

Firmware

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Firmware

Версия 2.41.0

Выпущена 17.06.2025

Новые функции

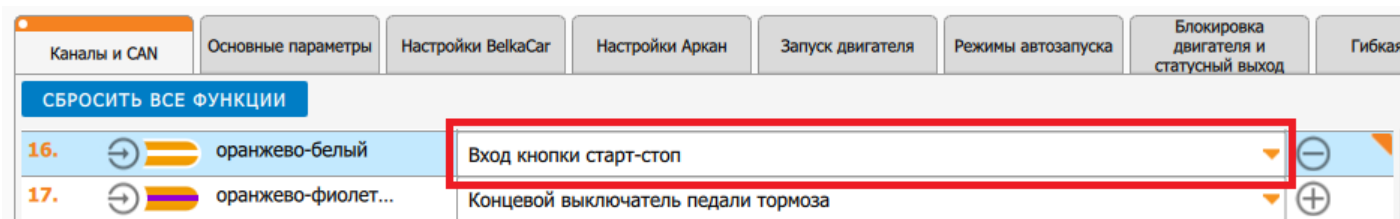
1. Добавлена возможность запуска двигателя кнопкой старт-стоп на автомобилях с замком зажигания.

E96(V2) KZ E96(V2) GEN7 GEN7(V2) S96(V2)

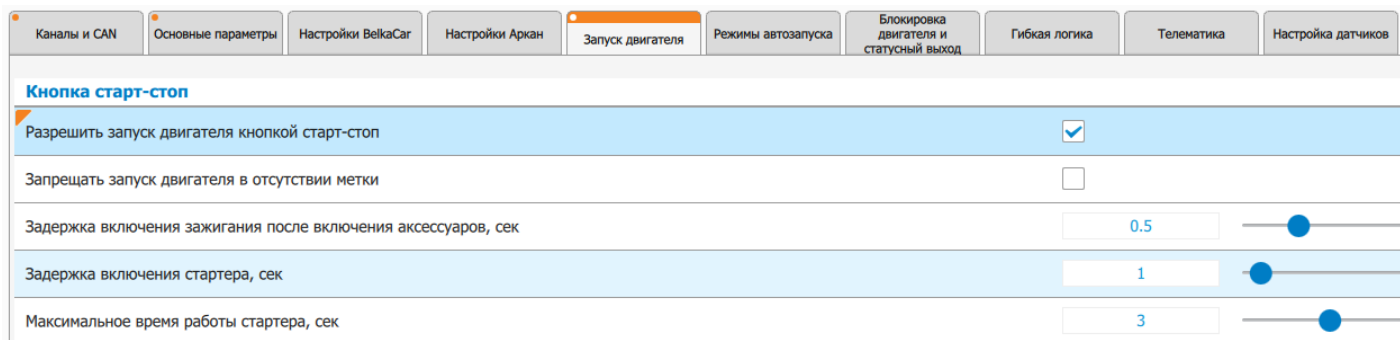
Теперь в автомобиле с замком зажигания можно добавить кнопку старт-стоп в качестве **дополнительного аксессуара, необходимо при этом сохранить возможность запуска двигателя с помощью ключа.**

Для работы данной функции должны быть подключены цепи запуска, необходимые для дистанционного запуска автомобиля.

Для использования алгоритма необходимо в разделе "Каналы и CAN" назначить на свободный вход функцию "Вход кнопки старт-стоп".

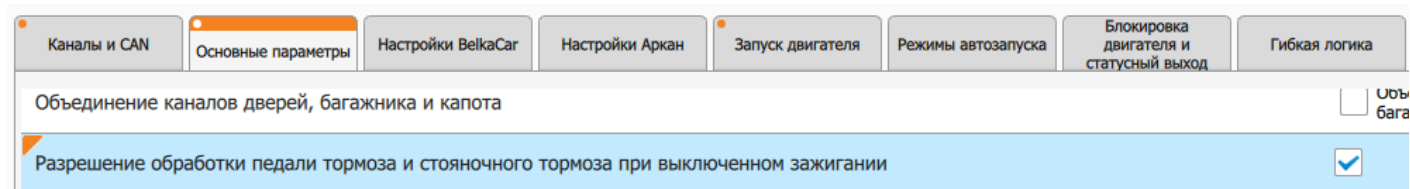


И включить настройку "разрешить запуск двигателя кнопкой старт-стоп".



Если используется аналоговое подключение к педали тормоза, то рекомендуется включить настройку "Разрешение обработки педали тормоза и стояночного тормоза при выключенном

зажигании".



Тогда при нажатой педали тормоза и активации входа кнопки будет активирован выход аксессуаров, далее согласно настройке "задержка включения зажигания после включения аксессуаров, сек" через указанное время будет активирован выход зажигания, далее аналогично после времени "Задержка включения стартера" будет активирован выход стартера. Если используется статус педали тормоза из CAN, то при первой активации входа кнопка старт-стоп активируются аксессуары, при втором нажатии зажигание, при третьем - активируется выход стартера.

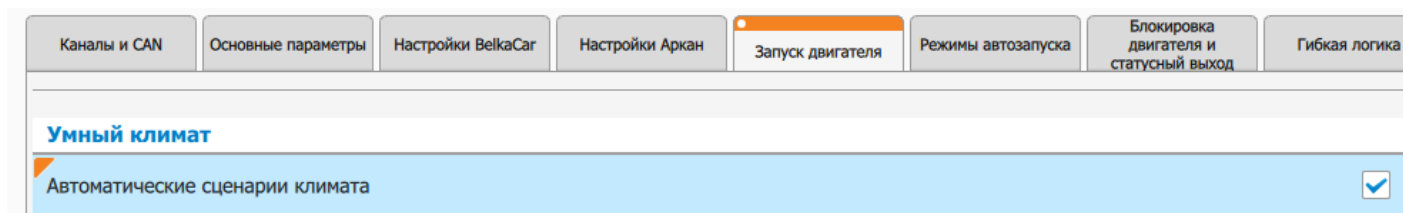
Глушение двигателя выполняется при активации входа кнопки старт стоп при нажатой педали тормоза. Доступно глушение длительным удержанием (более 2 сек) кнопки старт-стоп без педали тормоза. Если охранный комплекс оборудован GPS антенной или поддерживается получение скорости из CAN, то доступно глушение коротким нажатием без педали тормоза при скорости ниже 5 км/ч.

