



(<https://www.facebook.com/HamRadioK0PIR>)



(<https://twitter.com/k0pir>)



(<https://plus.google.com/u/0/b/103199309341658601772/+HamRadioK0PIR>)



(<http://www.youtube.com/c/HamRadioK0PIR>)



([https://www.instagram.com/ham\\_radio\\_k0pir/](https://www.instagram.com/ham_radio_k0pir/))

# Ham Radio with K0PIR - Icom 7300 and 7610 SDR Transceivers (<http://www.k0pir.us/>)



[⌂ \(http://www.k0pir.us/\)](http://www.k0pir.us/) > [Blog \(http://www.k0pir.us\)](http://www.k0pir.us) >

[HRD Logbook and WSJT-X Integration | New HRD v6.4.0.886 \(http://www.k0pir.us/hrd-logbook-and-wsjt-x-integration-new-hrd-v6-4-0-886/\)](http://www.k0pir.us/hrd-logbook-and-wsjt-x-integration-new-hrd-v6-4-0-886/)

# HRD Logbook and WSJT-X Integration | New HRD v6.4.0.886

In Software (<http://www.k0pir.us/category/software/>) by

K0PIR / September 12,

2018 / 10 Comments (<http://www.k0pir.us/hrd-logbook-and-wsjt-x-integration-new-hrd-v6-4-0-886/>)



(<http://www.k0pir.us/hrd-logbook-and-wsjt-x-integration-new-hrd-v6-4-0-886/?print=pdf>)

HRD Logbook now includes “QSO Forwarding”. With QSO forwarding in HRD Logbook there’s no need to use JT Alert, although JT Alert is still beneficial to many users, including myself. According to the author, “Ham Radio Deluxe (<https://www.ham-radio-deluxe.com>) Logbook receives QSOs directly from WSJT-X as-if they originated in DM-780.” This is what many have been waiting for or expected to see. In the past JT Alert and HRD have had an on & off type relationship. This eliminates any future incompatibilities between JT Alert and HRD.

HRD Logbook QSO Forwarding will also work with  
FT8Call.

*Getting the most out of your radio?*

Please join our growing Icom 7300/7610 community.

Enter Your Name

Enter Your Email Address

**SIGN UP**

I agree to have my personal information transferred to MailChimp ( [more information](#)  
(<https://mailchimp.com/legal/privacy/>) )

Receive e-mail notifications of new articles. I will never give away, trade or sell your email address. You can unsubscribe at any time.

# HRD Logbook QSO Forwarding

After installing the new HRD v6.4.0.886 you'll see "QSO Forwarding" under Tools>Configure in HRD Logbook.

In the "QSO Forwarding" window we just need to enable "UDP Receive". The "Receive Port" I am using is 2333. My "Target Database" is my default logbook and "My Station fields" I have set to "Merged". See below.

# WSJT-X Settings

In WSJT-X I tried using Ham Radio Deluxe as the “Rig”. It appears to be working well with my Icom 7610 and should work well with any other radio including the Icom 7300 (<https://amzn.to/2mOctsz>). If you do not start HRD rig control, you can use your radio as the “Rig” with the appropriate “Serial Port Parameters”. This may be best for some. See my article “A New Spin on JT Alert”. (<http://www.k0pir.us/a-new-spin-on-jt-alert-hrd-logbook-and-wsjt-x/>)

Under the Reporting tab you will need to enable “N1MM (<https://n1mm.hamdocs.com/tiki-index.php>) Logger+ Broadcasts”. I have also enabled the “UDP Server” and under “Network Services” the “PSK Reporter Spotting”. I find that beneficial and helpful for others. See below.



