

# The Colorado Radio Collectors

Antique Radio Club

# FLASH!

Volume 11

May



June

2000

Issue 3



*In this issue...*

- ◆ The Cardtalk Phonograph ◆ Mark Dittmar's Technical Corner ◆
- ◆ History of the RCA Radiotron Reference Manual ◆

## ABOUT THE COVER

All it takes is to give some clever person a challenge and viola, you've got a solution. Read Wayne Gilbert's article on page 3 about this seemingly too simple to work mechanism that will play a 78 record. Well, I've heard it, and this simple little gadget is truly amazing.

## The Colorado Radio Collectors Antique Radio Club

**Meetings:** Unless otherwise noted in this journal, regular meetings are held on the second Sunday of every other month starting in January (except: 3rd Sunday of May) at 1:00PM at the VectraBank Building, Community Room, 1380 S. Federal Bl. The meeting normally includes business items, discussions, "show and tell", a raffle and a swap meet.

**Membership:** All dues are \$12.00 annually. Joining dues are prorated to June 1st. Contact club for foreign rates. Send dues and membership inquiries to the CRC Treasurer, Robert Baumann, 1985 S. Cape Way, Lakewood CO 80227, (303)988-2089, RGBdenver@aol.com

**Article Contributions:** Submission of articles are always appreciated. This would include historical and technical items as well as stories about individual collections. Articles may be written or e-mailed, and need not be in final form. Submissions and requests for information should be directed to the CRC "Flash!" Publisher, Larry Weide, 5270 E. Nassau Cir., Englewood CO 80110, (303)758-8382  
lweide@ibm.net.

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**Want Ads:** Submission of Sell/Want ads are always free to CRC members. Non-members may advertise in the Flash! for \$0.20 a word. Display advertising is available by contacting the CRC publisher, Larry Weide, for info and rates.

**Publishing Deadlines:** All submissions must be submitted by the 1st of Feb, Apr, Jun, Aug, Oct and Dec. for publishing in the following months.

**Thanks to the Pressworks** for printing the Flash! - (303) 934-8600

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### Upcoming 2000 CRC Events

Regular Meeting - July 9th, Annual CRC Picnic - more info coming



# Colorado Radio Collectors Antique Radio Club

Founded October 1988

Dedicated to the Preservation and Education of  
Wireless, Radio, Television and Associated Equipment.

Volume 11, Issue 3

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Hey folks, does the Flash look a little anemic this issue? Will it is, and guess why? Yes, that's right, **not enough contribution**. I *really* appreciate the efforts of those who have regular or even occasional articles printed - like Wayne, Mark and Charles. But, it isn't enough. There's a wealth of knowledge in our club, and more of you need to be contributing it. Help make the Flash better. LW

## **A CHAT WITH THE PRESIDENT**

# **IS IT RAINING RADIOS WHERE YOU ARE?**

by Tom Kelley, CRC President

Hello again fellow club members,

Spring has sprung and everything is coming up radios? Speaking of radios, our spring show "A Century of Radios" has come and gone - stay tuned to the Flash! for an in-depth report in the next issue.

The next CRC event coming up will be our summer picnic at the Lakewood Heritage Center (formerly Bellmar), as it has been in the past years. It will probably be held on the last Sunday in July. Stay tuned for details.

Now that it's summer, I hope you all find the "radio of your dreams". Many exciting shows, such as Elgin, Rochester, Lansing, etc. will provide an opportunity for radios to show up - and don't forget yard sales and flea markets.

Tom

# "CARDTALK", A SIMPLE TALKING MACHINE

By Wayne Gilbert, CRC Member

The Cardtalk phonograph record player is the classic definition of a paradox. While very few collectors know what a Cardtalk is, and even fewer own one, approximately a million have been made and distributed world wide. Although it's truly a phonograph record playing machine, it has no moving parts,

costs less than a dollar to manufacture, and has remarkably good sound fidelity. And finally, it coexists, without fear, with the most complex of sound reproduction machines in this world of complex electronic marvels.