Если включить настройку "запрещать запуск двигателя в отсутствии метки", то при активации входа кнопки старт-стоп без наличия связи с меткой не будут включаться выходы (аксессуары, зажигание, стартер).

В сервисном режиме и режиме охраны при активации входа кнопки старт-стоп выходы тоже не активируются независимо от наличия метки.

2. Добавлены автоматические сценарии климата

E96(V2) KZ E96(V2) GEN7 GEN7(V2) S96(V2)



После включения настройки "Автоматические сценарии климата" в разделе "Запуск двигателя" при дистанционном или автоматическом запуске по будильнику в зависимости от температуры окружающей среды и поддерживаемых функций включается различный набор подогревов и устанавливается температура на климатической установке. Для изменения температуры климатической установки должна быть включена настройка "Регулировка температуры климата". Список поддерживаемых функций по CAN доступен на сайте can.starline.ru.

Температуры окружающей среды берется из CAN. Если в CAN отсутствует поддержка внешней температуры, то используется температура салона из центрального блока сигнализации. Предусмотрено 3 варианта сценария:

1) "Холодно" - если температура окружающей среды ниже +3 °C, то устанавливается значение температуры климата на максимум и включаются подогревы руля, сидений, зеркал и стекол. Если разница между температурой двигателя и температурой окружающей среды более 20 градусов, то на климатической установке устанавливается значение температуры климата из приложения.

2) "Обычно" - если температура окружающей среды от +3 до +22 °C, на климатической установке устанавливается значение температуры климата из приложения и подогревы согласно настройкам из приложения в разделе умный климат.

3) "Тепло" - если температура окружающей среды выше +22 °C, то на климатической установке через минуту после запуска двигателя устанавливается минимальное значение температуры климат и активируется вентиляция сидений. Если прервать запуск или выполнить мягкую посадку ранее чем через минуту, то остается значение температуры климата из приложения.

При мягкой посадке, если было состояние "Холодно" или "Тепло", то включается температура из приложения в разделе умный климат. Если автомобиль не поддерживает мягкую посадку, то при глушении двигателя сохраняется значение температуры климата, активированное во время работы автоматического сценария.

Исправленные ошибки

1. Отсутствуют

Известные ошибки

1. Отсутствуют

Firmware

Master 2.40.6

Released 22.04.2025

New features

1. No

Fixed bugs

1. 2.X.X GEN7(V2) Comfort via LIN may not work properly on some vehicles.

Known bugs

1. No

Master 2.40.3

Released 18.03.2025

New features

1. It is now possible to disable sending insurance events to the server

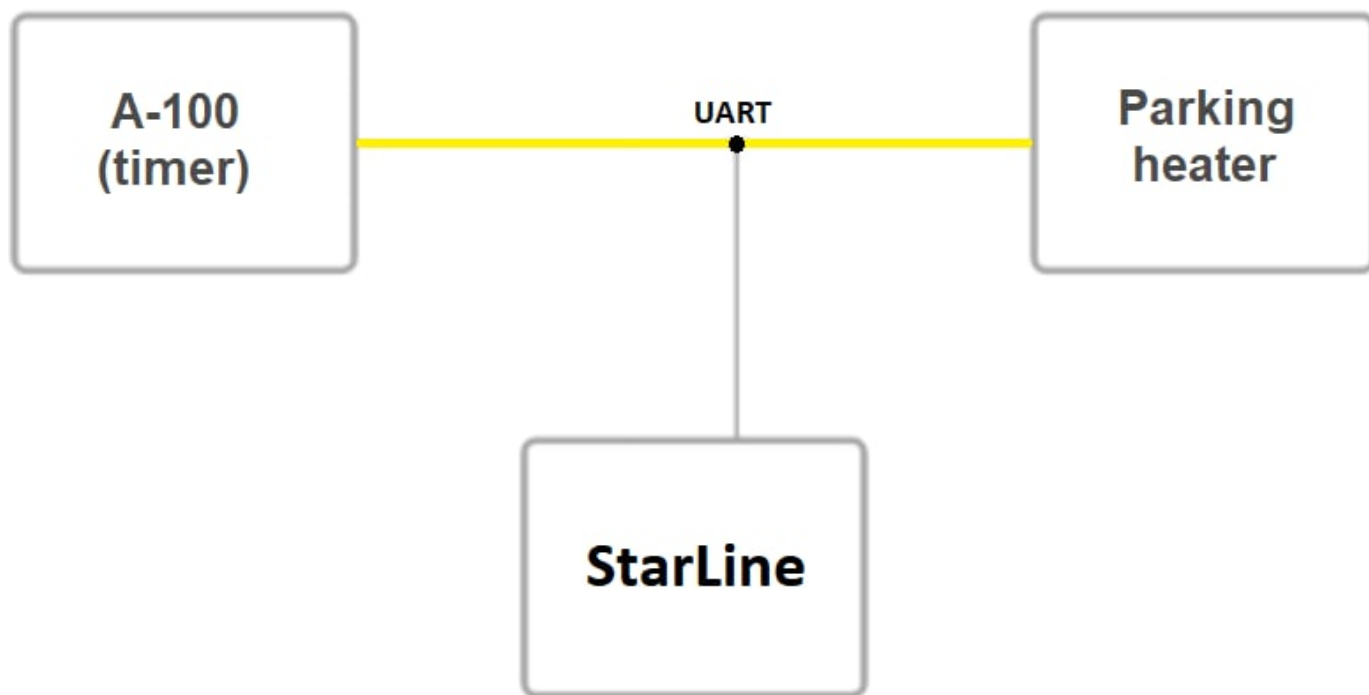
AS90 GEN7 GEN7(V2) S96(V2)

"Allow insurance events transfer to server" setting added. When it is disabled, the system will stop registering dangerous maneuvers, which are used to assess driving behavior. If you enable this setting again, the driving behavior will start working after an automatic recalibration.

