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Firmware

StarLine firmware version check

You can find the current firmware version for your security and telematic system using the main unit's serial number.

The serial number starts with...	How can you find the current firmware version?
<i>GEN7S S...</i>	Send SMS with text: FWUPDATE? If the reply SMS says "firmware not found," then the latest firmware for your system is 2.42.4.
<i>ES96P S...</i>	
<i>GEN7E S...</i>	You can find the current firmware version by connecting the main unit to the StarLine Master app
<i>E96V2P S...</i>	
<i>GEN7 S...</i>	The latest firmware is 2.41.0 (2.41.1 for LTE systems); support has ended afterward.
<i>ES96 S...</i>	
<i>E96V2 S...</i>	
<i>E96V2L S...</i>	The latest firmware is 2.28.6; support has ended afterward.

Firmware

Master 2.44.0

Released 23.03.2026

New features

1. Added pulse control for smart comfort functions

A90 A90BT AS90 E90V2 E90V2BT E96(V2) E96(V2)E90L GEN7(V2) S96(V2)

In channel settings:

Channels and CAN | General settings | Engine start | Autostart | Engine blocking | Flexible logic | Telematic

RESET CHANNELS

X1 (Main connector)

2.	↔	black-white
2.	↔	purple-white
2.	↔	black-white
3.	↔	black-red
4.	↔	grey-black
5.	↔	pink
6.	↔	purple
7.	↔	grey
8.	↔	yellow-black
9.	↔	white-black
10.	↔	dark blue
12.	↔	yellow-white
12.	↔	purple-yellow
12.	↔	yellow-white
13.	↔	green-yellow
13.	↔	purple-green
13.	↔	green-yellow
14.	↔	yellow
15.	↔	dark blue-red
16.	↔	orange-white
17.	↔	orange-purple
17.	↔	orange-purple

- Engine blocking No. 1
- Engine blocking No. 2
- Engine blocking No. 3
- Door open simulation
- Trunk release
- 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
- Windows and mirrors heater
- Seats heater
- Seats ventilation
- Steering heater (impulse control)**
- Windows and mirrors heater (impulse control)
- Seats heater (impulse control)
- Seats ventilation (impulse control)

Pulse duration: 1 sec.

2. Events and conditions added to flexible logic for smart comfort functions

A90 A90BT AS90 E90V2 E90V2BT E96(V2) E96(V2)E90L GEN7(V2) S96(V2)

Added events and conditions to the vehicle's status group for seat heaters, windows and mirrors, steering wheel, and seat ventilation.

Events:

1 <Specify program name>

Events

If X1:19 (orange-grey - Not set) : active provided

ADD EVENT

Conditions

Operation modes : disarmed X

and

State of vehicle

Seats heating

on

then

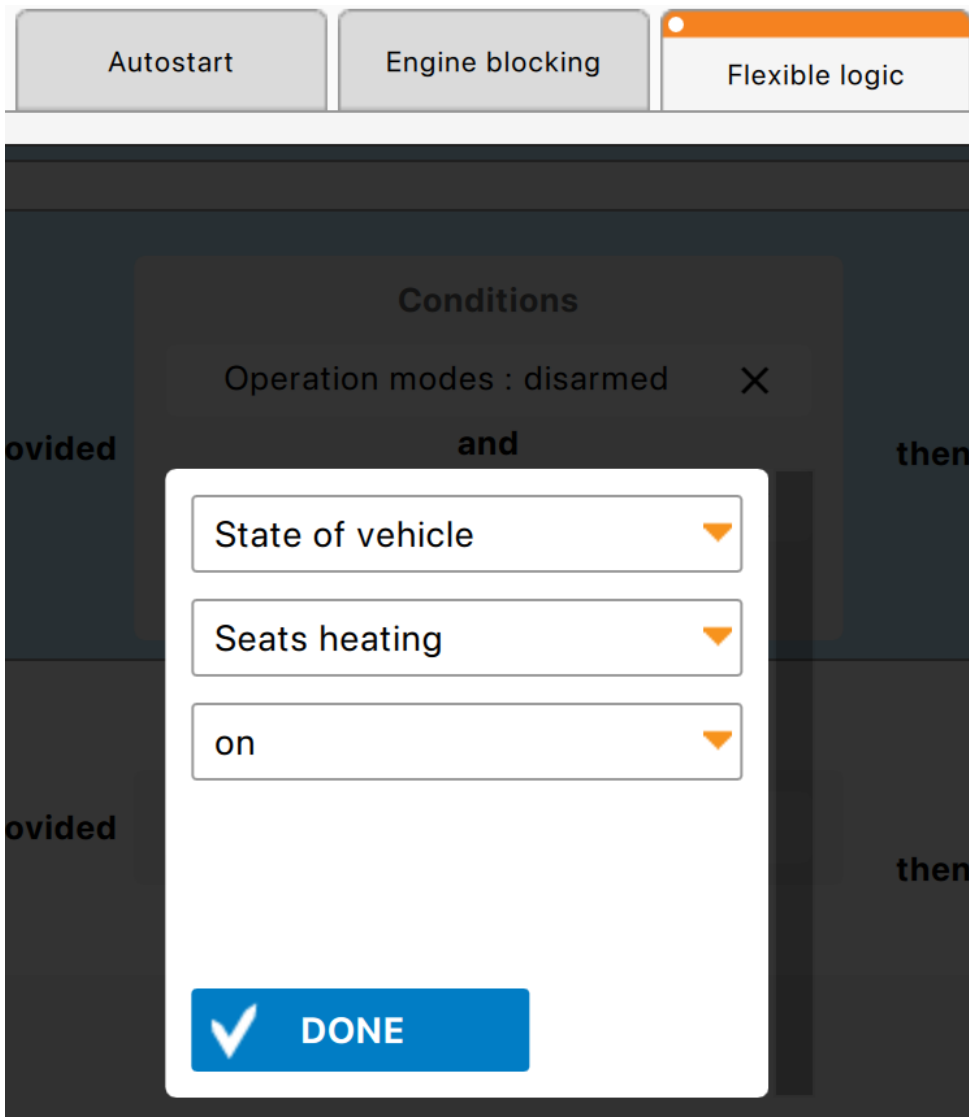
2 <Specify program name>

If X1:19 (orange-grey - Not set) : inactive provided

then

✓ DONE

Conditions:



3. Binary-5S preheater via digital bus support has been added

GEN7(V2) E96(V2) E96(V2)E90L S96(V2) M66(V2)

Added control and startup monitoring for Binary-5S preheater via digital bus. Connect to the white and green wires in heater control unit harness.

To connect, use 2 LIN wires, switching them to the digital channel.

In the "StarLine Master" app, program one channel for the "Control Binary-5S preheater via digital bus" function. Connect it to the white wire in heater control unit harness.

For the second channel, set "Monitor Binary-5S preheater startup via digital bus" function. Connect it to the green wire in heater control unit harness.

On "Engine Start" tab, in "Preheater" section, enable "Allow preheater operation" option. For "Preheater start type" parameter, select "Binary-5S via digital bus".

