



# **Hamvention – 2010**

## **Drake Forum – Slide Presentation**

### **Part One of Three**



# 2010 Dayton Hamvention Drake Forum





# •Agenda

- **1030-1030:**

- Moderator: Evan Rolek, K9SQG
- *Restoring, enhancing, or upgrading Drake equipment...the choices are yours*
- "Pieces, parts, and places", Mark, WB0IQK.
- "Adapting the L4B linear to modern rigs, plus some cosmetics", Evan, K9SQG.
- "C-line PTO improvements and maintenance: why the C-line still belongs in your arsenal", Rob Sherwood, NC0B.
- "Ask the Experts: Questions & Answers", Jeff, WA8SAJ, Mark, WB0IQK, and Gary, W8PU.
- FREE prize drawing including Drake memorabilia, Sue, our "Lady of Luck".



## Prizes and Contributors

- 1) Drake Logo Pens. Donated by WB0IQK, K9SQG, & W4WTO
- 2) Two VOX Adapters, from “John Kriner, The Man, TR7Dude”
- 3) A,B & C Line Cabinet Screws, from WB4HFN.COM
- 4) LEDs from RadioLabWorks.
- 5) Drake Mousepad from the Forum Committee
- 6) Two UKA-2 Interface for L4B, from Hamgadget

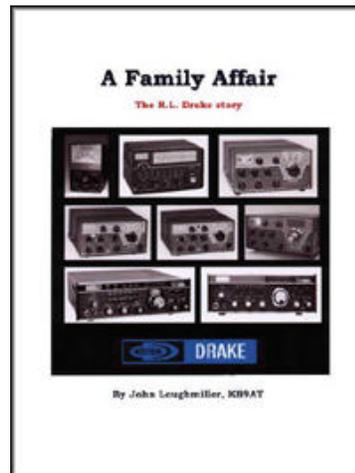


# Resources

Drake Technical Net: Sunday, 7238 kc @ 2000z

Drake & Antique Tube Gear Net: Tue. 3865kc @ 8 pm Eastern

Drake Family Affair Book by John Loughmiller, KB9AT



Drake Internet Reflector: [Drakelist@zerobeat.net](mailto:Drakelist@zerobeat.net)



Door Prize Contributor

**THE RADIO LAB WORKS**  
**WWW.RADIOLABWORKS.COM**

Blue LED Backlighting for  
all Drake 4-Line and 7-Line Equipment

- Plug & Play (4-Line) or Simple Soldering (7-Line)
- Ten year continuous operation life expectancy
- 1/10th the current draw
- Eliminates Gel Filter use
- Assembled in the U.S.A.
- Over 2000 currently in service



D.A. Buska Engineers LLC

Owned and Operated by Don Buska N900  
[engineering@radiolabworks.com](mailto:engineering@radiolabworks.com)

## DRAKE

Drake Repair Services

For Sale - Drake Parts

For Sale - Drake Radios

Picture Gallery

Ham Shack Pictures

Radio Manuals

Serial Number Data

Radio Resale History

User Technical Tips

Service Bulletins

Parts & Services

Radio Brochures

Catalogs & Price Lists

Magazine Ads

What's New

Related Web Links

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234485

## WB4HFN Amateur Radio Website

### "The Drake Page"

Check out the [What's New](#) section on this site for all the latest updates to this site.

Take a look at some recent articles written by other Drake users on a variety of related subjects. See the entire list of articles, [Technical Tips](#).

- ▶ [Drake L4-B Power Switch Repair](#)
- ▶ [What's Inside the Drake TR-7 Transceiver](#)
- ▶ [The Drake TR-7 Transceiver Renewed](#)
- ▶ [Radio Refurbishing Before Restoration](#)
- ▶ [TR-7 Wide Band Transmit Modifications](#)
- ▶ [Restoring Drake TR-7 Amp To Full Output](#)
- ▶ [Drake AC-4 & AC-3 Power Supply Upgrade](#)
- ▶ [Useful Function for the TR7 "Store Switch"](#)
- ▶ [Identifying Drake TR7 & TR7A Differences](#)
- ▶ [Drake PTO - Smooth and Silky](#)
- ▶ [Drake Parts, Materials and Resources](#)

Do you consider yourself a Drake Collector, whether it be a few radios, small collection or large, proudly display this emblem. Just copy and paste the picture to your e-mail, website or other projects.