2. Added support for A100 HYDRO D5/G5 Eco V3 parking heater (preheater)

GEN7 GEN7(V2) E96(V2) S96(V2) M66(V2)

Control and monitoring of parking heater (preheater) A100 HYDRO D5/G5 Eco V3 via digital bus has been added. The connection between timer and preheater is made in parallel to the yellow wire (UART).



You can use white-black wire or any free LIN wire to make the connection. Switch it to a digital channel.

Set "A100 preheater control via data bus" function on the selected channel in StarLine Master.

On "Engine Start" tab in "Parking heater (preheater)" section enable "Control parking heater (preheater)" function. Select "A100 via digital bus" for "Start type of preheater".

Setting example:

5. white-black	<input checked="" type="radio"/> Not set	X2
6. dark blue	<input type="radio"/> Webasto preheater control via data bus	
7. yellow	<input checked="" type="radio"/> A100 preheater control via data bus	
8. green	<input type="radio"/> Eberspächer preheater control via data bus	
9. gray-white	<input type="radio"/> StarLine digital bus	

Channels and CAN	General settings	Engine start	Autostart	Engine blocking	Fl	<
Parking heater (preheater)						
Control parking heater (preheater)				<input checked="" type="checkbox"/>		
Start type of preheater				A100 via digital bus ▼		

3. A90BT and AS90 R6 ECO support added

A90BT AS90 E90V2BT

Support for R6 ECO channels settings in StarLine Master has been added for A90BT and AS90.

Fixed bugs

1. **2.X.X** **A90 A90BT AS90 E90V2 E90V2BT E96(V2) E96(V2)E90L GEN7 GEN7(V2) S96(V2)** Key fob settings menu had only 12 settings instead of 22. The key fob firmware must also be updated to version 2.1.6 or higher.

Known bugs

Master 2.39.3

Released 21.01.2025

New features

- 1. Added climate control for electric vehicles.

E96(V2) E96V2E90L GEN7 GEN7(V2) M66(V2) S96(V2)

Option "Control electric vehicle air conditioning via CAN-LIN" has been added to the engine starting settings. Automatic start by timer supported. Find the list of supported EV at can.starline.ru.

Channels and CAN	General settings	Remote start	Autostart	Engine blocking	Flexible logic	Telematics	<	>
Remote engine start								
Enable / disable remote start			<input checked="" type="checkbox"/>					
Type of transmission			Automatic transmission					
Engine start system			EV climate control via CAN-LIN					

Fixed bugs:

No

Known bugs:

No

Firmware

Master 2.39.2

Released 21.01.2025

New features

1. French language support added

A90 A90BT AS90 E90(V2) E90V2BT E96(V2) E96V2E90L GEN7 GEN7(V2) GSMGPS(V2)
M18MINI M18PRO(V2) M66(V2) S96(V2)

Fixed bugs

No

Known bugs

No

Master 2.39.0

Released 16.12.2024

New features

1. Seats ventilation control added

GEN7 GEN7(V2) E96(V2) S96(V2)

In channels and CAN settings:

Channels and CANGeneral settingsRemote startAutostartEngine blockingFlexible logicTelematics

RESET CHANNELS

Start preheater by analog signal

Steering column blocking (SLP)

Security status

Arkan radio modem

Dashcam power relay control

Steering wheel heater

Windows and mirrors heater

Seats heater

Seats ventilation

Starter

Immobilizer data bypass (iKey)

Steering wheel heater

Seats heater

Seats ventilation

Windows and mirrors heater

Horn control

Low beam switch Off

In smart comfort settings:

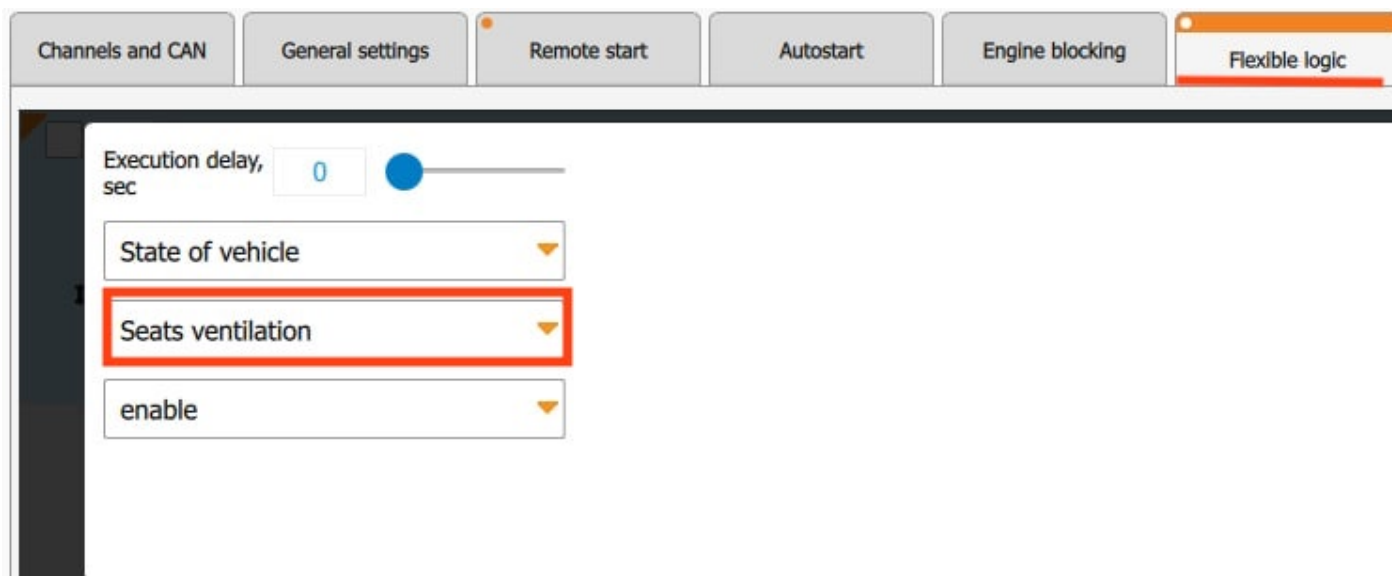
Channels and CANGeneral settingsRemote startAutostartEngine blockingFlexible logicTelematics

