

7045V DIGITAL CLOCK INSTALLATION NOTES

This clock is designed for operation from a 12 or 24 volt DC source only (10.6 to 27v)

Current draw 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 power 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 12 or 24v 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. The sensor wire can be extended up to a maximum of 4 meters if you have the necessary parts and tools.

The mounting pedestal swivels, 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 power 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* until 12H or 24H is displayed. Release the *TIME* button.

Press the *UP* button to select 12H or 24H. Now press *TIME* button again.

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.

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*. *Zz* will be displayed.

In snooze mode the alarm will sound again in 5 minutes, for a period of 60 seconds.

This cycle will repeat 2 times, after which the alarm will not sound again.

DISPLAY BACKLIGHT COLOUR

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 °C/°F, the display will toggle between °C and °F display

Ice Alarm

An Ice Alarm can be turned on, and will sound if the external sensor detects a temperature of less than 0°C (32°F)

To toggle the ice alarm on or off, press and hold the °C/°F 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 between 0 and -4°C (32 and 25°F), the buzzer will sound for 30 seconds.

If the temperature rises above 0°C (32°F) 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 power source, between 10.6 and 27 volts only.

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.

The bars are NOT useable on a 24v system, as they do not measure above 14v.

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 12v lead acid type at room temperature, with no load 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, for a period of 12 months from date of purchase Cruising Electronics will, at their sole discretion, either repair or replace the unit, provided that:

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

Under no circumstances can Cruising Electronics or their staff or agents be held responsible or accept liability for any consequential damages or loss whatsoever, incurred as a result of purchasing, installing or operating this clock.

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