Save 20% With Coupon  
"holidayham18" at Chec  
Ham Radio Deluxe Now

Ad HRD Software, LLC

Shop Now

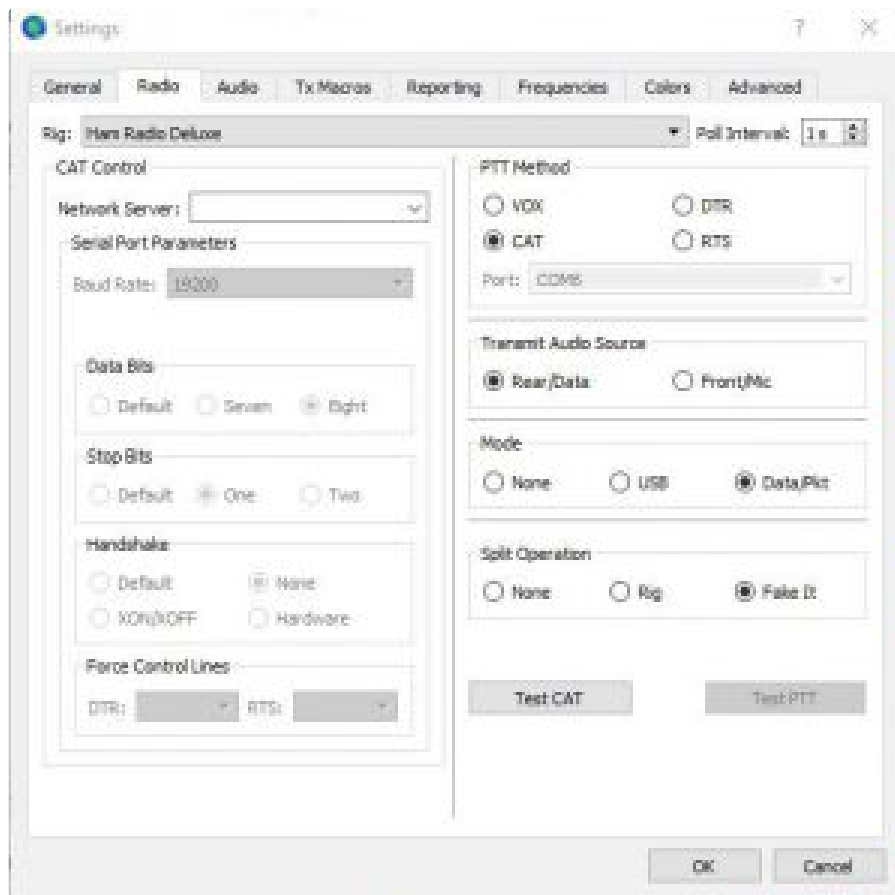
On the “Reporting” tab I also have “Prompt me to log QSO” ticked.



(<http://www.k0pir.us/wp->

<content/uploads/2018/09/qsoforwardhrdlogbook.jpg>

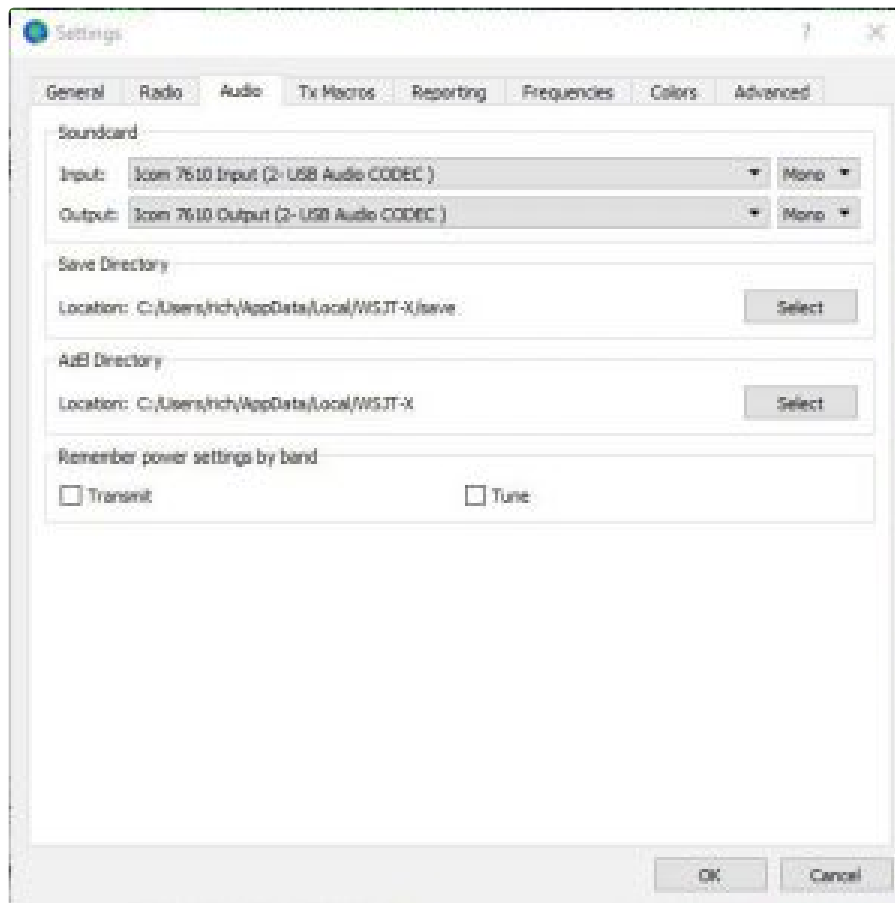




(<http://www.k0pir.us/wp->

content/uploads/2018/09/wsjt-x-rig.jpg)

