



D3  
53mm  
DIN rail mount



D4  
72mm  
DIN rail mount



P44  
48mmx48mm  
panel mount



P49  
48mmx96mm  
panel mount

## RUNNING HOUR METER

D3-RHM1  
D4-RHM1  
P44-RHM1  
P49-RHM1

Operating instructions and Guarantee Certificate  
[www.iconelectronics.co.za](http://www.iconelectronics.co.za)

### Description:

The timer is active as long as the "RUN" terminals are shorted.

The timer increments every second until it reaches 9999 h, 59m & 59 sec.

The setpoint can be set with values from 1 second to 9999 hours.

The lapsed time may be cleared by shorting the "CLR" pins, or via the menu.

During a power failure the lapsed time is saved to non-volatile memory.

When power is re-applied the timer continues where it left off. The power may be disconnected indefinitely without loss of data.

The relay functionality may be reversed.

The display may be set to indicate lapsed or remaining time.

A separate "total hours" counter with a maximum

DUAL DISPLAY DEVICES: 999999

SINGLE DISPLAY DEVICES 9999 hours is also included..

### Menu options:

- Set point for minutes and seconds ("SEt" + "SEC") (default:0 min & 0sec)

(press "▲" or "▼" to view & make adjustments)

Once the lapsed time is greater than the pre-set hours, minutes & seconds, the relay will change state until the counter is cleared (via software, or by shorting the "CLR" pins).

- Set point for hours ("SEt" + "hour") (default:0 hours)

(press "▲" or "▼" to view & make adjustments)

Once the lapsed time is greater than the pre-set hours, minutes & seconds, the relay will change state until the counter is cleared (via software, or by shorting the "CLR" pins).

- Clear counters ("CLr")

Press "▲" and "▼" to clear the lapsed time.

- Total number of hours ("tot") (not adjustable)

Select this setting to view the total number of hours the device has run. This counter is only reset during a full device reset.

See "rest" setting. When the value exceeds 4 digits, the display alternates between the first 3 digits of the value (displayed in position 1,2 and 3 on the display), and the second 3 digits (displayed in position 2,3 and 4 on the display).

- Relay functionality ("r.Fun") (default: CLOSE)

Once the pre-set number of hours is reached, the relay will either "CLOSE" or "OPEN"

- Display format ("diSP") (Default: Lapsed hours)

Set the display to indicate lapsed time ("LA t"), or remaining time ("rE t") before the relay will switch.

- Reset ("rESt)

Press "▲" and "▼" to reset all values to default.

(the total register is also reset to zero).

### **PROGRAMMING EXAMPLE DUAL DISPLAY DEVICE:**

*Set the device to de-energise the relay after 150 hours.*

Press “⏻” repeatedly until “Set” + “hour” is displayed.

Use “▲” and “▼” buttons to change the value to “150”.

Press “⏻” to display the next menu item.

Press “⏻” repeatedly until “r.Fun” is displayed.

Use “▲” and “▼” to change the value to “OPEn”.

Press and hold “⏻” to exit the menu

### **PROGRAMMING EXAMPLE SINGLE DISPLAY DEVICE:**

*Set the device to de-energise the relay after 150 hours.*

Press “MENU” to display “Set”.

Press “SELECT”. Use the “+” and “-” buttons to change the value to “150”.

Press “ENTER” to return to the menu. “CLr” is displayed.

Press “MENU” twice. “r.Fun” is displayed.

Use “+” and “-” to change the value to “OPEn”.

Press “ENTER”.

Press “BACK”.

### **Please Note:**

- If the display is configured to indicate remaining time, and the lapsed hours is greater than the set point value, the display will indicate zero.
- Once 9999 hours have lapsed, the counter will NOT roll over to zero. (It will remain at 9999 until cleared.)

### **Specifications:**

Set point: 0 – 9999 hours

Accuracy: ±0.05%

DUAL Display DEVICE Resolution : 1 second      hours are displayed on the upper display,  
minutes & seconds on the lower display

SINGLE Display DEVICE Resolution: 1 hour (minutes and seconds if “SELECT” is pressed, or time < 1hour)

Input voltage: ±15% of rated voltage

Led indication: Relay status

**Menu operation (single display device):**

All adjustments are made via the three front mounted buttons.

Press the "MENU" button repeatedly until the desired setting is reached, press "SELECT" to display the current value of the selected parameter, or sub menu (if applicable).

The "+" and "-" buttons are used to change the value.

"ENTER" will return the device to the menu.

The "BACK" button will exit the menu.

**Menu operation (dual display device):**

Press the menu "⏏" button repeatedly until the desired setting is reached.

The "▲" and "▼" buttons are used to change the value.

"⏏" will display the next menu item.

To exit the menu hold "⏏" button for 3 seconds.

**Menu options:**

Exit the menu before making the following adjustments.

**Lock / unlock parameters:****(default: unlocked)**

Press "BACK" ("▼"), then "ENTER" ("⏏") and hold the 2 buttons until the desired option is displayed.

The display cycles between "Loc" (no changes allowed) & "u.Loc" (parameters may be adjusted)

**Full / reduced menu (default: Full)**

Press "SELECT" ("▲"), then "ENTER" ("⏏") and hold the 2 buttons until the desired option is displayed.

The display cycles between "rEdu" (limited menu) & "Full" (all parameters are accessible)

**Access Code: (default: no code)**

Once the above options have been set as required, Press "BACK" and "SELECT" ("▼" and "▲") simultaneously until "CODE" is displayed.

Now use the "+" & "-" ("▲" and "▼") to enter a code.

Once a code is entered, access to the options above is not permitted.

To clear the code, re-enter the same code again.

If the code is forgotten. Press and hold "+" & "-" ("▲" and "▼") until "CODE" is displayed while re-applying power to the device.

**Please Note ( for 1 and 2 relay devices ONLY):**

- As a power saving feature, the display dims if settings are not being made.
- Even though the device seems to operate correctly, the relay(s) will not energise if the input voltage is below the operating voltage.

**12 Month guarantee:**

Our product is guaranteed for a 12 (twelve) month period from date of purchase. This guarantee is valid for defects arising from failure during specified conditions. This guarantee does not cover damage due to abuse, tampering or improper installation. Our company does not accept liability for any consequential damage or loss arising from product malfunction. Should this product prove to be defective, kindly return for inspection or repair.

**Relay specifications:**

Contact rating: 10A 250 VAC 2500VA

Mechanical life: 30 million operations

Electrical life: 250 000 operations (at maximum load)

