

Can Bus Alarm System



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THIS INSTRUCTION MANUAL IS VALID FOR SYSTEMS UPDATED TO *CARLIST34* OR HIGHER. IT INTEGRATES THE NEW *WIRELESS SIREN* SUPPORT

For "*CARLISTnn*" means the list of compatible vehicles preloaded into memory (see label report on the control unit). Each update adds new vehicles, whilst maintaining compatibility with previous ones. In the pack there is a summary of those codes, but you may want to download the updated list and installation specific cards for each vehicle from the site www.patrolline.it .

INDEX OF MANUAL

Read and keep this manual in the vehicle, it may be helpful in case it is needed for maintenance, vehicle sale or for safety feature expansions etc. Inside you will find:

USER SECTION	page 2-8
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PACKAGE CONTENTS

Supplied in the standard version are:

- HPS 845 Alarm device
- Installation Wiring cables
- This manual
- List of code to compatible can bus vehicles
- Anti-Theft / Programming button
- LED wired sticker

Included in the 845/55 kit are:

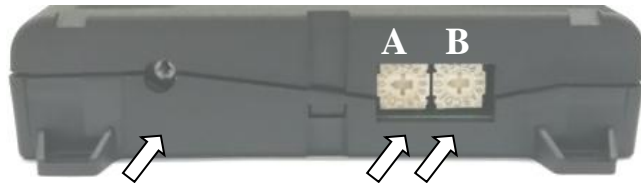
- Adjustable ultrasonic module
- Pair of transducers sensors

DESCRIPTION OF THE SYSTEM

The system can interface and acquire information through the **CAN BUS** (Controller Area Network) of the vehicle. It then uses the radio controls and / or transponder of the vehicle to set for its own operation.

It is possible to find additional information and downloading specific vehicle installation cards at www.patrolline.it, after the properly user registration.

Located inside the alarm memory are all the compatible vehicles, the selection is done through the placement of switches A and B on the control unit.



For selection of vehicles consult the list of applicable vehicles included in the box

Shock adjust

Switches vehicle

SELECTION 01 is dedicated to vehicles **not** equipped with a CAN bus suitable system. Appropriately connecting the wires (see the connection diagrams of the vehicle) it can find its operation in the traditional analog version.

OPTIONAL DEVICE TO IMPROVE SAFETY AND FUNCTIONALITY

HPA974 – Transmitter (optional)

In addition to using with the original remote control of the car, it is possible to add one or more transmitters HPA 974, which can synchronize both with the originals or independently for greater safety. (See functions n°5 and n°26 to p.16).

HPA 977 – Transponder (optional)

With the addition of a transponder, it is possible to clearly manage the special security functions (v. functions 10, 11 and 27 to p.16). The functions are still manageable through the panic button included in the package.

HPA 975 – Wireless Sensor (optional)

It is possible to extend the protection of the system with the addition of wireless sensors 2.4 GHz (HPA 975)

HPS 98 - Self-powered Wireless Siren (optional)

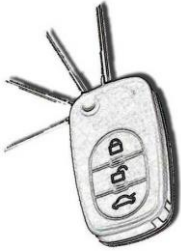
It allows faster installation by eliminating the need for cables in the engine compartment.

HPS 94C – Siren 4 wires with battery back-up (optional)

HPA 500 – Central door locking module (optional)

HPS 44A – Windows lift module (optional)

ORIGINAL REMOTE CONTROL OPERATING



PRESSING THE ORIGINAL REMOTE-CONTROL BUTTON, YOU ACTIVATE LOCKING THE VEHICLE AND ARMING THE SYSTEM:

CONFIRMED BY:

- 1 beep (if enabled).
- The LED on the dashboard turn ON.
- Engine block ON (if connected).
- Modules output arming (Window closure, ultrasonic, etc...)

The second press of the lock button allows disabling of ultrasonic sensors, wireless devices in Zone 2 and the closing of windows (if connected). This function is specific to the type of vehicle. If this does NOT work perform the sequence "Lock - Unlock - lock" of the original central locking with the remote control in quick succession. The action is confirmed by 4 LED blinks before posting.

PRESSING THE OPENING PUSHBUTTON ON THE ORIGINAL REMOTE CONTROL YOU GET CONFIRMATION TO DISARM THE ALARM:

- 2 beeps (if enabled).
- Turning off the LED on the dashboard.
- Deactivation of electric engine immobilization (if connected).
- Deactivation of modules output (closing windows, ultrasonic, etc.).

After disarming, in the case of one or more alarm cycles, the LED will remain fixed, indicating the presence of the alarm memory, that will be displayed after opening the door. To stop it turn on the key.

PRESSING THE BOOT RELEASE OF THE ORIGINAL REMOTE CONTROL

If the alarm is on it will inhibit boot sensors, shock and ultrasonic modules to allow the access to the boot compartment. The physical closing of the boot will re-enable the sensors. This function depends on the type of vehicle.

SYSTEM RED LED (ON THE DASHBOARD)

<i>STATE</i>	<i>INDICATION</i>
- OFF	Power off or system disarmed
- ½ second ON - ½ second OFF	First power up or restart for power failure. Perform an opening and closing cycle to turn it off
- ON fixed	Neutral time 10 sec. (after insertion) or alarm memory ready for reporting (after system disarmed). Open the driver's door and count the flashes of the LED between a pause and the next. Check the sensor intervened in the "Alarm Memory" paragraph
- Flash every second	System inserted and in surveillance
- ON 2 seconds and OFF 1 second	Car selected not in memory, check the set selection and if properly update the unit.
- Quick flashing, 5 times per second	Alarm in progress. The cycle lasts 30 seconds.
- 2 flashes and pause	VALET function is active, system blocked, this signaling occurs at ignition key on and is repeated for 40 seconds (see VALET function).
- Quickly flashes (3 time/second) only after disarming	The IMMOBILIZER function (n° 27) is active. It's necessary to disarming with the reset pushbutton (if the transponder is not present) or the system make alarm.
- Flashing very fast, 10 times per second	The device firmware is corrupted, it tried to load the firmware of another product, update the system via PC using the correct file.