Example of setting:

11. white-dark blue Binar-5S preheater control via data bus

12. white-green Binar-5S preheater start control via data bus

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

AUTO mode control

Parking heater (preheater)

Control parking heater (preheater)

Start type of preheater Binar-5S via data bus

Example of setting for M66v2:

2. dark blue Binar-5S preheater control via data bus

9. white-black Binar-5S preheater start control via data bus

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

AUTO mode control

Parking heater (preheater)

Control parking heater (preheater)

Start type of preheater Binar-5S via data bus

Fixed bugs

- 2.X.X E96(V2) E96(V2)E90L GEN7(V2) S96(V2)** Added handling of outdated temperature values from the car's onboard system. During autostart, the car's onboard system might not get the current temperature in time. This caused engine heating start to cancel
- 2.41.0 E96(V2) E96(V2)E90L GEN7(V2) S96(V2)** On some cars with ignition barrel, after reboot, pressing PTS button wasn't processed until ignition status was received from CAN bus
- 2.41.0 E96(V2) E96(V2)E90L GEN7(V2) S96(V2)** On cars with ignition barrel, when starting via PTS button input, data bypass of factory immobiliser sometimes didn't activate
- 2.X.X A90 A90BT AS90** Fixed Eberspacher preheater control via digital bus

5. **2.42.0 A90 A90BT AS90 E96(V2) E96(V2)E90L GEN7(V2) S96(V2)** Fixed handling of "Loss of connection with digital relay R7" setting
6. **2.42.0 A90 A90BT E96(V2) E96(V2)E90L E90V2 E90V2BT GEN7(V2) M66(V2) GSM+GPS(V2)** Fixed transmission of remaining autostart/remote start timer to server in devices with external GSM connected via SLBUS

Known bugs

1. **2.42.4 GEN7(V2)** UAZ Patriot: LIN bus status reading and control not working
2. **2.44.0 GEN7(V2)** Data bypass of factory immobiliser control via DataLink bus not working

Firmware

Master 2.43.3

Released 03.03.2026

New features

1. No

Fixed bugs

1. **2.X.X E96(V2) E96V2E90L S96(V2) GEN7(V2)** Factory immobiliser bypass wasn't working on Daihatsu vehicles.

Known bugs

1. No

Firmware

Master 2.43.0

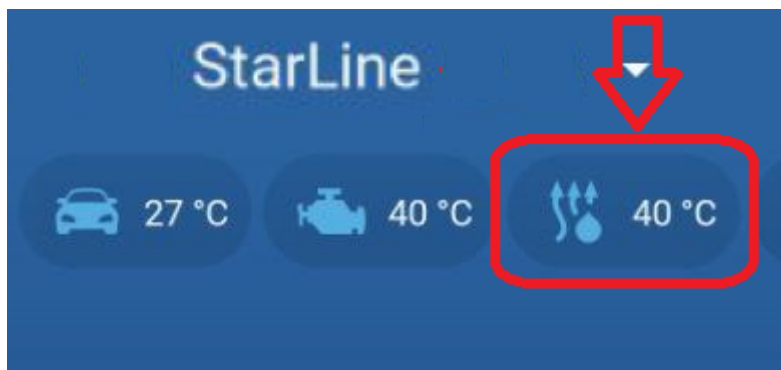
Released 03.12.2025

New features

1. Added coolant temperature via data bus from A100 and Webasto heaters

GEN7(V2) AS90 S96(V2) M66(V2)

Mobile app now shows coolant temperature for Webasto Thermo Top Evo 5, A100 HYDRO ECO version 2, and A100 HYDRO D5/G5 Eco V3 heaters. This works via the data bus when the heater is running or the ignition is on.



The engine temperature from the heater can now be used in Flexible logic programs as an event or condition.

Engine temperature from parking heater, °C

became more

1

✓ DONE

Auxiliary options

Engine temperature from parking heater, °C

became less

1

✓ DONE

1 <Укажите название программы>

События

Если

Доп. параметры

Температура двигателя из предпускового подогревателя, С

стала больше

1

✓ готово

Условия

при условии

Доп. параметры

Температура двигателя из предпускового подогревателя, С

больше

0

✓ готово

2. Added transmission of engine temperature from CAN

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

The system now uses engine temperature from CAN and heater buses. For systems with a built-in GSM or LTE module, the mobile app sends the following temperature values to the server, based on priority:

1. Engine temperature from CAN (if available, enabled in settings, and the CAN bus is active

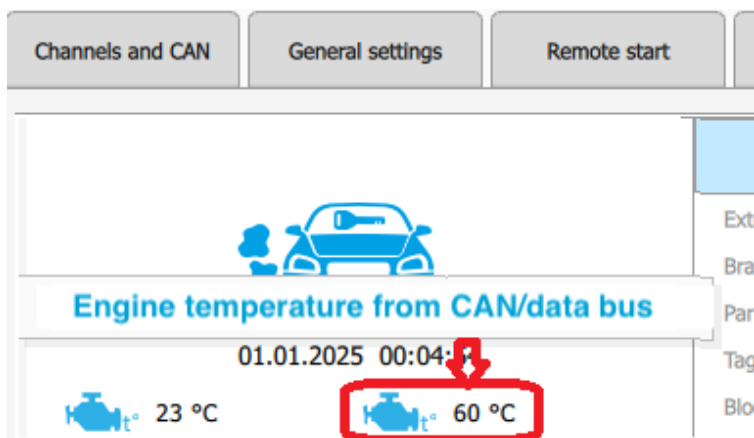
- Coolant temperature from the preheater via the data bus (available when the ignition is on or the heater is running).
- Temperature from an external sensor in the main unit or the Wireless relay R6.

This temperature, according to the priority above, is used in the following algorithms:

- Heater and auxiliary engine heater are turned on/off based on the lower/upper temperature thresholds.
- Heater is turned off when the engine reaches the maximum allowed temperature.
- Engine is stop (remote/automatic) when the engine reaches maximum allowed temperature.
- Engine temperature is sent to the server if there is a measurement from an external temperature sensor. If the external sensor is not connected, temperature is not sent to the server and is not shown in the mobile app.

If both the temperature sensor and CAN temperature are available, the value from CAN is used, regardless of engine temperature source setting in StarLine Master. If the sensor is not connected, temperature from CAN is used in the listed algorithms.

In the Diagnostics tab of StarLine Master, a new icon for engine temperature from CAN/data bus has been added (separate from the icon for engine temperature from the external sensor). If both temperatures (CAN and heater) are available, temperature from CAN will be shown in diagnostics.



