StarLine A9, B9, D9, AS9

X1

Color	Function
blue	Output "open" Central Lock (10 A)
green	Output "close" Central Lock (10 A)
black-red	
black-red	Ø + 12 V
blue-black	
green-black	

10 A 10 A

Connect actuators in parallel

X2

15 A   Storage battery   +12B

Color	Function
red	Unit power supply
green-black	Output to hazard lights (7,5 A) (+)
black	
green-yellow	Output to hazard lights (7,5 A) (+)

7,5 A   7,5 A

X3

3 A

Color	Function
red	Power supply of low-current circuits
black	
black-white	Security status output (200 mA) (–)
yellow-white	Door open simulation output (200 mA) (–)
black-red	Engine blocking output (200 mA) (–)
green-yellow	Comfort closure output (200 mA) (–)
gray-black	Engine run control input
yellow	Ignition input (+)
pink	Bypass module control output (200 mA) (–)
blue-red	Parking brake input (–)
purple	R4 code relay control output (200 mA) (–)
orange-white	Trunk trigger input (–)
gray	Siren control output (2 A) (+)
orange-purple	Brake pedal input (+)
yellow-black	Trunk unlock output (200 mA) (–)
blue-black	Door trigger input (+/–)
yellow-red	Door two-step unlock output (200 mA) (–)
orange-gray	Hood trigger input (–)
white-black	StarLine Bus
orange-black	DVR control output (2A) (+)

Blocking relay in the set
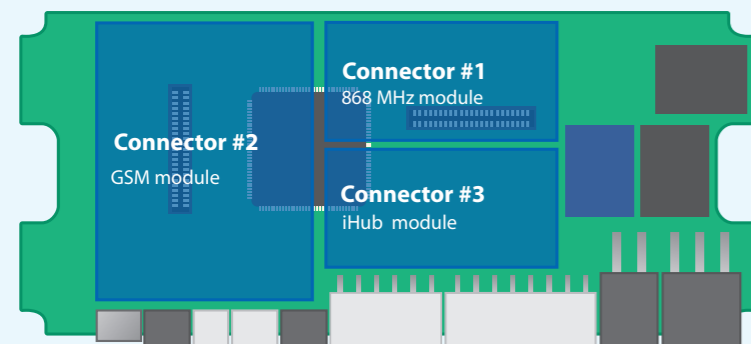
(–) 85 87a 30 — Common
87 86 — H3
(+) — HP
Ignition 1

X5
GPS+GLONASS antenna *

X6
Service button with LED

X7
Temperature sensor

X8
Microphone (option)

