# INSTALLATION INSTRUCTIONS EASYSTART WEB



#### Web-based operating software for operation of Eberspächer heaters

Designation		Order No.
EasyStart Web	to 05/2019	22.1000.34.5100
EasyStart Web	from 06/2019	22.1000.34.7800



#### Chapter Chapter title

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#### 1 Introduction

#### 1.1 General information

#### 1.1.1 Please read first

Before installing, always read through these installation instructions carefully and keep them in a safe place for reference at a later date. The document contains important information necessary for the installation.

The complete operating instructions are stored on the enclosed CD and are also available on the Eberspächer Partner Portal to view and to download.

#### 1.2 Special text formats and presentations

Special text formats and picture symbols are used in these instructions to emphasise different situations and subjects.

The meaning and corresponding actions are shown in the following examples.

Examples

- Text preceded by a dot (•) indicates a list, which is introduced by a heading.
  - Text preceded by a dash (-) is positioned under the list with a dot.

<u>Underlined blue text</u> denotes a cross-reference, which can be clicked in the PDF document. The part of the document named in the text is then displayed.

#### 1.3 Picture symbols

### ⚠ Danger!

This information points out a potential serious or fatal danger. Ignoring this information can result in severe injuries.

→ This arrow indicates the appropriate precaution to take to avert the danger.

### 🛕 Caution

This information points out a dangerous situation for a person and / or the product. Failure to comply with these instructions can result in injuries to people and / or damage to machinery.

→ This arrow indicates the appropriate precaution to take to avert the danger.

### i Note

These remarks contain recommendations for use and useful tips for installation and operation.

#### 1.4 Repair

Repair of the EasyStart Web control unit is not permitted. Failure to comply makes the guarantee null and void and this leads to the exclusion of any liability of Eberspächer Climate Control Systems GmbH & Co. KG.

#### 1.4.1 Disposal

Dispose of the product only according to the relevant legal regulations.

#### 1.5 Important information

#### 1.5.1 Intended use

The web-based EasyStart Web control unit is used to operate and / or program Eberspächer heaters via the internet. This can be done not only with the help of a browser-based web application but also with the help of a smartphone app.

#### Note

- Use of the EasyStart Web control unit for any purpose other than that given by the manufacturer is not permitted.
- Use the EasyStart Web control unit for the specified purpose only.
- Do not use the EasyStart Web control unit if a malfunction could cause a hazard and / or damage to property.
- Shut down the EasyStart Web control unit immediately if it can be assumed that safe operation of the heater is no longer guaranteed.
- ightarrow Take all measures to prevent accidental putting back into service.
- Failure to comply makes the guarantee null and void and excludes any liability of Eberspächer Climate Control Systems GmbH & Co. KG.



#### 1.6 Installation and operation

### ⚠ Danger!

- Risk to life due to susceptible pacemaker. Pacemakers and hearing aids can be affected by radio waves and their function disrupted.
- → Get your doctor to check your pacemaker or hearing aid specialist to check your hearing aid for susceptibility to faults.
- Risk of choking due to small components. Accessories are small components and can be swallowed by children.
- → Keep small components of the EasyStart Web out of reach of children.
- Risk of fire/deflagration due to ignition. Hazardous situations can occur if the heater is operated in the immediate vicinity of flammable gases, fumes, liquids or dust.
- → Do not use the EasyStart Web control unit if the heater to be activated is in an environment in which flammable gases, fumes, liquids or dust are present or could be present.
- Risk of poisoning due to escaping exhaust gases. Hazardous situations can occur during operation of the heater in enclosed rooms.
- → Do not use the EasyStart Web control unit if the activated heater is located in enclosed rooms, e.g. in a garage or a multi-storey car park.
- Risk of short-circuit due to penetrating liquid. Penetration of liquid into the EasyStart Web receiver unit can result in dangerous situations.
- → To reduce the risk of an electrical short-circuit or damage, do not expose the receiver unit of the EasyStart Web to moisture.

#### 1.7 Disclaimer

The manufacturer is not liable for damage caused by improper use or incorrect operation.