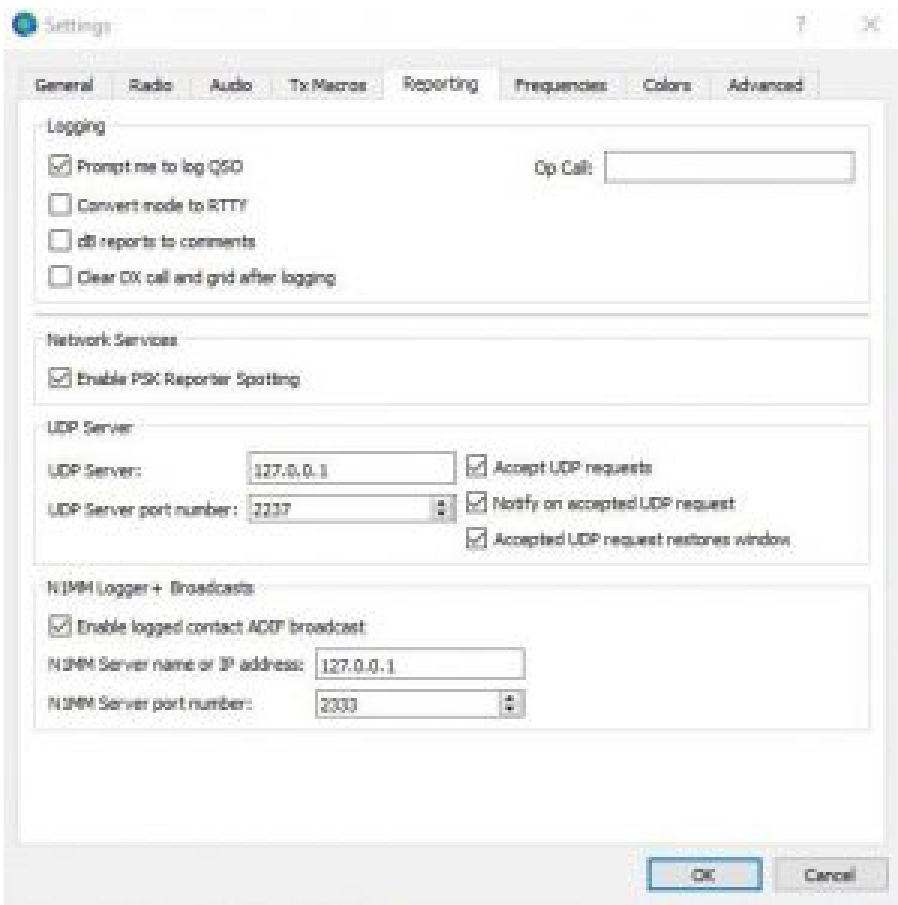
WSJT-X RADIO



[\\_ \(http://www.k0pir.us/wp-](http://www.k0pir.us/wp-)

[content/uploads/2018/09/wsjt-x-audio.jpg](http://www.k0pir.us/wp-content/uploads/2018/09/wsjt-x-audio.jpg)

WSJT-X AUDIO



[\\_ \(http://www.k0pir.us/wp-](http://www.k0pir.us/wp-)

[content/uploads/2018/09/wsjtxreporting.jpg](http://www.k0pir.us/wp-content/uploads/2018/09/wsjtxreporting.jpg)

WSJT-X REPORTING

There is just one USB cable

(<https://rover.ebay.com/rover/1/711-53200-19255-0/1?>

ff3=4&toolid=11800&pub=5575171312&campid=533786089

Speed-A-B-Cable-Ferrite-Chokes-Premium-Double-

Shielded-Male-USB-2-0-6-Feet-

%2F262272346235%3Fhash%3Ditem3d10a6687b%3Ag%3

in this configuration between the radio and PC. More

explanation is in the video below. HRD Logbook QSO

Forwarding will also work with FT8Call.

