# 4600

## USER MANUAL

cobra

## Summary

*Dear Customer,*
*The product you've choosen is in line with the quality and functional standards required by the main Car Manufacturers and it complies with the safety and security European directives. The technology used for the remote controls and the Driver cards guarantees an high level of security toward attempts to reproduce the digital code. We would like to remind you that the security degree of this system can be increased by adding the following modules:*

**LEVEL MONITOR**

This sensor detect the vehicle being jacked up to for towing it away or for stealing the wheels.

**HYPERFREQUENCY VOLUMETRIC SENSOR**

It is a volumetric sensor for interior protection required for convertible vehicles as it is not sensitive to air movements.

**CRANK INHIBITION**

To add another crank inhibition to the system.

**WINDOW CLOSING**

Fitting this module the electric windows will raise automatically when the system is armed.

**TRACKING DEVICE**

Allow to track your vehicle and to send alerts to a Secure Operating Center.

*In this manuals we've listed all the standard system functionalities and those you can ask to active to an authorized Cobra fitting centre. Please read carefully this manual to get the full benefit from the product.*

## 1. - INTRODUCTION.

This system is equipped with a built-in CAN interface (Controller Area Network) that allows it to detect CAN data from the electric vehicle platform. The system can be armed/disarmed with the vehicle original remote control or with the Cobra remote control (if supplied).

## 2. - ARMING AND DISARMING WITH THE VEHICLE ORIGINAL REMOTE CONTROL OR WITH THE COBRA REMOTE CONTROL.

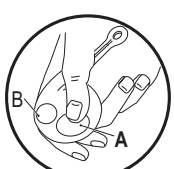
To arm the system press the door locking pushbutton of the vehicle original remote control or, if the system is provided with it, the “A” pushbutton of the Cobra remote control.

The arming status is confirmed by:

- vehicle doors locking (with the Cobra remote only if the CDL connections have been made);
- Audible signals (if activated);
- Flashes of the direction lights (only when the vehicle original remote control is used);
- LED of the emergency panel illuminated.

The protection features of the system become active after a 25 s arming period has elapsed (when the LED of the emergency panel starts blinking).

**Button A >** to arm the alarm and to lock doors.

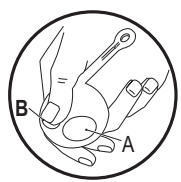



To disarm the system press the door unlocking pushbutton of the vehicle original remote control or, if the system is provided with it, the “B” pushbutton of the Cobra remote control.

The disarming status is confirmed by:

- Vehicle doors unlocking (with the Cobra remote only if the CDL connections have been made);
- Audible signals (if activated);
- Flashes of the direction lights (only when the vehicle original remote control is used);
- LED of the emergency panel OFF.

**Button B >** to disarm the alarm and to unlock doors.




**Note:** if also the Driver Card is provided it will be also possible to arm and disarm the system by pressing its pushbutton.

The system is delivered with a set of standard functionalities (active functions). The installer is able to activate some more functionalities (programmable functions) with an impact on the security and comfort the system will offer. The following are the lists of the two groups.

## 3. - ACTIVE FUNCTIONS.

### 3.1 - Interior protection with ultrasonic volumetric sensor.

The system protects the vehicle interior with a volumetric ultrasonic sensor. Any attempt to get into the vehicle will be detected and the alarm will trigger.

### 3.2 - Perimetric protection with door open warning diagnostic.

The alarm will trigger by opening any door, boot and bonnet. Should you have left any door opened while arming, the system will signal it by 3 flashes of the direction lights and 3 audible signals (5 audible signals if the arming/disarming audible signals function has been activated).

**3.3 - Cable cutting protection** (only for systems with back-up battery siren).

The alarm will trigger if the system is not power supplied (cutting of cables - battery disconnection) signaling the sabotage.

### 3.4 - Engine starting inhibition.

As soon as the system is armed the engine starting is not be possible anymore.

