



SmarTemp Control fx


Digital Timer Interface

Installation / Operation Instructions

General

Thank you for choosing Webasto to meet your heating needs. The Webasto SmarTemp Control fx enables you to preset start-up cycles of your Webasto heater 7 days a week with 4 individual times each day.

Operation

The Webasto SmarTemp Control fx is controlled using a rotary dial around the outside of the unit to browse through different menu options. Simply click the selection button () to make your choice. The following sections will define each menu item and its default setting.

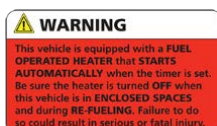
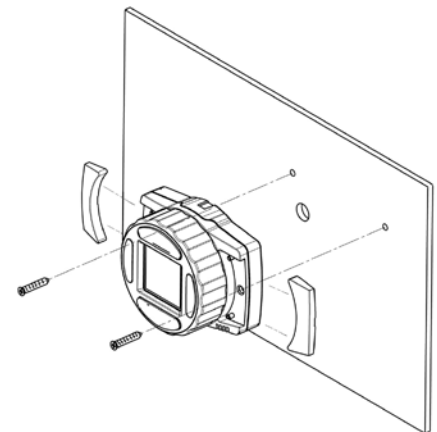
Compatibility

All Coolant Heaters. The SmarTemp Control fx has an output of 1A for the heaters ON/OFF signal. Heaters requiring a higher amperage signal will require a relay to accommodate different specifications. See electrical connections for details.

Note: Relay not included.

Mounting Procedure

1. Find a suitable mounting location (on a flat surface if possible) in a visible area. **Note:** Always install in an area protected from the effects of weather and contamination.
2. Use the drilling dimensions to lightly mark the two mounting holes.
3. **(Optional Step)** To route wire harness through the mounting surface, drill a 17mm hole as notated on the drilling dimensions image.
NOTE: Always make sure there are no obstacles behind the mounting location prior to drilling.
4. Secure the Webasto SmarTemp Control fx using the two supplied #4 screws.
5. Apply the supplied "Heater Off" warning sticker in a highly visible location to the drivers area. Refer to the example sticker below.

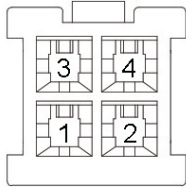


6. Observe the Menu Descriptions section for proper menu setup.

Electrical Connections

SmarTemp Connector Pin-out

Pin Number	Description	Wire Color
1	+12 / 24V	Red
2	GND	Brown
3	Heater Output	Black or Gray
4	*Diagnostic Blink Code	Green
For terminal removal use: Molex terminal removal tool P/N: 11-03-0044 (http://www.molex.com)		



**TERMINAL INSERT
SIDE OF CONNECTOR**

*Diagnostic Blink Code functionality does not apply to most coolant heaters. Refer to the Error Code section for additional information.

Relay Connection: (If applicable)

Heaters requiring a higher amperage ON/OFF signal will require a relay to accommodate different specifications. If the connected heater requires more than a 1A ON/OFF signal to start, use the pin-out of a standard relay as described below.

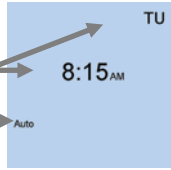
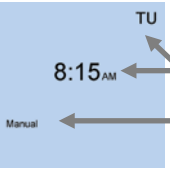
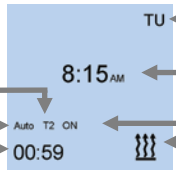
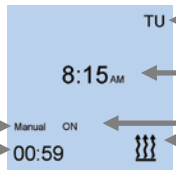
Relay	Output
Relay Pin 30	Battery (B+) power source (Fused according to required heater amperage)
Relay Pin 85	Ground
Relay Pin 86	Heater ON/OFF signal wire from pin 3 of SmarTemp Control fx harness.
Relay Pin 87	Switched ON/OFF signal to heater.