X9
USB-connector

* if the GSM module is installed
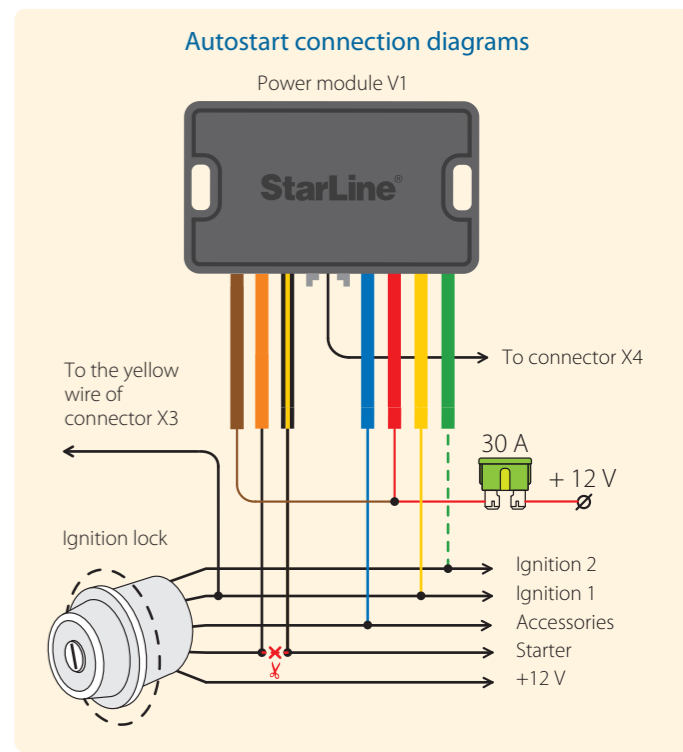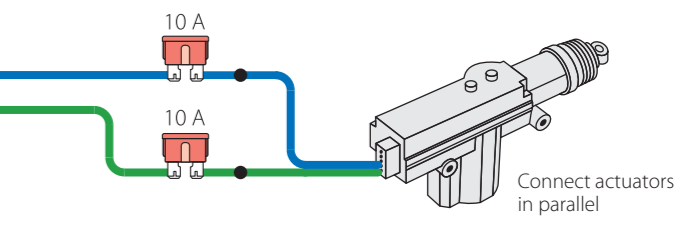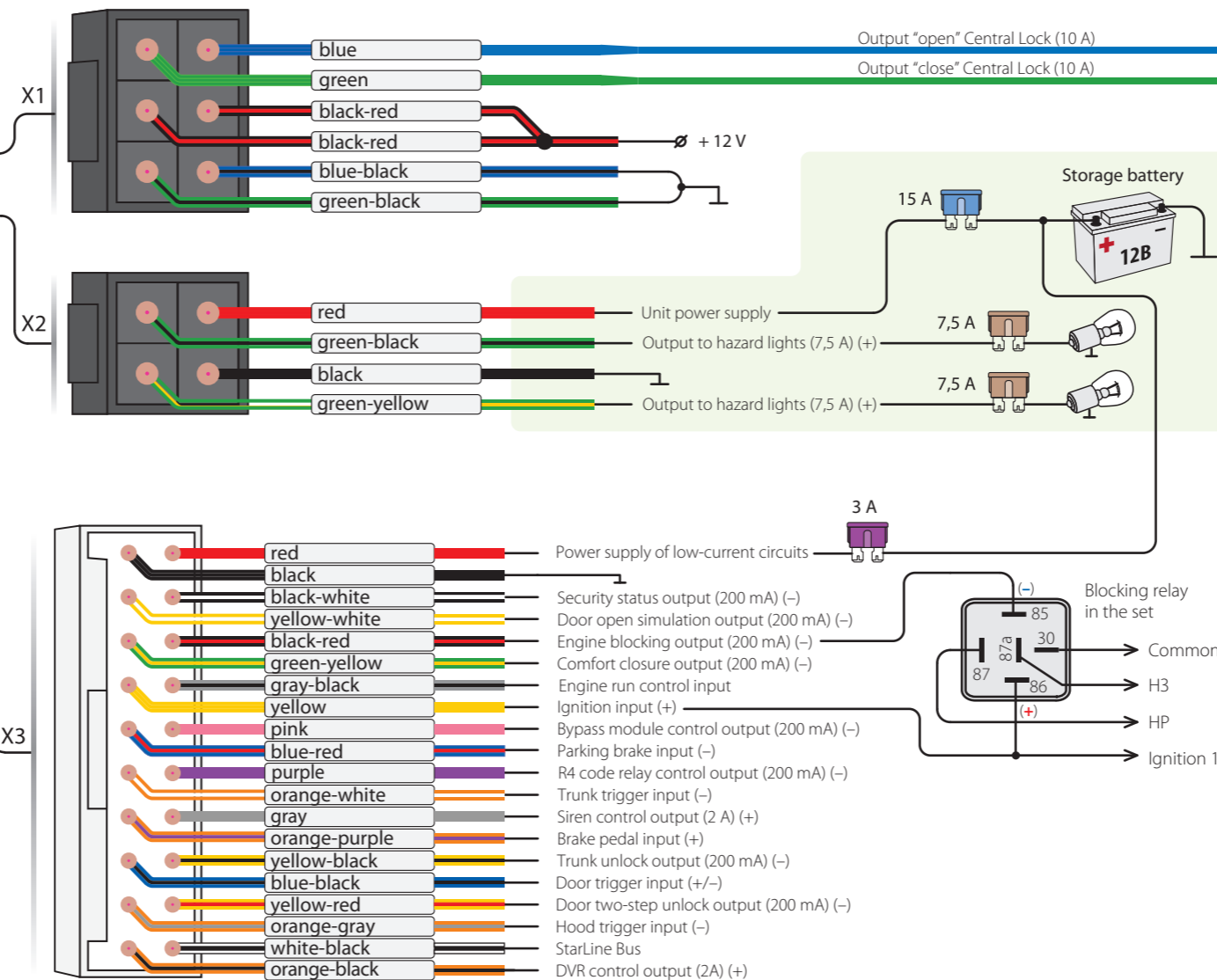
For convenient setting, diagnostics and software update use the StarLine Master program, available for download on the website help.starline.ru/slm
Enter the program using the service code given on the owner's plastic card.

