

StarLine AS9, B9

Security – telematic system 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 at website can.starline.ru



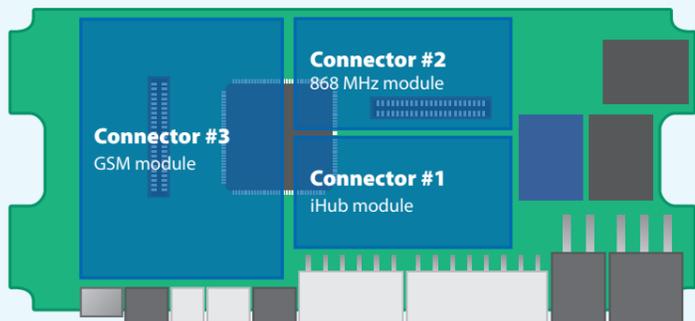
- X1
- X2
- X3
- X4
- X5 GPS+GLONASS receiver *
- X6 Service button with LED
- X7 Temperature sensor
- X8 Microphone (optional)
- X9 USB-connector

* if the GSM module is installed

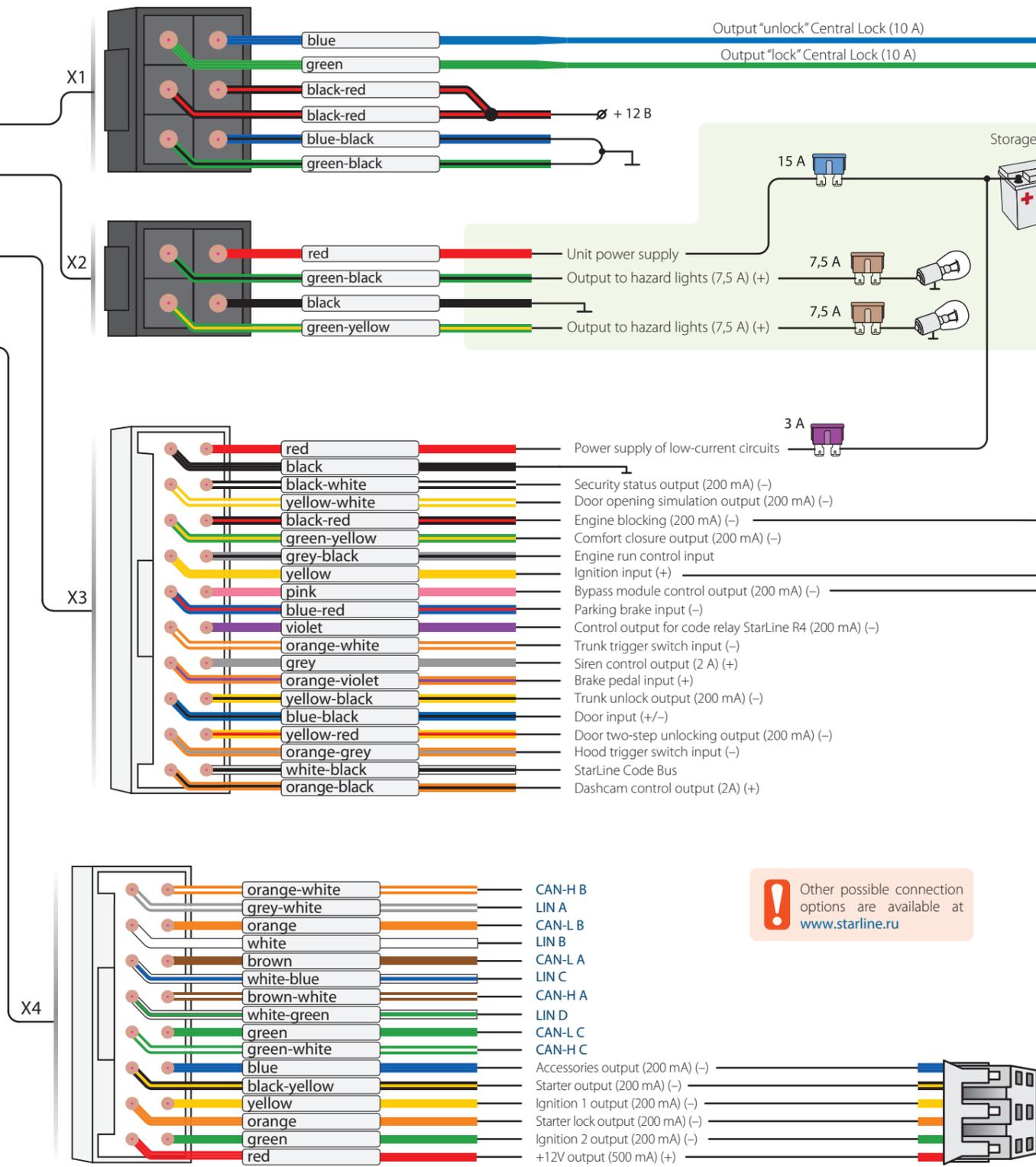
For convenient setting, diagnostics and software update use StarLine Master program, available for download at help.starline.ru/slm. Enter the program using service code given on the owner's plastic card.

