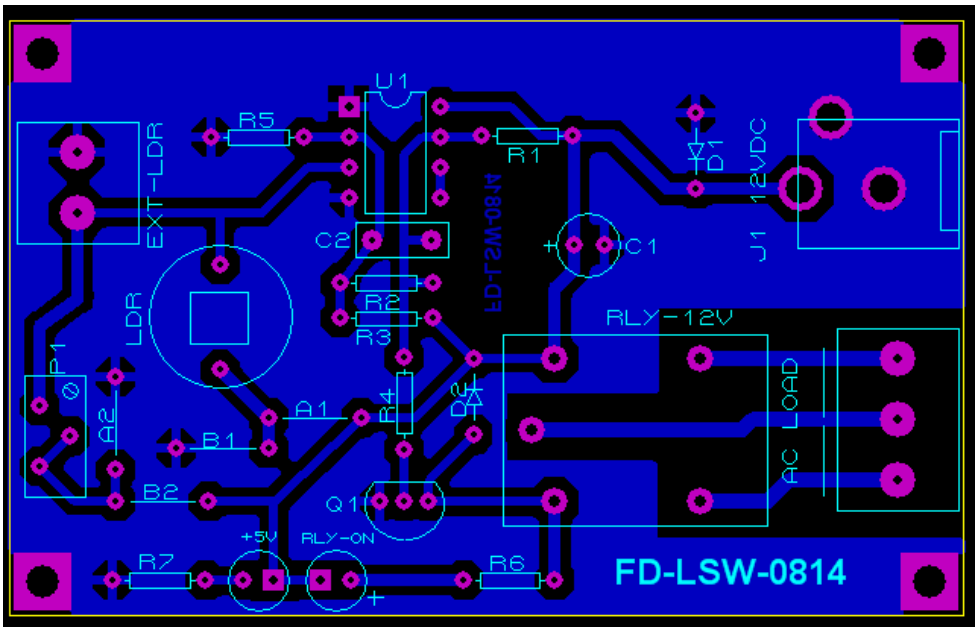
Light Operated Switch: A Simple Light Operated Switch with Relay

Completed Light Switch:

Light Switch PCB TOP SIDE View with Silk:

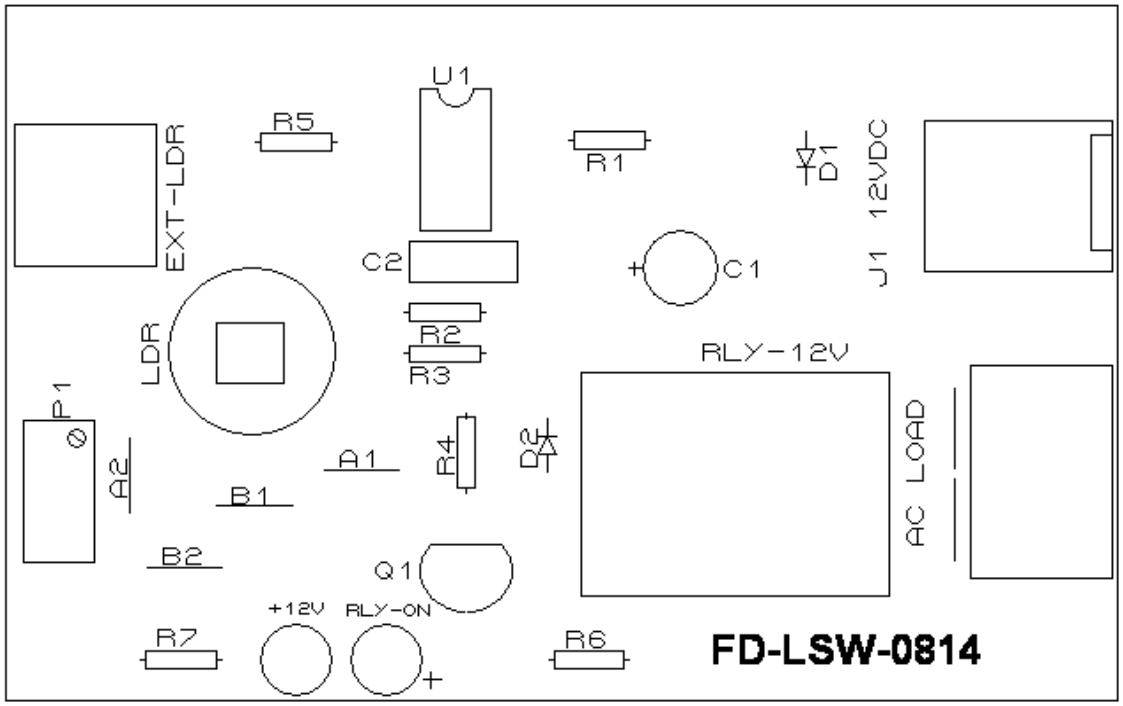


Jumper Settings:
Day Switch: Short B1 and B2
Night Switch: Short A1 and A2

Light Switch Kit Parts List

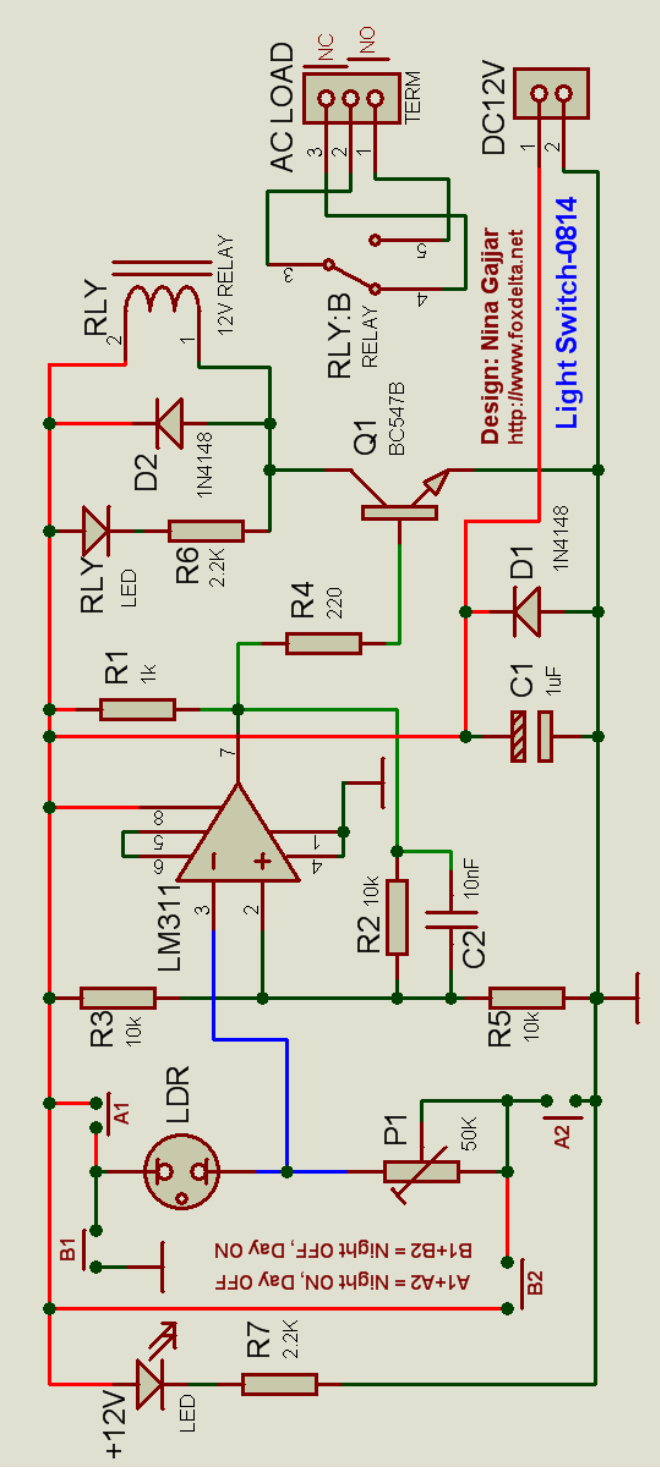
Qty	Check	ID	Part Detail
1		U1	LM311 DIP8
1		IC Socket	8PIN
1		DC Connector	12V DC IN
2		LED	3mm
1		PCB	Lightswitch-0814 Single Sided PCB
2		D1, D2	1N4148 Diode
1		C1	220uF Electro
1		C2	0.1uf Capacitor
1		LDR	LDR (Large or Small- Option)
1		RLY	12V DC Coil Relay
2		Terminal Blocks	3PIN X 1, 2PIN X 1
1		Preset	50K
3		R2, 3, 5	10K 1/4W Resistors 5%
2		R6, R7	2.2k 1/4W Resistors
1		R1	1K

Light Switch PCB SILK:



Silk error: LED with +12V in above picture is marked as +5V on PCB.

Light Switch – 0814 Schematic:



BASICS:

This light control switch may be configured to use as a NIGHT switch or DAY switch.

Set jumpers A/A1 and B/B1 accordingly

Kit is offered with Large LDR to be placed on PCB or small LDR, which can be connected at Terminals marked as "EXT-LCD"

This kit requires that you supply DC 12V thru a wall adapter.

LOAD:

Any AC 110 or 220V load can be connected. It can be as a NO (normally open) or NC (Normally closed)

Load capacity is that of relay used, in this case, its 5A.

Setting-up:

Just turn preset to get required activation of relay for operation.

Nina Gajjar 4th November 2014