HPA 974 - THE REMOTE CONTROL OPERATION (OPTIONAL)

In addition to the same functions as the original remote control, through the bi-directional transmission, the transmitter HPA 974 has useful diagnostic and control functions.

**BUTTON 3
Arming system**

The entry is confirmed by:

- 1 beep (if enabled)
- 1 blinkers flash (if enabled)
- LED on the dashboard
- Lock the doors (if connected)
- Activation of electric engine immobilization (if connected)
- Activation of modules output (closing windows, ultrasonic, etc.)
- Enhanced output activation (electric windows, etc.)

Press again within 10 seconds to activate the ultrasonic and radio sensors in zone 2. The exclusion will be confirmed by 3 beeps and 3 flashes arrows.

**BUTTON 2+3
Shock exclusion**

Pressing the buttons 2 and 3 simultaneously immediately after arming the system, you get the exclusion of the shock sensor confirmed by 5 beeps (if enabled) and 5 flashing blinkers.

**BUTTON 1+3
System status**

Press simultaneously and release them. If the transmitter LED flashes for a few seconds, the alarm is activated. If the alarm is off, the LED will remain off. The function is independent of the distance from the vehicle and is valid when you use the same remote control for alarm management.

**BUTTON 1
Disarming system**

Disarming is confirmed by:

- 2 beeps (if enabled)
- 2 blinkers flashes (if enabled)
- Turning off the LED on the dashboard
- Unlock the doors (if connected)
- Deactivation of electric engine immobilization (if connected)
- Deactivate output modules (ultrasonic etc...)

After disarming, in the case of one or more alarm cycles, the LED will display the alarm memory after opening of the door until turning on the key.

LED

While pressing any of the radio button if the LED:

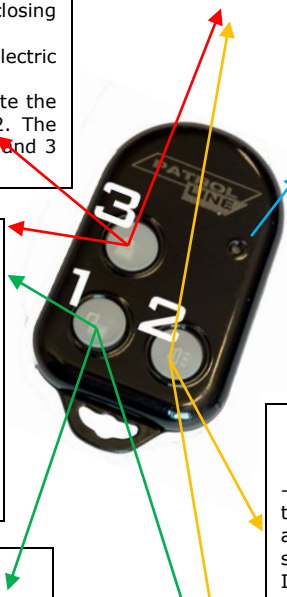
- Is fixed:** means that the transmission is received by the system.
- Blinks fast:** means that the transmission is not received by the system (distance too great).
- Blinks 4 times:** it means that the transmitter battery is low and it should be replaced.

**BUTTON 2
Panic alarm and siren stop**

- The pushing of button 2 when the system is armed causes an alarm cycle (and therefore the sound) for about 30 seconds. If the system is already in alarm, this is stopped.
- Pressing button 2 after 10 seconds of activation causes exclusion of the siren, confirmed by 4 beeps and 4 blinkers flashes.

**BUTTON 1+2
Exclusion zone 2 sensors**

Simultaneously pressing buttons 1 and 2 (10 seconds after activating the system) for excluding the alarm signal of the programmed sensors in zone 2. The exclusion is confirmed by 6 beeps and 6 blinkers flashes.



SECURITY GUARDS AND TRANSPONDER HPA977 USE (OPTIONAL)

Button RESET and HPA 977

The **IMMOBILIZER** functions, **ANTI-AGGRESSION** and **ANTI-THEFT** **ARE NOT ACTIVE** in the default configuration. Activation can be carried out exclusively on the customer's request, and only by qualified personnel. **ATTENTION:** this function is managed by the transponder device (**HPA977**) or by the **RESET Pushbutton (that must be installed)**

IMMOBILIZER FUNCTION (N° 27)

This function, if programmed, is activated when you switch off the alarm.

From this moment, and within 30 seconds, the function must be reset by the presence of the transponder or the appropriately installed RESET button. If not, a full alarm cycle will start with an engine block. The Ignition ON skips the timeout and triggers a direct alarm cycle with an engine block.

Also, the opening of any doors after 15 seconds starts a direct alarm cycle.

If the function is started, you can re-arm the system by remote control or with vehicle self locking.

CAUTION: disarming the alarm (unlocking with original remote control) out of the transponders range, after 30 seconds it triggers an audible and visual alarm cycle.

ANTI-AGGRESSION FUNCTION (N° 10)

- **Can Bus Vehicle.** The vehicle speed, after the ignition key turn ON, controls the activation and engine block of the ANTIAGGRESSION function. The alarm system will request Transponder recognition after passing the 10km/h speed threshold. If the system cannot detect recognition after 40 seconds the alarm system activates the siren sound for 20 seconds (pre-alarm), from this point if the vehicle speed falls below the 10 km/h speed threshold (settable), the engine block will be activated.

- **No Can Bus Vehicle.** Turn ON the key, the procedure starts, the LED start to flash. After 40 seconds, the alarm system activates the siren sound for 20 seconds (pre-alarm), after that it will stop the engine by the intermittent activation within 50 seconds.

The ANTIAGGRESSION procedure can be stopped every time by the anti theft push button or by the HPA 977 Transponder signal recognition.

ANTI -THEFT FUNCTION (N° 11)

- **Can Bus Vehicle.** The vehicle speed, after the driver's door has been opened and closed, controls activation and the engine block of the ANTIAGGRESSION function. The alarm system will request the Transponder recognition after passing the 10km/h speed threshold. If the system cannot detect recognition after 40 seconds, the alarm system activates the siren sound for 20 seconds (pre-alarm), from this point if the vehicle speed falls below the 10 km/h speed threshold (settable), the engine block will be activated.

