Etsilon

Multifunction Timer
PTR743

Features

- 3+3 digit, single set point
- LED indications - Relay ON, hr, min, sec
- Relay modes-ON delay, Interval, Cyclic ON first, Cyclic OFF first

- Multifunction, multi-range timer
- 96 x 96mm size
- Direction – Up / down selectable

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A) SAFETY PRECAUTIONS

⚠ **SAFETY SUMMARY**
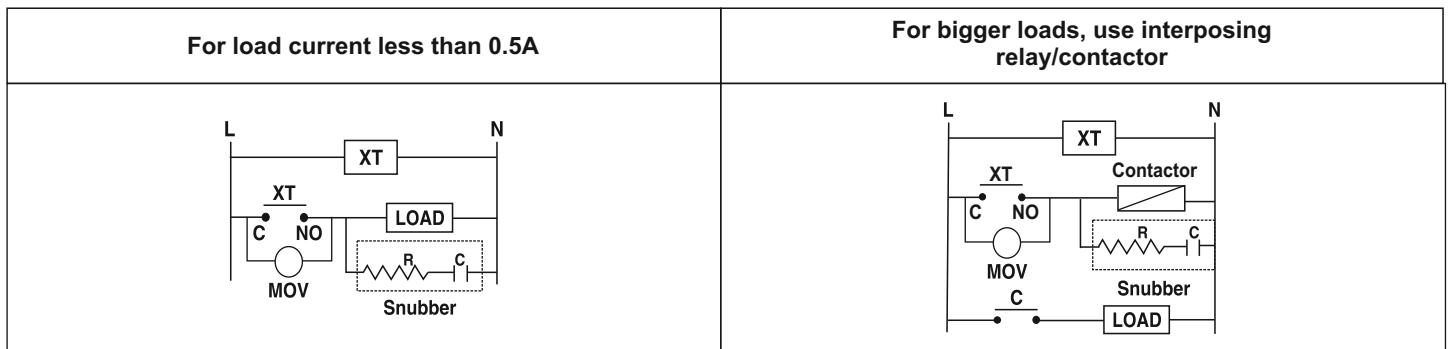**Please maintain these instructions and review them prior to using the unit:**

⚠ **INSTALLATION GUIDELINES:**

1. This unit is panel mounted type with its output terminals connecting to the host equipment. Such equipment shall also comply with basic EMI/EMC and safety requirements like BS EN 61326-1 and BS EN 61010 respectively.
2. To avoid electric shock, power supply of the unit should be kept off while wiring. Wiring should be done strictly as per the terminal layout, given in the manual.
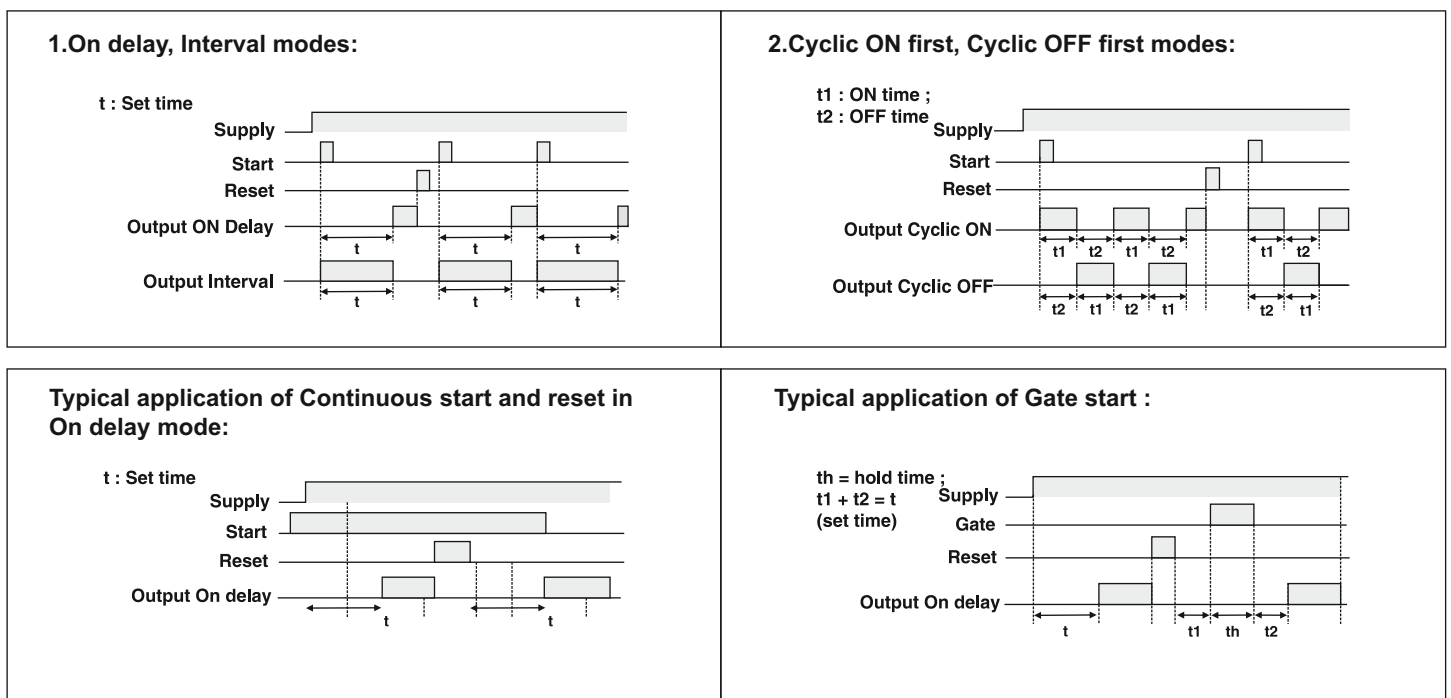3. Use lugged terminals to meet M3 screws.

