Presettable Counter   **TWS-1400F**

| 0 0 0 0 |

| 9 9 9 9 |

O R1

RESET

M MULTISPAN

TWS-1400F
96 X 96 X 50 mm

Technical Specification

Model	TWS - 1400F
Dimension	96 X 96 X 50 mm
Panel Cutout	92 X 92 mm
Display	4 digit, 0.56″, 7 segment
Output	1 relay with 2 C/O, 230V AC, 5A
Supply	110 to 270V AC
Sensor	Proximity PNP / NPN
Memory	Power Failure Facility
Delay ON/Delay off	Selectable
Over Counting/ Without Over counting	Selectable
Speed Selection	Selectable

How to Set the Auto Manual Time

1). Reset Key used for reset count and set Auto Reset Time.

2). Press Reset key for 10 seconds to Enter in set mode. To change the value of Auto Time hold reset key in pressed condition and select value from thumb wheel switch. If you release reset key then it will take that value at the time of releasing key.

Function	Display	Range
Auto Manual Time	ᵗ00.0	00.0-99.9 Sec.

Note:

How to Set Delay ON/ instant ON, Memory Yes/No, Over counting/without over counting, Speed High/Low Exponent & Scale Factor

✱ Press (RESET) key Then turn on instrument & follow following Procedure To set all above parameter.

Thumbwheel   Display

| 1 | 0 | 0 | 0 |

$$d\ P$$ **(Decimal Point)**

Press (RESET) key.

$$9\ 9\ 9.9 \longleftrightarrow 9\ 9\ 9\ 9$$

Press (RESET) key.
(Range : 9999/999.9)

| 2 | 0 | 0 | 0 |

$$d\ 0\ n$$ **(Delay ON)**

Press (RESET) key.

$$d\ 0\ F\ F$$ **(Delay OFF)**

| 3 | 0 | 0 | 0 |

$$0\ u\ C\ t$$ **(Over Count after reach set value)**

Press (RESET) key.

$$n\ 0\ C\ t$$ **(No Over Count after reach set value)**

| 4 | 0 | 0 | 0 |

$$\overline{n}\ E\ \overline{n}\ 1$$ **(Power fail memory)**

Press (RESET) key.

$$Y\ E\ S \longleftrightarrow n\ 0$$

Press (RESET) key.

| 5 | 0 | 0 | 0 |

$\boxed{S\ C\ A\ L}$ **(Scal Factor)**

Press [RESET] key.

$\boxed{9.9\ 9}$ **(Range: 0.01 To 9.99)**
(Value can be change by
right hand side three thubwheels)

| 6 | 0 | 0 | 0 |

$\boxed{E\ H\ P\ 0}$ **(Exponents)**

Press [RESET] key.

$\boxed{1}$ **(Range: 10^{-5} To 10^{-2})**
(Value can be change by [RESET] key)

| 7 | 0 | 0 | 0 |

$\boxed{S\ P\ E\ d}$ **(Speed/Input Frequncy)**

Press [RESET] key.

$\boxed{\overline{m}\ E\ d\ U}$ ←→ $\boxed{F\ A\ S\ t}$

Press [RESET] key.

(Up To 5000 RPM)   **(Up To 5000 RPM To 60,000 RPM)**

NOTE : Parameter value will Automatacally save if you go
for next parameter setting.

EXAMPLE:

1) If diamate of wheel = 10 cm.
2) So,circumference of wheel = 3.142857 x 0.1
= 3.142857 x 0.1 meters
3) Since the proximity switch gives one pulse per revolution,
The display should increment 0.3142857 for every pulse
4) Therefor scale factory = 0.31428775=3.142875 X 10^{-1}
5) So, set scale = 3.14285
6) Exponent = 10^{-1}

Working

1). Count can be set by Thumb Wheel Switch .

2). If yor set TIME=00.0 SECOND then it will be in MANUAL MODE and if you set TIME=0.01 To 99.9 SECONDS then it will be in AUTO RESET MODE.

3). At set Count Relay will turn ON and RED LED will turn on right hand side.

4). Relay remain on until AUTO RESET TIME is over.

5). If you set TIME 00.0 seconds then Relay will remains in on condition until Reset key is pressed.

6). To reset the count press [RESET] key for 2 seconds.

Connection Diagram

16	15	14	13	12	11
NO	C	NC	NO	C	NC
	RELAY			RELAY	

NPN PROXI:- Short Pins 7 & 8
                Proxi Connection to 8,9 & 10
PNP PROXI:- Short Pins 9 & 10
                Proxi Connection to 7,8 & 9
MICRO SWITCH:- Short Pins 9 & 10
                M/S Connection 7 & 8

SUPPLY
110 To 250V AC

L	N			RESET		+VE / I/P1 M/S	I/P2	GND
1	2	3	4	5	6	7	8	9	10