- **No Can Bus Vehicle.** Engine is ON, opening and closing of doors checked, the procedure starts and the LED starts to flash. After 40 seconds, the alarm system activates and the siren sounds for 20 seconds (pre-alarm), within 50 seconds it will stop the engine by the intermittent activation.

The ANTI THEFT procedure can be stopped every time by the anti theft push button or by the HPA 977 Transponder signal recognition.

NEUTRAL TIME AND ALARM STATUS

Once the signal of arming is over, the alarm will stay in "neutral time" for 10 seconds, signaled by the fixed LED light. The flashing of the LED light on the dashboard will indicate that the system controls the vehicle and is ready to signal the alarms.

If during the neutral time of 10 seconds the alarm system detects a triggering of alarm, it shows this by flashing of the indicators. The number of indicator flashes tells you the cause of the alarm. Look at the table on chapter "alarm memory" to find out the cause.

If the alarm detects the same cause of alarm 5 times, it automatically excludes this cause.

PANIC ALARM

Alarm armed, 10 seconds after arming (after the "neutral time"), press the LOCKING push- button of the original remote control or Button 2 of the PATROLLINE remote control HPA 974: central unit, do an alarm cycle of 30 seconds. To stop the alarm cycle, press the LOCKING push- button of the original remote control again or Button 2 of the PATROLLINE remote control HPA 974.

These functions are available only for some vehicles because they depend on the model and the setup of the original remote control of the car.

ADDITIONAL MODULE EXCLUSION

After the system arming, press the LOCKING push-button of the original remote control, or the button N°3 of the PATROLLINE remote control within 10 seconds.

The exclusion will be confirmed by 3 beeps and 3 indicator flashes.

BOOT OPENING

The system can detect the boot unlocking by the original remote control. In this case, when the boot physically opens, the ultrasonic sensor and shock sensor will be disarmed, to avoid triggering the alarm. This will be alarmed again once the boot is closed.

These functions are only available for some vehicles because they depend upon the model and setup of the original remote control for the vehicle.

STATUS MEMORY

If during the armed state, the alarm is turned off using the mechanical key or the alarm is detached from the cable harness, once restored it will remember the state in which it was. This prevents any attempt of tampering.

HORN / SIREN EXCLUSION

Through the ignition key it is possible to exclude the HORN / SIREN: alarm disarmed, (CDL opened), turn on and off the ignition key 3 times and within 30 seconds press the original remote control to close the CDL of the vehicle.

Trough the PATROLLINE remote control HPA 974, it is possible to exclude the HORN / SIREN. After system arming, within the first 10 seconds push Button 2 of the PATROLLINE remote control. The exclusion will be confirmed by 4 indicator flashes and 4 beeps.

From this moment, the central unit will signal the attempt to break only by the blinker flashes.

SHOCK SENSOR EXCLUSION

This function is available only with the PATROLLINE remote control HPA 974. After system arming, within the first 10 seconds press together buttons "2" and "3". The exclusion will be confirmed by 5 indicator flashes and 5 beeps.

ANTI-DISTRACTION FUNCTION (N°16 PROGRAMMABLE FUNCTIONS)

Every time that the alarm is disarmed and if within 10 seconds nothing happens (a door opening - ignition key turns ON), the system arms itself.

SIREN LIMITATION FOR CONSECUTIVE ACTIVATIONS

If 3 consecutive alarm activations are detected from the same sensor, the system will exclude the sensor or that alarm line. During this condition, the engine block is still active.

ALARM PROCEDURE

Operating the alarm system

In the case of an alarm, the system triggers optic and acoustic signals (i.e., flashing of the indicators and sounding of the horn or siren), for 30 seconds. One cycle of alarm is 30 seconds long.

To stop the alarm triggering without disarming the system, press the LOCKING button of the original remote control or button "2" of the PATROLLINE remote control.

To stop the alarm triggering and disarming the system, press the UNLOCKING button of the original remote control or button "1" of the PATROLLINE remote control.

ALARM MEMORY

If the central unit records one or more causes of alarm they are signaled i.e., when disarming, opening the driver's door or pressing the anti hi-theft push-button, through the LED. To verify the type of alarm, check the number of LED flashes within the table below.

N° Flash of the LED	CAUSE
1	Doors Opening (by CAN-BUS)
2	Mechanical CDL Opening (by CAN-BUS) or wireless siren power supply missing
3	Bonnet opening (by CAN-BUS)
4	Boot opening (by CAN-BUS)
5	Ignition key ON protection (by CAN-BUS)
6	Shock sensor Alarm
7	Additional sensor Alarm
8	Supplementary Alarm input (BLUE wire)
9	Supplementary Alarm input (BLUE/RED wire)
10	Supplementary Alarm input (GREEN/BLACK wire)
11	Original alarm triggered (by CAN-BUS)
12	Magnetic sensors HPA 975 Alarm
13	Bonnet opening (by WIRE), detected also by wireless siren
14	GAS detector alarm
15	Communication missing with wireless siren, or radio jamming (when radio jamming trig is enabled).

PROTECTION AGAINST RADIO INTERFERENCES ANTI-JAMMING

Alarm armed status, if the system detects a radio interference device being used to blind the operating frequency, it triggers one automatic alarm cycle.

VALET FUNCTION

This function puts the alarm into the stand-by mode. This allows the car to be left at a service centre without leaving the remote control. It is activated when the alarm is disarmed.

Activation of the Valet function:

To set using the ignition key and the **unlocking** code (factory setting 1-2-3).

If the operation is successful, the LED on the dashboard will flash twice.

A reminder that the Valet function is active the LED on the dashboard will flash twice at any point of turning on the ignition key.

Deactivation of the Valet function:

To set using the ignition key and the **unlocking** code (factory setting 1-2-3).

If the operation is successful, the LED on the dashboard will flash 4 times and all the system functions will be restored.

