

# *HLARA RADIOGRAM*

The Quarterly Publication of the Heartland Antique Radio Association, Inc.

January 2008 Edition

### Greetings from the President



Greetings fellow radio aficionados,

A new year is upon us and it's time to get cranking on HLARA business again.

Membership renewal has been good so far and there is money in the bank so things are looking sunny. Here are a few things we have in store for you:

The Vacuum Tube Technology Course starts February  $2^{nd}$ . This is a great opportunity to learn a great deal about vintage radio restoration and repair. Even if you can't make it to all eight classes, try to attend the ones you can.

The Radio Tune Up days have proven very popular so we have several planned throughout the year. These workshop days are another great source of knowledge as well as hands on experience and fun.

We are discussing the possibility of one or possibly two field trips this year. Stay tuned for details as they develop.

We can't forget the Summer Sizzler. We have set a tentative date providing there are no conflicts. Organization efforts will begin soon.

Don't forget the Fall Picnic and Swap Meet. It has also proven popular and will be held again this year. Don't forget the monthly meetings every third Thursday.

I've listed all of these things in one article to demonstrate all of the things your radio club has to offer. I'm very proud of the changes and the growth in HLARA over the past two years. When I first became President two years ago, the first thing I said was, "Lets shake things up and get some people off the couch!" I hope we've done that and that we can continue to keep things shaking. I say "we" because I'm not in this alone. This club belongs to everyone and what you get out of it depends on what you put into it. It's easy to sit on the porch and watch everything go by, but you will find it's worth the effort

## Worldwide Listening on a Budget

by Scott Petty

For Christmas I received a wonderful stocking gift that I desperately needed: Another radio! This little jewel is a Grundig Mini 300 portable world band radio capable of receiving shortwave (7 bands), AM, and FM transmissions. It is a compact, shirt-pocket sized radio with telescoping antenna (20 inches) and weighs about 4.7 ounces and functions well as a small, hand-held receiver. A protective travel case, wrist band, and owner's manual are included in the gift box from Restoration Hardware. The radio measures 4.5 x 2.5 x .75 inches and is powered by two AA batteries (generic alkaline batteries are included) and features a LCD display to show the selected frequency. Unfortunately, the display does not have a backlight and there is no indication on the display to indicate the band to which you are tuned. The tuning control is an analog dial, vertically situated on the right side of the radio just above the volume control. The left side of the radio has then band switch and external headphone jack for the accompanying earbud headphones that may be used for private listening. There is a small built-in speaker on the front of the device. The LCD display is crisp and clear, with a clean layout that makes it easy to control the radio's tuning, clock, alarm, and sleeper functions. The power button is conveniently located on the right front side of the unit and the Hour and Minute buttons next to the LCD display are small, but nicely separated and easy to use. The lack of a 24 hour time format was a bit of a drawback in tracking broadcast schedules in GMT. A grey sharkskin water resistant body covering provides a good grip and wear protection.

On the evening of January 1, while most of the nation was watching college football, I decided to take my new toy on a test drive. The AM and FM reception was about what one would normally expect for a radio of this size, easily tracking WBBM Chicago and KMOX St. Louis on the broadcast (MW) band. The local FM stations came in effortlessly on their assigned

to get out and participate. There are a lot of us having a lot of fun. Wish you were here! Get off the couch and join us.

See you at the next HLARA event. I know you'll be there!

Chris Cunningham President HLARA

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#### 2008 officers:

Chris Cunningham, President/Webmaster Scott Petty, Vice President John Andreson, Secretary Bob Shindhelm, Treasurer Directors: Bob Shindhelm Curt Lutz Dan Weilacher, Radiogram Editor

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**Grundig Mini 300 Receiver** 

frequencies. I moved quickly to the exotic world of shortwave listening. The band switch cycled positively from one band to another. In a few minutes reception was established in English language broadcasts from Radio China International (Beijing), Radio Taiwan International (Taipei), Radio Havana (Cuba), Radio Sweden (Stockholm), BBC (London), Radio Netherlands (Holland), Radio Canada (Montreal), Radio Prague (Czech Republic), and a plethora of Christian radio stations. These radio stations all have broadcasts beamed to the Americas. It's fun to listen to the music of all of these countries, but the news broadcasts are even more entertaining and informative. Any intelligence gathering agency would have a field day listening to these broadcasts that are often heavily tinged with propaganda and differing political views.

The radio is equipped to tune an array of shortwave bands—49, 31, 25, 22, 19, and 16 meters. The tuning is very sensitive and is a bit tricky to operate, but the selectivity is amazing for a radio of this size and price (\$29.95). The dials can be very easily, perhaps too easily, moved from their intended positions. This isn't much of a problem for volume control, but for fine-tuning reception you might find yourself re-tuning stations if you bump or touch the tuning dial.