Check-out the Drake Reflector, this is a great service for sending and receiving e-mail messages to the entire Drake Group. You will see e-mails from other Drake users having questions, users answering those questions, or simply ask you own question and receive answers for other user. This reflector is a great opportunity to all serious Drake users. To Subscribe or for more information: <http://www.zerobeat.net/draquelist/drakefaq.html>

Highlights from previous Dayton Hamvention Drake Forum's. One of the high lights at Dayton for the Drakester is the annual Drake Forum on Saturday.

- ▶ [2001 Drake Forum, the Drake gang reunion.](#)
- ▶ [2004 Drake Forum, & Flea-Market Friends.](#)
- ▶ [2007 Drake Forum, Dinner and Flea Market](#)
- ▶ [2009 Drake Dinner, Forum and Flea Market](#)

Join the fun, tune into the Drake radio Nets every Tuesday and Sunday. List equipment for sale, look for equipment repairs and operating tips, and ask questions. These nets are found on Tuesday's at 8:00pm EST on 3.865Mhz, and on Sunday at 3:00pm EST on 7.238Mhz. The Sunday Net is a technical session only, if your looking for parts, troubleshooting help, repair assistance and advice, the Sunday Technical Net is the place to go.



**4C**FrontPanels  
Tony Mills / KF8MW  
[info@4cfrontpanels.com](mailto:info@4cfrontpanels.com)

**WB4HFN**  
Drake Radio  
Repair & Restoration



<http://wb4hfn.com/DRAKE/DrakePartsService.htm>

#### [Drake Case Screws, for all Drake Equipment](#)

Replacement case screws for all Drake cases, exact size, color and oxide finish, just like the Drake originals, but more durable. They are packaged in lots of 100 and all for \$10.00 per package.

#### [Drake "4" Line Microphone Connectors](#)

WA4SDE, Danny, has the Drake "4" Line Microphone connectors available.

#### [Drake 4 Line Interconnecting Cables](#)

Drake "4-Line" interconnecting cables for the R4 and T4X series, 36 inch gray w/ RCA style connectors, used for audio & switching functions and the special RF cable used for the Injection Cable and Carrier Oscillator Cable.

#### [Drake TR-7 Extender Boards / Service Kit](#)

Here are the Drake TR-7 Extender Boards kit, this kit is used to extend the circuit boards in the transceiver for repair and service to the individual boards.

#### [AC-4 Power Supply Upgrade Circuit Board](#)

Your old Drake AC-4 no longer functions, or getting a little rough around the edges. Can't locate those high voltage capacitors without taking out a bank loan? Well perhaps the solution is to install the new AC4R upgrade printed circuit board.

#### [Drake Radio Parts Locator](#)

##### [Drake "B" & "C" Line, 2B Receiver and TR4 & TR4C Transceiver](#)

Here is a nice product for the Drake equipment from Gary, K4OAH. Now you can locate those hard to find components to service your Drake equipment.

#### [Drake 4-Line Reproduction Front Panels](#)

Does the front panel on your Drake need replacing? Here is a nice product for the Drake "4" Line equipment from Tony, KF8MW. He has available reproduction Drake 4-Line front panels for several different models of Drake equipment.

#### [Drake Parts, Materials & Resources](#)

Here is a great resource for finding a lot of the common Drake parts that are still available directly from the manufacturer and parts catalog companies.

#### [Drake B-Line & TR-4 Tuning Knob Inserts](#)

##### [Complete Drake B-Line with Chrome Insert](#)

Here is a resource for the Drake front panel "Bar" knobs, B-Line Main Tuning Knob and tuning knob chrome inserts for all Drake "B" Line equipment.

#### [Drake "4" Line Bar Knobs, Singles or a complete set](#)

#### [Tuning Knob Spun Aluminum Inserts](#)

Here is a resource for the tuning knob inserts for all Drake "C" Line equipment.