It is also possible to activate this function through the anti-theft push-button: EASY VALET function

EASY VALET FUNCTION

Activation of the EASY VALET function:

- Ignition Key ON, front doors closed and alarm disarmed, push the anti theft button for about 10 seconds, the LED will start to flash slowly.
- Release the button before the LED stops to flash.

If the function is enabled -> 1 indicator flash- 1 beep - 1 LED flash

If the function is disabled -> 2 indicator flashes - 2 beeps - 2 LED flashes

Every time that the ignition key is turned ON, the LED flashes slowly 2 times for about 40 seconds, to show that the function is ON.

PRE VALET FUNCTION

This function permits disabling of the **anti-aggression and anti-theft functions** (if set), whilst keeping ON all the other functions of the alarm.

Activation of the PRE-VALET function:

- Ignition key ON, front doors opened, and alarm disarmed, push the anti theft button for about 10 seconds, the LED starts to flash slowly.
- Release the button before the LED stops flashing.

If the function is enabled -> 1 indicator flash- 1 beep - 1 LED flash

If the function is disabled -> 2 indicator flashes - 2 beeps - 2 LED flashes

USE OF THE EMERGENCY UNLOCKING PIN CODE

***WARNING: If the n°25 function has been activated, the procedure must be performed with the brake pedal or the handbrake and driver DOOR OPEN.
Do not use the handbrake with brake pedal and vice versa.***

To be used when the remote controls are lost or no longer operating, when the alarm system is still armed.

The code is always made of 3 digits (factory setting: 1-2-3). This code should be input (when the alarm is armed) via the ignition key as per the procedure detailed below:

1. Turn the ignition key ON/OFF as many times as per the first digit (1 in case of factory setting)

The LED is illuminated whilst inputting the pin code and the horn or siren sounds.

Wait until the LED goes out.

2. Turn the ignition key ON/OFF as many times as per the second digit (2 in case of factory setting)
3. Wait until the LED goes out.
4. Turn the ignition key ON/OFF as many times as per the third digit (3 in case of factory setting)

If successful, the alarm system will disarm after the third digit.

CHANGE OF THE RELEASE PIN CODE

You may customize the factory pre-set release pin code (1-2-3) following the procedure below, alarm disarmed:

Through the ignition key input the **old secret code** as described in the previous paragraph. Wait for quick LED flashes confirming that the old code for unblocking is correct, and then:

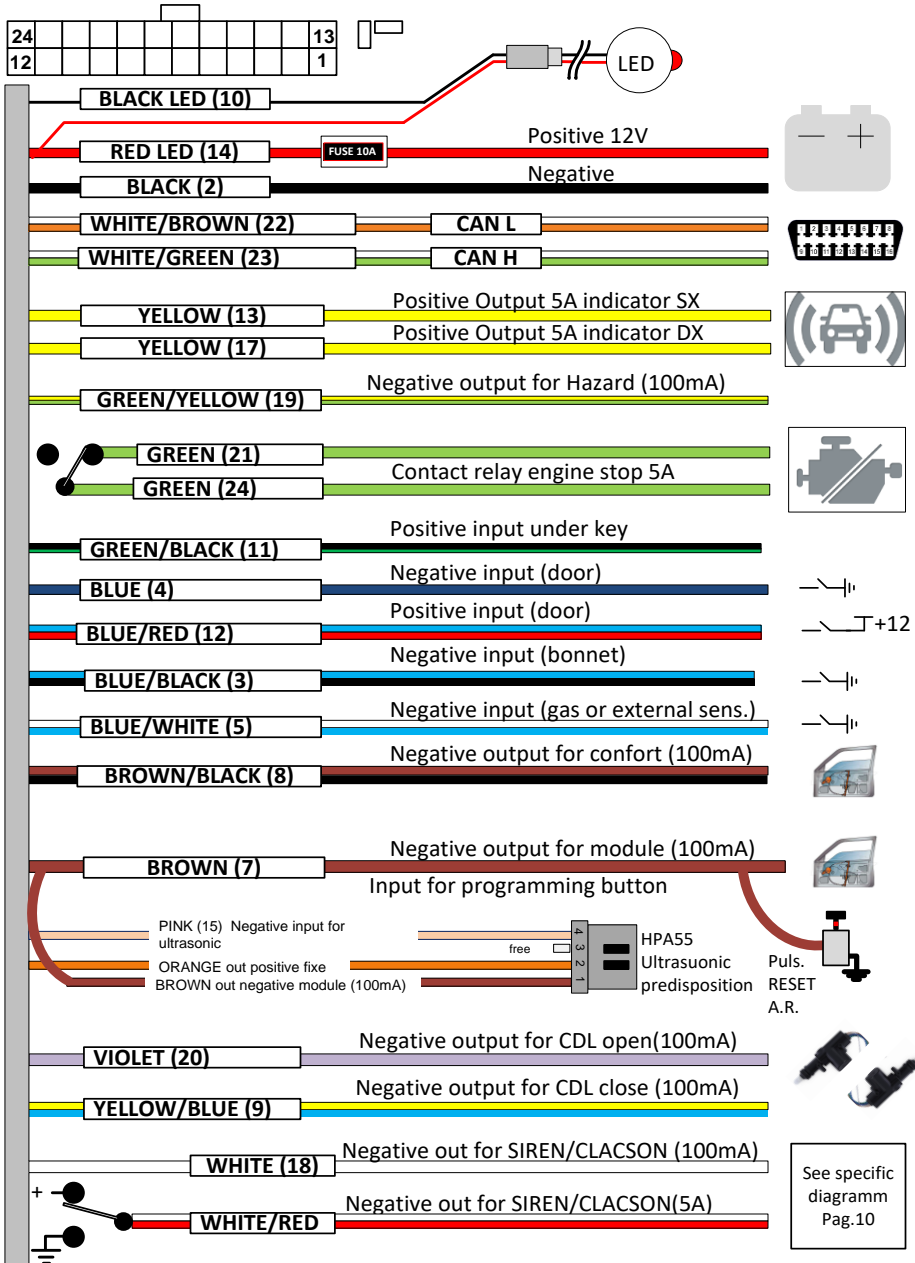
1. Turn the ignition key ON/OFF as many times as per the first number to be modified.
The LED will illuminate during input of the secret code.
Wait for the LED on the dashboard goes out.
2. Turn the ignition key ON/OFF as many times as per the second number to be modified.
Wait for the LED on the dashboard goes out.
3. Turn the ignition key ON/OFF as many times as per the third number to be modified.
Wait for the LED on the dashboard goes out.

