



SHACKNEWS

HIGHVELD AMATEUR RADIO CLUB

AUGUST/SEPTEMBER 2012

We're on



COMMUNICATION IS THE NAME OF THE GAME

ZS6HVB Meeting There was no meeting during August. There would have been too few members present.

ZS6SSC Social Club The next meeting will take place at Doug & Merle's home on Saturday 15 September. 14:00 for 14:30. **If you cannot attend please inform the hosts. This in regard to catering.**

A BIT OF HUMOUR

Both from pas tissues of Shacknews

A local business was looking for office help. They put a sign in the window saying: "HELP WANTED. Must be able to type, must be good with a computer and must be bilingual. We are an Equal Opportunity Employer."

A short time afterwards, a golden retriever dog trotted up to the window saw the sign and went inside. He looked at the receptionist and wagged his tail, then walked over to the sign, looked at it and whined. Getting the idea, the receptionist got the office manager. The office manager looked at the dog and was surprised, to say the least. However, the dog looked determined, so he led him into the office. Inside, the dog jumped up on the chair and stared at the manager.

The manager said, "I can't hire you. The sign says you have to be able to type."

The dog jumped down, went to the typewriter and proceeded to type out a perfect letter. He took out the page and trotted over to the manager and gave it to him, then jumped back on the chair. The manager was stunned, but then told the dog, "The sign says you have to be good with a computer."

The dog jumped down again and went to the computer. The dog proceeded to demonstrate his expertise with various programs and produced a sample spreadsheet and database and presented them to the manager. By this time the manager was totally dumbfounded! He looked at the dog and said, "I realize that you are a very intelligent dog and have some interesting abilities. However, I still can't give you the job."

The dog jumped down and went to a copy of the sign and put his paw on the part about being an Equal Opportunity Employer.

The manager said, "Yes, but the sign also says that you have to be bilingual."

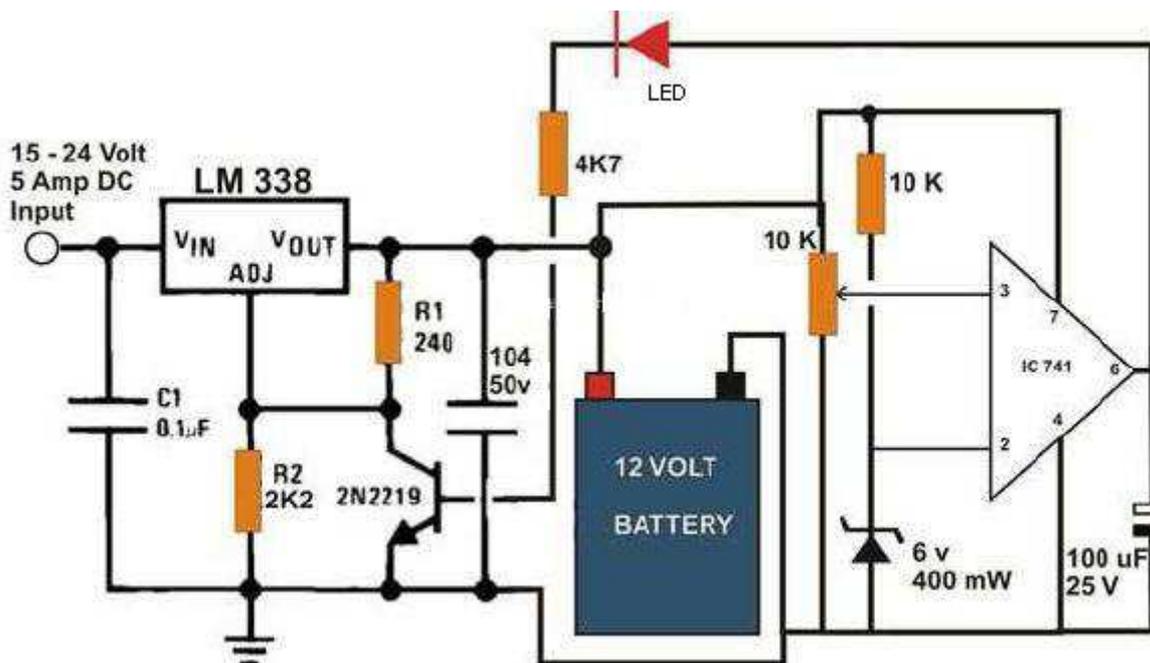
The dog looked at him straight in the face and said, "Meow."

