

Operating Instruction

PRESET TIMER

XTM 992/772/442

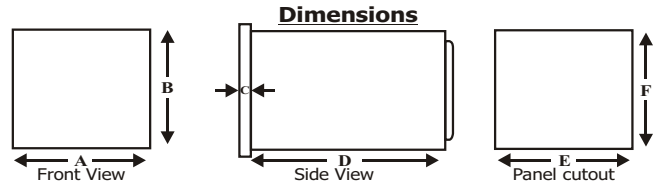
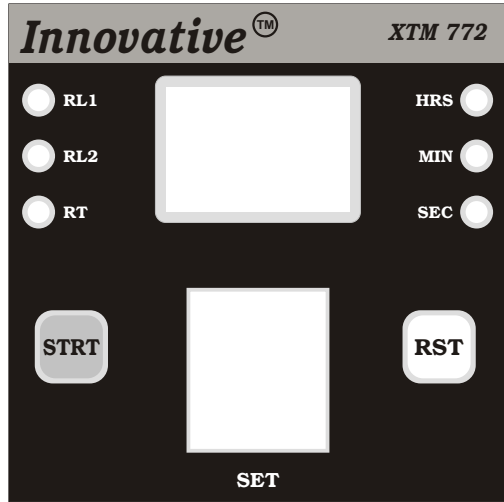


TABLE 2

MODEL	DIMENSION (in mm)					
	A	B	C	D	E	F
XTM 992	96	96	10	95	92	92
XTM 772	72	72	10	112	68	68
XTM 442	48	48	05	100	45	45

Terminal Details

Terminal No	Terminal Description		
	XTM 992	XTM 772	XTM 442
1	+12V	+12V	+12V
2	I/P1	I/P1	I/P1
3	I/P2	I/P2	I/P2
4	GND	GND	GND
5	RST	RST	NC2
6	+12V	HOLD	L
7	HOLD	NO1	N
8	AC1	C1	NO1
9	AC2	NC1	C1
10	L	NO2	NC1
11	N	C2	NO2
12	E	NC2	C2
13	NO1	L	RST
14	C1	N	HOLD
15	NC1	AC1	-
16	NC2	AC2	-
17	C2	-	-
18	NC2	-	-

Specifications

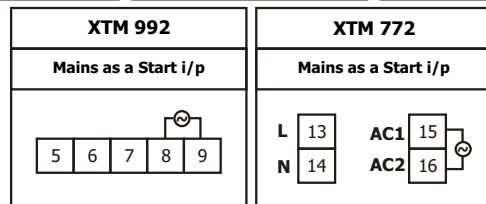
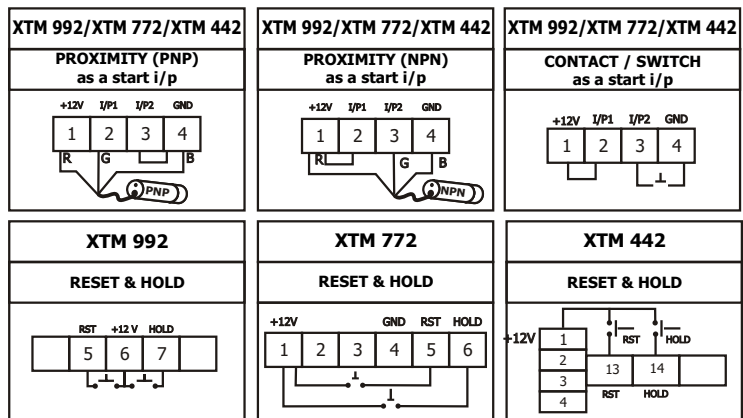
- Display : 2 digit, height 0.56"
2 digit, height 0.39"(for XTM 442)
- LED Indications : a] Time unit (Hrs./Min./Sec.)
b] Relay Status (RL1/RL2)
c] Auto Reset time(RT)
- No. of Set points : 1
- Time settings : Through pushwheel Switches
- Control Inputs : a] Start b] Reset c] Hold
- Memory : Non-Volatile (E²Prom)
- Memory retention : Up to 10 years
- 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

