SHACKNEWS

HIGHVELD AMATEUR RADIO CLUB

First Quarter 2017

We're on

ZS6HVB
Affiliated to the
SARL

COMMUNICATION IS THE NAME OF THE GAME

The first meeting of 2017 will be held at the home of Berridge & Sandra on the 18th March.

Time 14:00 for 14:30.

Icasa licenses need to be paid by the end of the month. I see amateurs are receiving renewals by e-mail.

A one year licence is R134.00 and a 5 year licence is R559.00

You need to apply in writing specifying the licence you wish to apply for. This must be stated in the subject heading of the relevant email to ICASA. For example, the required number of years licence, your seven digit licence number, and call sign. (e.g. 5 year payment, licence number 544-165-1, ZS6….). Include EFT document, PO receipt etc.

If you do not notify ICASA of the required term of licence, you will receive a one year licence, regardless of the amount paid.

E-mail and advise Dewald at DKuhrau@icasa.org.za of your payment for a five year license

DRIVING

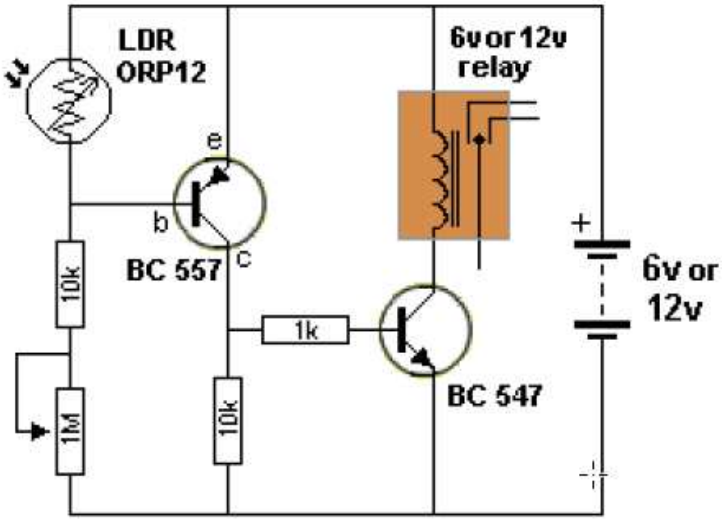
Two elderly women were out driving in a large car - both could barely see over the dashboard. As they were cruising along, they came to a major crossroad. The stoplight was red, but they just went on through.

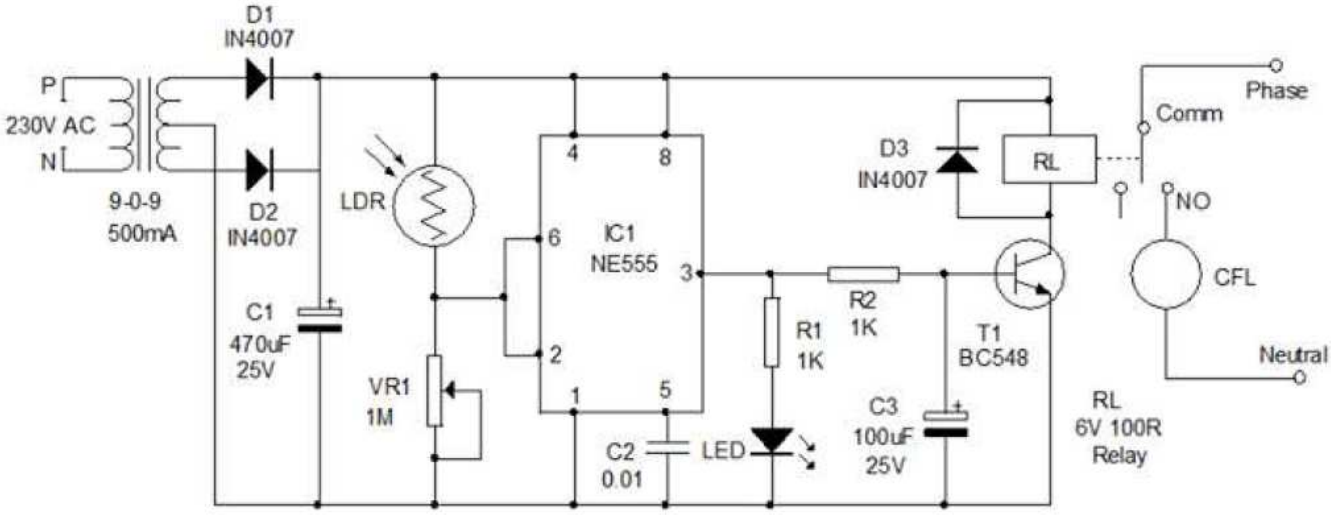
The woman in the passenger seat thought to herself "I must be losing it. I could have sworn we just went through a red light." After a few more minutes, they came to another major junction and the light was red again. Again, they went right through. The woman in the passenger seat was almost sure that the light had been red but was really concerned that she was losing it. She was getting nervous.