3. Added support for the Webasto AT2000STC air heater

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

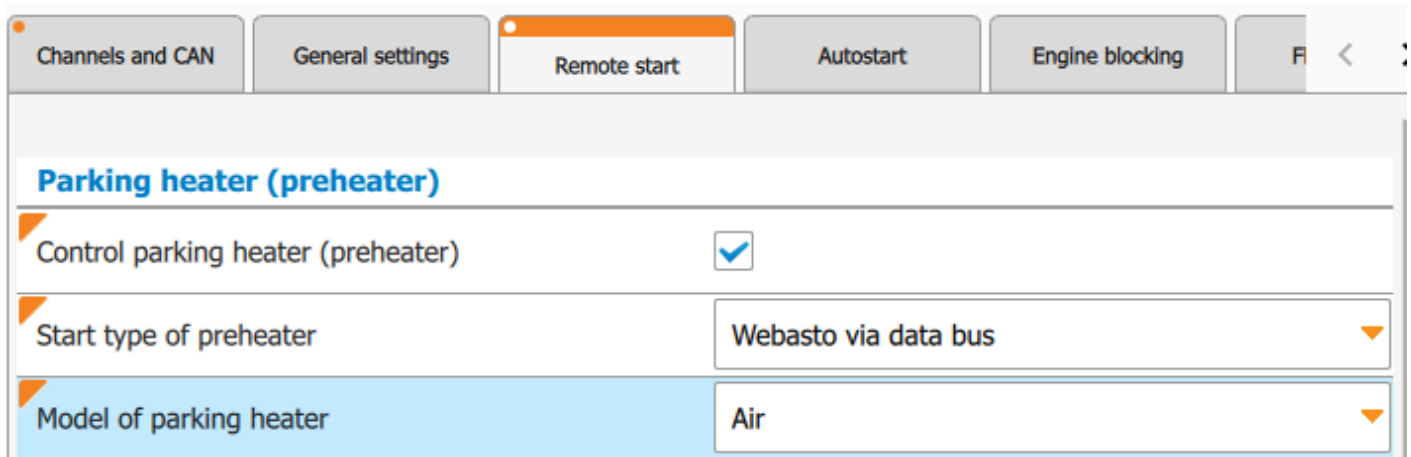
Control and monitoring of the launch of Webasto Air Top 2000 STC interior air heater via the W-bus have been added.

For connection, you can use the white-black wire or any free LIN wire, switching it to a digital channel.

In the StarLine Master app, assign the option "Webasto preheater control via data bus" to the selected channel.



On the "Remote Start" tab, in the "Parking heater (preheater)" section, set "Control parking heater (preheater)." For the "Start type of preheater" select "Webasto via data bus," and choose "Air" as the "Model of parking heater".



4. Changed preheater algorithm in auxiliary engine heater mode

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

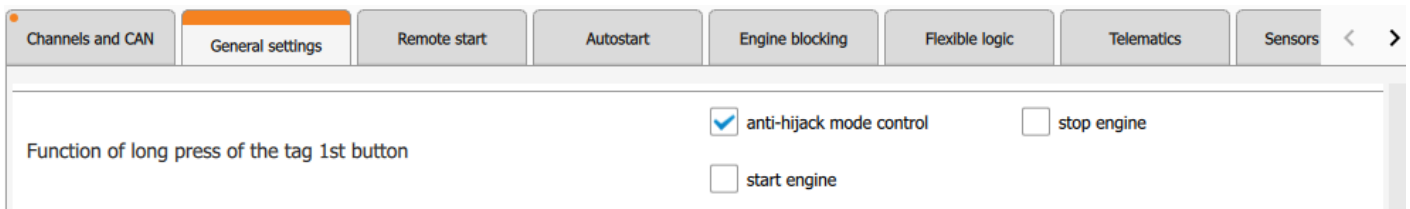
The heater in auxiliary engine heater mode now runs continuously (if it exceeds 120 minutes, it restarts after 30 seconds) until the stop condition is met. If the heater was running before engine start, auxiliary engine heater mode will begin 30 seconds after the heater's runtime ends.

Settings like "Use parking heater as an auxiliary engine heater", "Temperature to start auxiliary heater °C" and "Temperature to stop auxiliary heater °C" are now available in StarLine 2 app.

5. Added a setting for long press of the first button on the tag

E96(V2) GEN7(V2) S96(V2) A90BT AS90

The setting "Anti-hijack mode control" has been changed to "Function of long press of the tag 1st button". Now, in addition to controlling anti-hijack mode, you can set it to stop or start the engine with a long press (long press level 1: press and hold the button until you see two short flashes of the current mode and then one long flash; release the button during the long flash).



Fixed bugs

1. **2.X.X E96(V2) E96V2E90L GEN7(V2) S96(V2)** A 30-second delay has been added after engine starts, before reading external temperature from the CAN bus for the automatic climate scenario algorithms.
2. **2.41.0 E96(V2) E96V2E90L GEN7(V2) S96(V2)** On the Geely Atlas 2023-2025, when connecting CAN-C, the limit on the number of engine starts between trips stayed active.

Known bugs

1. No

Firmware

Master 2.42.7

Released 29.10.2025

New features

1. Architectural optimization of support for different device versions

GEN7(V2) M66(V2) GSMGPS(V2)

Fixed bugs

No

Known bugs

No

**This firmware version is designed for security systems E97, M66v2, GSM+GPS Master 6 v2*

Master 2.42.4

Released 14.10.2025

New features

1. No

Fixed bugs

1. **2.X.X GEN7(V2)** Comfort features control (like locking windows and sunroof) has been optimized using LIN on vehicles such as Changan UNI, Geely Coolray, Belgee X50, Lada Granta 2025, and others.
2. **2.X.X E96(V2) E96V2E90L S96(V2)** Fixed reading of factory buttons and other statuses via LIN on Geely (Atlas, Monjaro, Cityray, Preface), Chevrolet Monza, and others.
3. **2.X.X E96(V2) E96V2E90L S96(V2)** Central locking control via LIN has been optimized on vehicles like Lada Granta 2025, Haval F7, Tank 500, and others.
4. **2.X.X E96(V2) E96V2E90L S96(V2)** Optimized control of the factory security system using LIN on Chevrolet Monza and other models.
5. **2.X.X E96(V2) E96V2E90L S96(V2)** Improved control of seat heating via LIN on Nissan (Pathfinder, X-Trail) and others.
6. **2.X.X E96(V2) E96V2E90L S96(V2)** Improved programming procedure and data bypass of factory immobiliser on GM (Opel, Chevrolet, and others). For proper operation, CAN firmware in the security system must also be updated.

Known bugs

1. No

**This firmware version is designed for security systems with serial numbers in the format: GEN7S S..., GEN7E S..., E96V2P S..., ES96P S..., except E96V2L S..., ES96L S..., ES96V2 S..., E96V2 S..., GEN7 S....*

Master 2.42.3

Realized 08.10.2025

New features

1. No

Fixed bugs

1. **2.41.0 GEN7(V2)** Reading status and control functions have been improved for cars with single-wire CAN bus (Opel, Chevrolet, and others).
2. **2.X.X GEN7(V2)** Climate control has been improved for keyless start on FAW Bestune vehicles.
3. **2.X.X GEN7(V2)** Keyless bypass of factory immobiliser has been improved on BMW F-series and Chery Tiggo 8 Pro Hybrid.
4. **2.X.X GEN7(V2)** Keyless blocking has been improved on Chery and Exeed.
5. **2.X.X GEN7(V2)** Comfort feature has been fixed on VW and Skoda (MQB evo).

Known bugs

1. No

**This firmware version is designed for security systems with serial numbers in the format: GEN7S S..., GEN7E S...*

Master 2.42.2

New features

1. Added brake or clutch pedal simulation via CAN

GEN7(V2) E96(V2) E96(V2)E90L S96(V2)

Control is performed in sync with the operation of the analog output.

