APP - Control

🇬🇧

Version E-BUS v10.x

as of 11.2016

Operating manual

DANHAG

Antenna

Status LED

Release

SMA
connection

SIM card

Front View

GPS LED

Release
(connector I)

Release
(connector II)

PIN1

PIN8

Rear view
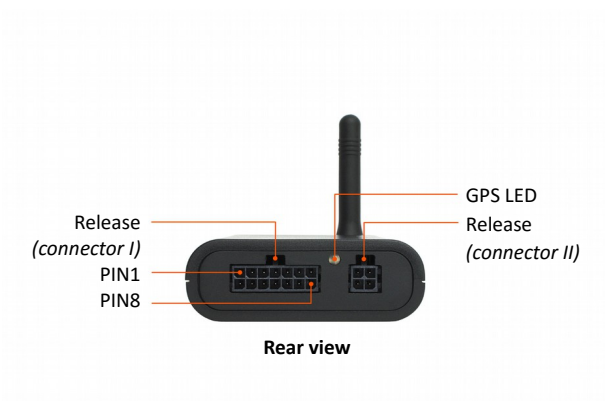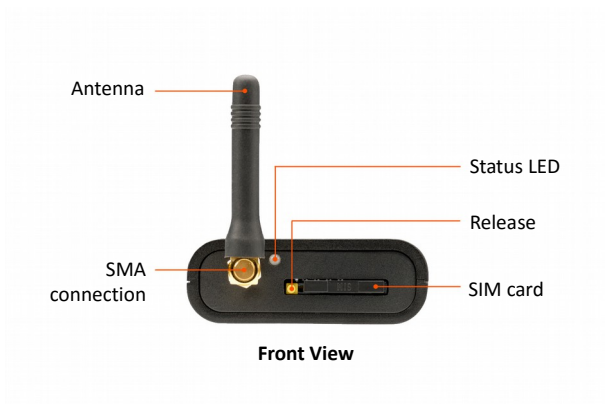
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- APP-control
- GSM-antenna (straight)
- connection line (14-pole connector)
- Operating manual

optional available accessories

- vehicle-specific cable harnesses
- Indoor window antenna
- Antenna adapter (FME to SMA)
- GPS-receiver
- external temperature sensor

> **!** Prior to insertion of the SIM card please deactivate the PIN request and the mailbox and delete all telephone numbers that may be stored.

> **!** The operation of the GSM remote control will require any SIM card which is not included in the scope of delivery.

2   Safety instructions

Prior to the commissioning ot the device please read this operating manual completely. Additionally you have to observe the generally valid and the local regulations for accident prevention and environmental protection. Keep the operating manual. Do not operate the device in a surrounding where flammable gases, vapors, liquids or dust are existing or my exist.

⚠️ Do not use the APP-control if due to a malfunction danger and / or damage may occur.

3   Intended use

The APP-control allows the switching of any device per APP, SMS or call. The APP-control is designated for private use and not for commercial purposes. The APP-control has to be used exclusively according to the instructions of thes operating manual. The manufacturer is not liable for damage which are caused by inappropriate use or incorrect operation.

⚠️ The installation must only be carried out by a qualified technican.

4   Obligation and liability

The APP-control has been developed and manufactured according to the current technical status and the recognized safety rules. It cannot be assured, however, that the APP-control will operate as intended under all circumstances, at any time and under all conditions.

> ⚠️ Do not use the APP-control for the switching of life-support systems or devices with an emanating danger due to an uncontrolled switching on and off.

The DANHAG APP-control is manufactures in compliance with the EU directive 2011/65/EG (RoHS 2). this directive determines the use of hazardous material in devices and components.

The compliance with the prescribed EMC limit values was confirmed by an independent EMC testing laboratory.

Our products are recorded in the register for waste electrical equipment and meet the requirements of the relevant, applicable CE regulations. We confirm the observation of European standards on our devices by the CE marking. WEEE Reg. No.: DE 33181931

We only use sales packaging licensed by the disposal company *"Zentek duales System"*.

5 Malfunction

The APP-control must taken out of service immediately when it might be assumed that a safe operation cannot be guaranteed any more. All appropriate measures must be taken to exclude an unintentional re-commissioning. Only a qualified person os allowed to perform a repair.

6 Disposal

This product must be taken to an official collecting point for disposal. You can also give back the product to the manufacturer for ecological disposal.

This product must kept out from the domestic waste. Please dispose the product according to the applicable legal provisions only.