- Range : See table 1
- Count direction : Up / Down
- Mode : On delay / Off delay
- Timer Start : a] Power on start
b] Front Start
c] Remote start (Edge triggered)
d] Remote start (Edge + Level)
e] 230 VAC Pulse (Optional)
- Timer Function : Auto Reset / Latched output
- Front Reset : Enable / Disable
- Hold I/P : Enable / Disable
- Memory Backup : Enable / Disable
- Output 2 function : a] Auxiliary Contact
b] Instant Contact
c] Off
d] End of cycle

TABLE 1: RANGES & RESOLUTION

	Range	Resolution		Range	Resolution
1	9.9 Sec	0.1 Sec	4	99 min	1 min
2	99 Sec	1 Sec	5	9.9 Hrs	0.1 Hrs
3	9.9 min	0.1 min	6	99 Hrs	1 Hrs



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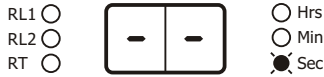
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E-mail : ims_inst@vsnl.net

Configuration Scheme

1. To Enter Configurations mode Hold down "STRT" key for 6 Sec. at power on
2. Press "STRT" Key to jump to next parameter
3. Press "RST" Key to Scroll between Parameter options

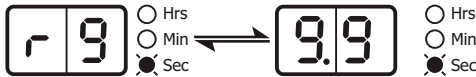
Hold down "STRT" Key at power on for 6 Sec.

"--" message will flash on display for 4 Sec. It will remain steady for 2 Sec. Now unit will allow the user to configure different parameters with options as described below.



Parameter 1 : Range

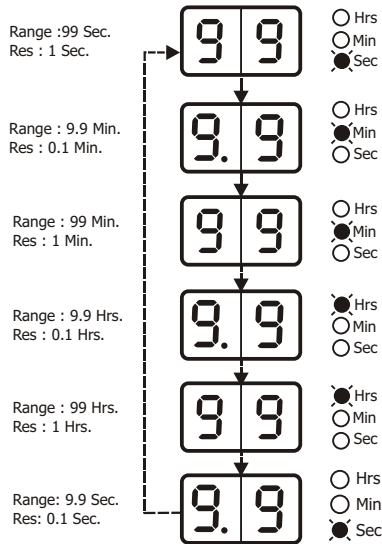
Display will toggle between "r 9" and last Range Selected at every 1 Sec. interval with corresponding time unit LED Blinking



Press "RST" Key to change range
OR

Press "STRT" key to move on to next parameter

Press "RST" key to scroll between parameter options



To select required option press "STRT" key
Now display will move on to next parameter

Parameter 2 : Direction

Display will toggle between "d r" and last direction selected at every 1 Sec interval



Press "RST" Key to change direction
OR

Press "STRT" key to move on to next parameter

Press "RST" key to scroll between parameter options



To Select required option press "STRT" key
Now display will move on to next parameter

Parameter 3 : Delay mode

Display will toggle between "F n" and last delay mode selected at every 1 sec interval



Press "RST" key to change delay mode
OR

Press "STRT" key to move on to next parameter

Press "RST" key to scroll between parameter options



To Select required option press "STRT" key
Now display will move on to next parameter

Parameter 4 : Start input

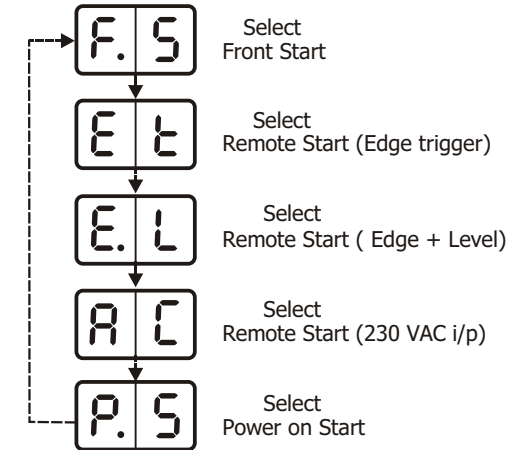
Display will toggle between "t.5" and last start I/P Selected at every 1 Sec interval