### 3.5 - Arming the system with the volumetric ultrasonic protection disabled.

This function allows to arm the system leaving temporarily disconnected the interior volumetric protection. The protection must be disabled any time you leave somebody or an animal in the vehicle. Also if you want to leave any window opened please disable the protection to avoid false alarms. All other protections remain active.

To disable the volumetric protection proceed as follow:
switch the engine off being sure that the ignition switch has been turned to the OFF position. Within 5 s press the emergency panel pushbutton and keep it pressed until it will flash once to confirm that the volumetric protection only has been disabled. By keeping the pushbutton pressed the system will confirm with two flashes that the additional sensor input only has been disabled, with three flashes for both of them disabled. The selected protection will remain disabled until the system will be disarmed. It will be automatically restored at the next arming.

**Note:** on some vehicles the system automatically disables the volumetric protection if any windows is left opened.

Ask your installer if this functionality is provided by the system fitted on your vehicle.

### 3.6 - Emergency panel LED.

The LED main scope is to show the system arming and disarming conditions. When the system is armed the LED gets ON and remains illuminated until the 25 s arming period has elapsed. After that it starts blinking. It goes OFF as soon as the system is disarmed.

### 3.7 - Alarms memory .

If the system has gone off (alarm ON) during the arming time it will warn you with 3 flashes of the direction lights and 3 audible signals (5 audible signals if the arming/disarming audible signals function has been activated). It also stores in its memory the reason of the occurred alarm and shows it on the emergency panel LED. Count the number of flashes and check the corresponding alarm reason on the table. By turning the key ON the memory will be deleted.

### 3.8 - Emergency disarming.

If the vehicle original remote control get lost or if it doesn't work, open the door with the mechanical key and turn the ignition key ON. If the system doesn't disarm automatically follow the emergency procedure described in chapter 5.

### 3.9 - Direction lights alarm flashes.

When the system goes off (alarm ON) the siren sounds and the direction lights flash for 28 s.

| LED NUMBER OF FLASHES | ALARM ROOT CAUSE |
|---|---|
| 1 flash | Door opening detection. |
| 2 flashes | Ultrasonic volumetric detection. |
| 3 flashes | Bonnet opening detection. |
| 4 flashes | Ignition key ON detection. |
| 5 flashes | Boot opening detection. |
| 6 flashes | Door opening detection. |
| 7 ÷ 14 flashes | "Technical alarm" detection. Contact your installer. |

## 4. - PROGRAMMABLE FUNCTIONS.

### 4.1 - Activation and volume adjustment of the audible arming and disarming signaling.

This function allows to activate a short audible signal to confirm the system's arming and disarming.

### 4.2 - Passive arming.

The system will automatically arm after 30 s the ignition key has been switched off and the driver side door has been opened and closed, so 30 s after the driver has left the vehicle.

### 4.3 - Auto re-arming.

The system will automatically re-arm if, after 115 s, it has been disarmed and no one door has been opened (nobody gets on the vehicle).

### 4.4 - Auto re-arming with doors locking.

As for auto re-arming, but doors will lock (if the CDL connections have been made).

### 4.5 - Passive engine starting inhibition.

The starting inhibition becomes active after 115 s the vehicle has been switched OFF. The starting inhibition is immediately deactivated if the Driver Card is detected or when a correct emergency PIN Code has been digit on the emergency panel. This functionality is totally independent from the other ones.

### 4.6 - Confort window closing with Cobra remote control.

This is a native function of the vehicle, so at first check if it is available. By keeping pressed the Cobra remote control pushbutton "A" you can close the windows from a distance. If not you can ask your installer to fit an additional window closing module.

**Warning:** for safety reasons we recommend to close the windows remaining close to the vehicle.

### 4.7 - Anti hi-jacking.

This function prevents the vehicle for being stealing while driving. It has been studied to also guarantee the driver safety. If the driver is not recognized by the system he will be considered as not authorized to drive the vehicle. The system will generate an alarm sequence and it will prevent the vehicle to start again after it has been switched OFF.

