



SHACKNEWS

HIGHVELD AMATEUR RADIO CLUB

JULY 2011

COMMUNICATION IS THE NAME OF THE GAME

Meeting At this month's meeting Yvonne, ZR6TBL, and Marianne, ZR6JMT, gave a practical demonstration on the use of Facebook. I'm sure that a lot of those present learnt something more about the program. The club is also on Facebook, so go and have a look see. The next meeting taking place on the 20 August 2011 will be this year's AGM.

In the last issue there was an article on a 10 Amp power supply. There was a bobo with the circuit diagram where a connection was left out. Corrected circuit is on the last page of this issue.

ZS6SSC Social Club There was no meeting this month. Next meeting will be held on the 17 September 2011. Venue:- QTH of Rex and Ingrid.

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More Puns

Dancing cheek-to-cheek is really a form of floor play.

Condoms should be used on every conceivable occasion.

Reading while sunbathing makes you well red.

When two egotists meet, it's an I for an I.

A bicycle can't stand on its own because it is two tired.

What's the definition of a will? (It's a dead give away.)

Time flies like an arrow. Fruit flies like a banana.

In democracy your vote counts. In feudalism your count votes.

She was engaged to a boyfriend with a wooden leg but broke it off.

A chicken crossing the road is poultry in motion.

If you don't pay your exorcist, you get repossessed

With her marriage, she got a new name and a dress.

The man who fell into an upholstery machine is fully recovered.

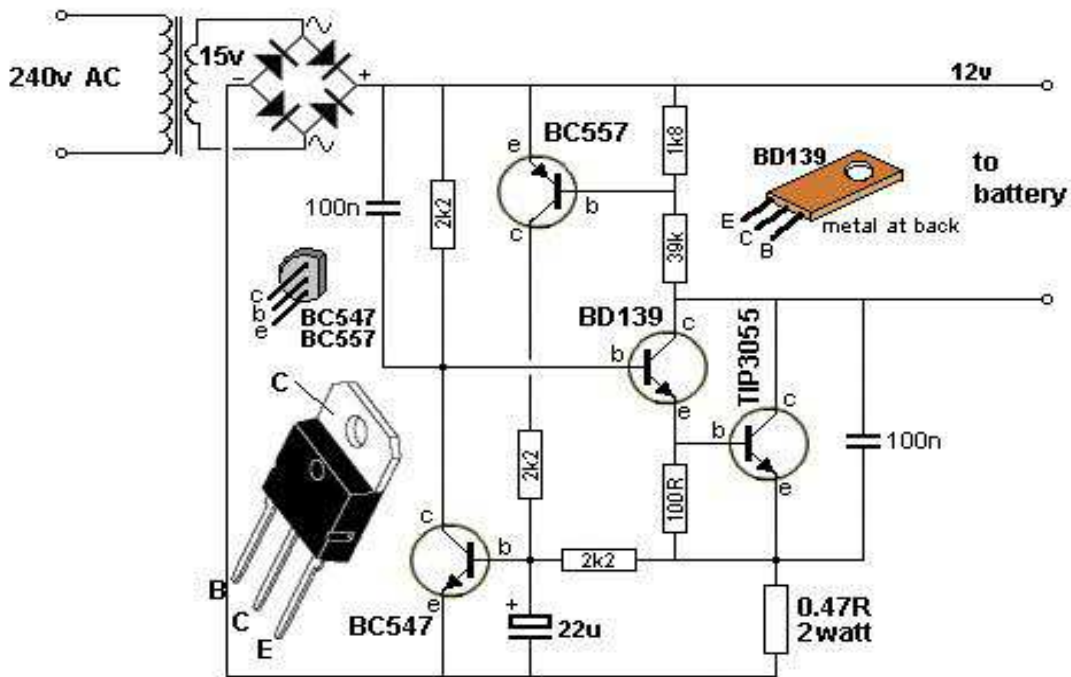
You feel stuck with your debt if you can't budge it.