Failure to comply with the safety instructions makes the guarantee null and void and excludes any liability of Eberspächer Climate Control Systems GmbH & Co. KG.

#### 1.8 Accident prevention

Always follow all accident prevention regulations and shop and operating safety instructions.

#### 1.9 EU Declaration of Conformity

We herewith declare that the version of EasyStart Web placed on the market by us conforms with the following EU Directive. EU Directive 2014/53/EU

The full Declaration of Conformity can be viewed and downloaded from the download centre at <u>www.eberspaecher.com</u>.



#### 2 **Product Information**

EasyStart \	Neb w	eb-based cont	rol unit:
Order No	to	05/2010	22 1000 3/

,			
Order No.	to	05/2019:	22.1000.34.5100
	from	06/2019:	22.1000.34.7800

#### Scope of supply 2.1

The scope of supply includes:

No. in	Quantity	Designation
sketch		
1	1	EasyStart Web receiver unit
2	1	Cable loom
3	1	Button
4	1	Interior temperature sensor
5	1	Bag with small parts
6	1	Adhesive pad, 25 mm x 30 mm
7	1	CD with installation instructions, operating instructions and quick start guide
8	1	Quick start guide
-	1	Label with access code (not illustrated)
<u> </u>		

Can be ordered as optional extra:		s optional extra:	Order No.
	1	Cable loom 2nd control unit	22.1000.34.5600
	1	Cable loom, EasyScan diagnostics and service tool	22.1000.34.5700





#### 2.2 Dimensions



#### 2.3 Technical data

Designation	Unit	Value
Operating voltage	[V]	9 32
Maximum input voltage	[V]	32
Closed-circuit power consumption	[A]	< 0.005
Current input in operation (GSM network)	[A]	< 0.5
Maximum continuous current input, in operation	[mA]	< 30
Operating temperature range	[°C]	-40 +85
Storage temperature range	[°C]	-40 +85
Dimensions, with fastening tabs $L{\times}W{\times}H$	[mm]	126×66×25
Class of protection	ISO 20653	IP40
Weight	[g]	90
GSM/GPRS	[MHz]	Quad band: 850/900/1800/1900
Transmission power	[W]	2 [33 dBm], Class 4 (GSM 850/900 MHz)
		1 [30 dBm], Class 1 (GSM 1800/1900 MHz)



#### 3 Installation

#### 3.1 Installing the receiver unit

- Install the receiver unit only inside the vehicle, preferably under the instrument panel.
- Fix the receiver unit using the adhesive pad included in the scope of supply or with cable ties.

#### i Note

- The receiver unit must not be completely enclosed by metal, especially the antenna area. Ensure that the distance between the receiver unit and people is > 20 cm (USA / Canada).
- When installing the receiver unit, ensure that there is sufficient space available for connecting the cable looms.



- 1 EasyStart Web receiver unit
- 2 Adhesive pad
- 3 Fastening tabs
- 4 Antenna area

#### 3.2 Installing the button

### 🚺 Note

- The button included in the scope of supply must be installed. Discuss the mounting position with the vehicle owner.
- When drilling the mounting hole ensure that no important functional components or cables behind the mounting surface are damaged.
- To install the button, drill a Ø 8 hole within the driver's reach in an easily accessed part of the instrument panel or centre console.
- Feed the button cable loom into the hole and clip in the button.
- Snap the "Button cable loom" cables into the 3-pin connector (small parts bag) as shown.
- Plug the connector into the 3-pin slot (2nd from right) of the receiver unit.



- → EasyStart Web receiver unit, 3-pin slot
- 1 BNYE cable
- 2 BN cable
- 3 RDYE cable

#### 3.3 Installing the interior temperature sensor

#### L Note

- Discuss the mounting position with the vehicle owner.
- The temperature sensor
- do not mount near a hot air outlet.
- do not mount in the hot air stream.
- mount in a place protected from draughts.
- mount in a place protected from direct sunshine.
- When drilling the fixing or connection hole ensure that no important functional components or cables behind the mounting surface are damaged.
- Install the temperature sensor included in the scope of supply to display or query the interior temperature.
- Use a self-tapping screw C 2.9×19 to mount the temperature sensor onto the instrument panel or another suitable place in the vehicle with concealed or visible lead harness (length 1.5 m).