X4

Color	Function
orange-white	CAN-H B
gray-white	LIN A
orange	CAN-L B
white	LIN B
brown	CAN-L A
white-blue	LIN C
brown-white	CAN-H A
white-green	LIN D
green	CAN-L C
green-white	CAN-H C
blue	ACC / Starter protection output (200 mA) (–)
black-yellow	Starter output (200 mA) (–)
yellow	IGN 1 output (200 mA) (–)
orange	Starter protection output / ACC (200 mA) (–)
green	IGN 2 output (200 mA) (–)
red	+12V output (500 mA) (+)

Arrangement of the modules on the board

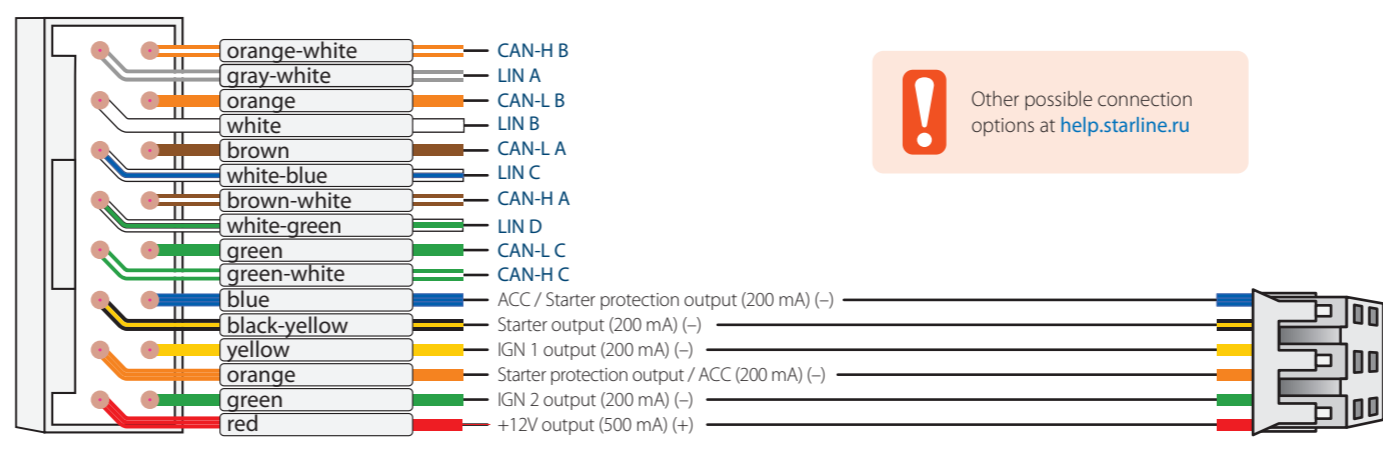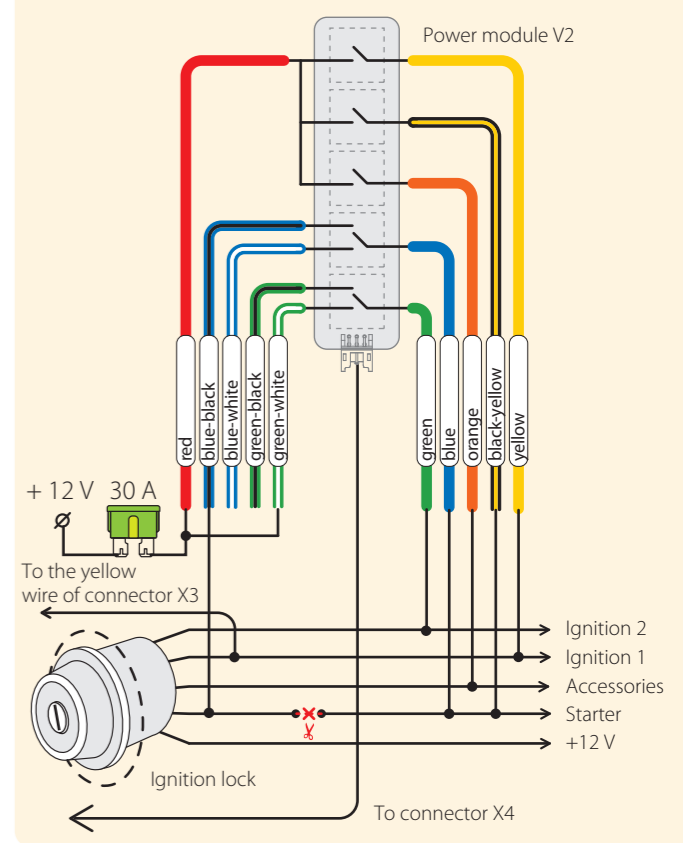Before installing the modules make sure that the main unit is disconnected from the car supply circuit and the computer USB connector.

