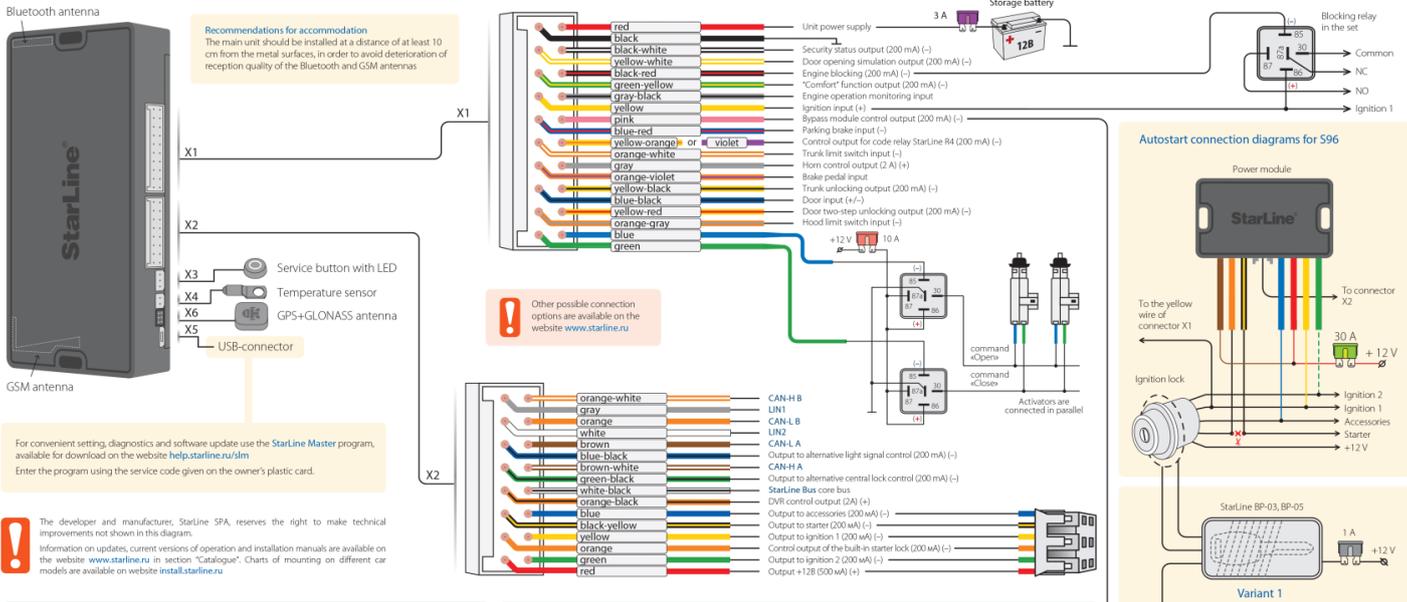# Connection diagram

StarLine® S96, S66 Connection diagram

For cars with a CAN/LIN-bus make a connection via the digital CAN/LIN-bus, for other cars make an analogue connection.
Information on connection to the CAN/LIN-bus of different cars is available on website can.starline.ru

Bluetooth antenna

Recommendations for accommodation
The main unit should be installed at a distance of at least 10 cm from the metal surfaces, in order to avoid deterioration of reception quality of the Bluetooth and GSM antennas

StarLine

X1

X1

X2

X3 — Service button with LED
X4 — Temperature sensor
X6 — GPS+GLONASS antenna
X5 — USB-connector

GSM antenna

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.

The developer and manufacturer, StarLine SPA, reserves the right to make technical improvements not shown in this diagram.
Information on updates, current versions of operation and installation manuals are available on the website www.starline.ru in section "Catalogue". Charts of mounting on different car models are available on website install.starline.ru