For the size and price, this radio provides outstanding shortwave reception. I tuned Radio Sweden at 0253 GMT (2053 CST) at a frequency of 6.01 MC. I checked this frequency with the broadcast schedule on their website and it was right on the button. Stations are easy to tune with the digital display although a light touch is required, especially on the higher bands. There is a small amount of frequency drift over time on AM and SW. This is not a powerful DX receiver, but it performs well with a crisp and clear sound and the speaker can produce a loud volume without distortion. Reception would undoubtedly improve with an external antenna, but part of the fun of using a portable device is that you are not tethered to more permanent connections. It doesn't deal well with image rejection at times and I found the reception was best when the radio was held in the palm of the hand with antenna fully extended.

The famous Grundig brand is synonymous with German precision engineering and quality, so I was a bit disappointed to see that the radio was manufactured by the Eton Corporation, based in Palo Alto, CA, and assembled in the Peoples Republic of China. If you are looking for a solid pocket radio, and you think you might enjoy tuning in broadcasts from around the world, this radio may be for you. It doesn't have the powerful features and reception of a higher-end shortwave radio, but it does offer an affordable and convenient way to bring clear AM/FM and limited shortwave listening.

# The Painted Radio Resto

By Dan Weilacher

While visiting my friend Gene, an avid radio collector, I noticed that he had a peculiar radio in his collection for a long time and one day we talked about it. The radio was a 1936 Kadette table model that Gene acquired at an estate sale of a friend. For some reason this friend let one of his grandchildren "fix" this radio by painting it completely black and then adding little gold music notes to it years ago. Gene said "I wonder what's under that paint?" I said "well why don't we find out" so I took the radio home and started stripping it that evening.



Gee, thanks for the great looking paint job Grandchild, lol



Stripping in progress, what a mess!

I used Dad's Spray Strip, and couldn't believe what was in front of my eyes as all that black goo rolled off. A gorgeous walnut cabinet was uncovered, and as I went further along a black inlaid stripe and a birds-eye walnut lower section,,, WOW this is a beautiful radio! I had some minor repairs to make to the cabinet, then applied grain filler, sanded, and then stained a really nice looking project. I then masked and painted the lower bump strip with black lacquer and the opening for the dial. I then applied about 8 coats of gloss Deft lacquer and after several days knocked off a little of the sheen with lemon oil and four ought steel wool. Then came the chassis, new capacitors were installed, new line cord and an alignment was in order.



Stripped and cleaned cabinet ready for grain filler



Cleaned, re-capped and alingned chassis



Some loose and split veneer being glued and clamped



**Restored Kadette Model 77** 

Finally I polished the dial lens, knobs, installed new grille cloth and final assembled the set. A couple days later I then showed up at Gene's and handed him his "new" radio. He really was surprised and thrilled a sweet little radio had been hiding for all those years behind a mask of black and gold paint. The look on his face was well worth the effort and money spent on this project.



My friend Gene with his new radio!



Author happy that Gene's radio turned out well

### My Variable Voltage Test Instrument

#### **By Bob Shindhelm**

There has been much written about the advantages of using a "variac" or variable voltage AC source when reforming electrolytic capacitors, trying out an old radio, etc. I even use one to vary the current to my soldering iron so that it doesn't overheat. I have built at least two others in the past and have been using them so long that I would be lost without one. Both of those that I built are still in use but both have some shortcomings that I didn't like. Both of them have large 9 amp variacs, and although both have voltmeters, only one has an ammeter and it is a 10 amp ammeter that barely gets off the peg until over one amp. So I started checking out my junk boxes and other prime sources of supply to see if I could find enough parts to build a better one. This instrument is the result.

Hopefully the third try is a charm.

This is pretty much a true junk box project. Nearly all of the parts came from swap meets or auctions and were stuff that I had on hand. About the only exception was the *Ohmite* variable voltage transformer that I had to buy on EBay after I discovered that the beautiful little 2.5A *General Radio* Variac that I had bought in an auction somewhere turned out to be for 400 cycles. These will overheat on 60 cycles. BEWARE! If you go shopping for a variac on EBay be very cautions. There are still plenty of 400 Hz variacs out there and not all the vendors will tell you about it. Nearly everything else, I had on hand. Even the front panel was cut out of a junked computer case and finished with *Rust-Oleum* hammered black paint.

I've had several people ask me about the details of the instrument, so I took some pictures, drew up a schematic, and compiled the following notes. I hope you find these to be of some interest.

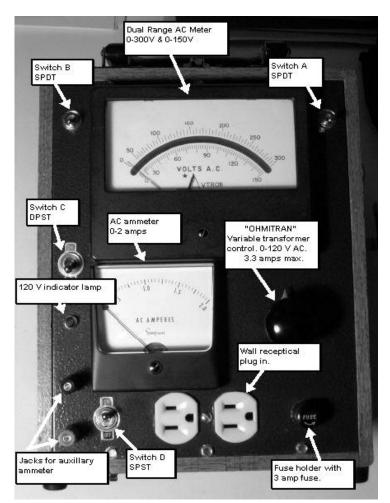


Figure 1

Figure 1
This is a picture of the face of the instrument.
The purpose of the switches is as follows:

Switch A: The particular meter that I used was a dual range test meter with a high range of 0 to 300V and a low range of 0 to 150V. Switch up is high range, down is low range. This switch would obviously be unnecessary using a single range meter.