This amazing little "phonograph" was developed in the

late 1940s by The World literature Crusade, a religious organization, to help it fulfill its mission of spreading Christian bible ministry throughout the world. The WLC, like many similar organizations, had been successfully producing and distributing printed literature, but the realization that many people it was trying to reach were illiterate

forced it into new frontiers. Records were, of course, the obvious solution, being cheap to produce and distribute and as reusable as printed materials. But for all their advantages, records were as totally useless to



someone without a record player as printed literature was to the illiterate. Battery powered

phonographs were impractical to produce and keep supplied with the necessary batteries, and spring powered were too expensive and prone to failure.

Then WLC's Joy Ridderhof thought about the problems in the most basic terms and decided the only thing truly needed to play a record was something for "the record to turn on and a needle to go into the groove." This spark of ingeniousness that was to verify the philosophy that 'less is better'. Thus the handicap of cost restrictions, combined with inspirations, true engineering genius, and luck contributed to the birth of the Cardtalk machine.

One of the commonest materials available was corrugated cardboard, which is cheap, easily workable and, ironically, discovered to be a very good material to reverberate the sound produced by needle. It was decided that cardboard could be cut into strips approximately two feet long and eight inches wide, and which when folded twice formed an 8" square platform for the record to rest on, and a triangular tone arm and sounding board.

Assembly simply consisted of attaching the needle (at the proper angle) to a small piece of metal which was then crimped to the cardboard tone arm. A small sheet

of smooth vinyl-like plastic was glued to the base to provide a smoother sliding surface, and a pop rivet was used for the record spindle.

Operation was as ingenious as construction and intuitively obvious to almost anyone immediately. Any 78 rpm record with the proper groove width, approximately eight inches in diameter, with a small spindle hole (or an adapter) could be played on a Cardtalk machine. The record needs only to have a small hole punched about 1 1/2 inches from the center, just large enough for the power source, usually a pencil or small pointed stick. The record is then rotated by hand and the speed is controlled by ear. It is surprisingly easy to maintain an adequately constant 78 rpm and the sound quality is much better than many more elaborate and expensive acoustical record players.

The Cardtalk phonograph is without a doubt one of the simplest and cheapest phonographs ever made and its basic simplicity is reminiscent of the very earliest radios. Although not designed to become a collector's item, its basic simplicity and functionality make it a very interesting piece for anyone who appreciates sound reproduction and transmission.



# Mark's Column

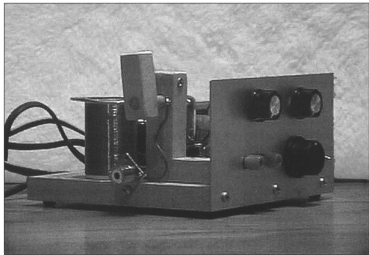
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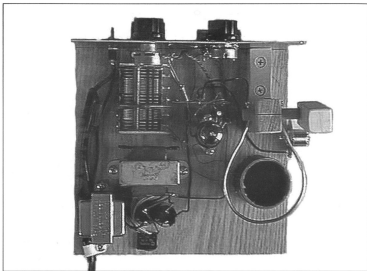
## Mark Dittmar

CRC Member

In the last issue of the FLASH, I detailed the construction of a BCB regenerative receiver which used a single 12AC6 RF pentode. This receiver, designed by Al Klase, featured 12V operation, screen-grid control of regeneration, tickler-coil feedback, and variable antenna coupling to the detector tube via a small trimmer capacitor. In this

month's column, I present another AM BCB regenerative receiver design using a single 12 V tube, this one designed and constructed by my father, George T. Dittmar of Lancaster, Ohio. Frankly, I have lost count of all the various receivers my dad has built over the last couple of years. When I return to Ohio on visits, I get to spend a number of hours fiddling with his new





creations and comparing their relative merits. They always work great and are beautifully made! I hope to feature some more of his work in future columns.