Pedal pressing simulation



CAN-FD-C

2. A network mode setting was added to support mobile internet on devices with LTE modems.

GEN7(V2) S96(V2)

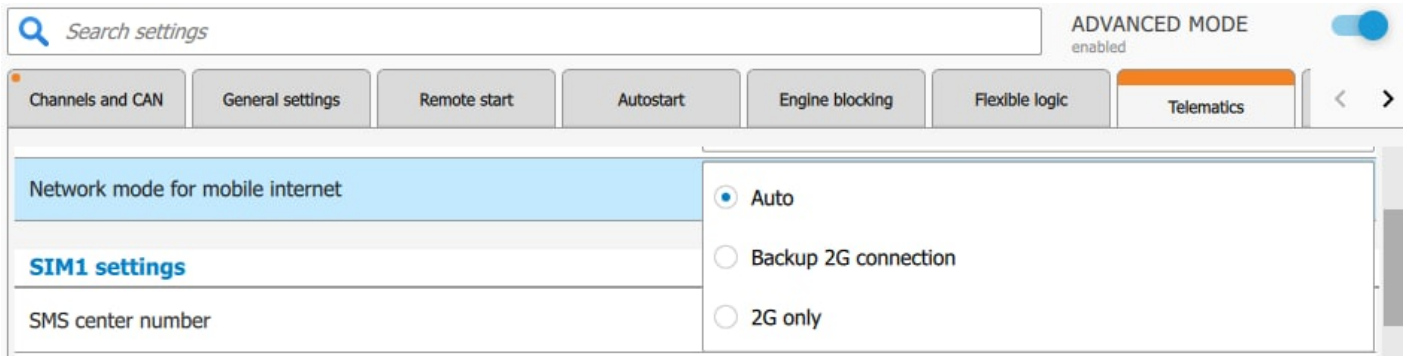
In "Auto" mode, the modem automatically picks network based on available LTE, 3G, or 2G.

In "2G Backup" mode, in addition to "Auto", program automatically switches the network to 2G for one day when there are mobile internet issues, then switches back to LTE/3G.

In "2G Only" mode, modem works on 2G until the setting is changed.

Settings can be changed in StarLine Master, as well as by SMS command:

- 00070 - Network mode "Auto" (default)
- 00071 - Network mode "2G Only"
- 00072 - Network mode "Backup 2G connection"



3. Added support for the Webasto Thermo Top Evo 5 preheater with an exhaust gas temperature sensor.

GEN7(V2) E96(V2) E96(V2)E90L S96(V2) M66(V2)

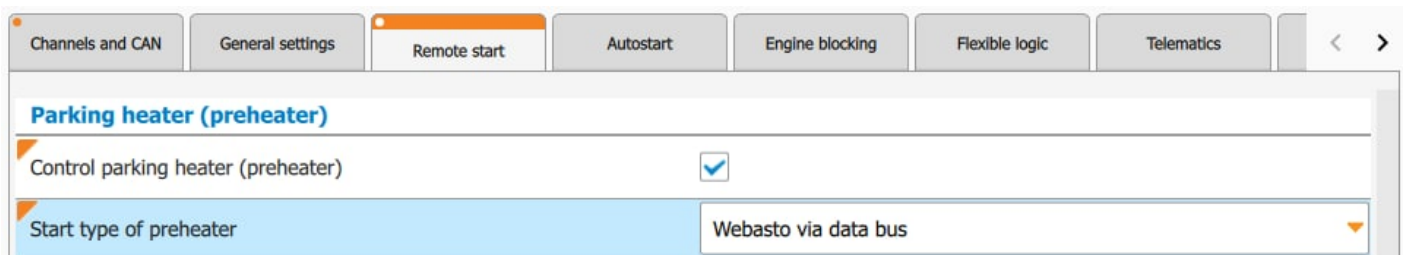
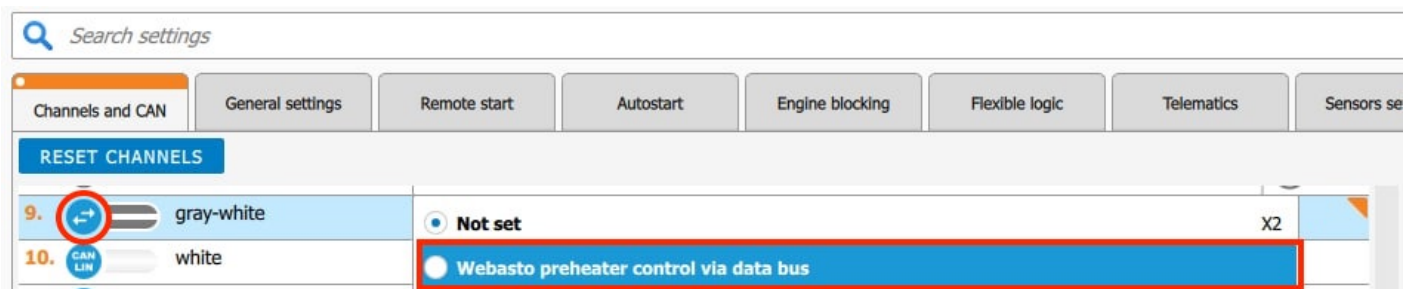
Added control and monitoring of Webasto Thermo Top Evo 5 preheater start with an exhaust gas temperature sensor via data bus. The connection is made to the yellow W-Bus wire.

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

In StarLine Master app, program the chosen channel for the function "Webasto preheater control via data bus"

On the "Remote start" tab, in the "Parking heater (preheater)" section, enable option "Control parking heater (preheater)". For the "Start type of preheater" setting, select "Webasto via data bus".

Setting example:



Fixed bugs

1. **2.41.0 GEN7(V2)** On some VAG vehicles, CAN-FD-B might not work.
2. **2.X.X E96(V2) E96V2E90L GEN7(V2) S96(V2)** The reason for the failed auto start by timer was not shown if the temperature at the time was higher than the set limit.

Known bugs

1. No

*This firmware version is intended for security systems with serial numbers:

GEN7S S..., GEN7E S..., E96V2P S..., ES96P S...,

except for E96V2L S..., ES96L S..., ES96V2 S..., E96V2 S..., and GEN7 S...

Master 2.41.1

Released 20.10.2025

New features

1. A setting for network mode has been added to support mobile internet on devices with an LTE modem.

GEN7 S96(V2)

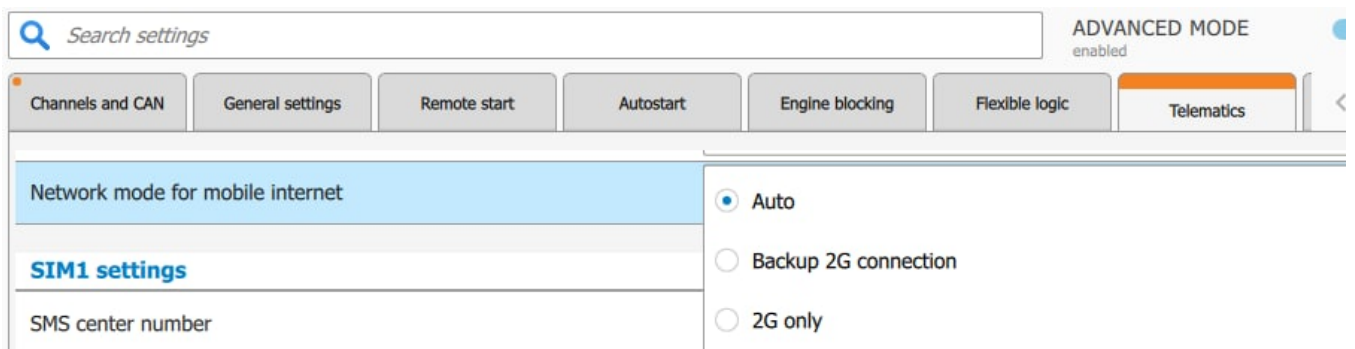
In "Auto" mode, the modem automatically picks network based on available LTE, 3G, or 2G.