Connector #1 — 868 MHz module
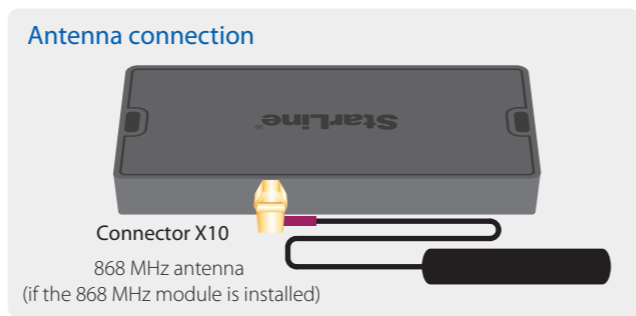**Connector #2** — GSM module
Connector #3 — iHub module

RF 868 MHz should be installed to control the system with 2-way pager.
GSM module should be installed to control the system with text messages, voice calls, mobile App and starline.online web service.

Antenna connection

Connector X10
868 MHz antenna
(if the 868 MHz module is installed)

Autostart connection diagrams

Power module V1

StarLine

To the yellow wire of connector X3

To connector X4

30 A   + 12 V   Ø

Ignition lock

Ignition 2
Ignition 1
Accessories
Starter
+12 V

Set X4:6 blue wire as "Starter protection" and X4:15 orange wire as "Engine start: ACC" in StarLine Master configuration program.

