

The

# FLASH!

The Newsletter of  
The **Colorado Radio Collectors**  
Antique Radio Club

Volume 33, Issue 1

CRC Meeting, Jan 9th - 1PM, Castle Rock

Jan./Feb. 2022

## Past **Flash** Articles Re-visited...

*In the previous issue of the Flash we re-visited DeForest Colorado. This issue of the Flash presents the 2nd of three separate "sequels" to articles that appeared in past issues. The remaining article will be in a future issue. Editors.*

In the 2018 January/February issue of the Flash, Vol. 29-1, the use of a 6A4/LA vacuum tube to replace an 01A vacuum tube was demonstrated. This issue presents yet another article that uses the 6A4/LA tube to replace an 01A tube. See **page 5** of this issue for the details.

The **2022 CRC Annual Show** in conjunction with **Vintage Voltage** is on March 20th this year. Now is the time to dust off and/or finish that restoration and get your displays ready!!

Ralph Brands is the clubs' Show Coordinator this year. Please contact Ralph at [rebrands@juno.com](mailto:rebrands@juno.com) to volunteer to help him out! Paul Thompson is handling the show registration this year. See pages 7 & 8 of this issue for show and pre-registration details.



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Newsletter for The **Colorado Radio Collectors** club, founded in the Fall of 1988.

"Dedicated to the preservation and education of wireless, antique radio, television and associated equipment."

**CRC MEETINGS:** Meetings are held on the 2nd Sunday of every other month starting in January (except May is the 3rd Sunday) at 1:00 pm. The meetings consist of business, "show & tell", raffles, auctions, swap meets, technical discussions and other subjects of interest. Visitors are welcome!!

**CRC MEMBERSHIP:** Current annual dues are \$20 and membership in the CRC runs from July to June. New memberships will be prorated to the following June. Members are entitled to attend meetings, participate in our Fall show and our Fall auction, and receive our newsletter, **The Flash!**.

Submit dues payable to: **Merril Campbell - 4723 Woodbury Dr. - Colorado Springs, CO 80915**

**UPCOMING EVENTS:** January 9th at 1PM, CRC meeting at the Castle Rock Library, March 13th, CRC meeting, location TBD. March 20th, Vintage Voltage Show - I-25 at 120th Ave.

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[phesopheon@comcast.net](mailto:phesopheon@comcast.net)

## MESSAGE FROM THE PRESIDENT

Well, I suspect when you receive this edition of the Flash the holidays will be completed. So, the next few months could be a great time to work on all the projects you have found over the past year. Why not plan to spend time at your workbench studying the repair / restoration of those great old finds?

Our January meeting will focus on our plan for the coming year starting off with the March show. We will try to have Dena Cain available (by phone or in-person) to clarify a few open questions.

Also, let's have a great raffle table for this meeting - please scrounge up a few items for give away or even to auction off. How about bringing an interesting item for show and tell? Remember they don't always have to be a radio.

Until our January meeting stay safe and, as a jolly little man in a red suite says; "A Merry Christmas to all and to all a good night"

*Mike Cook*

# The November 2021 Club Meeting

by Larry Snyder



The meeting was called to order by Mike Cook. 24 were in attendance including two guests.

Mike announced that the offices of President, Vice President, and Treasurer are available for other CRC members to serve in.

The Club provided a pizza and sodas from pizza hut for lunch.

## Show and Tell



A club member discussed a wearable string of battery-powered Christmas lights that he made and immediately sold it for \$7.00. *Let the holiday season begin!*

## Raffle



The Raffle tables

The raffle tables were full with proceeds donated to the club. Wayne Russert brought in a few items from an unnamed "old collector" and promised to bring more to future meetings. Rich Kuberski sold and called out the ticket numbers.

## An Auction



The Auction tables

Karin Smith, from Wyoming, submitted 16 radios from her father's (Mike Smith) collection for the club to auction. Rich Kuberski was the auctioneer.

