

PRODUCT OVERVIEW - EXPLANATION OF FEATURES

TICK TOCK TIMER

Instruction Manual



7 Day Relay Timer



SAFETY INSTRUCTIONS

- Only qualified tradesman should be connecting equipment to high voltage loads.
- Do not use if equipment appears to be damaged.
- Do not exceed maximum DC input voltage of 9v 1A.
- Do not exceed relay rating of 10A 250/125v AC or 10A 30v DC.
- Do not connect relay modules to AUX Port exceeding a power draw of 5v 40mAh on the trigger pin.
- Do not expose to moisture.
- Do not exceed maximum operating environment temperature of 60C / -10C.

DESIGNED IN AUSTRALIA

1 YEAR RETURN TO SUPPLIER WARRANTY

REGULATORY COMPLIANCE

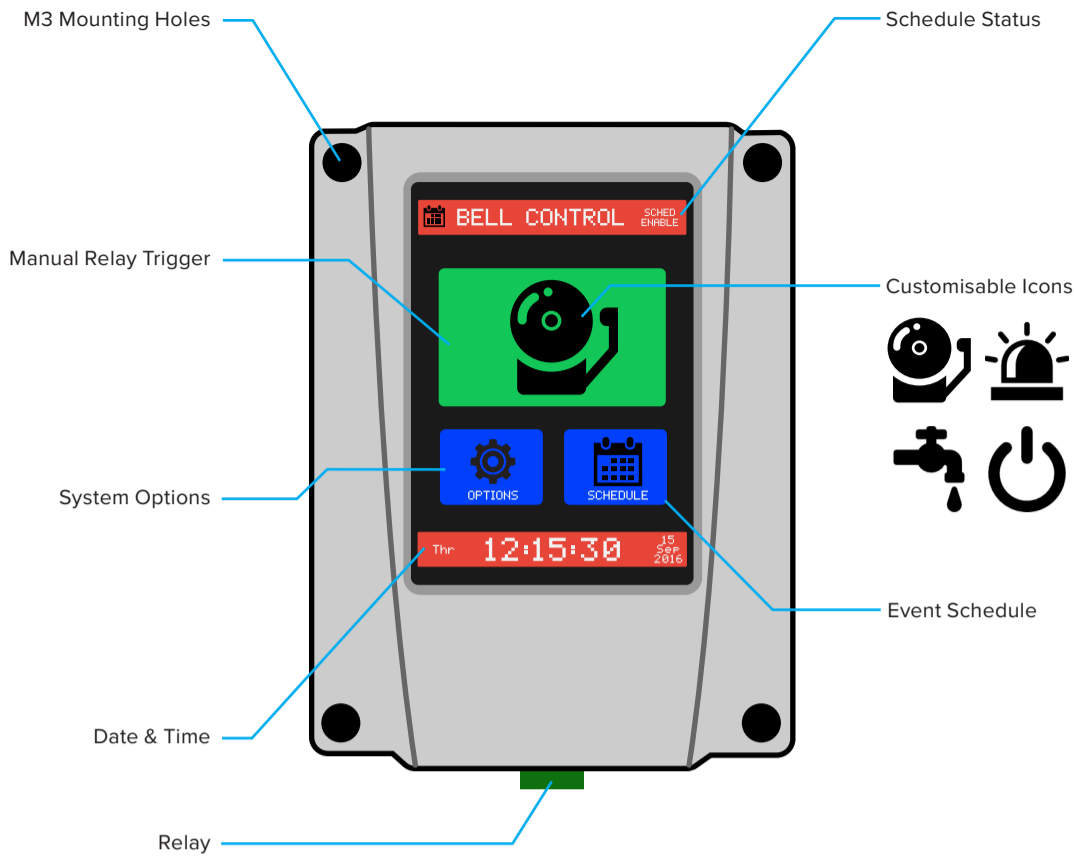
PENDING VALIDATIONS

INTRODUCTION

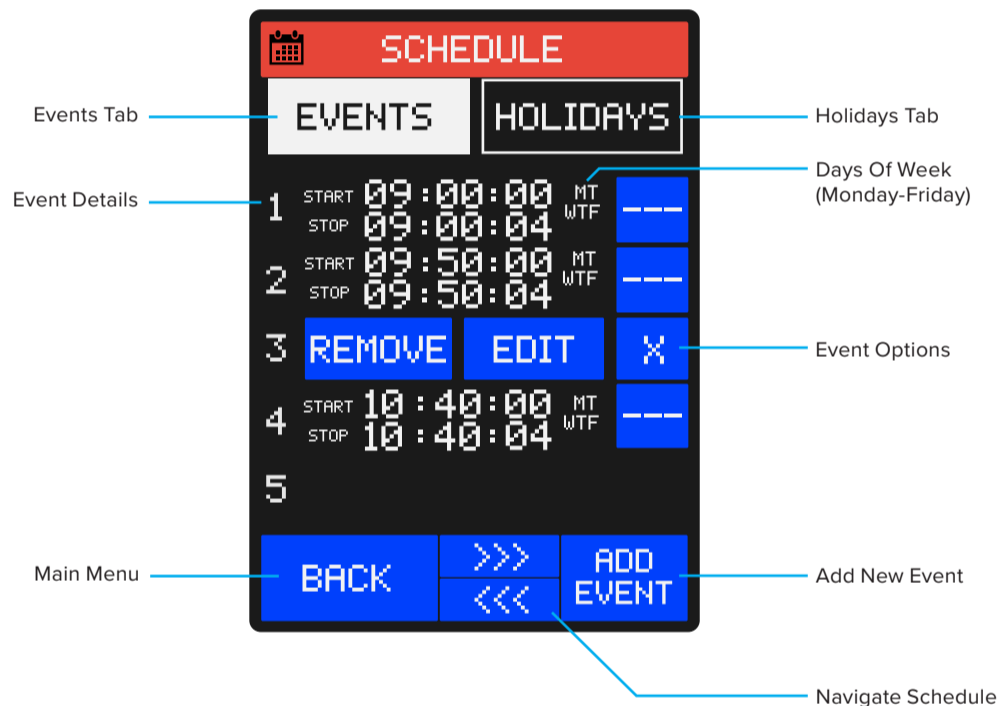
The Tick Tock Timer is a signal timer ready for deployment in schools, factories and any other application requiring precise relay timing control and scheduling. The intuitive touch screen user interface makes it simple to setup, program and customise to your application needs.