Power module V2
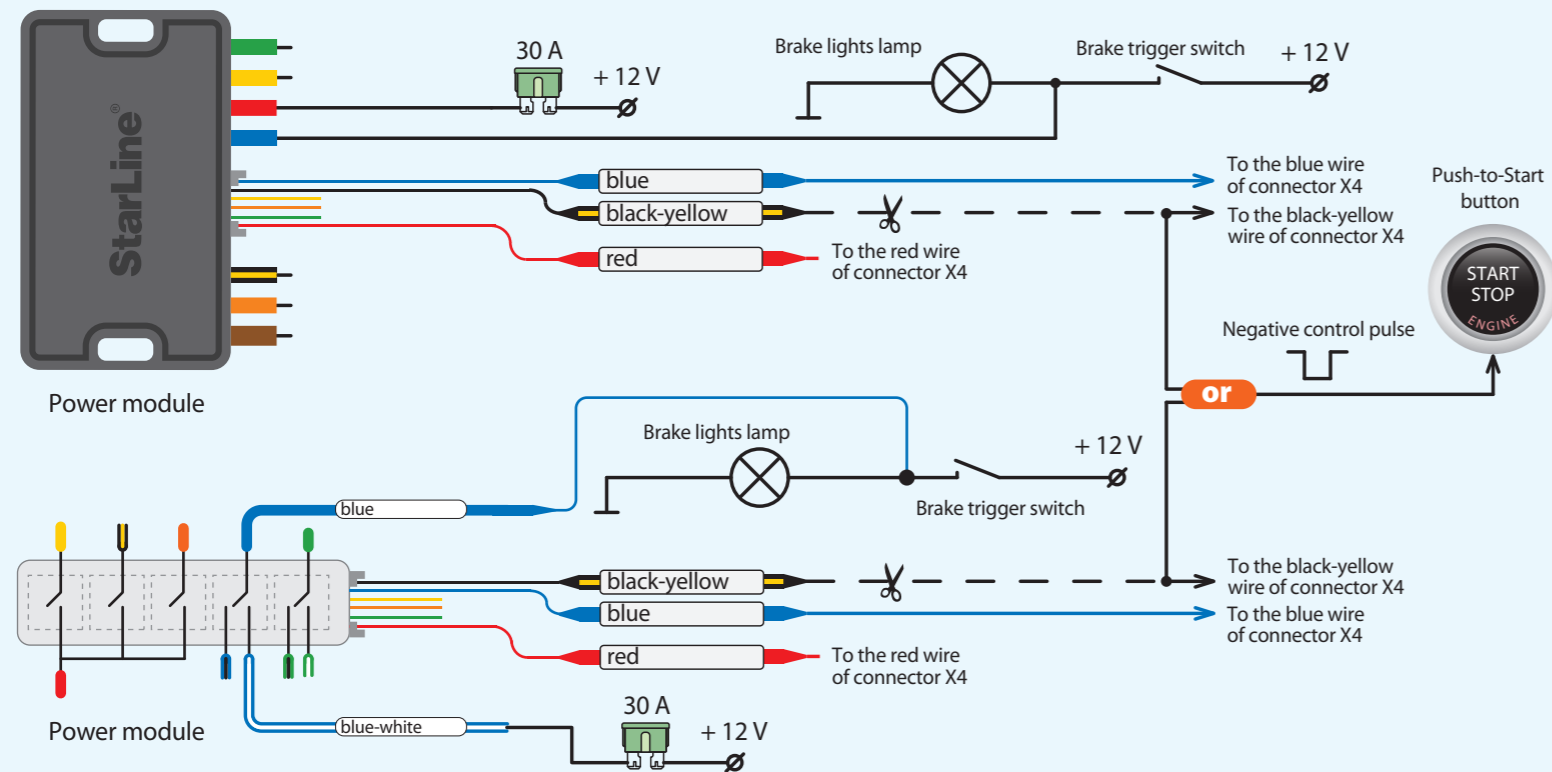
red, blue-black, blue-white, green-black, green-white
green, blue, orange, black-yellow, yellow

+ 12 V   30 A   Ø

To the yellow wire of connector X3

Ignition lock

Ignition 2
Ignition 1
Accessories
Starter
+12 V

To connector X4

Diagram of starting circuit connection on cars with PTS button

1. In StarLine Master program set X4:6 blue wire as "Engine start: simulate brake or clutch pedal" and X4:14 black-yellow wire as "Engine start: PTS button".
2. Connect wires according to diagram for corresponding power module.

