



1. General information

- The Car Heating Timer BLE is a socket outlet timer (illuminated) with daily program.



- Can be operated manually or with smartphone via Bluetooth (with the **AT-1 Hybrid** app).
- Integrated auto-charging function and time function.
- With integrated boot loader (start program) for an update of new functions.

2. Safety



Assembly and installation should only be carried out by a qualified electrician, somebody who has completed appropriate professional training and has the knowledge and experience necessary to be able to recognise and avoid the potential dangers posed by electricity.



Before installation/disassembly, disconnect the power supply and ensure that the parts are no longer live.



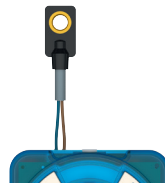
Prior to commissioning and using the product, read and observe all the operating instructions.

3. Proper use

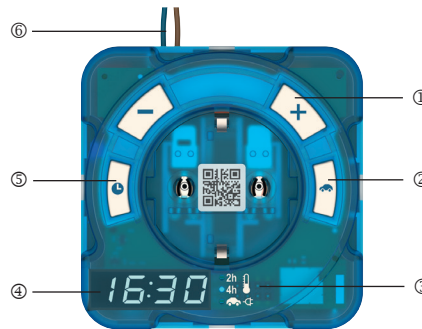
- The timer may **only** be installed in the "Car Heating Box" (see figure above).
- It controls a socket outlet for charging/heating electric car heaters. The user sets the departure time, and the timer switches the heating on 2–4 hours (depending on mode) before the start.
- The timer can also be used to recharge the car.
- There is the option of using an external temperature sensor 9070508 to control the preheating time, depending on the outside temperature.

4. Connection

- ⚠ During installation, it must be ensured that the phase is wired at the right contact.
- ⚠ When connecting the external temperature sensor, disconnect the timer from the power supply.



5. Settings



- ① Set departure time with buttons + or - (the times are automatically saved)
- ② Set mode: 2 or 4 hours heating or car charging
- ③ Display of activated mode for departure time, charging time (2 h, 4 h, , if car charge mode is activated)
- ④ Display for departure time (default), charging time or time of day
- ⑤ Setting/querying the time
- ⑥ External temperature sensor (9070508, optional) can be connected

6. Manual operation

Set/change time

- Press button ⑤ > 3 s.
- Use the + and – (①) buttons to set or change the current time (after 5 s the time is automatically saved). A longer press starts the fast mode.

Display time

- Press button ⑤ briefly.
→ The time appears on the display ④.
- Press button ⑤ or ② again.
→ The time display ends and the departure time is displayed.

Set departure time

- Set the departure time with the + and – buttons.

Set mode

- Press button ②.
Each further button press switches the mode from 2 h, to 4 h etc.
→ The LED at 2 h, 4 h, 🚗 lights up ③.

Save mode

- Release button ②.
① With temperature sensor (9070508) connected, the switch-on time of the heating period is automatically calculated based on the outdoor temperature.

Temperature	Mode 2 h	Mode 4 h
> + 5 °C	0 hour	0 hour
+ 5 ... 0 °C	0.5 hour	1 hour
< 0 ... - 5 °C	1 hour	2 hours
< - 5 ... - 10 °C	1.5 hours	3 hours
< - 10 °C	2 hours	4 hours

Set mode "Charge car"

- Press button ② repeatedly until the function lights up on the display ③. The charging time starts with 12 h; the remaining charging time is displayed with On 3 h, for example. Charging time finished: Off
- Press button ② again.
→ The charging time starts again at 12 h.

Set mode "Charge car" individually

- Use the + and – buttons to set the desired charging time.

Reset

- Press buttons ⑤ and ② simultaneously.
→ The device is reset; departure time and energy consumption for 7/28 days are retained. Afterwards, the time must be entered again.

7. Operation using the app

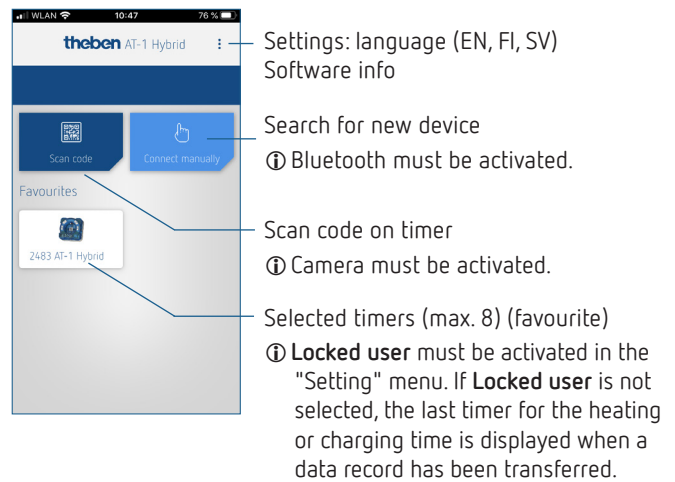
Connect timer and smartphone (via app)

① The time is synchronized when connected to the app. The timer can be operated with an app (for Android from version 6.0, for iOS from version 12.0) via mobile devices. Communication is via Bluetooth.

