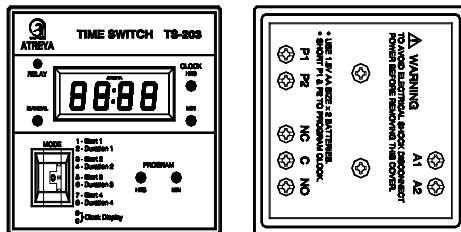
	OPERATING INSTRUCTIONS Model : TS 203	OPI No. : OPI/019
		PAGE : 01 of 03
		DATE : 05/06/2002

Front panel layout: Rear terminal layout Terminal Details



A1 and A2 : Power
NC : Normally closed
contact
C : Common
NO : Normally open
circuit
P1 and P2 : Clock set
Open - Disable
Short - Enable

TS 203 is a 4 program time switch meant for switching any load ON and OFF automatically with respect to real time clock. It's simple programming makes it user friendly for a host of real time clock based application.

How to Set clock:

- Short terminals P1 and P2 at the rear using a piece of wire. The shorting should be potential free.
- Connect mains to terminals A1 and A2 on the rear. The LCD displays the real time clock in 24 Hrs format with dots (.) blinking in between Hrs. and Mins.
- To alter the Hrs. press "Hrs." button on the front panel. The display rolls between 00 to 23.
- To alter the Min. press "Min." button on the front panel. The display rolls between 00 to 59.
- After adjusting the real time clock, disconnect mains and remove the shorting across P1 and P2. Removal of shorting across P1 and P2 disables the clock setting button. This facility will prevent tampering of clock.

Note:

1. In case of power failure, the real time clock display goes Off. However, the clock continues to run with the battery back up provided in the unit. The display comes ON after a small delay when the power is resumed.
2. TS 203 allows the user to program 4 switchings in span of 24 Hrs. By selecting the mode switch, position 1 through 8, the start time and duration time of each program can be set.

Mode switch position

Function

1	To set start time of program 1
2	To set duration time of program 1
3	To set start time of program 2
4	To set duration time of program 2
5	To set start time of program 3
6	To set duration time of program 3
7	To set start time of program 4
8	To set duration time of program 4
9 } 0 }	To display real time clock (Mode switch in 0 or 9)

How to program:

- Keep the mode switch in the required position. Press program "Hrs" or "Min" button to program required timing.
- Repeat the previous step for remaining settings.
- After setting 4 programs, the mode switch must be kept either in position 0 or 9 to save time settings, as well as to display real time clock.

Manual Over ride facility:

- TS 203 has been provided with manual over ride facility. By pressing the manual button provided on the front panel, the user can change the output relay status (ON to OFF and vice versa) thereby over riding the actual program.
- However, this facility is conditional and gets terminated when any of the following occurs or attempted.

- a)Power failure
- b)Altering and clock
- c)Completion of the originally intended program
- d)Changes in program settings.

Note: The manual over ride status is indicated by flashing of the real time clock.

Battery Installation:

- Remove the rear terminal cover by loosening the two star head screws.
- Install 2 x 1.5 V AA size batteries as per polarity marked on the battery holder.
- While fixing the cover back, care should be taken to ensure correct orientation of the cover with respect to terminal markings.
- Time switch will not come ON if supply is connected without the back cover fixed.

Caution:

- 1)DO NOT apply potential to terminals P1 and P2 as this will damage the time switch permanently. Shorting of P1 and P2 should be potential free and should be with mains disconnected.
- 2)DO NOT reverse the battery polarity as this will damage the time switch permanently.
- 3)DO NOT source the output relay by tapping the line from A1 or A2 terminals as this may lead to malfunction of the time switch. Use Separate wires for sourcing the time switch and control relay.