

## Microcontroller Based Timers / Counters / Stop Watch

(Product code 24.1 to 24.3)



### Model Wise Description:

Sr.No.	Model	Product Description	Size (mm.)
24.1	DTR-721	Micro controller based Timer	72 x 72 x 65
24.2	DCR-721	Micro controller based Counter	72 x 72 x 65
24.3	LSW-72	Micro controller based Stop Watch	72 x 72 x 65

### 24.1) Technical Specifications For Model DTR-721:

<b>Time Resolution</b>	0.1Sec (100mS), 1 Sec / Min / Hour /Min.Sec / Hour.Min – user programmable.
<b>Time Base</b>	Using high frequency quartz crystal.
<b>Ranges</b>	0.0 – 999.9 sec/min/hour or 0 to 9999 sec/min/hour or 99 min.59sec / 99hr.59min
<b>Display</b>	4 digit 0.5" 7-segment Red LED upper display for actual time value. 4 digit 0.3" 7-segment Red LED lower display for set time value.
<b>Time Count</b>	UP or DOWN – programmable.
<b>Reset</b>	Using front panel switch
<b>Function/Mode – Programmable</b>	ON delayed (Relay to turn ON after the end of the set time) or OFF delayed (Relay to remain ON till the end of the set time) or CYCLIC – (Relay will remain On and Off as per the programmed time)
<b>Set Point</b>	Single (On/Off delay) or Dual (Cyclic) - adjustable using soft touch keyboard.
<b>Output</b>	Two relays with single change over potential free contact (5A@230VAC) at the end of the set time.
<b>RemoteStart/Stop</b>	Can be provided using potential free contacts.
<b>Memory Back Up</b>	Retention of last count value in the event of power failure.
<b>Supply</b>	SMPS - 100 to 240VAC, 50/60 Hz.
<b>Size</b>	72 x72 x 65 mm.
<b>Enclosure</b>	ABS plastic with polycarbonate front.

### 24.2) Technical Specifications For Model DCR-721:

<b>Input</b>	Proximity switch / Photo sensor, encoder, potential free contact etc.
<b>Sensor Supply</b>	5 to 24 VDC.
<b>Range</b>	0 – 9999 count. (Up or Down counting – user selectable)
<b>Display</b>	4 digit 0.5" 7-segment Red LED upper display for Actual Count value. 4 digit 0.3" 7-segment Red LED lower display for Set Count value.
<b>Set Point</b>	Single or Dual Adjustable using soft touch keyboard.
<b>Output</b>	Two relays with single change over potential free contact (5A@230VAC) at the end of the set count.
<b>Remote Start/Stop</b>	Can be provided using potential free contacts.
<b>Memory Back Up</b>	Retention of last count value in the event of power failure.
<b>Supply</b>	SMPS - 100 to 240VAC, 50/60 Hz.
<b>Size</b>	72 x72 x 65 mm.
<b>Enclosure</b>	ABS plastic with polycarbonate front.

### 24.3) Technical Specifications For Model LSW-72:

<b>Time Resolution</b>	0.01Sec (10mS), 0.1Sec (100mS) , 1 Sec / Min / Hour – user programmable.
<b>Time Base</b>	Using high frequency quartz crystal.
<b>Range</b>	0 – 9999 mS / Second or 0.00 to 59.59 Minute. Second
<b>Display</b>	4 digit 0.5" 7-segment Red LED upper display for actual time value. 4 digit 0.3" 7-segment Red LED lower display for set time value.
<b>Time Count</b>	UP counting from 0 time .
<b>Function/Mode – Programmable</b>	Stop Watch function to Start the timer, Stop the timer or Reset the Timer using front panel or remote contact switches.
<b>Set Point</b>	Single - Adjustable using soft touch keyboard.
<b>Remote Start/Stop</b>	Can be provided using potential free contacts.
<b>Output</b>	Single relay with single change over potential free contact (5A@230VAC) at the end of the set time.
<b>Supply</b>	SMPS - 100 to 240VAC, 50/60 Hz.
<b>Size</b>	72 x72 x 65 mm.
<b>Enclosure</b>	ABS plastic with polycarbonate front.