Best Ant Repellent (author unknown)

We have had endless hassles with ants this year. I became the spray can queen, but also felt riddled with guilt about poisoning the family in the process, until white vinegar was recommended. We filled up an empty spray bottle with the cheapest white vinegar and each night sprayed the work surfaces and all of the ants' favourite places. Amazing results! Not only did the ants disappear, but so did grease and grime on the cupboards and in crevices.

(anybody tried this)

An automatic, regulated 6/12/24 battery charger



A simple yet accurate automatic, regulated 6/12/24 volt lead acid battery charger circuit is explained in this article. The circuit switches off the current to the battery as soon as the battery reaches full charge. An illuminated LED at the output indicates the fully charged condition of the battery.

The circuit can be understood with the following points:

Fundamentally the voltage control and regulation is done by the versatile, work horse IC LM 338. An input DC supply voltage in the range of 30volts is applied to the input of the IC. The voltage may be derived from a transformer, bridge and capacitor network.

The value of R2 is set to get the required output voltage, depending upon the battery voltage to be charged.

If a 6 volt battery needs to be charged, R2 is selected to produce a voltage of around 7 volts at the output, for a 12 volt battery it becomes 14 volts and for a 24 volt battery, the setting is done at around 28 volts.

The above settings take care of the voltage that needs to be applied to the battery under charge, however the tripping voltage or the voltage at which the circuit should cut off is set by adjusting the 10 K pot or preset.

The 10K preset is associated with the circuit involving the IC 741 which is basically configured as a comparator.

The inverting input of the IC 741 is clamped at a fixed reference voltage of 6 via a 10K resistor.

With reference to this voltage the tripping point is set via the 10 K preset connected across the non-inverting input of the IC.

The output supply from the IC LM 338 goes to the battery positive for charging it. This voltage also acts as the sensing as well as the operating voltage for the IC 741.

As per the setting of the 10 K preset when the battery voltage, during the charging process, reaches or crosses the threshold, the output of the IC 741 goes high.

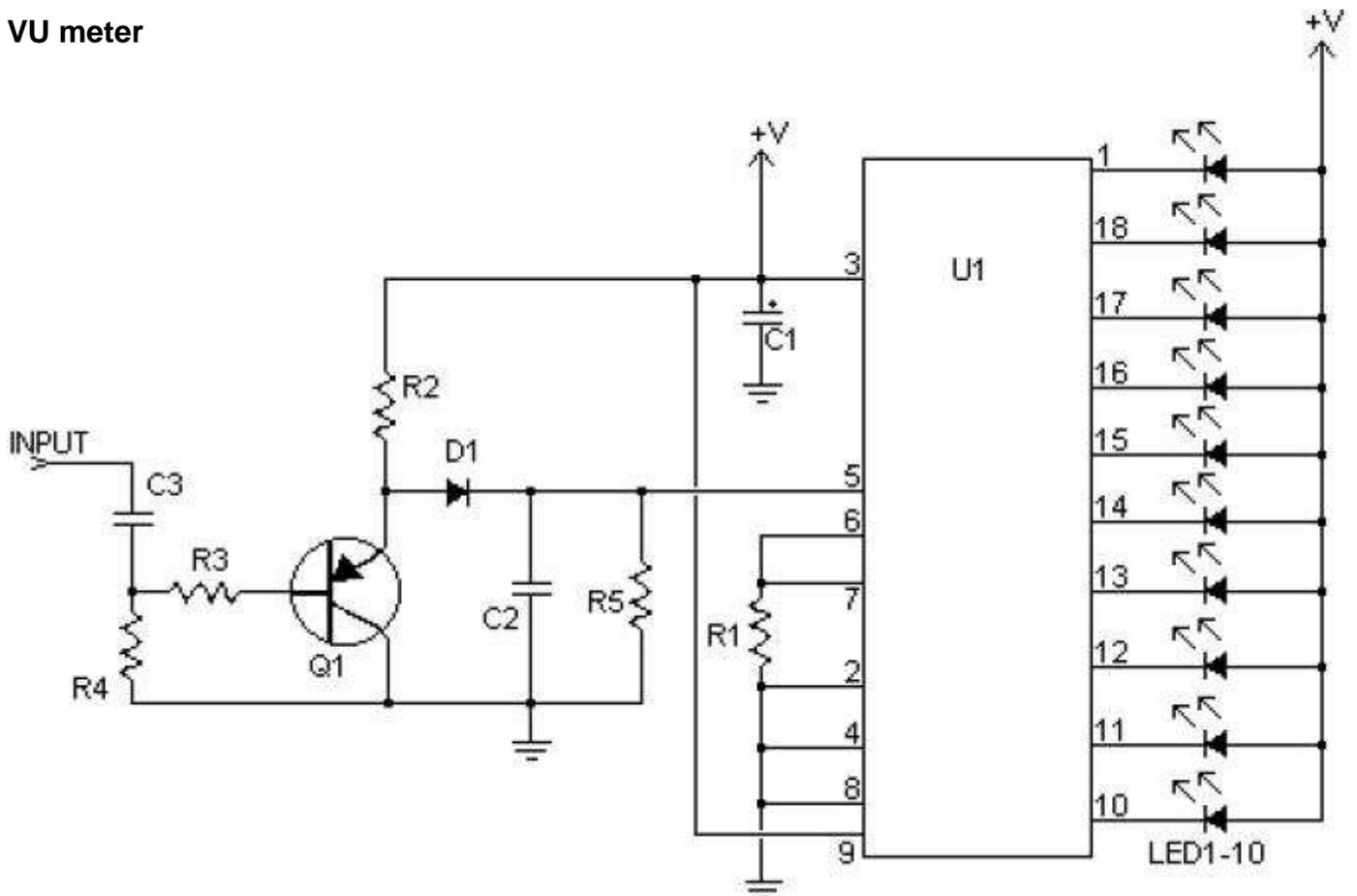
The voltage passes through the LED and reaches the base of the transistor which in turn conducts and switches off the IC LM 338.

