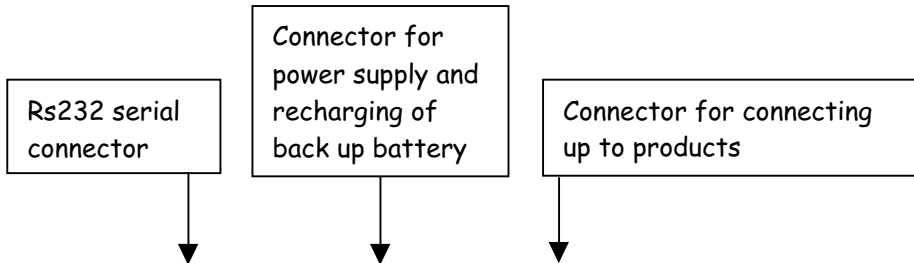


ALARM/PDC PROGRAMMER



(release 001) PRODUCTS THAT CAN BE PROGRAMMED

H.P.A.
H.P.A. rel. 02
H.P.A.3
H.P.B. only from rel. 04 on.
H.P.B. WFS only from rel. 04 on.
H.P.L.
H.P.V.
M8700
M760
ACTIVE PARK 4 only from rel. 03 on.

Fig. 1

Use the cable harness kit, supplied in the box, to connect the tester up to the various products.

| | |
|---------|--------------------------------|
| V080717 | HPB PROG. CABLE HARNESS |
| V080718 | HPB WFS PROG. CABLE HARNESS |
| V080719 | HPA PROG. CABLE HARNESS |
| V080720 | ACTIVEPARK PROG. CABLE HARNESS |
| V080744 | M8700 PROG. CABLE HARNESS |
| V080745 | M760 PROG. CABLE HARNESS |

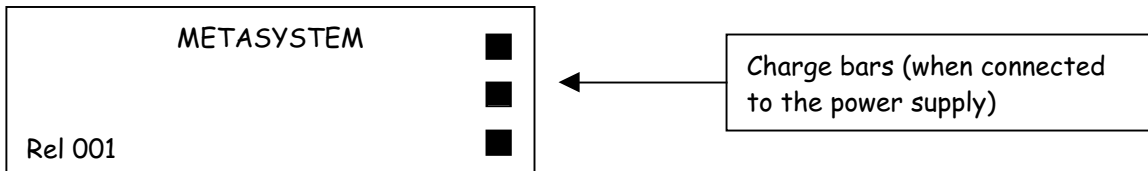
INTRODUCTION

The programmer is used to determine the operating modes, for setting the commands and altering the override code of the car alarms listed on page 1.

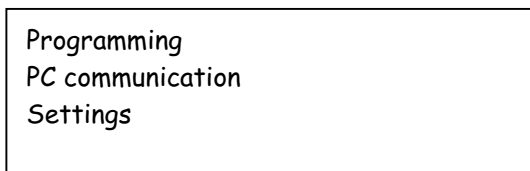
The remote controls of radio frequency remote controlled car alarms (H.P.A. , H.P.A. rel 02, H.P.A.3, H.P.L.,H.P.V., M8700 and M760) can also be re-programmed (refer to the section called PROGRAMMING OF REMOTE CONTROLS for details on the procedure).

PROGRAMMING INSTRUCTIONS

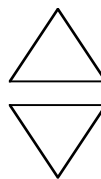
Switch the programmer on by pressing the OK button.



Access the programming menu by pressing the + or OK button



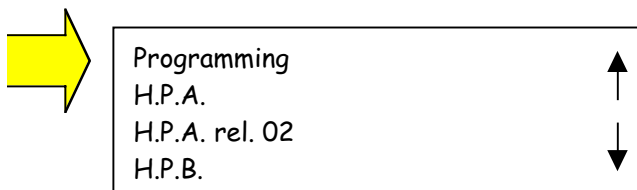
Scroll through the menu using the arrow buttons



Confirm a function using the + button

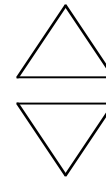
Return to the previous menu using the - button or by pressing the C button (cancel)

PROGRAMMING Menu



Connect the product you want to programme using the appropriate connection harness (see connector in Fig. 1)

Use the arrows to scroll through the list of products that can be programmed

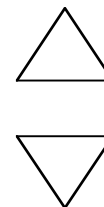


Select the product using the + button

(For example, let's select a H.P.B.)