Local Area Network in Australia - the LAN down under.

Every calendar's days are numbered.

A boiled egg in the morning is hard to beat.

A 12 volt trickle charger



The 12v Trickle Charger circuit uses a TIP3055 power transistor to limit the current to the battery by turning off when the battery voltage reaches approx 14v or if the current rises above 2 amp. The signal to turn off this transistor comes from two other transistors - the BC557 and BC 547.

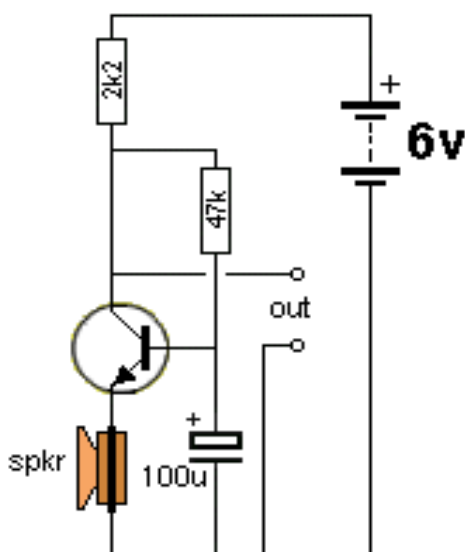
Firstly, the circuit turns on fully via the BD139 and TIP3055. The BC557 and BC 547 do not come into operation at the moment. The current through the 0.47R creates a voltage across it to charge the 22u and this puts a voltage between the base and emitter of the BC547. The transistors turn on slightly and remove some of the turn-on voltage to the BD139 and this turns off the TIP3055 slightly.

This is how the 2 amp max is created.

As the battery voltage rises, the voltage divider made up of the 1k8 and 39k creates a 0.65v between base and emitter of the BC557 and it starts to turn on at approx 14v. This turns on the BC 547 and it robs the BD136 of "turn-on" voltage and the TIP3055 is nearly fully turned off.

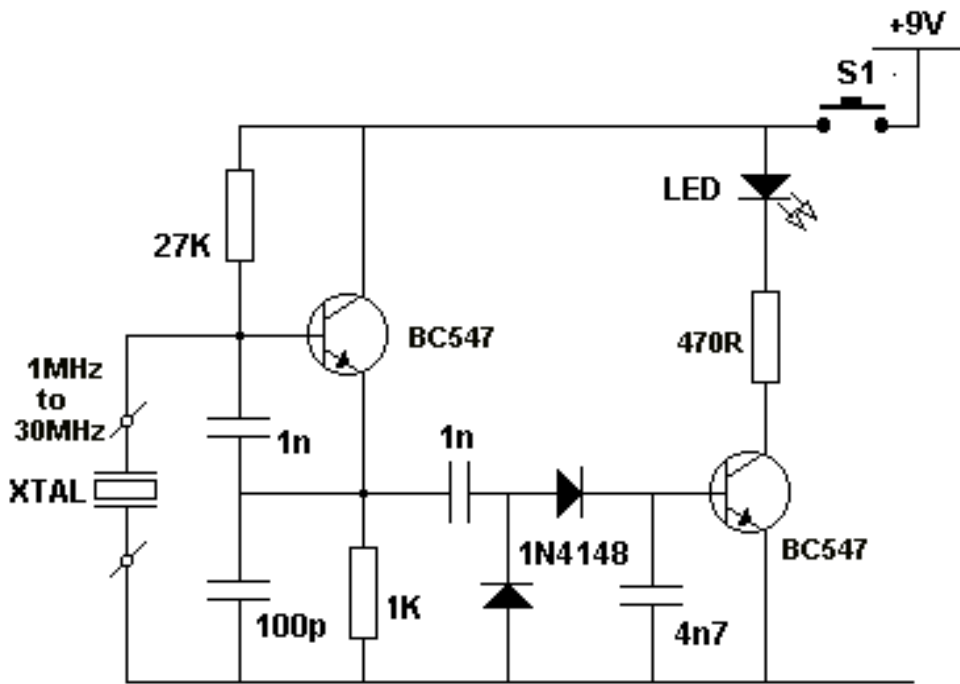
All battery chargers in Australia must be earthed. The negative of the output is taken to the earth pin.