- Download the **AT-1 Hybrid** app from the App Store or Google Play Store.



- Open the app.



The connection can be made in 2 ways:

1. Connection by scanning the QR code

- Scan the QR code on the timer with the smartphone.
→ The app starts and connects automatically with the timer.
- ① The light switches on automatically when it gets dark.

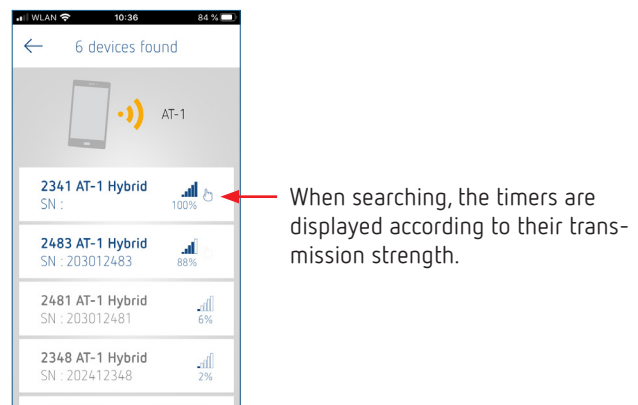


If this does not work

- open the app and press the **Scan code** button.
- Then scan the QR code on the timer.

2. Manual connection

- Press the **Connect manually** button in the app and then press the buttons 🚗 and + on the timer simultaneously.
→ The app displays the timer with the last 4 digits of the serial number. These digits also appear on the display of the timer and can be checked with the smartphone.
- Confirm **pairing** in the app.
→ The hand icon appears if the timer has been activated for connecting.



The main functions

Program

Send settings to timer

Enter/change the name of the device/parking space etc.

Program
 – Preheating time 2 h or 4 h
 – Activate car charging time (for all hybrid and e-vehicles)

Set departure time

Set the start time of the charging function

Set the duration of the charging time

Display of energy consumption

Display energy consumption (± 10 %)
 Data for 1 day, 7 days, 28 days (indicated in kWh and price/kWh)

retrieve current data

Consumption chart for 7 days, 28 days and 1/2 year (reset is possible for 1/2 year)

ⓘ No reset possible for the total consumption display.

Send consumption chart

ⓘ If the devices have a boot loader, they are regularly supplied with the latest functions.

Setting and FAQ

Favourite → only appears if **Locked user** is activated

Setting
 – Locked user (for private use)
 – Factory setting

Send factory setting

ⓘ Time and all energy consumptions are deleted

FAQ
 Operating instructions on the Internet

Normal mode and „Locked user mode“

In normal mode, the device identifiers are not stored and the ownership rights can be taken over by third parties, for example if one user has left the parking space and a second wants to use it. Remote connections in normal mode are maintained until one of the following conditions occurs:

- Mode 2 h elapsed +2 h
 - Mode 4 h elapsed +2 h
 - Mode "Charge car" > 1 h of heating time
 - if the manual connection is made by a person using a scan or the button combination.
 - if the + / – buttons and the Mode button are used to change the reservation manually.
- For further operation, the timer must be **reconnected**.

In "Locked user mode", i.e. **Locked user** must be activated in menu → Settings,

the device identifiers will be saved. The devices can be operated via the favourites on the start page without new pairing (favourite = yellow star).

8. Technical data

Operating voltage:	230 V AC
Frequency:	50 Hz
Standby:	0.4 W
Switching capacity:	16 A (at 230 V AC, $\cos \varphi = 1$), 3680 W
Switching capacity:	2 A (at 230 V AC, $\cos \varphi = 0.6$)
Protection rating:	IP 20 in accordance with EN 60529
Protection class:	I in accordance with EN 60730-1 subject to designated installation
Operating temperature:	-40 °C ... +50 °C
Type of contact:	NO contact
Switching accuracy:	to the second
Power reserve:	4 h
Time accuracy:	synchronised with mains
Mode of operation:	Type 1 BSTU
Rated impulse voltage:	4 kV
Pollution degree:	2
Software:	Class A
Range:	15 m on open air test site
Transmission frequency:	2400 MHz
Transmission power:	2.5 mW; class 2

Theben AG herewith declares that this type of radio installation complies with Directive 2014/53/EU. The complete text of the EU Declaration of Conformity is available at the following Internet address:

www.theben.de/red-konformitaet

Cleaning and service

- Only use a dry, soft cloth to clean the device surface.
- Do not use any cleaning agents or solvents.

Disposal

- Dispose of device in environmentally sound manner (electronic waste)

9. Contact

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