#### [Drake Case Screws](#)

Are the cabinet screws all beat up on your Drake gear? These are exact replacement but are stainless and more durable than the originals.

#### [Drake Cabinet Repainting](#)

Have your "4" Line Drake equipment cabinets repainted by the same company that painted all the Drake cabinets for the company.

#### [International Crystal Manufacturing - \(Drake Crystals\)](#)

Looking for Drake crystals, here is a supplier that can custom make any crystal frequency for all the Drake radios. Most crystals are in the \$10-\$15.00 each.

#### [JAN Crystals - \(Drake Crystals\)](#)

Here is another supplier for Drake crystals, these folks can make any crystal frequency for all the Drake radios, most crystals are under \$15.00 each.

#### [WB4HFN Drake & Collins "S" Line Equipment Repair](#)

Repair and refurbishing services available on most of the Drake Equipment and the Collins S-Line equipment.

#### [W8SAJ Drake Equipment Repair](#)

Jeff (W8SAJ) does Drake radio repairs, check out his page for further information about his services.

#### [International Radio - \(Filters for Drake Radios\)](#)

Here is a vendor that sells all the filters for the Drake R-4C receiver and the TR-7 transceiver. Choose from the CW, SSB and AM filters for either radio.

#### [Sherwood Engineering - \(Drake Upgrade Boards\)](#)

This company is a quality supplier for all the Drake R-4C upgrade boards. Their Drake upgrades are completely assembled, they will even do the installation work on your radio.

#### [Nationwide Radio & Equipment Sales](#)

This company stocks some Drake parts, manuals, T4X series plate tuning meters, TR7 case tops, WH7 and MN7 meters.

#### [Electron Tube Enterprises](#)

Here is a link to a company that sells the vacuum tubes used in the Drake tube type equipment.

#### [Ham Manuals](#)

This company has all the Drake radio manuals and some service manuals on a two CD-ROM set.

#### [The Manual Man](#)

Here is a resource for good quality copies of the original Drake manuals. This link takes you to the website Table of Contents, from there select "D" and scan down the list for the Drake listings.

#### [WZTG Vintage Manuals](#)

Here is a resource for good quality copies of the original Drake manuals.



Ron Baker, [www.WB4HFN.COM](http://www.WB4HFN.COM)

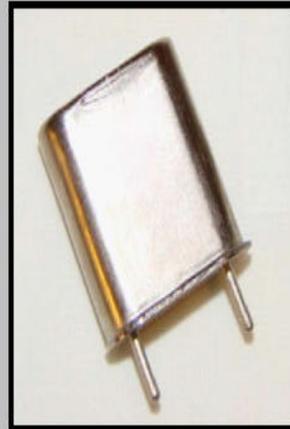
For more information please e-mail me at: [wb4hfn@wb4hfn.com](mailto:wb4hfn@wb4hfn.com)

### Drake "4" Line Crystals

**\$10.00 Each**

All crystals are for the R-4 and T-4(A/B/C) series equipment. Crystals are used, bench checked for proper frequency and performance. Frequencies listed are the low end of the radios tuning range not the actual crystal frequency.

- 2.5Mhz
- 14.5Mhz
- 19.5Mhz
- 20.5Mhz
- 27.0Mhz
- 27.5Mhz



### Drake and Collins Interconnecting Cables

**\$4.00 Each**

Cables are used to interconnect the receiver and transmitter or other station accessories. The cables are 36 inches long with molded RCA style connectors on both ends. Designed for audio, and low voltage and signal switching applications. Cables are all new stock, available in gray or black.



### Drake Injection Cable

**\$12.00**

This cable made with all new materials, 38 inches in length, 52 ohm impedance, low loss foam center insulation, very flexible, with RCA style tip jacks on each end. All cables are professionally built and assembled and fully tested.