Power module

Power module

Eberspächer heater connection with digital bus control

1. In StarLine Master program set the pink output wire of X3 connector as "Eberspacher preheater control via digital bus"
2. In "Engine start" section "Starting preheater" enable "Permission for preheater operation". For the point "Start type of preheater" select option "Eberspacher via digital bus".
3. Connect the wires according to the diagram.

Webasto heater connection with digital bus control

1. In StarLine Master software set the pink output wire of X3 connector as "Webasto heater control via digital bus", the gray-black wire – as "Webasto preheater start control via digital bus".
2. In "Engine start" section "Starting preheater" enable "Permission for preheater operation". For the point "Start type of preheater" select option "Webasto via digital bus".
3. Connect the wires according to the diagram.

ATTENTION! The tags included in the delivery set are already registered in the main unit and are in the transport mode, i.e. off. Pressing of the tag button in this mode will be indicated by green and red flashes of the built-in LED. Prior to operation, press the tag button several times until the flash color changes to green.

New devices registration

NOTE! At registration of new tags and smartphones all previously registered tags and smartphones will be erased from memory. So the existing devices should be registered simultaneously in one cycle with all the new devices. In total up to 5 Bluetooth devices can be registered in the system main unit.
When new RF pagers are registered, all previously registered pagers will be erased from memory. So the existing pagers should be registered simultaneously in one cycle with all the new pagers.
In total, up to 4 RF pagers can be registered in the system main unit.

Switch to device registration mode

1. Disarm the security system.
2. Switch ignition Off if it is On.
3. Press the valet button 7 times.
4. Switch ignition On. 7 light LED flashes of service button and 7 buzzer sounds will follow.
5. 2 short LED flashes and buzzer sounds will confirm entry into the Registration mode.

2-way remote control (pager) registration

6. Press pager buttons 1 and 2 shortly.
7. In 3 seconds successful registration will be confirmed by a short beep sound of pager, 2 LED flashes of service button and 2 buzzer sound signals. If a pager is not registered, 4 beep sounds of pager will follow.
8. Repeat points 6-7 for each pager.

Bluetooth tags (transponders) registration

9. Remove battery from tag.
10. Hold a tag button pressed and insert battery back. A tag LED will turn red.
11. Release button, a series of red flashes will follow.
12. In 10 seconds successful registration will be confirmed by green LED flash, 2 flashes of service button LED and 2 buzzer sounds. If tag is not registered LED will turn red.
13. Repeat points 9-12 for all remaining tags.
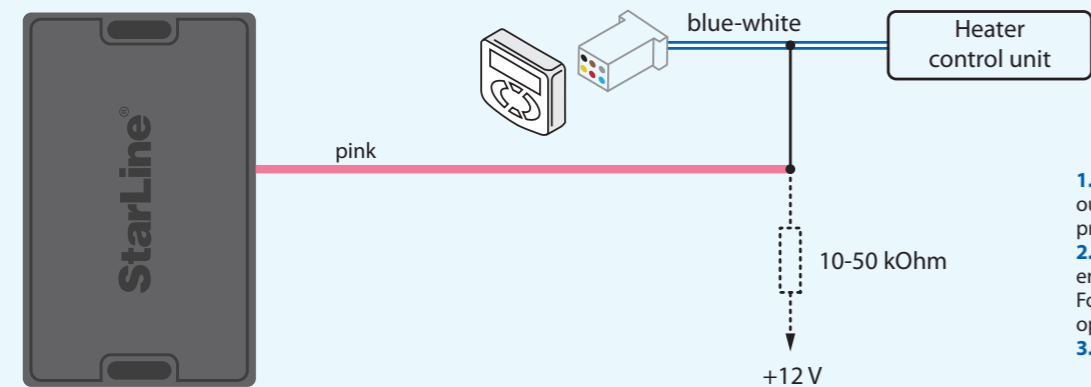
Smartphone registration

