

## LARGE DIGITAL LED TIMERS & TOTALISERS DISPLAYS

Our range of Large Digital LED Timers and Totalisers offer many options. All Timers have a Time base in Hours, Minutes, Seconds and combinations. We can also offer Long Range Timers also with Years, Weeks and Days. Typical functions are UP or DOWN timing, Totalising or Batch timing, TAKT timing, Repeat Cycle, One Shot output. Alarm trips and re-transmission or direct Serial Input.



**INPUT SIGNALS – CONTACT CLOSURE, NPN,  
PNP, 24V PLC**

**LED NUMERICAL DISPLAY OF**

**HRS : MINS : SECS, HRS : MINS, MINS : SECS, MINS, SECS, 1/10 SEC**

**INDOOR or OUTDOOR USE**

## NUMERICAL LARGE DIGITAL LED TIMERS & TOTALISERS – GENERAL OVERVIEW

These Large Digital LED Timers and Totalisers are ideal for all Industrial and Commercial applications ( such as Sports Halls and Sporting events outdoors ) with the following functions available.

**Time UP, Time Down, Repeat Cycle, TAKT Timing, Stop Watch.**

### INPUT

- Contact Closure
- NPN
- PNP
- 24V PLC

### OUTPUT ( Options )

- Relay Output at Zero or at UP Time out
- Output at various points ( settable ) during Time UP or DOWN

### TIME BASE RANGES

- Secs ( 1/10 sec option )
- Mins
- Mins : Secs
- Hrs : Mins
- Hrs : Mins : Secs
- DAYS : Hrs : Mins ; Secs

**ALL THE ABOVE LEGENDS / SYMBOLS ARE SUPPLIED ON REQUEST – AT NO CHARGE**

### FUNCTIONS

- To a SET POINT from Zero or FREE RUNNING to MAXIMUM SCALE
- From a SET POINT to Zero
- Stop Watch ( Start / Stop / Reset )

### LED DISPLAY DIGITS

- 2, 3, 4, 5 or 6

## LARGE DISPLAY CONTROL INPUT OPTIONS

- Remote wiring for START / STOP / RESET
- Remote Plug-in Box for setting Time value, Start / Stop / Reset
- IR Remote

## LARGE LED TIMERS – APPLICATIONS

The use of these Timers is very wide, applications include:

- Measuring assembly line down time.
- Controlling a process or event by Time alone.
- Calculating process efficiency.
- Measuring Time taken for line changeovers.
- Measuring TAKT Time.
- Measuring a total event or process Time.
- Improving employee motivation.
- Sports Time events ...etc.

## **ANYTHING THAT CAN BE MEASURED IN RELATION TO TIME**

## EXAMPLES OF SINGLE AND MULTILINE TIMERS WITH DIFFERENT TIME RANGES



Example of Outdoor LED Stop Watch



# LARGE DIGIT LED TIMER – DESCRIPTIONS AND USES

## UP OR DOWN TIMERS ( AND TAKT TIME )

**UP TIMERS** can also be called TIME TOTALISERS, whereby an INPUT START SIGNAL initiates the Timing UP from Zero to a PRESET VALUE or continues to TIME UP until the maximum scale range is reached, In both cases an OUTPUT SIGNAL can be provided.



Timer showing Hours, Minutes and Seconds

**DOWN TIMERS/ TAKT TIME** can also be called BATCH TIMERS, whereby a PRESET VALUE is set for a period of Time that an event has to take place. When that Time is reached, **normally at Zero** an OUTPUT SIGNAL can be provided.

This is typical of **TAKT TIMING**, where an operation must be completed within a set time.

Our Timers can, at ZERO, in such circumstances show NEGATIVE TIME and even the LEDs can change colour to show the SET TIME has been exceeded.

## STOP WATCH

This functions as its name suggests as a STOP WATCH, for INDUSTRIAL or SPORTS events in particular, where the Time needs to be STARTED and STOPPED and RECORDED and either RESET or continues to TIME.

These are usually UP TIMERS.

These functions can be manually controlled or through SERIAL communication.