Press "RST" Key to change timer start Mode
OR

Press "STRT" Key to move on to next parameter

Press "RST" key to scroll between parameter options



To select required option press "STRT" key
Now display will move on to next parameter

Parameter 5 : Timer mode

Display will toggle between "t n" and last mode selected at every 1 sec interval



Press "RST" key to change this parameter
OR

Press "STRT" key move on to next parameter

Press "RST" key to scroll between parameter options



To select required option press "STRT" key
Now display will move on to next parameter

Note : Parameter 6 available only if Auto reset mode with power on start is selected

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Parameter 6 : Set Auto reset time

Display will toggle between "r t" and last Auto reset time set at every 1 sec interval.



Press "RST" key to change Auto reset time
OR
Press "STRT" key to move on to next parameter

Press "RST" key, the display will stop flashing.

Now set auto reset time Via pushwheels. The display corresponds to the respective Push wheels.

To store Auto reset time press "STRT" key
Now display will move on to next parameter

Parameter 7 : Front Reset

Display will toggle between "F r" and last Front reset mode selected at every 1 Sec. Interval



Press "RST" key to change front Reset mode
OR
Press "STRT" key to move on to next parameter

Press "RST" key to scroll between parameter options



To select required option press "STRT" key
Now display will move on to next parameter

Parameter 8 : Hold input

Display toggles between "H L" and last Hold mode Selected at every 1 sec. interval



Press "RST" Key to change Hold mode
OR
Press "STRT" key to move on to next parameter

Press "RST" key to scroll between parameter options



To select required option press "STRT" key
Now display will move on to next parameter

★ **Parameter 9 : Memory Backup**

Display toggles between "n b" and last back up mode selected at every 1 sec. interval



Press "RST" key to change memory backup mode
OR
Press "STRT" key to move on to next parameter

Press "RST" key to scroll between parameter options



To select required option press "STRT" key
Now display will move on to next parameter

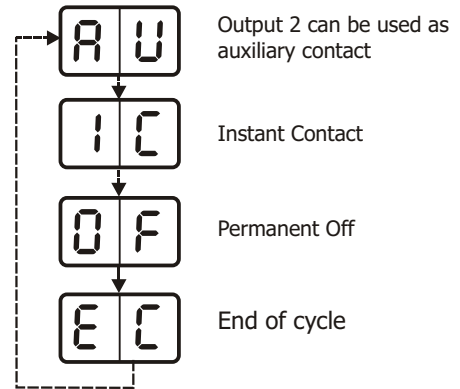
★ **Parameter 10 : Output 2 configuration**

Display will toggle between "0 2" and previously selected 2nd relay function at every 1 sec. interval



Press "RST" key to change output 2 configuration
OR
Press "STRT" Key to move on to next parameter

Press "RST" key to scroll between parameter options



To select required option press "STRT" key
Now display will move on to next parameter

Note : Parameter 11 is available only if output 2 is configured for end of cycle. Otherwise Unit will come out of configuration.

★ **Parameter 11 : End of cycle time**

Display will toggle between "r t" and last end of cycle time selected at 1 sec. Interval.



Press "RST" key to change End of cycle time
OR
Press "STRT" key to Exit configuration

Press "RST" key, the display will stop flashing.

Now set End of cycle time Via pushwheels. The display corresponds to the respective Push wheels.

To store End of cycle time press "STRT" key
Now display will Exit configuration.