SPECIFICATIONS

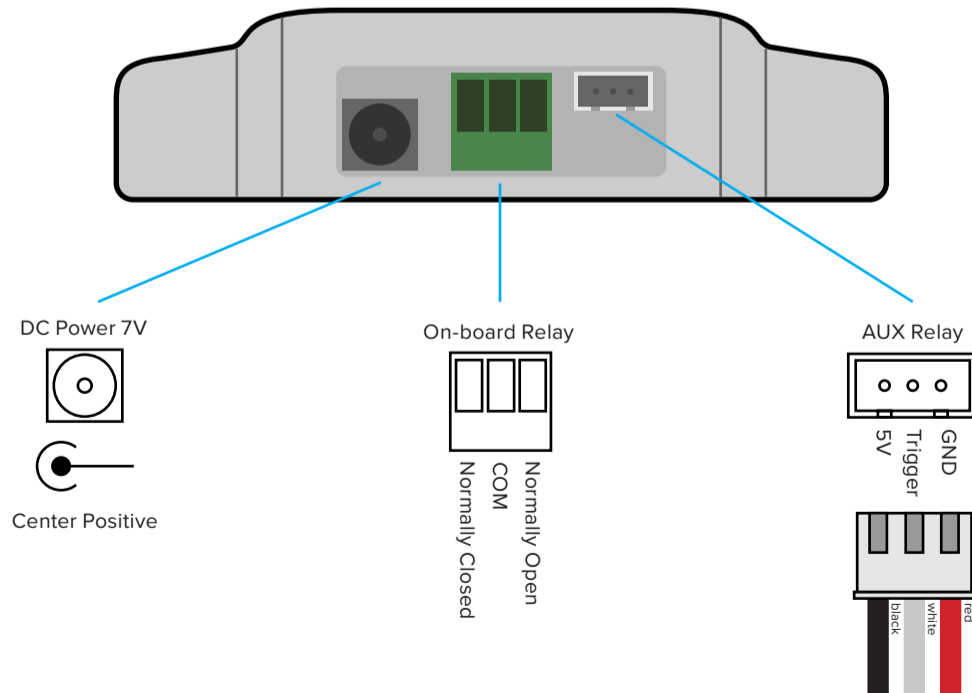
- 1x Programmable Relay (AC250 10A / DC 30V 10A)
- Extremely accurate Real Time Clock (+ / -1 minute per year)
- Daylight Savings settings
- 40x Programmable Events to the second
- 5x Holiday Periods
- 1x Auxiliary Output capable of 5v Signal function on event trigger
- Configurable 4-digit password to lock out menus
- Configurable Follow Up Pulse after manually triggering relay
- Selectable System GUI modes with configurable Pulse Time for manual triggering (1 second > 10hours)
- School Bell Timer
- Factory Shift Timer
- Pump Controller
- Relay Control
- Lunch & Break (adds manual Lunch & Break buttons with configurable follow up pulse)
- Pulse Time Sync
- Built in schedule for syncing analogue clocks through an External Relay