<u>Description</u>	<u>sale price</u>
Marathon MC5	60
Thompson Neutrodyne	40
Heath kit HR 20	70
RCA drum speaker model 100	20
Battleship gray metal speaker – no I.D.	15
Crosley Super Trirdyn	20
Freshman Masterpiece	20
Michigan Radio Corp sn. 3713	55
Galloway	20
Pfanstiel Overtone (bundled with) a Radiola III	25 total for both
Arborphone (bundled with) a McMillian Five	20 total for both
Crosley Trirdyn	"oops" sales price not noted by editor"
Tuska Radio	60
Crosley RFL 75	10



Rich holding the Michigan radio

Total Sale was more than \$435

The majority of selling prices were extremely low and some rare collectable radios had 'no-bids' causing the auctioneer to "bundle" radios to move the auction along. As noted by Mike Cook before the auction, the proper place to auction these radios would have been the club's Annual Auction where bidders are prepared to participate, and have funds available to bid accordingly.

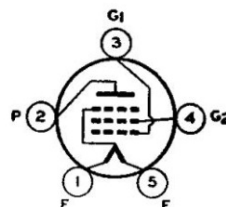


# Using the 6 volt 6A4/LA Vacuum Tube in Place of an 01A Diode in a Triplet Tube Tester

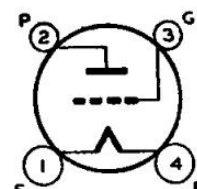
by Steve Touzalin, CRC member

In the **2018 January/February issue of the Flash, Vol. 29-1**, I presented an article on how to use the 6 volt 6A4/LA five pin tube to replace an 01A tube. An adapter could be made and used, however in my particular set I was forced to re-base the 6A4 tubes to a 4 pin base. Explicit details on the re-basing process was explained in the article.

6A4/LA Base	01A Socket
Pin 1 Filament	Pin 1 Filament
Pin 5 Filament	Pin 4 Filament
Pin 3 Grid	Pin 3 Grid
Pins 2 & 4, Plate and Screen tied together	Pin 2 Plate



6A4 Pinout



01A Pinout

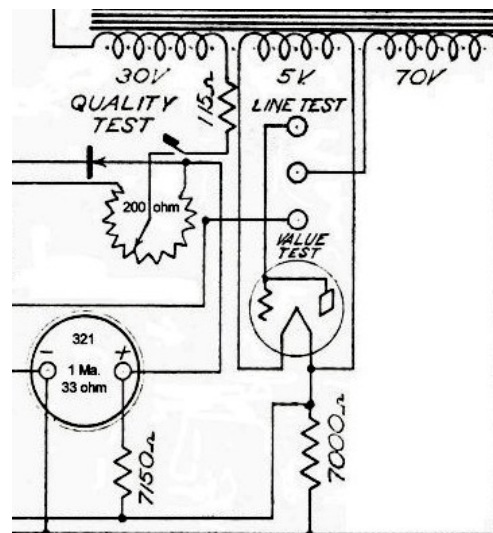
Five of these re-based tubes were created, tying the plate and screen wires together as a triode hookup. They worked very well in my set. What I failed to mention in the previous article was that I also created a single 6A4 that had the screen tied to the grid wire instead of the plate wire. I wanted to see what the results would be. This was later tried in the set in place of one of the original re-based 6A4 tubes. The results were awful, the set would not operate correctly no matter which tube socket the "trial" tube was used in. I can not say if all five tubes were the same if the set-up would have worked or not, or if the set could have been modified for the "trial" tube to work, but in my case this was a dead-end. The tube was set aside in hopes that some day I would again re-base the tube like the other 6A4 re-based tubes (right !!).

Sometime later I began to restore a Triplet Model 1210 tube tester, a small emission type tester, produced in 1934. The front panel of the set cleaned up rather nicely. A new power cord and grid-cap connection wire were added. The set had one paper capacitor inside that was automatically replaced. The hand-wound resistors were all really close to the values on the schematic and all were left in place. Next all the switches were cleaned and checked. I did need to replace the "Line Test - Value Test" switch. Fortunately I was able to obtain an exact replacement from Antique Electronic Supply. I was unsure how I was going to replace the switch as it was buried underneath two other switches. Once I realized I had to remove the switch hookup wires from their destination while leaving them still attached to the old switch and attach new hookup wires to the new switch before inserting the new switch, it was an easy fix.