In "2G Backup" mode, in addition to "Auto", program automatically switches the network to 2G for one day when there are mobile internet issues, then switches back to LTE/3G.

In "2G Only" mode, modem works on 2G until the setting is changed.

Settings can be changed in StarLine Master, as well as by SMS command:

- 00070 - Network mode "Auto" (default)
- 00071 - Network mode "2G Only"
- 00072 - Network mode "Backup 2G connection"



Fixed bugs

No

Known bugs

1. No

*This firmware version is intended for security systems *S96v2 LTE*, *A97 LTE* и *B97 LTE* with serial numbers:

ES96V2 S..., *GEN7 S...*

Master 2.41.0

Released 17.06.2025

New features

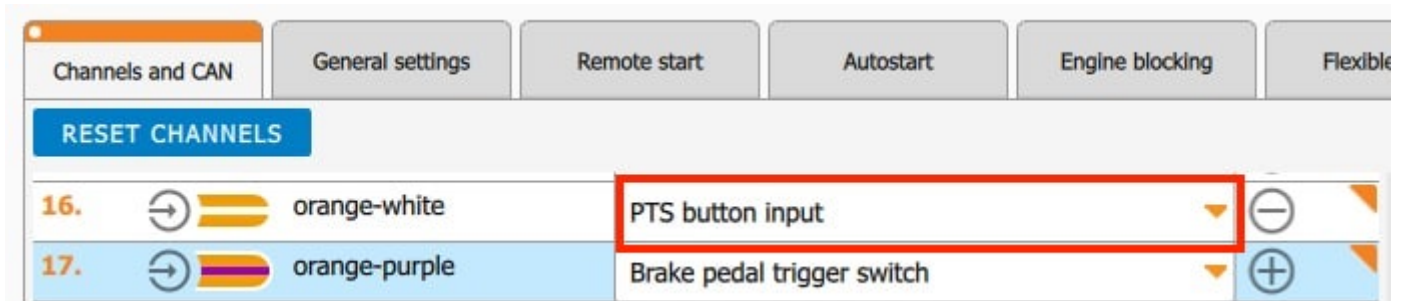
1. Added the option to start engine using PTS (push-to-start) button on vehicles with ignition barrel.

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

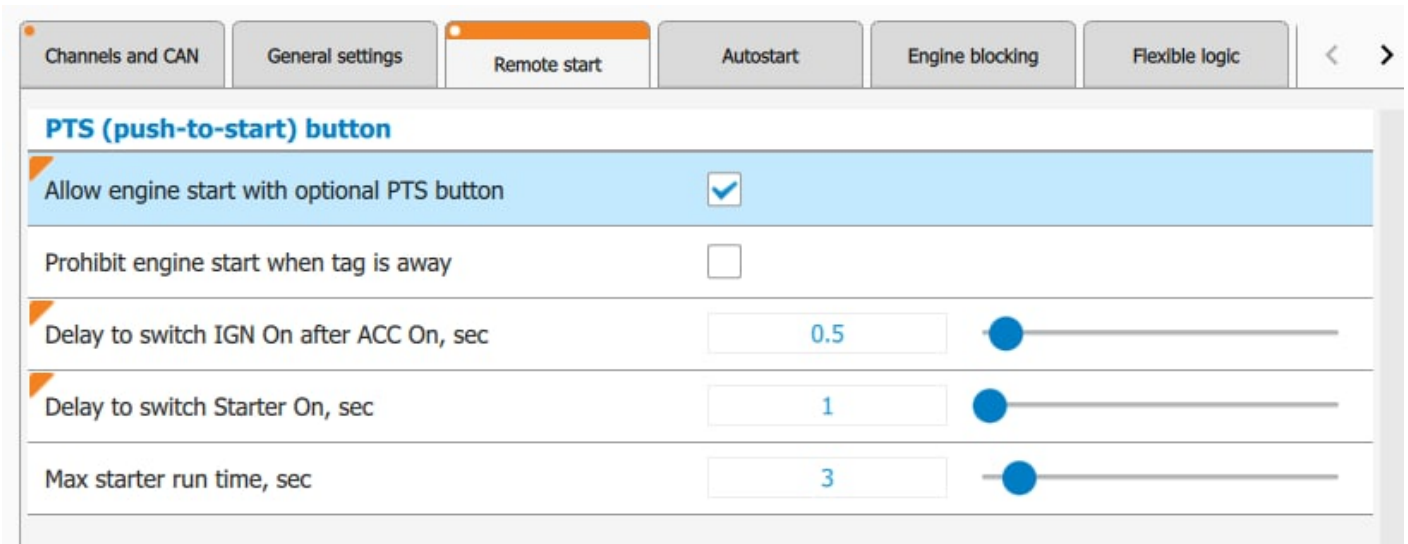
It's now possible to add a PTS (push-to-start) button to vehicles with an ignition barrel as an additional accessory, but the engine must still be able to start with the key.

To use this function, start circuits required for remote engine start must be connected.

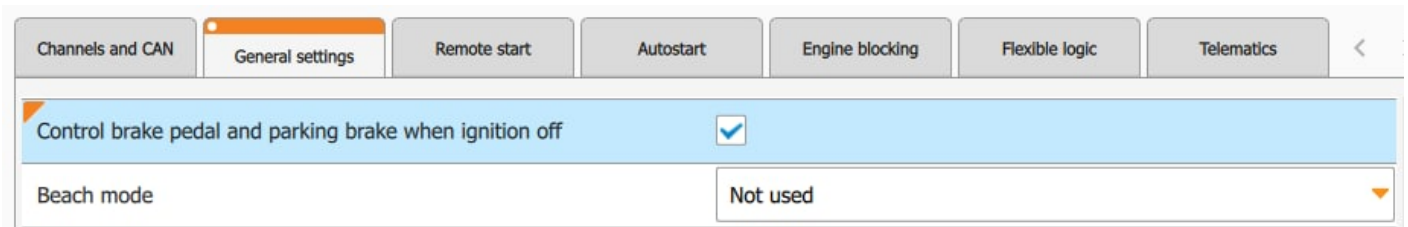
Set a free input to "PTS button input" in the "Channels and CAN" menu.



Also, enable "Allow engine start with optional PTS button" option.



If the brake pedal is connected via an analog input, you should turn on "Control brake pedal and parking brake when ignition off" option.



When brake pedal is pressed and button input is activated the accessories output will turn on. Then ignition output activates after the "Delay to switch IGN On after ACC On, sec" time. Further starter output activates after the "Starter run delay after ignition on, sec" time. If brake pedal status comes from CAN, then at the first press of PTS button accessories activate; at the second press, ignition turns on; and at the third press, starter output activates.

The engine is stopped when PTS (push-to-start) button input is activated while the brake pedal is pressed. Engine may be stopped by holding PTS (push-to-start) button for more than 2 seconds without pressing the brake pedal. If the security system has a GPS antenna or supports speed data from the CAN bus, you can turn off the engine by briefly pressing PTS button (without pressing the brake) when the speed is below 5 km/h.

If "Prohibit engine start when tag is away" is set, activating PTS button input without tag connection will not activate the outputs (accessories, ignition, starter).