Stop Watch Example



TAKT Time Example

## TOTALISERS

**TOTALISERS** are dedicated to the task of displaying TIME ELAPSED and are usually UP TIMERS.

They ( like all the previously described Timers ) are available in all the Time Bases listed earlier and are usually used to display Time only with no OUTPUT function.

Many of these type of Timers are used to display POWER USEAGE like ' kWh ' or similar.

They accumulate rather than simply display usage.

## DAY TIMERS

**DAYS TIMERS** are LONG RANGE Timers, usually UP TIMING from Zero and invariable used with **HRS : MINS** and sometimes **SECS**.

They can also be used a **DOWN TIMERS** where a set number of DAYS is entered remotely and when the Timer receives a START SIGNAL INPUT, will start Timing Down and every 24 hours the DAYS will decrease by one.

In both cases these Timers are used to show the Time elapsed before an EVENT takes place or the Time left before an EVENT takes place.





## LARGE DIGIT LED TIMERS – HEIGHT OPTIONS

All these Timers are available in the following LED DIGIT sizes:

2.3" (58mm), 4" (102mm), 6" (150mm), 8" (200mm), 12" (305mm), 16" (410mm), 18" (457mm).

Larger digits are available depending on quantity.

### VIEWING DISTANCES FOR LARGE DIGIT TIMERS AND TOTALISERS

The maximum viewing distances for the DIGIT SIZES given below are based on the LED manufacturers specifications and give **CLEAR UNAMBIGUOUS READING**. They are NOT to be taken MAXIMUM distances and normally viewing distance will be less than the maximum figure given.

#### DIGIT HEIGHTS

#### VIEWING DISTANCES

Actual	Guide Only
2.3" (58mm)	15 meters / 50 feet
4" (102mm)	35 meters / 115 feet
6" (150mm)	55 meters / 180 feet
8" (203mm)	75 meters / 246 feet
12" (305mm)	115 meters / 377 feet
14" (355mm)	135 meters / 442 feet
16" (400mm)	155 meters / 508 feet
18" (457 mm)	170 metres / 557 feet

### HIGH BRIGHTNESS DAYLIGHT VIEWING LEDS

High brightness LEDs are used for OUTDOOR applications but can also be used for INDOOR environments where it might be murky to ensure visibility at all times.



## LARGE LED TIMERS – REMOTE BOX OPTIONS / IR REMOTE

The Large Digit Timers can be set for TIME, START / STOP / RESET and OUTPUT functions.

The Remote Boxes are plug-in via a 5 meter cable and 'D' type connector or they can be controlled with an IR Remote. The plug-in Remote Boxes can be hand held or fixed to a Wall / Surface, whereas the IR Remote is purely hand held with a 10 meter send and receive operating distance.



Remote Control Box for  
Timer



IR Remote Control



Remote Control Box

# LARGE LED TIMERS – MOUNTING OPTIONS

THREE models are available, **Wall**, **Panel** and **Suspension**.

## WALL MOUNT

All Wall mounting displays have adjustable Tilt side brackets up to 8" ( 203mm ) SINGLE LINE, thereafter they have welded ' L ' shaped fixed corner brackets ( top and bottom ).