Resetting XTM-992/772/442

- a] By Front Key (If Enabled - parameter 7)
- b] XTM-992/772/442 can be reset from a remote push button (see. wiring diagram)

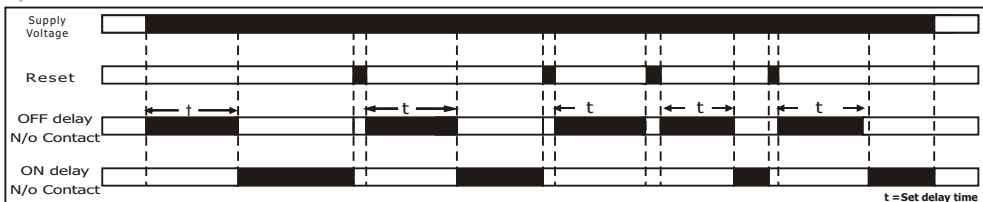
★ **Note: Parameter 9 to 11 are available on request only**

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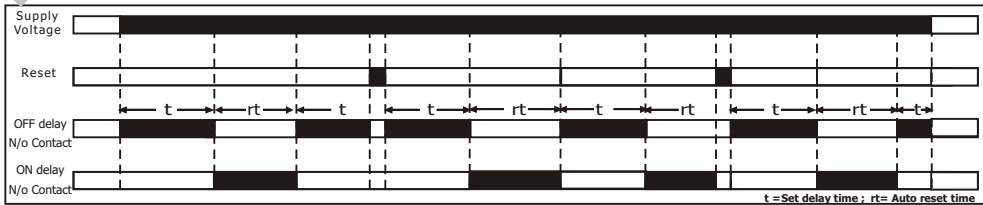
Function / Timing Waveforms for O/P1

1 * START I/P: Power ON * MODE: LATCHED O/P * FUNCTION : ON DELAY/OFF DELAY



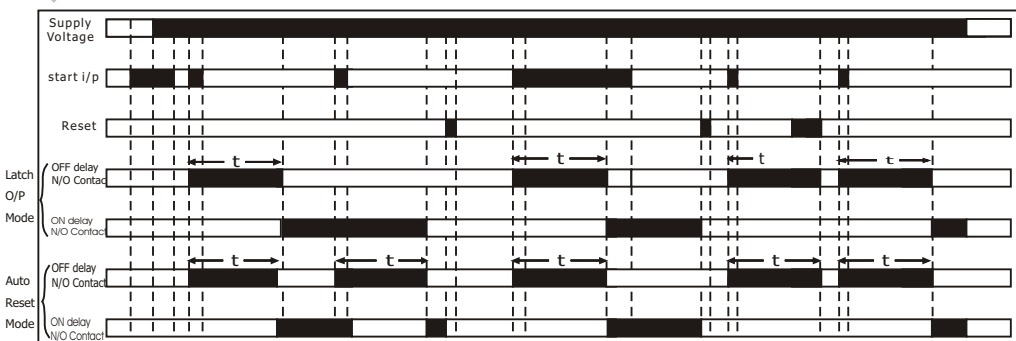
When power is applied the timing (t) begins. The O/P1 remains de-energised (ON delay) or energised (OFF delay). At the completion of timing (t) the O/P1 changes its state and remains in that state until resetted or power is interrupted.

2 * START I/P: Power ON * MODE: AUTO RESET * FUNCTION : ON DELAY/OFF DELAY



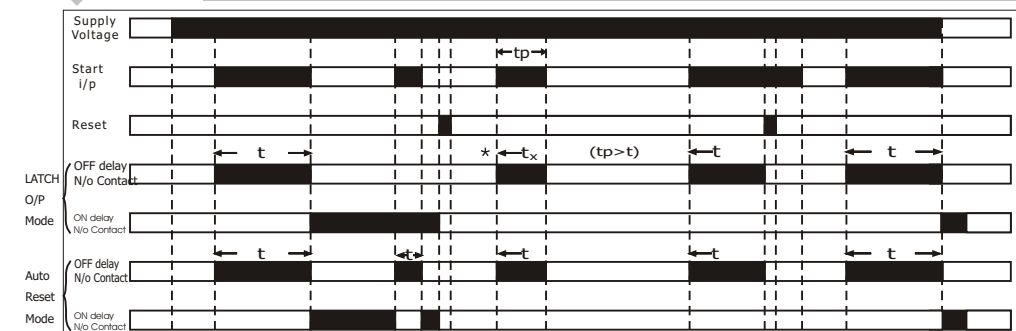
When power is applied the timing (t) begins. The O/P1 remains de-energised (ON delay) or energised (OFF delay). At the completion of timing (t) the O/P1 changes its state and Auto- reset time starts. After completion of auto-reset time, the O/P1 retains its previous state and cycle is repeated.