# HRD Logbook and WSJT X QSO Forwarding



# Thank you!

A big thanks to subscribers and everyone who posts questions, comments and sends emails to me with ideas and suggestions. I sincerely appreciate it and hope this website helps Ham operators.

Sources:

Ham Radio Deluxe (<https://www.hamradiodeluxe.com>)

**amazon**



USB Reading  
Lamp with 2...

\$9.99 

Shop now

## Comments

---

[NOVEMBER 15, 2018 \(HTTP://WWW.K0PIR.US/HRD-LOGBOOK-AND-WSJT-X-INTEGRATION-NEW-HRD-V6-4-0-886/#COMMENT-1191\)](http://www.k0pir.us/hrd-logbook-and-wsjt-x-integration-new-hrd-v6-4-0-886/#comment-1191)

[REPLY](#) ↩

Jim AD0YO

Rich,

Will this work with WSJT-X without HRD Rig. I would prefer to have WSJT do direct rig control of my 7300.



Author

[NOVEMBER 15, 2018 \(HTTP://WWW.K0PIR.US/HRD-LOGBOOK-AND-WSJT-X-INTEGRATION-NEW-HRD-V6-4-0-886/#COMMENT-1194\)](http://www.k0pir.us/hrd-logbook-and-wsjt-x-integration-new-hrd-v6-4-0-886/#comment-1194)

[REPLY](#) ↩

[K0PIR \(http://www.k0pir.us\)](http://www.k0pir.us)

Hi Jim,

Nice to hear from you and thank you for commenting.

Yes, that works great. Just open the Logbook and WSJT-X.

Best 73,

Rich, K0PIR

---

[OCTOBER 31, 2018 \(HTTP://WWW.K0PIR.US/HRD-LOGBOOK-AND-WSJT-X-INTEGRATION-NEW-HRD-V6-4-0-886/#COMMENT-1161\)](http://www.k0pir.us/hrd-logbook-and-wsjt-x-integration-new-hrd-v6-4-0-886/#comment-1161)

[REPLY](#) ↩

Anonymous



Rich, thank you so much for this article. I was struggling with getting rig control and logging set up for JTAAlert and HRD Logbook to be fully automated. Finally a straightforward article, easy to follow, and it works!

73, Paula K7PAX



Author

[OCTOBER 31, 2018 \(HTTP://WWW.K0PIR.US/HRD-LOGBOOK-AND-WSJT-X-INTEGRATION-NEW-HRD-V6-4-0-886/#COMMENT-1162\)](http://WWW.K0PIR.US/HRD-LOGBOOK-AND-WSJT-X-INTEGRATION-NEW-HRD-V6-4-0-886/#COMMENT-1162)

REPLY ↩

[K0PIR \(http://www.k0pir.us\)](http://www.k0pir.us)

Hi Paula,

Great to hear from you and thank you so much for commenting. I'm happy it helped.

Best 73 and hope to hear you on the air.

Rich, K0PIR

---

SEPTEMBER 24, 2018 (HTTP://WWW.K0PIR.US/HRD-LOGBOOK-AND-WSJT-X-INTEGRATION-NEW-HRD-V6-4-0-886/#COMMENT-1061)

REPLY ↩

## Jim Weigand

Thanks for your Videos. You stated that you are only using one cable. Will this setup work with Fox-Hound DX Expedition mode or do you need two cables?

I am having a problem; with WSJT-X set for (Ham Radio Deluxe, CAT, Rear/Data, Data/Pkt. and Fake It) the IC-7300 will default from USB-D to USB after every transmission. When I transmit again it will generally go back to USB-D but not always and then back to USB in receive. It almost seems like a timing issue or a conflict on the USB cable. Any ideas?



Author

SEPTEMBER 25, 2018 (HTTP://WWW.K0PIR.US/HRD-LOGBOOK-AND-WSJT-X-INTEGRATION-NEW-HRD-V6-4-0-886/#COMMENT-1066)

REPLY ↩

K0PIR (http://www.k0pir.us)

Hi Jim,

Nice to hear from you and thank you for the comments.

I would not imagine you would need two cables, but I'm unfamiliar with Fox-Hound, so I can't say for sure. If two COM ports are needed and you don't want to include a second cable there is always VSPE.



Are you using CAT for PTT in WSJT-X, Data/Pkt for Mode and Fake It for Split? It could be an issue with using HRD for the Rig. Does it happen if you use the Icom 7300 for the Rig and close HRD Rig control? You can just leave HRD Logbook open and it should log to it.