If you succeed, the quick flashing of the LED on the dashboard confirms that **the new secret code** has successfully substituted the old one.

**THE NEW PIN CODE WAS STORED AND HAS SUBSTITUTED THE OLD ONE,
INSERT THE NEW PIN CODE HERE _____**

GENERAL CONNECTION DIAGRAM HPS 5

There is a specific fitting instruction for every vehicle that is written into the vehicle compatible list. The following diagram shows a general connection example.

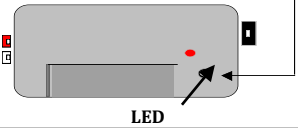


See specific diagramm
Pag.10

ADJUSTEMENT ULTRASONIC MODULE (MODEL HPS 846/55)

Ultrasonic sensitivity may be adjusted by using the trimmer in the module. Rotate the trimmer clockwise to increase sensitivity and anti clockwise to decrease it. Warning: an incorrect adjustment may cause false triggering of the alarm.

Ultrasonic adjustment



SIREN INSTALLATION – HORN CONNECTION

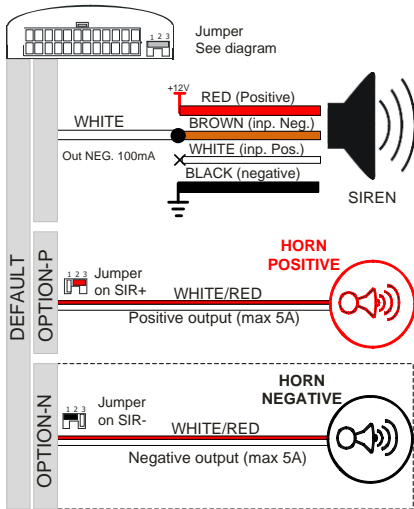
The HPS845 system has two alarm outputs:

- **WHITE / RED** wire of power, 5 A max, switchable in a positive or negative output acting on the front selector SIR+ / SIR-
- Wire **WHITE** negative output in case of alarm, 100 mA max.

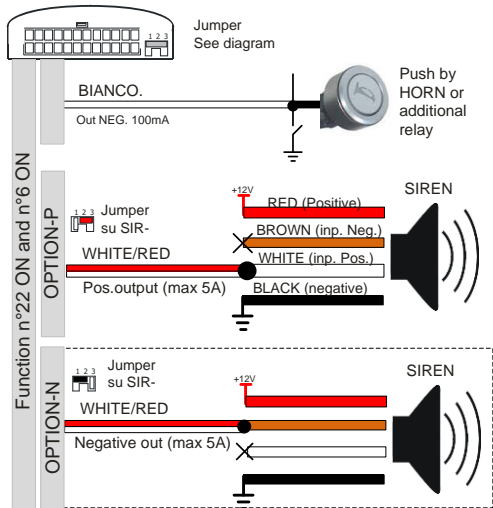
On both outputs are present the arming beep (1), disarming (2) and signaling. They can be excluded acting on the n° 7 functions (RED / WHITE) and n° 19 (WHITE)

Similarly, both outputs can be fixed for continuous or intermittent output functions by acting on the n° 6 (WHITE / RED) and n° 22 (WHITE) functions.

Example n°1



Example n°2



Example 1

Siren:
Command only for negative input siren (no beeps)

Horn power command:
Positive or negative POWER command (emits CIRP). It's NOT necessary to program functions.

The siren does not sound in anti-robbery and anti-aggression if not programmed the function N° 20.

Example 2

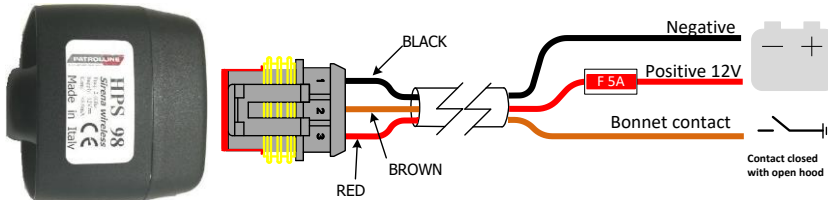
Siren:
Positive or negative siren control (emits beeps). It must be programmed the function n°6 to make continuous output.

Horn signal command:
Negative command and not of power (100mA max). It must be programmed function N°22 to make intermittent this output.

Use an external relay if the horn is positively controlled or need POWER.

WIRELESS SIREN CONNECTION

With the upgrade to vehicles LIST 34, has been added the possibility to control the wireless siren HPS98, which avoids that the wires coming in the engine compartment. However, the two alarm outputs remain active (wires White/Red and White). The connection to the Bonnet pushbutton is optional.



Description

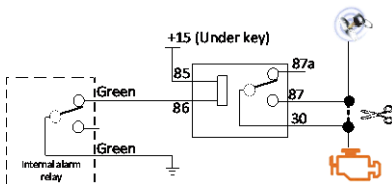
The HPS 98 siren operates with 2.4 GHz wireless technology. Once paired with an alarm unit, it will operate as a normal wired siren, adding additional protection functions during the armed state. The siren features include:

- The activation and deactivation commands (beep/chirp)
- The commands to activate and stop the acoustic warning cycle
- The status command (alarm armed or disarmed)
- The "beacon" transmission, to signal siren presence

The siren does not have a switch-off key. It will not trigger when disconnecting/disabling when the alarm is disarmed, but disconnecting/disabling it when the alarm is armed it will trigger sending a power missing transmission to the alarm.

