

F014 MICRO BASED RUNNING LIGHT CONTROLLER

Micro Based Running Light Controller kit will attract attention by way of running light effect using 8 bulbs. An ideal project for use during festival lighting, auspicious occasions at home or social gathering events.

- Microcontroller based design for greater flexibility and ease of control
- Triac based switching of loads connected to the circuit
- Industry standard isolation with the help of Opto enabled Triac Control
- Fuse protection for AC output
- Simple and easy to use 3 tactile switch enabled control of the kit
- PBT type connector for connecting supply (AC/DC) and TRIAC output on the PCB
- Onboard regulator for regulated supply to the kit
- Diode protection for reverse polarity connection of DC supply to the PCB
- Four mounting holes of 3.2 mm each
- PCB dimensions 86 mm x 173 mm

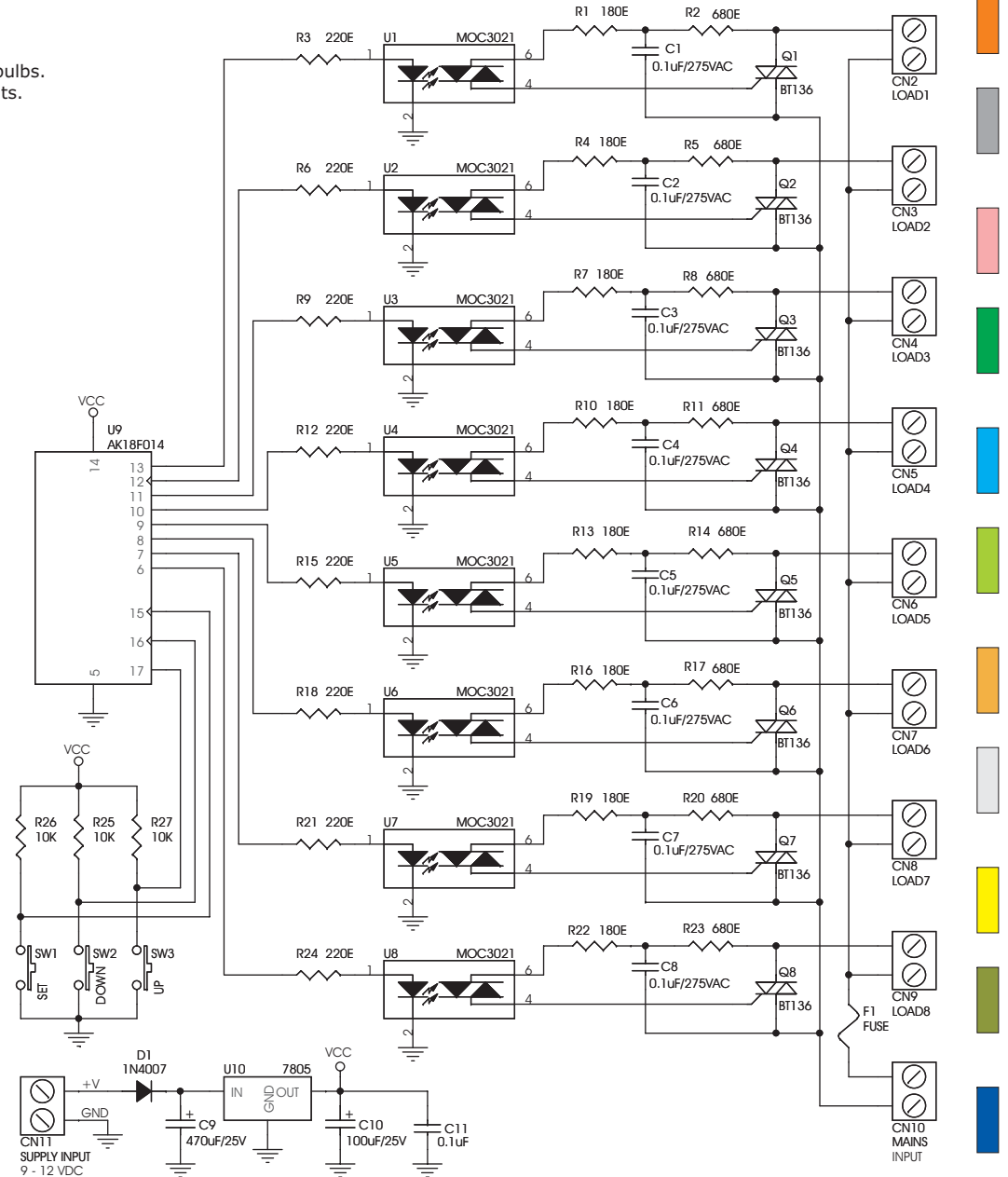


This Kit provides some lighting effect by the blinking pattern of the bulbs connected at its output. Up to 8 Bulbs can be connected in between connector CN2 to CN9 and AC power to control them should be connected at Connector CN10. DC Power should be applied at Connector CN11 in accordance with the polarity marked on this connector. Care should be taken while using this as it contains Main Power on the board.