During the normal usage of the vehicle the driver is recognized by the system in two ways:

- **automatic:** by the Driver Card matched to the system (if provided);

- **manual:** by entering with the emergency panel pushbutton the first two digits of the PIN Code.

The driver recognition must happen any time the ignition key is turned to the ON position or when, with the ignition key already ON, the driver side door is opened and then closed to get off the vehicle. If the driver is not recognized within 60 s the emergency panel LED starts flashing quickly signaling the missed driver recognition for the next 30 s. When this time elapses the system starts generating alarm sequences also if the engine is running, so this situation can take place while the vehicle is driven. The engine starting inhibition will become activate as soon as the ignition key is turned to the OFF position; additional attempt to start the vehicle will not be possible. To interrupt the anti hi-jacking functionality press once the Driver Card pushbutton or digit the complete emergency PIN Code on the emergency panel pushbutton.

**Nota:** the product is delivered with this function disabled as its usage invalids the product European homologation. It can be used only for non-european countries where the functionality is not in conflict with the local regulations.

**4.8 - Garage mode.**

This function allows to temporarily disable all protection automatic functionalities of the system .It can be used, as an example, when you need to leave the vehicle at a workshop for maintenance to avoid the automatic activation of any functionality. When the garage function is active the driver is allowed to turn the ignition key on for 10 times (engine running). After 10 times the system restore all automatic functionalities.

**Activation**

- Open driver side door.
- Turn the ignition key ON.
- Enter the complete emergency PIN Code (4 digits) on the emergency panel pushbutton.
- A flash of the direction lights confirms the activation.

**Deactivation**

- Lock then unlock the vehicle with the remote control.
- A flash of the direction lights and an audible signal confirm the deactivation.

## 4.9 - Personalization Pin Code.

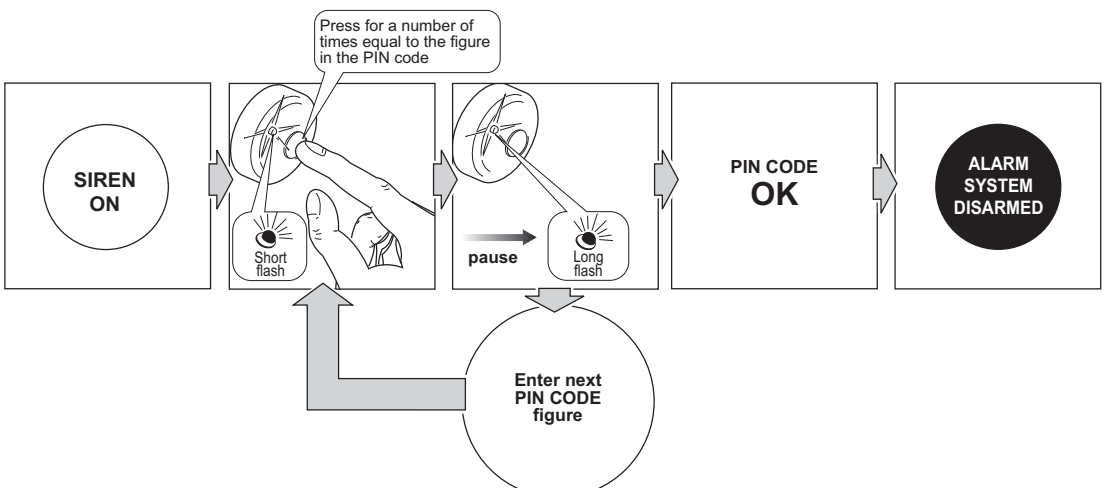
The Personal Identification Code is a four digits code which is already stored in the system. The sticker with the PIN code must be applied by the installer on the PIN code card you should have got from your installer.