In service mode and armed mode, when the start-stop button input activates, outputs do not activate, no matter if the tag is present or not.

2. Added automatic climate scripts

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



After setting “Automatic climate scripts” option in “Engine start” section, when engine is started remotely or automatically by the timer, different heaters will turn on and climate control temperature will be set depending on the outside temperature and supported features. To change the climate control temperature, “Climate control temperature” setting must be turned on. The list of supported CAN options is available on can.starline.ru.

The outside temperature is taken from CAN. If CAN does not support outside temperature, the interior temperature from the main unit is used. There are 3 scripts options available:

- 1) **"Cold"** - If outside temperature is below +3 °C, climate control temperature is set to max, and the steering wheel, seats, mirrors, and window heaters turn on. If the difference between engine and outside temperatures is greater than 20 degrees, climate control temperature will be set to value selected in the app.
- 2) **"Normal"** - When the outside temperature is between +3 and 22 °C, climate control temperature is set to the value selected in the app, and heaters operate according to settings in the app's Smart Comfort section.
- 3) **"Warm"** - If outside temperature is above +22 °C, climate control temperature is set to the min one minute after engine starts, and seats ventilation activate. If starting is interrupted or Ignition takeover is done before one minute, climate control temperature stays at the value from the app.

While ignition takeover, if the “Cold” or “Warm” script was active, climate control temperature is set to the value from the app’s smart comfort section. If vehicle does not support Ignition takeover, climate control temperature set during automatic script remains the same when engine is turned off.

Fixed bugs

No

Known bugs

1. **2.41.0** **GEN7(V2)** CAN-FD does not work on some VAG vehicles.

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

Firmware

Master 2.40.3

Released 18.03.2025

New features

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

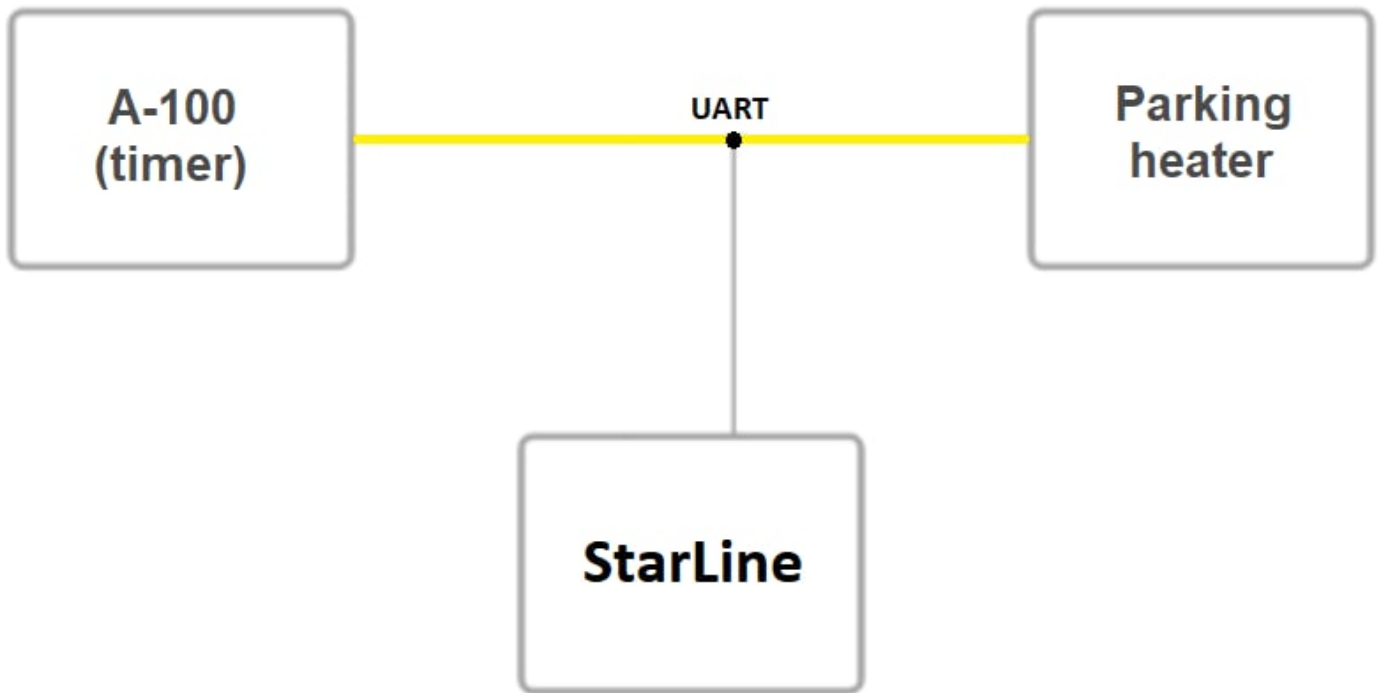
AS90 GEN7 GEN7(V2) S96(V2)

"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 Fil <

Parking heater (preheater)

Control parking heater (preheater)