Once the siren is paired with the alarm, a "beacon" presence communication is established with the alarm, this allows you to verify the mutual communication. If it fails, an alarm warning cycle is triggered for "jamming" (see memory table alarm). The siren is self-powered.

ENGINE KILL WITH EXTERNAL POWER RELAY (OPTIONAL)

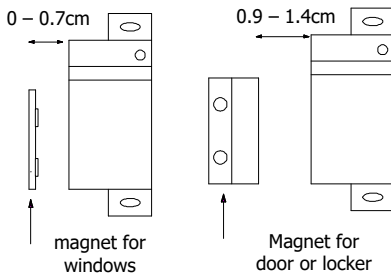


The engine kill circuit of the alarm supports a maximum current of 5A steady. To cut the circuit with a higher steady current uses the additional 30A relay. Apply the relay as indicated in this diagram:

HPA 975 INSTALLATION (OPTIONAL)

It's possible to install the 2,4 GHz transmitters on door, windows and locks.

Place the transmitter on the fixed part and the magnet on the mobile part (door or windows), as shown in the picture.



ATTENTION: the transmitters are equipped with an anti-tampering system, respect the minimum and maximum distance that are shown in the picture. If the distance between these two devices is too little, it is possible that there is a continuous alarm signal transmission, this means continued false alarms.

SET-UP PROGRAMMABLE FUNCTION


Attention: this table is valid for CARLIST34 and above.

It is possible to modify the function written into the table. Alarm disarmed and driver door opened, press the anti-hijack push-button as many times as the number of the function to set.

The function ON is confirmed by **1 beep/chirp, 1 indicator flash and 1 LED flash.**

The function OFF is confirmed by **2 beeps/chirps, 2 indicator flashes and 2 LED flashes.**

Making the programmed function turn ON, and the programmed turn OFF.

N° Function and initial state	FUNCION DESCRIPTION
F. 1	No function
F. 2	<p> PAIRING THE WIRELESS SIREN The Patrolline wireless sirens must be paired by the alarm in order to work. Both the siren and alarm must be in the paired state. Alarm Side: Enter in the programming procedure (2 button presses), the LED flashes quickly. Within 30 seconds continue to the siren procedure. Siren Side: Enter in the programming procedure, grounding the BROWN siren wire 10 times (bonnet input), the siren emits a series of beeps/chirps until it is detected by the alarm (beeps/chirps become more frequent). The pairing procedure can end by bringing the bonnet input back to ground. Therefore, it is better to disconnect the bonnet wire (if used) to perform the procedure. Warning: Once the alarm has been paired, every time the system is armed, the alarm monitors the presence of the siren confirming a transmission is present and received. Therefore, if you need to remove the siren, you must erase the siren or perform the exclusion of the "beacon" communication, see function 29. Erasing the Siren: Enter in the pairing procedure, when the LED starts flashing quickly, press the pushbutton again for 5 seconds until 1 flash of the indicators and 1 beep/chirp. Siren is erased.</p>
F. 3	<p>HPA975 Magnetic sensor pairing in ZONE n°1 <i>Zone n° 1 is not excludible by the PATROLLINE HPA974 remote control</i></p> <ul style="list-style-type: none"> - Activate function 3 (see table start) - During the LED flashing turn ON all the magnetic sensor to pair one by one - The correct programming is indicated by 1 flash of the indicators, 1 beep/chirp and the 1 second LED ON. <p>The procedure can stop after 30 seconds from the last pairing or after turning ON the key. The maximum number of devices accepted into Zone n° 1 is 24. Erasing all Zone n°1 sensors: Enter in the pairing procedure, when the LED starts flashing quickly, press the button for 5 seconds until 1 flash of the indicators and 1 beep/chirp.</p>
F. 4	<p>HPA975 Magnetic sensor pairing in ZONE n°2 <i>Zone n° 2 is excludible by the PATROLLINE HPA974 remote control</i></p> <ul style="list-style-type: none"> - Activate function 4 (see table start) - During the LED flashing turn ON all the magnetic sensor to pair one by one - The correct programming is indicated by 1 flash of the indicators, 1 beep/chirp and the 1 second LED ON. <p>The procedure can stop after 30 seconds from the last pairing or after turning ON the key. The maximum number of devices accepted into the Zone n° 2 is 8. Erasing all Zone n° 2 sensors: Enter in the pairing procedure, when the LED starts flashing quickly, press the button for 5 seconds until 1 flash of the indicators and 1 beep/chirp.</p>

