



INSTALLATION GUIDE

1 Channel Timer

Model: TC1

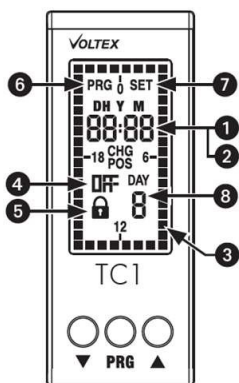


This product should only be installed by a licenced electrician in accordance with all the requirements of AS/NZS 3000 (current edition) and other relevant Standards and Regulations

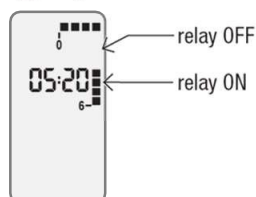
SPECIFICATIONS

Power supply	240Vac (-15% to +10%) 50/60Hz
Terminals	1 x 4mm ² cable maximum
Output	Normally open relay
Programming	Weekly (a different program for every day of the week), or Daily (same program each day)
Programming resolution	30 minutes
Operating temperature	-20 to +50 °C
Storage temperature	-10 to +70 °C
IP Rating	IP20
Operating humidity	-20 to 90% non-condensing
Width	1 DIN module wide
Maximum Load	HWS up to 2kW. For HWS above 2kW, we recommend using with a 25A contactor. LED 500 VA Incandescent 2000 W Fluorescent 250 VA Low voltage halogen 1000 VA Halogen (240 V) 2000 W CFL 200 VA
Backup Battery life/type	4 years/Lithium CR-1632
Dimensions	18 mm wide x 91 mm high x 65 mm overall depth

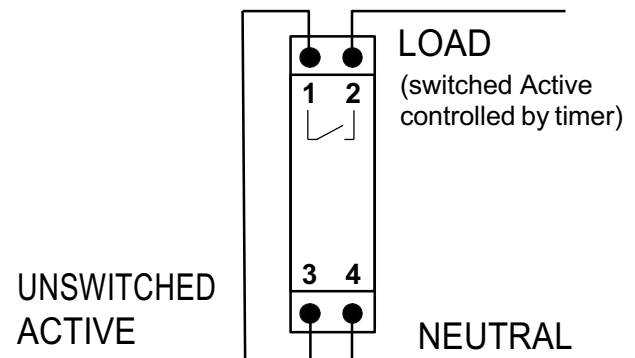
DISPLAY



- 1 Current time indication
- 2 Year, month, day indication (displayed in advanced programming)
- 3 ON/OFF indication blocks
- 4 Relay status
- 5 Relay Lock
- 6 Programming Menu is Active
- 7 Advanced Programming Menu is Active
- 8 Day of the week



TYPICAL CONNECTIONS



INSTALLATION

The device comes with the backup battery inserted. Therefore, if required, the timer can be switched on and programmed without a mains connection. To turn the timer on without a mains connection, press the **PRG** button.

Note that when programming without a mains connection, the LED backlight display and relay will not operate. The backlight display will turn on when the device is mains powered and remains on while mains is connected.

MANUAL RELAY SWITCHING

To change the state of the relay output (from ON to OFF or vice versa) press the ▼ button. The state is maintained until the ▼ button is pressed again or until the next programmed switching.

Locking the relay output

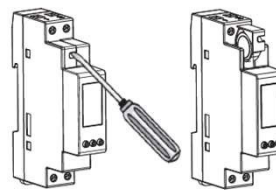
To lock the current relay output state and prevent it switching, press the ▼ button for 3 seconds.

In this condition the symbol is lit.

To unlock, press the ▼ button for 3 seconds.

BATTERY REPLACEMENT

When the backup battery is low the device displays 'bAtt CHG' and the battery should be replaced as soon as possible.



NOTE

- Before you access the battery compartment, disconnect mains.
- So that the date and time is not lost, replace the battery within one minute of removing it.
- Only use a CR-1632 type battery

DEFAULT PARAMETERS

The default parameters are:

- Geographical Zone: 1 (Australia)
- Automatic Summertime / Wintertime change: OFF

To reset to factory defaults

To reset the timer to factory defaults

- From the main screen, press all three buttons (▼PRG □) simultaneously with a pen or similar for at least 3 seconds.
- 'dEF' (flashing) will appear on the screen,
- When dEF is seen flashing, press the PRG button to confirm the reset
- If the PRG is not pressed within 5 seconds, the timer returns to the main screen without performing a reset.