This receiver has a number of features that make it quite different from the design featured in the previous issue. Let's start with the tube, a single 12EC8. This tube contains both a triode and a pentode in a single envelope, and consumes 0.225A at 12.6 volts for the filament. This enables one to build a regenerative receiver which contains both a detector and a single stage of audio with only one tube. In the parlance of regenerative receivers, this is called a "detector and one step".

Referring to the schematic diagram, the pentode section of the 12EC8

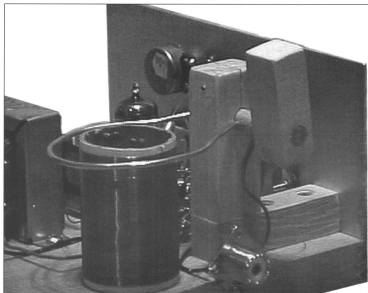
comprises the detector. Regenerative feedback is obtained via a single, tapped winding as opposed to a separate tickler winding. A 365 pf capacitor, in parallel with this coil, allows tuning from 500 khz up to 1800 khz. The grid leak resistance and capacitance are 10 Mohm and 120 pf, respectively. The antenna is coupled to the detector using a rather unique single - turn swinging link inductive coupling arrangement (a bit more on this later). The regeneration control is achieved by variation of the screen voltage of the pentode, using a conventional 50 Kohm potentiometer. The portion of the control resistor between the rotating contact (the "slider") and ground is bypassed via a 0.1 uF capacitor to filter out scratching noise when the arm is rotated. The .001



uf from the plate of the pentode to ground serves as an RF bypass, and keeps RF out of the succeeding audio stage. The detector is coupled to the triode audio stage via a 100K fixed resistor and a .022 uF capacitor. A 1 megohm potentiometer serves as a simple volume control, feeding the audio signal into the grid of the triode section. Bias on the triode tube is secured via a 2.2K resistor, and the 22 uF capacitor in parallel with this resistor serves as an audio bypass, keeping a fixed level of bias on the triode. A pair of old-fashioned high-impedance headphones, connected in series with the triode plate and B+, rounds out the design. Again, high - impedance headphones (around 2

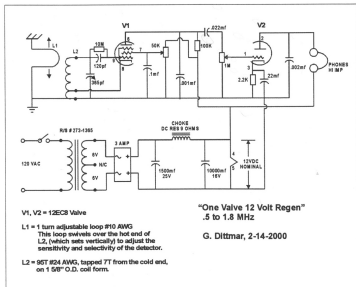
KOhm or better) are required, conventional walkman headphones won't work in this application.

The schematic diagram also shows a simple power supply that can be built for the set - it is a conventional full wave bridge supply. You may have to "fiddle" with the choke to obtain the proper, loaded output voltage of 12 VDC. The power supply choke in this receiver was the primary winding of an STANCOR P8615 power transformer. It really is not critical. A wall wart rated for 12 VDC at 250 ma will work OK too. I prefer to run regenerative receivers on battery power, or sometimes use a small REGULATED power supply that I keep around for such purposes.



Page 5 shows a view of the completed receiver, showing the front panel layout. Page 6 presents a top view, while page 7 shows a side view of the movable link, and the main tuning coil. Classic breadboard/panel construction is used, the main oak

will serve just fine. You will need to add a separate binding post/terminal for a ground connection, however. The two binding posts at the lower left of the panel are the jacks for the headphones, and the main tuning dial is to the right of these. The volume and



board measuring 7" deep, 7¼" wide, and ¼" thick. The front panel is a piece of aluminum 7¼" wide by 4" high, attached to the breadboard with some wood screws. An S0-239 UHF connector can also be seen in the photograph - this is just the connector for the antenna, with the ground connection being made through the outer shell of the connector. If you just have a simple wire antenna, any kind of binding post or even a Pfanestock clip

regeneration controls are on the top row of the front panel. The main tuning capacitor in this case was simply epoxied to the board, since there were no mounting holes of any kind on this particular capacitor. The capacitor's shaft simply passes through a hole in the front panel. A vernier movement for the tuning capacitor is not required, although the capacitor used here has a geared movement built in. Again, page y has a top view of the receiver,

showing how the parts are laid out on the breadboard.