Rich, K0PIR

---

[SEPTEMBER 25, 2018 \(HTTP://WWW.K0PIR.US/HRD-LOGBOOK-AND-WSJT-X-INTEGRATION-NEW-HRD-V6-4-0-886/#COMMENT-1068\)](http://www.k0pir.us/hrd-logbook-and-wsjt-x-integration-new-hrd-v6-4-0-886/#comment-1068)

REPLY ↩

Jim Weigand N9BW

Hi Rich,

Thanks for your prompt reply. I am using one USB cable and no VSPE. I tried all that you mentioned except maybe using 7300 for rig control. After all day of trying different combinations I don't remember. But after sending you the question I got to thinking about my comment about a conflict on the USB. I went back last night and looked at the CI-V settings. The original "How To Setups" called for 9600 baud rate. So I tried the max rate of 115200 rate in the CI-V setup and also in the Connect setup for HRD. That solved the problem. It did seem to create another problem of multiple log entries into HRD logbook; interesting. I think I saw that discussed in one of you discussions. I will search

through them (so many) for a solution. Maybe the baud rate issue will help some others.

Thanks, Jim N9BW



Author

[SEPTEMBER 25, 2018 \(HTTP://WWW.K0PIR.US/HRD-LOGBOOK-AND-WSJT-X-INTEGRATION-NEW-HRD-V6-4-0-886/#COMMENT-1070\)](http://www.k0pir.us/hrd-logbook-and-wsjt-x-integration-new-hrd-v6-4-0-886/#comment-1070)

REPLY ↩

[K0PIR \(http://www.k0pir.us\)](http://www.k0pir.us)

Thanks Jim. Happy to hear you got it going.

Are you using JT Alert? Maybe that is adding an extra log entry.

Take care, best 73,

Rich, K0PIR

---

[SEPTEMBER 13, 2018 \(HTTP://WWW.K0PIR.US/HRD-LOGBOOK-AND-WSJT-X-INTEGRATION-NEW-HRD-V6-4-0-886/#COMMENT-1044\)](http://www.k0pir.us/hrd-logbook-and-wsjt-x-integration-new-hrd-v6-4-0-886/#comment-1044)

REPLY ↩

[Roger Matschke \(http://AZ\)](http://AZ)

Another excellent instructional video. I keep learning more.

---



Author

[SEPTEMBER 13, 2018 \(HTTP://WWW.K0PIR.US/HRD-LOGBOOK-AND-WSJT-X-INTEGRATION-NEW-HRD-V6-4-0-886/#COMMENT-1045\)](http://WWW.K0PIR.US/HRD-LOGBOOK-AND-WSJT-X-INTEGRATION-NEW-HRD-V6-4-0-886/#COMMENT-1045)

[REPLY](#) ↩

[K0PIR \(http://www.k0pir.us\)](http://www.k0pir.us)

Thanks Roger! I was happy to see that it works with FT8Call too.  
Hopefully FT8Call will continue to improve.

Best 73,

Rich, K0PIR

Leave a Comment 

---

Your Comment \*

Your Name \*

Your Email \*

Save my name, email, and website in this browser for the next time I comment.