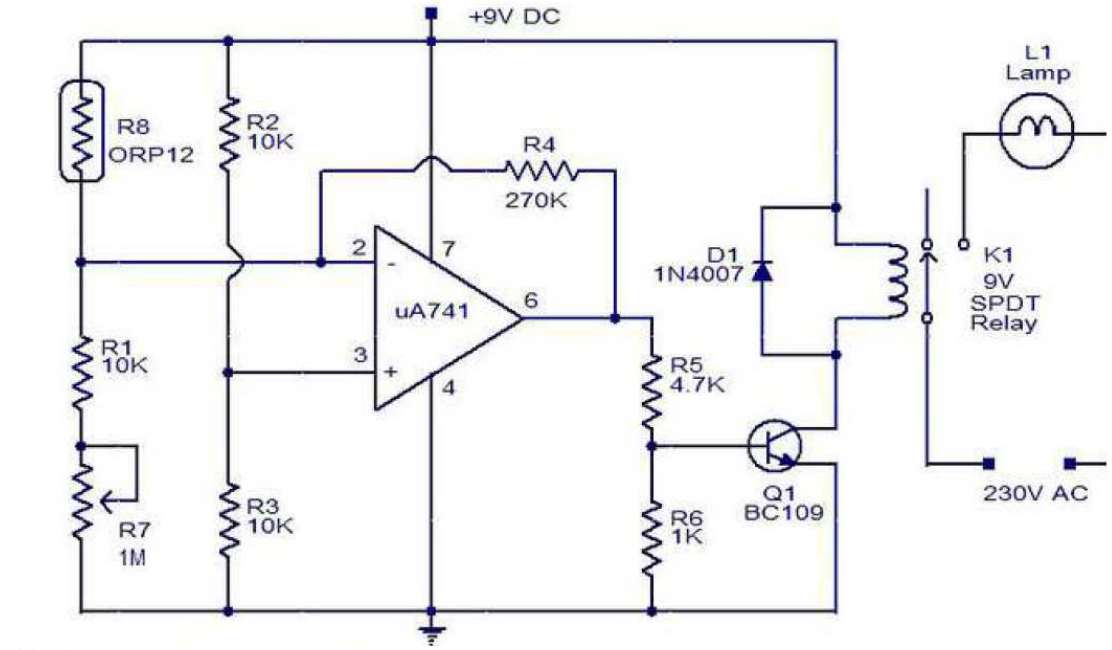
At the next junction, sure enough, the light was red and they went on through. So, she turned to the other woman and said, "Mildred, did you know that we just ran through three red lights in a row? You could have killed us both!"