Referring to page 7, the link (L1 in the schematic diagram) is simply a 1turn adjustable loop, made of #10 AWG wire. It is approximately  $2\frac{3}{4}$ " in diameter, and is concentric with the tuning coil. It can easily swing through a full 90 degree arc. The main standard for the link is a piece of  $\frac{3}{4}$ " by 1" wood piece, with a  $\frac{3}{8}$ " diameter hole drilled approximately  $\frac{7}{8}$ " from the top of the standard and centered. The main standard is  $2\frac{3}{4}$ " high, and sits on top of another piece of wood, mounted to the breadboard. A slot is cut through the top of the standard through the center of the hole; a  $\frac{3}{8}$ " diameter dowel passes through the hole and it is to this dowel that the link is attached. A small screw also passes through the slotted region of the standard and by adjusting this screw, the tension on the dowel can be controlled by varying the gap width made by the slot. The handle for the dowel is just another piece of wood,  $\frac{3}{4}$ " square by 2 inches in length. This link mechanism makes adjustment of antenna coupling easy, and allows the operator of the set to balance selectivity against sensitivity when tuning for weaker stations. L2, the main tuning coil, consists of 95 turns of #24 AWG enameled wire wound on a  $1\frac{5}{8}$ " diameter form. I have heard that a toilet paper tube is about this diameter, although I doubt that such a tube would have the required mechanical strength. PVC pipe of a similar diameter should work OK here as a coil form. A tap taken from the 7<sup>th</sup> turn

from the cold end (the end connected to ground) is required for the regenerative feedback. The same coil winding techniques outlined in my previous article can be applied here. When the 7<sup>th</sup> turn is reached, just pull a bit of extra wire away from the form (a  $\frac{1}{2}$ " or so) and continue winding. Sometimes it is easier to keep the tap in place by giving the pulled wire a couple of twists before continuing on with the winding. When the coil is completed, it is a simple matter to go back to the tapped area and remove the enamel insulation with a razor blade, then "tin" the tap with solder, so a good connection can be made to it.

I understand from my father that this receiver is a very good performer and is very sensitive with more than enough volume. I will either have to build my own version or wait until my next trip to Ohio to find out for myself! Until next time,

73,  
Mark, AB0CW



## Olde Time Radio Humor



"Oh gee - I wish I had the dough to buy myself a radio!"



It must be fun to twist the dials and pull them in for miles and miles!



To settle back and listen as the atmosphere is filled with jazz!



Well holy gosh! If that ain't great! Just 15 minutes more to wait!!"

RADIO NEWS Dec/1927

# My Red Book is Blue

By Charles Brett  
CRC Member



One of the major Books on the design of vacuum tube radio receivers is the RCA Radiotron Designers Handbook 4th Edited by Fritz Langford-Smith. This book got its start in Australia in 1934 with the 1st edition. By 1935 the second edition had been produced with what I expect was corrections and a few additions as the second edition was only 58 pages.

Langford-Smith was born in Sydney Australia in 1904, received his B. Sc. in 1926, his B. E. in 1928 at Sidney University and was living there until his death in 1966. He had worked for Cosmos Lamp Works during 1929-32 the Amalgamate Wireless Valve CO. 1932 -56, the English Electric Company 1956-63 and was also Editor of Radiotronics 1935-50.

The 3rd edition of the Radiotron Designers Handbook (RDH) came out in 1940 for \$1.00 with 352 pages. The last edition the Big Red Book, or the "Bible" as it has been called in radio circles, is the 4th edition and it came out in 1952 for \$7.00 with 1,482 pages. The final printing in 1960 has 1,498 pages.

To most of us who have used this book it has always been the RCA Radiotron Designers Handbook, and RCA highly advertised and sold the book in the 1950s. The supplement at the end of the book grew from 8 pages in 1952 to 24 pages by the late 1960s, and is now very prized by vacuum tube enthusiasts - especially those into tube audio design. The final version of the supplement contains many hundreds of

additional references and a few added drawings of circuits and charts. This same book has been published in England titled "The Radio Designer's Handbook".