#### 3.3.1 Install the temperature sensor lead harness

Variant 1: Install with lead harness concealed (hole in the instrument panel).



- 1 Instrument panel
- 2 Lead harness
- 3 Temperature sensor

Variant 2: Install with lead harness visible.



- 1 Instrument panel
- 2 Lead harness
- 3 Temperature sensor



- Snap the "Temperature sensor cable loom" cables into the 2-pin connector (small parts bag) as shown.
- Plug the connector into the 2-pin slot (2nd from left) of the stationary unit.



- → EasyStart Web receiver unit, 2-pin slot
- 1 BNWH cable
- 2 GY cable
- 3.4 Connect the cable loom (heaters with LIN-/ S+ interface)

#### Standard configuration

#### 3.4.1 Connect the communication and power supply cables

- Check whether the receptacles are available on the RD, BN and BUWH cables in the "Operation" lead harness of the heater cable loom.
- If the receptacles are missing on the relevant cables or incorrect receptacles are installed, crimp on the sleeves from the small parts bag supplied.
- Snap the cables into the 5-pin receptacle housing as follows.
  - rt cable in chamber 1
  - br cable in chamber 3
  - BUWH cable in chamber 4
- Connect the 5-pin receptacle housing of the "Operation" lead harness to the 5-pin "cable loom" connector.
- For air heaters, connect and insulate the GYRD cable to the BNWH also.
- Insulate unused cables.
- Connect the two 4-pin connectors of the "cable loom" in the corresponding slots of the EasyStart Web receiver unit (flat 4-pin -> far left, square 4-pin -> far right)



- 2 Receptacle housing, 5 pin
- 3 "Cable loom" connector, 5 pin
- 4 Flat (tab) connector, 4 pin

- 5 Square connector, 4 pin
- 6 EasyStart Web receiver unit

#### **I**Note

Note and follow the circuit diagrams from page 16.

#### Cable colours

RD	red	GR	grey	BK	black	WH	white	VT	violet
BU	blue	YE	yellow	GN	green	OR	orange	BN	brown

- 3.5 Connect the cable loom (heaters with CAN interface)
- Connect 4-pin connector housing -XS1 from heater lead harness in the right-hand slot of the EasyStart Web module.



- 1 Square connector, 4 pin
- 2 to the heater lead harness
- 3 EasyStart Web receiver unit

#### 3.6 Connecting the power supply

After installing the heater and EasyStart Web receiver unit, push in the fuse to establish the power supply for both units.

#### 3.7 Automatic detection

After applying the operating voltage the button's LED starts to light up. EasyStart Web checks which heater is connected and configures the system accordingly.

Start the initial startup and configuration (see <u>from page 9)</u> of EasyStart Web when the LED in the button is no longer flashing.



#### 4 Initial startup / configuration

The web-based EasyStart Web operating software can be used to operate an Eberspächer air or water heater via the installed receiver unit.

→ The installation workshop or garage must log into the EasyStart Web portal to start up the operating software.

#### 4.1 Log in for initial startup

The initial startup of the EasyStart Web operating software can only be carried out by the installation workshop using a PC/tablet with an internet connection.

- To access the "EasyStart Web portal", open the Eberspächer Partner Portal with <u>https://partner.eberspaecher.com/de</u>. If an access to the portal already exists, it is not necessary to enter an email address and password to log in. If no access exists yet, follow the login instructions.
- If the access is successful the main window of the partner portal appears. Click the "EasyStart Web" button under the "Customer Area" menu item.







• Select the "Initial startup" menu item.



• Enter the approval code (IMEI) for EasyStart Web.



The approval code (IMEI) is printed on the EasyStart Web packaging box and is also enclosed in the packaging as a sticker.