We can change the Blink pattern by the press of the SET switch and change the blinking speed by the press of the UP and DOWN keys on the PCB. Fuse F1 will protect the Kit from any possible short circuit and excess current flowing through it.

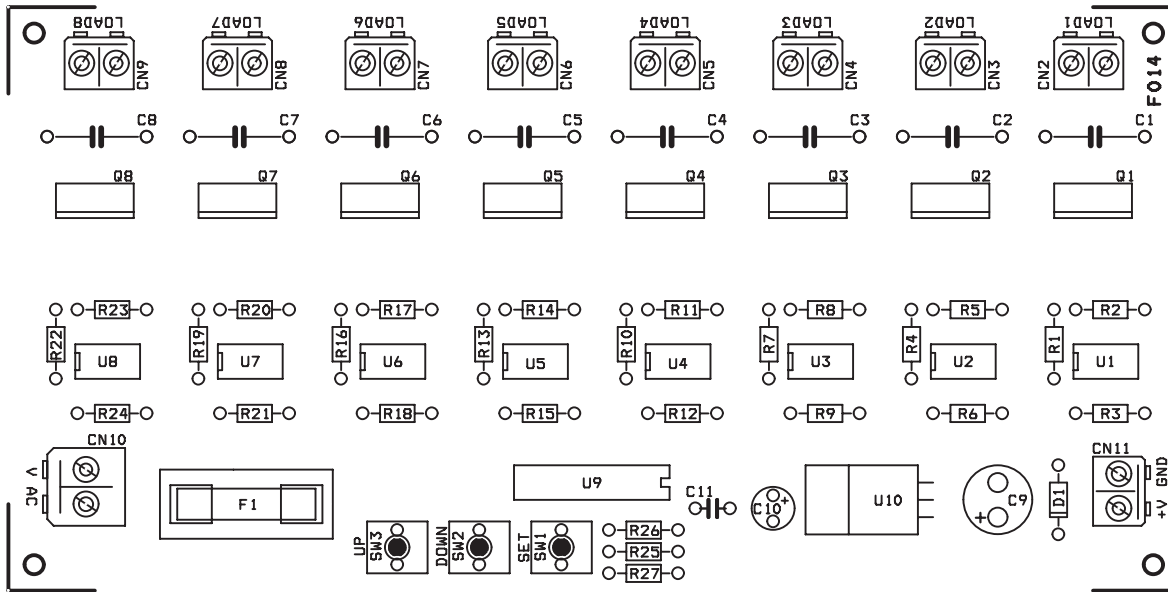
Please refer to the schematic diagram for the configuration of this board.

The kit includes all components required for the project. Please check the components supplied to you as per the BOM "Bill of Material" listed in this document. Component legends and In/Out port pins are clearly printed on the PCB.



R2,R5,R8,R11,R14,R17,R20,R23 : 680E for 230 VAC
R1,R4,R7,R10,R13,R16,R19,R22 : 1E for 110 VAC





SR.	QTY.	REF.	DESCRIPTION
1	9	CN2,CN3,CN4,CN5,CN6,CN7,CN8,CN9,CN10	2 PIN PBT CONNECTOR
2	1	CN11	2 PIN PBT CONNECTOR
3	8	C1,C2,C3,C4,C5,C6,C7,C8	0.1uF/275VAC
4	1	C9	470uF/25V
5	1	C10	100uF/25V
6	1	C11	0.1uF
7	1	D1	1N4007
8	1	F1	FUSE HOLDER WITH 10A FUSE
9	8	Q1,Q2,Q3,Q4,Q5,Q6,Q7,Q8	BT136
10	8	R1,R4,R7,R10,R13,R16,R19,R22	180E
11	8	R2,R5,R8,R11,R14,R17,R20,R23	680E / 1E
12	8	R3,R6,R9,R12,R15,R18,R21,R24	220E
13	3	R25,R26,R27	10K
14	3	SW1,SW2,SW3	2 PIN TACT SWITCH
15	8	U1,U2,U3,U4,U5,U6,U7,U8	MOC3021
16	1	U9	AK18F014
17	1	U10	7805
18	1	SOCKET	18 PIN DIP IC SOCKET
19	1	SCREW	SC02905
20	1	NUT	NT02900