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

Firmware

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

Firmware

Master 2.39.0

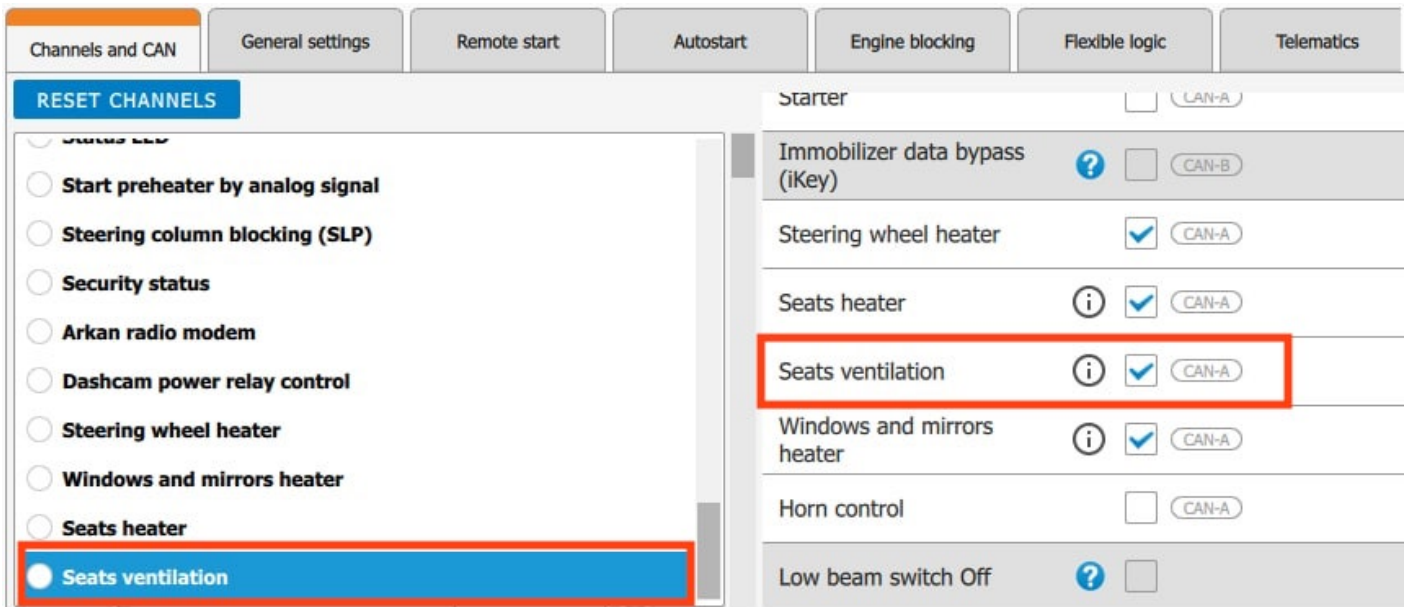
Released 16.12.2024

New features

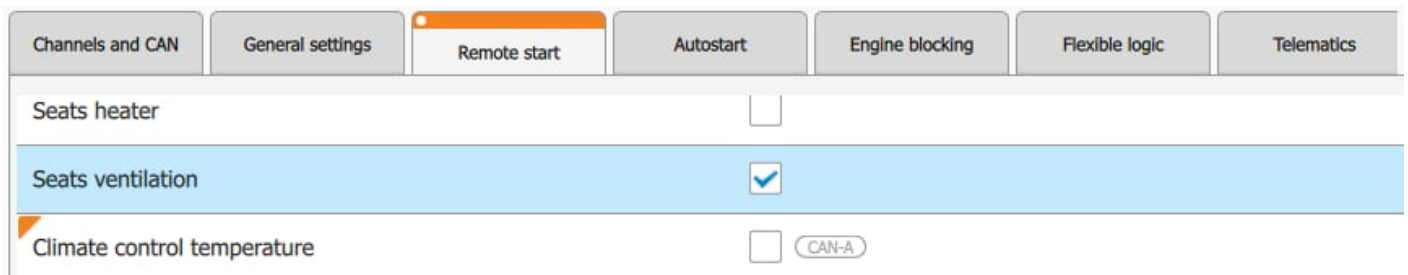
1. Seats ventilation control added

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

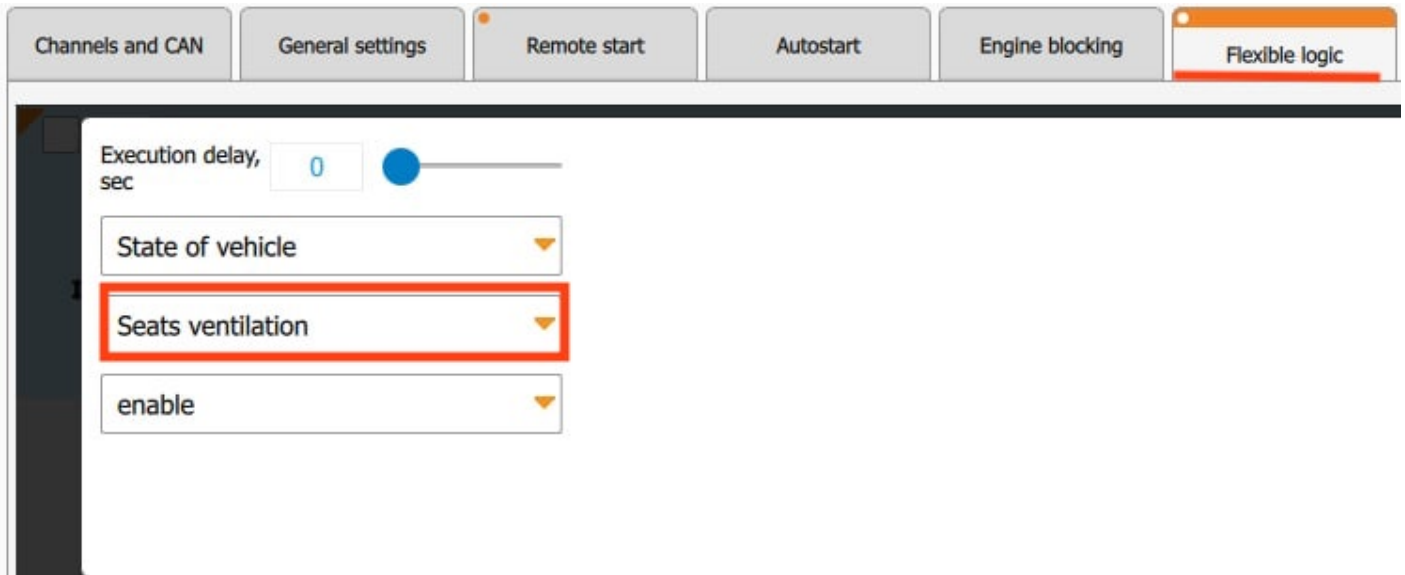
In channels and CAN settings:



In smart comfort settings:



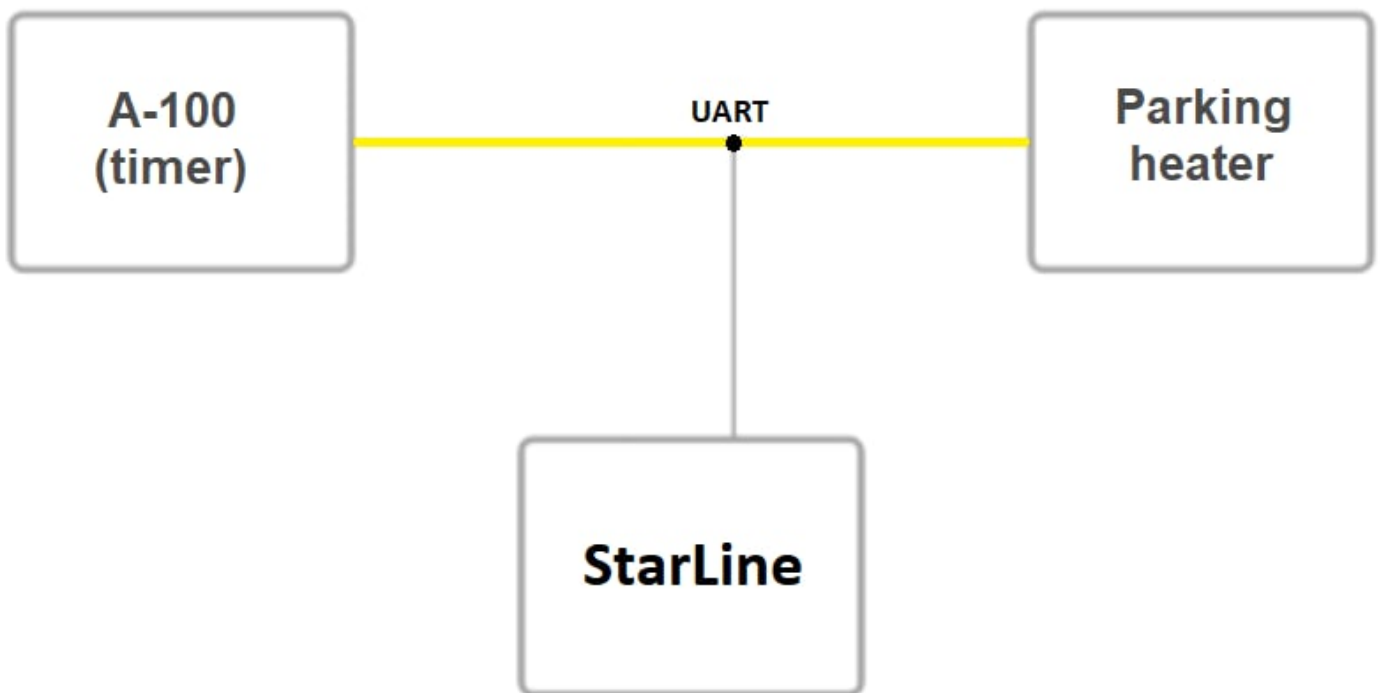
In Flexible Logic settings:



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:

The screenshot displays the configuration interface for the StarLine Master. It is divided into two main sections. The top section shows a list of channels (9-12) with their respective colors and CAN/LIN status. Channel 9 is selected, and its settings are shown on the right. The settings include radio buttons for "Not set", "Webasto preheater control via data bus", "A100 preheater control via data bus" (which is selected and highlighted with a red box), and "Eberspächer preheater control via data bus". The bottom section shows the "Remote start" tab selected, with a sub-tab for "Parking heater (preheater)". Under this sub-tab, the "Control parking heater (preheater)" option is checked, and the "Start type of preheater" is set to "A100 via digital bus".

