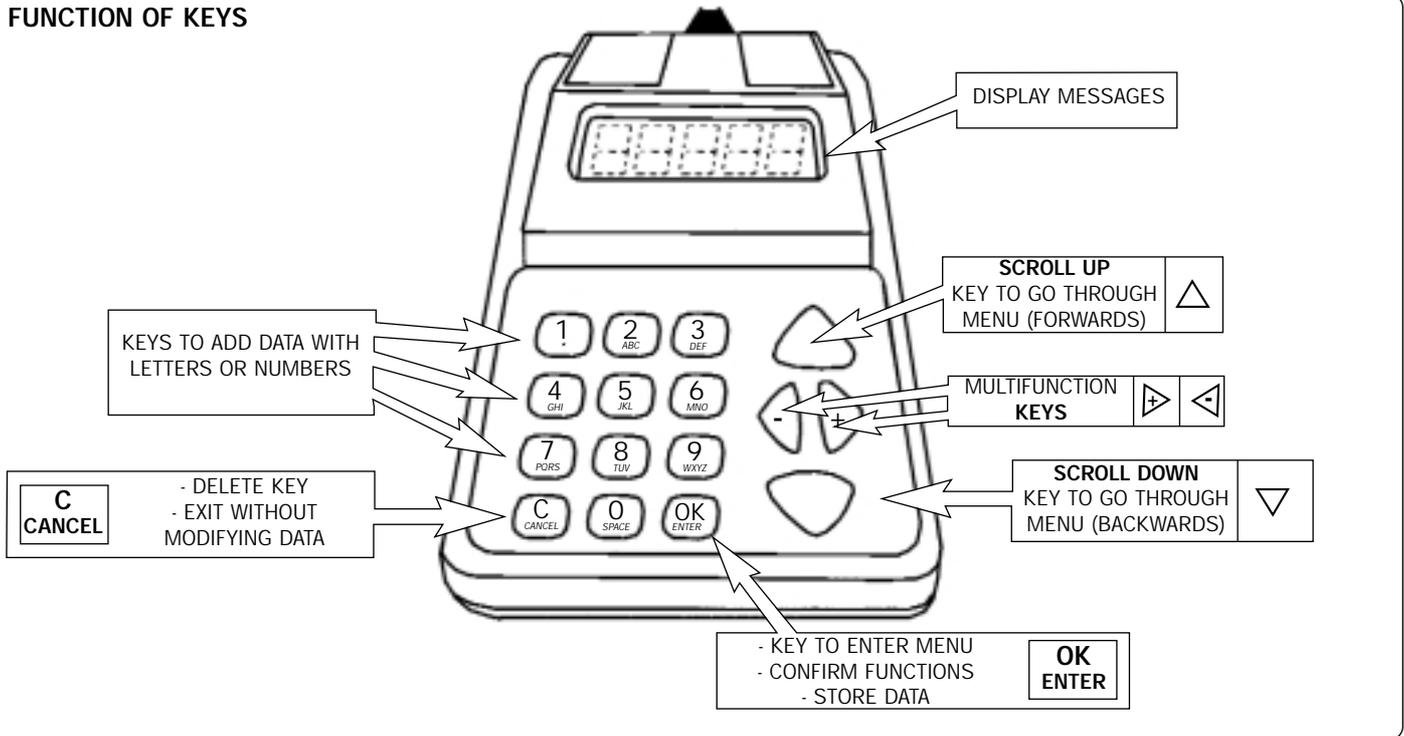


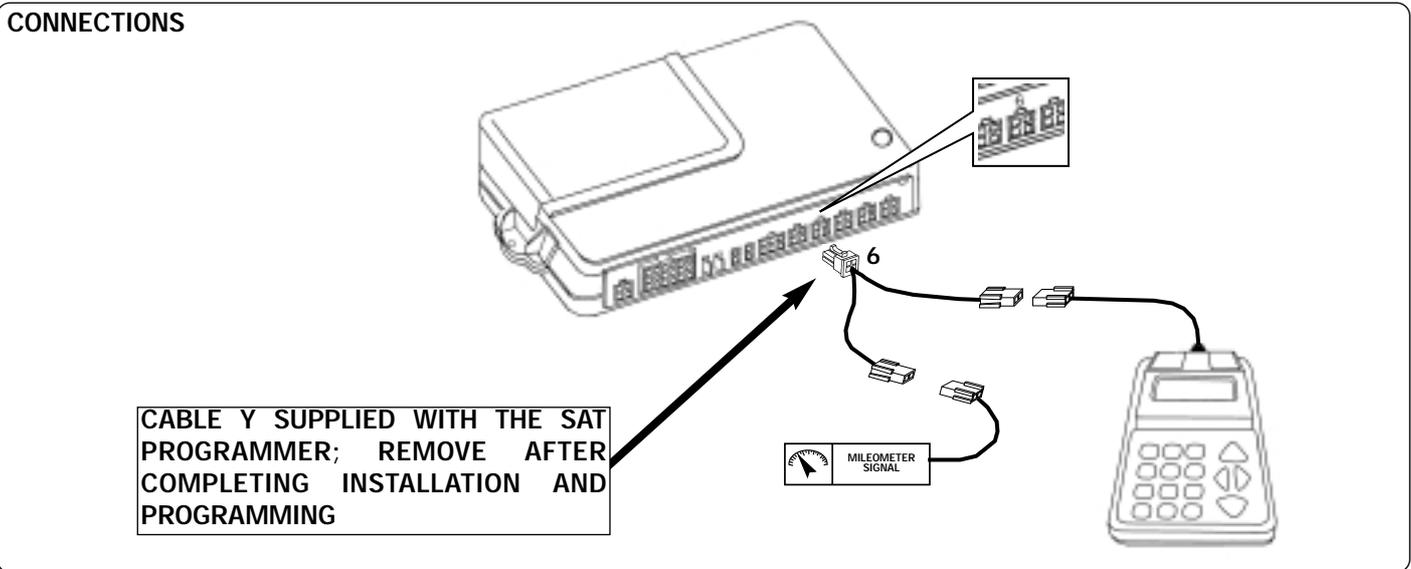
# SAT PROGRAMMER INSTALLER'S MANUAL

Rel.2.02

## FUNCTION OF KEYS



## CONNECTIONS



## TECHNICAL SPECIFICATIONS OF THE SAT PROGRAMMER

Power supply voltage..... 12 VDC  
 Temperature..... -30°C +85°C  
 Consumption..... <100 mA

## STEP 1

Fill out the "CONFIGURATION AND TEST REQUEST FORM" which you will find in the peripheral unit box and send it by fax to the Customer service centre.