7 Declaration of conformity

The device is complying with the EU regulation 2004/108/EG (electromagnetic compatibility). Applied standards: EN 50498 / 2011

CE

8   Device description

8.1   Function

The DANHAG APP-control is designed to switch an existing parking heater by APP, SMS and call.

> ⓘ The APP-control „*E-BUS*" can only be used when the vehicle has a parking heater with remote control already installed. A list of supported vehicles can be found at our homepage **www.danhag.de**

8.1.1 Status

The APP-control queries the current state of the heater and shows it at the "INFO-SMS". Not all heaters support this function.

8.1.2 Status messages

Status messages are disabled with the default settings.
When status messages are enabled, you will be notified via SMS either when:

- the heater was started successfully
- the heater could not be started
- the heater was turned off

> ⓘ Status messages are not supported from all vehicles / heaters.

8.1.3 Operating time

When you turn on the heater by call, SMS or APP, the operating time stored at the board computer is used. If the operating time can't be queried from the board computer, the values preconfigured by SMS are used.

However, if you switch on the heater by SMS, you can set the operating time to 10, 20, 30, 40, 50 or 60 minutes, regardless of the previous settings.

8.2 Alarm function

The APP-control is equipped with an alarm input which can be connected to an existing alarm system.

After connecting the power supply to the APP-control, the voltage level on the alarm input will be stored (0 or +12V). As soon as this level changes, the alarm will be triggered and all stored numbers are informed by call and SMS.

Factory installed alarm systems are often integrated into the vehicles bus-system. To connect the APP-control to this system, you will need an alarm-module which monitors the state of the alarm on the bus and provides a defined +12v or ground signal when the alarm is triggered.

8.3   Switching acknowledgment

8.3.1 Switching by call

When switching the APP-control by call, you will hear a dial tone. During this time the caller's ID will be analyzed. In case of a valid phone number th switching operation will be released and you will hear a busy tone.

8.3.2 Switching by APP or SMS

You can query the current switching state of the APP-control by sending a SMS with the text "INFO" to the APP-control.

8.4   Status LED, GPS LED

The status LED's are showing the current state of the device.

Status LED		
⭕	flashing green (every 3s)	Standby *(logged in)*
🟢	lighting green	Heater is switched on
⭕	flashing red	Network search *(not logged in)*
🔴	lighting red	fault

GPS LED		
⚪	off	GPS-receiver off
⭕	flashing red (every 1s)	no GPS-reception
⭕	flashing green (every 1s)	GPS-reception OK

9   SIM-card

Any SIM card is required for the operation of the APP-control (Prepaid or subscription).

9.1   Inserting the SIM card

- Disconnect the power supply from the device

- remove the SIM card holder
  (Pleas press the „release button" slightly to release the holder)

- insert the SIM card into the holder

- push the SIM card into the device

- connect the power supply

10   Inputs and Outputs (connector I)

PIN	color	description	function
1	yellow	Switching output 1 •	E-BUS
2	black	Switching output 2	Output +12V, max. 1A
3			
4		Output GND	Output GND 1KOhm for ext. LED
5	green	Input +12V	*Input for ext. button / switch Button: one impulse (approx. 1s) is turning the Switching outputs alternately on and off ("on" for preset time) Switch: as long as +12V are applied the Switching outputs are activated (max. for preset time)*
6		Output +12V	Output +12V for ext. button
7	red	Supply voltage •	+12V *(fuse with 5A)*
8	brown	Ground •	Ground connection
9			

PIN	color	description	function
10		Relay	nc
11		Relay	co
12		Relay	no
13		Input alarm +12V / GND	*Input for an existing alarm system (see alarm function)*
14			

The inputs and outputs marked with "•" must be connected for the basic functionality of the device. All further connections can be used optionally.

11   electrical connection

11.1 General

The APP-control „*E-BUS*" is connected to the already existing receiver of the remote control, using the y-cable which is included into delivery. The Y-cable also ensures the power supply of the APP-control.

11.1.1

- Disconnect the plug on the receiver of the remote control

- connect this plug to the Y-cable

- connect the Y-cable to the receiver of the remote control

- connect the APP-control to the Y-cable.

> For many cars, an overview about the mounting place of the receiver can be found at our website:
> "**www.danhag.com → „installation guide**"

11.2 Connection of ext. button

The button / switch is connecting PIN6 (+12V) with PIN5 of the 14-pole connecting plug. There is a ground signal on PIN4 present as long as the switching output is active. PIN4 has a resistor integrated to drive a LED directly.

white
green
brown

DANHAG button

14pol. connector of APP-control
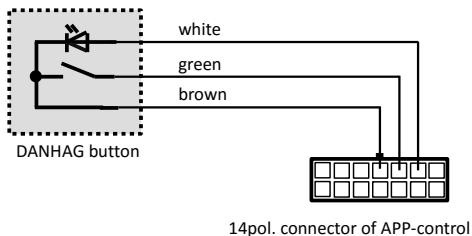
Wire-colors are coresponding to the original DANHAG button. Colors in brakets are coresponding to the WEBASTO button.