⚠ **CAUTION**:

1. This unit is not intended for outdoor use.
2. The power connection cable must have a cross-section of at least 1sq.mm and insulation capacity of at least 1.5kV.
3. The output connections must not be loaded beyond the specified values/range.
4. Avoid inflow of dust and contact of conductive material with the internal circuitry of the unit.
5. The unit must not operate in presence of heating sources, caustic vapors, oil, steam, vibration or impact etc.
6. Use clean moist cloth soaked in water for cleaning. Avoid entry of water into the circuitry through the ventilation holes.

LOAD CONNECTION

For load current less than 0.5A	For bigger loads, use interposing relay/contactor

MODE OF OPERATION

1.On delay, Interval modes: 	**2.Cyclic ON first, Cyclic OFF first modes:**
Typical application of Continuous start and reset in On delay mode: 	**Typical application of Gate start :**

USER GUIDE	START: Pulse / Gate

A) **Pulse**: Timing starts on momentary closure of switch Connected between START and COMMON terminals.
B) **Gate**: Timing starts at power ON. When START & COMMON is closed timing freezes and it resumes only When the shorting is opened.

B) OVERVIEW

SPECIFICATIONS

Display	Dual LED (3+3) digit, 0.56"+ 0.40" height, 7 segment.
Supply	90 to 270V AC/DC, 50/60 Hz, 5VA max
Operating modes	On delay, Interval, Cyclic On first, Cyclic Off first
Time ranges	9.99/99.9/999 sec, 9.59 min: sec, 99.9/999 min, 9.59 hour: min, 99.9/999 hour
Direction	Down / Up
Set point	Single set point
Relay rating	5A @250V AC / 24V DC, Resistive
Start input	Pulse, Gate (programmable)
Reset	On interruption of power (selectable), front panel reset & terminal reset
Outputs	2 Relay (SPDT)
LED indication	Relay timer indication
Memory retention	10 years
Accuracy	**Setting**: ±0.05% of set time or 50 msec (whichever is greater) **Repeat**: ±0.05%
Temperature	Operating: 0 °C to 50 °C, Storage: -20 °C to 75 °C
Humidity	95% RH (non condensing)
Housing	PC trans black
Mounting	Panel mount
Weight	220gm

FRONT PANEL DESCRIPTION
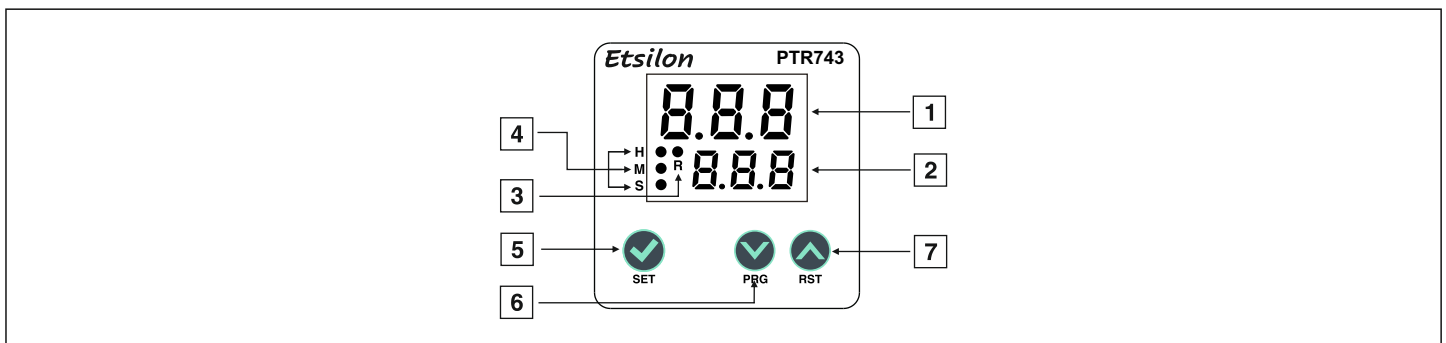
1		Process time
2		Set time
3		Output status (light when output is ON)
4		Time range (blink in online mode)
5		To set process time
6		Configuration mode
7		For reset