3 * START I/P: FRONT START: /EDGE TRIGGERED/REMOTE AC I/P * MODE : LATCHED O/P/ AUTO RESET * FUNCTION : ON DELAY / OFF DELAY



When power is applied the O/P1 remains De-energised. Upon receipt of start i/p, the O/P1 energises (Off delay) or de-energises (On delay). After completion of timing (t) the O/P1 reverts its state. During timing, start i/p will not have any effect on timing. In latched O/P mode, Once the cycle is over the new timing cycle will not be started until the unit is reset while in Auto reset mode the timer will automatically reset after timing is over. Application of start i/p itself will initiate cycle.

4 * START I/P: Edge + Level trigger * Mode: LATCH O/P/ AUTO RESET * FUNCTION : ON DELAY/OFF DELAY

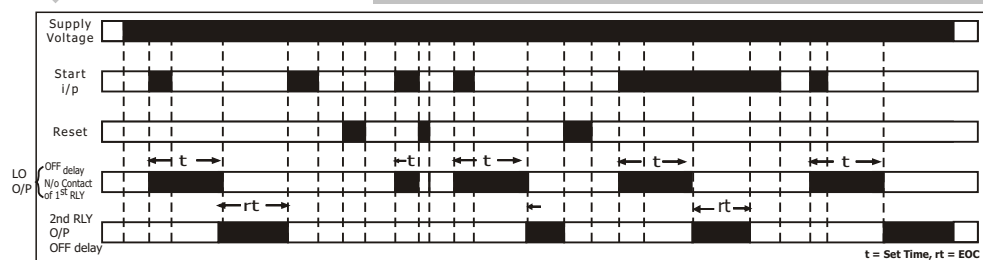


When power is applied the O/P1 remains de-energised upon receipt of start i/p (Edge) the O/P1 energises (OFF delay) or de-energises (on delay). During timing (t) cycle Start i/p must remain high otherwise the timer will reset. The timing will start again upon the receipt of next start i/p (Edge) only. (Auto reset mode)

* Timing cycle aborted since $t_p < t$

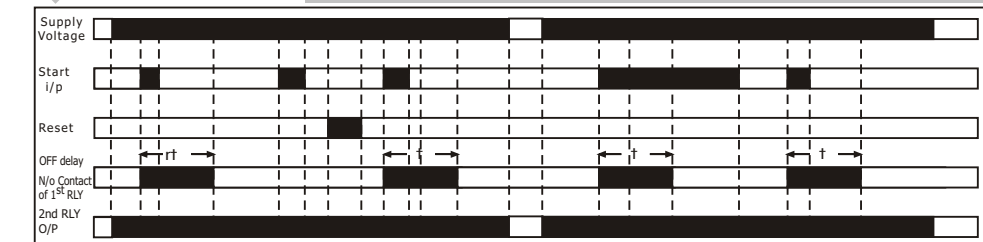
Function / Timing Waveforms for O/P2

5 * START I/P: ANY * MODE : ANY FUNCTION : ANY * OP2:EOC



When power is applied, the O/P2 de-energised. After timing (t) is over the O/P2 energises. It will remain energised for pre-defined "rt" time. The O/P2 will de-energise either after completion of "rt" time OR timer is reset OR Interruption of power.

6 * START I/P: ANY * MODE : ANY FUNCTION : ANY * O/P2: INSTANT CONTACT



When power is applied, the O/P2 energises. It will remain energised as long as input power is ON.

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