<p>F.5 OFF</p>	<p>HPA974 remote controls and HPA977 Transponder pairing (maximum 4) To pair the additional remote controls and Transponders, the selectors on the central unit must be positioned as shown on the vehicle compatible list. or on the selection 0-1, for non CAN BUS vehicle. Pairing procedure:</p> <ul style="list-style-type: none"> - Activate function 5 (see table start) - To store one remote control, push button number 3 - To store one Transponder, open the shell, remove and re-insert the battery <p>Correct pairing is indicated by 1 flash of the indicators, 1 beep/chirp and 1 second LED ON. If the procedure is started again, the previously stored remote controls and Transponders will be substituted by the newly inserted programming. The procedure can stop after 30 seconds from the last pairing, after the pairing of the maximum remote controls and Transponder number accepted or after turning ON the key.</p> <p>Erasing all transmitters: Enter in the pairing procedure, when the LED starts flashing quickly, press the button for 5 seconds until 1 flash of the indicators, 1 beep/chirp</p>
<p>F.6 PULSE</p>	<p>Set the output RED/WHITE wire alarm for Siren or horn Use this setting when a siren is used instead of the car Horn. Default Horn output is enabled, intermittent during the alarm cycle. To obtain a Siren output, continue during the alarm cycle, the function must be enabled. <i>Attention: in case of some vehicles, where the Horn is controlled through the CAN BUS, this setting doesn't give any results.</i></p>
<p>F.7 ON</p>	<p>Set the arm/disarm beep Off/On This setting permits the removal of the acoustic signal when the system is armed/disarmed and also removes the exclusion signal.</p>
<p>F.8 OFF</p>	<p>Set Siren command by relay (if it is CAN BUS driven) This setting permits you to change the HORN control from the CAN BUS to relay (in cases where vehicles are set in this way). With this programming it is necessary to execute the wire connection to the siren or Horn.</p>
<p>F.9 OFF</p>	<p>Set Indicators command by relay This setting permits you to change the control of the INDICATORS from the CAN BUS or HAZARD to relay (in cases where vehicles are set in this way). With this programming it is necessary to execute the wires connection to the indicators (Yellow wires).</p>
<p>F.10 OFF</p>	<p>ANTI-AGGRESSION For operation see the user section "SPECIAL SECURITY GUARDS" on page 15. NOTE: The engine stop is not automatic, it must also be programmed via the N° 20 function</p>
<p>F.11 OFF</p>	<p>ANTI-THEFT FUNCTION For operation see the user section "SPECIAL SECURITY GUARDS" on page 15. NOTE: The engine stop is not automatic, it must also be programmed via the N° 20 function</p>
<p>F.12 1 s.</p>	<p>Set 30 seconds / 1 second CDL locking This setting permits you to prolong the locking time to 30 seconds, to enable the COMFORT function where possible, by the HPA 974. In case of Ultrasonic/Comfort exclusion, press the second locking command, the time will be re-set and the windows closing will stop.</p>
<p>F.13 Single</p>	<p>Lock impulse double/single This setting permits you to do the function "doors armor", where possible, during the locking by the HPA 974. This function is usually obtained by the original remote control, after two consecutive locking commands.</p>
<p>F.14 Double</p>	<p>Unlock impulse double/single This setting permits you to do the function, unlocking only the driver door or all doors, where possible. This function is usually obtained by the original remote control, after two consecutive unlocking commands.</p>
<p>F.15 OFF</p>	<p>Indicator flashes at arming/disarming by the HPA 974 ON/OFF This setting permits you to have the indicator flashes at arming/disarming the alarm system by the TLC 2,4 GHz, HPA 974. <i>ATTENTION: do this setting only if the lock by the HPA 974 doesn't give any original indicator flashes. Verify this by locking and unlocking the car through the mechanical key.</i></p>
<p>F.16 OFF</p>	<p>Arming by anti-distraction (CAN BUS or HPA 974) This setting permits you to disable the auto arming function of the alarm if the vehicle is equipped with the original auto arming (by the original remote control). <i>ATTENTION: before you set this function it is necessary to check if the indicators do not flash during the locking and unlocking operation through the mechanical key.</i></p>

F.17 OFF	Shock sensor disabling with the US module (by the remote control) This setting permits you to also disable the shock sensor during arming of the system, it has excluded the ultrasonic module due the second locking press, by the original remote control or HPA 974.
F.18 ON	Disable Panic function by the remote control This setting permits you to disable the panic function by the original remote control or HPA 974.
F.19 OFF	NEW Disable the acoustic signals on the WHITE wire and WIRELESS siren. Starting from CARLIST 32 on WHITE wire, generates the acoustic signal (beep/chirp) when arming and disarming the system (as well as on the WHITE / RED wire)
F.20 OFF	Enable the engine block during the anti-aggression / ant-theft cycle Activate the engine block function during the Anti-aggression and/or anti-theft functions. The engine stops working intermittently and becomes fixed within 50 seconds. Activate with function No. 10 and/or No. 11.
F.21 OFF	PASSIVE FUNCTION WHEN ALARM OFF After stopping the engine, opening and closing the driver's door the function will be activated, the LED flashes quickly and within 30 seconds the alarm will arm. During this time, you can interrupt the function turning on the ignition or by opening any access points. The re-closing of these will trigger the time again. <i>Attention: This function can be dependent on the type of vehicle!</i>
F.22 OFF	NEW SET THE SECONDARY OUTPUT INTERMITTENT (WHITE wire) When function is OFF (default) the output wires are fixed (siren connection). When function is ON the output wires are intermittent for the horn connection.
F.23 OFF	ACTIVATE the alarm sensor for Jammer frequency This setting permits to ACTIVATE the alarm sensor for Jamming function. Warning: this sensor is affected by very strong Wi-Fi networks.
F.24 OFF	Inhibit the Alarm arming/disarming by the OEM remote control This setting permits you to disable the alarm, arming and disarming, by the OEM remote control. The alarm can be armed only by the PATROLLINE remote control HPA 974.
F.25 KEY	NEW SWITCH the reading PIN CODE from IGNITION KEY to BRAKE PEDAL Use for cars that do not have the mechanical ignition key. This function allows you to switch the reading pin code input (default ignition key) with the brake pedal or the handbrake. <i>Attention: all the functions that use the unlock code are affected by this switching.</i>
F.26 OFF	Disarming by the ignition key ON enabled This setting permits you to disarm the alarm system, in case of emergency, by turning ON the ignition key. The Positive under key (+15) is detected by the CAN BUS. There is an alternative to the emergency PIN CODE to disarm the alarm by the ignition key: it is possible to set the system to accept emergency disarming by the transponder recognizing the original key. With this function enabled, during the alarm cycle, it is sufficient to unlock the car and turn ON the key. The automatic recognition of the original key disarms the alarm.
F.27 OFF	Immobilizer function enabled For operation see the user section "SPECIAL SECURITY GUARDS" on page 5. This setting permits you to enable the PASSIVE function. Through the Anti-theft push button or the Transponder detections it is possible to reset this function.
F.28 ON	LOCK THE DOORS WHEN VEHICLE IS MOVING This feature allows you to lock the central locking of the doors when the vehicle's speed exceeds 10 km / h. The doors will be unlocked when the ignition is turned off.
F.29	DISABLED "BEACON" TRANSMISSION OF THE WIRELESS SIREN The beacon transmission keeps the wireless siren in contact with the alarm when the siren has been programmed. Removing the siren without activating this function causes an alarm trigger. To remove the siren from the system is possible using function n° 2 (siren erasing).
F.30	<i>No function</i>
F.31	Alarm parameters default restore This setting permits you to restore all the alarm default parameters, without deleting any stored devices (remote control, transponder and magnetic sensor).