X1 wiring

Wire	Function
red	Unit power supply
black	
black-white	Security status output (200 mA) (–)
yellow-white	Door opening simulation output (200 mA) (–)
black-red	Engine blocking (200 mA) (–)
green-yellow	"Comfort" function output (200 mA) (–)
gray-black	Engine operation monitoring input
yellow	Ignition input (+)
pink	Bypass module control output (200 mA) (–)
blue-red	Parking brake input (–)
yellow-orange or violet	Control output for code relay StarLine R4 (200 mA) (–)
orange-white	Trunk limit switch input (–)
gray	Horn control output (2 A) (+)
orange-violet	Brake pedal input
yellow-black	Trunk unlocking output (200 mA) (–)
blue-black	Door input (+/–)
yellow-red	Door two-step unlocking output (200 mA) (–)
orange-gray	Hood limit switch input (–)
blue	
green	

3 A
Storage battery
+12B

Blocking relay in the set
Common
NC
NO
Ignition 1

Other possible connection options are available on the website www.starline.ru

+12 V 10 A

command «Open»
command «Close»
Activators are connected in parallel

X2 wiring

Wire	Function
orange-white	CAN-H B
gray	LIN1
orange	CAN-L B
white	LIN2
brown	CAN-L A
blue-black	Output to alternative light signal control (200 mA) (–)
brown-white	CAN-H A
green-black	Output to alternative central lock control (200 mA) (–)
white-black	StarLine Bus core bus
orange-black	DVR control output (2A) (+)
blue	Output to accessories (200 mA) (–)
black-yellow	Output to starter (200 mA) (–)
yellow	Output to ignition 1 (200 мА) (–)
orange	Control output of the built-in starter lock (200 мА) (–)
green	Output to ignition 2 (200 мА) (–)
red	Output +12B (500 мА) (+)

Autostart connection diagrams for S96

Power module

StarLine

To the yellow wire of connector X1

To connector X2

30 A
+ 12 V

Ignition lock

Ignition 2
Ignition 1
Accessories
Starter
+12 V

StarLine BP-03, BP-05
1 A
+12 V
Variant 1

StarLine BP-06
violet-yellow
not used
+12 V
Variant 2

or

General installation specifications

The complex is designed for installation on vehicles with a voltage of 12V onboard power supply.

Before the complex installation, make sure that the circuits of the electrical equipment of the vehicle, to which the complex is connected, are in good working order, and also in the absence of error indication of the vehicle's factory equipment.

The complex installation should be carried out in accordance with the connection diagram.

First of all, you should connect the "ground" wire of the complex to chassis ground.

Wiring should be made as far as possible from sources of electrical interference: ignition coils, high-voltage wires, etc. Pay attention to the fact that the wires do not come in contact with the moving parts of the vehicle's construction - pedals, steering rods, etc.

Power supply to the components of the complex is allowed only after the installation is completed.

Do not install the engine temperature sensor near the exhaust manifold, as this may cause the sensor to overheat and malfunction.

The complex installation should be carried out only by specially trained qualified installers.

When configuration the complex the parameters to be set must not contradict the requirements of the vehicle guide.

Connection diagram for StarLine R4 code relay

NO — brown
NC — orange
COM — black-yellow
Blocked circuit

Hood lock
UNLOCK — blue
LOCK — green

orange-gray — INPUT — To connector X1 yellow-orange wire
black-white — EXT
black — GND — Power
red — BAT +
yellow — IGN — Ignition
gray — OUTPUT

Hood limit switch

External blocking relay
NC — Common
Blocked circuit

StarLine® S96, S66
Additional connection options
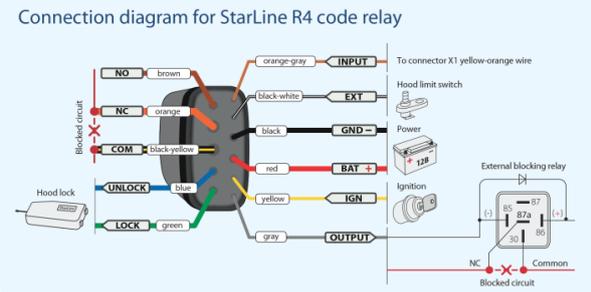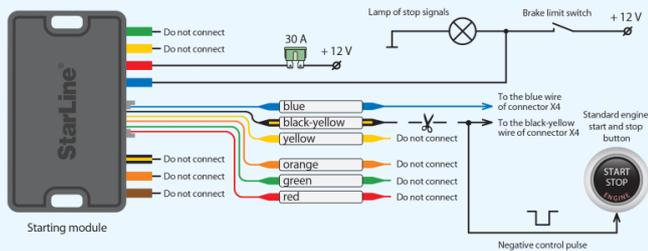Setting of the security-telematic complex

version №1

Diagram of starting circuit connection on cars with "Start-Stop" button

1. In the Starline Master application, reprogram the blue wire of connector X4 for simulation of the brake pedal, and the black-yellow wire of connector X4 — for the "Start-Stop" button
2. Make connection in accordance with the diagram

