



SYSTEM DESCRIPTION

S40 CAN is a high security level car alarm system that uses a special information exchange method between the car and alarm system. This method allows a reduction in the number of the alarm connection wires, thus not only making its detection more difficult but also decreasing the extent of intervention in the original car electronics. The system is operated from the original car remote controls.

INSTALLATION OF THE CONTROL UNIT

It is recommended to place the SKYBRAKE S40 CAN control unit in the car salon, in a place that is difficult to access, as far as possible from hot surfaces, in a place protected from moisture and water. The system control unit is fixed to the chosen surface using two screws, double-sided adhesive tape or plastic fasteners with the wires facing downwards.

Wire colours and connection to the car's electrical system

1., 2. Blue. Engine cut-off. An internal relay of 20A. The relay contacts are NC (Normally Closed) when the system is in an unlocked status when the ignition has been started. The engine cut-off circuit is intended for cutting off the power supply to the

engine operation electric units.

3. Yellow. Negative output for control of the additional sensors. Switching on the alarm security mode, a negative signal is produced, intended for the control / power supply of additional sensors. Maximum permissible load: 400mA.

4. Green/yellow. Output to the hazard light switch. If the flashing light control is activated from the hazard light switch, then this output should be connected to the hazard light switch.

5. Blue. Total lock-up (the comfort function). Switching on the alarm, this wire outputs a negative signal intended for closing the power windows and sunroof. The signal lasts for approximately 10 seconds. In order to change this time, see the section "Changing the settings".

6. Black/green. Intended for activation of the radio "MUTE" mode in cases when the Anti-HiJack function is used. This option will ensure that the driver will always hear the Anti-HiJack warning signals. Maximum permissible load: 400mA.

7. Orange/brown. CAN L – the CAN bus low level, connected to the low level of the car's CAN bus.

8. Orange/green. CAN H – the CAN bus high level, connected to the high level of the car's CAN bus.

9. Red/blue. Wire for locking the central lock system. A negative output for locking the central lock system in cases when the alarm is operated from separate remote controls as a defence system and the CAN bus is not used. Maximum permissible load: 400mA.

10. Red/white. Wire for unlocking the central lock system. A negative output for unlocking the car's central lock system in cases when the alarm is operated from separate remote controls as a defence system and the CAN bus is not used. Maximum permissible load: 400mA.

11. Orange. Negative output to the siren or car's original horn. Maximum permissible load: 1A. If the car's original horn needs to be connected instead of the siren, an additional relay should be used and the corresponding function activated. In order to activate this function, see the section "Changing the settings".

12. White. Negative input for the door switch. Should be connected to the door switch.

13. Pink. Positive input from left or right flashing light. In case, when the flashing lights are activated by the wire No. 4, and after panic mode the flashing lights are not switching off, this wire should be connected to any of flashing lights.

14. Grey. Negative input for the interior security sensors. Should be connected to the negative signal output of the interior security sensors.

15. Red/green. Ignition (+15). This is the system ignition wire. It should be connected to the wire in which the 12V voltage appears when the ignition is on and does not disappear when the engine is in the START mode. When the ignition is on, the voltage may not be lower than 9V.

16. Green. Negative input for the service button. Intended for connection of the service button. The other end of the service button is connected to the car's body(ground).

17. Black. Negative Output to the light-emitting diode. Should be connected to the black wire of the light-emitting diode.

18. Red/black. Positive Output to the light-emitting diode. Should be connected to the black/red wire of the light-emitting diode.

19. White/black. Negative input for the engine hood switch / programmer unit. It should be connected to the engine hood switch. In order to change the system settings, a special programming unit is connected to this wire. See "Changing the settings".

20. White/red. Negative input for the trunk switch. Should be connected to the trunk switch.

21. Green/white. Positive output to the right side flashing light. The maximum permitted load: 6A.

22. Green/white. Positive output to the right side flashing light. The maximum permitted load: 6A.

23. Black Ground wire (31). This is the system's ground wire. It should be tightly fastened to the car's body with a screw. When the system is installed, this wire should be connected first.

24. Red. System power supply 12V (+30). Should be connected to the positive terminal of the car's battery or other access point to constant 12V voltage.

Automatic detection of the car's make and model (self learning)

SKYBRAKE S40 CAN can automatically detect the car's make and model. As a result, the installer can save system installation time.

Open the main unit protecting cover; there are located two LEDs, fuses and operating mode selection switch.

To ensure that the system detects the specific car model, you need to connect the power supply, CAN bus and siren. In order to activate this mode:

1. Disconnect the power supply;
2. Turn operating mode selection switch to the position S (sync);
3. Turn On the ignition and the Hazard lights;
4. Connect the system to the power supply. At this moment, the green LED will start to blink – which means that the system will attempt to recognise the car's make and model;
5. In the event of successful recognition, you will hear three sound signals and green led will turn on;
6. Turn operating mode selection switch to the position A (auto).

From this moment, the car's make and model are recorded in the system's memory. Disconnecting the power does not erase the memory; therefore, there is no need to repeat the procedure.

Warning!

In case, when trying to recognize the car's make and model the green LED turns off and the red LED starts blinking together with the siren, it means that the CAN line is not correctly connected. Check the CAN lines connection and repeat the procedure starting from the point No.1.