ALARM MAINTENANCE

PATROLLINE alarm systems are very sophisticated and highly reliable devices.

Paying attention to some points it is possible to prolong its lifetime and increase reliability.

All operations to repair the alarm must be performed by PATROL LINE Assistance Centers. The tampering of the alarm by personnel not qualified can jeopardize the device working, and the safety of the vehicle.

REPLACING THE BATTERY OF THE TRANSMITTER / TRANSPONDER



It is advisable to replace the batteries of the HPA977, HPA974, HPA975 devices every two years. Use CR2032 lithium 3V from any manufacturer.



SIGNAL FOR LOW BATTERY

HPA977 - at the time of the reset protection functions (PASSIVE - ANTI-THEFT - ANTI-AGGRESSION), the LED of the transponder and the LED alarm will flash four times, indicating that the battery should be replaced as soon as possible.

HPA974 - Four flashes of the LED or each key press

HPA975 - Four flashes of the LED after each excitation / transmission

HOW TO REPLACE THE BATTERY

Gently open the shells of the transponder or transmitter by levering with a flat screwdriver. Remove the battery from the house. Replace it with a new battery type CR2032 or equivalent.

Do not open the batteries. The liquid that can escape is corrosive and can cause burns or damage eyes or skin and is still toxic. In the case in which the battery is determined to be liquid leakage, replace them immediately, taking care to clean the housing and to thoroughly wash the hands in case of contact with the leaked fluid.

ATTENTION: Due to the small size of the product some of its parts may be swallowed. Keep out of reach of children under 36 months of age. Handle with care to avoid short-circuit the batteries through conductive materials. Do not use rechargeable battery. Do not incinerate.



Remove the battery from remote control before disposal of the same and dispose of according to current regulations. Dispose of batteries according to local regulations. Do not dispose of with household waste.

TECHNICAL FEATURES

	Power supply	11V ÷ 15V
	Absorption Armed / disarmed	< 4.5 mA
	Max Current relay (Current engine immobilizer, indicator, alarm)	5 A
	Alarm timing	< 30 sec.
	Frequency transceiver	2.4 GHz
	Working temperature	-40°C / +85°C
	Central Unit size	80 x 50 x 30
	Weight	143 gr.

DECLARATION OF CONFORMITY

This product follows the directive:

Regulation No. 116 >> Rev.2/Add.115 (United Nations)

The installation certificate of the alarm, included in the packing, must be duly filled in and will form part of vehicle documentation.

Please transcribe the following homologation number on the installation certificate in order to complete compliance with the directive for the filling of vehicle and alarm data form.

Type approval n°

E24 16R A-000031



Make copies of this page if necessary

CONDITIONS OF WARRANTY

PATROLLINE guarantees the device against manufacturing defects for a period of 24 months from the date of delivery. The warranty consists in free replacing or repairing of parts unusable or inefficient because of factory's fault verified by Patrolline. Any delay in carrying out works do not entitle to damages or extension of warranty. The warranty lapses if the devices are used not in conformity with the present conditions, if they are modified, repaired or tampered, if the defects derive from accidents, from negligence or from using parts not original. What above-mentioned is the only warranty, that therefore substitutes the legal one. The buyer has not the right to ask for the annulment of the contract, to claim compensation or price reduction.

RESPONSIBILITY: Patrolline has no responsibility or obligations for any accident and/or damage to things/people that could occur using the device.

LIMITATIONS: the buyer undertakes to not to use the device for purposes different from the ones it is for, and to not to modify its construction and its functioning. Saved any possible action of compensation for damages, it is agreed that the non-observance of the regulations above-mentioned involves the immediate end of the right of warranty.

The validity starts from the date of delivery (that is the date of the first installation) signed on the warranty special coupon with the receipt attached or a copy of the invoice. Without these documents, the warranty will start from the date of manufacturing.

The following services are free: the supply and replacement of the parts unusable or inefficient because of verified defect of material; the workforce to replace and repair the above-mentioned parts; the supply of materials that have become necessary after the above-mentioned actions and pertinent to them. **Are payable by the buyer:** the replacement of various materials not connected with the interventions to repair the device for verified defect; maintenances and interventions because of wear, accident or conditions that do not follow the indications of Patrolline. **Every piece returned**, for any reason, to Patrolline will be done by FREE PORT. **These conditions of warranty** have to be considered valid only on National territory (Italy). **Warning** The alarm must be installed by a qualified person following carefully the indications of the manufacturer. The person who do the installation must fill in the *installation certificate* attached. The homologation number of the alarm can be found on the user's manual or on the label located on the plastic box of the alarm. Every following modification to the device or to the connections of the alarm invalidates the installation certificate.

INSTALLATION CERTIFICATE

The undersigned _____

professional installer certify that the installation of the vehicle protection device described below has been carried out conforming to the instructions given by the manufacturer.

Description of the vehicle:

Brand and Model _____

Description of the vehicle protection device:

Model and Serial Number _____

Place and date of the installation: _____

MALFUNCTION (briefly describe the problem):

Stamp and signature of the installer



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