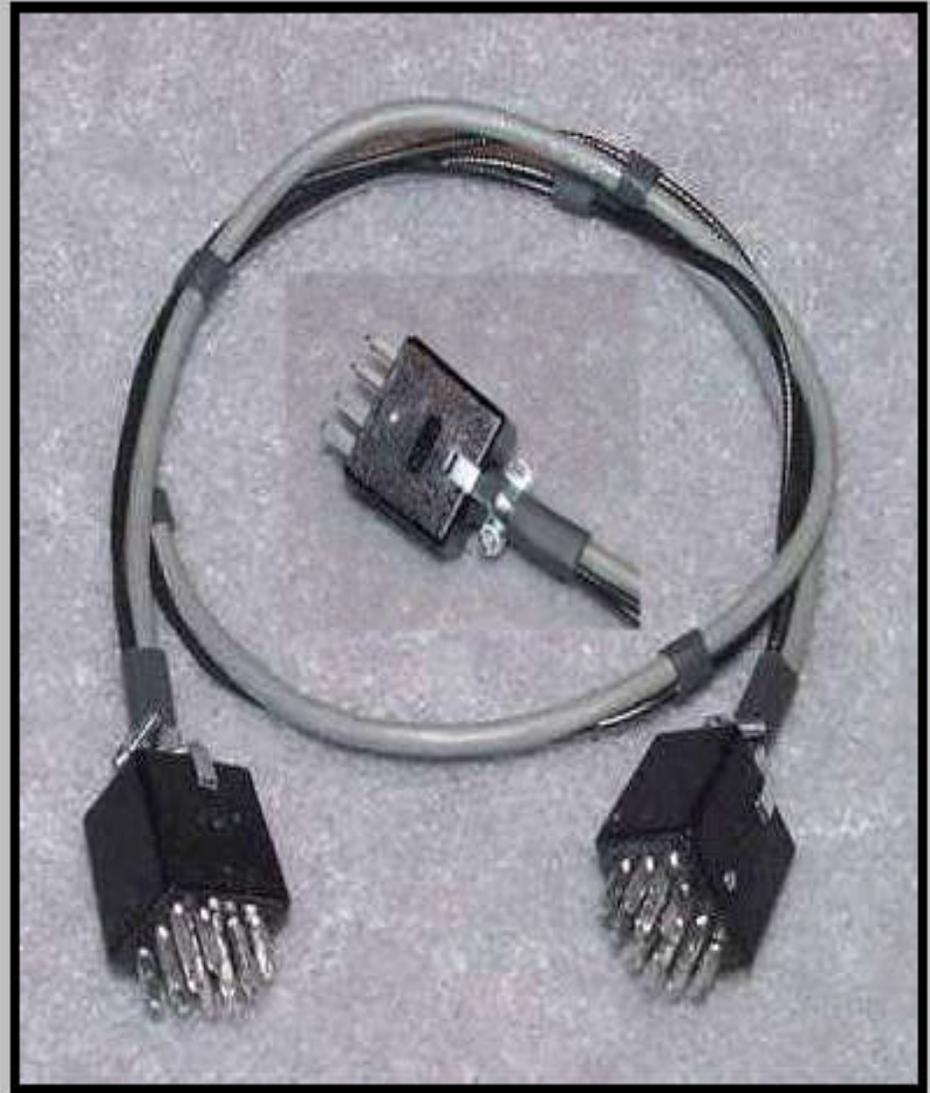


Ron Baker, [www.WB4HFN.COM](http://www.WB4HFN.COM)

## Drake TR7(A) To R7(A) Transceiver Cable

**\$50.00**

Cables are made with all new materials, 12 pin connectors, separate cabling for the control functions and RF signals, shrink wrap on the cable ends to protect and hold the cables securely to the connectors. These cables are professionally built and assembled and fully tested and perform identically to the Drake original.