Arrangement of the modules on the board

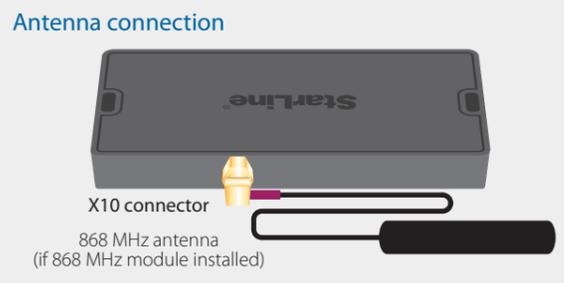
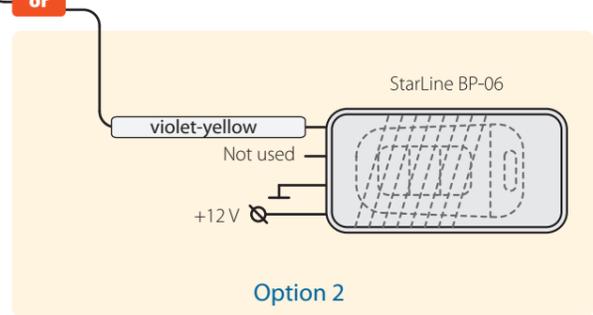
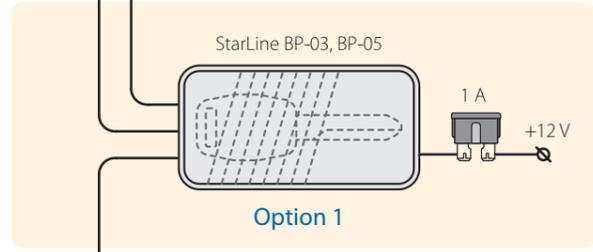
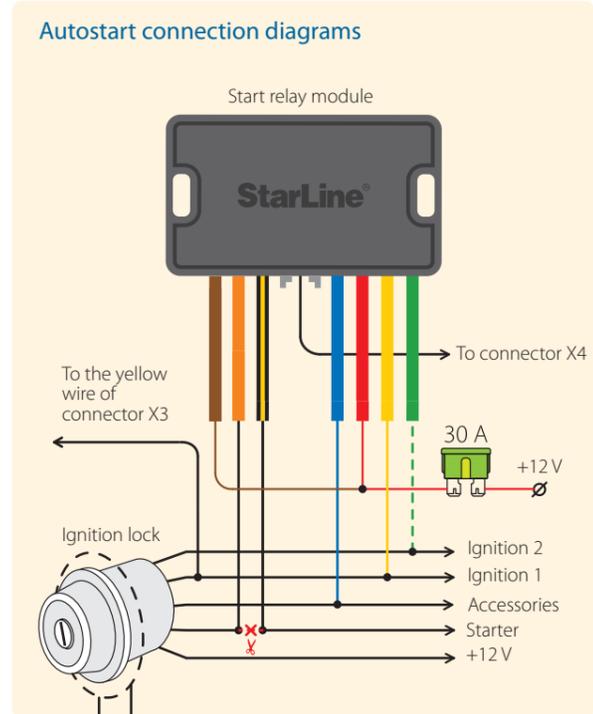
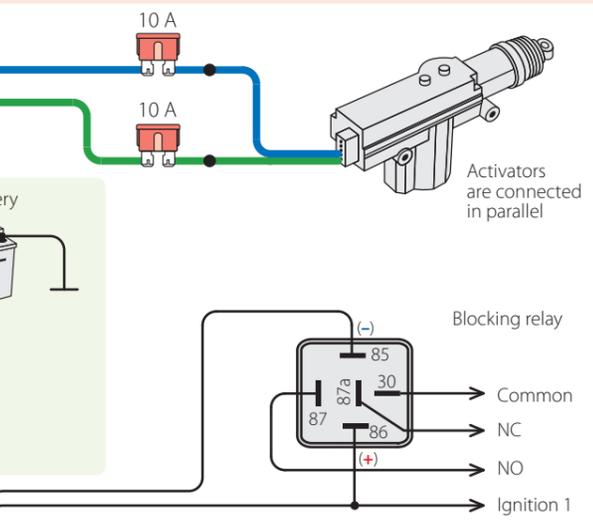
Before installing the modules make sure that the main unit is disconnected from the car supply circuit and the computer USB connector.