The menu will appear with the functions that can be programmed

| | |
|----------------------|---|
| H.P.B. | ↑ |
| #1 Buzzer | |
| #2 Com horn/sir | ↓ |
| #3 Current drop sens | |

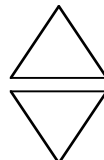


Use the arrows to scroll through the list of functions that can be programmed

Select the function using the + button

| | |
|-----------|----|
| #1 Buzzer | NO |
|-----------|----|

Use the arrows to modify the function and confirm by pressing OK



| | |
|---------------|----|
| #1 Buzzer | IS |
| OK to confirm | |

NOTE for the HPB car alarm

The programmer can be used to access the same programming functions as the Car Link Software:
MODULE CONFIGURATION (selection of commands)
DELETION OF ELECTRONIC KEYS
RESETTING THE 50 CYCLES OF FREE OVERRIDE
READING AND MODIFICATION OF THE OVERRIDE CODE
READING AND MODIFICATION OF THE KEY4 KEYPAD'S CODE

Press the C button (cancel) to return to the product selection menu

Programming menu for the ACTIVE PARK 4

By accessing the programming menu for the ACTIVE PARK 4, you can select the following settings:

- SYSTEM CONFIGURATION

Front

Rear

Front-Plate

-SENSITIVITY

(adjustment of the sensitivity as if you were adjusting the external trimmer and bypassing adjustment via the trimmer)

-OFFSET

(adjustment of the separate OFFSET on each channel bypassing adjustment via the trimmer)

-VOLUME

(adjustment of the buzzer volume bypassing adjustment via the trimmer)

- GONG FUNCTION

(lets you switch the audio gong function on or off)

- SPEAKER TYPE

(lets you choose between loudspeaker type audio control and "dedicated accessory" piezo type audio control)

- MAXIMUM DISTANCE

(lets you adjust the maximum distance for the detection of an obstacle)

-SET-UP SENSITIVITY

(lets you select HIGH or LOW, simulating the same adjustment you can do using the Red/Blue wire in the cable harness - refer to the product's fitting instructions)

-STATIC OBSTACLE SIGNAL

(lets you select whether the signalling of a static obstacle should be continuous or timed)

-DURATION OF STATIC OBSTACLE SIGNAL

(lets you set the duration of the static obstacle signal if timed function was chosen - see previous function).

-PLATE LENGTH

(lets you enter the plate length parameter if the control unit has been set for the front-plate)

- CAPSULE DIAGNOSIS

(lets you switch on or bypass acoustic signalling should one or more sensors appear faulty)

- DEFAULT EEPROM SETTINGS

(lets you reset the control unit by resetting the initial default parameters and restores trimmer operation if they were bypassed previously with programming)

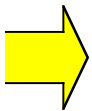
- SOFTWARE RELEASE

(read only function)

PLEASE NOTE:

The programming of other devices follows exactly the same logic as the example shown

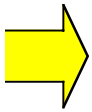
PC COMMUNICATION menu



Programming
PC communication
Settings

The "PC Communication" menu should be selected if the tester is updated using a computer (refer to the section called "updating the software")

SETTINGS menu



Programming
PC communication
Settings

The "settings" menu provides access to the following selections:

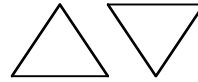
Settings
Language
Backlighting
Display contrast

The LANGUAGE menu lets you select one of the various languages available

The BACKLIGHTING menu is used to switch the backlighting off or switch it on, either permanently or timed, for optimum management of the life of the backup battery. Battery life will be longer if the backlighting is switched off.

The DISPLAY CONTRAST menu lets you adjust the contrast of the digits from a max of 100 to 0. We do not recommend setting this below 50% to safeguard good visibility of the data shown on the display.

Use the buttons to adjust the contrast



PROGRAMMING OF REMOTE CONTROLS

To start programming of new remote controls, access the programming menu for the specific car alarm.