Eberspächer	EasyStart Web
Add EasyStart Web for editing	Edit new EasyStart Web Please enter the approval code (EasyStart Web with assigned user) or access code (EasyStart Web without assigned user): Approval code or access Next >>

#### 4.2 Default settings for customers

Configure EasyStart Web as requested by the customer or as necessary for installation.

### i Note

This step is only possible if the EasyStart Web registered on the server beforehand (logged into a GSM network).

Eberspächer	EasyStart Web		<b>A</b>
Add EasyStart Web for editing	naekjcto43		EasyStart Web configuration
	This EasyStart Web	o is in maintenance mode.	
	Immediately	🚍 Timer	
		💿 🖽 Heat 💿 🐮 Ventilate	
	Running time	10 🔄 Minutes	
	Current temperature	23 °C	
		Now update	
	Remaining runtime	Minutes	
		The heater is now off.	
		Switch on	
	Exit maintenance		

#### 4.2.1 Configuring EasyStart Web

EasyStart Web system parameters	>
Connectivity	>
Free start period	>
EasyStart Web fault memory	>
EasyStart Web operation settings	>
Automatic running time calculation	>
EasyStart Web undervoltage detection	>
Resetting EasyStart Web	>
Overview heaters	>



The following functions can be selected:

#### EasyStart Web system parameters

- Display of the current configuration and properties of the activated EasyStart Web.
- Display of the IMEI number
- Display of the current software version
- Perform software update, if necessary
- Default value of the minimum and maximum setpoint temperature

EasyStart Web system parameters		
IMEI		]
IMSI		]
Software version	1.3.9	]
	ebp_V1.0.266.tki	
	Perform software update	
Hardware version	0x0D.0x01.0x0F	]
Bootloader version	6.1.8	]
Reset counter	20	]
Heater type	Air heater	]
Supported operating modes	Heat Ventilate	]
Minimum settable setpoint temperature (1st heater)	8	) °C
Maximum settable setpoint temperature (1st heater)	36	) °C

#### Connectivity

- Status: EasyStart Web can be reached / cannot be reached via the app (use period)
- Remaining use period in days

Connectivity	*
Status	
End customer not yet active	$\checkmark$
Remaining use period	
0	days

#### Free initial period

- Enter the email address of the end customer. When the free initial period is released by the workshop notification of the enabling of the free initial period is sent to the end customer automatically by email.
- Enabling of free initial period for the customer (connectivity for 30 days)

Free start period has been activated	•
E-mail address of end customer	
Free 30-day start period	
Release free 30-day start period	

#### EasyStart Web fault memory

- Display EasyStart Web fault memory
- Delete the fault memory

EasyStart Web fault memory

Current error			
-			
Delete fault memor	у		
Delete now			

#### EasyStart Web operation settings '(selection)

- Default setpoint temperature value
- Default running time of the heater
- Running time limit of the heater
- Operating mode for the time function (start/departure time)
- Configuration of the control unit
- Temperature unit setting (°C/°F)
- Connection of additional temperature sensor

EasyStart Web operation settings		*
Default setpoint temperature value	21	°C
Default setting of the running time for the air heater		minutes
	<ul> <li>Enable unlimited running time</li> </ul>	
Unlimited running time		
	✓ Heater 1	
	Heater 2	
	Heater 3	
	Heater 4	
Heater 1 running time limit	120	minutes
Operating mode for the timer function	Start time	
Configuration of the operating modes		
Temperature unit (°C/F)	°C	
Temperature sensor connected	HG1	
Bus-Kommunikationssystem	CAN	
Gruppe Heizgerät 1		
Gruppe Heizgerät 2		
Gruppe Heizgerät 3		
Gruppe Heizgerät 4		



#### - Automatic running time calculation

#### **I**Note

- Automatic runtime calculation is not possible for air heaters.
- The engine size entered can be increased by 500 cm<sup>3</sup> for a larger heat requirement. If the combination valve 25.2014.80.6200 or 25.2014.80.7200 is used in the water circuit, the engine size entered can be reduced by 500 cm<sup>3</sup>.
- The values for increasing or reducing the engine size entered are only valid for cooling water circuits, whose vehicle fan heat exchanger is flowed through before the vehicle engine.
- If the vehicle is only used for short trips, consult the customer and reduce the maximum runtime.