Day-Night Switch

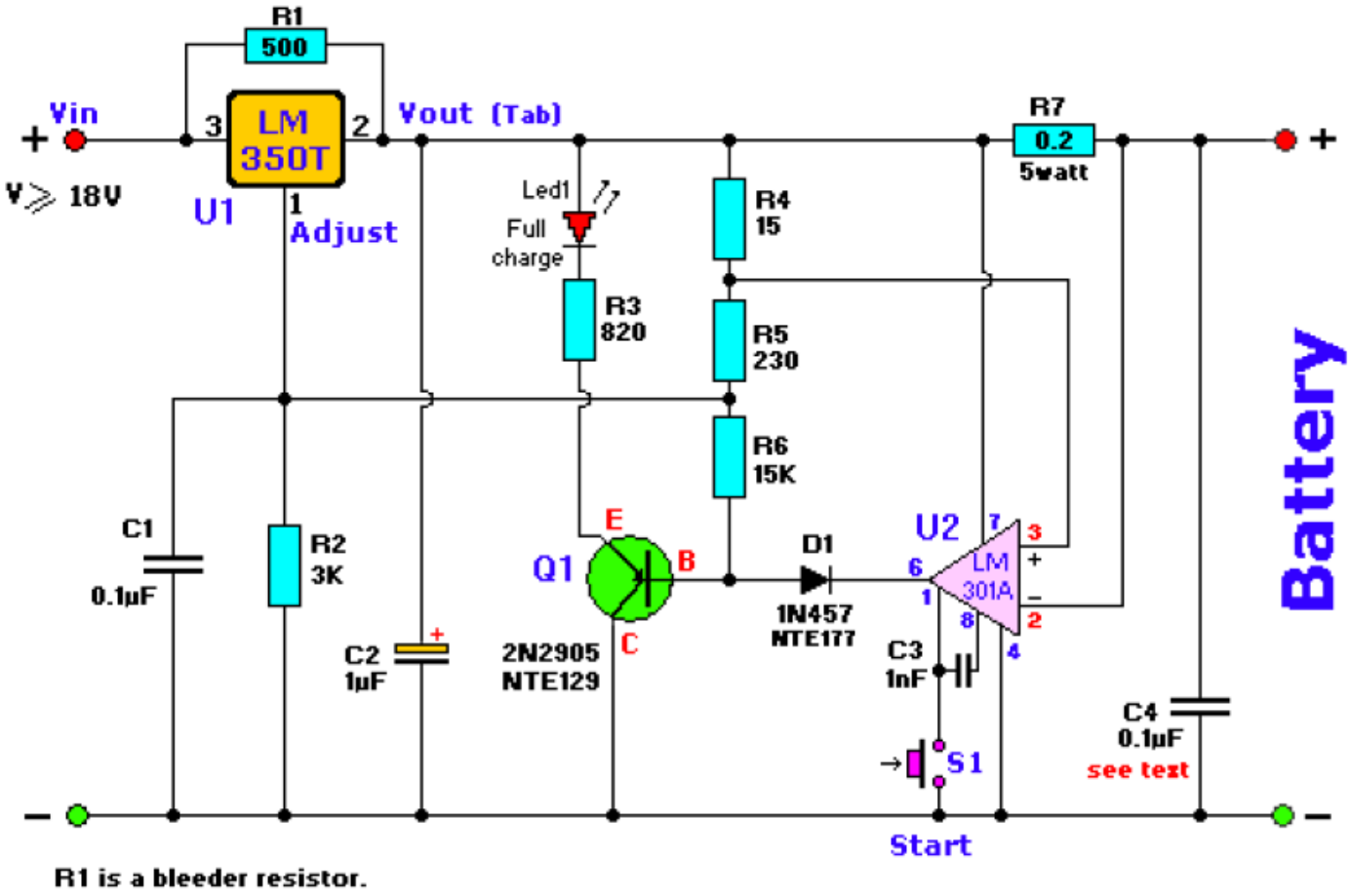
I have found that the bought day-night CFL lights do not last very long so I plan to try one of these circuits







Gel Battery Charger (used in my shack for 12Ah standby battery)



All resistors are carbon, 1/4 watt, 5% tolerance, unless otherwise indicated.

R1 = 500 ohm
R2 = 3K
R3 = 820 ohm
R4 = 15 ohm
R5 = 230 ohm
R6 = 15K
R7 = 0.2 ohm, 5W, WW

C1 = 0.1uF (100nF), ceramic
C2 = 1uF/40 volt
C3 = 1000pF (1nF), ceramic
C4 = 0.1uF, ceramic (see text)
D1 = 1N457 (or equiv.)(used a 1N4007)
Led1 = Red, 5mm, ultra-bright
Q1 = 2N2905, PNP, TO-39 case

U1 = LM350T
U2 = LM301A
S1 = Pushbutton switch (normally-open)