Set up the vehicle in such a way as to ensure access to all of the modules connected to the peripheral so that all alarm functions may be tested in conjunction with the service centre.

## STEP 2

### PRELIMINARY PROCEDURES FOR CONTROLLING THE SYSTEM

In the initial stages of installation, it is essential to check two of the principal components to ensure that the satellite system works correctly.

The components to be checked are the GSM module and the GPS receiver. In particular, it must be checked that the position of their relative antennas guarantees that the parts in question will always be able to work. Follow the instructions in the CHECK GSM STATUS and CHECK GPS STATUS menus to select the best positions of the antennas on the vehicle. These procedures must always be done outside, at a distance from any buildings that could result in areas of shade or prevent the above-mentioned parts from working.

### PROCEDURE

After the GSM antenna and the GPS antenna have been placed in the best position to guarantee optimum performance, complete connections for the test:

- connect the Sat Programmer to output n°6 on the peripheral unit using the "y" cable supplied in the box(diagram page 1)
- after the GPS antenna connector has been connected to its outlet on the GPS receiver, connect the connector on the GPS receiver to output n° 5 on the peripheral unit
- connect the GSM antenna to the peripheral unit's external connector.
- after completing the connections illustrated in the installation manual, connect the connector on the main cable (16 pin) to the peripheral unit;
- reconnect the vehicle's battery

The following initial message appears on the SAT Programmer's display:

SAT OK  
in maintenance

The menus can be displayed by pressing the  $\triangle$   $\nabla$  arrows on the Sat Programmer (menus can be displayed with peripheral unit in maintenance status):

I/O Display ?	Activate Funct. password ?	Activate Factory password?	Call forwarding disable ?
GPS Position?	SN (read only): 000000000000	Temporary disab. Battery alarm?	
check GSM status ?	Battery Check?	NUMBER PRIVACY mode Enable ?	
check GPS status ?	Listen to voice messages?	NUMBER PRIVACY mode Disable ?	
check GSM credit?	software releasae 2.02.1	ID (read only) 00000	

### Checking the GPS antenna's position

Use the  $\triangle$   $\nabla$  arrows to locate the **check GPS status ?** menu and press the **OK ENTER** key to confirm selection. A second display appears with the situation of the visible satellites:

■ ..... 1sv  
fix not avail. N°

The data shown on the display indicate:

■ ..... the number of satellites visible and their intensity

For example: ..... 0 satellites visible

■ ..... 1 satellite visible

■ ■ ..... 2 satellites visible (the first one is the strongest)

**1sv** = indicates the number of visible satellites (number can vary from 0 to 12)

**fix not avail** = indicates that the geographical coordinates of the position have not been calculated. This indication normally corresponds to the first time the peripheral unit is switched on when the satellites are not yet visible,

**current fix** = indicates that the visible satellites are able to calculate the position of the vehicle and the position data is constantly updated,

**previous fix** = indication given after **current fix**. In this case, the system has already acquired the coordinates that are not updated as the vehicle is in an area of shade and no longer receives signals from the satellites,  
**No GPS** = indicates that the GPS receiver has probably been disconnected or that there is a fault,  
**N°** = indication given in seconds of the time passed since the selection of the **Check GPS status?** function  
The time required to acquire the minimum satellites for the first calculation of position, in conditions of visible sky (meaning there are no obstacles near the vehicle, e.g. very high buildings), is around 300 seconds.

The timer goes back to zero every time you press the OK key, and thus exit check mode, and starts again when you access the function again. The timer stops when it reaches 999 and is not updated. The timer is not a critical factor for acquiring satellites but is just an indication of how much time has passed.

**Possible problems when acquiring satellites**

Vehicle Position	N° Satellites	Indication on the display	Time passed	Type of fix	Notes
Open sky	From 0 to 1	■ . . . . .	600 sec.	No fix available	Move GPS antenna
Garage	From 0 to 1	■ . . . . .	600 sec.	No fix available	Move vehicle outside
Open sky	0	=====	always	No GPS	Check connection of GPS receiver and control unit
Open sky	0	. . . . .	always	No fix available or previous Fix	Check connection of GPS antenna to the receiver

**CHECKING THE GSM ANTENNA'S POSITION**

Before checking the GSM signal, a SIM phone card must be inserted into the dedicated slot. This must not have an access PIN number, message box service or incoming call transfer service.

The SAT Programmer indicates if no SIMCARD is present with the following message:

**ERROR: SIM CARD NOT FOUND !!** The telephone continues its attempts to locate the SIM Card, which is automatically recognised as soon as it is inserted in the appropriate slot.

The SAT Programmer can be used to eliminate the PIN if it has not already been deleted from the SIM Card. The peripheral unit recognises that the PIN is present and allows it to be neutralised:

**ERROR: SIM CARD PIN REQUEST !!**, this display alternates with **[+] PIN insert [-] Restart**

Select the + key on the Sat Programmer, the display changes to:

**INSERT PIN \*\*\*\*\*** Key in the correct PIN and press OK to confirm. If you make a mistake, press C to repeat.

If the PIN is correct, the SAT Programmer first displays: **Function active Please wait**

Then: **CODE OK PIN DISABLED**, and then the telephone is automatically started.

If the PIN is not correct, the Sat Programmer displays **PASSWORD NOT ACCEPTED**

Please remember that the SIM will be blocked if three attempts are made to key in a false PIN and also that the PUK must be keyed in after the third attempt as per the following display:

**ERROR SIM CARD REQUIRES PUK**, this display alternates with **[+] insert PUK [-] restart**

Select the + key on the Sat Programmer, the display changes to:

**INSERT PUK \*\*\*\*\*** If the PUK is correct, the following display appears: **CODE OK PIN DISABLED**

When the correct PUK is keyed in, the PIN code is automatically changed to '1111' and consequently neutralised. After the correct PUK is keyed in, the display automatically changes over to show the status of the GSM signal. If this is not

visible, use the  $\Delta$   $\nabla$  arrows to locate the **GSM status verify?** menu and press the **OK ENTER** key to confirm selection. A second display appears which shows the status of the GSM signal:

**GSM SiGNAL n%**  
 ■■■■■■■■ = = = =

The data provided indicates:

**n %** = the percentage of GSM signal that is available. This is the effective signal that is available and should not be compared to the signal shown on the display of a mobile phone as this only gives an approximate reading.