The supply to the battery is immediately cut off.

The illuminated LED indicates the charged condition of the connected battery.

This automatic battery charger circuit can be used for charging all lead acid or SMF batteries having voltages in between 3 and 24 volts.

VU meter



This nifty sound level meter is a perfect one chip replacement for the standard analogue meters. It is completely solid state and will never wear out. The whole circuit is based on the LM3915 audio level IC and uses only a few external components. This circuit can also be integrated into audio projects.

V+ can be anywhere from 3V to 20V.

The input is designed for standard audio line voltage (1V P-P) and has a maximum input voltage of 1.3V.

Pin 9 can be disconnected from +V to make the circuit use a moving dot display instead of a bar graph display.

Parts

C1 2.2uF 25V Electrolytic Capacitor
C2, C3 0.1uF Ceramic Disc Capacitor
R1, R2 1K 1/4W Resistor
R3 10K 1/4W Resistor
R4 100K 1/4W Resistor
R5 1M 1/4W Resistor
D1 1N914 Silicon Diode
Q1 2N3906 PNP Transistor
LED1 to 10 Standard LED or LED Array
U1 LM3915 Audio Level IC
MISC Board, Wire, Socket For U1

Joys of aging

Just before the funeral services, the undertaker came up to the very elderly widow and asked, "How old was your husband?" "98," she replied. "Two years older than me." "So you're 96," the undertaker commented. She responded, "Hardly worth going home, is it?"

Reporters interviewing a 104-year-old woman: "And what do you think is the best thing about being 104?" the reporter asked. She simply replied, "No peer pressure."

I've sure gotten old! I've had two bypass surgeries, a hip replacement, new knees, fought prostate cancer and diabetes; I'm half blind, can't hear anything quieter than a jet engine, take 40 different medications that make me dizzy, winded, and subject to blackouts. Have bouts with dementia. Have poor circulation; hardly feel my hands and feet anymore. Can't remember if I'm 85 or 92. Have lost all my friends but, thank God, I still have my driver's license.

I feel like my body has gotten totally out of shape, so I got my doctor's permission to join a fitness club and start exercising. I decided to take an aerobics class for seniors. I bent, twisted, gyrated, jumped up and down, and perspired for an hour. By the time I got my leotards on, the class was over.

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

Linked to 70 cm - 438.850 Mhz (Sunday bulletins)

Bulletins Sunday morning - 145.7875 MHz & 7062 KHz @ 08h45.
Relay - 80M - 3662KHz

Monthly meeting venue

Germiston Methodist Church
Room at back of the offices
Lady Duncan Rd
Germiston

3rd Saturday of the month at 14:30

Committee

Chairman	Ton van Dijk	ZS6ANA	011-432-5494
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Club bank details

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Branch Code 201209 - Sunward Park