This high-performance circuit first quickly starts (and holds) the charge at 2 amp, but as the voltage rises the current will consequently decrease.
When the current falls below 150mA, the charger automatically switches to a lower 'Float' voltage to prevent overcharging.
At the point that a full charge is reached, Q1 will bias and the LED will light.
The LM301A is a 8-pin OpAmp. Transistor Q1 is a PNP, Silicon, AF-Out type with a TO-39 metal case and can be substituted for a NTE or ECG129. Diode D1, a Si, GP Det. type, can be substituted with a NTE177 or ECG177. The LM350 (U1) needs to be cooled.
The input voltage should equal or about 18volts.
R1's function is to bleed some of the input voltage to the output and vice-versa. A 1N4002 or similar diode can be used also.
R2 and R5 are actually metal-film type resistors. To get the 3K for R2 use two 1K5 (1500 ohm) resistors in series. For R5 use two 470 ohm resistors in parallel. Or whatever combination to get to these values. For R1, 500 ohm, you can use two 1K in parallel or 470 + 33 ohms in series.
R7, the 0.2 ohm resistor, is a 5 watt wire-wound type. Do **not** use the standard carbon type.
C4: This (optional) 0.1uF (100nF) Ceramic capacitor needs to be mounted over the power lines and as close to the LM301 (U2) as possible. It will filter off any possible residue hf ripple, which otherwise may prevent this op-amp from
working properly. Use only if you have problems with the LM301 not switching off. (Cont'd page 4)

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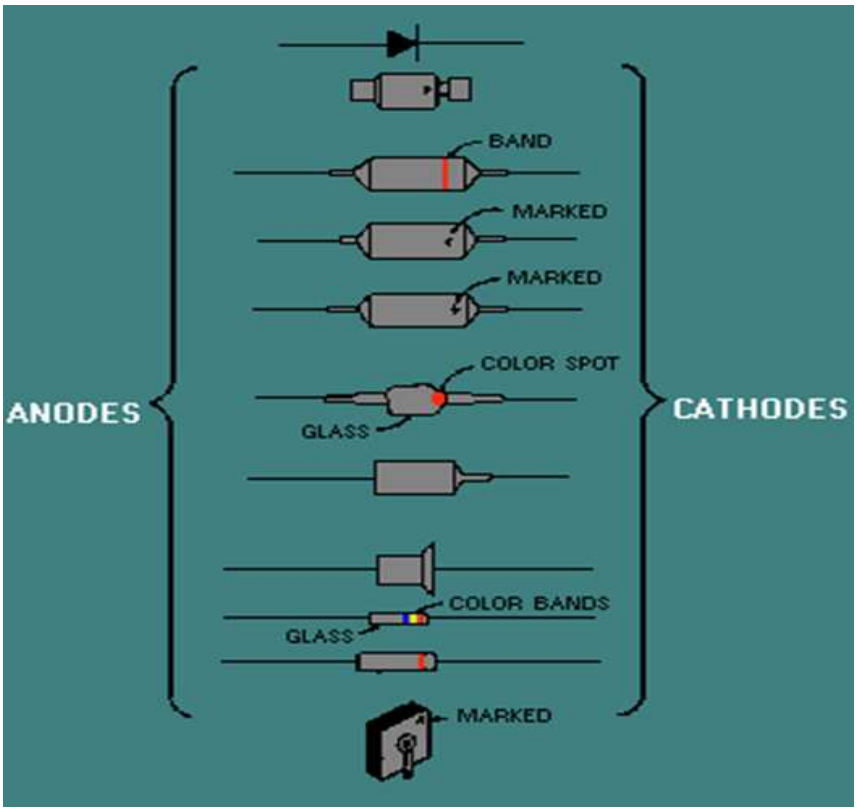
When the start switch (S1) is pushed, the output of the charger goes to 14.5 V. As the batttery approaches full charge, the charging current decreases and the output voltage is reduced form 14.5V to about 12.5V, terminating the charging process. Transistor Q1 then lights the led as a visual indication of a full charge.

Diodes



Club Information

Postal address PO Box 19937 Sunward Park 1470

Website http://www.zs6hvb.za.net

Back Issues of Shacknews available on the club website

e-mail zs6hvb@zs6hvb.za.net

Repeater 145.1875 MHz input - 145.7875 MHZ output

Bulletins Sunday morning - 145.7875 MHz & 7162 KHz @ 08h45.

Monthly meeting venue

Every Third month
On the *3rd Saturday of the month*
at 14:30.

@ various venues

Committee

Chairman	Vacant		
Secretary/Treasurer	Berridge Emmett	ZS6BFL	011-893-1291
Shacknews Editor	Berridge Emmett	ZS6BFL	011-893-1291
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