Seats heater

Seats ventilation

Climate control temperature

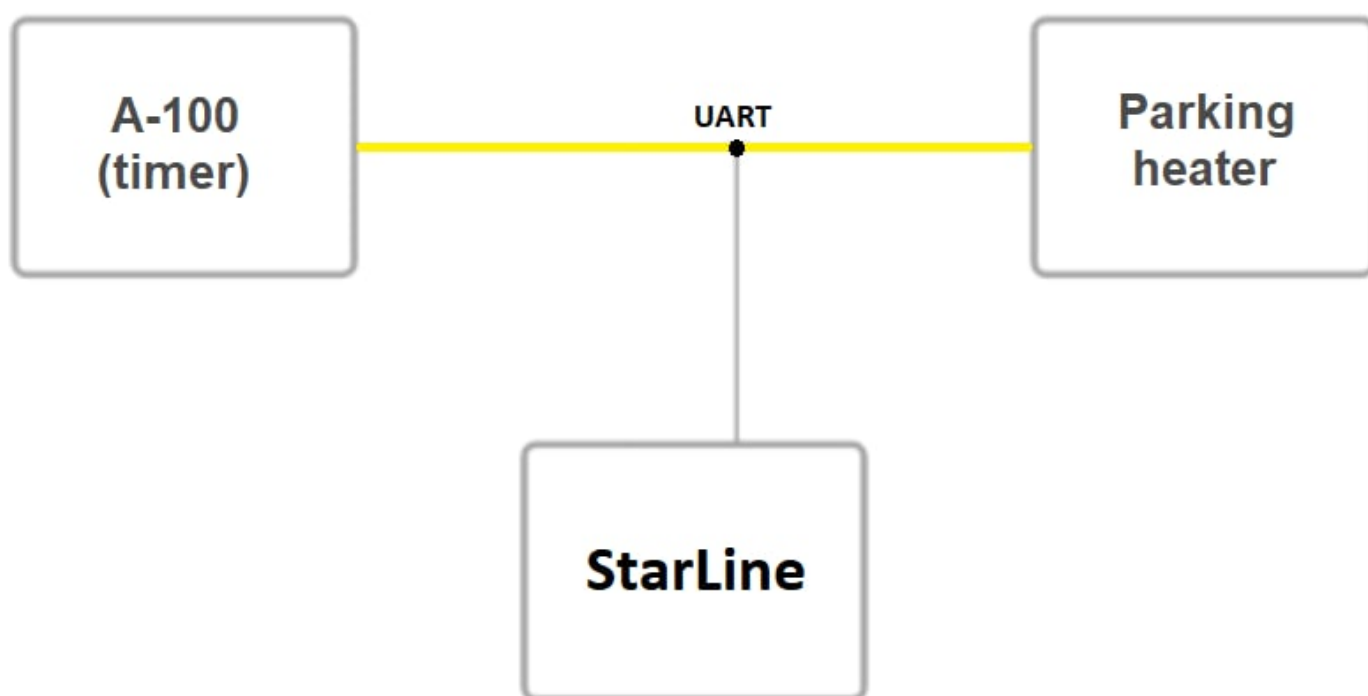
In Flexible Logic settings:



2. Support for A100 parking heater added

GEN7 GEN7(V2) E96(V2) S96(V2) M66(V2)

Control of the A100 HYDRO ECO parking heater autostart, version 2, have been added via digital bus. The connection between timer and preheater is made in parallel to the yellow wire (UART).





You can use the white-black or any free LIN wire to connect. Switch it to a digital channel.


Set "A100 parking heater control via data bus" function to the selected channel in "StarLine Master".


Select "Control parking heater" (preheater) parameter in "Parking heater (preheater)" section of Remote Start tab. Set "A100 via digital bus" for the "Start type of preheater" parameter.

Example of settings:

9.  gray-white

10.  white

11.  white-dark blue

12.  white-green

☐ Not set

☐ Webasto preheater control via data bus

☒ A100 preheater control via data bus

☐ Eberspächer preheater control via data bus

Channels and CAN

General settings

Remote start

Autostart

Engine blocking

Flexible logic

Telematics

Parking heater (preheater)

Control parking heater (preheater)

☒

Start type of preheater

A100 via digital bus

Fixed bugs

2.X.X **GEN7(V2)** Statuses reading and control via CAN stopped working when engine was started on vehicles, mainly Chinese brands, until unit was restarted.

Known bugs

No

Firmware

Master 2.38.5

Released 10.12.2024

New features

No

Fixed Bugs

2.X.X **A90 A90BT E96(V2) GEN7(V2)** Optimization of integrated RF-transceiver power control

Known bugs

2.X.X **GEN7(V2)** On most Chinese-built vehicles, reading statuses and control via CAN stops when engine is started until the main unit is rebooted.

Firmware

Master 2.38.0

Released 24.09.2024

New features

General optimization of device operation algorithms

Fixed bugs

2.31.1 **GEN7 GEN7(V2) E96(V2) S96(V2) M66(V2)** VIN reading configuration error fixed

Known bugs

No bugs

Master 2.37.5

Released 26.08.2024

New features

The ability to enable AUTO mode in the climate control system has been added.