Keep the PIN code card always with you. The code is required to emergency override the system the remote control doesn't work or if you've lost it. The PIN code is also used for other scopes (driver recognition code for the anti hi-jack functionality and as activation code for the garage mode). Upon your request and submitting the card to your installer, he will personalize you the PIN code.


We advise you to stick the **PIN CODE**, which may be found on the rear of the control unit, adhesive label on to the **PIN CODE CARD**.

## 5. - EMERGENCY OVERRIDE WITH PIN CODE.

To disarm the system without the remote control proceed as follow:
Press the emergency panel pushbutton for a number of times corresponding to the first digit of the PIN Code. Each pushbutton pressure is confirmed by a quick flash of the LED. Make a longer pause to let the system understand that you've finished to enter the first digit, a longer flashing of the LED will confirm it. Do the same for the remaining digits, as soon as all four digits will be entered the system will disarm.

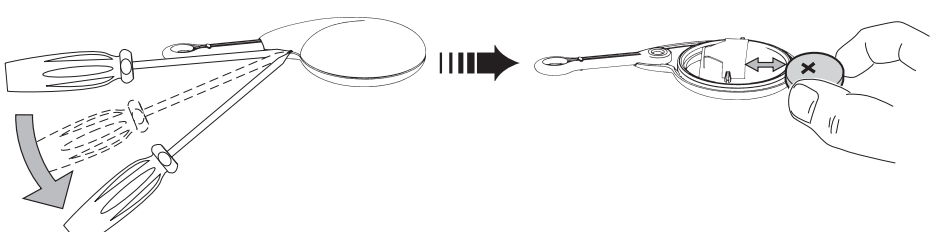


## 6. - COBRA REMOTE CONTROL BATTERY REPLACEMENT.

The Cobra remote control battery is a CR2032-3V lithium battery.
Its replacement is necessary as soon as, by pressing one of the two pushbuttons, the LED flashes irregularly or just for a short time.

To replace the battery perform the following steps:

- open the remote control shell, being careful to lever it up in the point indicated in the drawing.
- Remove the battery as shown (dispose the empty battery in the appropriate container disposal).
- Wait approximately 10 seconds, then insert the new battery, taking care to make sure your fingers touch it only on the sides. Make sure the polarity is correct, as shown in the drawing.
- close the shell and press the remote control pushbutton “A” to check if the system is properly working.

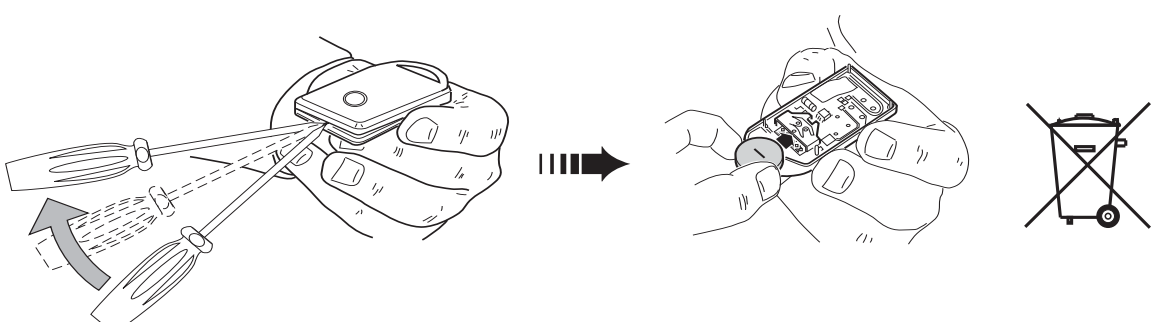


## 7. - DRIVER CARD BATTERY REPLACEMENT.

The Driver Card battery is a CR2032-3V lithium battery.

When the Driver Card battery is low the emergency panel LED flashes for 10 times. If the system doesn't disarm when the Driver Card is inside the vehicle try to disarm it by pressing the Driver Card pushbutton, otherwise replace the battery.