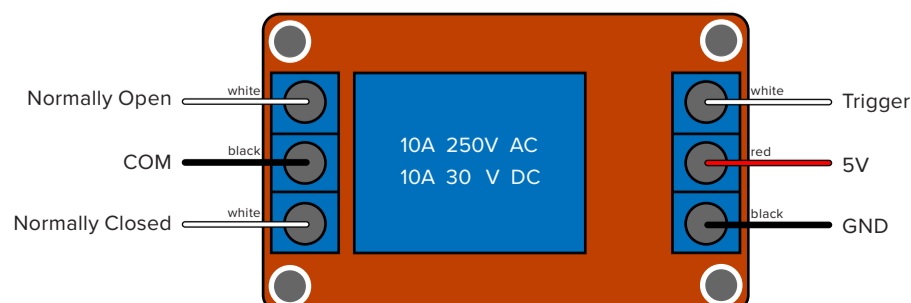
SCHEDULE MENU SCREEN



CONNECTOR DETAILS & PIN CONFIGURATION



EXTERNAL RELAY CONNECTION



CONFIGURATION

Setting the Time & Date

The Tick Tock Times system time can be set from the DATE & TIME menu. To access this feature select the OPTIONS button from the main screen and then select TIME & DATE.

Use the + and – buttons to set the current 24 hour time. Use the APPLY button to save the selected time. Once this has been set select DATE and use the + and – buttons to set the current DATE. Use the APPLY button to save the selected DATE.

If you wish to set automatic daylight saving adjustments select DAYLIGHT SAVINGS and select your time zone. Use the ? button to view automatic adjustment times for each zone.

Adding Events

Relay Events are set from the SCHEDULE menu which is accessible from the Main Screen. To add a new relay event select ADD EVENT and enter the relay CLOSE time, select NEXT and enter in a relay OPEN time. Once an OPEN / CLOSE time has been entered select DAYS and press on each day you would like the event to take place on followed by Save.

Edit/Delete Events

Events can be edited and deleted under the SCHEDULE menu. Use the --- button next to each event to EDIT or DELETE an existing event.

Adding Holidays

Holiday periods allow you to specify a start and stop date when no relay events will be triggered. To add a holiday select SCHEDULE from the main menu and select HOLIDAYS. Select the ADD HOLIDAY button and use the + and – buttons to enter a holiday start date followed by the END DATE button to enter the END DATE. Use the SAVE button to save the holiday.

User Modes

5 different icons can be selected for use with the timer's main screen. This allows customization of the timer look according to its application, however the core functionality of the timer remains the same, except for the Lunch & Break mode.

When the Tick Tock Timer is set to Lunch & Break Mode, a Lunch Timer and Break Timer can be selected from the System Menu. When triggered from the main screen the timer will pulse the relay once and start a countdown. When the end of the timer is reached the relay will pulse a second time signaling the end of the lunch or break period.

Security

3 levels of system security can be set in order to prevent unauthorised access to the timer's functions through the use of a 4 digit password. The 4 digit password is set from the "SET PASSWORD" option.

Access Levels

None – All menus can be accessed without the use of a password
 Partial – Timers Manual Trigger and Schedule can be accessed but the options menus requires a password
 Full – None of the timers functions can be accessed without entering the password

Time Drift Compensation

Time drift compensation allows you to automatically set the internal clock forwards or backwards a few seconds per week, in order to adjust for the natural drift of the inbuilt real time clock chip. This setting is best used by referencing the timer against another time source such as an atomic clock or an internet time server.

Special Menu

The SPECIAL menu allows you to trigger relay pulse patterns. There are 3 built in patterns for Fire, Disaster and Lock-down. Each of these patterns can be customized allowing you to set the on/off interval of the relay pulses.

Event Trigger

The Event Trigger menu allows you to set the action of an event.