RF 868 MHz module should be installed for system control by means of the remote key. GSM LTE+BT module should be installed to control the system with BLE tag, SMS-commands, via mobile App and at starline.online web account. Analogue channels module should be installed for using the analogue SLAVE.



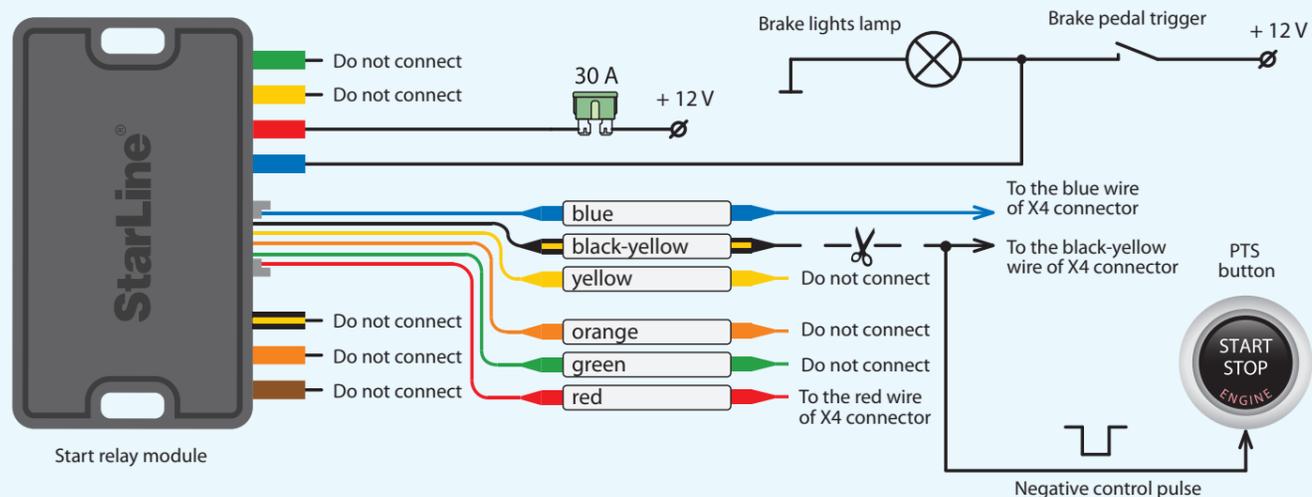
! Other possible connection options are available at www.starline.ru



! 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 at help.starline.ru

Diagram of starting circuit connection on cars with Push-to-Start button

1. In Starline Master program configure the blue output wire of X4 connector as "Starting the engine: simulation the brake or clutch pedal", and the black-yellow output wire of X4 connector - as "Engine start Start-Stop button"
2. Connect the wires according to the diagram



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

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 devices can be registered in the system main unit. At registration of new remotes all previously registered remotes will be erased. Up to 4 remotes can be registered in main unit.

Entry in 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.
5. 7 light LED flashes of service button and 7 beeps will follow.
6. 2 short LED flashes and 2 beeps will confirm entry into the Registration mode.

Registration of remotes

7. Shortly press buttons 1 and 2 of the remote.
8. After 3 seconds, successful registration will be confirmed by a short beep from remote and 2 LED flashes on the valet button. If remote is not registered, 4 beeps from remote will follow.
9. Repeat points 7...8 for each remote.

