501-12V & 501-24V TIMER MODULES
OWNERS INSTRUCTION MANUAL

Red LED's — Timer contacts closed — Green LED's

Trim Pots
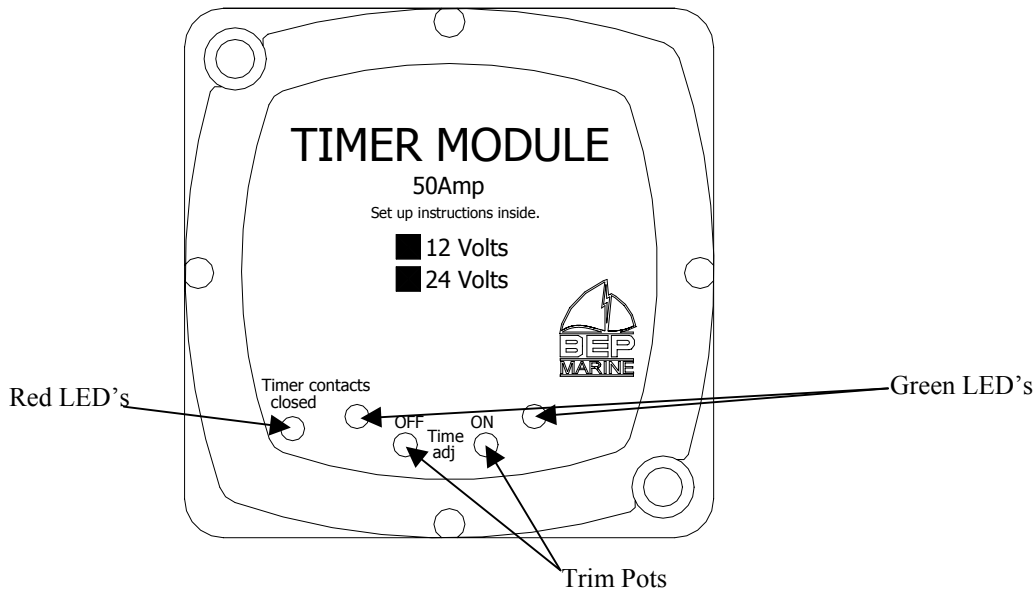
501 Timer Module

The 501-timer module offers timed function control of electrical systems.
The 501-timer has two different timing characteristics;
1. The timer can be used for initiating a circuit for a set period of time. This is a single operation.
2. The timer can be used to switch a circuit on for a period of time and then off for a period of time on a continuous basis.

Examples of application for **function (1)** include holding tank pump out, shower drain, pump out, and electric toilets.

Examples of application for **function (2)** include bait tank circulation and engine room ventilation.

Both Timer functions are actuated by a momentary switch.

Periods of operation are fully adjustable between 0-60 seconds or 0-60 minutes.