A number of reviews of this book have been written, one of which is by Paul J Bourbin in late 1997 in the Vacuum Tube Valley, Issue 8. There's also an early review in the Proceedings of the IRE in October 1953 by Kerim Onder. Here are some excerpts from the reviews; Bourbons in his Vacuum Tube Valley review states "It is probably the most comprehensive book ever written on vacuum tubes and their circuits" ....., "this book has achieved a status almost equal to the Holy Grail (and almost as hard to find!)" ....., "The fourth part handles radio frequencies in the same thorough manner and covers all of the related circuits. Part five deals with rectifiers, rectification, filtering and hum. All types of regulators and fitters are covered in great detail." ....., "There are nearly 100 pages of tables, charts and other information of interest to anyone who works with electronics. The Index is extremely thorough ....., "Although the Radiotron Designer's Handbook seems to be oriented towards radio, it is one of the most detailed books available for those who want to understand and design circuits used in High Fidelity equipment. Although dated 1952, there is no information on use of vacuum tubes for computers, industrial uses (like machine control) or television." Kerim Onder working

for Panoramic Radio Products in 1953 wrote in the October 1953 IRE Proceeding Book review "The fourth edition of this well-known reference book has been increased in size more than four times, and like its predecessor, it deals exclusively with the design of broadcast radio receivers and audio amplifiers. There is no specific information on television, radar, nor industrial electronics etc." ....., "The authors could have safely assumed an elementary knowledge of radio and mathematics on the part of reader, thereby making room for more useful information. for instance, a chapter on transistors in part (2) and another on the mechanical aspects of receiver design in part (6) would have been quite welcome. As it is, transistors are mentioned in about two lines"..... "The audio engineer will be happy to see more than 400 pages devoted to his field." ....., "Receiver test and measurement methods are general based on IRE and RTMA Standards. However, more information on noise and a circuit description of a noise factor meter would have been quite useful in as much as such test equipment is not readily available at present." .... .. "Among the many good features of this book are the detailed and classified list of references at the end of each chapter and an unusually complete index."

I remember my first introduction to the 3rd edition, the small Black Radiotron Designers Handbook, in 1948 while I was in my second year

attending the Technical Institute CT I of the Norfolk Division of the College of William and Mary (now a part of Old Dominion University). My teacher, BC Dickerson, got about 30 copies for all of his students. I was 17 and still in high school and was allowed to go to the Technical Institute in a class of mostly WWII veterans 3 hours a day 5 days a week, as our little county school in Norfolk had only limited vocational education available to its students. Dickerson spent a few hours going over the book and introducing it to us. The text book for our class at the time was Radio Engineering 4th edition by Frederick E. Terman and this new Radiotron book was very similar to Termans work but it only covered receivers.

It was many years later in 1956 when I got a copy of the 4th edition when someone at Ramo Wooldridge Corp. in California, where I was working, purchased a case of the Big Red RCA book and had them available for about \$7.00 each. At the time I was designing the rf/mixer and local oscillator sections of a miniature high frequency vacuum tube receiver. I decided to read and study the complete RCA Handbook and got through the first 350 pages before other things took up my time.

It has always been an excellent reference book on vacuum tube receiver and audio amplifier design and has held a key spot in my library. For about 20 years or so this book has not been available except on the use book market. With the renewed interest in

vacuum tube radios and audio amplifiers the book has become in high demand but the used price has risen from about \$5.00 to \$100.00+ for mint copies.

Over the past year or two the book became available again on CDROM at \$69.95 and then was quickly reduced it to \$29.95 at Old Colony Sound Co. It's fairly easy to use on Windows Desktop Computers. When it was put on CD they used a late printing of the book that has all of the early corrections incorporated, plus the complete supplement of 24 pages making a total page count of 1,498. My old 1953 copy has only an 8 page supplement making the total book 1,484 pages.