Bluetooth tags registration

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

Smartphone registration

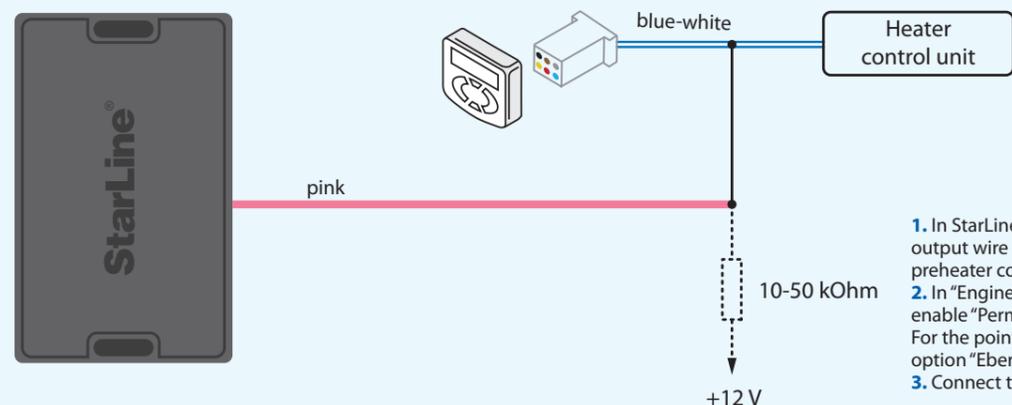
15. Register a smartphone* with use of the free StarLine mobile App.

Exit from device registration mode

16. In 10 seconds switch ignition Off to exit the registration mode. An exit from Registration mode will be confirmed by LED flashes in amount of total registered tags, keys and smartphones.

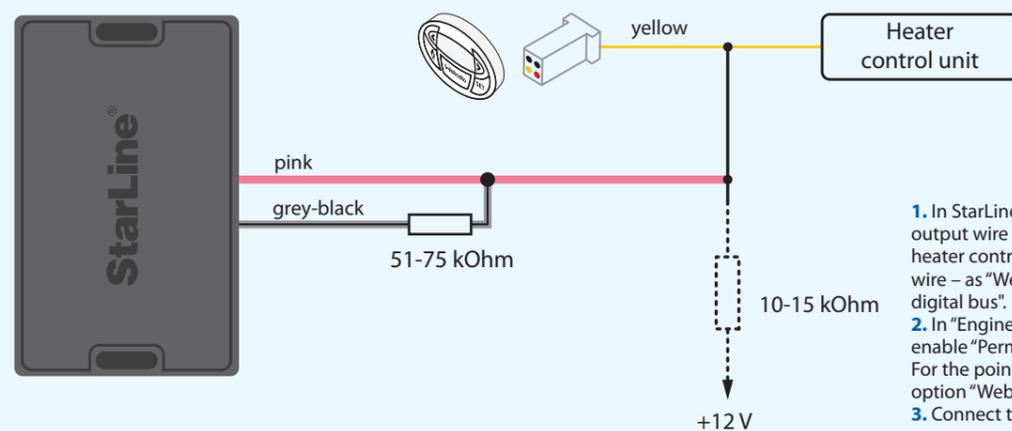
* The iOS and Android smartphone with Bluetooth Smart 4.2 and above are supported.

Eberspächer heater connection with digital bus control



1. In StarLine Master program configure the pink output wire of X3 connector as "Eberspächer 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 "Eberspächer via digital bus".
3. Connect the wires according to the diagram.

Webasto heater connection with digital bus control



1. In StarLine Master software configure 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.

Programming an owner authorization code (with car buttons)

1. Disarm security system.
2. Switch ignition Off, if it is On, then press valet button 7 times.
3. Switch ignition On.
4. 7 LED flashes of valet button and 7 beeps will follow.
5. Then 2 LED flashes of valet button and 2 beeps will follow, confirming entry into Registration mode.
6. Enter the owner authorization code using car OEM buttons with a pressing interval no more than 3 seconds. Every button pressing should be followed by a single valet button LED flash. The owner authorization code consists of a code sequence containing from 2 to 25 OEM buttons pressing. The list of supported OEM buttons is available at can.starline.ru. If a valet button LED flash does not follow after pressing of OEM button, so this button is not supported for this car.
7. In 3 seconds after the code entry 2 short LED flashes and 2 beeps will follow, confirming the code successful registration.
8. Enter the owner authorization code again.
9. If the code is recorded properly, 2 LED flashes and 2 beeps will confirm. If the code recording is failed, so 4 flashes and 4 beeps will follow, in this case repeat steps 5-8.
10. Switch ignition Off to exit the Registration mode.
11. Write down and memorize this entered Authorization code.

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 not 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.