E96(V2) KZ, E96(V2), GEN7, GEN7(V2), S96(V2)

Climate control settings now include AUTO mode in addition to temperature tuning. Supported vehicles are listed at can.starline.ru
It must be enabled in the "Channels and CAN" tab.

Climate control temperature	<input checked="" type="checkbox"/>	CAN-A
AUTO mode	<input checked="" type="checkbox"/>	CAN-A

and set it in the "Engine start" tab

Climate control temperature	<input checked="" type="checkbox"/>	CAN-A
Climate control temperature, °C	<input type="text" value="21"/>	<div><div></div><div></div></div>
AUTO mode control	<input checked="" type="checkbox"/>	CAN-A

Fixed bugs

No

Known bugs

Firmware

Master 2.37.4

Released 30.07.2024 for GEN7(V2)

New features

No

Fixed bugs

2.35.0 GEN7(V2) Stability of B97v2 security systems has been improved under high-temperature operating conditions.

Known bugs

No

Master 2.37.3

Released 04.07.2024

New features

The low battery voltage setting range has been increased for M18 PRO v2.

M18PRO(V2)

The low battery voltage setting range has been increased up to 25V.

Fixed bugs

2.X.X GEN7(V2) The orange-purple wire failed to operate in output mode on units with serial number **GEN7S S...**

Known bugs

No

Firmware

Master 2.36.1

Released 18.04.2024

New features

CAN FD support added

GEN7(V2)

CAN FD protocol support added. Supported vehicles are listed at can.starline.ru

Fixed bugs

No

Known bugs

No

Master 2.36.0

Released 18.04.2024

New features

Added "External GSM/GPS module" mode

E96(V2)

Support for "External GSM/GPS module" mode has been added to StarLine E96v2 security systems (with serial numbers E96V2 S...) for joint operation with StarLine M66v2 or StarLine GSM+GPS Master 6v2 with firmware version 2.35.0 or higher.

Added support for parking heater (preheater) control in M66v2

M66(V2)

Support for parking heater (preheater) control has been added in tracker M66v2.

Channels and CAN	General settings	Engine start	Autostart	Engine blocking	Flexible logic	Telematics	Se < >
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Control parking heater (preheater) ☒

Start type of preheater	<input checked="" type="radio"/> Not used
Control preheater state	<input type="radio"/> Start by impulse, stop by impulse
Max preheater activating time, sec	<input type="radio"/> Start by pulse, stop automatic
Preheater operation time, min	<input type="radio"/> Start by potential
Activate preheater before remote start	<input type="radio"/> CAN/LIN
Activate preheater before autostart	<input type="radio"/> Webasto via data bus
Temperature to activate preheater before autostart / remote start, ° C	<input type="radio"/> Eberspächer via data bus
Temperature to run automatic / remote start, ° C	<input type="radio"/> Xin Long YT-F-C-12-W via data bus
Temperature to stop preheater, ° C	<input type="radio"/> A100 via digital bus

Control of Xin Long WATER heater (Model YT-F-C-12-W) supported when connected into the cut of signal wire with between timer and heater control unit with an external relay. Two wires must be used to connect. On "Channels and CAN" tab, set "A100 parking heater control through external relay" on the green or blue wire and connect it to the negative terminal of external relay coil that control the break in the signal wire. Assign "Xin Long YT-F-C-12-W via data bus (control unit)" on white-black wire and connect it to normally closed (NC) terminal of external relay. Connect common contact to the heater control unit, and normally closed (NC) contact to the timer. On "Engine Start" tab, in the "Parking heater (preheater)" section, enable "Control parking heater (preheater)". For the "Start type of preheater" parameter, select "Xin Long YT-F-C-12-W via data bus".

Setting example:

The top screenshot shows the 'Channels and CAN' tab. It has a 'RESET CHANNELS' button and a table for channel configuration. The table has two rows, both for 'Xin Long YT-F-C-12-W parking heater control through external relay' with a current of 0.2 A.

Channel	Wire Color	Function	Current
1.	green	Xin Long YT-F-C-12-W parking heater control through external relay	0.2 A
2.	dark blue	Xin Long YT-F-C-12-W parking heater control through external relay	0.2 A

The bottom screenshot shows the 'Engine start' tab. It has a 'Parking heater (preheater)' section with three settings:

- Control parking heater (preheater)**: ☒
- Start type of preheater**: Xin Long YT-F-C-12-W via data bus
- Control preheater state**: Start control

Added "Smart comfort" feature

A90, A90BT, AS90, E96(V2) KZ, E96(V2), GEN7, GEN7(V2), S96(V2)

Selected "Smart Comfort" features will be activated during remote start and auto start by timer. Supported settings depend on vehicle trim and functions available CAN bus control. The corresponding features must be configured in the CAN interfaces or channels.

Channels and CAN
General settings
Remote start
Autostart
Engine blocking
Flexible logic
Telematics

Smart comfort

Steering wheel heater
☐

Windows and mirrors heater
☐

Seats heater
☐

Seats ventilation
☐

Climate control temperature
☐ CAN-A

Climate control temperature, °C
22

AUTO mode control
☐ CAN-A

Channels and CAN
General settings
Remote start
Autostart
Engine blocking
Flexible logic
Telematics

RESET CHANNELS

X1 (Main connector)

2.		black-white	Not set	
3.		black-red	Engine block...	
4.		grey-black	Not set	
5.		pink	Not set	
6.		purple	Not set	
7.		grey	Siren	
8.		yellow-black	Not set	
9.		yellow-red	Not set	
10.		dark blue	Not set	
12.		yellow-white	Not set	
13.		green-yellow	Not set	
14.		yellow	Not set	
15.		dark blue-red	Not set	
16.		orange-white	Not set	
17.		orange-purple	Not set	
18.		dark blue-black	Not set	
19.		orange-gray	Not set	
20.		green	Not set	