Now with the continued high demand for the book it has been reprinted in India by Gopsons papers Ltd. and carries the British Title "The Radio Designer's Handbook" and is available from Old Colony Sound Co. and Antique Electronic Supply for \$66.95. If one divides the new price by the inflation factor since 1950s when I got my first copy you come close to the \$7.00 price then.

One of amusing things is the color of the new reprint is blue i.e. the Big Red Book is now Blue. I'M not sure what you can read into this, but RCA is now owned by GE so things just have a way of changing with time.

# Collector Books for Sale

CRC Members get specially reduced prices on popular collector books. Place and receive your order at club meetings. If ordered for mail shipment add \$1.75 postage for each book ordered. For information and ordering: Charles Brett, (719) 495-8660, brett3729@aol.com. *This listing has item and price updates - void all other listings.*

	Retail	Club
<b>RADIOS, (GENUINE PLASTIC) OF THE MID CENTURY</b> Jupp & Pina, hard bound, 219 pgs, 1998 PG, 450+ color pics	\$39.95	\$28.00
<b>ANTIQUÉ RADIOS, COLLECTOR'S GUIDE - 4th EDITION</b> Bunis, 1997 values, revised & updated, new photos, 248 pgs	\$18.95	\$15.00
<b>GUIDE TO OLD RADIOS, POINTERS... - 2nd EDITION</b> Johnson, 277 pgs, 1995-96 prices	\$19.95	\$15.00
<b>ANTIQUÉ RADIO RESTORATION GUIDE - 2rd EDITION</b> Johnson, 144 pgs, repairing, refinishing, cleaning	\$14.95	\$12.00
<b>RADIO, EVOLUTION OF THE - VOLUME ONE</b> 227 pgs, 118 in color, More than 800 radios pictured and priced for 1992, picture from the collections of CRC members Jim Berg and Johnny Johnson	\$22.95	\$18.00
<b>RADIO, EVOLUTION OF THE - VOLUME TWO</b> All different from Volume One, 226 pgs, Color, Radios of the 1920s to 1960s, with 93-94 values, pix from CRC member Jim Berg	\$24.95	\$19.00
<b>TRANSISTOR RADIOS, COLLECTOR'S GUIDE VOL II</b> Bunis, 1996 prices, Full Color	\$16.95	\$13.00
<b>ZENITH TRANSISTOR RADIOS, 1995-1965</b> Smith, 1998 PG, 160 pgs, 226 color pics, info, descr.	\$29.95	\$22.00
<b>THE ZENITH TRANS-OCEANIC (THE ROYALTY OF RADIOS)</b> Bryant and Cones, 160 pgs, 1995	\$29.95	\$22.00
<b>ZENITH RADIOS THE EARLY YEARS 1919-1936, Cones</b> 1997-98 Price Guide, 223 pgs, 100's Photos, Desc., Hist.	\$29.95	\$22.00
<b>RADIOS BY HALLICRAFTERS, revised 2nd edition</b> Dachis, 1999 values, 220 pgs, 1000+ pics, id's, history	\$29.95	\$22.00
<b>CLASSIC TV'S, PRE-WAR THRU 1950'S</b> 86 pgs, color & b/w pics, descriptions, etc.	\$18.95	\$15.00
<b>Machine Age to Jet Age, Radiomania's Table Radio Guide I, '33-'59</b> Stein, 255 pgs, 100's photos	\$24.95	\$19.00
<b>Machine Age to Jet Age, Radiomania's Table Radio Guide 'II, 30-'59</b> Stein, 358 pgs, 100's photos	\$28.95	\$22.00



