



SHACKNEWS

HIGHVELD AMATEUR RADIO CLUB

APRIL & MAY 2012

COMMUNICATION IS THE NAME OF THE GAME

Meeting The April meeting was a disaster as only one member and one visitor attended. There were seven apologies.

The May meeting was very successful. Willie, ZS6WC, gave a talk on mobile HF antennas with lots of goodies on display.

ZS6SSC Social Club The next meeting will take place at the home of Berridge and Sandra on the 16 June 2012. Usual rules apply.

Hobbitech This years event which took place on the 12 & 13 May was successful and most enjoyable. Thanks goes to the club members that attended as well as the East Rand Club/Hamnet members that helped with the trailer and other goodies.

A few pictures from the event.



More on the club FaceBook pages

On The Lighter Side

A college pizza delivery boy arrived at the door of a very wealthy looking suburban house. The owner came to the door and asked: "What is the usual tip?"

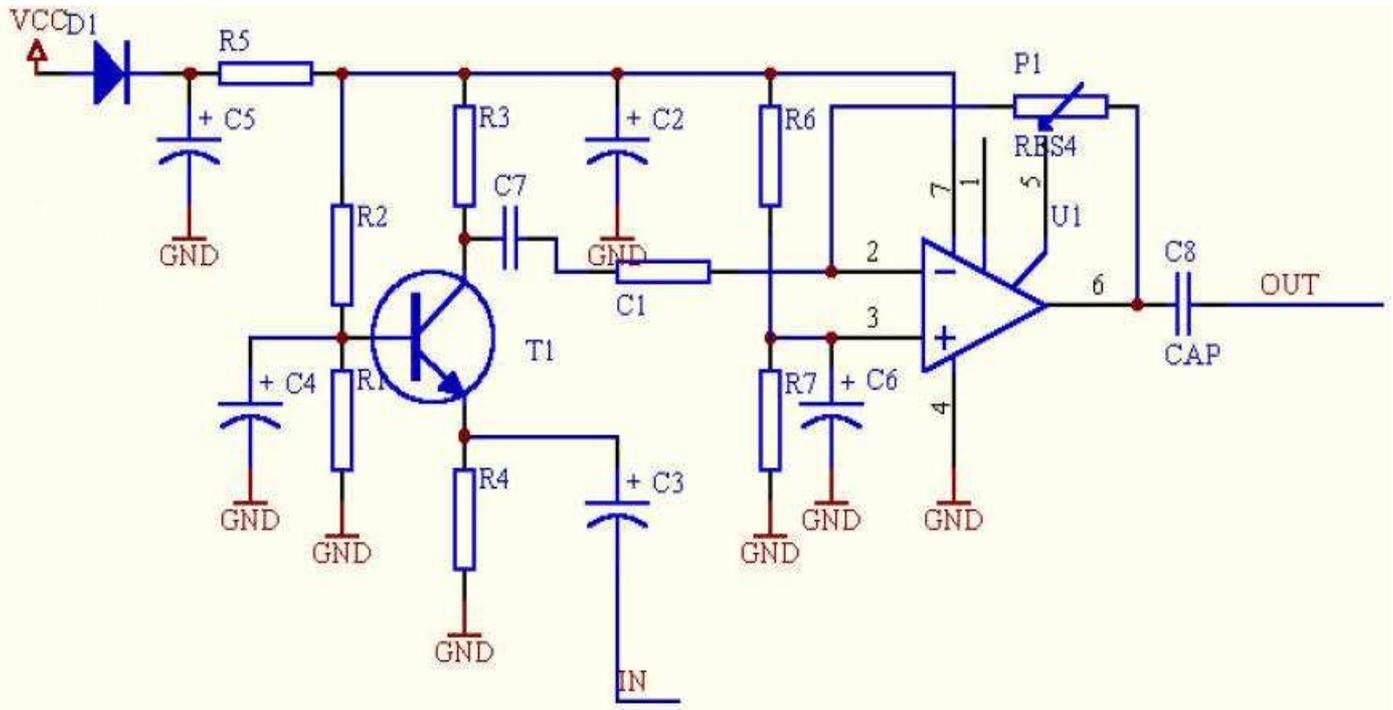
"Well," replied the youth, "this is my first trip here, but the other guys say if I get a quarter out of you, I'll be doing great." "Is that so?" he snorted. "Well, just to show them how wrong they are, here's five dollars."

"Thanks," replied the youth, "I'll put this in my school fund."

"What are you studying in school?"

The lad smiled and replied: "Applied psychology."

Low impedance microphone amplifier



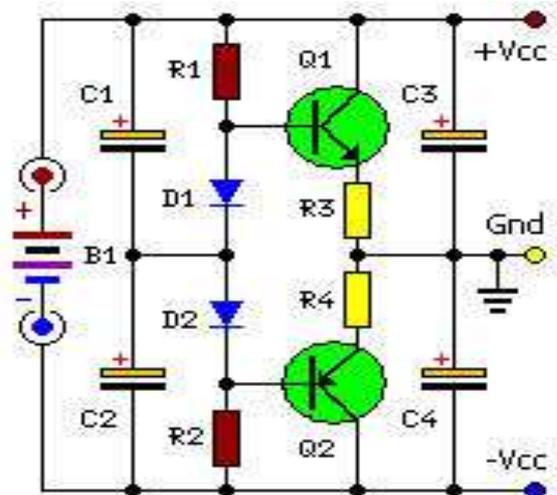
The circuit is a microphone amplifier for use with low impedance (~200 ohm) microphones. It will work with stabilized voltages between 9-30VDC. If you don't build the impedance adapter part with T1, you get a micamp for higher impedance microphones. In this case connect the signal directly to C7.