Submit

SEARCH THIS SITE

🔍 Search

### Shop Related Products

1. ICOM 7300 02 Direct Sampling S... ([http://aax-us-east.amazon-adsystem.com/x/c/QiFu-aY8EJ72ctnx0dFp9wsAAAFoD2XywAEAAAE0AbTi09M/https://www.amazon.com/7300-02-Direct-Sar-Shortwave/dp/B01C95F56M/ref=sm\\_n\\_au\\_dka\\_US\\_pr\\_con?adId=B01C95F56M&creativeASIN=B01C95F56M&linkId=45c52d06dc2da6342d63c9d7e00b9a76&tag=20&linkCode=w51&ref-refURL=http%3A%2F%2Fwww.k0pir.us%2Fhrd-logbook-and-wsjt-x-integration886%2F&slotNum=1&imprToken=8JoFZ-TFyKgtsgfCOKGa6w&adType=smart&adMode=auto&adFormat=list&impressionTimestamp=1546446](http://aax-us-east.amazon-adsystem.com/x/c/QiFu-aY8EJ72ctnx0dFp9wsAAAFoD2XywAEAAAE0AbTi09M/https://www.amazon.com/7300-02-Direct-Sar-Shortwave/dp/B01C95F56M/ref=sm_n_au_dka_US_pr_con?adId=B01C95F56M&creativeASIN=B01C95F56M&linkId=45c52d06dc2da6342d63c9d7e00b9a76&tag=20&linkCode=w51&ref-refURL=http%3A%2F%2Fwww.k0pir.us%2Fhrd-logbook-and-wsjt-x-integration886%2F&slotNum=1&imprToken=8JoFZ-TFyKgtsgfCOKGa6w&adType=smart&adMode=auto&adFormat=list&impressionTimestamp=1546446))  
\$1199.95
2. ICOM 2300H 05 144MHz Amateur ... ([http://aax-us-east.amazon-adsystem.com/x/c/QiFu-aY8EJ72ctnx0dFp9wsAAAFoD2XywAEAAAE0AbTi09M/https://www.amazon.com/2300H-05-144MHz-Radio/dp/B008I6LK4I/ref=sm\\_n\\_au\\_dka\\_US\\_pr\\_con?adId=B008I6LK4I&creativeASIN=B008I6LK4I&linkId=45c52d06dc2da6342d63c9d7e00b9a76&tag=ha20&linkCode=w51&ref-refURL=http%3A%2F%2Fwww.k0pir.us%2Fhrd-logbook-and-wsjt-x-integration886%2F&slotNum=1&imprToken=8JoFZ-](http://aax-us-east.amazon-adsystem.com/x/c/QiFu-aY8EJ72ctnx0dFp9wsAAAFoD2XywAEAAAE0AbTi09M/https://www.amazon.com/2300H-05-144MHz-Radio/dp/B008I6LK4I/ref=sm_n_au_dka_US_pr_con?adId=B008I6LK4I&creativeASIN=B008I6LK4I&linkId=45c52d06dc2da6342d63c9d7e00b9a76&tag=ha20&linkCode=w51&ref-refURL=http%3A%2F%2Fwww.k0pir.us%2Fhrd-logbook-and-wsjt-x-integration886%2F&slotNum=1&imprToken=8JoFZ-))



TFyKgtsgfCOKGa6w&adType=smart&adMode=auto&adFormat=list&impressionTimestamp=1546446  
\$194.95

3. Quansheng ham radios (UV-R50)... ([http://aax-us-east.amazon-adsystem.com/x/c/QiFu-aY8EJ72ctnx0dFp9wsAAAFoD2XywAEAAAE0AbTi09M/https://www.amazon.com/Quansheng-radios-talkies/dp/B07D7231Y6/ref=sm\\_n\\_au\\_dka\\_US\\_pr\\_con?adId=B07D7231Y6&creativeASIN=B07D7231Y6&linkId=45c52d06dc2da6342d63c9d7e00b9a76&tag:20&linkCode=w51&ref-refURL=http%3A%2F%2Fwww.k0pir.us%2Fhrd-logbook-and-wsjt-x-integration886%2F&slotNum=1&imprToken=8JoFZ-](http://aax-us-east.amazon-adsystem.com/x/c/QiFu-aY8EJ72ctnx0dFp9wsAAAFoD2XywAEAAAE0AbTi09M/https://www.amazon.com/Quansheng-radios-talkies/dp/B07D7231Y6/ref=sm_n_au_dka_US_pr_con?adId=B07D7231Y6&creativeASIN=B07D7231Y6&linkId=45c52d06dc2da6342d63c9d7e00b9a76&tag:20&linkCode=w51&ref-refURL=http%3A%2F%2Fwww.k0pir.us%2Fhrd-logbook-and-wsjt-x-integration886%2F&slotNum=1&imprToken=8JoFZ-))

TFyKgtsgfCOKGa6w&adType=smart&adMode=auto&adFormat=list&impressionTimestamp=1546446

4. ICOM IC-7300 100W HF Tran... ([http://aax-us-east.amazon-adsystem.com/x/c/QiFu-aY8EJ72ctnx0dFp9wsAAAFoD2XywAEAAAE0AbTi09M/https://www.amazon.com/IC-7300-Transceiver-Guides-Reference/dp/B01LZDSMB1/ref=sm\\_n\\_au\\_dka\\_US\\_pr\\_con?adId=B01LZDSMB1&creativeASIN=B01LZDSMB1&linkId=45c52d06dc2da6342d63c9d7e00b9a76&tag:20&linkCode=w51&ref-refURL=http%3A%2F%2Fwww.k0pir.us%2Fhrd-logbook-and-wsjt-x-integration886%2F&slotNum=1&imprToken=8JoFZ-](http://aax-us-east.amazon-adsystem.com/x/c/QiFu-aY8EJ72ctnx0dFp9wsAAAFoD2XywAEAAAE0AbTi09M/https://www.amazon.com/IC-7300-Transceiver-Guides-Reference/dp/B01LZDSMB1/ref=sm_n_au_dka_US_pr_con?adId=B01LZDSMB1&creativeASIN=B01LZDSMB1&linkId=45c52d06dc2da6342d63c9d7e00b9a76&tag:20&linkCode=w51&ref-refURL=http%3A%2F%2Fwww.k0pir.us%2Fhrd-logbook-and-wsjt-x-integration886%2F&slotNum=1&imprToken=8JoFZ-))