**■■■■■ = =** = chart giving a visual indication of the available GSM signal.

If the percentage amount and the chart indicate a very low signal, it is important to locate the causes preventing good reception. These may be:

- antenna is in critical position
- antenna is not connected to the outlet on the control unit
- antenna cable is damage or partially broken
- the vehicle is located in a garage made of reinforced concrete
- low signal caused by poor coverage of the phone company (sometimes the signal from one phone company is poor whilst that of another is good).

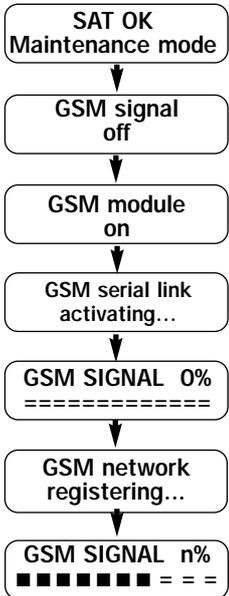
If the check is being made after the initial switch on, the Sat Programmer display could say "GSM module in low consumption mode".

Press the **▶** key to activate the module and display the intensity of the signal.

**RESET GSM MODULE:** press the **◀** key on the SAT Programmer to reset the telephone's GSM module.

**Indications after the satellite peripheral unit is switched on for the first time:**

As the peripheral unit is switched on for the first time, the Sat Programmer **automatically** displays the acquisition of the GSM signal. The displays appear in the following sequence:



### STEP 3

#### SYSTEM CHECK AND PROCEDURES FOR PROGRAMMING.

It is possible to check that the system was installed correctly after the initial checks prior to actually completing the installation of the system. Further to these checks, which can be carried out with the peripheral unit in maintenance mode, follow the Installer Level Entry Procedure to program the system.

#### SYSTEM CHECK.

Make sure that the system is powered and that all the connectors of the external appliances are connected up correctly. Also make sure that the SIM phone card is inserted in the correct slot. Check the status of the GPS and GSM signal again, as previously described.

#### DISPLAY OF INPUTS

Use the  $\triangle$   $\nabla$  arrows to locate the **I/O Display ?** menu and press the **OK ENTER** key to confirm selection. A second display appears with the status of the inputs. The first display that appears is as follows:

----- R -----

**R** indicates that the peripheral unit is under the installer's control.

The display is updated every time the peripheral unit receives a stimulus, for example:

- **Switch the dashboard on (+15)** the display is updated:

----- R ----- K --  
dashboard on

**K** indicates that the ignition key is inserted and operational

- **Switch the dashboard off** the display is updated

----- R -----  
dashboard off

The same tests can also be made with the other available input lines:

SMHVARYXDT12BKGC  
dashboard off

where the letters, in combination with the descriptions, indicate:

Letter	If the letter is shown on the Display	If the letter is not shown on the Display	Letter	If the letter is shown on the Display	If the letter is not shown on the Display
S	Signals active	Signals off	X	Crash sensor triggered	Crash sensor at rest
M	Peripheral unit is immobilised	Peripheral unit is not immobilised	D	Doors open	Doors closed
H	Peripheral unit is active	Peripheral unit is neutralised	T	Boot open	Boot closed
V	Hands-free active	Hands-free at rest	1	VOL1 active	VOL1 at rest
A	Peripheral unit enabled	Peripheral unit in maintenance mode	2	VOL2 active	VOL2 at rest
R	Installer control	Service Centre control	B	Bonnet open	Bonnet closed
Y	Transport mode active	Transport mode neutralised	K	Dashboard on	Dashboard off
			G	Window open	Window closed
			C	Sunroof open	Sunroof closed

**NB:** the information displayed is updated after the status of an input changes. No information is displayed for the first input after the check function.

The consecutive sequence with the variation of several inputs makes it possible to display the last variation alone. The previous ones are not displayed unless the variation in question is repeated.

Variation in the crash sensor is not immediate as it is delayed for a few seconds. Press the **OK ENTER** key to exit the function.

#### GPS POSITION

If the peripheral unit can see the sky correctly and more than 3 satellites are visible, which guarantee the establishment of the **Current Fix**, it is possible to interrogate the **GPS Position** function to display the geographical coordinates of the vehicle's position.

Use the  $\triangle$   $\nabla$  arrows to locate the **GPS Position** menu and press the **OK ENTER** key to confirm selection.

A second display appears with the geographical coordinates of the vehicle's position:

Ok 45'46'05" N  
008'48'52" E [OK]

The geographical coordinates are set by the manufacturer in degrees, minutes and seconds and are distinguished by Latitude and Longitude. (Warning: check what type of coordinates are accepted if they are to be inserted in map software. Function 384 can be used to set the display format of the coordinates to DECIMAL or NMEA). It is normal that the display of the minutes varies during the display of the position data unless this variation is +/- 2 units.

**Ok** = indicates that updated geographical coordinates are currently being received.

If this symbol is absent, it indicates that the coordinates are not updated and are previous to the reading. If this symbol is absent it does not mean there are problems with reception. Any doubt must be cleared up by checking with the: "**Check GPS Status**" menu.

**45'46'05" N** = indicates the Latitude of the geographical position which is N = North, if you are above the equator, and S = South, if you are below the equator.

**008'48'52" E** = indicates the Longitude of the geographical position which is E = east, if you are to the right of the Greenwich meridian, and W = west, if you are to the left of the Greenwich meridian.

Press the  key to exit the function.

### BATTERIES CHECK

The peripheral unit provides information on the status of the vehicle's battery and its own internal battery.

Use the   arrows to locate the  menu and press the  key to confirm selection.

A second display appears with the status of the batteries:

  
Int: 7.2V +23°C  
Ext:14.5V ok [OK]

The data should be read as follows:

**Int : voltage in V** = the internal battery's voltage,

**+ temperature in °C** = the internal temperature of the peripheral unit,

**Ext : voltage in V** = the external battery's voltage,

**ok** = indicates that the external battery voltage is correct

**off** together with 0.0V indicates that the vehicle battery is disconnected

**nok** together with a voltage reading below 10.0V indicates that the voltage of the vehicle's battery is too low to safeguard the correct running of the system.

**[OK]** = indicates which key to press to exit the display.

Flashing symbols appear next to the **Int: voltage in V** which indicate if the internal battery charging system is operating and if it is charging the internal battery.

The internal battery is only charged if:

◆ external battery voltage is above 10V

◆ external temperature, shown on the display is above 0°C and below +80°C

◆ +15 is ON.

The flashing symbols, with +15 on, should be read as follows:

= internal battery charged and system at rest

= internal battery is flat and system in rapid recharge mode

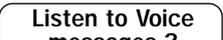
= internal battery sufficiently charged and internal recharge system in slow recharge mode.