R1 15k	C3 22uF
R2 150k	C4 4u7
R3 2k2	C5 470uF
R4 820	C6 10uF
R5 680	C7 100nF
R6 10k	C8 47uF
R7 10k	U1 TL081
P1 1M	D1 1N4148
C1 3k9	T1 BC109
C2 100uF	

Virtual ground circuit

Here is the simple virtual ground circuit based on discrete components. Is to make a buffer from generic discrete components. The transistors can be most any complementary pair of small-signal transistors. Suitable alternatives are the PN2222A and PN2907A. The diodes are generic small-signal types. An acceptable alternative is the 1N914. This circuit has better performance than a simple resistive divider virtual ground, and the parts cost is lower than for any other circuit mentioned here. It is, however, the least accurate of the buffered virtual ground circuits.

R1,R2 = 4.7K	D1,D2 = 1N4148
R3,R4 = 4.7R	Q1 = 2SC1384
C1,C2 = 470uF-25V	Q2 = 2SA684
C3,C4 = 47uF-25V	B1 = Battery



DON'T WASTE THAT LEMON PEEL

Many professionals in restaurants are using or consuming the entire lemon and nothing is wasted. How can you use the whole lemon without waste?

Simple. Place the lemon in the freezer section of your refrigerator. Once the lemon is frozen, get your grater, and shred the whole lemon (no need to peel it) and sprinkle it on top of your foods.

Sprinkle it to your whisky, wine, vegetable salad, ice cream, soup, noodles, spaghetti sauce, rice, sushi, fish dishes. All of the foods will unexpectedly have a wonderful taste, something that you may have never tasted before. Most likely, you only think of lemon juice and vitamin C. Not anymore. Now that you've learned this lemon secret, you can use lemon even in instant cup noodles.

What's the major advantage of using the whole lemon other than preventing waste and adding new taste to your dishes?

Well, you see lemon peels contain as much as 5 to 10 times more vitamins than the lemon juice itself. And yes, that's what you've been wasting. But from now on, by following this simple procedure of freezing the whole lemon, then grating it on top of your dishes, you can consume all of those nutrients and get even healthier.

It's also good that lemon peels are health rejuvenators in eradicating toxic elements in the body.

LIGHT EXTENDER

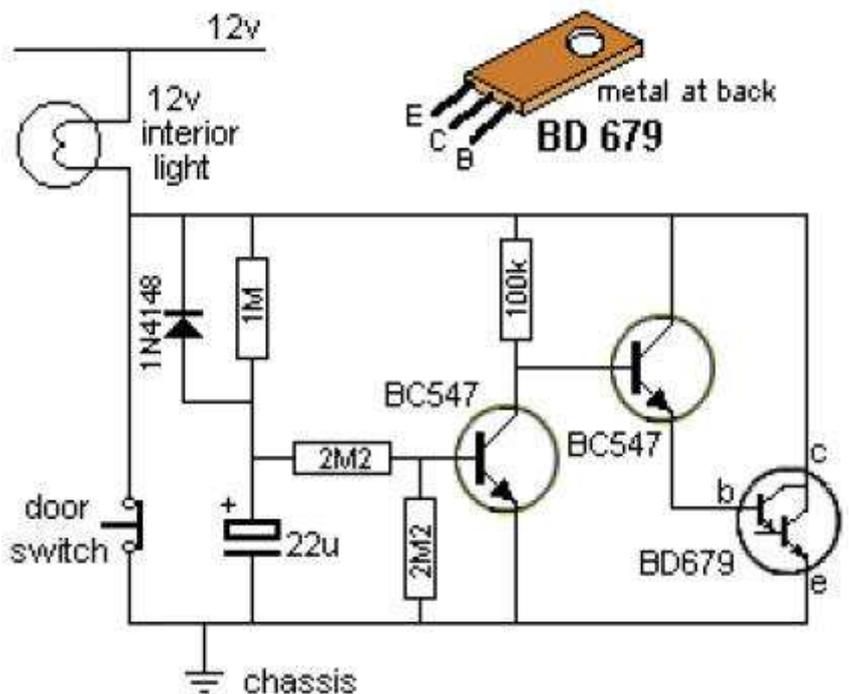
This circuit is a Courtesy Light Extender for cars. It extends the "ON" time when a door is closed in a car, so the passenger can see where he/she is sitting.

When the door switch is opened, the light normally goes off immediately, but the circuit takes over and allows current to flow because the 22u is not charged and the first BC 547 transistor is not turned ON.

This turns on the second BC547 via the 100k and the BD679 is also turned on to illuminate the interior light.

The 22u gradually charges via the 1M and the first BC547 turns on, robbing the second BC547 of "turn-on" voltage and it starts to turn off the BD679.

The 1N4148 discharges the 22u when the door is opened.



Something on traps

Hy-Gain traps (TH7/TH3 style) are pre-tuned at the factory. To check them, first visually inspect them for broken or missing trap-caps. These can allow water to enter the trap and detune it. Replacements are available from the factory. Also, look for breaks or cracks in the outer aluminium tubing where it is bent to connect to the smaller inner tubing. Also check the screw used to make this connection. Older (before 1985) traps used plated screws that may be rusty. Check this connection with an ohm-meter and replace the screw if necessary. Check inside the trap for insect and spider nests (especially if stored on the ground). Clean nests out by using a high-pressure air hose. DO NOT take the trap apart! If all connections and caps are good, then the trap may be checked with a grid-dip meter for the proper resonant frequency. 10 meter traps are resonant approx. 27.6 MHz, 15 meter traps are resonant approx. 20.6 MHz. Couple a dipper coil to the outer end of the trap to obtain the resonance.

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
Branch Code 201209 - Sunward Park