification, there is no need to connect the door contact.

## 2. Additional Features

**Journey type switch:** for identification of work or private journey. Switching the type in the middle of journey will divide the journey into two. Switching during the first five minutes will mark the whole journey by the selected type.

**Alarm feature:** activation of alarm input will cause sending alarm SMS message to predefined phone number or start alarm phone call with listening-in.

**Emergency button:** pressing this button will send emergency SMS to predefined phone number or start emergency phone call with listening-in. This button can also be used for simple voice communication with dispatch.

**Safe stopping of vehicle using SMS:** sending SMS command “pin STOP” will launch action of safe stopping – vehicle will be stopped only when speed drop below 10 km/h during 30 min after receiving the command. The confirmation SMS message will be sent in case of successful stopping or unsuccessful attempt to phone number “tel5” from the unit’s phone list.

**Navigation:** unit can be used as GPS receiver for navigation software in connected laptop or PDA.

**SMS request for location:** for SMS command “pin GPSD” the unit will reply to sender’s number with SMS message with current geographic coordinates. These coordinates then can be shown on a map - for example using the localization service on our website [www.levelna.cz](http://www.levelna.cz).

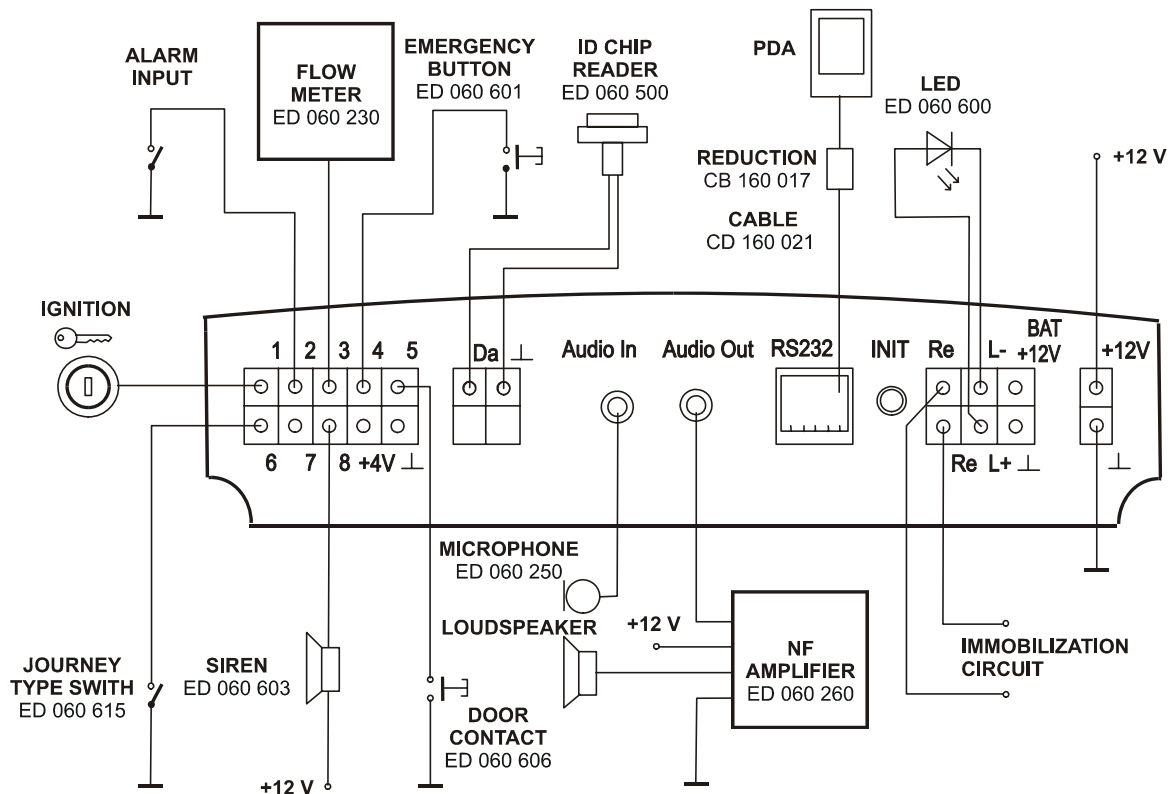
## 3. List of Standard Components of the “F” Set

Code	Description
GB 060 515	GSM/GPRS unit
ED 001 002	GSM antenna flat – to be glued on glass or plastic
ED 002 002	GPS antenna active with SMB connector
CB 161 011	Connector with 10 pins, 10 cables 2 m long with connected pins
CB 161 002	Connector with 2 pins, 2 cables 2 m long with connected pins
CB 161 000	Installation set

## Optional Accessories

Code	Description		
ED 060 606	Door contact	Set with Dallas chips	Set with Dallas chips and immobilizer
CB 161 004	Connector with 4 pins, 4 cables 2 m long with connected pins		
ED 060 500	ID key reader with 30 cm cable		
ED 060 550	ID key chip - 2 pcs		
ED 060 603	Alarm siren		
CB 161 006	Connector with 6 pins, 6 cables 2 m long with connected pins	Set with LED	
ED 060 600	LED		
ED 060 601	Emergency button		
ED 060 615	Journey type switch		
ED 060 250	Microphone		
ED 060 260	Loud speaker with amplifier		
CB 160 021	RS 232 data cable		
CB 160 017	Data cable reduction for PDA		
ED 060 230	Double-chamber flow-meter (diesel) and installation set		

