(PRE JUNE 2016) 7045V DIGITAL CLOCK INSTALLATION NOTES

This clock is designed for operation from a 12 volt DC source only (10.6 to 16v)

Current draw when connected to a 12v supply is approximately 50mA (.05 Amps)

Allowable ambient temperature range -20 to + 50° C

Backup Batteries are fitted for clock memory. Remove the plastic insulator on the battery compartment before use. To replace the batteries, remove the single screw holding the small access plate on the rear and remove the plate by lifting the end where the screw was. Place a small pointed object under a corner of the batteries and 'flick' them out. Replace with Lithium Cells LR44 or equivalent. **Observe Polarity when fitting: + side must be up**

When the batteries are fitted, but the clock is not connected to a 12v source, only the Clock function will operate

Power cable has a Cigar Lighter plug attached.

The cigar plug requires the vehicle socket to have Positive + at the tip connection.

All negative chassis vehicles are wired this way, but a vessel may not be. If in doubt check with a voltmeter first. Warranty is void if incorrectly wired.

Where it is desired to permanently wire the clock into the 12v electrical system of a vehicle, vessel etc, rather than using the cigar plug/socket combination, the cigar plug can be removed, without voiding the Warranty.

Observe the correct polarity if doing this: The wire with the WHITE STRIPE is to Positive +

The plain BLACK wire goes to negative -

The wire is of light gauge. Ensure it is properly connected, well supported and provided with proper strain relief. As usual best practise, please ensure all + wiring is fused as near as possible to the voltage source and run in a workmanlike manner. All connections must be secure, low resistance and protected. Use a fuse rating of 1/2 an Amp

Temperature lead/sensor can be placed or mounted in any convenient location, but it is not intended to be placed where it will get wet. The back of the sensor has sticky tape attached. Remove the protective paper from it to use.

Mounting pedestal swivels vertically, whilst the foot can rotate, or be removed. The foot has sticky tape already attached, but for a more robust mounting it may be advantageous to drill 2 holes through the foot for screw fittings.

OPERATION

The Clock should be connected to the 12v source to carry out the setting procedures

When carrying out setting procedures the clock will exit from the setting mode if no button is pressed for 60 seconds

SETTING THE TIME FORMAT TO 12 OR 24 HOUR

From the normal time display, press and hold *TIME*. Press *UP* to toggle the display between 12hr or 24hr Format Subsequent presses will toggle the display 12 or 24 Hour alternately

REMEMBER: 24 hour mode will show as a different display only if the time is after 1pm (1300 hrs)

When in 12 Hour display mode AM or PM is shown on the far left of the display.

SETTING THE TIME AND CALENDER

From the TIME display, press and hold *TIME* until 12H or 24H is displayed. Press *TIME* again twice.

The Hours display will flash. Press *UP* or *DOWN* to adjust to the desired setting.

Press *TIME* once, the Minutes display will flash. Press *UP* or *DOWN* to adjust to the desired setting.

Press *TIME* once, the calendar Year will flash. Press *UP* or *DOWN* to adjust to the desired setting.

Press *TIME* once, the calendar Month will flash. Press *UP* or *DOWN* to adjust to the desired setting.

Press *TIME* once, the calendar Day will flash. Press *UP* or *DOWN* to adjust to the desired setting.

To set the clock accurately to radio time pips or similar:

Set the time as above, but set it to 1 minute ahead of actual time.

From the TIME display, press and hold *TIME,* until 12H or 24H is displayed. Press *TIME once* again.

The seconds display is now flashing

Pressing *UP* at the instant of the beginning of the last time pip will reset the seconds display to zero

ALARM

To view the current alarm time setting press *ALM.* To return to the normal time display press *TIME*

Setting the Alarm

From the normal Time display:

Press *ALM* once, the display will read the current set alarm time

Press and hold *ALM* until the hours display flash

Press *UP* or *DOWN* to adjust to the desired Hour setting.

Press *ALM* once. The minutes display will flash.

Press *UP* or *DOWN* to adjust to the desired setting.

Press *ALM* once. The Alarm time is now set, but the Alarm is still not turned on

Press *UP* once more to turn the alarm on. A small bell will be shown on the display.

TURNING OFF OR CANCELLING THE ALARM

To turn off the Alarm function:
Press *ALM* to display the current alarm setting. Press *UP* to turn the Alarm function off.
The alarm will not sound at the set time or at all. The Bell icon will be removed from the display.

To cancel an Alarm that is sounding:
When the alarm time is reached, the buzzer will sound for 60 seconds
To cancel the alarm completely, press any button except *SNZ*
To activate Snooze mode, press *SNZ*
In snooze mode the alarm will sound again in 5 minutes, for a period of 60 seconds.
This cycle will repeat 5 times, after which the alarm will not sound again.

DISPLAY BACKLIGHT COLOUR - Note that this option only became available in June 2015
The backlighting colour can be set to Blue or Orange with the slide switch on the rear of the clock

TEMPERATURE FUNCTIONS
The unit displays inside temperature and outside temperature (if the remote sensor has been located outside)
The inside temperature is measured from inside the clock unit, so will reflect that.

Changing the temperature display units:
Press ºC/ºF, the display will toggle between ºC and ºF display

Ice Alarm
An Ice Alarm can be turned on, and will sound if the external sensor detects a temperature of less than 4 ºC (39ºF)
To toggle the ice alarm on or off, press and hold the *ºC/ºF* button for 2 seconds.
When the ice alarm is turned on, a small Ice icon will be shown on the display near the outside temperature reading
When the temperature drops to 4 ºC (39ºF), the buzzer will sound for 30 seconds.
If the temperature rises above 4 ºC (39ºF) at any time during the 30 second period the buzzer will stop sounding.
During the 30 second period the sounding buzzer can be silenced by pressing any *key*.

VOLTAGE FUNCTION
The unit measures the voltage applied to it from your 12 volt battery.
This is shown in the digital display in .1v increments (1/10th v) and graphically by way of a bar-graph display.
Different voltage levels are represented by displaying varying numbers of 'bars' in the bar-graph display.
For example:
Less than 11.5v is shown as 1 bar, and over 13v is shown as 5 bars
The displayed digital and bar-graph readings are most accurate at about 12.5 volts, rather than at the lower or higher ends of the measured voltages.
Interpreting voltage readings in relation to state of battery charge is not simple, as the terminal voltage is affected by a number of factors in addition to the actual state of charge, including type of battery, temperature, current load, charging devices in operation to name a few. As a rough guide, for a lead/acid type at room temperature, with no load attached, and no charging devices attached (or very recently disconnected), 12.6 to 12.8v equals fully charged, 12.4v equals 25% discharged, and 12.2v equals 50% discharged. The Internet has much excellent information

WARRANTY
In the event of malfunction or failure Cruising Electronics will, at their sole discretion, either repair or replace the unit, providing that:
Malfunction has occurred within 12 months from the date of purchase
Any or all of the listed ratings of the unit have not been exceeded
The unit has been properly installed, with regard to correctly rated cables, fuses, switches and any other ancillary items which could reasonably be regarded as necessary to effect a safe and workman-like installation.
The unit has not been exposed to any fluid, corrosive or hazardous substance, excessive airborne particles
The unit is returned freight paid to Cruising Electronics or their nominated agent
Proof of purchase is provided
Please note that under no circumstances can Cruising Electronics be held responsible or accept liability for any consequential damages or loss whatsoever, incurred as a result of installing or operating this clock.