# **Specifications**

Operating Voltage	12 to 24VDC or 12 to 18VAC
Current Consumption @ 12VDC	4mA standby
Current Consumption @ 18VAC	42mA standby 136mA relay latched
Physical Dimensions	90 (L) x 52 (W) x 30 (H) mm
Output Channels	1
Output Type	SPDT Relay
Relay Rating	10A @ 30VDC
Reverse Polarity Protection	Yes ( diode)
Timing Accuracy	+/- 0.2 seconds (MM:SS) +/- 10 seconds (HH:MM)
Maximum Timing	87 hours 45 minutes
Trigger Inputs	Momentary +, - or AC
Country of Manufacture	Australia

# Warranty

Circuit Level Electronics (Aust) Pty Ltd warrants this product to be free from defects in materials and workmanship for a period of **2 Years** from date of purchase. We will in the event of failure repair or replace the product at our sole discretion. This warranty does not apply in the event of accidental damage, abuse, misuse, non approved purpose or act of God. This warranty is given in addition to any rights allowed by New South Wales law.

Designed and Manufactured in Australia By Circuit Level Electronics ( Aust) Pty Ltd ABN 51 074 517 570





# **GPT-1** General Purpose Timer Module



- Time from 1 second to 87 hours 45 minutes
- 12 to 24VDC or 12 to 18VAC powered
  - DIP switch time settings
    - High accuracy
  - 10 Amp rated SPDT relay output
  - Positive and Negative triggers
- PCB only module ( No housing supplied )
  - Designed and made in Australia



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## **Product Overview**

The GPT-1 is a general purpose timer which is useful for switching on any appliance for a period up to 87 hours and 45 minutes. The output relay is SPDT and is rated at 10 amps.

Note: The output relay should not be used to switch 240VAC loads directly.

The product features a wide operating and trigger voltage of 12 to 24VDC or 12 to 18VAC. Timing is set using four (4) way DIP switches .

The GPT-1 is triggered by applying a negative or positive voltage momentarily to the input terminal. The relay will then activate for the time set by the DIP switches An additional trigger applied while the relay is activated will start the timing again.

Two LEDs are provided to indicate TRIGGER and RELAY activation.

# PCB Layout



The GPT-1 is supplied as a PCB ONLY module with double side tape affixed to the underside for mounting purposes.

The RED LED marked **T** indicates a trigger signal has been applied. The GREEN LED marked **R** indicates the relay is timing and is activated.

## **Programming the Timer**

The GPT-1 is programmed very simply by DIP switch selection.

## **DIP switch A**

This DIP switch is labelled "**S**, **4**, **2**,**1** " The "**S**" switch selects between HOURS and MINUTES for **ALL** DIP switches when in the OFF position and MINUTES and SECONDS when in the ON position. The switches 4, 2 and 1 are used to set HOURS x 10 if the **S** switch is in the OFF position and MINUTES x 10 if the **S** switch is in the ON position.

Eg: With S OFF and DIP switch 1 ON = 10 hours With S ON and DIP switch 1 ON = 10 minutes With S OFF and DIP switch 1 and 2 ON = 30 hours With S ON and DIP switch 1 and 4 ON = 50 minutes

When multiple DIP switches are ON the times are added together. This allows a great deal of flexibility in timing range.

## **DIP switch B**

This DIP switch is labelled "**8**, **4**, **2**, **1** " DIP switch B provides settings for MINUTES x 1 if **S** is ON and HOURS x 1 if **S** is in the OFF position.

Eg: With S OFF and DIP switch 1 ON = 1 hour With S ON and DIP switch 1 OFF = 1 Minute

Again selecting multiple switches adds the settings together

Eg: With S OFF and DIP switch 1 + 4 ON = 5 hours

## **DIP Switch C**

This DIP switch is labelled " **8**, **4**, **2**, **1** " DIP switch C provides settings for SECONDS x 10 if **S** is ON and MINUTES x 10 if **S** is in the OFF position.

Eg: With S OFF and DIP switch 1 ON = 10 minutes With S ON and DIP switch 1 ON = 10 seconds

## **DIP Switch D**

This DIP switch is labelled "**8**, **4**, **2**, **1** " DIP switch D provides settings for SECONDS x 1 if **S** is ON and MINUTES x 1 if **S** is in the OFF position.

Eg: With S OFF and DIP switch 1 ON = 1 minute