X2 (CAN-LIN and Start power module)

1.		CAN LIN orange-white	Not set
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Parking heater (preheater) control
? ☐

Parking heater (preheater) stop
? ☐

Engine start
i ☐ CAN-A

Starter
☐ CAN-A

Immobilizer data bypass (iKey)
? ☐ CAN-B

Steering wheel heater
☒ CAN-A

Seats heater
i ☒ CAN-A

Seats ventilation
i ☒ CAN-A

Windows and mirrors heater
i ☒ CAN-A

Horn control
☐ CAN-A

Low beam switch Off
? ☐

Sunroof closure
☐ CAN-A

i-STOP control
? ☐

Charge port control
? ☐

Climate control
? ☐

Climate control temperature
☒ CAN-A

Channels and CAN	General settings	Remote start	Autostart	Engine blocking	Flexible logic	Telematics	Sensors set
RESET CHANNELS							
X1 (Main connector)							
2.		black-white					
3.		black-red					
4.		grey-black					
5.		pink					
6.		purple					
7.		grey					
8.		yellow-black					
9.		yellow-red					
10.		dark blue					
12.		yellow-white					
13.		green-yellow					
14.		yellow					
15.		dark blue-red					
16.		orange-white					
17.		orange-purple					
18.		dark blue-black					
19.		orange-gray					
20.		green					
X2 (CAN-LIN and Start power module)							
1.		orange-white					
2.		orange					

☐ Engine start: simulate brake or clutch pedal (analog)
☐ Engine start: PTS button
☐ Engine start: start button
☐ Engine start: stop button
☐ Engine blocking #1 R7_5
☐ Engine blocking #2 R7_5
☐ Engine blocking #3
☐ Door open simulation
☐ Trunk unlock
☐ Comfort closure output
☐ Starter protection at autostart
☐ Status output #1
☐ Status output #2
☐ Status output #3
☐ Status LED
☐ Start preheater by analog signal
☐ Steering column blocking (SLP)
☐ Security status
☐ Dashcam power relay control
☒ Steering wheel heater X1
☐ Windows and mirrors heater
☐ Seats heater

Fixed bugs

No

Known bugs

No

Master 2.35.0

Released 10.01.2024

New features

The feature of PWM modulation for brake or clutch pedal simulation has been added.

A90, A90BT, AS90, E90(V2), E96(V2), GEN7, GEN7(V2), S96(V2)

Previous "Engine start: brake or clutch pedal simulation (PWM)" single option has been replaced by two separate options.

The group of settings has been added to the end of "Remote start" tab.

When "Set parameters automatically" checkbox is enabled, the signal parameters from CAN library are used (if supported).

Simulation of released pedal is enabled together with data immobilizer bypass.

Simulation of released pedal operates according to logic of a normal "analog" output "Engine start: simulate brake or clutch pedal (analog)".

"External GSM/GPS module" operating mode has been added.

M66(V2), A90, A90BT, E90(V2), E96(V2)

"External GSM/GPS module" mode has been added in StarLine M66v2 tracker for joint operation with StarLine E96v2, E90v2, A90BT, and A90 security systems with firmware version 2.35.0 and above.

Sequence to register the StarLine M66v2 tracker as an external GSM/GPS module:

1. Connect white-black wire of tracker (StarLine Bus) with white-black wire of security system (StarLine Bus).
2. Power on tracker
3. Set operating mode to "External GSM/GPS module" in the General settings

4. Switch security system to "Device registration" mode (see security system manual)
5. Switch tracker to "Device registration" mode. To do this, send SMS command REG XXXX, where XXXX is emergency disarm code from the welcome SMS.
6. Wait for the responding SMS message: "Device registered successfully: external main unit".
7. Exit from "Device Registration" mode occurs automatically in 5 minutes or when ignition Off.

Fixed bugs

No

Known bugs

No

Firmware

Master 2.34.4

Released 28.11.2023

New features

No features

Fixed bugs

1. **2.32.X GEN7, GEN7(V2), E96(V2), S96(V2)** Programming procedure to bypass factory immobilizer didn't work on some Mazda vehicles (bypass via RX/TX).
2. **2.34.1 E96(V2), S96(V2)** Immobilizer bypass stopped working after parking until restarted on vehicles with factory immobilizer bypass via LIN, RX/TX, IMO/IMI (GM, Honda, KIA etc).
3. **2.34.1 E96(V2), S96(V2)** Improved stability of CAN operation on single wire CAN bus vehicles (both reading statuses and control functions).
4. **2.34.1 E96(V2)** Key fob stopped working when ignition On in vehicles having single LIN wire (Hyundai, KIA, GM etc).

Known bugs

No

Master 2.34.1

Released 10.10.2023

New features

New supported devices

A90, A90BT, AS90

Fixed bugs

1. **2.X.X S96(V2)** Orange-black wire failed to operate in input mode on units with serial number ES96V2P...

Known bugs

1. **2.32.X GEN7 GEN7(V2) E96(V2) S96(V2)** Programming procedure to factory immobilizer bypass does not work on some Mazda vehicles (bypass via RX/TX).
2. **2.34.1 E96(V2) S96(V2)** Immobilizer bypass stopped working after parking until restarted on vehicles with factory immobilizer bypass via LIN, RX/TX, IMO/IMI (GM, Honda, KIA etc).
3. **2.34.1 E96(V2) S96(V2)** CAN sometimes stops working (both reading statuses and control functions) until the system is restarted on vehicles with a single wire bus.
4. **2.34.1 E96(V2)** Key fob stopped working when ignition On in vehicles having single LIN wire (Hyundai, KIA, GM etc).

Firmware

Master 2.33.3

Released 11.09.2023

New features

Architecture optimization to support different device revisions

GEN7(V2) E96(V2) S96(V2) E90(V2)

Fixed bugs

No

Known bugs

1. **2.X.X S96(V2)** Orange-black wire failed to operate in input mode on units with serial number ES96V2P..