- To change the battery, open the Driver Card shell, being careful to lever it up at the point the area indicated in the drawing.
- Remove the battery by extracting it in the manner shown.
- Wait approximately 10 s.
- Insert the new battery, taking care to make sure your fingers touch it only on the sides. Make sure its polarity is correct, as indicated in the diagram.
- Close the shell and press the Driver Card button checking that the system responds correctly. Perform the test near the vehicle.
- Dispose of the empty battery in an appropriate disposal - bin.
- In the event of loss of both the Driver Cards an emergency disarming may still be performed. Reference should be made to the disarming / emergency procedure described in chapter 5.



## 8. - TROUBLESHOOTING GUIDE.

| THE REMOTE CONTROL DOESN'T ARM/DISARM THE SYSTEM. | |
|---|---|
| **Root cause** | **Countermeasure** |
| The battery is empty. | a.If the system is armed, perform the emergency override procedure (see chapter 5). |
| | b.Replace the battery. For Cobra remote controls see chapter 6, for the original remote control follow the instructions of the vehicle "Use and maintenance" manual. |
| | **c.If you cannot solve the problem contact your installer.** |
| **THE SYSTEM HAS GENERATED A FALSE ALARM – CHECK ON THE EMERGENCY PANEL LED (ALARM MEMORY FUNCTION) WHICH IS THE ALARM ROOT CAUSE.** | |
| **Rot cause** | **Countermeasure** |
| **Alarm generated by the volumetric US sensor.** | a. Check if the windows and the roof have been closed. |
| | b.Check if inside the car there is any moving objects or any object that can move because of slow air movements. |
| | c. If you cannot solve the problem contact your installer. |
| **Alarm generated by door/ boot/bonnet opening.** | a. Check if all doors/boot and bonnet have been closed. |
| | b.If you cannot solve the problem contact your installer. |

## 9. - WARRANTY CONDITIONS.

This product is guaranteed for 24 months from the date of purchase, validated by receipt or invoice. The warranty will be null and void if the product shows signs of tampering, incorrect installation, damage caused by falling or transport, negligence and anything else not imputable to manufacturing defects.

In the event of improper installation of the system, the manufacturer shall not be liable to compensate for damages:

- of any kind and direct or indirect;
- to things or to persons.

To benefit from warranty coverage, contact your authorized dealer with adequate documentation showing the date of purchase.

## 10. - DECLARATION OF CONFORMITY

Cobra Automotive Technologies
CAT-VA

### Declaration of Conformity

The manufacturer hereby declares, at its sole responsibility, that the product:

| | |
|---|---|
| **Description:** | **Wireless alarm system for automotive application** |
| **Model:** | **4600** |
| **Type:** | **4600 family with siren type 5365** |

is in conformity with the essential requirements of the R&TTE Directive 1999/5/EC.
The product has been tested against the following standards and specifications:

| | |
|---|---|
| **EMC :** | **ECER10** |
| **Health and Safety:** | **Relevant tests of ECER116 Regulation EN50371** |
| **Radio Spectrum:** | **EN 300 220-1 EN 300 220-2** |

and declares that the:

**TRANSMITTER Model 2781 and Model 7777**

conform to the essential requirements of the Radio and Telecommunication Terminal Equipment Directive 1999/5/EC in accordance to the following relevant standards and Directives:

| | |
|---|---|
| **Radio:** | **EN 300 220-1/2** |
| **EMC:** | **EN 301 489-1/3** |
| **Health & Safety:** | **EN 60950 EN 50371** |

The products are marked with the following CE marking and Notified Body number according to the Directive 1999/5/EC:

2010-09-22
Dario Parisi
Products Homologation Engineer
Tel +39 0332 825111

The manufacturer shall not be liable for any faults or malfunctions in the anti-theft device and/or in the electrical system of the vehicle due to incorrect installation and/or to failure to comply with the indicated technical specifications. The system must only be considered as a deterrent agaist theft attempts.