Scroll through the until you get to CODE CARD

| |
|------------------|
| Code Card |
| FFFFFFFFFFFFFFFF |
| ^ |

Enter the new code shown on the code card supplied with the two new, spare remote controls. Use the + button to alter the settings and to move onto the next digit.

E.g.:

| |
|------------------|
| Code Card |
| 30D1E10403C95490 |
| ^ |

Press OK to confirm after you have finished

| |
|----------------------------------|
| Confirm new Code Card? (OK/C) |
| 30D1E10403C95490 |

You now get confirmation of the new code

| |
|------------------|
| New Code card |
| 30D1E10403C95490 |
| ^ |

You can now verify that the newly paired up remote controls work correctly using the M2002 tester or directly on the vehicle.

UPDATING THE SOFTWARE

If you need to update the tester's software (for example, if the programming of a new device has become available), follow the instructions below:

Install release 3.0.8.0 of the Meta System Programmer programme

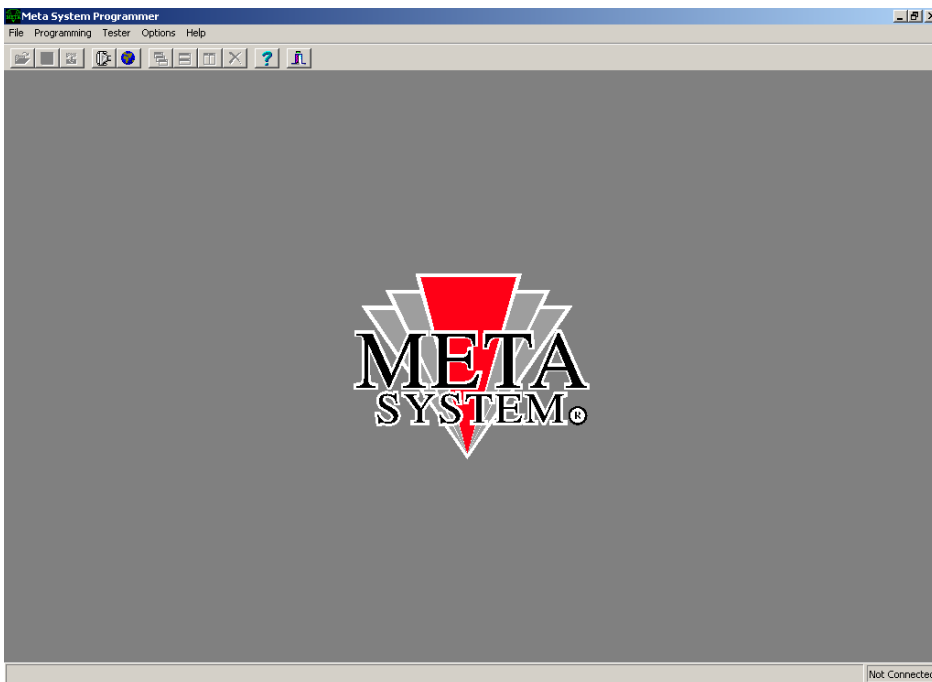
(if you don't have this, ask customer service for a copy by sending an e-mail to assistenza.caralarm@metasystem.it)

Also ask them for the software update package.

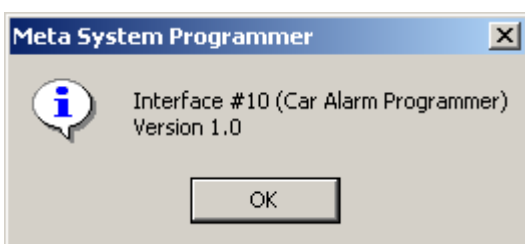
Connect the Rs232 serial line between your tester and your PC.