**CASE H (height) and L (length)**

### 2.3" x 4 Digit LED Timers

- H100 x L294 x D61mm

### 2.3" x 6 Digit LED timers

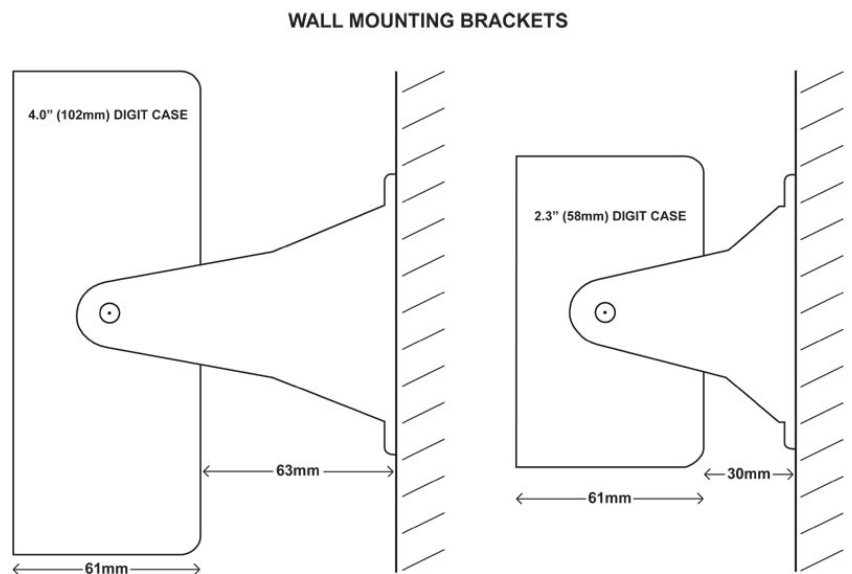
- H100 x L428 x D61mm

### 4.0" x 4 Digit LED Timers

- H155 x L434 x D61mm

### 4.0" x 6 Digit LED Timers

- H155 x 674 x D61mm



## FLUSH PANEL MOUNT 2.3" and 4.0" only

### CASE H (height) and L (length)

2.3" x 4 Digit LED  
Timers PANEL CUT OUT

- H110 x L304mm

2.3" x 6 Digit LED  
timers PANEL CUT OUT

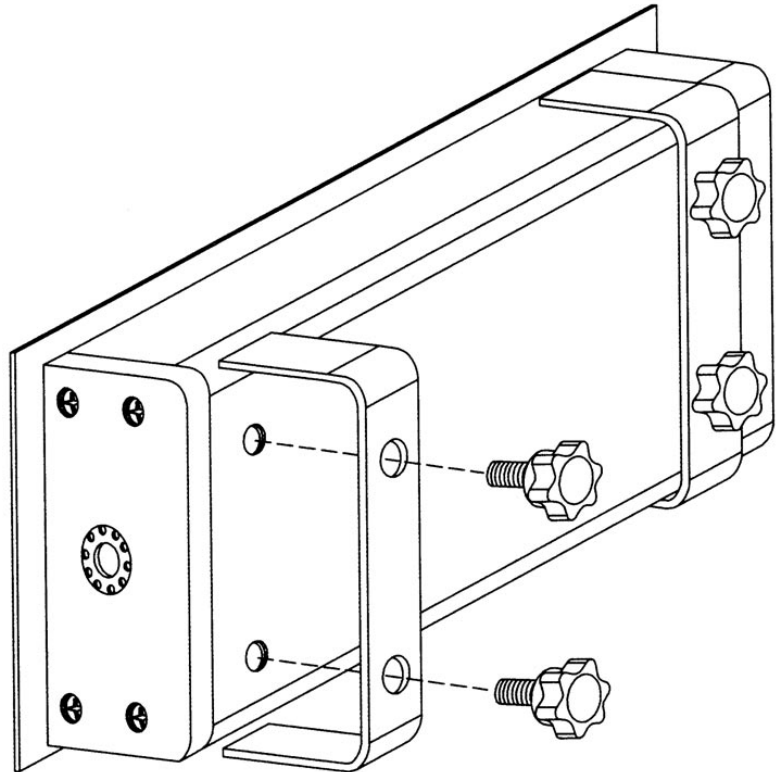
- H110 x L438mm

4.0" x 4 Digit LED Timers  
PANEL CUT OUT

- H165 x L444mm

4.0" x 6 Digit LED  
Timers PANEL CUT OUT

- H165 x L674mm



**2.3" and 4.0" PANEL MOUNTING CASE**

## SUSPENSION MOUNT

Suspension mounting is usually used for Double Sided Displays, Large Digits and / or Multiline. To be viewed from a distance by a number of work staff in an area where common information is required. **These displays can have a variety of different inputs as well as time.**



## CASES FOR LARGE DIGITAL DISPLAYS

### IP and NEMA CASE RATINGS

#### **IP54 / NEMA 3**

Used for most INDOOR applications, protection against ingress of Dust, Light Water Spray, Oil and general grime