Triplet Model 1210

There was one last item to address, the vacuum tube that was used as the diode in the tube tester. The schematic (pictured at the right) showed the filament was powered by 5 volts and sure enough, the tube in the tester was an 01A, and of course the 01A tube was "kaput". I really did not want to use a perfectly good 01A in a tube tester that would probably never be powered on again once I had finished restoring it. I re-visited the **March/April issue of the Flash, Vol. 30-2**, to re-read Larry Snyder's article



on 01A tube substitutions. Any of the tubes in his article would probably work. I even considered a 5A6 miniature tube in a socket adapter. The only requirement for the replacement would be that the tube and adapter fit in the fairly tight space the original tube was in. Then I remembered the "trial" 6A4 tube I had filed away earlier. Since all the screen and grid elements needed to be tied to the plate and it did not matter whether they were connected inside or below the tube socket, as the schematic showed the one single output (the plate and grid were tied together under the 01A socket), the "trial" 6A4 should work just like the 01A wired as a diode.

The modified 6A4 tube did fit in the designated space and the tester was re-assembled and buttoned down to prevent any accidental short circuits. I located several tubes listed on the 1210 tube-chart that I had in my inventory for testing, including some known duds. The set was powered on and allowed to warm up. All the tubes were then tested and the results recorded. The tubes were then re-tested on a newer 1951 Triplet Model 3413a tube tester and the resulting values were nearly identical. The duds tested as duds on both testers as well. As there is no calibration adjustment for the 1210 tester I was pretty pleased with the results. Once again the 6A4 tube was a suitable replacement for the 01A tube and a botched experiment was also salvaged.

#### Notes:

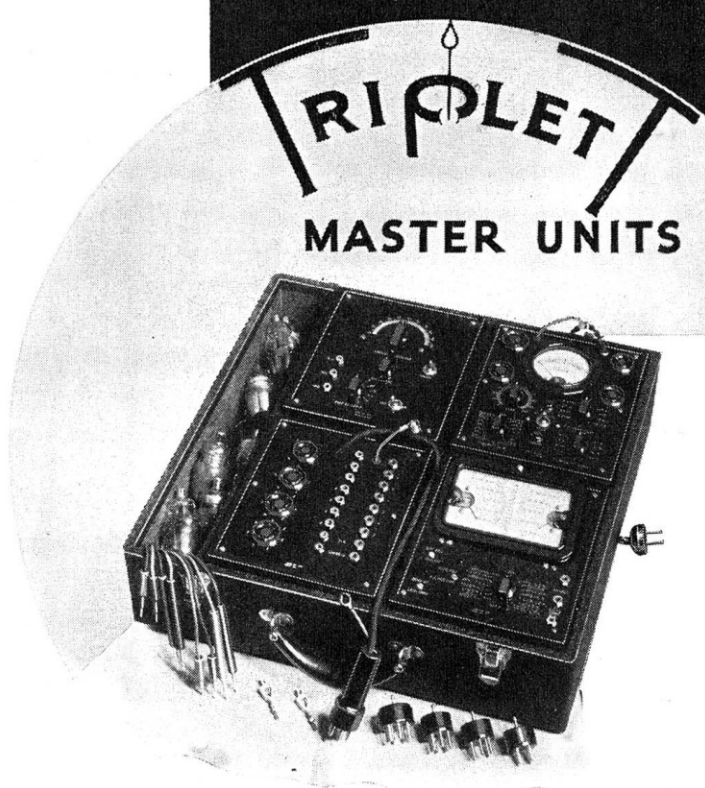
1. There is a Model 1210 and a Model 1210A Triplet tube tester. The 1210A is a newer model and has an additional octal socket installed. My tester is a Model 1210.
2. The Model 1210 was often sold as part of the Master Unit pictured at the right.
3. I did use a permanent marker to make a note on the 6A4 tube that it was re-based as an 01A so the next owner would have some idea of what was in the tester.

#### Sources:

1. Tube Lore by Ludwell Sibley, p. 173
2. RCA Receiving Tube Manual, RC-14
3. Radio Engineers' Handbook by Frederick E. Terman, 1943
4. <http://www.vacuumtubesinc.com>
5. Service Magazine, December 1934, p. 7
6. <http://coloradoradiocollectors.com/CRC/>  
- The Flash, Vol. 29-1 and Vol. 30-2

# NOW!

## ....Solve Any and Every Servicing Problem with



SERVICE men and technicians who have seen and used the precision instruments in the Triplet Master Unit line pronounce them today's most advanced developments. Triplet Interchangeable Master Units make possible different combinations of testing equipment to suit every servicing requirement . . . no matter how difficult or complicated. These units may be used as furnished, or, placed in convenient portable cases that hold one, two, three or four units.

