

# Icon Electronics



D3  
53mm  
DIN rail mount



D4  
72mm  
DIN rail mount



P44  
48mmx48mm  
panel mount



P49  
48mmx96mm  
panel mount

## ACCUMULATION TIMER

D3-ACT1

D4-ACT1

P44-ACT1

P49-ACT1

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

### **Description:**

The timer relay is energised whenever the main timer is NOT equal to zero.

The separate alarm relay can be programmed to indicate when the remaining time is running out.

Whenever a pulse is received, the pre-programmed “on time” is added to the main timer and the two counters (resettable & non-resettable) are incremented and saved to non-volatile memory.

The display indicates the remaining time.

The counters indicate the number of pulses received (coins deposited).

The device may be programmed to either reset after a power failure, or continue where it left off.

To enable the device to be installed in a location where access to the keypad is restricted, the nonresettable counter value may be viewed by shorting the “counter” terminals.

### **Menu options:**

- On time seconds “on t “ + “SEC” (default: 30 seconds)  
Whenever a pulse is received, the main timer is incremented by this amount.
- On time hours & minutes “on t “ + “hour” (default: 2 minutes)  
Whenever a pulse is received, the main timer is incremented by this amount.
- Resettable counter “r.Cnt” (default: 0)  
This counter is incremented whenever a pulse is received.  
To reset the counter, press the “▲” and “▼” buttons simultaneously while the value is being displayed.
- Total counter “Cnt”  
This counter is incremented whenever a pulse is received.  
It can only be reset by selecting the reset option see (“rEST”).
- Alarm time seconds (“ALAR” + “SEC”) (default: 30 seconds)  
The alarm relay is energised whenever the remaining time is less than the programmed alarm time.

- Alarm time hours & minutes (“ALAr” + “hour”) (default: 0 minutes)

The alarm relay is energised whenever the remaining time is less than the programmed alarm time.

- Save timing values on power failure (default: off)

If set to “on” the device will continue timing where it left off after a power failure.

- Reset (“rEst)

By selecting this option, all values are reset to default.

### **Specifications:**

Time range: 0–99:59:59

Accuracy: ±0.05%

Counters: 0-9999 (before roll-over)

**DUAL Display:** Remaining time: hour & minutes (upper display)  
seconds (lower display)

**SINGLE Display:** Remaining time: time > 1 minute: hour & minutes  
time < 1 minute: seconds

Input voltage: ±15% of rated voltage

Led indication: Timer relay status,  
Alarm relay status

Min pulse width: 45ms (de-bounced)

non volatile memory: eeprom: life expectancy ±100 000 pulses

### **Programming example (dual Display):**

Eg: Set device to add 10 minutes and 30 seconds whenever a pulse is received:

Press “⏏” to display “on t” + “SEC” .

Use “▲” and “▼” to change the value to “30”.

Press “⏏” to display “on t” + “hour”

Use “▲” and “▼” to change the value to “10”.

Press “⏏” for 3 seconds to exit the menu.

### **Programming example (dual Display):**

Eg: Set device to add 10 minutes and 30 seconds whenever a pulse is received:

Press “MENU” to display “on t”.

Press “SELECT”. “SEC” is displayed.

Press “SELECT” and change the value to “30” using the “+” and “-” buttons.

Press “ENTER”. “hour” is displayed. (this is where the hours and minutes are adjusted).

Press “SELECT” and change the value to “10”.

Press “ENTER” Press “BACK” to exit the menu.

**Menu operation (single display):**

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):**

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)