TFyKgtsgfCOKGa6w&adType=smart&adMode=auto&adFormat=list&impressionTimestamp=1546446  
\$1335.40

Ads by Amazon ([http://aax-us-east.amazon-adsystem.com/x/c/QiFu-aY8EJ72ctnx0dFp9wsAAAFoD2XywAEAAAE0AbTi09M/https://affiliate-program.amazon.com/home/ads/ref=sm\\_n\\_au\\_dka\\_US\\_logo?adId=logo&creativeASIN=logo&linkId=45c52d06dc2da6342d63c9d7e00b9a76&tag=hamradiok0pir-20&linkCode=w51&ref-refURL=http%3A%2F%2Fwww.k0pir.us%2Fhrd-logbook-and-wsjt-x-integration-new-hrd-v6-4-0-886%2F&slotNum=1&imprToken=8JoFZ-TFyKgtsgfCOKGa6w&adType=smart&adMode=auto&adFormat=list&impressionTimestamp=1546446566266&ac-ms-src=nsa-ads&cid=nsa-ads](http://aax-us-east.amazon-adsystem.com/x/c/QiFu-aY8EJ72ctnx0dFp9wsAAAFoD2XywAEAAAE0AbTi09M/https://affiliate-program.amazon.com/home/ads/ref=sm_n_au_dka_US_logo?adId=logo&creativeASIN=logo&linkId=45c52d06dc2da6342d63c9d7e00b9a76&tag=hamradiok0pir-20&linkCode=w51&ref-refURL=http%3A%2F%2Fwww.k0pir.us%2Fhrd-logbook-and-wsjt-x-integration-new-hrd-v6-4-0-886%2F&slotNum=1&imprToken=8JoFZ-TFyKgtsgfCOKGa6w&adType=smart&adMode=auto&adFormat=list&impressionTimestamp=1546446566266&ac-ms-src=nsa-ads&cid=nsa-ads))

[\\_ \(http://aax-us-east.amazon-adsystem.com/x/c/QiFu-aY8EJ72ctnx0dFp9wsAAAFoD2XywAEAAAE0AbTi09M/https://www.amazon.com/adprefs\)](http://aax-us-east.amazon-adsystem.com/x/c/QiFu-aY8EJ72ctnx0dFp9wsAAAFoD2XywAEAAAE0AbTi09M/https://www.amazon.com/adprefs)

## RECENT POSTS

[Icom 7300 Memory Operation and Scanning Emergency Frequencies](http://www.k0pir.us/icom-7300-memory-operation/)

(<http://www.k0pir.us/icom-7300-memory-operation/>)

[Icom 7610 HSDSDR as a 3rd Receiver](http://www.k0pir.us/icom-7610-hsdsdr-as-a-3rd-receiver/) (<http://www.k0pir.us/icom-7610-hsdsdr-as-a-3rd-receiver/>)

[Icom Band Stacking Register and Memo Pad](http://www.k0pir.us/icom-band-stacking-register-and-memo-pad/) (<http://www.k0pir.us/icom-band-stacking-register-and-memo-pad/>)

[The Last Ham Desk Project](http://www.k0pir.us/ham-radio-shack-desk/) (<http://www.k0pir.us/ham-radio-shack-desk/>)

---

[My Satellite Tracking Software for the Elk Antenna \(http://www.k0pir.us/satellite-tracking-software/\)](http://www.k0pir.us/satellite-tracking-software/)

---

RECENT COMMENTS
-----------------

---

[K0PIR \(http://www.k0pir.us\)](http://www.k0pir.us) on [Icom 7610 RS-BA1 Installation and Settings \(http://www.k0pir.us/icom-7610-rs-ba1-installation-settings/#comment-1266\)](http://www.k0pir.us/icom-7610-rs-ba1-installation-settings/#comment-1266)

