

USER'S OPERATING MANUAL FOR DIGITAL PRESET TIMER

(Models: XTM - 443 / 773 / 993)



XTM - 443
(48 X 48)



XTM - 773
(72 X 72)



XTM - 993
(96 X 96)

SPECIFICATIONS :

Display	: 3 Digit , 0.56" Ht (XTM-773/993) 3 Digit , 0.39" Ht (XTM-443)
Status Indication	: a) Time unit (Hrs. / Min. /Sec.) b) Relay status (OP1/OP2) c) EOC (RT) Time
Time settings	: Through Pushwheel Switches
Control Inputs	: a) Start b) Reset
Reset time	: < 100 ms
Timing Accuracy	: 0.05% Full Scale
Repeat Accuracy	: 0.01%
Outputs	: 5 Amp @ 230VAC Relay (1C/O) x 2
Reset	: a) Front switch (Programmable) b) Remote Reset (via rear terminals) c) On power interruption (Programmable)
Supply	: 90 to 270 VAC
Mounting	: Panel
Housing	: ABS Plastic
Operating temp.	: 0 ~ 50° C
Humidity	: 95% Rh (Non Condensing).

Configurable Parameters:

Count direction	: Up / Down
Timer Start	: a) Power on Start b) Front Start c) Remote Start (Edge Triggered) d) Remote Start (Edge + Level Triggered)
Timer Function	: Auto Reset / Latched output
Front Reset	: Enable / Disable
Output 2 Function	: a) Auxiliary Contact b) End of Cycle c) Off

DIP Switch Setting:-

1) Timer Mode Setting:-

DIP 1	Mode
OFF	On Delay
ON	Off Delay

2) Timer Range Setting:-

	DIP 4	DIP 3	DIP 2	Range	Resolution
1	OFF	OFF	OFF	9.99 Sec	0.01 Sec
2	OFF	OFF	ON	99.9 Sec	0.1 Sec
3	OFF	ON	OFF	999 Sec	1 Sec
4	OFF	ON	ON	99.9 Min	0.1 Min
5	ON	OFF	OFF	999 Min	1 Min
6	ON	OFF	ON	9Hr. 59Min	1 Min
7	ON	ON	OFF	99.9 Hrs	0.1 Hrs
8	ON	ON	ON	999 Hrs	1 Hrs

INSTALLATION GUIDELINES

1. Prepare the cut-out with proper dimension as shown in figure.
2. Remove clamp from Timer.
3. Push the Timer through panel cut-out and secure the Timer in its place by tightening the side clamp.

SAFETY INSTRUCTION

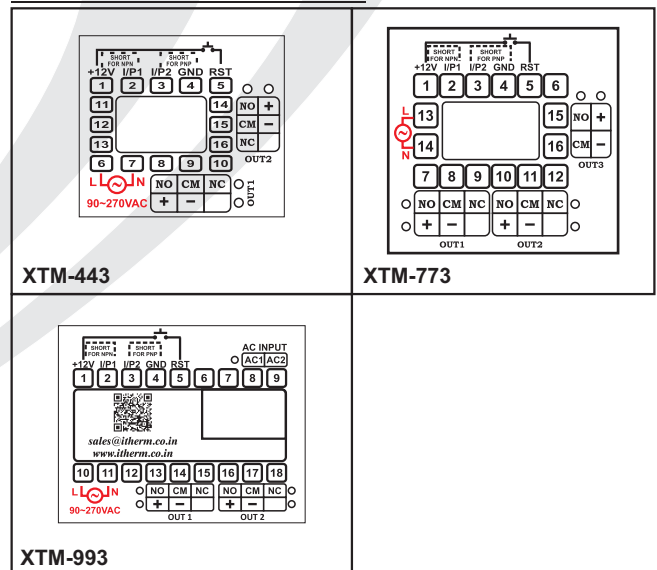
MECHANICAL

- ❖ Ambient temperature and relative humidity surrounding the Timer must not exceed the maximum specified limits..
- ❖ The Timer in its installed state must be protected against excessive electrostatic or electromagnetic interferences.

ELECTRICAL

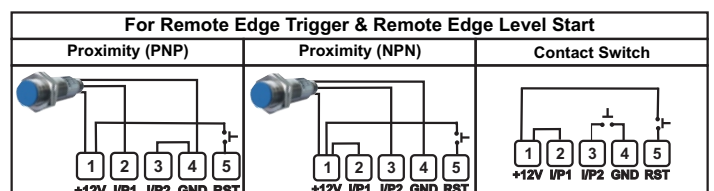
- ❖ The Timer must be wired as per wiring diagram & it must comply with local electrical regulation.
- ❖ The Electrical noise generated by switching inductive loads might create momentary Fluctuation in display, latch up, data loss or permanent damage to the instrument. To reduce this use snubber circuit across the load.