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ADJUSTING THE DATE, TIME AND OPERATING MODES

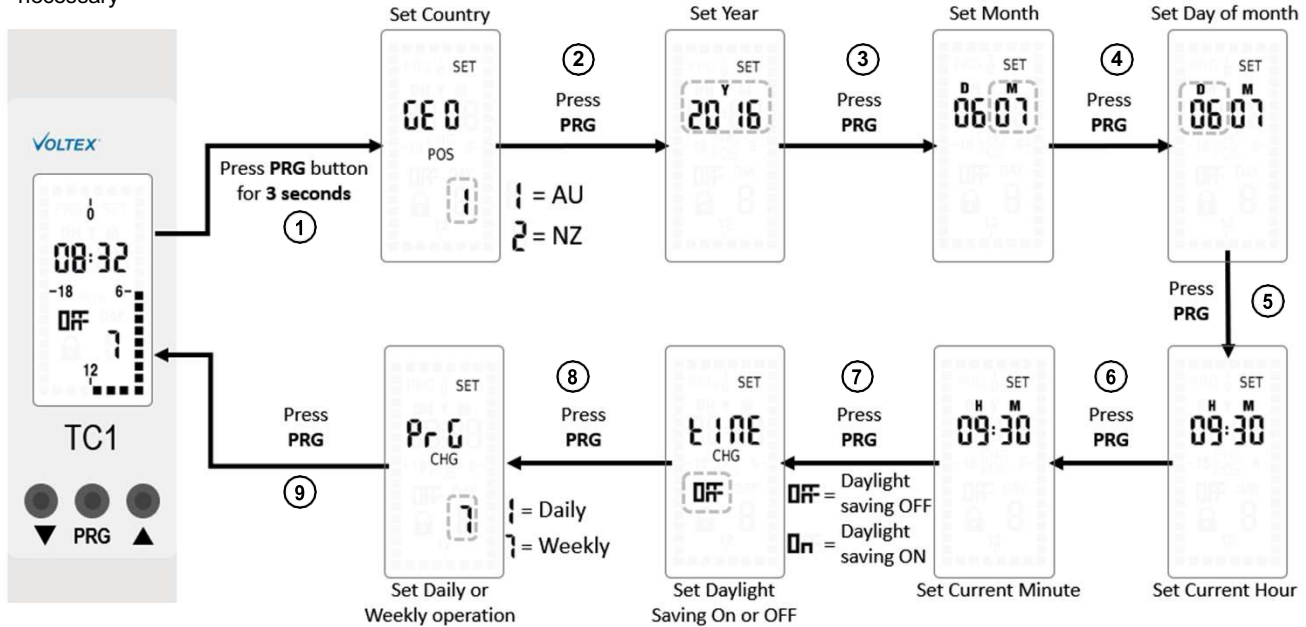
The following can be adjusted

- the geographical zone of the installation (Australia by default)
- the current date and time
- automatic summer-time/winter-time changing (OFF by default)
- weekly or daily operating mode (Weekly by default)

Follow the sequence below and use the ▼ and □ buttons on each screen to make adjustments as necessary

If set to ON, Daylight-saving time changes occur as follows

Zone	Start Daylight saving time (+1h)	End Daylight saving time (-1h)
1 (Australia)	2am, first Sunday in October	3am, first Sunday in April
2 (New Zealand)	2am, last Sunday in September	3am first Sunday in April



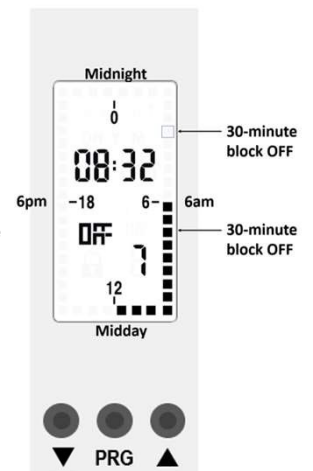
PROGRAMMING ON/OFF TIMES

Programming consists of 7 different programs, one for each day of the week.

The timer splits a 24-hour day up into 48 time-blocks, with each block 30 minutes long. When a block is ON, the relay output is ON. Before programming, all 48 blocks are OFF. The timer can be set to turn any combination of the 30-minute blocks ON.

Setting 30-minute blocks to ON

1. Use a pen (or similar) to press the programming buttons
2. Press the **PRG** button (short press) to enter programming mode. The day indicator will flash
3. Scroll through days by pressing □ (Monday = 1, Tuesday = 2, etc.). Select the day required by pressing **PRG**. The time will indicate 00:00
4. Press the **PRG** button to move through the 30-minute blocks, starting at midnight. The time will increment by 30 minutes each time the **PRG** button is pressed
5. If a 30-minute block is required to be ON, press the □ button and then the **PRG** button. If it needs to be OFF, just press the button **PRG** button again to move to the next block. Blocks set to ON will be shown as black (see diagram)
6. When all required blocks are set to ON, press the **PRG** button for **3 seconds** to return to the day selection screen
7. Program other days as required
8. When programming is finished, press the **PRG** button for 3 seconds to return to the main screen.



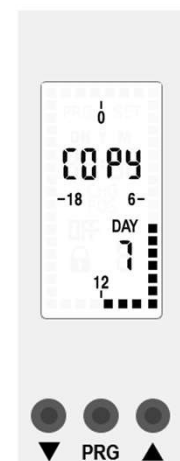
Changing 30-minute Blocks from ON to OFF

1. In programming mode, use the **PRG** button to move to the block required to be changed. The block will flash.
2. When the block is flashing, press the ▼ button. The block will change from ON to OFF.

Copying Days

To copy an existing program from another day

1. From the main screen, press the **PRG** button (short press) to enter programming mode. The day indicator (1 to 7) will flash.
2. Scroll through the days by pressing □ and select the day required to **Copy TO** by pressing **PRG**. The time will indicate 00:00.
3. Press the ▼ and □ buttons at the same time. 'COPY' appears on the display and the day flashes.
4. Choose the day to **Copy FROM**, by scrolling to the required day using the ▼ or □ buttons.
5. Confirm the Copy process by pressing the **PRG** button for 3 seconds.
6. If required to **Copy TO** another day, use the □ button to choose another day and repeat steps 3 to 5.
7. When copying days in complete, press and hold the **PRG** button for **3 seconds** to exit programming mode



Displaying programs and dates

- From the main page, use the □ button to scroll through the programs for each day and the current date.
- Programming mode will exit if no buttons are pressed within the time-out period (40 seconds if the device is mains powered, 10 seconds if powered by the backup battery). Any modifications are still saved.