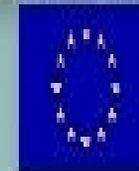
[http://www.dproducts.be/drake\\_museum/](http://www.dproducts.be/drake_museum/)



# R.L. DRAKE VIRTUAL MUSEUM

by: JH CHERRY

& Sindre TORP



# R.L. DRAKE VIRTUAL MUSEUM

Last updated : 11-jan-2006 18:24 Best viewed with :Internet Explorer 800 x 600, 16 bits color or more

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K3HRN, Thom LaCosta: <http://www.zerobeat.net/drakelist/>

- DRAKE**
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- [The Missing Q Signals](#)
- [Amateur Radio Exams Online](#)
- [Homebrewing in a PCW Camp No Kits-No Parts-Lots of Guts](#)
- [K3HRN Visiting USS Torsk](#)
- [The Drake Song](#)
- [Darksuckers What The Power Company Doesn't Want You to Know](#)
- [Visit Webmaster And Scare Rats](#)
- [FCC Regulations for Amateur Radio](#)
- [Online Amateur Event Calendar](#)
- [Crystal Sources](#)

### Drake List Home Page



### WinLink Wants YOUR Frequencies

If the ARRL has its way, [you'll hear a lot of this](#) in the bands!  
Tell The League what you think about the latest push to mis-use the Ham Bands!

- [Drake Online Database](#)  
[Parts Sources,Service,Tips](#)
- [DrakeList Web Based Forum](#)  
New! [Drake Mailing List Online Forum](#)
- [New! DrakeList IRC Chat](#)
- [The OLD Drake Web Based Message Board](#)
- [Drake Grading Standard](#)
- [Modifications](#)  
DrakeMod Version 6  
Sherwood  
More
- [Technotes from our Viewers](#)
- [R4A Information and Survey](#)
- [Download DrakeMD6.ZIP](#)  
[And Other Usefull Files](#)  
New! [Drake Mods compiled ebook](#)
- [New! Drake Het - New Time on 40 Meters](#)
- [Hourly Propogation Chart](#)
- [D-Region Absorption Prediction](#)
- [New! Join the Drake Mailing List](#)
- [The NEW Drake Mailing List Archive](#)
- [The Drake Reunion Video Tape](#)

- [Posting restricted](#) - Thom LaCosta - K3HRN 15:25:16 9/17/2003 (0) [ Post M
- [TR7 product detector](#) - Twan - PA1KV 07:21:51 9/17/2003 (0)
- [Rookie question about 4-line](#) - Jason Reber 11:44:24 9/16/2003 (1)
  - [Re: Rookie question about 4-line](#) - Garey - K4OAH 14:02:52 9/16/2003 (0)
- [T-4XC questions](#) - Ralph Webb 18:16:21 9/14/2003 (0)
- [Looking for Jones plugs for C-4](#) - Tom Taylor 21:54:13 9/13/2003 (1)
  - [Re: Looking for Jones plugs for C-4](#) - Garey - K4OAH 11:55:03 9/14/2003 (0)
- [t4xc 6146 mod](#) - Bob 11:07:01 9/13/2003 (0)
- [TR-72 info needed](#) - Tom WA8PYR 16:40:06 9/09/2003 (0)
- [Drake PS4 Schematic diagram](#) - Bent Jørgensen 12:41:10 9/09/2003 (1)
  - [Re: Drake PS4 Schematic diagram](#) - Twan - PA1KV 07:50:17 9/17/2003 (0)

M.V.G. May 2010



LA6OP, Sindre Torp: <http://home.online.no/~sindtorp/>

[Main](#)

**LA6OP** SINDRE TORP **NORWAY**

[Speaker at The Dayton Hamvention 1999, 2000, 2002 and 2004; Moderator of The Drake Forum 2001](#)

[E-mail](#)

[Drake equipment list](#)

[Drake wanted](#)

[Service equipment wanted](#)

[Drake links](#)

[Some pictures](#)

There will come more here with detailed pictures of rare units!

Welcome to my homepage, and the World's largest collection of equipment made by





Allen Martin / W7APM

## Drake Cabinet Screws

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E-mail Address for Additional Information: [w7apm@mtaonline.net](mailto:w7apm@mtaonline.net)



Are the cabinet screws all beat up on your Drake gear?

The originals were kind of soft and after a couple of cycles of remove and replace they look bad and the slots are shot too!

25 screws is one more than needed to replace all of the cabinet screws on a set of Drake twins. These are exact replacements but are stainless and more durable than the originals. They are black oxide treated and not painted so no worries about flaking paint. I have had nothing but positive reviews for the screws.

Packages of 25 at \$10.00, or packages of 50 at \$20.00, price includes shipping.