****This firmware version is intended for security systems with serial numbers in format GEN7 S..., E96V2 S..., E96V2P S..., ES96 S..., ES96P S..., excluding E96V2L S... and ES96L S***

Master 2.33.1

Released 18.07.2023

New features

Feature	GEN7	GEN7(v2)	E96(v2)	S96(v2)
Bluetooth data exchange protocol optimization	●	●	●	●
Xin Long YT-F-C-12-W parking heater control support	●	●	●	●
Accelerometer data processing filter optimization			●	●

Bluetooth data exchange protocol optimized

GEN7 GEN7(V2) E96(V2) S96(V2)

The data exchange protocol has been optimized for changing settings via StarLine 2 mobile app over Bluetooth or through an external GSM-GPS module.

Xin Long YT-F-C-12-W parking heater control support added

GEN7 GEN7(V2) E96(V2) S96(V2)

Control and monitoring of the Xin Long YT-F-C-12-W parking heater control via digital bus has been added. Supported when connected into the break of signal wire between timer and heater control unit.

Use two wires: grey and white or white-blue and white-green to connect.







In StarLine Master program set one wire as "Xin Long YT-F-C-12-W parking heater control via data bus (timer)", and the second - "Xin Long YT-F-C-12-W parking heater control via data bus (control

module)".



On "Engine Start" tab, in "Parking heater (preheater)" section, enable "Control parking heater (preheater)". For "Start type of preheater" parameter set "Xin Long YT-F-C-12-W via data bus" option.

Setting example:

RESET CHANNELS

9.		gray-white	Xin Long YT-F-C-12-W parking heater control via data bus (timer)		
10.		white	Xin Long YT-F-C-12-W parking heater control via data bus (control module)		

Parking heater (preheater)

Control parking heater (preheater)	<input checked="" type="checkbox"/>
Start type of preheater	Xin Long YT-F-C-12-W via data bus 
Control preheater state	Start control 

Optimization of accelerometer data processing filter

E96(V2) S96(V2)

Optimization of the filter processing data transmitted by the accelerometer has been completed.

Fixed bugs

- 1. 2.32.2 M18PRO(V2) M66(V2) Universal output 3 option added.

Known bugs

- 1. 2.X.X S96(V2) The orange-black wire is non-functional in input mode on units ES96V2P..

**This firmware is for security systems for serial numbers GEN7 S..., E96V2 S...,E96V2P S..., ES96 S...,ES96P S..., except for E96V2L S... and ES96L S...*

Master 2.32.1

Released 20.04.2023

New features

Feature	GEN7	E96BT	E96 (v2)	S96 (v2)	M18 mini
Siren control tone type setting added	●	●	●	●	
Emergency disarm code transmission added					●

Siren control signal type setting added

GEN7 E96 BT E96(V2) S96(V2)

A new option to select siren control signal type has been added to the main settings. Type 1 matches signal used before firmware version 2.28. Type 2 - to signal in firmware versions from 2.28 to 2.31.

Channels and CAN

General settings

Remote start

Autostart

Engine blocking

Flexible logic

Telematics

Hazard lights potential control duration, mc

1100

Horn impulse duration at arm / disarm, mc

100

Horn impulse duration at alarm trigger, mc

550

Siren tone type

☒ Tone 1

☐ Tone 2

Buzzer control

Main unit embedded buzzer

☒

Emergency disarm code transmission added

M18 MINI

Emergency disarm code added to welcome SMS message.

Fixed bugs

1. **2.X.X GEN7 E96 BT E96(V2) S96(V2)** CAN sometimes stopped working (both reading status and controlling functions) until the main unit was restarted on single-wire vehicles.
2. **2.31.1 GEN7 E96 BT E96(V2) S96(V2)** The new flexible logic programs for 'start' and 'stop' events were not working correctly.
3. **2.30.0 E96(V2) S96(V2)** On some GM vehicles, bypass or immobilizer programming procedure does not work on main unit with serial numbers ES96P and E96V2P.