MECHANICAL INSTALLATION

PRODUCT CODE

MODELS	DIGITS	BEZEL SIZE(mm)
PTR743	3	96 x 96

OVERALL DIMENSIONS (All dimensions in mm)

Panel Cutout
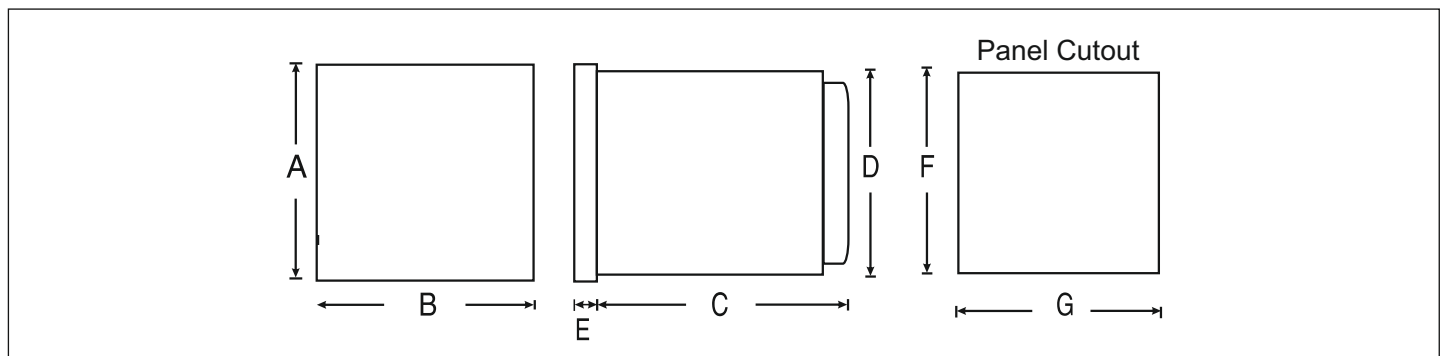
MODELS	DIM	A	B	C	D	E	F	G
PTR743		99	99	39	90.5	3	92	92

C) TERMINAL CONNECTION

| START | GND | RST | | NC2 | COM2 | NO2 |
| L(+) | N(-) | | | NO1 | COM1 | NC1 |
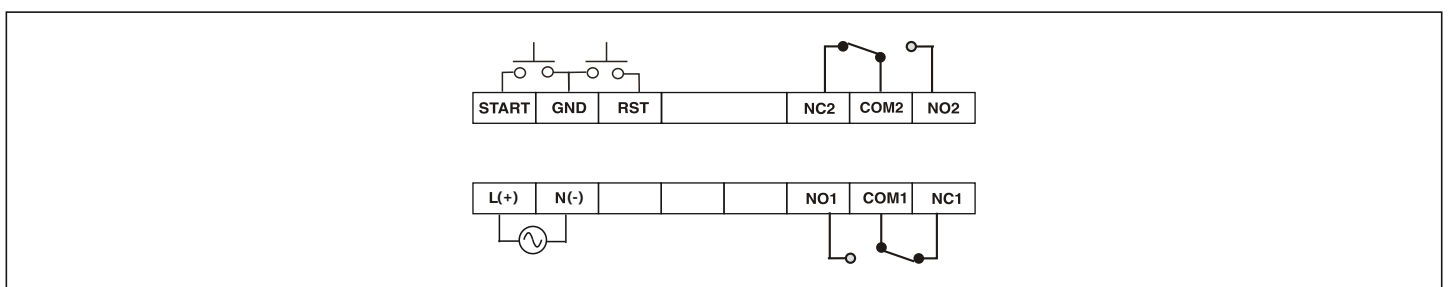
RESET METHOD

Reset ➤ r 5 t / d n E   **Press ⬆ (RST) key continuously for 3sec. to reset the unit.**

D) PROGRAMMING

PROTECTION LEVEL

NOTE: Press ⌄ + ⌃ together continuously for 3sec. to enter into protection level.