IP54 Standard Aluminium Case

#### **IP65 / NEMA 4**

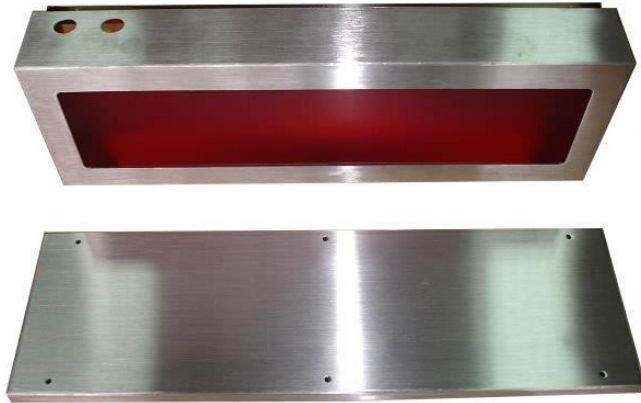
Used for all OUTDOOR applications, fully weather proof and can also be used in INDOOR applications where the environment is particularly harsh and corrosive.



IP65 Black Painted Case

### **IP65 Stainless Steel**

316 Grade, used extensively in the Food Processing Industry and in applications where exposure to SALT ( Sea Air ) is prevalent such as DOCK SIDE, SEA PORTS etc.



Stainless Steel Case

## LARGE DIGITAL LED TIMERS – GENERAL SPECIFICATIONS

- Control commands START / STOP / RESET
- Volt Free Momentary contact closure
- Number of digits available 2, 3, 4, 5, 6 for UP / DOWN / STOP WATCH Timers
- Number of digits available 6, 7, 8 or 9 for DAYS Timers

### BATTERY BACK UP

Standard on all Timers

### IP / NEMA RATINGS

- IP54 / NEMA 3, 13 for Indoor use
- IP65 / NEMA 4 (4X) for Outdoor use

### INPUT POWER SUPPLIES

- 95~265Vac
- 24Vdc
- 12Vdc

### CONTROL INPUT OPTIONS

- Contact Closure
- NPN
- PNP
- 24V PLC
- RS-232, RS-485
- MODBUS

### CONTROL OUTPUTS

- Alarm Setting ( Relay )
- RS-485

### ACCURACY

- 01% of range





## OPERATING ENVIRONMENT

10 ~ +50 °C / 14 ~ 122 °F

## HERE IS OUR FULL RANGE OF LARGE DIGITAL LED DISPLAYS

### A to D (Analogue to Digital) Displays

Our LED Digital A to D Displays accept all standard industrial input signals Voltage and Current and all are scalable.

These LED displays will display any engineering units with decimal point position programmable.

### Counters and Rate Displays

Our LED Digital Counters will accept standard input signals, contact closure, 24Vdc, NPN, PNP, Quadrature.

UP or DOWN, BATCH or TOTALISING count, single line or multiline.

### Industrial Temperature Displays

These displays accept Industry Standard Thermocouple Inputs and 2/3 wire PT100/RTD sensors. With a wide range of Temperature scale ranges in °C or °F.

### Temperature and Humidity Displays

These Large Digital LED Displays combine Temperature and Humidity on two separate displays in a single case with an integral 4~20mA dual input sensor or a dual 0-10Vdc input signal.

### Clock and Temperature Displays

Our LED Digital Clocks set a new industry standard. Time bases Hours : Minutes : Seconds or Hours : Minutes.

The Clocks also allow the display of Date / Year and Temperature alternating.

### Timers and Totalisers

All Timers have a Time base in Hours, Minutes, Seconds and combinations. Long Range Timers with Years, Weeks and Days are also available.

Typical functions are UP or DOWN timing, Totalising or Batch timing, TAKT timing, Repeat Cycle, One-Shot output.

### Commercial Temperature Displays

Ideal for the Food industry, Chillers, Freezers as well as Office and work area room Temperature comfort. In-built NTC sensor. Scale ranges are limited to Low Temperature applications.

### Cold Store Temperature Displays

These Large Digital LED Cold Store Temperature Displays have been specifically designed for the Refrigeration market. Suitable for Walk in Refrigerators, Freezers, Cold Stores, Cold Rooms, Chillers and Cold Cabinets.