If +15 is not on, only the  symbol flashes regardless of the level of internal battery voltage displayed. Press the

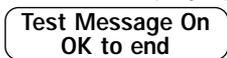
 key to exit the function.

### LISTENING TO VOICEBOX MESSAGES

The system is provided with an internal synthesizer that reproduces voice messages to inform the end-user of the causes of an alarm, request or emergency situation which are listened to via the system's hands-free speaker.

Use the   arrows to locate the  menu and press the  key to confirm selection.

A second display appears with the following message:

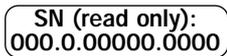


Listen to the messages via the hands-free speaker. Press the  key to interrupt the sequence.

### SERIAL NUMBER

The peripheral unit's Serial Number can be consulted via the Sat Programmer. This makes it possible to check the serial number at any time for communications with the Service Centre or the Manufacturer as regards assistance or updates.

The display shows:



## STEP 4

### ACCESSING PROGRAMMING

To start the programming of the satellite peripheral unit, you must enter the system at **"Installer Level"** as per the following procedure.

The procedure is described starting at **"Maintenance Level"** as this is the factory setting.

The programming steps are very important to ensure the system operates correctly and great care and attention must be paid when they are being carried out.

To access **"Installer Level"**, you must reach user level by means of the following procedure:

After the peripheral unit has been switched on for the first time, the display appears as follows.



Press the **OK ENTER** key to confirm selection and then **SAT OK In maintenance** is displayed.

Use the  $\triangle$   $\nabla$  keys to select the

**Activate Funct. password ?** display and press the **OK ENTER** key to confirm selection.

There next appears the display with:

**PASSWORD ACTIVE! Insert password** press key **3** five times and confirm with the next display

**PASSWORD OK** and then **Functions active Select function:** Key in the number **6 0 0** and confirm by pressing the **OK ENTER** key

The display appears with:

**Activate Instal. password ?** confirm by pressing the **OK ENTER** key and continue

**PASSWORD ACTIVE! Insert password** press key **4** five times and confirm with the **OK ENTER** key.

The next display confirms that you have reached installer level as follows:

**Installer OK Select function:**

It is now possible to decide how to proceed with the programming of the peripheral unit, but in both cases, it is essential to take great care with programming. . The methods for programming are as follows:

- use the  $\triangle$   $\nabla$  keys to select the function (or functions) of interest and then press the **OK ENTER** key to access the selected function,

- call up the function of interest by keying in its corresponding number and then press the **OK ENTER** key to access the selected function.

The table below lists the functions, which are available for the installer:

The table shows the function's number, the symbols that appear on the display, the factory setting (if any) and a short comment by way of explanation.

Function N°	Symbols on the display	Factory setting	Description
200	Unlock Code >> *****	11111	The code used by the end-user for disarming
201	Anticarjack Code >> *****	22222	The code used by the end-user in case of car jacking
202	Functions Enable Code >> *****	33333	The code used to access programming functions
205	Phonebook Edit Index?	Must be programmed in	The menu for adding phone numbers
206	SN (read only) 00000000000000	-	The product's serial number
207	Software release x.xx.xx	-	Release of factory set software
211	Temporary disab. Battery alarm?	-	If selected, temporarily disables the alarm for disconnection of battery (for one arming cycle)
212	NUMBER PRIVACY mode Enable ?	-	If selected, does not let your number be displayed in case of calls
213	NUMBER PRIVACY mode Disable ?	-	If selected, lets your number be displayed in case of calls
214	ID (read only) 00000	-	Recognises the identification number of the peripheral unit memorised by the Service Centre

215	Call forwarding disable	-	Allows call.transfer services to be disabled
300	Installer Code >> 44444	44444	The code for access at your level
302	Indicators Com. DRIVE LAMPS	DRIVE LAMPS	Indicates if indicators are controlled directly or not
307	Vehc. Plate (8 chs.)	Must be programmed in	Stores number of vehicle's numberplate
323	Siren sound on alarm ALTERNATE	Alternate	How an external horn is controlled, if any
341	GSM Call activ. delay 10	10 seconds	Time between cause and call (can be set between 0 and 254 secs)
350	Call List editor SPEED WARNING	Must be programmed in	Calls to activate if speed limit is exceeded
351	Call List editor LOW BATTERY	Must be programmed in	Calls to activate if car battery is flat
352	Call List editor LOW CREDIT	Must be programmed in Only with prepaid SIM	Calls to activate if prepaid SIM card credit is insufficient
353	Call List editor CAR ALARM	Must be programmed in	Calls to activate if the car alarm sounds
357	Call List editor PERIODIC	Programmed in by Service Centre	Calls to activate periodically with programmed period
358	Listen to voice messages?	-	Repeats a synthesized test message via hands-free
362	VOL 1 input pol. POSITIVE	Positive	Programmes in the polarity of the VOL1 input
364	Hands-free set Present? YES	YES	Programmes in the presence of the hands-free kit
365	Check GSM Status	-	Checks the status of the GSM module
366	Check GPS Status	-	Checks the status of the GPS module
367	Check GSM Credit	-	Checks the remaining credit of prepaid SIM phone cards
368	Speedometer Calibration?	Must be calibrated	Memorises the frequency of the speedometer signal
369	GPS Speed Verify ?	Must be checked	Displays the tachometer speed and GPS speed
370	Battery Check ?	-	Displays the status of the internal and vehicle batteries
371	Credit warning at 50 units	50 units	Minimum limit for remaining value of prepaid SIM phone cards
374	SC SMS Number	Already stored or to be stored by SIM	Indicates the number of the phone company for SMS messages
375	Command Test #1 ?	-	For checking horn output and blinker connections and immobiliser
378	Electronic keys in memory:	0	0Displays how many electronic keys are stored in the memory of the peripheral unit
381	Update data format ?		Only for use by technical service
382	Code request at doors open ? NO	NO	Activates request for unblock code when door is opened
383	Ignition block mode: DOUBLE	DOUBLE	Activates aux relay even if not blocked by remote. Set 'single' if fault with check panel
384	Co-ordinate mode DEGREE.MIN.SEC	DEGREE.MIN.SEC	Sets format of coordinates via SMS to user
401	Outgoing Calls	ENABLED	If disabled, only calls to numbers in phonebook can be made after activation
429	Extern alarm immunity 5 min	5 minutes	Delay after placing CAR ALARM calls if VOL1 is active

