# **OPERATING & ASSEMBLY INSTRUCTIONS**

# PowerTector PT40-T & PT60-T



# (E) 2 Ē 3 Ð LED 4 5 6 (X) Ē

- (1) Input Positiv
- Output Positive
- (3) Program (4) Alarm\*\*
- (4) Alarm\*\* (5) Ground
- (6) Vehicle ignition switch
- (**F**) Fuses
   (**X**) Vehicle Ignition Switch

### ■ TECHNICAL DATA

Part Number	Current	Rated Voltage	Dimensions	Weight
PT40-T	40A	12V/24V	76x78x33mm	155g
PT60-T	60A	12V/24V	76x78x33mm	155g

## PROGRAM MODES / MODES DE PROGRAMMATION

Program Number	Time		
P1*	30 mins		
P2	1 hour		
P3	3 hours		
P4	6 hours		
P5	12 hours		
P6	18 hours		
P7	24 hours		
P8	36 hours		
P9	48 hours		
P10	72 hours		
	12V System	24V System	
P11	10.5V	21V	
P12	11V	22V	
P13*	11.5V	23V	
P14	12V	24V	
P15	8.5V	8.5V	

# \* Factory default settings

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# ASSEMBLY

PACKING CONTENTS

 1 x PowerTector
 5 x Crimp Connectors 3 x Screws

1 x Programming Lead FEATURES

12V / 24V Automatic mode selection (12V mode 8<V≤17. 24V mode 17<V≤35)

10 Programmable disconnection times
Supplied with FASTON crimp connectors for low current connections

IP65 rated

Ignition switch connection Connection for remote alarm

■ OPERATION

The PowerTector-T will guard against excessive battery discharge by disconnecting the load at a user selectable time after the ignition has been turned off.

The PowerTector-T will also monitor the battery once the ignition has been turned off and disconnect the load when the voltage drops below a user selectable level after one

erTector will protect the load by disconnecting it if the battery voltage exceeds 19V on a 12V system or 32V on a 24V system ■ ASSEMBLY

Select a cool and ventilated position to install the device which is not exposed to direct sunlight. Mount as close to the battery as possible using a wire of sufficient diameter.

Isolate the power to the wiring before commencing installation.

Mount using the three mounting holes with screws or bolts. Connect the 'ground' terminal.

Connect the 'input positive' terminal.

Connect the 'ignition' terminal to the vehicle ignition switched output. If required program the unit as described below.

For the alarm, (4) maximum current is 500mA.

Connect the 'output positive' once no further programming is required.
 Connect the alarm if required.

### ■ 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.

Temporally connect together the 'input positive' and the 'program' terminal using the programming lead supplied.

The LED will start to flash, each flash indicates the program to be selected.

Keep the connection until the LED has flashed the number of times for the desired program then remove the connection.

The LED will then flash the number of times to confirm the selected program. Programming of P1 to P10 and P11 to P15 are carried out separately.

■ PROGRAM MODES

P1-P10—Disconnect time range. (P1 is default)
P11—15 Disconnection Voltage. (P13 is default)

■ ALARM

The alarm output will be constantly active 10s after the voltage drops below the disconnect threshold. It will deactivate if the voltage rises above the disconnect threshold or 60s

after the voltage drops below the disconnect threshold.

The alarm will activate in pulse mode if the battery voltage rises above 19V for a 12V system or 32V for a 24V system.

Alarm - The use of a relay requires a free wheeling diode to prevent damage - see application note AN-PT01

## **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.

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

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 conseavential damage



This device complies with the EU directive 2004/108/EC. The type plate is located on the top of the device.