## 4. Connection Description



## 5. Connection Description

- 1 Ignition key ("15") +12 V when vehicle ignition on
- 2 Alarm output – reacts to connection with earth
- 3 Flow-meter sensor input
- 4 Emergency button input – reacts to connection with earth
- 5 Door contact input – must be connected when driver ID using Dallas chip or immobilizer is used in the system

- 6 Journey type switch input – signals private journey in the system when there's connection with earth
- 8 Alarm siren output – siren is installed when system uses driver ID using Dallas chip – short beep signalizes recognition of ID chip, permanent beep signalizes that Dallas chip was not applied to the reader before starting ignition
- Da White cable of Dallas chip reader, ⊥ - brown cable of Dallas chip reader
- Audio In Microphone audio input
- Audio Out Audio output pro amplifier
- RS 232 Serial port for connecting PC (for configuration) or for PDA connector (for navigation)
- INIT Initialization button – short press launches reset, short press when power supply disconnected turns the unit off, press longer than 5 sec launches initialization – all settings will be deleted and unit will go into default configuration
- RE Immobilization relay output (max. 5 A)
- L/L+ Signal LED
- PWR +12V/ ⊥ 12 V unit power supply
- GSM antenna Antenna is equipped with self-adhesive tape for mounting. Do not place the antenna on metal surface.
- GPS antenna Antenna must be installed in horizontal position with the best possible view of the sky. There must be no metal objects obstructing the view.

## 6. Inserting the SIM Card

Before inserting a SIM card disable the PIN and enable the GPRS data services from the GSM carrier. SIM card should be inserted in the holder that ejects by pressing the yellow pin with suitable object.

## 7. Settings via SMS

Settings can be carried out from any mobile phone. There SMS must be sent to phone number of SIM card inserted in the unit installed in the vehicle. Unit will always confirm execution of SMS command by a message sent back to the sender.

### Each configuration SMS must contain:

- PIN four-digit security code (manufacturer's default value is set to 1234)
- Space space between PIN and command
- COMMAND name of command for required configuration modification
- Space space between command and parameter
- PARAMETER name of required feature

SMS command text	Command description
pin PIN x	<b>PIN change</b> x= new PIN
pin APN x	<b>Carrier's APN settings</b> – configuration according to the carrier's settings and SIM card type in the unit, x= APN name (e.g. T-mobile CZ: internet.t-mobile.cz)
pin LOGN x	<b>APN login name settings</b> x= login name
pin LOGP x	<b>APN login password settings</b> x= password
pin TEL1 x	<b>Alarm SMS receiver settings</b> x= receiver's phone number
pin TEL2 x	<b>Alarm call receiver settings</b> x= receiver's phone number
pin TEL3 x	<b>Emergency SMS receiver settings</b> x= receiver's phone number
pin TEL4 x	<b>Emergency call receiver settings</b> x= receiver's phone number
pin TEL5 x	<b>Status info SMS receiver settings</b> x= receiver's phone number, receiver will be informed about power supply disconnection, backup battery flat status, low prepaid credit value, full internal memory, stopping the vehicle.
pin CREDITCMD x	<b>Settings of USSD code for prepaid credit inquiry</b> x= code (e.g. T-mobile CZ: *101#)
pin CREDITLOW x	<b>Low prepaid credit level settings</b> x= credit value

## 8. Settings Using the Control Panel Software

When the immobilization or driver ID features using the Dallas chip are used, these chips must be added to the system, named and connected with particular action in the Control Panel software.

After installing the Control Panel and connecting to the unit, read the configuration from the unit into PC (menu *Configuration – Read from GB 060*). Apply the Dallas chip to the reader and have the chip found (menu *Insert – Find* – dialog box: *Search* and then *Add*). Change name of the chip – for example to name of driver (up to eight characters without diacritic marks), open menu item “*Action when logged in*” and select KEY1ON from list of actions. Repeat the same procedure for second chip – only for “*Action when logged in*” select KEY2ON. When finished save this configuration into the unit (menu *Configuration – Save into GB 060*)

The Control Panel software can also be used for APN settings, phone numbers, prepaid credit inquiry code a low level of credit.

## 9. Technical Support

The Control Panel and documentation with closer description of all the features of GB 060 5xx unit can be downloaded in latest version from manufacturer’s website at [www.levelna.cz](http://www.levelna.cz).

## 10. Technical parameters

Unit dimensions	144 × 44 × 88 mm
Rated power supply voltage	12 V DC
Power consumption in idle mode	< 20 mA
Maximum power input	0,5 A at 12 V
GSM	900 / 1800 MHz
Report file memory	about 10 000 GPS records
Temperature range GSM module	-25 °C to +65 °C*
Temperature range for rest of unit	-40 °C to +85 °C

\* When temperature reaches out of this range the GSM connection can stop working and will limit functionality of the whole unit.