There are 3 available settings:

- Internal Relay - Event trigger the internal relay to close
- AUX Port - Event causes the trigger pin on the AUX relay to go HIGH (5v)
- Internal Relay + AUX Port - Both the Internal Relay closes and the Trigger Pin on the AUX Port go HIGH (5v)

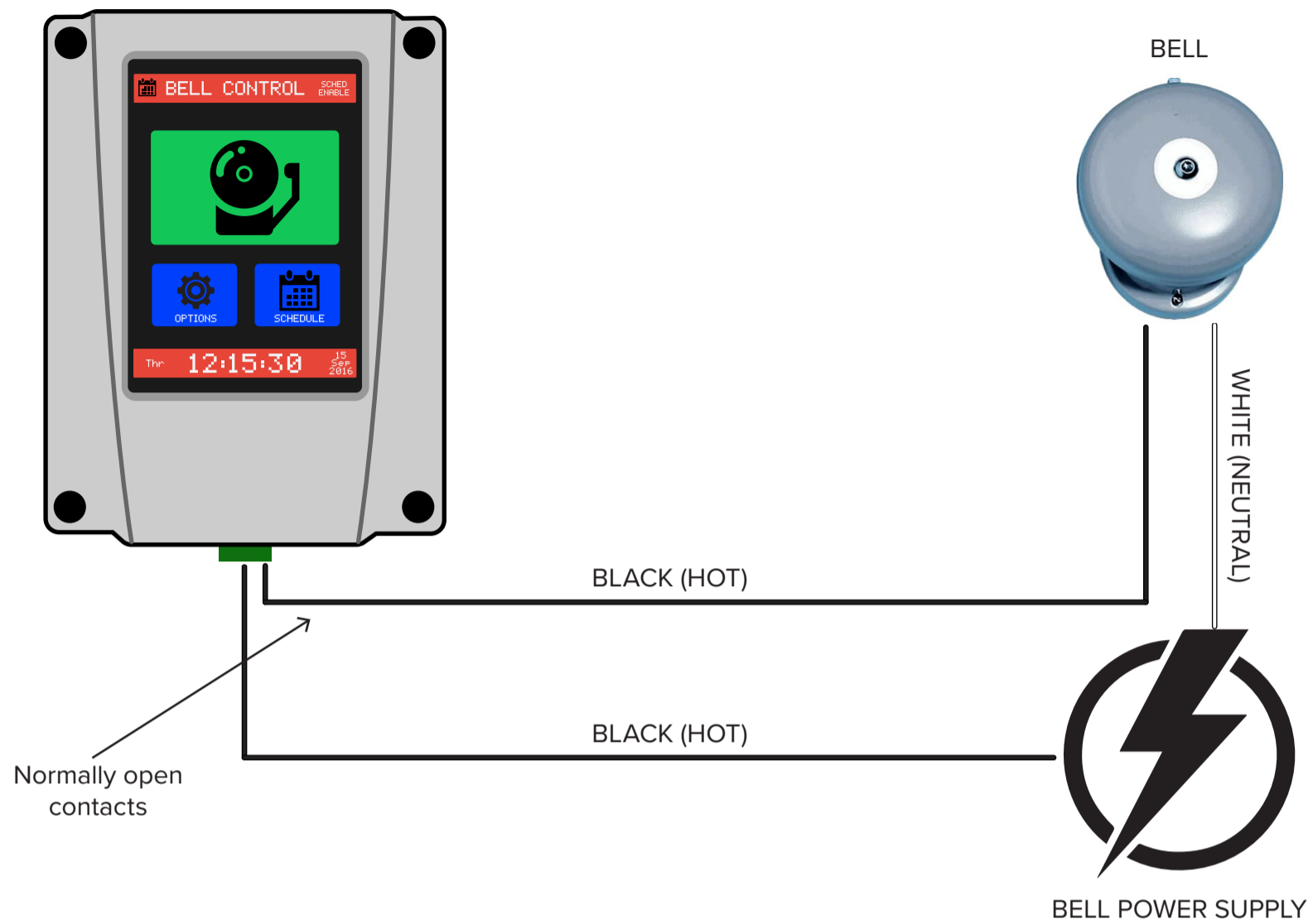
Factory Reset

The factory reset option wipes all events/holidays and returns all settings to factory default.

EXAMPLE WIRING DIAGRAMS

Bell Wiring

Normally open relay contacts used to close 24V circuit and trigger bell.



Pulse Time Sync

Time correction for large wall clock using aux pin output to external relay. Pulse time sync is enabled under the system menu.