#### Triplet Master Unit, No. 1205, includes:

- No. 1200 Volt-Ohm-Milliammeter.** DC scale readings: 1/5 to 1,000 volts (2,000 ohms per volt)—20 microamperes to 250 milliamperes—0 to 3,000,000 ohms. AC scale readings: 1 to 1,000 volts. Capacity charts furnished. Dealer's net price, unit only, \$21.67.
- No. 1210 Tube Tester.** Tests all tubes. Contains the most efficient short check known. Analyzes each plate of multi-plate tubes. Dealer's net price, unit only, \$20.00.
- No. 1220 Unit Tester.** Makes all series or parallel meter connections to the set sockets. Dealer's net price, unit only, \$8.33.
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- No. 1205.** Complete with above four units in case. Dealer's net price, \$71.33.

**YOUR JOBBER CAN SUPPLY YOU**  
**Triplet Electrical Instrument Company**  
113 Main Street, Bluffton, Ohio





# 2022 Colorado Radio Collectors Annual Show

The **2022 CRC Annual Show** in conjunction with Vintage Voltage is on March 20th this year.

This has become a yearly event and we will again be a part of the Vintage Voltage Show. The show this year is at the Delta by Marriott, located at I-25 at 120th Ave. (Exit East).

Every year the turnout is tremendous with thousands of people going through the facility. This is your chance to show off your stuff. Bring your treasured radios and equipment to show everyone and see what others have brought. Although there will be a featured category, don't forget that all of the standard categories will still be available.

Every radio counts! Ribbons for top entries in each category as well as a **Best of Show** plaque will be awarded as a result of paired member judging. Take advantage of this opportunity to show off your stuff! We have yet to run out of space for the display of radios, so dig deep, bring some items and let's show off who we are!

## CRC Show Schedule

Doors open/setup	8:00 AM
Registration	8:30 - 9:30
Judging Begins	10:00 (sharp!)

## Judging Criteria

- **Exterior condition**
- **Interior condition (if visible)**
- **Presentation: display, documented, etc.**
- **Rareness: few are in existence**
- **Uniqueness: novel, not many like it**

*Note that these criteria are weighted, with an emphasis on condition and presentation, so everyone has a chance!*

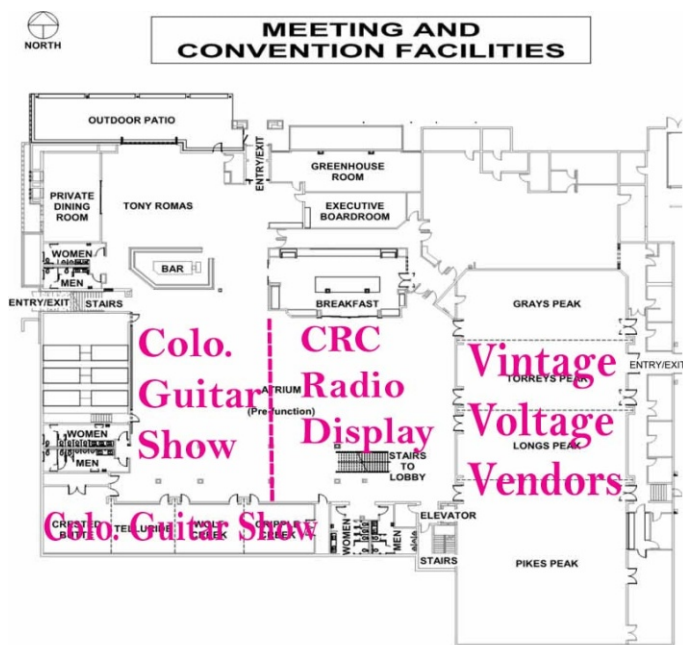
Be sure to place your display(s) in the correct areas designated by the display category signs. Also be sure to go to the computer desk to register and get entry tags.

Also, we depend on members to do the judging and also pass out the 'Peoples Choice' and other ballots - **please be available.**

**Please use the enclosed form below to enter your items for the show.**

**For early registration, email your information to:**

**Paul Thompson at [snowshoe9@comcast.net](mailto:snowshoe9@comcast.net) - Highly Recommended !!!**



At this time it is uncertain what, if any, covid restrictions (masks, proof of vaccination, etc.) will be in effect for the event. Details will be sent out at a later date.