---

Dave Warner on [Icom 7610 RS-BA1 Installation and Settings \(http://www.k0pir.us/icom-7610-rs-ba1-installation-settings/#comment-1265\)](http://www.k0pir.us/icom-7610-rs-ba1-installation-settings/#comment-1265)

---

[K0PIR \(http://www.k0pir.us\)](http://www.k0pir.us) on [Icom 7300 Memory Operation and Scanning Emergency Frequencies \(http://www.k0pir.us/icom-7300-memory-operation/#comment-1264\)](http://www.k0pir.us/icom-7300-memory-operation/#comment-1264)

---

Mike Miranda on [Icom 7300 Memory Operation and Scanning Emergency Frequencies \(http://www.k0pir.us/icom-7300-memory-operation/#comment-1263\)](http://www.k0pir.us/icom-7300-memory-operation/#comment-1263)

[K0PIR \(http://www.k0pir.us\)](http://www.k0pir.us) on [Icom 7300 Memory Operation and Scanning Emergency Frequencies \(http://www.k0pir.us/icom-7300-memory-operation/#comment-1262\)](http://www.k0pir.us/icom-7300-memory-operation/#comment-1262)

---



CATEGORIES

---

[Amateur Satellite](http://www.k0pir.us/category/amateur-satellite/) (<http://www.k0pir.us/category/amateur-satellite/>)

---

[Discussion](http://www.k0pir.us/category/discussion/) (<http://www.k0pir.us/category/discussion/>)

---

[Elecraft KX2](http://www.k0pir.us/category/elecraft-kx2/) (<http://www.k0pir.us/category/elecraft-kx2/>)

---

[Equipment](http://www.k0pir.us/category/equipment/) (<http://www.k0pir.us/category/equipment/>)

---

[Flex](http://www.k0pir.us/category/flex/) (<http://www.k0pir.us/category/flex/>)

---

[FT-8](http://www.k0pir.us/category/ft8/) (<http://www.k0pir.us/category/ft8/>)

---

[Icom 7300](http://www.k0pir.us/category/icom-7300/) (<http://www.k0pir.us/category/icom-7300/>)

---

[Icom 7610](http://www.k0pir.us/category/icom-7610/) (<http://www.k0pir.us/category/icom-7610/>)

---

[Mac In The Shack](http://www.k0pir.us/category/mac-in-the-shack/) (<http://www.k0pir.us/category/mac-in-the-shack/>)

---

[Mobile](http://www.k0pir.us/category/mobile/) (<http://www.k0pir.us/category/mobile/>)

---

[Panadapter](http://www.k0pir.us/category/panadapter/) (<http://www.k0pir.us/category/panadapter/>)

---

---

[Raspberry Pi 3 \(http://www.k0pir.us/category/raspberry-pi-3/\)](http://www.k0pir.us/category/raspberry-pi-3/)

---

[Reviews \(http://www.k0pir.us/category/reviews/\)](http://www.k0pir.us/category/reviews/)

---

[Software \(http://www.k0pir.us/category/software/\)](http://www.k0pir.us/category/software/)

---

Ad



**Apple Macintosh Color  
Classic MYSTIC 132MB**

**\$500.00**



**RETRO VINTAGE Dell  
Windows 98 SE / DOS**

**\$299.95**



**Dell Business  
Industrial Pentium 3**

**\$399.95**



**Macintosh Color  
Classic MYSTIC Apple**

**\$600.00**



**15Khz RGB CGA  
Component Video to**

**\$89.00**



**Apple PowerBook Duo  
2300c PowerPC 603e**

**\$350.00**



([HTTPS://WWW.FACEBOOK.COM/HAMRADIOK0PIR](https://www.facebook.com/HAMRADIOK0PIR))



([HTTPS://TWITTER.COM/K0PIR](https://twitter.com/K0PIR))



([HTTPS://PLUS.GOOGLE.COM/U/0/B/103199309341658601772/+HAMRADIO](https://plus.google.com/u/0/b/103199309341658601772/+HAMRADIO))



([HTTP://WWW.YOUTUBE.COM/C/HAMRADIOK0PIR](http://www.youtube.com/c/HAMRADIOK0PIR))



([HTTPS://WWW.INSTAGRAM.COM/HAM\\_RADIO\\_K0PIR/](https://www.instagram.com/HAM_RADIO_K0PIR/))

#mailchimp #amazon one link