Dynamic microphone amplifier



This circuit takes the place of an electret microphone. It turns an ordinary mini speaker into a very sensitive microphone. Any NPN transistors such as BC 547 can be used. The circuit will work from 3v to 9v. It is a common-base amplifier and accepts the low impedance of the speaker to produce a gain of more than 100.

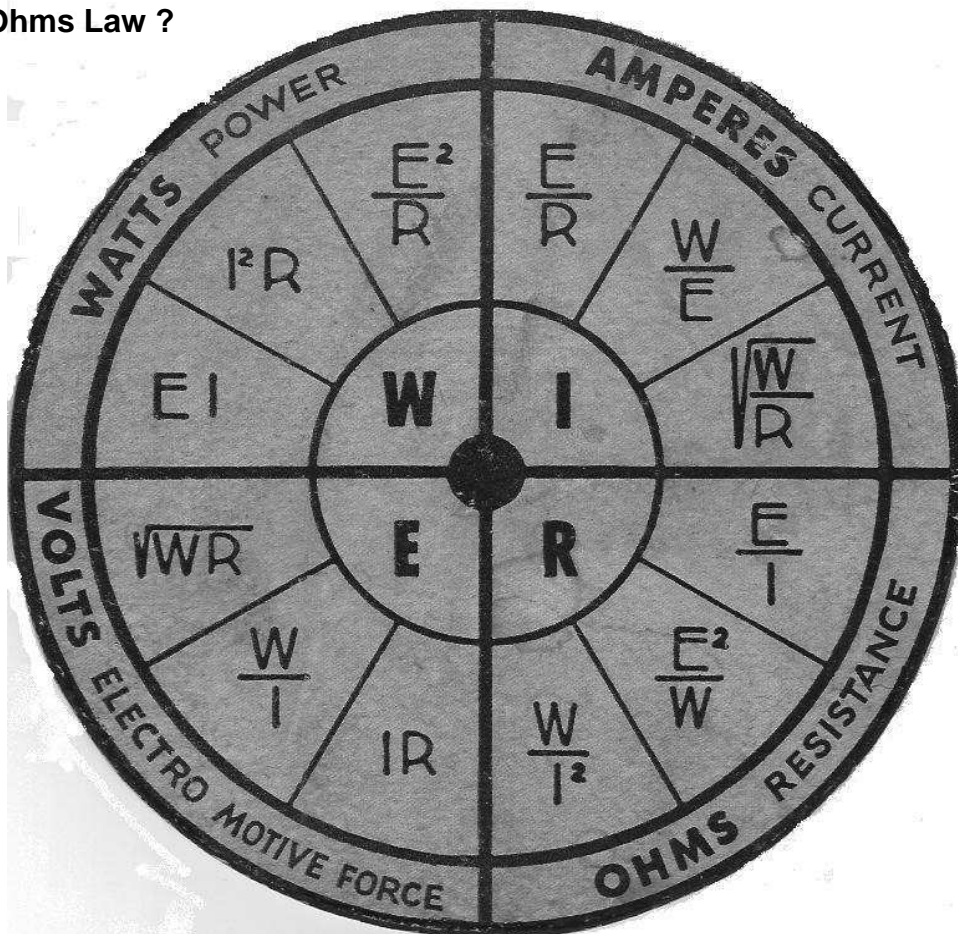
Crystal Tester

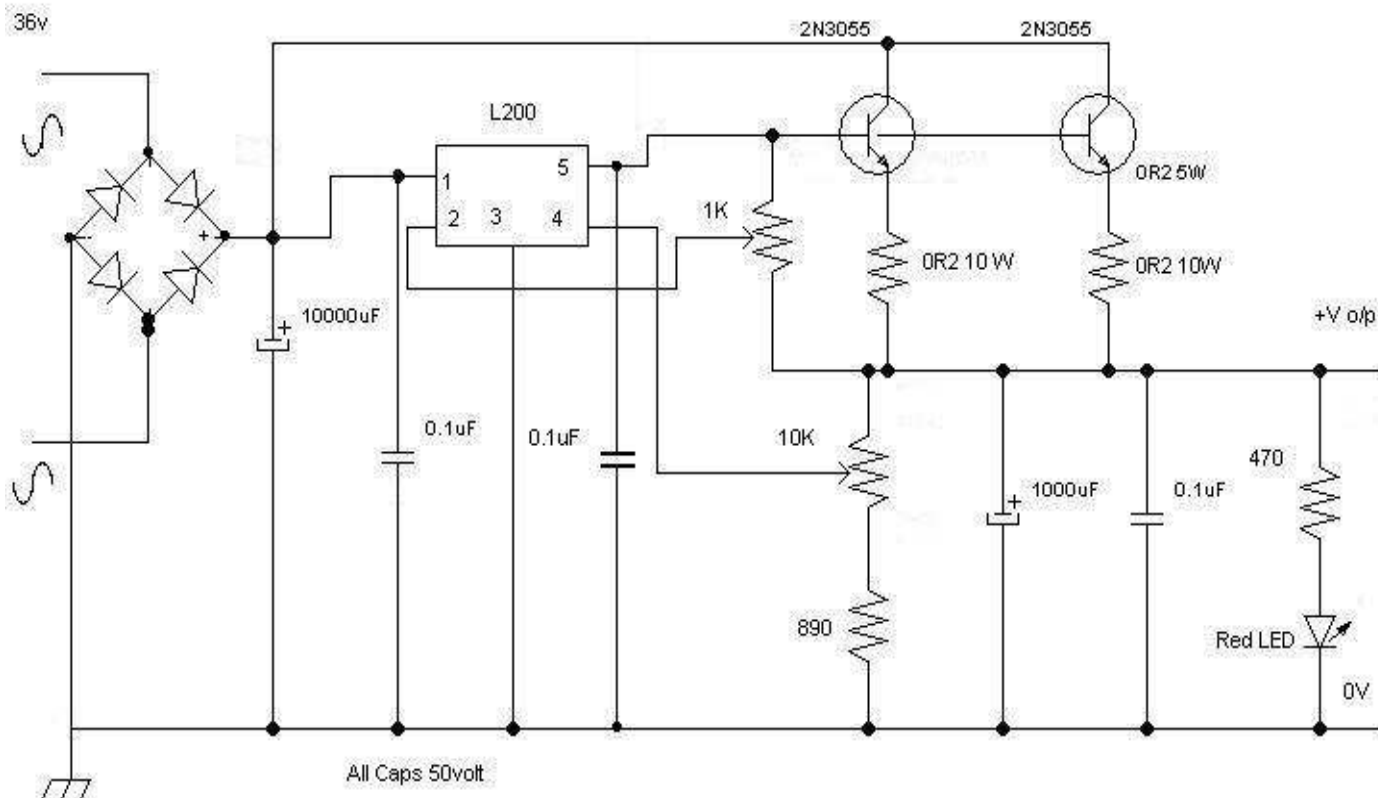


For all those junk box crystals

This circuit will test crystals from 1MHz to 30MHz. When the crystal oscillates, the output will pass through the 1n capacitor to the two diodes. These will charge the 4n7 and turn on the second transistor. This will cause the LED to illuminate

Remember Ohms Law ?





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

First National Bank - Current Account 62116557309. Branch Code for EFT 250655