# 2022 Colorado Radio Collectors Annual Show Entry Form

## Contest Judging Categories:

Accessories  
 Bakelite  
 Battery (1926-1929)  
 Battery nonportable (1930+)  
 Catalin  
 Cathedral  
 Classic Audio  
 Communications Gear  
 Console (Fulllength)  
 Console (High/Low Boy)  
 Crystal Set  
 Homebrew  
 Kit

Metal Box (1920's)  
 Metal Case  
 Military  
 No Judging (Display only)  
 Novelty (Transistor)  
 Novelty (Tube)  
 Phonograph  
 Plastic (Tube)  
 Portable (Post 1938)  
 Portable (Pre 1939)  
 Pre 1926  
**\*Specialty\***  
**"My Favorite Radio"**

Speakers  
 Telephony & Telegraph  
 Television  
 Test Equipment  
 Tombstone  
 Transistor  
 Tubes/Parts Display  
 Wooden (linepowered)

**\*ADDITIONAL AWARDS\***  
**BEST OF SHOW**  
**BEST RESTORATION**  
**MOST EDUCATIONAL**  
**PEOPLES CHOICE**

## 2022 Colorado Radio Collectors and Annual Show Competition

March 20, 2022 at the Delta by Marriott - I-25 at 120th Ave. (Exit East)

**The Specialty Category this year is: "My Favorite Radio"**

Record your entries information on this form and submit it to the computer operator  
 or **preferably** email your info to [snowshoe9@comcast.net](mailto:snowshoe9@comcast.net)

**NAME**

**PHONE#**

**BRAND  
 MODEL/YEAR**

**CATEGORY**

**RESTORE  
 PROJECT? Y/N**

1

2

3

4

5

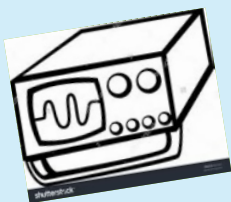
6

7

8

Use the backside of this sheet for additional entries if needed.





# Classified Ads



Ads are free for CRC members. To place an ad send your ad description along with personal contact information to Steve at [stevetou@comcast.net](mailto:stevetou@comcast.net) or Larry at [Lsnyder200@cs.com](mailto:Lsnyder200@cs.com).

**REPAIR SERVICE:** Radio repairs for club members. Reasonable rates. Good references.

Call David Boyle 303-681-3258

## FOR SALE:

Starting to gradually sell off restored radios from my extensive collection to club members and friends. Prices are very reasonable and will gladly negotiate. Range from the early 1920's to mid 1950's. Mostly wood radios from the 1930's...my favorite styles!

David Boyle

Castle Rock Area

email: [djboylesr@msn.com](mailto:djboylesr@msn.com)

## FOR SALE:

Tube Radios - Tombstone, Cathedral and Novelty Transistor Radios.

I have collected radios of all types for 35 plus years and now it is time to let them go to new home/s. I have over 250 tube type and over 5,000 transistor (both novelty and shirt pocket type)

Please call 303-2381384

[radio4us@aol.com](mailto:radio4us@aol.com)

Thank You,

Ron Smith

The insert shown to right is from the July 1923 issue of Radio-Age and thanks to Bill Potorti for submitting the tidbit.

R. C. G., Chicago, Ill.

Question: I wish ask a few questions with regard to charging a battery. I am on a direct current circuit for house lighting, and therefore could use the socket light for charging my storage battery but I am unable to determine exactly how much resistance I should have in the line, and the safest type to use. I have an electric toaster of 550 watts type of 5 ohms resistance, and would like to know if this would be a satisfactory resistance? How would this be connected? How long should the current be allowed to charge for an 80 ampere hour battery? How is polarity of the direct current determined? How can I tell when my battery is fully charged?

Answer: In Figure 1, I am printing the correct arrangement for charging the battery you speak of using the direct current lighting source you have. The toaster in series with several lamps of about 100 watts will sufficiently cut down the current to make it safe. The circuit should be properly fused at all times. If the battery boils violently another lamp should be added until the plates just bubble profusely. To determine when the battery is charged, I would advise that you secure a hydrometer, an instrument costing about seventy-five cents from your local battery station and by following the instructions accompanying the instrument you can test your battery for its gravity at any time. A fully charged battery should read 1280. The description of a polarity indicator is described elsewhere in this issue.

