

TYRE WARMER

Instruction Manual



Products by
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INTRODUCTION

Thank you for purchasing the G-FORCE Tyre Warmers, designed to pre heat rubber tyres for 1/10th Touring cars.

Warming the tyres before use brings the temperature up to optimal levels for racing, by allowing the rubber to have a higher co-efficient of friction, but also allows a more efficient absorption of traction compounds into the rubber, so that your tyres provide the maximum ability to grip the racing surface, from the very first lap.



FEATURES

- Front & Rear temperature can be set independently
- Temperature of 4 tires is controlled by MCU
- Removable front & rear tire warmers
- 8 different beep tones
- Minimum temperature
- Celsius - Fahrenheit selectable display
- Safety timer

SPECIFICATIONS

- Input: 11-18V
 - Temperature Range*: 20-80°C, 100°C / 68-176°F, 212°F
 - Buttons: ▲ Up, ▼ Down, ◀ Left, ▶ Right
 - Dimensions: 92x111.4x50mm
 - Weight: 440g / 15.52oz
- * Atmospheric conditions may affect the final tire temperature

THE SET CONTAINS

1. Gforce Tyre Warmer
2. Front Tyre Warmers
3. Rear Tyre Warmers
4. DC Input Cable



NOTES

- Always elevate the chassis off the surface so that the warmer cup when fitted to each tyre is not touching the surface (The main body of the Warmer unit is fitted with non slip rubber pads to support the chassis)
- Do not leave Tyre Warmers switched on when not fitted to a Tyre
- Do not fit, use or remove the Tyre Warmer cups while the car is powered on
- Always check the Tyre Warmers before use, if any signs or damage or wear are noticed, discontinue use.
- Never attempt to modify the Tyre Warmers
- Do not leave Tyre Warmers in use unattended
- Only for use with 1/10th scale rubber tyres

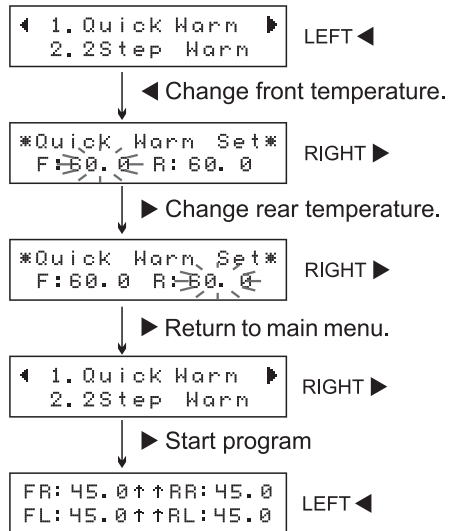
HOW TO CONNECT TYRE WARMER TO DC POWER SOURCE

Located on the left hand side of the tyre warmer is a jack for the connection of the DC power cord. To utilize the tire warmer's absolute maximum capability, the DC power source must be capable of delivering at least 8 amps while maintaining 12V DC.



QUICK WARMING

This mode is easy to setup, good for standard use. You can change temperature during warming.



How to setup temperature

- ▲ Increase front or rear temperature.
- ▼ Decrease front or rear temperature.

If you need extra hot warming for certain track or weather conditions, You can set 100°C/212°F by pressing ▲ button once more when you reach to 80°C/176°F.

◀ You can see elapsed time during quick warming.

Quick Warming
01:30

It is recommended that the warmers are left on the tires for about 10 minutes, allowing the rubber to be heated uniformly and fully. Do not use for any periods longer than 30 minutes as this can damage the tire.

FR: 59.2↑ RR: 60.0
FL: 59.6↑↑RL: 59.9

During the warming process, upward arrow "↑" means the temperature is going up. It disappears when the temperature is reached to target temperature.

▶ Quit out of Quick warming.

▲ or ▼ You can change temperature during Quick warming.