When trying to recognize the car's make and model green LED turns off and the red LED turns on, it means that CAN line is correctly connected, but the system cannot recognize the car's make and model. Reason – CAN line is not correctly chosen or the system is not suitable with the particular car.

SWITCHING THE ALARM ON AND OFF

The alarm is switched on by pressing the car-locking button on the remote control. The central locking system locks all the doors and switches on the alarm. One sound signal and blink of the flashing lights confirm that the alarm is on. The light-emitting diode is also lit up continuously for the first 30 seconds, indicating preparation for the security mode. The alarm verifies whether all the doors, hood and trunk are locked, and the light-emitting diode starts to blink after 30 seconds. The alarm is ready for the panic mode from this moment onwards.

The alarm is switched off by pressing the car-unlocking button on the remote control. The central locking system unlocks all the doors, the light-emitting diode stops blinking, and the alarm is switched off. Three sound signals and blink of the flashing lights confirm that the alarm has been switched off.

- If the alarm gives one or several sound signals within 5 seconds of being switched on, it means that some of the car's doors, hood or trunk is not closed:
- 1 sound signal – some of the doors are still open;
- 2 sound signals – the hood is still open;
- 3 sound signals – the trunk is still open;
- 4 sound signals – the interior security sensors have been triggered;
- 5 sound signals – the ignition is still on.

In this case, the alarm should be switched off and the open door, hood or trunk closed. After that, the alarm should be switched on once more.

THE ALARM PANIC MODE

The alarm will switch on in the panic mode if it is switched on and:

- Some of the doors are opened;
- The hood is opened;
- The trunk is opened;
- The ignition is switched on (there is an attempt to crank up the car);
- Someone attempts to enter inside the car – the interior sensors will be triggered.

Continuous sound of the siren and blinking of the flashing lights will indicate the panic mode.

In order to switch off the alarm panic mode, the remote control button for unlocking the car should be pressed. After the button has been pressed, the central lock system will unlock the doors, and both the panic mode and alarm will be switched off.

SWITCHING OFF THE ALARM AREAS

If any of the areas trigger the panic mode more than three times (the number of times can be changed), then the system stops reacting to this area. This function is set up in order to avoid continuous panic in the event that some switch or sensor is damaged. In order to change the number of triggers in response to which the system stops reacting, see the section "Changing the settings".

MEMORY OF THE PANIC CAUSES

The alarm saves the causes that have triggered the panic in its memory. Continuous blinking of the light-emitting diode after the alarm has been switched off is indicative of it. In order to determine what kind of external impact is responsible for triggering the panic mode, the alarm needs to be switched off and the ignition turned on. Observe the light-emitting diode and count how many times it blinks:

- 1 blink of the indicator – the door has been opened;
- 2 blinks of the indicator – the hood has been opened;
- 3 blinks of the indicator – the trunk has been opened;
- 4 blinks of the indicator – the interior security sensors have been triggered;
- 5 blinks of the indicator – the ignition has been turned on.

TURNING OFF THE INTERIOR SECURITY SENSORS

If you need to leave a child or a pet inside the car and lock the car, the interior security sensors should be switched off. In order to do that, you will need to:

1. Turn on the ignition;
2. Press the alarm service button;
3. Turn off the ignition;
4. Release the service button.

From this moment, when the car is locked, the alarm will be switched on with the interior security sensors turned off. Next time you lock the car, the interior sensors will be switched on. Repeat the procedure in order to switch off the sensors.

SERVICE MODE

The service mode is intended for switching off the alarm while your car is being serviced or repaired. In service mode, the system does not react to the remote control buttons, salon sensors and does not block the engine. In order to switch on the service mode:

1. Press the service button for 15 seconds;

2. The alarm will give a sound signal, and the flashing lights will blink;

3. Release the service button and press it once again for 1 second.

The service mode is turned on. Rapid blinking of the light-emitting diode when the car is locked and unlocked is indicative of the service mode.

In order to switch off the service mode, repeat the same procedure you used for switching it on.

ENTERING THE PIN CODE

In cases in which the alarm cannot be switched off by the remote control (the battery is empty), you can switch it off by using the PIN code. In order to switch off the alarm using the PIN code:

1. Find out from the system's manufacturer the two-digit PIN code;
2. Unlock the door using the key (manually);
3. Turn the ignition on and off;
4. Turn the ignition on;
5. Count the indication diode blinking times, and when they match with the first digit of your PIN code, turn the ignition off and on;
6. Count the indication diode blinking times, and when they match with the second digit of your PIN code, turn the ignition off.

If the PIN code is entered correctly, the system will switch off the S40 CAN protection completely and switch on in the service mode. In order to switch off the service mode, see the section "Service mode".

CHANGING THE SETTINGS

Changing the system settings is available to certified car security system installers using special equipment. This equipment can be used for:

- Switching the sound signals on/off when the alarm is switched on or off;
- Switching the automatic alarm activation on/off;
- Switching the Anti-HiJack function on/off;
- Switching the flashing light activation from the emergency button on/off;
- Manual selection of the car's make and model;
- Changing the system PIN code;
- Uploading/deleting a report on the panic mode history;
- And other functions.

The programming user's manual can be obtained together with the programming.

WARRANTY PERIOD

The warranty period of the SKYBRAKE S40 CAN security system is 2 years.

The warranty is valid if the system does not work due to the fault of the manufacturer.

The warranty is not valid if the product has been mechanically damaged, exposed to the direct influence of water, improperly installed or used.