Component Description



* The micro USB service port is not used for Webasto heater diagnostic purposes on SmarTemp Control fx.

LCD Screen Legend

Standby Mode	<p>Standby (Auto)</p> <p>Day and Time</p> <p>Auto Mode (Timers Enabled)</p>			<p>Standby (Manual)</p> <p>Day and Time</p> <p>Manual Mode</p>
Auto Mode	<p>Timer Active</p> <p>Auto Mode</p> <p>Runtime Duration Remaining</p>		<p>Current Day</p> <p>Current Time</p> <p>Heater ON</p>	
Manual Mode	<p>Manual Operation Mode</p> <p>Runtime Duration Remaining</p>		<p>Current Day</p> <p>Current Time</p> <p>Heater ON</p>	

Menu Descriptions

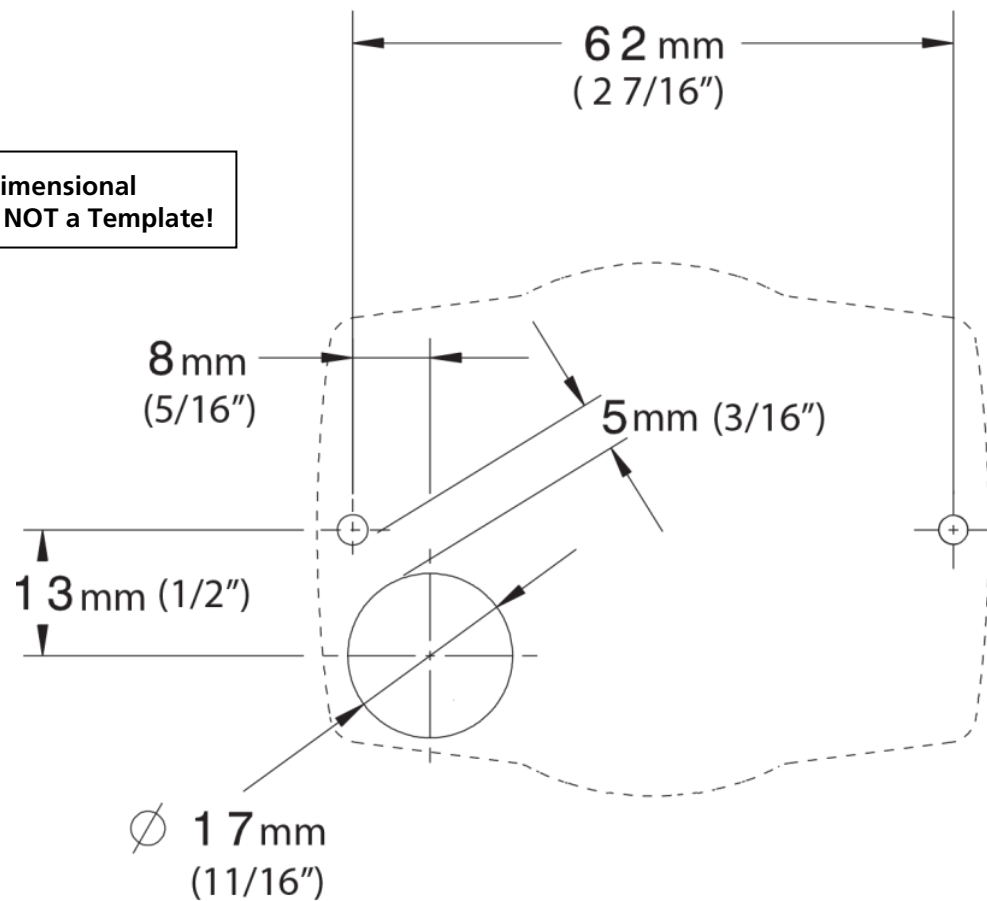
	Definitions	Default
Time & Date	Time & Date allows user to properly set the current date and time. User also has the ability to switch between AM/PM and 24 hour format. If the 24 hour format is selected the date format will change to dd/mm/yyyy.	AM/PM mm/dd/yyyy
Mode	<p>Two modes are possible:</p> <ul style="list-style-type: none"> Auto mode enables the pre-defined timer programs. Standard ON/OFF functionality is still possible while in this mode. Manual Mode allows the heater to be operated via the Webasto button on the SmarTemp Control fx. While in Manual Mode, all Auto Mode functionality is indefinitely disabled. <p>Note: While in manual mode the heater will continue to operate based on the pre-defined “Duration” set by the user. See “Duration” for further detail.</p>	Manual
Language	Language changes between English, Spanish, and French.	English
Duration	<p>Duration allows user to select heater runtime of the heater. Set range is between 10 – 120 minutes selectable by 10 minute increments.</p> <p>While using Manual Mode, the “Duration” setting will be used for the runtime of the heater when the Webasto button is pressed.</p> <p>Note: Setting the Duration run-time (in the Duration section) before setting a timer program will default all new programs to the user defined duration time.</p>	60 minutes