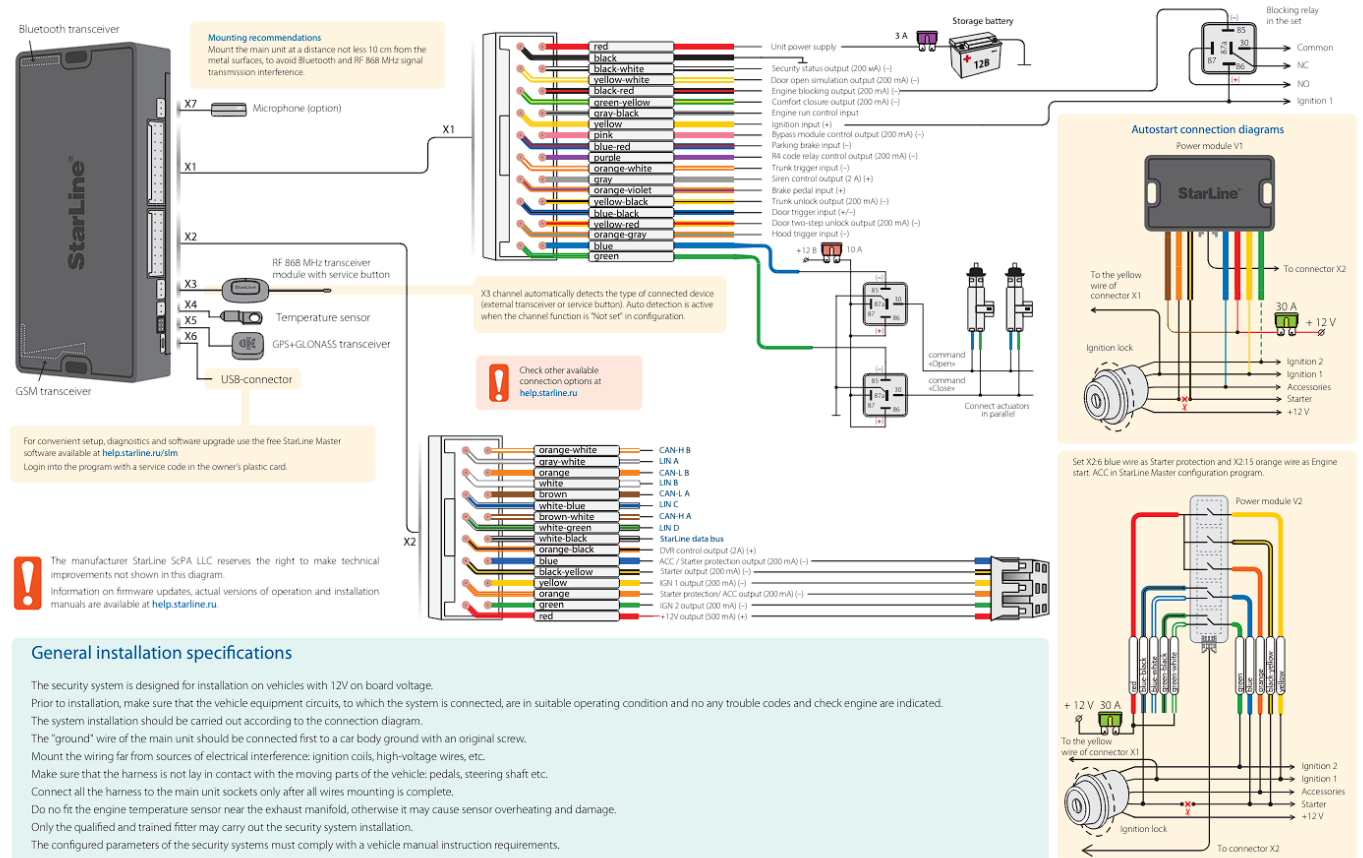
Known bugs

No

This firmware is for security systems for serial numbers GEN7 S..., E96BT S..., E96V2 S..., ES96 S..., except for E96V2L S..., ES96L S...

Connection diagram

StarLine S9 v2 Security – telematic system connection diagram

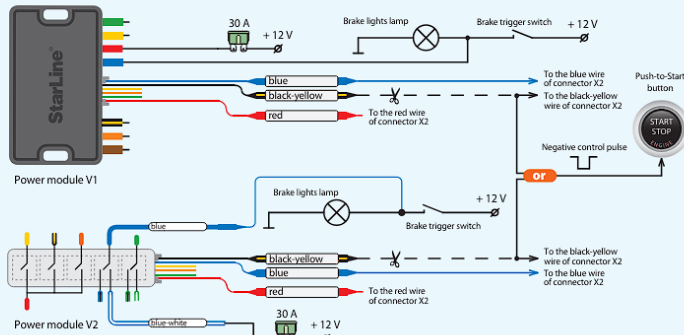


StarLine S9 v2 Additional connection options

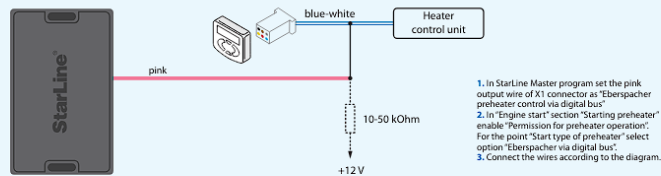
Configuring the security-telematic system

Diagram of start circuits connection on vehicles with PTS button

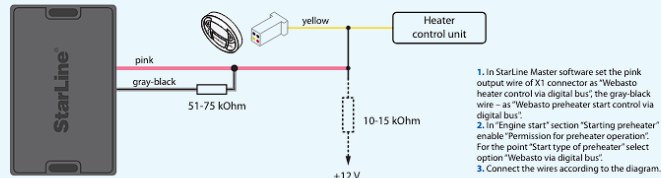
1. In StarLine Master program set X2:6 blue wire as "Engine start: simulate brake or clutch pedal" and X2:14 black-yellow wire as "Engine start: PTS button".
2. Connect wires according to diagram for corresponding power module.



Eberspächer heater connection with digital bus control



Webasto heater connection with digital bus control



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 Bluetooth devices can be registered in the system main unit. When new RF pagers are registered, all previously registered remote keys will be erased from memory. So the existing remote keys should be registered simultaneously in one cycle with all the new remote keys. 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 service 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 a pager buttons 1 and 2 shortly.
7. In 3 seconds successful registration will be confirmed by a short beep sound of a pager, 2 LED flashes of service button and 2 buzzer sound signals. If 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 a battery from tag.
10. Hold a tag button pressed and insert a battery back. A tag LED will turn red.
11. Release a button, a series of red flashes will follow.
12. In 10 seconds successful registration will be confirmed by a green LED flash, 2 flashes of a service button LED and 2 buzzer sounds. If a tag is not registered LED will turn red.
13. Repeat points 9-12 for all the 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.

Programming an owner authorization code (with car buttons)

1. Disarm security system.
2. Switch ignition Off, if it is On, then press service button 7 times.
3. Switch ignition On.
4. 7 LED flashes of service button and 7 buzzer sounds will follow.
5. Then 2 LED flashes of service button and 2 buzzer sound signals 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 service button LED flash. The owner authorization code consists of a code sequence containing from 3 to 30 OEM buttons pressing. The list of supported OEM buttons is available at can.starline.ru. If a service 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 buzzer sound 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 short buzzer sound will confirm. If the code recording is failed, so 4 short buzzer sounds will follow, in this case repeat steps 6-8.
10. In 10 sec switch ignition Off to exit the Registration mode.
11. 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.
12. Write down and memorize this push sequence.

Software

All descriptions of software versions for the main unit, remote keys, and tags are available at the link: [Software\(to do\)](#)