Switch B: When this switch is up the meter reads the actual line voltage. When it is down it reads the output voltage of the instrument.

Switch C: This is a DPDT switch that completely disconnects the instrument from the line. The indicator lamp will light when the line cord is plugged in and the switch turned on (up)

A 2amp ammeter is provided and good readings can be obtained down to about 0.25 amps which is 30 Watts at 120 volts. Although this should be sensitive enough for most purposes, provisions were made to connect an auxiliary AC milliammeter by connecting is to the jacks provided. When this is done, Switch D must be placed in the "off" position as it acts to short between the jacks when in the "on" position.

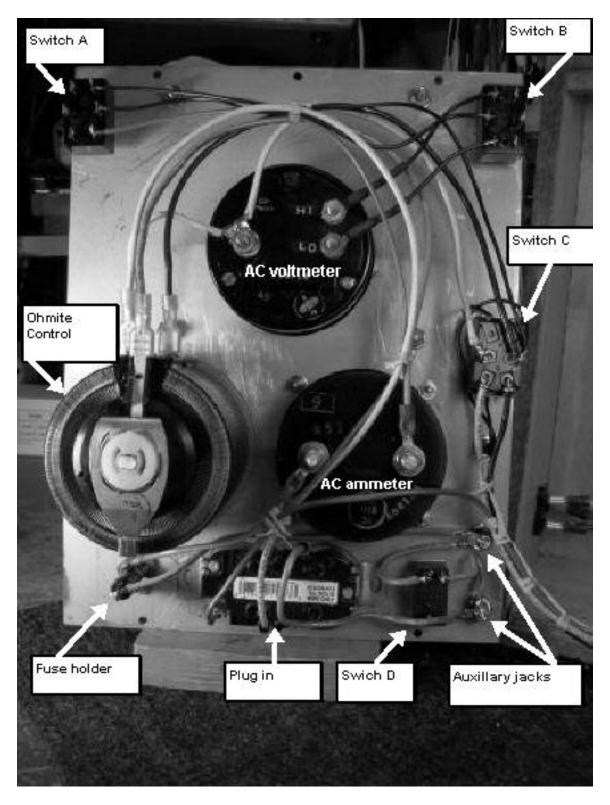


Figure 2

Figure 2 is a picture of the backside of the panel and shows the placement of the components.

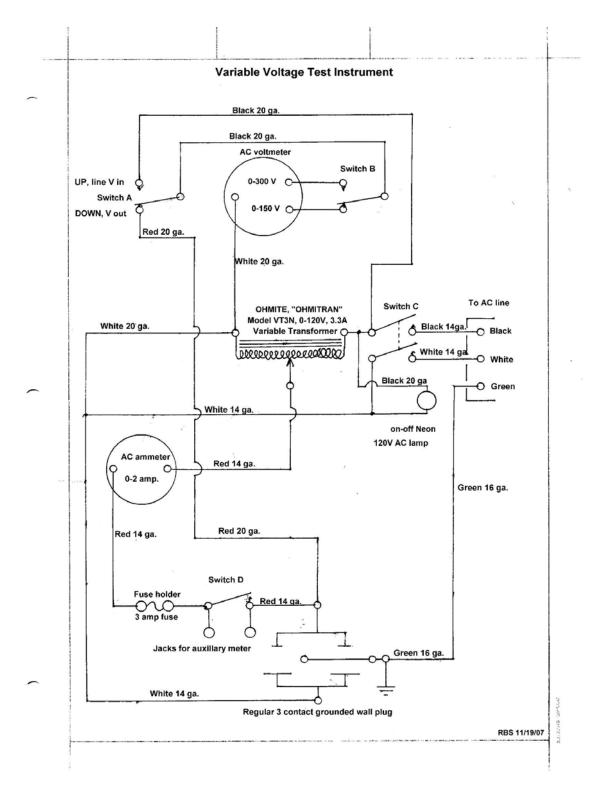


Figure 3

Figure 3 is a schematic of the instrument. Please notice that *no isolation from the line is provided*. If you are working on AC/DC equipment, an isolation transformer should be placed between this instrument and the line. Without the isolation transformer though, you will notice that the wires are color coded to preserve the integrity of the normal house wiring system, i.e., black is the *hot wire*, white is the *grounded neutral*, and green is the wiring system *ground*. Red is the *controlled voltage* on the *hot* side.

So far I'm perfectly satisfied with this instrument. I hope you find this information useful.