11.2.1   Difference between button and switch

Button: Pressing the button shortly (approx. 1s) will switch on the heater for the preset time. If you want to switch of the heater you have to press the button once again.

Switch: The heater is running as long as the switch is closed, however, not longer than the preset time.

12   Accessories connection

The 4-pole accessories connection (connector II) is located at
the rear side of the device. You can connect an external temperature
sensor or an GPS-receiver. If you want to connect both devices, you
willl need a Y-cable which is available as accessory.

12.1 External temperature sensor

The measured values are far more accurate.

> **!** When you connect an external temperature sensor, the
> sensor must be activated via SMS. (Please refer to the
> SMS-configuration).

12.2 GPS-receiver

The APP-control supports an external GPS-receiver which can be connected to
the aux-socket at the back of the module. If the ignition is switched on the
position is determined about every 1 second and can be queried via SMS. If the
ignition is switched off, the GPS-receiver is activated during determining the
position only.

You will get a SMS containing the current coordinates of the car as well as a link
to "google maps" which shows the current position on the map.

If you want to update the position when the ignition is turned off, you will have to send a SMS with the text *„XGPS"* to the APP-control. The GPS-receiver is turned on for about 3 minutes and determines the current position. If the receiver doesn't get any valid information, the last known position will be used.

The GPS-receiver must be activated when used for the first time. Please refer to the manual delivered with the GPS-receiver.

13 Start up

Prior to start-up please read the complete instruction manual.

- Disable the PIN-request of the SIM-card
- insert the SIM-card into the APP-control
- connect the APP-control to the 14-pole connector
- wait until the APP-control is logged-in *(Status-LED flashing green)*
- configure the APP-control

After connecting the power supply , the APP-control will perform a selftest. The LED will be lighting red for approx. 4 seconds and then begins to flash red (network search). As soon as the APP-control is logged in into the GSM network, the LED will be flashing green. Now, the APP-control is ready to operate and can be configured.

> **!** Please deactivate the PIN query prior to the insertion of the SIM card. Otherwise the APP-control cannot log in into GSM network. Therefore please insert the SIM card – if required - in a "normal" mobile phone and use the function "Deactivate PIN query".

14   Configuration

After the first start you have to configure the APP-control per SMS once. The settings are stored, even in case of disconnecting the power supply.

The following functions and settings can be configured:

Password

- for the SMS configuration you will need the 5-digit password
- the password can be modified and must consist of 5 figures *(preset "12345")*
- after a reset the password will be set back to "12345"

Running time
Determines how long the heater is switched on.

This value is used when the APP-control can't querie the operating time from the board computer.

Output signal

The output signal required by your vehicle is configured already.

Alarm delay

Determines how long the alarm signal must be present continuously before the alarm is triggered.

Phone numbers / Master number

- you can specify 5 authorized phone numbers

- Phone number 1 is the master number to which all info SMS will always be sent

- The APP-control will perform the switching operation only if it is switched by one of the authorized phone numbers per APP, SMS or call

Please enter the phone number with the international prefix (e.g. +49 for germany). The phone number must not exceed 17 digits in total.

Status notification

Determines if and which status reports will be sent by the GSM remote control.

- • 0: all status reports deactivated
- • 1: only fault messages
- • 2: only switch-on messages
- • 4: only switch-off messages

If you want to be informed about several events, you have to add up the corresponding numbers. E.g. for fault and switch-off messages you have to enter 5. (1 + 4 = 5)

Status notifications are not supportet by all vehicles / heaters.

14.1 Table parameter

no.	function	setting	remark
00	Password	5 digits	preset *"12345"*
11	Master number	max. 17 digits	Enter phone numbers with international prefix.
12	Phone number 2		
13	Phone number 3		Germany +49 ...
14	Phone number 4		Austria +43 ...
15	Phone number 5		e.g. +49171345678
20	Running time	10 - 255	Running time in Minutes
33	Status notification	0 - 7	
35	Ext. temp. sensor	0 - 1	0 = not connected 1 = connected
40	Alarm delay	0 - 251 sec	251: alarm deactivated

14.2 Configuration with SMS configurator

Please use the SMS configurator on „www.danhag.de" for the configuration. Alternatively you can also generate and send the SMS with your mobile phone. After successful configuration the GSM remote control will send an SMS with an overview of the current settings to the master number.