9.		gray-white	<input type="radio"/> Not set	X2
10.		white	<input type="radio"/> Webasto preheater control via data bus	
11.		white-dark blue	<input checked="" type="radio"/> A100 preheater control via data bus	
12.		white-green	<input type="radio"/> 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

Firmware

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

Fixed bugs

No

Known bugs

No

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

Firmware

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 < >

Control parking heater (preheater)

Start type of preheater

- Not used
- Start by impulse, stop by impulse
- Start by pulse, stop automatic
- Start by potential
- CAN/LIN
- Webasto via data bus
- Eberspächer via data bus
- Xin Long YT-F-C-12-W via data bus
- A100 via digital bus

Control preheater state

Max preheater activating time, sec

Preheater operation time, min

Activate preheater before remote start

Activate preheater before autostart

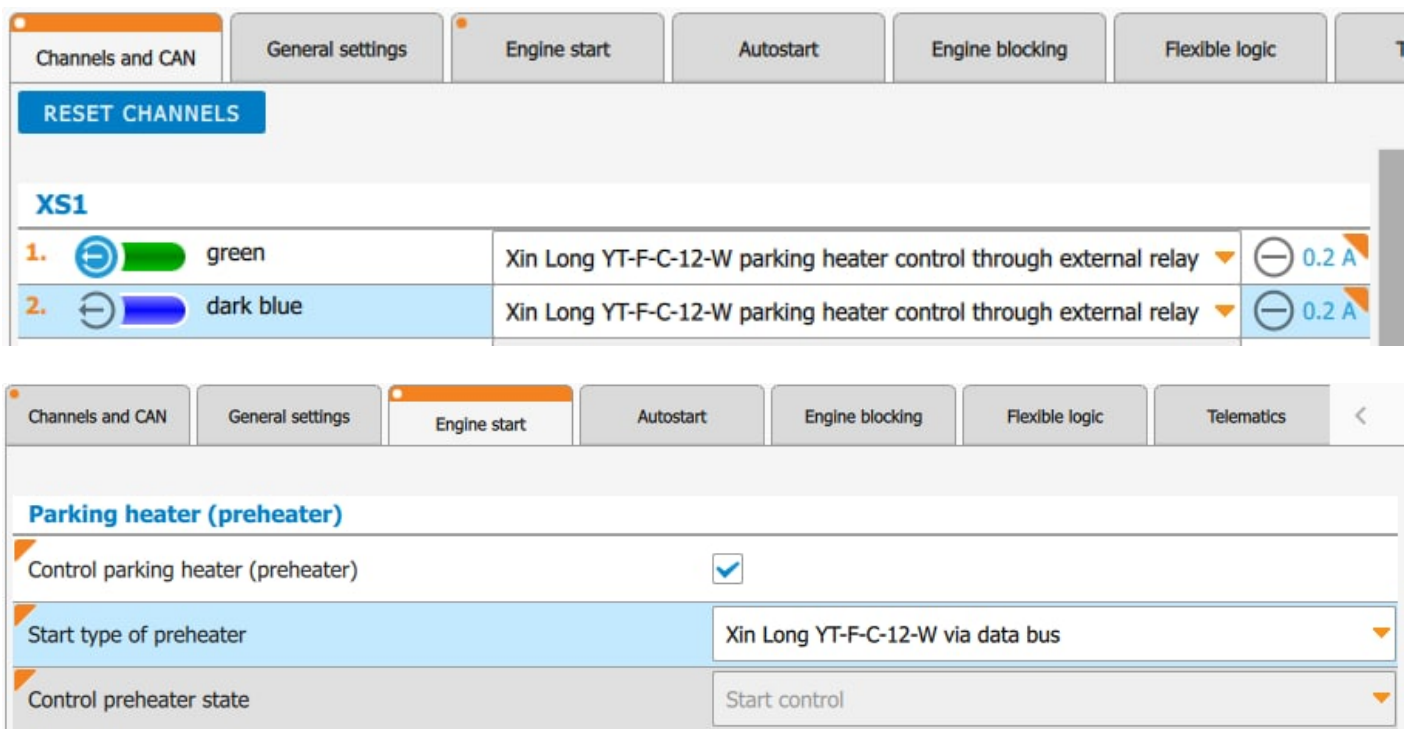
Temperature to activate preheater before autostart / remote start, ° C

Temperature to run automatic / remote start, ° C

Temperature to stop preheater, ° C

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:



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

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	⊖ 0.2 A
3.		black-red	Engine block...	⊖ 0.2 A
4.		grey-black	Not set	⊕
5.		pink	Not set	⊖ 0.2 A
6.		purple	Not set	⊖ 0.2 A
7.		grey	Siren	⊕ 2.0 A
8.		yellow-black	Not set	⊖ 0.2 A
9.		yellow-red	Not set	⊖ 0.2 A
10.		dark blue	Not set	⊖ 0.2 A
12.		yellow-white	Not set	⊖ 0.2 A
13.		green-yellow	Not set	⊖ 0.2 A
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	⊖ 0.2 A

X2 (CAN-LIN and Start power module)

1.		orange-white	Not set	
----	--	--------------	---------	--

Parking heater (preheater) control ?

Parking heater (preheater) stop ?

Engine start CAN-A

Starter CAN-A

Immobilizer data bypass (iKey) CAN-B ?

Steering wheel heater CAN-A

Seats heater CAN-A

Seats ventilation CAN-A

Windows and mirrors heater 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 modu...

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 2 A
 Engine blocking #2 R7_5 2 A
 Engine blocking #3 0 A
 Door open simulation 2 A
 Trunk unlock 2 A
 Comfort closure output 2 A
 Starter protection at autostart 2 A
 Status output #1 2 A
 Status output #2
 Status output #3
 Status LED
 Start preheater by analog signal
 Steering column blocking (SLP)
 Security status
 Dashcam power relay control 2 A
 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.

The screenshot shows the 'General settings' tab in the firmware configuration interface. The 'Siren tone type' setting is highlighted, showing two radio button options: 'Tone 1' (selected) and 'Tone 2'. Other settings visible include 'Hazard lights potential control duration, mc' (1100), 'Horn impulse duration at arm / disarm, mc' (100), and 'Horn impulse duration at alarm trigger, mc' (550). The 'Main unit embedded buzzer' checkbox is checked.

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

Software

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