Owner's manual

GSM control module Webasto

ALTOX WBUS-4

- control heaters Webasto on protocol WBUS
- manage any heaters by analog signal
- automatically identify type of heater
- DTMF, SMS, TCP commands and voice menu (optional)
- manage and control by mobile Web- application
- processing any USSD-requests from device SIM-card
- start heater from car interior by pressing the button
- all adjustments are done by SMS commands
- SMS message about the heater Webasto status
- manage the Webasto work by temperature
- reading and erasing errors of Webasto heaters

2014

1. Operation description

Led NET	Description
1. Light is on constantly	Checking SIM, find and register in the network
2. Flashes 1 time in 3sec.	Standby mode (connected)
3. Flashes 1 time in 5sec.	Set GPRS connects/RING/SMS/USSD

Getting started

1. Before insert a SIM-card set to off PIN-code request. Insert and change SIM-card when the device is off power supply.

2. The first income call number is saved automatically into the sell num1 (the sell num1 should be empty).

3. The device processes USSD-commands only in Latin alphabet, in case reply by numbers, request the operator to change the encoding to the transliteration.

4. The default setup is "heater_type0" - automatically identifies type of connected heater (digital TTC/TTV or analog).

5. Summer mode – heater_type7 (only interior ventilation control).

6. Setup "bind1" sets interfacing with other controls Webasto (GSM module activated heater, Timer 1533 deactivated).

7. When using the fixed-type button (setup key0) the heater will not turn off automatically at time expiration "time1".

8. At "setsms1" the user gets SMS about start and stop Webasto.

9. At "errorsms1" the user gets SMS about errors of Webasto work.

10. Before set up function of control heater temperature (if the value is above "temp_high" - Webasto stops, if lower "temp_low" – starts), request the status message, to control the precise definition by the device temperature of the Webasto heater.

Mobile Web-application (description: http://altox.by/mobile_webasto)

1. To activate GPRS - input the APN of access point SIM-card operator of the device (see setup apn1, apn2, apn3). To deactivate GPRS - delete APN access point, by sending SMS command "apn1:".

2. All setup GPRS changes will come into force after one minute.

3. Size of TCP-packs: ping - less 10byte, status - less 100byte.

Incoming call

At "voice0" (voice is off) and incoming call of saved number, the call is rejected, but Webasto starts (1beep) / stops (2 beeps).

If the number is not saved /not identified, the call is rejected only.

At "voice1" (voice menu is on) possible to input DTMF-commands:

- Activate/deactivate the heater – push 1.
- Request a balance – push 2.
- Request a status   – push 3.

After one minute the connection automatically discontinued.

2. Setup (SMS commands)

To manage send SMS command to SIM-card number of the module.

Possible to setup several settings at same time separated by commas.

Adjustable parameters	Text message
1, 2. Request SMS with settings 1/2	settings1 / settings2
3. Switch on the heater	heater_on (or start)
4. Switch off the heater	heater_off (or stop)
5. Request the heater status	heater_status
6. Read Webasto heater errors	heater_read
7. Erase Webasto heater errors	heater_erase
8, 9. Unlock Webasto T5GP (T5) Attention! Risk to broke ECU! Only for VW Amarok / T5 / Touareg	heater_unlock1 (2)
10. WBUS-auto/TTC/TTV/+12V/1533/t1/t2/vent./w	heater_type0/1/.../8
11. Stop heater when errors WBUS	rstop0 / rstop1
12. Interfacing with other controls	bind0 / bind1
13. Button type: fixed-type button / not fixed	key0 / key1
14. Heater time range (from 10 to 55 min)	time1:30
15. Delay before is ON OUT (1–20 min)	time2:0
16. Delay before is OFF OUT (1–10min)	time3:0
17. Voice menu (OFF / ON)	voice0 / voice1
18. SMS confirmation about ON/OFF heater	setsms0 / setsms1
19. SMS about heater work errors (OFF/ON)	errorsms0 / errorsms1
20. Temperature control (OFF/ON)	temp0 / temp1
21. The upper temperature limit (70 – 110°C)	temp_high:85
22. The lower temperature limit (10 – 80°C)	temp_low:60
23. Save the tel. number X (where X=1, 2, 3)	numX:+37529xxxxxxx
24. Save the balance number	bal:*100#
25. To make USSD-request	ussd:*110*4*1#
26. Access point (APN)	apn1:mts
27. User name	apn2:mts
28. Password	apn3:mts
29. IP server address	server1:123.123.123.123
30. Server port	server2:12345
31, 32. frequency at work time and ping, sec.	freq1:10 and freq2:60
33, 34. Quantity tries of setup GPRS and TCP	count1:5 and count2:3
35. Password setup before enter SMS commands	pass:1234

- After Webasto unlocked, disconnect power supply and then erase the errors.

- To delete setup/number send a command without parameters (e.g. num1:).

Sample outgoing SMS with setup 1:

H0 R1 B0 K1 V1	- setup: type WBUS, rstop1, bind0, key1, voice1
S0 E1 T:30,0,0	- setsms0, errorsms1; meaning: time1, time2 and time3
Temp: 60C-85C	- temperature control from temp_low to temp_high
N1, N2, N3, B	- tel. numbers and number of request balance account

P:"" (up to 4symb.)   - if any/no any password for SMS commands

### Sample outgoing SMS with ID and setup 2:

ID:123456789012345	- unique ID device
S:"123.123.123.123","12345"	- IP server address and port
G:"mts","mts","mts"	- APN point , user name, password
F:10,60,10,5	- setup freq1, freq2, count1, count2

Sample outgoing SMS status message:

Webasto OFF	- heater status
Signal GSM (0-31): 28	- GSM network signal level
Voltage: 12.8V	- voltage vehicle electrical system
Temperature: 0C	- value of the Webasto temperature sensor
Flame: no	- state of the Webasto flame sensor

3. Technical data

Parameter	Range
Power supply voltage	10V – 16V
Current consumption in the standby mode	less 20мA
Maximum current of additional output	500мA

Leds are in SIM-card slot

+12V (through fuse 1A)
GND (common)
IN KEY
WBUS
OUT
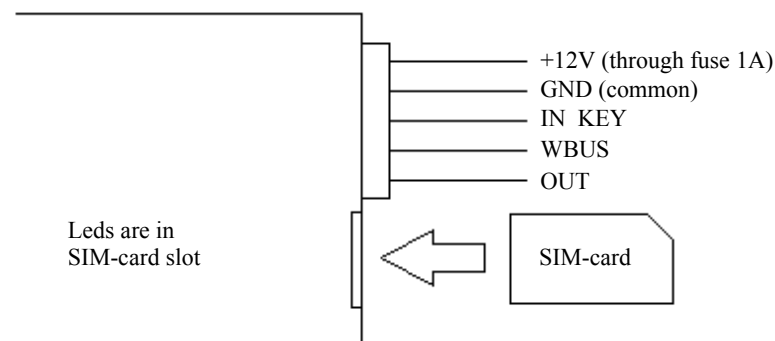
SIM-card

1. Make installation of the devise as far as possible from metal parts and wire harnesses.
2. Before insert a SIM-card set to off PIN-code request.
3. In KEY connected to external control, to fixing or not fixing button (waiting for a +12V).
4. Output OUT commutes +12V. Intended for heater control by analog signal, for connecting LED, coolant pump or interior heater fan. Switched on with delay "time2" after Webasto is on, switched off with delay "time3" after the heater finished its work.
5. The red led duplicates the output status "OUT".
6. The led "NET" has orange color.