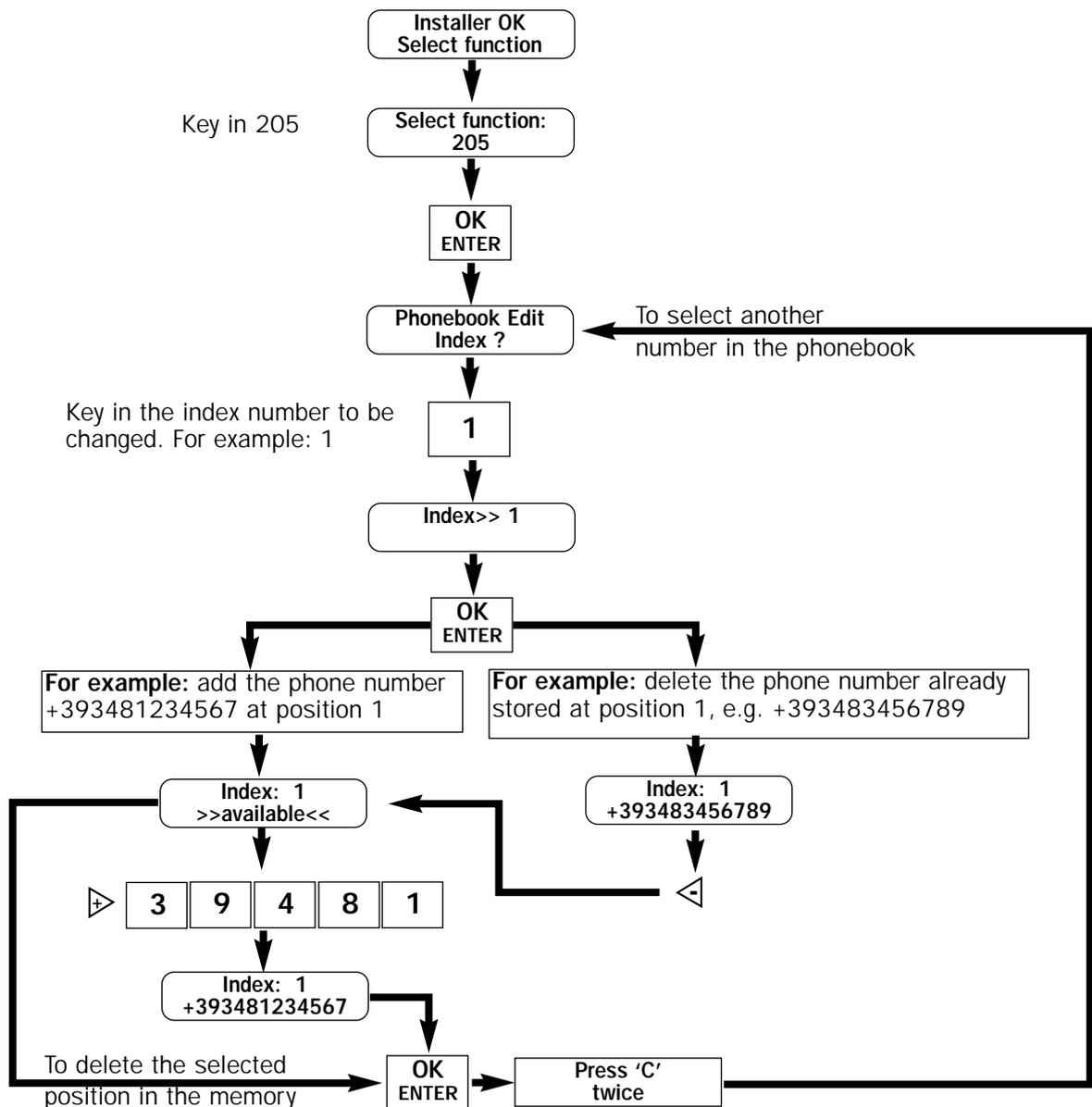
430	maintenance mode Enable ?	-	Puts the peripheral unit into maintenance mode
431	maintenance mode Disable ?	-	Takes the peripheral unit out of maintenance mode
439	Speed limit 31= 310Kmh.	310 Kmh	Sets the maximum speed: the peripheral unit calls if this is exceeded
446	GPS Position?	-	Displays the geographical coordinates of the vehicle's position
447	Display I/O	-	Displays the status of the inputs and outputs
460	Fix UTC DateTime 20may02 10:00:00		Displays Greenwich time as reference for reception of GPS signal
604	Activate Factory password?		Only for use by technical service
605	Memorise Electronic Keys ?	-	Function for storing electronic keys
606	Add Electronic Keys ?	-	Adds extra keys in addition to those already stored

Some of the most important programming functions are illustrated below and the simpler and less significant steps are described in the written comments.

The keypad is used to carry out all the programming together with the use of the  $\Delta$   $\nabla$  arrow keys and the  $\triangleleft$   $\triangleright$  function modification keys.