Adjustment is very simple using a trim pot system (in seconds mode) and removable links for changing between 0-60 seconds and 0-60 minutes.
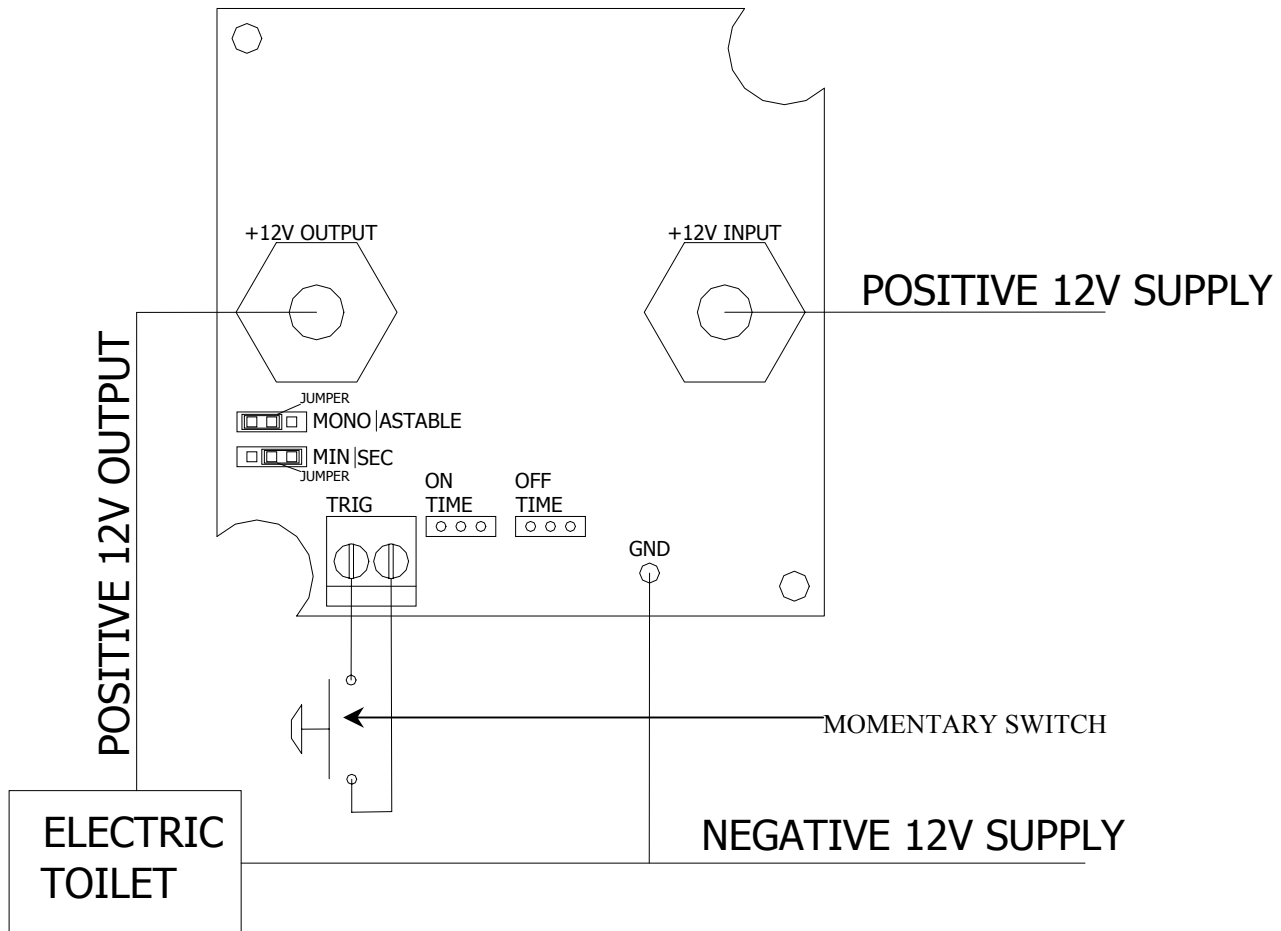
501-12V for 12 volt systems
501-24V for 24 volt systems
Timer relay rating: 50amps
Dimensions: 69mm x 69mm x 50h

TYPICAL MONOSTABLE MODE APPLICATION

+12V OUTPUT

+12V INPUT

POSITIVE 12V SUPPLY

POSITIVE 12V OUTPUT

JUMPER
MONO | ASTABLE

MIN | SEC
JUMPER

TRIG

ON
TIME

OFF
TIME

GND

MOMENTARY SWITCH

ELECTRIC
TOILET

NEGATIVE 12V SUPPLY

SETTING MONOSTABLE MODE

JUMPER

MONO | ASTABLE

With the jumper in the above position the timer is in monostable mode.

SE TTING THE TIME PERIODS

MINUTES

JUMPER

SECONDS
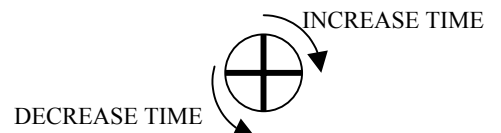
JUMPER

INCREASE TIME

DECREASE TIME

SECONDS:

To set the time period for seconds ensure the min/sec jumper is in the sec position. Adjust the pots to suit the required time period.
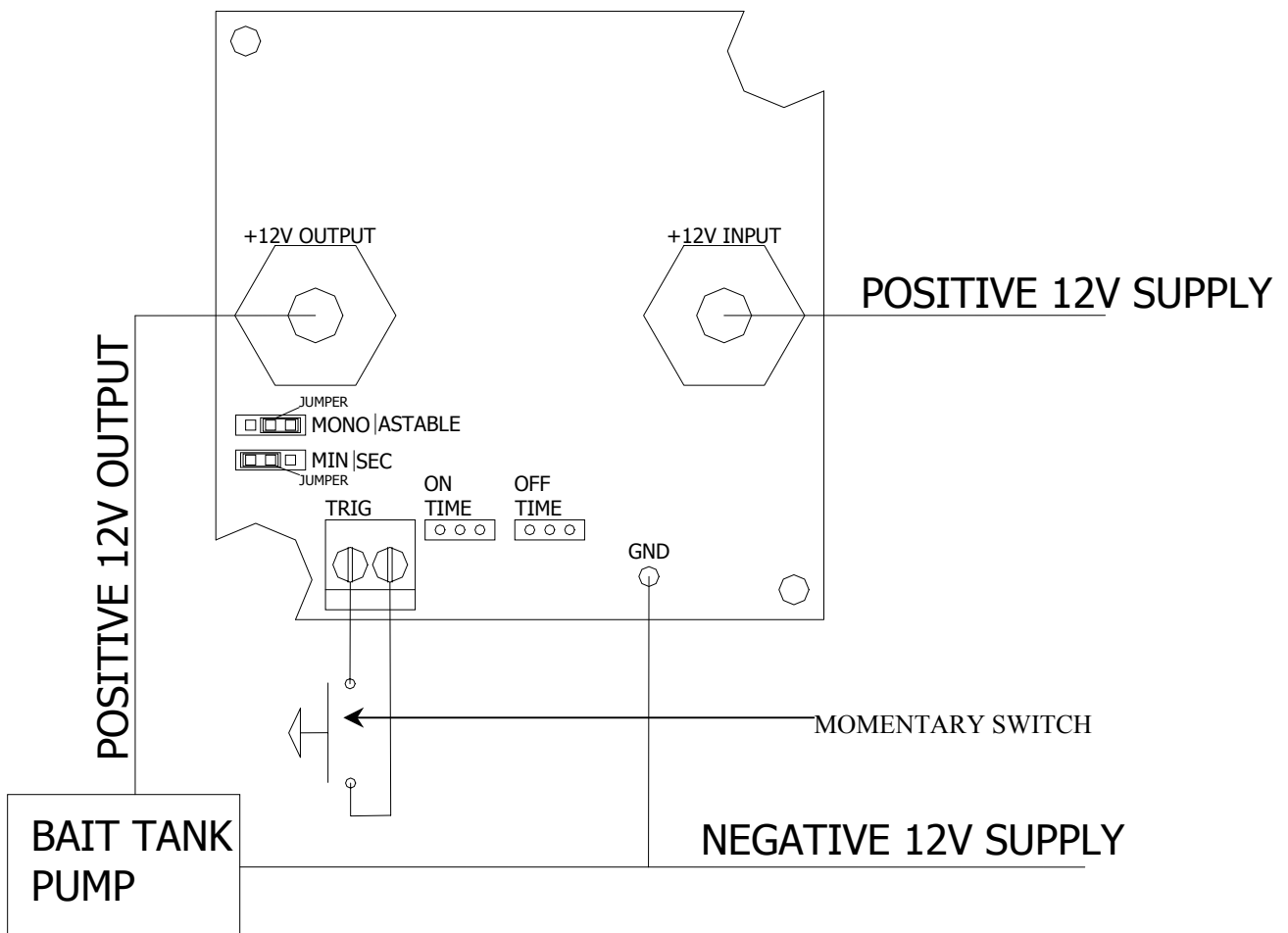
MINUTES:

To set the time period for minutes ensure the min/sec jumper is in the sec position. Adjust the pots to suit the required time period ie 30 seconds for 30 minutes, once the period is set move the jumper to the minutes position.

Note 1: The green LED's above the trim pots flash according to the time period ie short flash, short time period.

Note 2: The times can be adjusted with no load connected to the output. Only the +12V input and GND need to be connected.

+12V OUTPUT

+12V INPUT

POSITIVE 12V SUPPLY

POSITIVE 12V OUTPUT

JUMPER

MONO | ASTABLE

MIN | SEC

JUMPER

TRIG

ON
TIME

OFF
TIME

GND

MOMENTARY SWITCH

BAIT TANK
PUMP

NEGATIVE 12V SUPPLY

SETTING ASTABLE MODE

JUMPER

MONO | ASTABLE

With the jumper in the above position the timer is in astable mode.

ACTIVATING THE TIMER

MONOSTABLE MODE: Pressing the momentary switch will activate the timer causing the relay to switch on. After the preset time period has passed the relay will switch off and the timer unit will reset ready for the next time the switch is pressed.

ASTABLE MODE: Pressing the momentary switch will activate the timer which will go into its on-cycle/off-cycle sequence. Pressing the momentary switch a second time will switch the timer off.

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