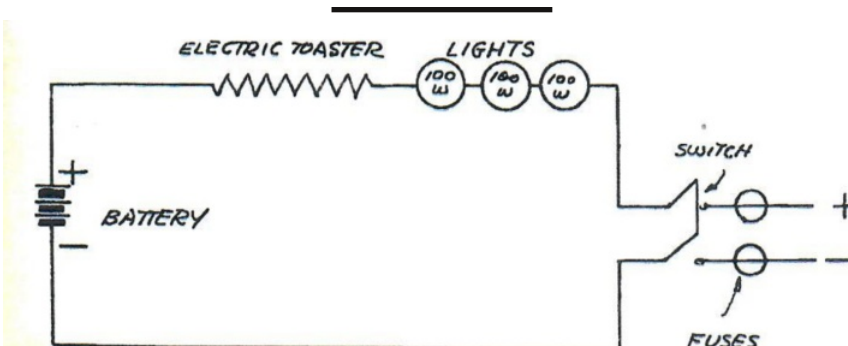
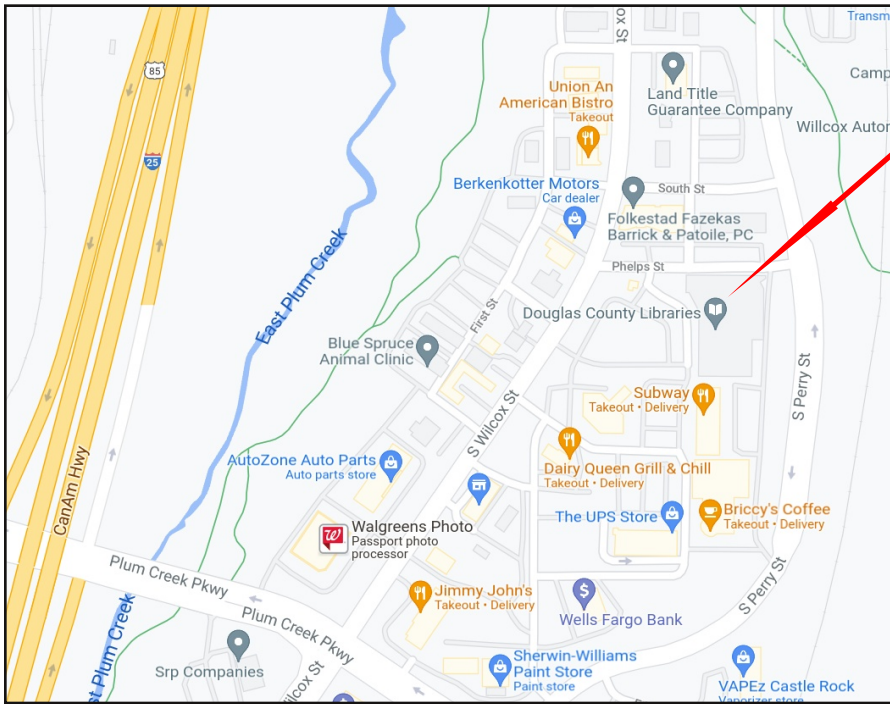


Figure 1. An arrangement using an electric toaster and a bank of 100 watt lamps in series to charge storage batteries, where direct current is available.

## SUBMISSION OF ARTICLES & AND ADVERTISEMENTS

Classified Ads and articles of any radio/electronic or historical related subject to be published in The Flash! are encouraged and welcomed. The article(s) should be submitted in **Microsoft Word, OpenOffice, RTF, or as plain text**, to Steve Touzalin by email at: [stevetou@comcast.net](mailto:stevetou@comcast.net) or Larry Snyder at [Lsnyder200@cs.com](mailto:Lsnyder200@cs.com) or by postal mail to 417 So. Queen Circle, Lakewood CO 80226. Formatting isn't necessary as it won't transfer into our software, but if you do, set the font to Times New Roman, size 10, left justified. If you have graphics (.jpg files) to be inserted, please name them and be specific about how you would like them placed. We will do our **best** based on space limitations.

# CRC Meeting January 9th at 1:00 PM



## Directions to Miller Library in Castle Rock:

From I-25: Take the Plum Creek Parkway, exit #181. Turn East onto Plum Creek Parkway. Turn Left (North) onto S. Wilcox Street and continue north 2-tenths of a mile. The Philip S. Miller Library is on the east side of the street at 100 S. Wilcox St. The building is towards the back of the parking lot, past the Dairy Queen .



**Colorado Radio Collectors  
Antique Radio Club**

**1st Class Mail**