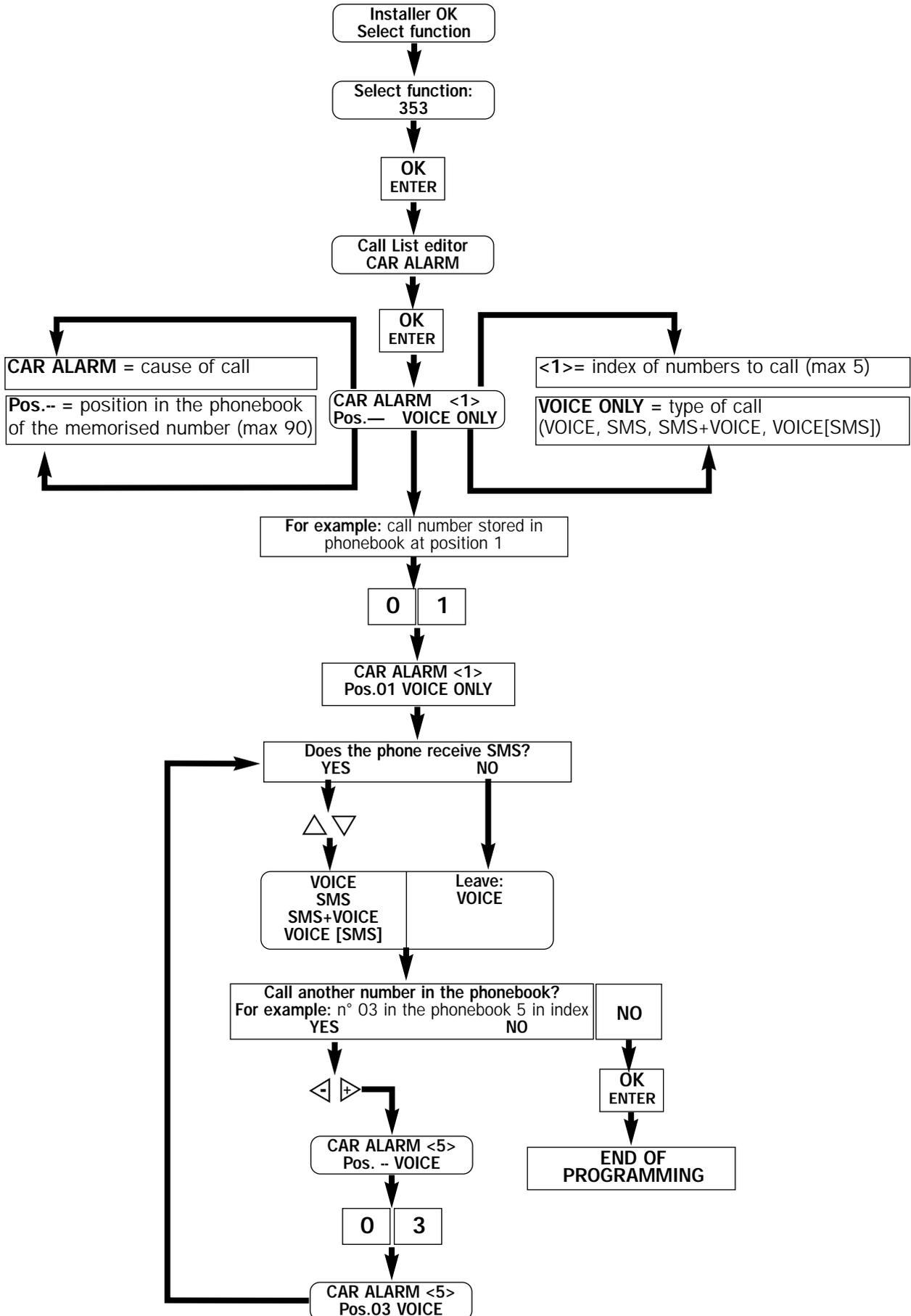
Refer to the pertinent section at the end of the manual on how to exit programming mode.

#### PROGRAMMING PHONE NUMBERS IN THE SIM CARD'S PHONEBOOK - FUNCTION 205

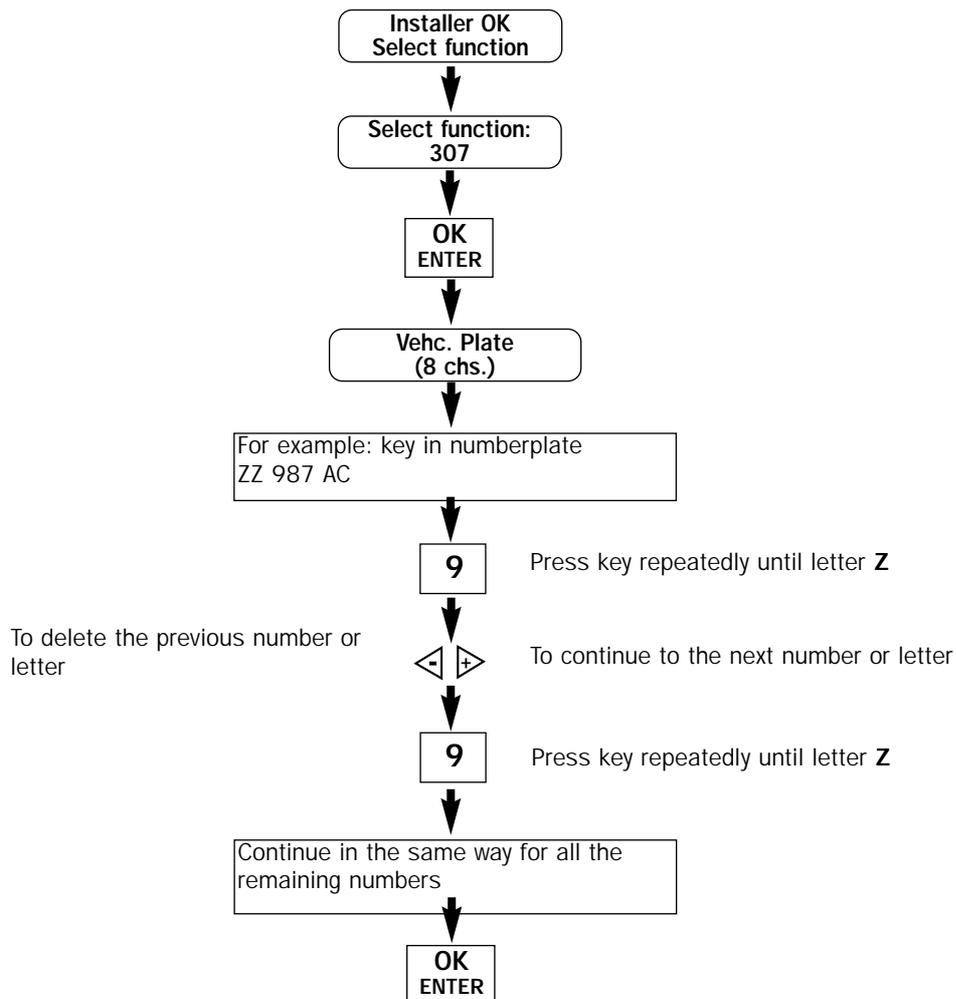


**PROGRAMMING THE CALLS LIST - FUNCTIONS FROM 342 TO 357:**

For example: List of Car Alarm calls (calls to the end user due to external alarm)



## PROGRAMMING IN OR MODIFYING VEHICLE'S NUMBERPLATE (MAXIMUM OF 8 DIGITS) – FUNCTION 307



### CANCEL CALL TRANSFER – FUNCTION 215

All call transfers can be disabled via this function (deviations, answering machines, etc.) without removing the SIM card from its slot. Select the function (215) and press OK. Wait for the message confirming cancellation. From now on, all services available with the SIM card are disabled.

### PROGRAMMING IN THE HORN SOUND – FUNCTION 323

Select function n°323 using the keypad, press OK, select the type of sound (ALTERNATED –CONTINUOUS –NONE) using keys + and -, confirm selection with the OK key, or press the C key to keep the previous setting.

### PROGRAMMING IN THE TYPE OF CONTROL FOR THE DIRECTION INDICATORS – FUNCTION 302

Select function n°302 using the keypad, press OK, select the type of control (DRIVE LAMPS, DRIVE BLINKER) using keys + and -, confirm selection with the OK key, or press the C key to keep the previous setting.

