EAPL Model ST-10M1 INSTRUCTION MANUAL ST-10M1 SEQUENTIAL TIMER WITH 10 CHANNELS www.eaplindia.com ❖ DIMENSION 200.0 45.0 30.0 SEQUENTIAL TIMER **❖ FRONT VIEW**

ST - 10M1 SEQUENTIAL TIMER

ELECTRONIC AUTOMATION PVT. LTD.

FUNCTION

On power application and shorting of S1 & S2 terminals, the timing sequence of the 1st channel is initiated by switching On RLY0 and ontime starts. After completion of ontime of RLY0 offtime starts. After completion of the offtime of RLY0, RLY1 comes ON and ontime starts followed by offtime this cycle continues for rest of the sequences.

A1.A2: Source

S1-S2: Start signal for a minimum of 150mS.

C1-C2 : SHORT – Single cycle operation(i.e timer stops at the end of one cycle)

OPEN – Cyclic operation (i.e. timer continues to operate).

O1-O2: Cycle Complete Output. This output is available after completion of 1 cycle in single cycle operation mode (C1-C2 shorted).

I1-I2 : Time Pause Input. By shorting these terminals timing is temporarily stopped and relay status maintained, again by opening timing continues.

COPY: SHORT – First channel program shall be copied to all 10 channels during program mode.

OPEN – Individual channel shall be programmed with different values.

HOLD MODE: Continue the timing after resumption of interrupted power.

RESTART MODE: After the resumption of interrupted power operation starts from the sequence 0 or waits for the start signal if C1–C2 is shorted.

Programming Instruction:

Timing Example:-

CHNL 3 : ONTIME 39.50Min OFFTIME 45.30Sec

- Slide RUN/PROG switch to PROG mode; Sequence display shows "0",ON LED glows, Previously programmed timing & range is displayed.
- Press "SEQUENCE" button till display shows '3'.

ON TIME: -

- > Press "RANGE" button till "MIN SEC" LED glows.
- > Press "SELECT" button, MSD starts flashing.
- Press "ADVANCE" till display shows '3', press "SELECT" again; 2nd digit starts flashing.
- > Press "ADVANCE" till display shows 9.
- > Press "SELECT" again; 3rd digit starts flashing.
- Press "ADVANCE" till display shows 5.
- > Press "SELECT" again; 4th digit (LSD) starts flashing.
- > Press "ADVANCE" till display shows 0.
- Press "SELECT" again; the SET value is saved in memory depending on the selection of 'COPY' terminals.

OFF TIME:-

- Press ON/OFF switch to select OFF time (OFF LED glows).
- Press "RANGE" button till "SEC SEC" LED glows.
- Press "SELECT" button, MSD starts flashing.
- Press "ADVANCE" till display shows '4'. Press "SELECT" again; 2nd digit starts flashing.
- > Press "ADVANCE" till display shows 5.
- Press "SELECT" again; 3rd digit starts flashing.
- Press "ADVANCE" till display shows 3.
- Press "SELECT" again; 4th digit (LSD) starts flashing 0.
- Press "SELECT" again; the SET value is saved in memory depending on the selection of 'COPY' terminals.

Slide RUN/PROG switch to RUN mode; now the timer is ready for operation. Same procedure shall be followed for different ranges and for different timing requirement.

Copy Channel Programming:

- Short copy terminals.
- > Slide RUN/PROG switch to PROG mode.
- Program the required readings for ON & OFF (1st channel) as per the programming instruction.
- > 1st channel program is copied to all the channels.
- > Slide the RUN/PROG switch back to RUN mode.

	STATUS				
OPERATING CONDITION/MODE	TIMING SEQUENCE	TIMING IN PROGRESS(TIP)		TIMING COMPLETION(TC)	
		RELAY	LED	RELAY	LED
SEQUENCE 0	ON TIME	RLY1 ON	ON	-	OFF
	OFF TIME	RLY1 OFF	OFF	-	OFF
SEQUENCE 1	ON TIME	RLY2 ON	ON	-	OFF
	OFF TIME	RLY2 OFF	OFF	-	OFF
SEQUENCE 2	ON TIME	RLY3 ON	ON	-	OFF
	OFF TIME	RLY3 OFF	OFF	-	OFF
SEQUENCE 3 & so on	ON TIME	RLY4 ON	ON	-	OFF
	OFF TIME	RLY4 OFF	OFF	-	OFF

CREATED ON: May 20, 2014

1) Cascading of two Sequential timers

EAPL Sequential timers with O1- O2 & S1- S2 Fecility can be cascaded to get more no of channels.

Single cycle operation

Connect O1 of the First timer to S1 of Second timer & O2 of the first timer to S2 of Second timer.

C1-C2 of both timers shall be shorted for Single operation. S1-S2 of first timer shall be Shorted manually to initiate the Function. Refer: Page No:04 of 04

HINTS ON CORRECT USAGE

- Use proper gauge wires for connections.
- Ensure all terminals are tightly screwed.
- Source Voltage should not exceed specified limits. It will damage the unit beyond repair.

CAUTION

Shorting of S1-S2 shall be potential free; applying power to these terminals will damage the timer permanently.

DISPOSITION

Once the product life is over, you may send back the unit to EAPL for disposition.

TROUBLE ANALYSIS

- Timing not initiated.
- S1- S2 start signal shall be applied.

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CREATED ON: May 20, 2014

DOC NO.: OD RS YN 19001 0 Dtd: 20/05/2014

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