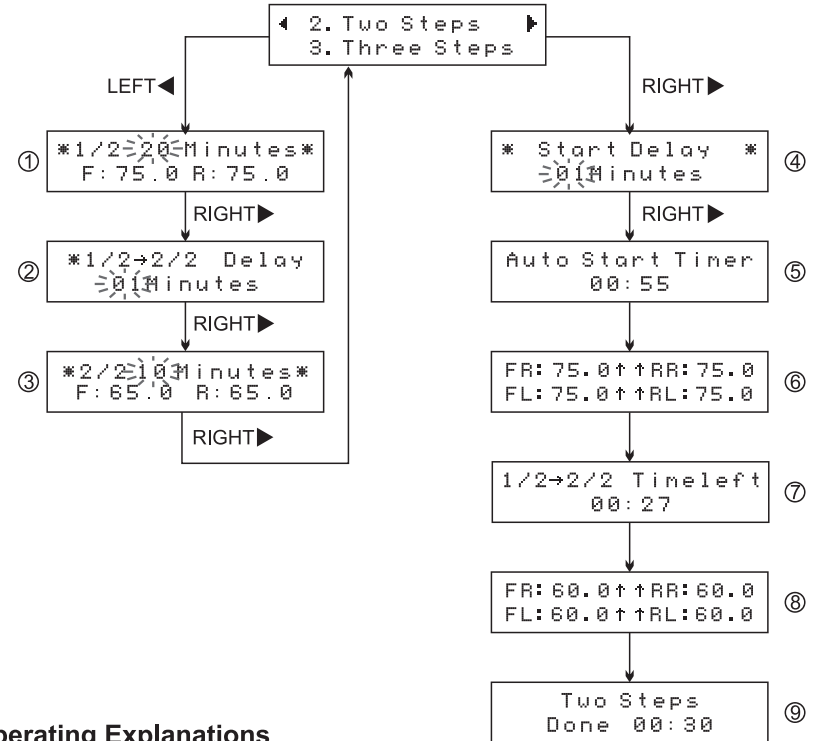
FR: 65.0 RR: ----
FL: 65.0 RL: ----

If you see "----" on the display, check warmers connection. On left display, rear warmers have bad connection or disconnected.

STEP WARMING

You can warm your tires by 2 step in this mode. It is convenient when you apply two different kinds of tire additives on your tires.

Three steps has one more warming step, all other functions are exactly the same as two steps warming.



Operating Explanations

- ① ▲▼ Determine first step warming time.
 - ▶ Set front and rear tires target temperature 20-80°C.
- ▲▼ Change front or rear temperature.
 - ▶ Move to next set up
 - ◀ Back to former set up

If you need extra hot warming for certain track or weather conditions. You can set 100°C by pressing ▲ button once more when you reach to 80°C.
- ② ▲▼ Determine delay time
 - ▶ Move to next set up
 - ◀ Back to former set up

- ③ ▲▼ Determine second step warming time.
 - ▶ Set front and rear tires target temperature 20-80°C
- ▲▼ Change front or rear temperature.
 - ▶ Move to next set up
 - ◀ Back to former set up

If you need extra hot warming for certain track or weather conditions, You can set 100°C by pressing ▲ button once more when you reach to 80°C.

- ④ ▲▼ Set auto start timer

- ⑤ ▶ Skip count down.

- ⑥ 1/2 Step Warming

- ◀ You can check current step and elapsed time.
- ◀ Back to former page
- ▶ Quit from step warming.

- ⑦ 1/2 -2/2 Delaying

- ◀ You can check temperature or 1/2-2/2 delay time.
- ▶ Skip delaying, move to 2/2 step warming

- ⑧ 2/2 Step Warming

- ◀ You can check current step and elapsed time.
- ▶ Quit from step warming.

- ⑨ 2 Step warming done

USER SET UP

◀ 4. User Set Up ▶
1. Quick Warm

RIGHT ▶

*TEMP Display *
°Celsius

DOWN ▼

*TEMP Display *
°Fahrenheit

▲▼ Select temperature display celsius - Fahrenheit

DOWN ▼

* Safety Time *
30 Minutes

▲▼ Set safety time. (10-120 Minutes)
Tire warmer will stop working when reach safety time.

DOWN ▼

* Supply12.0V *
Cut off : 10.0V

▲▼ Set low voltage alarm. you can save your expensive LiPo battery with this function.
We recommend to set at 10V for 3 cell LiPo battery.

DOWN ▼

* BeepTone *
-1-

▲▼ Select your favourite beep tone. (OFF, 1-8)

DOWN ▼

* Minimum TEMP *
20.0 °C

▲▼ Set minimum warming temperature while not using quick warm and step warm.

CALIBRATION

You can calibrate your tire warmers with your thermometer.
Calibration may be required if the Tyre Warmer cup does not measure accurately.

With pressing ▲ button and holding, input DC power.

```
TEMP adjust mode
hand off please
```

Stop pressing ▲ button.

```
* TargetTEMP *
OFF
```

▲▼ Determine target temperature for calibration.

LEFT◀

```
FR: 69.2  RR: 66.5
FL: 68.8  RL: 71.0
```

FL will blink first.
Check the temperature of FL
with your thermometer

▲▼ Match the temperature to the value of thermometer



► Move cursor to next step.

Calibrate FR-RL-RR warmers as same way.

If you pressing ► button and holding on FL, step-W will save all calibration data and will restart itself.

FACTORY RESET

You can reset the setting when you want to return all values to the original values.

With pressing ▼ button and holding, input DC power.

```
Factory reset
hand off please
```

Stop pressing ▼ button.

▲▼ Will ask you if factory reset.

```
Factory reset
NO◀  ▶YES
```

► Factory reset then goes to Main menu.
◀ Exit and goes to Main menu.

LIABILITY EXCLUSION

This tire warmer is designed and approved exclusively for use with for 1/10 size touring car's rubber tires stated in Instruction Manual. Gforce accepts no liability of any kind if the tire warmer is used for any purpose other than that stated. We are unable to ensure that you follow the instructions supplied with the tire warmer, and we have no control over the methods you employ for using, operating and maintaining the device. For this reason we are obliged to deny all liability for loss, damage or costs which are incurred due to the incompetent or incorrect use and operation of our products, or which are connected with such operation in any way. Unless otherwise prescribed by law, our obligation to pay compensation, regardless of the legal argument employed, is limited to the invoice value of those Gforce products which were immediately and directly involved in the event in which the damage occurred.