Scroll through the tester's menu until you get to the PC COMMUNICATION menu

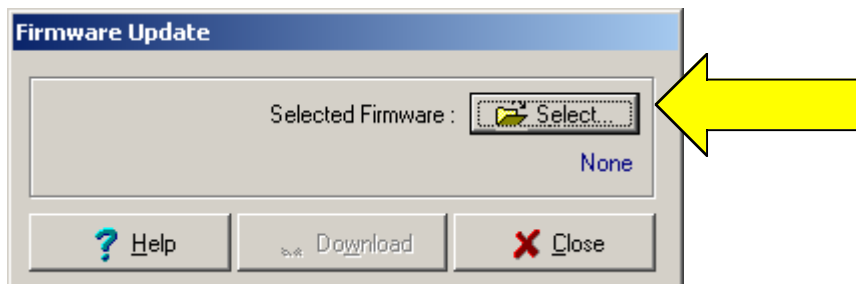
Run the Meta System Programmer programme



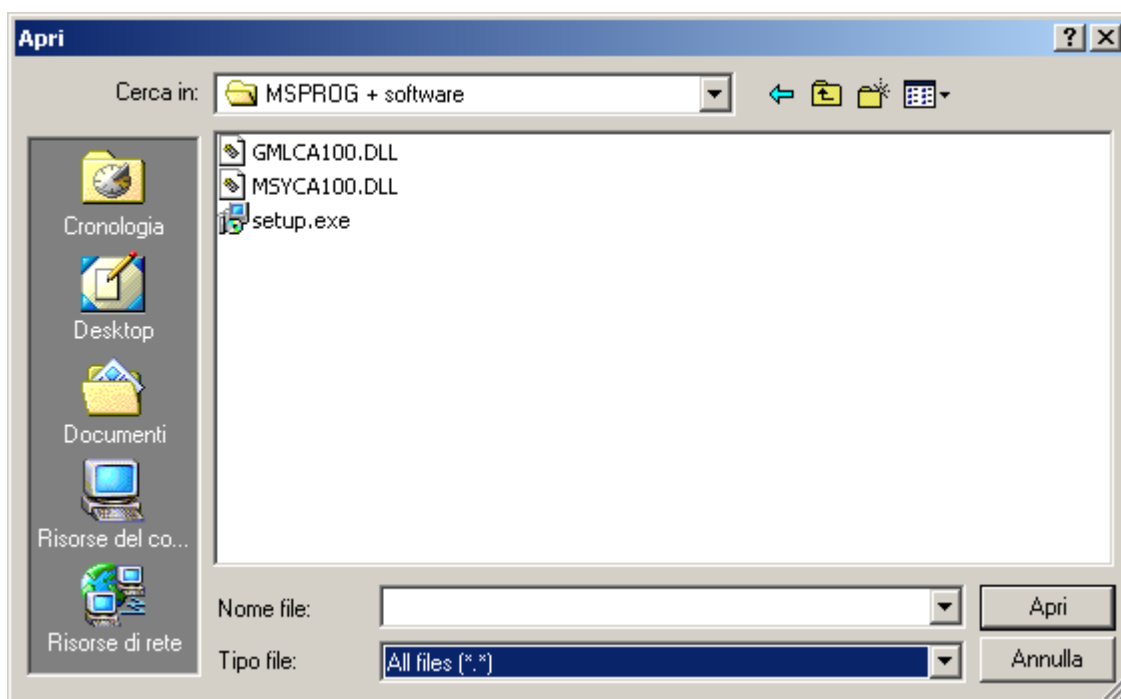
Select CONNECT INTERFACE in the FILE menu, and then TESTER



Select FIRMWARE UPDATE in the TESTER menu

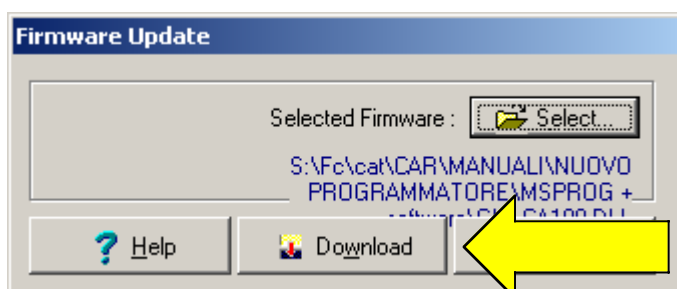


In SELECT (see above), select the folder where you previously saved the update file.