### SETTING THE ACCESS CODES – FUNCTIONS 200- 201-202-300

The access codes can be set, up to your own level (installer level).

The codes that refer to the:

- Disarm or unblocking code (function n° 200)
- Anti car-jack code (function n° 201)
- Unblock functions code (function n° 202)

can be changed but it is not possible to see the stored code.

Your own installer code is however visible.

For vehicles with a system that you did not install yourself, the Service Centre can set the default password so that the functions can be accessed.

#### Setting the Disarm - Anti car-jack - Unblock functions codes

Select the function required (n°200 – n°201 – n°202) , press OK, key in the new code directly on the keypad (it must have from 5 to 8 digits, numbers only), confirm selection with the OK key, or press the C key to keep the previous setting.

### Setting the new installer code

Select the function required (n°300), press OK, key in the new code directly on the keypad (it must have from 5 to 8 digits, numbers only), confirm selection with the OK key, or press the C key to keep the previous setting.

### Setting the polarity of the VOL1 input – function 362

The polarity of the VOL1 input can be altered.

The polarity of the VOL1 input must be set according to the type of signal (positive or negative) from the auxiliary output of an external alarm.

Select the function required (n°362), press OK, select the type of polarity (POSITIVE – NEGATIVE) with the + and - keys, confirm selection with the OK key, or press the C key to keep the previous setting.

### SETTING THE HANDS-FREE KIT - FUNCTION 364

It is possible to configure if a hands-free kit is connected or not.

Select the function required (n°364), press OK, use the + and - keys to confirm if there is a hands-free option or not (YES – NO), confirm selection with the OK key, or press the C key to keep the previous setting.

### CALIBRATION OF TACHOMETER – FUNCTION 368

With version 2.02, the tachometer calibration is done automatically. However, calibration as described below is recommended to check that the mileometer signal gives the correct reading.

**Calibration must be checked when the system has been completely connected up, powered and the vehicle is ready to go back on the road.**

After connecting the mileometer wire, the correct operating frequency for the vehicle's mileometer must be stored in the peripheral unit's memory.

Select the function required (n°368), press OK, start up the vehicle and reach the speed of 50 km/h, keep this speed steady and press OK to confirm.

If the tachometer is not connected up, the SAT Programmer's display will inform you:

**Tachometer not connected!!**

### CHECKING GPS SPEED- FUNCTION 369

It is possible to check the calibration of the tachometer speed, whether automatic or manual, by selecting the function required (n°369) and pressing OK. The following display appears

T=0 d=0 f=0  
G=0 d=0 Q=8

The measurements which are needed to check the setting are:

**T** = displays the speed in km/h of the tachometer wire.

**G** = displays the speed in km/h of the GPS.

**f** = the frequency of the tachometer signal.

If T or G shows three ??? instead of a number, it means that there is no connection with the tachometer or GPS

### SC SMS NUMBER – FUNCTION 374 (MUST ALWAYS BE CHECKED)

The number of the telephone company, that manages the SMS messages, can be set or changed. Usually, new SIM cards already have the Service Centre number for SMS messages stored in their memory and therefore this number need not be altered.

If this number has not already been stored, select the function required (n°374), press OK, use the keypad to key in the number taking care to add the international code, press OK to confirm.

### TESTING CONTROLS – FUNCTION 375

It is possible to check if the outputs have been correctly connected, before returning the vehicle to its owner.

Select the function required (n°375), press OK,

[ - ] HORNS/INDIC.  
[ + ] BL. RELAY [OK]

The symbols mean:

if the minus [ - ] key is pressed, the horns and direction indicators will be activated

if the plus [ + ] key is pressed, the ignition immobilisation relay and the relay for signalling immobilised status will be activated (the +15 must be given to get activation)

Press OK to exit this function.

### FUNCTION 378

Displays the number of electronic keys stored in the memory. Select the function required (n°378) and press OK.

### FUNCTION 380

Function 380 enables all the services present in the telephone SIM card to be deleted without having to remove it from its slot. These services (call transfer, answering machines etc.) must be disabled so that the peripheral unit can always respond directly to calls from the Service Centre.

Select the function required (n°380) and press OK. The function starts automatically and all the services activated in the SIM are disabled.

## **FUNCTION 381**

Reserved for use by technical service.

## **REQUEST CODE WHEN DOOR OPENED – FUNCTION 382**

This function makes it possible to extend the peripheral protection if an external alarm is not connected to the Vol.1 input. If the function is enabled ('yes'), the peripheral unit requires the unblock code to be keyed in either as soon as the car door has been opened, or otherwise when the +15 is turned on. In this case, switching on the instrument panel (+15) has no effect. Select the function required (n°382), press OK and use the +/- keys to select the YES/NO setting. Press OK to confirm selection or C to keep the previous setting.

## **IGNITION IMMOBILISATION – FUNCTION 383**

This function makes it possible to set how the 'signal immobilised status' relay will work when the peripheral unit is operational, after +15 has been turned on and the subsequent request for the 'unblock code'. If the 'DOUBLE' option has been selected, the peripheral unit will activate the 'blocked status' relay immediately after +15 has been turned on. If the 'SINGLE' option has been selected, the peripheral unit will not activate the 'blocked status' relay after +15 has been turned on but only if it receives the pertinent command from the Service Centre and provided the tachometer and/or GPS speed is less than 1 km/h. Select the function required (n°383), press OK and use the +/- keys to select the SINGLE/DOUBLE setting. Press OK to confirm selection or C to keep the previous setting.

## **FORMAT OF COORDINATES - FUNCTION 384**

The type of format for the GPS coordinates can be set so that it is possible to display the geographical coordinates (function 446) according to three different parameters:

- DEGREES – MINUTES – SECONDS: 44' 42' 47" N – 010' 36' 57" E
- DECIMAL: 44,7131 N – 010,6161 E
- NMEA: 44'42,79N – 010'36,96'E

The type of format is important if the user intends to use map-location software. The position will be sent with each SMS sent to the user and the numerical format keyed in can be used to trace the position of the vehicle using a digital map. Select the function required (n°384), press OK and use the +/- keys to select the DEGREES – MINS–SECS/DECIMAL/NMEA parameter. Press OK to confirm selection or C to keep the previous setting.

