Multi-Cycle/ Sequential Timer

Model : MCT

User Manual

1. INTRODUCTION

It is a programmable timer where desired multiple cyclic patterns can be achieved. This timer has 10 programmable slots (time ranges). Each slot can be programmed from 0:01 – 9:59 (Hours: Minutes). It has the 3 modes of operation. ON mode, OFF mode, CYCLIC mode.

2. DESCRIPTION

- **Power ON/OFF switch:** This switch is provided at the right lower corner to switch ON/OFF the controller unit.
- **POWER LED:** It indicates the power supply to the unit.
- **RELAY1 LED:** glows when relay 1 in ON condition.
- **RELAY2 LED:** glows when relay 2 in ON condition
- **Seven Segment Display :** Displays settings/status of the timer.
- **SET key:** It is used for entering the menu and to save the settings.
- **NEXT key:** It is used for moving to the NEXT options like Menu, Successive Locations.
- **INC key:** Used to increment value from 0 to 9.
- **Modes:** Has 3 modes of operation – ON mode, OFF mode and Cyclic mode.

ON mode: This is achieved when the first cycle alone is programmed for the desired hours and minutes to switch ON the device. The remaining 9 cycles will not be programmed and is kept zero. The device connected to this pattern will be ON for the programmed Hours and Minutes and then gets switched off.

OFF mode: This is achieved when the first cycle alone is programmed for the desired hours and minutes to keep the device in OFF condition and then continued ON. The remaining 9 cycles will not be programmed and is kept zero. The device connected to this pattern will be OFF for the programmed Hours and Minutes and then gets switched ON continuously.

CYCLIC mode: Here 2 or more than 2 cycles are programmed for the desired Hours:Minutes. The programmed cycles will run in its step by step cyclic pattern in a sequential manner. The device connected to this pattern will be ON for the programmed Hours:Minutes and then gets switched OFF for the programmed Hours:Minutes. Desired time can be fixed in each cycles. (No. of cycles can be 2 or more as per requirement.) The device can be ON continuously for this pattern of function.

3. TOOLS REQUIRED

- Multistrand power cable
- Insulation tape
- Wooden Gattas
- Screws for mounting unit on wall
- Line tester
- Wire stripper
- Simple hammer
- Drill gun

4. INSTALLATION PROCEDURE

Caution: Switch off the main power while doing the Power Connection steps.

Step 1: Wall mount the timer nearby the switch of electrical device which requires timer operation. Two loads can be connected to one timer.

Step 2: As per the model purchased, check the label and connect AC supply 230V to red and black wire of timer refer figure 1.

Step 3: Connect blue pair wire to the switch/MCB of the load in parallel as shown in figure1.

Note: In case of doubts please call 044 - 43180017 or What's App 9940594413 from Monday to Saturday 10 am to 6 pm.
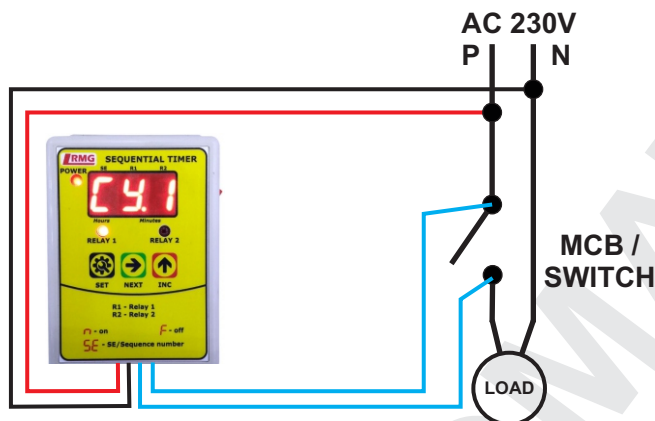

Figure1: 1Φ SWITCH/MCB

5. OPERATING PROCEDURE

- Switch ON the device using the power ON/OFF switch. POWER LED will glow. There is a power ON delay of 6 seconds.
- Using SET, NEXT and INC keys program the timer depending on your requirement. Refer **Programming methods** for more programming.
- By pressing **NEXT** and **INC** keys together we can start timer operation.
- Depending upon the program, Timer will ON/OFF the devices connected to it. RELAY 1 LED will glow when load connected to Relay 1 is ON. RELAY 2 LED will glow when load connected to Relay 2 is ON.
- Timer will show current running cycle number and time elapsed in its display, when timer is working.
- The timer stores the current settings in non-volatile EEPROM memory, so no need to program again. Also stores the running time in EEPROM to continue the remaining time once power resume.

6. TROUBLE SHOOTING METHODS

Sl. No.	Error	Solutions
1	Device dead / Not Powered ON	a. Check the power connection wires for loose contacts. b. If problem continues, contact RMG Automation for support
2	Load connected is not switching ON	a. Check whether the connections are given properly. b. If connections are okay and still issue persist, contact RMG Automation for support

5. PROGRAMMING METHODS

SE — Sequence/cycle number
R1 — Relay 1 status
R2 — Relay 2 status

SE R1 R2

`0Fn`

Hours Minutes

F - off status

n - on status

SE R1 R2

`0.00`

Hours Minutes

→ Minutes
→ Hours

START

`rn9` **POWER ON DELAY**

SET

`0FF`

→ **INC** → `0Fn` → **INC** → `0nF` → **INC** → `0nn`

→ **SET** → SEGMENT BLINKS → **INC** → SET THE VALUE →
→ **NEXT** → MOVE TO NEXT SEGMENT → → **SET**

TIMER OPERATION STARTS, DISPLAYS CURRENT RUNNING CYCLE AND TIME

PRESS NEXT & INC KEYS TOGETHER TO START TIMER → `CY0`

NEXT

`1.FF`

→ **INC** → `0Fn` → **INC** → `0nF` → **INC** → `0nn`

→ **SET** → SEGMENT BLINKS → **INC** → SET THE VALUE →
→ **NEXT** → MOVE TO NEXT SEGMENT → → **SET**

TIMER OPERATION STARTS, DISPLAYS CURRENT RUNNING CYCLE AND TIME

PRESS NEXT & INC KEYS TOGETHER TO START TIMER → `CY1`

NEXT

NEXT

`9FF`

→ **INC** → `0Fn` → **INC** → `0nF` → **INC** → `0nn`

→ **SET** → SEGMENT BLINKS → **INC** → SET THE VALUE →
→ **NEXT** → MOVE TO NEXT SEGMENT → → **SET**

TIMER OPERATION STARTS, DISPLAYS CURRENT RUNNING CYCLE AND TIME

PRESS NEXT & INC KEYS TOGETHER TO START TIMER → `CY9`

NEXT