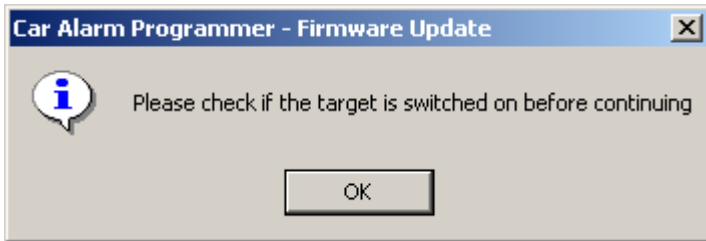
Select the file and click OPEN in the window.

The following window will appear again:

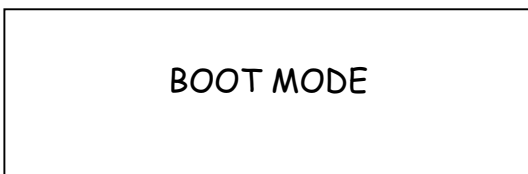


Click DOWNLOAD and confirm.

The following verification message will appear.



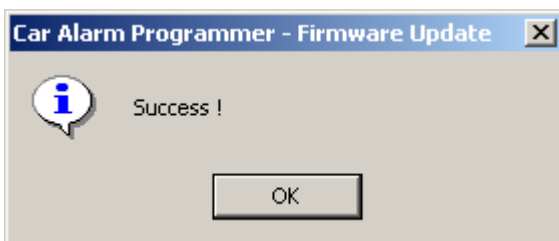
Simply press the OK button on the tester and BOOT MODE will appear on the display



Press OK to confirm the programme verification message

The update now starts (and can be verified with the blue progress bar at bottom left of the programming window)

When you have finished, you will get confirmation of the correct execution of the update