Automatic running time calculation		*
Automatic running time calculation		
	Heater 1	
	Heater 2	
	Heater 3	
	Heater 4	
Cubic capacity	1.8	litre
Maximum running time	60	minutes

EasyStart Web undervoltage detection

See PLUS installation instructions

EasyStart Web undervoltage detection		3
Undervoltage limit	9	volt
Offset for undervoltage limit	0	volt

- Resetting EasyStart Web
  - Reset to factory settings

Resetting EasyStart Web		i.
Reset to factory settings	Reset now	

- Overview heaters
  - Supported operating modes
  - General operating hours counter
  - Display current errors
  - Read out and delete heater's fault memory

- Load fault memory

Overview heaters		~
H1		
Heater type	Air heater	
Supported operating modes	Heat Ventilate	
General operating hours counter		hours
Current error		
Fault memory	-	
Load fault memory	Load now	
Unlock heater	unlock now	
Delete fault memory		Delete now

#### 4.2.2 After completing the settings

- Click the <u>Save changes to configuration</u> or <u>Reset form</u> buttons to then save or discard the configuration.
- After ending the configuration, perform a test run in "Immediate operation" mode.
- Click the switch on button to start test mode.
- Following the run through test operation is ended. To do this, select the Extransmess button and then confirm the message.

> Add EasyStart Web for editing	naekjcto43		EasyStart Web configuration
	This EasyStart Web	is in maintenance mode.	
	Immediately	🗎 Timer	
		💿 🏥 Heat 💿 🕊 Ventilate	
	Running time	10 🔄 Minutes	
	Current temperature	23 °C	
	Remaining runtime	- Minutes	
		The heater is now off.	
		<ul> <li>Switch on</li> </ul>	
	Exit maintenance		
	+ Neue EasyStart Web	bearbeiten	

Do you really want to end the maintenance for this EasyStart Web?



### i Note

If errors were reported during the initial startup, determine the cause of the error in Chapter <u>5 "What to do if ...?" on page 12</u> first and then carry out the described remedies.

When handing over the vehicle to the customer give them the packaging box and quick start guide with the access code (IMEI).



### 5 What to do if ...?

5.1 Describe possible errors and faults, causes and remedies

Display	Remedy / Customer
The button flashes.	Wait for automatic detection.
The unit combination is not permitted.	Check the wiring and correct any errors.
Short-circuit in the button of the EasyStart Web.	Check the wiring and remove the button if necessary. If the error is still queued, replace Easy Start Web, otherwise replace defective button.
Short circuit in the temperature sensor.	Check the wiring and remove the sensor if necessary. If the error is still queued, replace Easy Start Web, otherwise replace defective sensor.
No connection between EasyStart Web and the server.	Ensure GSM network supply.
	Check the fuse and correct error if necessary.
The heater does not exist.	Check the wiring and fuse of the heater and correct error if necessary.
The heater settings stored on the web server do not match the EasyStart Web setting.	Perform automatic detection again by removing the fuse.
The measured value of the temperature sensor is invalid.	Check the wiring and correct any errors.
	Replace the temperature sensor.
The optional control unit is not responding.	Check the wiring and correct any errors.
Undervoltage detected by EasyStart Web.	Charge the battery.
	Check the heater's power supply.
No communication possible between EasyStart Web and the heater.	Check the wiring and fuse of the heater and correct error if necessary.
The heater is not responding.	Check the wiring and fuse of the heater and correct any errors.
The heater has a hardware fault.	Perform the diagnosis at the heater.
You do not have access to this EasyStart Web.	Ask the customer for the approval code.
EasyStart Web is not ready for use.	Ensure GSM network supply.
	Check the fuse and correct error if necessary.
Unable to find EasyStart Web with the access code.	Contact the support service.
Use of the service is not enabled for this EasyStart Web.	Renew service.
The heater cannot be switched on using the button.	Check the heater's fuse.
	Contact the support service.
	Check whether the heater has been installed correctly.
	Check whether EasyStart Web has been configured suitable for the heater.
A programmed timer is not executed.	Delete timer and reprogram.