Set time Lock	`SEt ULK`	Use ⌃ to select Set time LOCK & UNLOCK Default: UNLOCK
Config. Lock	`CNG ULK`	Use ⌃ to select config. LOCK & UNLOCK Default: UNLOCK
Version No.	`UEr 1.00`	Use ⌄ to go to set time lock page.
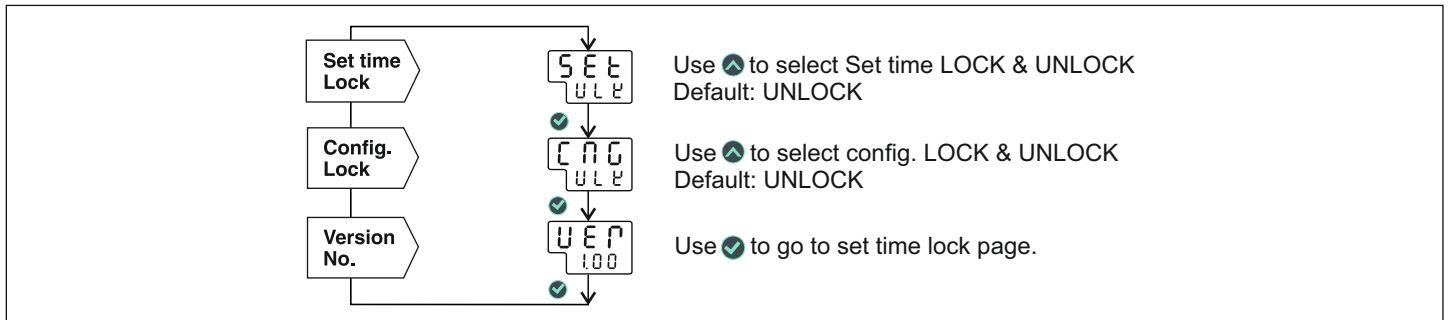
Description	Display	Default value	Range
Set time Lock	`SEt ULK`	UNLOCK	LOCK / UNLOCK
Config. Lock	`CNG ULK`	UNLOCK	LOCK / UNLOCK

The unit will auto exit lock mode after 30sec. of key inactivity or by pressing ⌄ + ⌃ keys together continuously for 3 sec to exit the function.

CONFIGURATION INSTRUCTION

1. Enter configuration by pressing key ⌄ for 3 sec.
2. Scroll various function ranges by pressing ⌃ & ⌄ key.
3. Scroll various parameter by pressing the ⌄ key.

The unit will auto exit program mode after 30sec. of key inactivity or by pressing ⌄ (PROG) key continuously for 3sec.
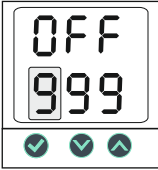
MODE	DISPLAY	DISCRIPTION
	`LCK 000.`	Prompt only if configuration Lock enabled in PROTECTION LEVEL Lock code = 85 [fixed]
Output Modes	`nOd On`	Use ⌃ & ⌄ keys to select various modes ON delay, Interval, Cyclic ON first, Cyclic OFF first Default: ON delay
Time Range NOTE : Use ⌃ & ⌄ keys to scroll through the various time ranges. H, M, S indication will indicate time range.	`r-S 99.9`	This parameter prompted only in ON delay & Interval mode. Default: 99.9s
	`On 99.9` `OFF 99.9`	This parameter prompted only in Cyclic mode Default: For ON time - 99.9s For OFF time - 9.99s
Counting Direction	`dIr dyn`	Use ⌃ & ⌄ keys to select direction Up or Down Default: Down
Start	`Str GAt`	Use ⌃ & ⌄ keys to select gate or pulse. Default: Gate
Front panel reset	`FPr yES`	Use ⌃ & ⌄ keys to select yes or no Default: Yes
Power on reset	`POr nO`	Use ⌃ & ⌄ keys to select yes or no Default: No
Default	`dFt nO`	Use ⌃ & ⌄ keys to select yes or no Default: No

TO PROGRAM SET VALUE

Note 1: Press ✓ key continuous for 3 sec to edit the set value.
Note 2: The corresponding digit will increment or decrement from 0 to 9 using ⌃ & ⌄ key respectively.
Note 3: Press ✓ key to shift the digit.

Only if mode selected is on delay / Interval					
Set 1st digit	000 999	Set 2nd digit	000 999	Set 3rd digit	000 999

Note: Press ✓ key continuous for 3 sec to exit set value function.

Only if mode selected is cyclic					
Set 1st digit	On 999	Set 2nd digit	On 999	Set 3rd digit	On 999

Note: Press ✓ key continuous for 3 sec to store the On time value and move to next parameter that is off time value.

Set 1st digit	OFF 999	Set 2nd digit	OFF 999	Set 3rd digit	OFF 999

Note:
1) Press ✓ key continuous for 3 sec to exit set value function.
2) If the set value is 000 then timer must hold (not work). & all indications will be OFF.
3) The unit will auto exit set value mode after 30 sec of key in activity.