14. Register a smartphone* with use of the free StarLine mobile App.

Exit from the device registration mode

15. In 10 seconds switch ignition Off to exit the registration mode. An exit from Registration mode will be confirmed by double LED flashes and buzzer sounds and then additional signals in amount of total registered tags, pagers and smartphones will follow.
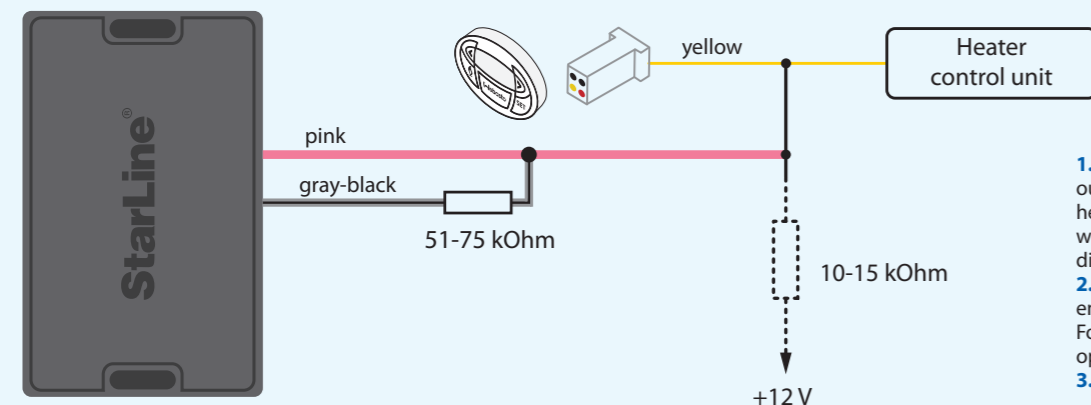
The iOS and Android smartphone with Bluetooth Smart 4.2 and above are supported.

Creation of owner authorization code (by means of the standard buttons)

1. Deactivate complex security.
2. Switch off ignition, if it was on, then press the service button 7 times.
3. Switch on the ignition.
4. 7 light signals of the LED on the service button will follow.
5. Then 2 short light signals on the service button will follow, meaning entry in the registration mode.
6. Enter the owner authorization code using the standard car buttons with pressing interval not more than 3 seconds. Each pressing of the standard button will be accompanied with a single signal of the LED on the service button. The list of standard buttons supported in the car is given on the website **can.starline.ru**
7. Acceptance of the owner authorization code will be confirmed by 2 signals of the LED on the service button.
8. Enter the owner authorization code again.
9. If the code is entered correctly, 2 light signals on the service button will follow. If the code is entered incorrectly, 4 short signals will be heard, in this case repeat items 6...8.
10. Switch off ignition to exit the mode of owner authorization code recording.
11. Exit from the registration mode will be confirmed by signals of the LED on the service button: 2 short signals and the number of signals corresponding to the total number of registered pendants, tags and smartphones.
12. Note down the created owner authorization code in the corresponding section of the user's manual.

General installation requirements

The security system is designed for installation on vehicles with 12V on board voltage.
Prior to installation, make sure that the vehicle equipment circuits, to which the system is connected, are in suitable operating condition and no any trouble codes and check engine are indicated.
The system installation should be carried out according to the connection diagram.
The "ground" wire of the main unit should be connected first to a car body ground with an original screw.
Mount the wiring far from sources of electrical interference: ignition coils, high-voltage wires, etc.
Make sure that the harness is not lay in contact with the moving parts of the vehicle: pedals, steering shaft etc.
Connect all the harness to the main unit sockets only after all wires mounting is complete.
Do no fit the engine temperature sensor near the exhaust manifold, otherwise it may cause sensor overheating and damage.
Only the qualified and trained fitter may carry out the security system installation.
The configured parameters of the security systems must comply with a vehicle manual instruction requirements.