#### 6 Electrics

6.1 Circuit diagram, EasyStart Web connection to Hydronic, Hydronic 2, Hydronic M-II and Hydronic S3 Economy

### i Note

These installation instructions describe the standard configuration. For details of enhanced configuration of the EasyStart Web with control units and for special functions, the "Installation Instructions PLUS – Easy Start / Altitude Kit / Special Functions and Diagnosis" are available to view and download from the partner portal.



c to the heater

#### **Cable colours**

RD	red	GR	grey	BK	black	WH	white	VT	violet
BU	blue	YE	yellow	GN	green	OR	orange	BN	brown



6.2 Circuit diagram, EasyStart Web connection to Airtronic, Airtronic M and Airtronic L

# **I** Note

These installation instructions describe the standard configuration. For details of enhanced configuration of the EasyStart Web with control units and for special functions, the "Installation Instructions PLUS - Easy Start / Altitude Kit / Special Functions and Diagnosis" are available to view and download from the partner portal.



- EasyStart Web interior temperature sensor -B10
- EasyStart Web radio remote control -E6
- EasyStart Web button -H4

#### **Cable colours**

RD	red	GR	grey	BK	black	WH	white	VT	violet
BU	blue	YE	yellow	GN	green	OR	orange	BN	brown

- to the heater С
- to the heater g
- Connect cables and insulate у



6.3 Circuit diagram, EasyStart Web and temperature sensor connection to Airtronic, Airtronic M and Airtronic L

### i Note

These installation instructions describe the standard configuration. For details of enhanced configuration of the EasyStart Web with control units and for special functions, the "Installation Instructions PLUS – Easy Start / Altitude Kit / Special Functions and Diagnosis" are available to view and download from the partner portal.



RD	red	GR	grey	BK	black	WH	white	VT	violet
BU	blue	YE	yellow	GN	green	OR	orange	BN	brown



#### 6.4 Circuit diagram, EasyStart Web connection to Hydronic S3 CS

# i Note

These installation instructions describe the standard configuration. For details of enhanced configuration of the EasyStart Web with control units and for special functions, the "Installation Instructions PLUS – Easy Start / Altitude Kit / Special Functions and Diagnosis" are available to view and download from the partner portal.



#### Parts list

- -E6 EasyStart Web radio remote control
- -H4 EasyStart Web button
- -B19 Sensor, interior temperature
- c to the heater

#### **Cable colours**

RD	red	GR	grey	ΒK	black	WH	white	VT	violet
BU	blue	YE	yellow	GN	green	OR	orange	BN	brown

22.1000.34.97x2.0x



#### 6.5 Circuit diagram, EasyStart Web connection to Airtronic 2

# **i** Note

These installation instructions describe the standard configuration. For details of enhanced configuration of the EasyStart Web with control units and for special functions, the "Installation Instructions PLUS – Easy Start / Altitude Kit / Special Functions and Diagnosis" are available to view and download from the partner portal.



#### Parts list

- EasyStart Web interior temperature sensor -B10
- EasyStart Web radio remote control -E6
- EasyStart Web button -H4

#### **Cable colours**

RD	red	GR	grey	ΒK	black	WH	white	VT	violet
BU	blue	YE	yellow	GN	green	OR	orange	BN	brown

- to the heater С
- to the heater g
- Connect cables and insulate y



#### 7 Service

7.1 Technical Support

If you have any technical questions or problems with the heater, the control unit or the operating software, please contact the following service address:

support-UK@eberspaecher.com



Eberspächer Climate Control Systems GmbH & Co. KG Eberspächerstraße 24 73730 Esslingen Germany info@eberspaecher.com www.eberspaecher.com