FUNCTION DESCRIPTION AND POSSIBLE CONFIGURATIONS ON ACTIVEPARK14

| Function N° | FUNCTIONS | DISPLAYED FUNCTIONS | DESCRIPTION OF PROGRAMMER'S FUNCTIONS |
|----------------------|--|--|---|
| 1 | System configuration | System config. | It allows to set-up the ECU as a front system without adding the LED/button or as a rear system (factory configuration). |
| 2 | System sensitivity | System sensit. | The sensitivity value can be read and calibrated (without trimmer) via software. NOTICE: the software calibration cuts out the trimmer that can be activated again by selecting the function "enable trimmer". |
| 3 4 5 6 | Offset Channel A Offset Channel B Offset Channel C Offset Channel D | Offset channel A Offset channel B Offset channel C Offset channel D | It is the distance which the system emits a continuous beep due to an obstacle detection. This value can be read and calibrated via software. This temporarily disables the trimmer. NOTICE: the software calibration cuts out the trimmer that can be activated again by selecting the function "enable trimmer". |
| 7 | Buzzer Volume | Buzzer volume | It allows to detect and set-up via software the buzzer's output, by temporarily disabling the trimmer. NOTICE: the software calibration cuts out the trimmer that can be activated again by selecting the function "enable trimmer". |
| 8 9 10 | Sensitivity Trimmer Offset Trimmer Volume Trimmer | Trimmer sensit Trimmer offset Trimmer volume | It activates again the three trimmers, whether disabled by software calibrations. |
| 11 | Gong Function | Gong function | This function makes the speaker indicate the obstacle with a series of Beeps which an eco effect is added to, in order to have a softer gong sound. |
| 12 13 14 15 | Maximum Distance Channel A (FRONT) Maximum Distance Channel B (FRONT) Maximum Distance Channel C (FRONT) Maximum Distance Channel D (FRONT) | A-FRONT distance B-FRONT distance C-FRONT distance D-FRONT distance | This functions opens a menu that allows to read and calibrate the distance of first acoustical signalling, for each sensor (A, B, C, D) by dialling the desired value in centimetres. |
| 16 17 18 19 | Maximum Distance Channel A (REAR) Maximum Distance Channel B (REAR) Maximum Distance Channel C (REAR) Maximum Distance Channel D (REAR) | A-REAR distance B-REAR distance C-REAR distance D-REAR distance | This functions opens a menu that allows to read and calibrate the distance of first acoustical signalling, for each sensor (A, B, C, D) by dialling the desired value in centimetres. |
| 20 | HW/EEPROM Sensitivity | HW/EEPRO sensit. | It allows to enable or disable the access to "system sensitivity" parameters via Eeprom (with PDC programmer) or via HW (with harness). |
| 21 | Sensitivity set-up | Set-Up sensib. | By selecting "LOW", this function reduces the system's sensitivity to adapt it to extreme applications. This software selection is alternative to the connection of the relevant wire (part of harness). NOTICE: to set the sensitivity via programmer it is necessary to activate this mode via EEPROM as well (see function "HW/EEPROM sensitivity"). Otherwise the function "HW/EEPROM sensitivity" is left in HW mode. |
| 22 | Signal of still obstacle | Still obst. sign | Through this function it is possible to limit the period which the system acoustically indicates a still obstacle, at more than 60 cm. To do so, it is enough to switch from "continuous acoustical mode", to "temporary acoustical mode". |
| 23 | Duration of still obstacle signal | Still obst. sign | In case the system is in "temporary acoustical mode", it is possible to change the signalling duration via PDC programmer, through the function "Duration of still obstacle signal". NOTICE: this function is strictly depending on "signal of still obstacle" function. |
| 24 | Dynamical variation of speaker's volume. | Activate speaker | If this function is enabled, the speaker's volume changes in proportion to the distance from the obstacle. The maximum level is reached at the offset point. NOTICE: enabling this function, cuts out the volume trimmer. |
| 25 | Deactivation of dynamical variation of speaker's volume. | Deactiv. speaker | It disables the function that makes the speaker's volume change in proportion to the distance from the obstacle and enables the volume's trimmer. |
| 26 | Speaker's volume minimal level. | MIN spkr value | This function sets the speaker's volume to the minimal level. |
| 27 | Speaker's volume maximum level. | MAX spkr value | This function sets the speaker's volume to the maximum level. |
| 28 | Capsules check | Caps diagnosis | This function allows to detect any possible malfunctions or misconnections, by acoustically warning just after activating the system. This function indicates which is the malfunctioning sensor and keeps others working. |
| 29 | Display position | Display position | It defines the display's orientation. This function is suitable and working for all Active Park systems. |
| 30 31 32 33 | Display of masking value on the high gain reception stage: channel A channel B channel C channel D | TOW-BAR High A TOW-BAR High B TOW-BAR High C TOW-BAR High D | This function allows to read and/or change the masking level on the high gain reception stage, for each channel. This way, it is possible to duplicate an already defined masking on a same application, avoiding to repeat the whole manual procedure. |

| | | | |
|----------------------|---|--|--|
| 34 35 36 37 | Display of masking value on the low gain reception stage: channel A channel B channel C channel D | TOW-BAR Low A TOW-BAR Low B TOW-BAR Low C TOW-BAR Low D | This function allows to read and/or change the masking level on the low gain reception stage, for each channel. This way, it is possible to duplicate an already defined masking on a same application, avoiding to repeat the whole manual procedure. |
| 38 | Set-up of Beep signal for activation of the REAR system. | Beep ins. REAR | This function cuts-off the BEEP emitted to warn the user about the activation of the REAR system (by selecting the rear gear). NOTE: this function is recommended for cars equipped with automatic gear box. |
| 39 | Set-up of Beep signal for activation of the FRONT system. | Beep ins. FRONT | This function cuts-off the BEEP emitted to warn the user about the activation of the REAR system (by selecting the rear gear). NOTE: this function is recommended for cars equipped with automatic gear box. |
| 40 | Rear system's speaker frequency | Beep ins. REAR | This functions allows to adjust the speaker's frequency from 400 Hz to 1300 Hz for the rear system. Note: the more the frequency is increased, the higher note will be emitted by the buzzer. |
| 41 | FRONT system's speaker frequency | Beep ins. FRONT | This functions allows to adjust the speaker's frequency from 400 Hz to 1300 Hz for the front system. Note: the more the frequency is increased, the higher note will be emitted by the buzzer. |
| 42 | Restore default | Default EEPROM | It restores the factory configuration, by erasing all changes on parameters. |
| 43 | Masking Sensitivity | Mask sensib. | By selecting "High", the width of masked area is increased. |