14.3 Configuration with mobile phone

Each function and / or setting has an assigned number. The assignment of the respective parameter is carried out by a „=" sign. Close up each input with a „;". You can summarize several functions in one SMS (max. 150 digits). Finish the configurations SMS with „#".

Example SMS
The example SMS configures the GSM remote control as follows:

- Masternumber 1: 0305627853
- Phone number 2: 01706878981
- Running time: 25 minutes

Syntax::
12345;11=+49305627853;12=+491706878981;20=25;#

14.4 Delete a phone number

You can delete a phone number by overwriting it with "0".

14.5 Reset

To reset the APP-control, please disconnect the power supply for about 5 sec.

14.6 SMS-commands

You can control the GSM remote control by APP, SMS or call.

The following table shows the supported SMS commands.

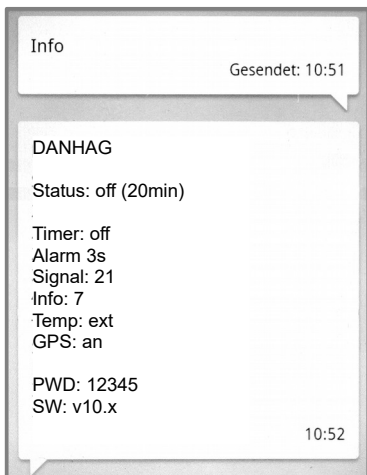| command	function
INFO	Query of current settings
TEMP	Query the temperature
ON	switches the heater on
ON:20	switches the heater on for 20 minutes
OFF	switches the heater off
START0630	Timer function e.g.: heater starts at 6:30 am
STOP	switches the heater off <u>and</u> deletes the timer
GPS	Query of the last known GPS-position[1]
XGPS	Query of the current GPS-position[1]

[1] GPS-receiver required

> If you use an APP for controlling the heating, it also sends the corresponding SMS commands in the background. Depending on your mobile phone contract, additional costs may occur due to the SMS sending. Switching the heater by calling is free of charge.

14.6.1   INFO SMS

You can query the current settings of the APP-control by sending an SMS with the Text "INFO" to the APP-control. Then you will receive an SMS with a summary of the settings to the master number.

Info

Gesendet: 10:51

DANHAG

Status: off (20min)

Timer: off
Alarm 3s
Signal: 21
Info: 7
Temp: ext
GPS: an

PWD: 12345
SW: v10.x

10:52

Status
Status of heater
(on, remaining time)
(off, running time)
Timer
Preset start time
Alarm
Alarm delay
Signal
Field strength(0 - 31)
(10: bad, 31: good)
Info
Status notifications
PWD
Current password
SW
Software version

15 Trouble shooting

Fault description	fault	Cause of fault
LED flashing rapidly red	GSM module not logged in	• PIN query not deactivated • SIM not correctly inserted • no reception
LED lighting up shortly red, every 60s	Under-voltage on module	Check supply voltage and the fuse (5A)
No switching operation at all	Not / incorrectly configured	• Phone number existing twice on SIM card • APP-control not configured yet delete all phone numbers / SMS on SIM cardand re-configure
No INFO-SMS query possible	Kno credit on SIM card of APP-control	Load credit
Heater is not running during preset time	Under-voltage on heater or maximum heating time achieved	Check vehicle battery
APP-control cannot be configured	wrong password (PWD)	after reset the PWD will be set to *"12345"*

16   Manufacturer

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Webseite: www.danhag.de

17   technical data

|	
Supply voltage:	10 - 15 VDC
Current consumption:	Standby ca. 10mA, shortly max. 2A
Switching output 1:	E-BUS
Switching output 2:	+12V, max 1A
Operating temperature:	-30°C bis 80°C
Dimensions:	64 x 60 x 22mm (L x B x H) zzgl. Antenne

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19   Installation location

Mark the installation location of the APP-control.
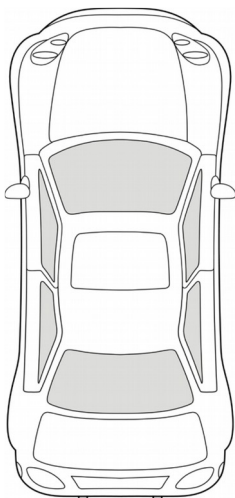
Bitte besuchen Sie **www.danhag.de** für eine deutschsprachige Version.

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