



## ASSEMBLY

### ■ PACKING CONTENTS

- 1 x PowerTector
  - 4 x Crimp Connectors
- 4 x Cable ties  
1 x Programming Lead

### FEATURES

- 12V / 24V Automatic mode selection (12V mode  $8 < V \leq 17$ , 24V mode  $17 < V \leq 35$ )
- 10 Programmable voltage settings
- Supplied with FASTON crimp connectors
- IP65 rated
- Connection for remote switch

### ■ OPERATION

The PowerTector will guard against excessive battery discharge by disconnecting the load before the battery voltage drops too low. If the battery voltage is below the disconnect threshold after a total of 60s the PowerTector will disconnect the load from the battery. The load will remain disconnected until the battery voltage rises above the reconnect threshold.

The PowerTector will protect the load by disconnecting it if the battery voltage exceeds 19V on a 12V system or 32V on a 24V system.

### ■ ASSEMBLY

1. Select a cool and ventilated position to install the device which is not exposed to direct sunlight.
2. Mount as close to the battery as possible using a wire of sufficient diameter.
3. Isolate the power to the wiring before commencing installation.
4. Connect the 'ground' terminal.
5. Connect the 'input positive' terminal.
6. If required program the unit as described below.
7. Connect the 'output positive' once no further programming is required.
8. Connect the switch if required.
9. Secure the PowerTector to cable loom using cable ties.

## PROGRAMMING

### ■ THE CONNECTIONS

Isolate the circuit before you connect or disconnect the device. Connect the unit as detailed in the wiring diagram.

### ■ PROGRAMMING

The table shows the factory default and user defined settings.

To change a program:

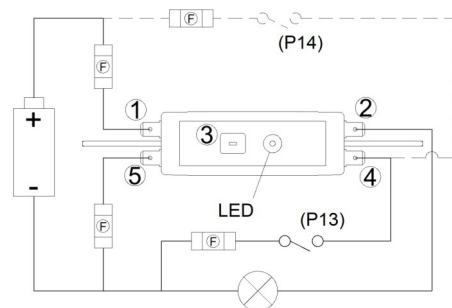
1. Remove the 'input positive' crimp connector just enough to reveal the 'input positive' terminal.
2. Temporally connect together the 'input positive' and the 'program' terminal using the programming lead supplied.
3. The LED will start to flash, each flash indicates the program to be selected.
4. Keep the connection until the LED has flashed the number of times for the desired program then remove the connection.
5. The LED will then flash the number of times to confirm the selected program.
6. Programming of P1 to P10, P13 & P14 are carried out separately and do not affect each other. Programmes can be changed as many times as necessary.

### ■ PROGRAM MODES

**P1-P10**—Operating voltage range. (P7 is default)

**P13**—The PowerTector output is disconnected when the switch terminal is connected to the negative terminal of the battery.

**P14**—The PowerTector output is disconnected when the switch terminal is connected to the positive terminal of the battery.



- (1) - Input Positive
- (2) - Output Positive
- (3) - Program
- (4) - Alarm\*\*
- (5) - Ground
- (F) - Fuses

### ■ TECHNICAL DATA

Part Number	Current	Rated Voltage	Dimensions	Weight
PT20-C	20A	12V/24V	155x30x15mm	45g

### ■ PROGRAM MODES

Program Number	12V		24V	
	Disconnect	Reconnect	Disconnect	Reconnect
P1	10.5V	12V	21V	24V
P2	10V	11.5V	20V	23V
P3	9.5V	11.5V	19V	23V
P4	11V	13.5V	22.5V	26.5V
P5	11.5V	13.5V	23V	27.5V
P6	10.5V	12.5V	21V	25V
<b>P7*</b>	<b>12.5V</b>	<b>13.5V</b>	<b>23V</b>	<b>25.5V</b>
P8	11V	12.5V	23.5V	25.5V
P9	12V	13V	24V	26V
P10	10V	13V	20V	26.5V
Family 2 / Famille 2	<b>P11*</b>	<b>Alarm Mode = Normal / Mode alarme = Normal</b>		
	P12	Alarm Mode = Battery Charger Enable Mode alarme = Activation du chargement de la batterie		
Family 4 / Famille 4	<b>P15*</b>	<b>Voltage Range = Auto</b>		
	P16	Voltage Range = 12V Only		
	P17	Voltage Range = 24V Only		

\* Factory default settings

## SAFETY

### ■ SAFETY

- **This PowerTector is for ancillary equipment only. It must not be used to disconnect equipment that is critical to the safe operation of the vehicle.**
- The device must not be exposed to severe mechanical shocks.
- The device must not be exposed to extreme temperature, direct sunlight or vigorous vibration.
- The device may only be used within a dry environment, such as a vehicle.
- Do not install this device on hot vehicle parts and ensure there is sufficient space around the device for air circulation and cooling.
- The wiring harness should be protected by fuses.
- Observe the magnitude and polarity of the input/output voltage when installing, incorrect polarity of the output could damage the circuit.
- Isolate the circuit before you connect or remove the device.
- Ensure that the output of the device is not short-circuited.
- Never open the device casing and never repair it. The device must be replaced if it is damaged.

### ■ FUSING

The input and ground wiring must be fused appropriately.  
For the ground, minimum 500mA to 1A maximum.

### ■ WARRANTY

Faulty units returned to us will be repaired or replaced free of charge without quibble. Usually, repaired faulty items are dispatched within 48 hours of being received. We have no control over the way the units are installed, the type of electrical system the units are installed on and the condition of such electrical systems, neither can we control the kind of load that is applied and the operating environment on which the units are used. So our guarantee is limited to the replacing of a failed unit, and we will not pay for any consequential damage.



This device complies with the EU directive 2014/30/EU.  
The type plate is located on the top of the device.