<b>Machine Age to Jet Age, Radiomania's Table Radio Guide 'III, 33-'62</b> Stein, 256 pgs, 100's photos	\$29.95	\$24.50
<b>TRANSISTOR RADIOS, 1954 TO 1969</b> Norman Smith, with prices, 160 pgs, 1000 photos, 1998	\$29.95	\$22.00
<b>PHILCO RADIO: 1928 - 1942</b> Ramires & Prorise, 160 pgs, 828 pics & drawings, 1993	\$29.95	\$22.00
<b>RADIO AND TV PREMIUMS</b> Jim Harmon, 256 pgs, 200+ photos, 1997 —— new books —— new books —— new books ——	\$24.95	\$19.00
<b>RADIO MANUFACTURES OF THE 1920'S VOL I</b> Alan Douglas, 225 pgs, 1988	\$24.95	\$19.00
<b>RADIO MANUFACTURES OF THE 1920'S VOL II</b> Alan Douglas, 266 pgs, 1989	\$24.95	\$22.00
<b>RADIO MANUFACTURES OF THE 1920'S VOL III</b> Alan Douglas, 285 pgs, 1991	\$24.95	\$22.00
<b>CRYSTAL CLEAR VOL 1</b> Maurice Sievers, 282 Pgs, 1991	\$29.95	\$22.00
<b>CRYSTAL CLEAR VOL 2</b> Maurice Sievers, 252 Pgs, 1995	\$29.95	\$22.00
<b>RADIO TUBES AND BOXES OF THE 1920'S</b> George A Fathauer, 112 Pgs, 1999	\$26.95	\$20.00
<b>70 YEARS OF TUBES AND VALVES, 2ND EDITION</b> John Stokes, 264 Pgs, 1997	\$29.95	\$22.00
<b>RADIO DIAGRAM SOURCEBOOK</b> Richard Gray, 264 Pgs, 1996	\$18.95	\$15.00
<b>THE RADIO COLLECTOR'S DIRECTORY AND PRICE GUIDE, 2ND ED.</b> Robert Grinder, 524 Pgs, 1995	\$26.95	\$21.00
<b>COLLECTOR'S GUIDE TO VINTAGE TELEVISION</b> Durbal & Glenn Bubenheimer, 200 Pgs, 1999	\$15.95	\$13.00
<b>NOVELTY RADIOS, VOLUME 1</b> Marty Bunis & Robert Breed, 223 Pgs, 1995	\$19.95	\$15.00
<b>NOVELTY RADIOS, VOLUME 2</b> Mary Bunis & Robert Breed, 199 Pgs, 1999	\$18.95	\$15.00

# "The Open Trunk" Classified Advertisements

◆ See IFC for ad details ◆

WANTED: 1940 Deutsche Arbeits Front (DAF) 1011 • Radione 1939 portables R-2, & R-3 • Any VE-301 • Any Japanese 1930's radio • Zenith T-O bomber or sailboat • Hoffman "Nugget" sub min tube pocket radio • WWII axis powers clocks or watches. Will pay your price. Condition not important. **John A. Miner** (303) 759-9152 voice, (303) 759-5438 FAX hohum@uswest.net

FOR SALE: Reproduction Philco Cathedral cabinet parts. Front panels, rear arches, bottom moldings. Grandfather clock finials, colonial clock top trim and finials. Reproduction 90, 70 and 20(std) cabinets. Other needs such as other style moldings from your sample. Inquire. **Dick Oliver**, Antique Radio Svc., 28604 Schwalm Dr., Elkhart IN 46517. (219)522-4516

WANTED: The female power (battery) plug for a Kemper portable K-52. Similar to octal except has 7 pins and two round locating pins (edge and center). • Knobs for a Crosley 601 bandbox. **Mark McKeown**, (303) 278-3908 mmckeown@tde.com

FOR SALE: • Zenith R-7000, the very last trans-oceanic made. Call for details. (303)730-8539

WANTED: Stewart-Warner model R-123 chassis, used in receiver models 1231 to 1239 (see Riders volume 6 page 6-2 for picture of chassis). • Chassis for AK 217, and Majestic 371. **Jerry Tynan**, (303)642-0553 jtynan@worldnet.att.net

FOR SALE: Copper Rod, save \$\$\$\$\$\$, several diameters available to make your own soldering iron tips (or I can for you). • Radio repair and restoration service. **David Boyle**, 1058 Colt Cir., Castle Rock, CO 80104 (303)681-3258