Do not connect
Do not connect
30 A
+12 V
Lamp of stop signals
Brake limit switch
+ 12 V

blue — To the blue wire of connector X4
black-yellow — To the black-yellow wire of connector X4
yellow
orange — Do not connect
green — Do not connect
red — Do not connect
Do not connect
Do not connect
Do not connect

Standard engine start and stop button
START STOP ENGINE
Negative control pulse

Starting module

Standard connection diagram for underhood unit StarLine R6

If unit StarLine R6 was purchased separately, it must be registered in the main unit's memory:

1. Deactivate complex security. Switch off ignition if it is on.
2. Disconnect the BAT, OUTPUT and INPUT wires from the car circuits.
3. Press the service button 7 times.
4. Switch on the ignition.
5. 7 light signals of the LED on the service button will follow.
6. Then 2 signals of the LED on the service button will follow, meaning entry in the registration mode.
7. Interconnect the OUTPUT and INPUT wires of the underhood unit.
8. Supply power (BAT and GND wires).
9. In 10 seconds, successful registration will be confirmed by 2 signals of the LED on the service button.
10. Disconnect the BAT wire from the car circuits, then open the OUTPUT and INPUT wires.
11. Switch off ignition and check unit operation.

NO — Brown
NC — orange
COM — black-yellow
UNLOCK — blue
LOCK — green
Blocked circuit
Hood lock drive

orange-gray — INPUT
Hood limit switch
do not connect — black
Black-and-white — EXT — red
white
Temperature sensor R6
black — GND −
red — BAT + — Power 20 A — 12B
yellow — IGN — Ignition
gray — OUTPUT — Horn

The device is manufactured with textual or color marking of wires.

Registration of new components

ATTENTION! At registration of new tags and smartphones all previous tags and smartphones will be deleted from memory. It will be necessary to register them again. In total, up to 5 devices can be registered in the complex.
When new remote keys are registered, all previous remote keys will be deleted from the memory. It will be necessary to register them again. In total, up to 4 remote keys can be registered in the complex.

Entry in the device registration mode

1. Deactivate complex security.
2. Switch off ignition if it is on.
3. Press the service button 7 times.
4. Switch on the ignition.
5. 7 light signals of the LED on the service button will follow.
6. Then 2 short light signals of the LED on the service button will follow, meaning entry in the registration mode.

Tag registration

7. Remove the battery from the tag.
8. Press the tag button and install the battery back. The tag LED will light up red.
9. Release the button, a series of red flashes will follow.
10. In 10 seconds, successful registration will be confirmed by a green flash and 2 signals of the LED on the service button. If the tag was not registered, the LED will light up red.
11. Repeat items 10-12 for the remaining tags.

Smartphone registration

12. Register a smartphone* using the free StarLine mobile application.
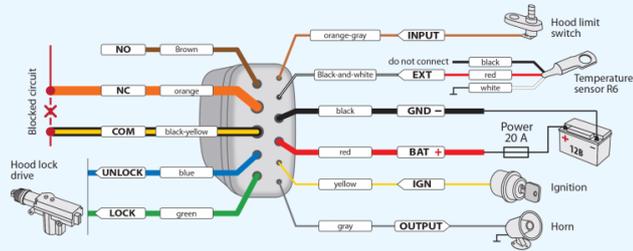
Exit from the device registration mode

13. In 10 seconds switch off ignition to exit the registration mode. Light signals on the service button will follow, the number of which will match the total number of registered tags, pendants and smartphones.

The list of supported smartphones is available on the website www.starline.ru

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.