For more information or to place an order by e-mail: [w7apm@mtaonline.net](mailto:w7apm@mtaonline.net)

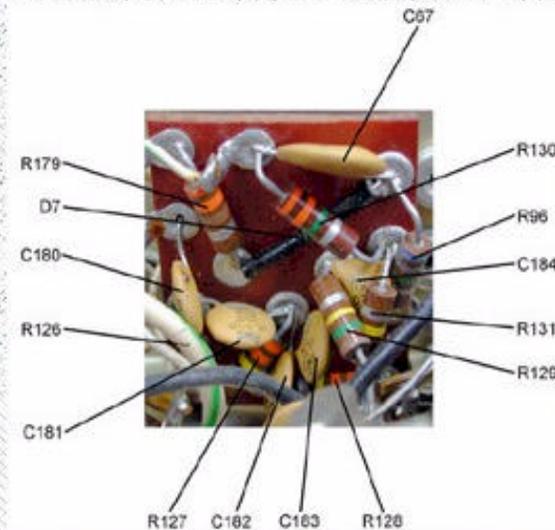
Send mail orders to:

Allen Martin / W7APM  
P.O Box 4177  
Palmer, Ak. 99645

# DRAKE

Garey Barrell, K4OAH  
<http://www.k4oah.com>

■ Home ■ 2-B CD ■ B-Line CD ■ C-Line CD ■ TR-4 CD ■ TR-4C CD ■ Ordering



## PRODUCT



Drake TR-4C  
Service CD

## PRICE

\$35 Postpaid  
US & Canada

**VIEW**

Complete part list showing all resistors, capacitors and semis keyed to full color photos, showing their location on the PC board or chassis.



TR-4 &  
TR-4C  
Combined  
Service CD

\$50 Postpaid  
US & Canada

**VIEW**

Full color, high resolution photos of the chassis and each PC board (excluding PTO) with each part identified.



High resolution scans of original manual for the TR-4C, plus addenda for CW and CwRIT Versions.



Additional information, including four Schematic Versions, Errata, Update and Alignment pages, along with a copy of Drakemod 6A.



Additional high resolution scans of original manuals for the RV-4C, MN-2000, L-4B, MN-4, W-4, etc.

**ORDER**



Bob Magee , W7AWK 509-750-7589



Recreated TR-7 / R-7 Service Kit

HISTORY - Several years ago I purchased a TR-7 and wanting to be able to work on it obtained a copy of the Service Manual. I soon learned to do any serious work a Service Kit sold by DRAKE 20 - 25 years ago as an option was required. These kits nowadays are essentially unavailable. In a year of looking the only one I saw sold was on E-Bay going for \$320. I started exploring the possibility of making my own by asking what the design was like and collecting parts. As others learned of my project several asked to be included until I determined a small lot might be produced.

The biggest problem I have had is finding parts. The printed circuit circuit cards were professionally designed and supplied. But the various connectors used by Drake were by MOLEX who only sells in very large quantities. I was lucky and found several components which had been setting in the ware house back rooms for years.

Over 75 kits have been supplied with very positive feedback

OFFER - The cost of a kit is \$60 plus postage. In the USA and using priority mail the total cost is \$64.80. In the EU countries air letter postage is \$8.90 USD making the total \$68.90 USD. My Paypal ID is w7avk@arrl.net

If interested or have questions I may be contacted by e-mail at: [Bob.W7AWK](mailto:Bob.W7AWK) or by phone at [509] 750-7589.

These images are provided for informational purposes for the Drake community.

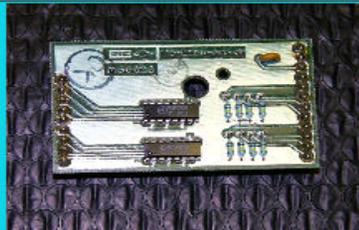
(photos of DRAKE gear by KF4FJH - RF Buchanan)



5 Sizes Extender Boards in 13 Set by DRAKE



13 Extender Board Set I Supply



DIGITAL JUMPER Board by DRAKE



DIGITAL JUMPER Board I Supply