WANTED: GE clock radios, models 935 & 936. **Tom Kelley**, 971-1/2 Pleasant St., Boulder, CO 80302 (303)444-1837

FOR SALE: Arvin 450 • Belmont 636 • Airline 94-HA-1528 • Motorola 50-X-1

WANTED: Chassis for Sparton Model 931. • Cathedral cabinets for Philco mod 50 & AK 627 • Chassis for RCA 120/124 & Steinite mod 22  
• Information about any radios

manufactured in Colorado; A&M, Madison/Moore, Buckwalter. etc.  
**Wayne Gilbert** (303)465-0883

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**WANTED:** Dial drive assembly for a Philco 42-327, or a junker with dial plate, support, dial pointer and sheaves intact. • Case and knobs for a Zenith 6D311 Bakelite set. • Articulated detector arm for a Flivver crystal set. • Westinghouse Little Jewel (Refrigerator); H-124 dark green, H-127 burgundy. • Palomar base/amplifier. **Fred Sodamann**  
2603 N. Greenwood, Pueblo 81003  
(719)543-6654, fritz@market1.com

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**FOR SALE:** Victor console, 1927. • GE Tombstone Model A63, 1935. • Majestic Tombstone, 1935.  
• Zenith 5G01, 1950. • Emerson Model 529, portable record recorder, 1950 Two tone arms and mike - NITB.  
• Precision Tube Tester Model 10-54.  
• 2 spools of jumper leads, 2 spools of 40's hookup wire. **Clyde Benge**, 10057 S. Falcon Creek Dr., Littleton CO 80126, (303)683-0624

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**FOR SALE: Juke Boxes !**

- Rockola 441 "Deluxe" \$300.
- Wurlitzer "Cabaret" \$300.

**Dave Wanner**, 3230 W. Grand Ave., Englewood, CO 80110 (303)797-7563

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**WANTED:** Mountain Dew BB-92 • Napoleon Cognac BB-93 • Peachtree Cream BB-97 • Scotch Seven BB-100 • Mr & Mrs "T" BB-106 • 7-UP Vending Machine • Pink Panther

BB-390 • Battlestar Galactica BB-447 • Batman BB-353 • Mickey Mouse (Breed 1 Plt 115)

**Ron Smith**, 145 Carr St., Lakewood CO 80226, (303)274-7522

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**WANTED:** Old Radio magazines for my research library in Antique Radio. Need pubs like Radio Design, Radio Age, and Radio Craft -1920's thru 1940's. Will provide home, or purchase singles or full sets at a fair price. Also interested in publications from various companies; Aerovox, RCA, Sylvania, Bell Labs, etc. Likewise, need old test equipment literature and manuals.  
**Charles Brett** 5980 Old Ranch Rd., Colorado Springs CO 80908  
(303)495-8660

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**WANTED:** Old horn speaker parts, drivers and incomplete units. Also, old light bulbs with tip and good filaments.  
**Charles Combs**, 508 E. Daniel St., Albany MO 64402 ph/fax  
(606)726-3038

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**FREE - JUST FOR SHIPPING!!:**

Plug-in peak noise limited for National TC5 Rcvr • Zenith rotor wave magnet 9x4x16 • Original factory ship. carton for Philco F743

- Philco "G" elec/dny speaker
- Crosley Prestotune 12, model 1227 chassis w/tubes • Sears model 1324 chassis w/tubes • RCA R-32 chassis (3 pc's) wo/tubes • Sparton 966 chassis wo/tubes • **Bill Busetti**  
902 Bellview #6, La Junta CO 81050  
(303)384-2365 week days

Colorado Radio Collectors  
Antique Radio Club  
5270 E. Nassau Cir.  
Englewood CO 80110



**FIRST CLASS**

Note the meeting day  
3rd Saturday of the month!



The May meeting is on Saturday May the 20th at 1:00 PM  
VectraBank Building at Federal and Arkansas