Timer	There are 4 heater start-up cycles possible 7 days per week. Select the day or the specific timer (T1 – T4) using the rotary knob and the selection button. Once the day, time, and duration have been entered, press the selection button to set. A checkmark will confirm the timer has been saved. To turn the timer OFF, select the timer checkmark and dial the duration down to the OFF position and click the selection button.	Calendar Fields Empty
Skip	The Skip feature looks similar to timer programming; however when a specific timer program is selected, it will update the checkmark to an “s” for skipped. When a program has been skipped, it will disable that specific timer program for <u>one</u> cycle (7 day period). Preset timer programming will reactivate after this one-time skip cycle. Note: To permanently turn a timer OFF, refer to the “Timer” section.	Calendar Fields Empty
LVD	LVD “Low Voltage Disconnect” allows the user to adjust the battery voltage level at which the Webasto SmarTemp Control fx will shut down heater functionality. If battery voltage is equal to or less than the threshold selected +0.1v, the heater will not start. i.e. if an 11.5v threshold is selected the heater cannot be started until B+ has reached 11.7v. 12 volt - Range between 11v – 12.5v 24 volt - Range between 21v – 25.5v	11.4v 24.2v
Error Codes	This section will log the last 5 error codes and the date that it was set. Highlight and select an error code for a full description. If the heater produces an error code, the status indicator lights will flash red and the error will display on the main screen. Error codes cannot be reset through the Webasto SmarTemp Control fx. Refer to the heater service manual for resetting an error code. Note: Error code functionality <u>does not</u> apply to <u>most</u> coolant heaters. Codes on products with no blink code functionality can still be obtained using the PC Diagnostics test tool. Refer to the applicable service manual by visiting www.techwebasto.com for detailed PC diagnostics information.	No Errors
Hour Meter	The hour meter logs the operating hours of an active ON signal to the heater. This does not reflect the true runtime of the heater itself. Note: For warranty purposes a diagnostic printout is still required where applicable. This hour meter is for reference only!	N/A
Default	Default allows the user to perform a factory reset of the control settings and saved timer program data.	N/A
SW Version	This displays the firmware version of the Webasto SmarTemp Control fx.	Installed Version
Back	Select this to return to the previous screen.	N/A

Technical Information

- Rated Voltage: 12 / 24V
- Operating Voltage Range: 12V: 11 – 16V | 24V: 21 - 32V
- Low Voltage Disconnect Range: 12V: 11 – 12.5V | 24V: 21 – 25.5V
- Operating Temperature: - 40° ... +185 °F (- 40° ... +85 °C)
- Installation Dimensions: (L x H x D) 2.7" x 2.2" x .60" (69.4mm x 55.5mm x 15.2mm)

Use this drawing for dimensional reference only! This is NOT a Template!



For a Spanish version of this document, scan this QR Code.





Feel the Drive

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