## **PRIVATE USE OF TELEPHONE - FUNCTION 401**

The function enables the telephone function to be used via the on-board keypad. If set as 'DISENABLED', the telephone will not work if full telephone numbers are keyed in. However all the numbers stored in the phone's memory can still be called (e.g. 01#) and 99# to call the Service Centre. Incoming calls are always possible. Select the function required (n°401), press OK and use the +/- keys to select the ENABLED/DISENABLED parameter. Press OK to confirm selection or C to keep the previous setting.

## **EXTERNAL ALARM IMMUNITY - FUNCTION 429**

The amount of time that the peripheral unit will disregard further triggers of an external alarm on the VOL1 input can be changed (from 1 to 15 minutes), if set. Zero indicates that no immunity time has been set.

We do not recommend you alter the factory setting.

Select the function required ( n°429 ), press OK, use the + and - keys to modify the setting, confirm selection with the OK key, or press the C key to keep the previous setting.

## **HOW TO ENTER MAINTENANCE MODE - FUNCTION 430**

When the vehicle is being serviced, or should the end-user specifically request it, the peripheral unit can be put into maintenance mode.

In this mode, the normal functions of the peripheral unit are temporarily neutralised and an alarm will not be triggered if the vehicle's battery is disconnected.

Select the function required (n°430), press OK. Maintenance mode is now operational.

## **HOW TO EXIT MAINTENANCE MODE - FUNCTION 431**

When the peripheral unit is in maintenance mode and servicing has been completed, or if the end-user requests it, normal operating mode can be restored.

Select the function required (n°431), press OK.

Maintenance mode is now neutralised.

## **SPEED LIMIT - FUNCTION 439**

If the end-user requests it, it is possible to set the speed limit for the vehicle: the peripheral unit will call the number specified by the end-user (the call is made if the limit is exceeded for at least consecutive 10 seconds).

The limit can be set from 10 to 310 Km/h.

Select the function required (n°439), press OK, use the + and - keys to select the speed, confirm selection with the OK key, or press the C key to keep the previous setting.

\*WARNING: Remember to inform the vehicle's owner that the peripheral unit will place a call and/or send a SMS to the numbers set in the phone book if the speed limit is exceeded. This will result in an increase in the usage costs for the SIM CARD.

To alter the set value, access the 'Unblock Functions' Level by keying in the password 33333 or the password set by the user if it has been altered. Call up the function (439) and alter the reading. The vehicle owner can set the speed limit using the keypad, if required, by following the procedure illustrated in the 'User Manual' or by asking the Operations Centre to do it for him.

### STORING EMERGENCY KEYS (MAX NUMBER OF KEYS THAT CAN BE STORED = 3) – FUNCTION 605

Connect an electronic key reading unit (receptacle) to peripheral n° 3 and store the keys.

Select the function required (n° 605), press OK, insert the keys to be stored in the reader's memory one at a time, the number of keys stored (at bottom right) increases by the number of good keys inserted, press OK again to exit this function.

Any keys previously stored will be deleted by this process.

The peripheral unit's maximum waiting time for the insertion of a key is 20 seconds.

### FUNCTION 604

Reserved for use by technical service.

### ADDING EMERGENCY KEYS - FUNCTION 606

This function makes it possible to store new keys in addition to those already stored, and does not delete those stored previously.

Select the function required (n° 606), press OK, insert the keys to be stored in the reader's memory one at a time, the number of keys stored (at bottom right) increases by the number of extra keys compared to the number at the beginning, press OK again to exit this function. The peripheral unit automatically exits the function 5 seconds after the last key has been stored.

### HOW TO EXIT PROGRAMMING

To exit programming, starting from the:  display, press the zero key and . The peripheral unit returns to its initial status and displays

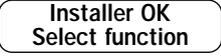
 Restore the peripheral unit to its  status by pressing key **1** five times and then pressing  the key.

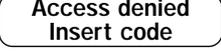
### ACTIVATING THE PERIPHERAL UNIT

The Service Centre activates the peripheral unit directly during the testing and programming stage. Should the Customer require the vehicle to be delivered without it being activated by the Service Centre, the peripheral unit can be activated locally, by following the steps below:

- Access Installer Level as described on page 8.

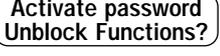
- Select function 431,  and press OK.

- To exit Installer Level when the display shows : press the zero key twice and then . The

S.P will display . The peripheral unit is disarmed by switching on the dashboard and keying

in the password. The S.P will now display 

**From this moment on, the peripheral unit is armed and disarmed according to the procedure described in the User's Handbook. Should it be necessary to change any of the settings of the programming parameters, it is possible to access Installer Level by repeating the procedure to access programming, even from this level by locating the**

 menu

### PROBLEM SOLVING

You may find that it is not possible to programme the unit or display information for some reason. Some of the possible problems you may come across are listed below.

### IT IS NOT POSSIBLE TO REPROGRAMME THE PERIPHERAL UNIT

When the system requires maintenance work, the Service Centre must transfer control to the installer for the time needed for the work to be done. This mode of operation is called 'MANAGEMENT MODE' and the installer must always make sure that the Service Centre has activated "Control from SC to Installer"

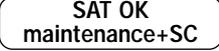
**THE MILEOMETER SPEED IS NOT SHOWN ON THE DISPLAY**

Check that the wire is connected up correctly and that the signal is taken from the correct wire. Usually, the mileometer signal is alternating with voltage up to 12 volt for vehicles and the frequency varies with the variation of the speed. The signal is normally given when the instrument panel is switched on.

**THE GPS SPEED IS NOT SHOWN ON THE DISPLAY**

Check that the GPS receiver/antenna is connected up correctly.

**IT IS NOT POSSIBLE TO ACCESS 'INSTALLER LEVEL' AFTER THE SYSTEM HAS BEEN TAKEN UP BY THE SERVICE CENTRE.**

If the SAT Programmer displays 

the SC symbol means that the peripheral unit is in 'maintenance' mode but is still controlled by the Service Centre. Call the Service Centre to inform them of the problem and get installer control. If control is transferred correctly, the next

display will be 

If you attempt to access Installer Level by following the procedure for 'Access Programming' (STEP 4) from user level

 and the display indicates  for a moment, you must request authorisation for access from the Service Centre, as described above.

**From version 2.02 of the SW onwards, which can be checked using function 207, the end-user can alter the unblock, anti-carjack and unblock functions passwords directly.**

**Therefore, the '33333' factory-set default password may be no longer valid.**

**In this case, if the vehicle or the satellite system is to be serviced or repaired, remember to ask the vehicle's owner the new functions unblock password.**

**NB: Any functions displayed on the SAT PROGRAMMER which are not described in this manual refer to extension modules which provide additional features. Refer to the relative instruction manuals for more details on how they work and are used.**