TERMINAL CONNECTIONS :



OVER ALL DIMENSIONS & PANEL CUT OUT (IN MM)


Model	A	B	C	D	E	F	G	H
XTM-443	48	48	5	85	43	45	45	9
XTM-773	72	72	10	65	66	68	68	9
XTM-993	96	96	10	65	89	92	92	9



Programming:-

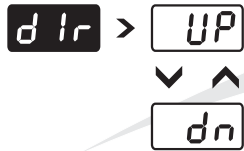

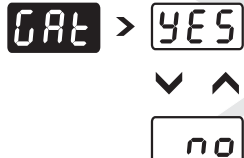
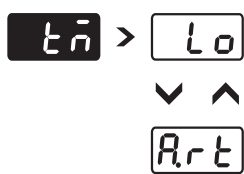
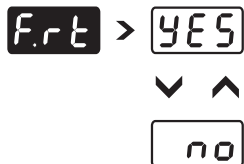
User List:-

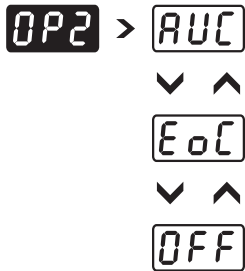
1. To access the user list press & hold 'START' key for 3 Sec.
2. Press 'RST' Key to change the value.
3. Press 'START' Key to Store data & move on to next parameter.
4. All parameters as shown in the shaded will be displayed for 1 Sec. followed by its value.

PARAMETER	DISPLAY	DESCRIPTION	DEFAULT
End of Cycle Time		End of Cycle Time:- It will appear only if End of Cycle as Output 2 is selected.	5
		The End of Cycle time is set with the help of Push Wheel input.	

Configuration List:-

1. To Enter in this mode press & hold 'START' key for 5 sec. at Power On. 'CNG' & '1.1.2' Message will be toggle for 5 sec. Now unit will allow the user to configure different parameters with options as described below.
2. Press 'START' Key to move on to next parameter.
3. Press 'RST' Key to scroll between parameter options.
4. All following parameters as shown in the shaded will be displayed for 1 Sec. followed by its options or values.

PARAMETER	DISPLAY	DESCRIPTION	DEFAULT
Timer Direction		Timer Counting Direction:-	Down Count
		Up Counting:- If Selected, timer starts counting from 0 to set time in ascending order. (Up direction)	
		Down Counting:- If Selected, timer starts counting from Set time to 0 in descending order. (Down direction)	
Timer Start		Timer Start Mode:- This parameter defines the Start mode for the timer.	Power On Start
		Power On Start:- If Selected, timer starts counting from Power On.	
		Front Start :- If Selected, Timer starts only after user presses START key. If the cycle is incomplete at the time of power fail , It will continue after power is restored without need for re-issuing the Start command from front key (If MEM=On).	
		Remote Edge Trigger Start :- If Selected, Timer starts counting only when it detects high to low pulse at back terminal from external Input.	
		Remote Edge Trigger + Level Start :- If Selected, Timer starts counting only when it detects high to low pulse at back terminal from external Input. The input signal must remain low during timing cycle otherwise timer will Reset.	
Gate Input		Gate Input :- Prompted only if Timer is configured as Power On Start. When Enabled (Set to yes) the External Input can work as a Gate input.	No
		Yes:- The External Input can be used as a Gate input.	
		No:- The External Input can not be used as a Gate input.	
Timer Mode		Timer Mode:- This parameter will be prompted if other than power on start selected.	Latch Output
		Latched Mode:- In this mode once the timing cycle is over, User must issue a Reset signal from front key or Ext. Reset input to Re-Start the timer.	
		Auto Reset Mode:- In this mode once the timing cycle is over, Next start input through External Input signal will Re-Start the timer. No need to issue Reset Signal.	
Front Reset		Front Reset :- This parameter allows the user to Enable or Disable front Reset function. This feature prevents un-authorized attempt to Reset the Timer during Run mode.	Yes
		Yes:- The Timer can be reset through front panel.	
		No:- The Timer can not be reset through front panel.	

PARAMETER	DISPLAY	DESCRIPTION	DEFAULT
Output 2 Function		Output 2 Function:-	Auxiliary
		Auxiliary Contact:- The OP2 will operate simultaneously with OP1. This function is required when user needs 2 changeover Relay contacts.	
		End of Cycle Output:- The OP2 is energized for RT period programmed by user via push wheel switches in Sec.	
		Off:- The OP2 is not used & can be kept reserve for future use.	



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