

Modifications for the Alinco DR-112

Modes DR-112T Extended RX/TX

9600bd ALINCO 110,112,1200

19-07-1998

Modes DR-112T Extended RX/TX

This is just to confirm that the modification that was posted to the Alinco DR110T also works on the DR112T (same radio, but with an LCD display as opposed to the DR110T's LED display). Pop the cover, cut one wire, reset the radio, and PRESTO! Instant expanded coverage.

I verified that the radio will receive the National Weather Service.

However, I haven't tried listening to the 300 MHz or 800 MHz segments the radio now covers. I have no idea how well (or how poorly) the receiver performs at those frequencies.

Andre Molyneux KA7WVV

for reference, here is the DR110 mod file:

After installing the out-of-band receive mod on my Alinco 110, I accidentally pressed a couple of keys and found I could receive from:

130 -> 170 MHz + Xmit of this range

340 -> 380 MHz - no Xmit

870 -> 890 MHz - no Xmit

To modify the Alinco to receive out of band, perform the following steps:

Remove the top cover by removing the obvious screws. Be careful, as the speaker may stick to the cushion on the top cover. If it does, separate the speaker from the top panel and replace it back in its receptacle within the rig.

Positioned at the front of the rig, look near the tuning knob and you will see a little yellow jumper coming from behind the front panel, looping around and returning to the front panel. This jumper looks like it should have a tag on it saying "cut me for more features". Go ahead and take the wire cutters to this jumper.

Be careful that the cut ends don't short to something!

Replace the top cover on the rig, get everything set back up and turn on the rig.

The next step is to reset the radio. If you don't remember its current programming, you may want to write it down at this time.

When ready to reset the rig, hold down the F key and the VFO/M key at the same time, turn the POWER off, back on, and then let go of the keys. The rig is reset and will display 144.00.

You will now be able to tune around, and transmit, from 130.00 -> 169.99 MHz.

To move to the next "band segment", press F and then the MHZ key.

The display will go the 340.00 MHz segment. F+MHZ again will get you cellular, and F+MHZ a third time will return you to the 2 meter segment. Happy monitoring...

Gene - AA6IY @ N6LDL

19-07-1998

9600bd ALINCO 110,112,1200

Hello FELLOW Packeteers! I just got off the phone with Matt from Alinco!

I have been asked if the 9600 baud Mod that I posted would also work fr the 110.

YES IT WILL!

The 110, 112 and 1200 radios are identical except for the power output of the 1200 (25-watts high power compared to the 45-watts of the 110 and 112!) and the 112 has a LCD display to replace the piece of junk one on the 110! Also, if you want to have more power in the 1200, you can buy the 100/112 PA Board (45-watts) for \$65.00 from Alinco. It also requires buying 4 high power switching diodes for \$20.00 from Alinco. \$85.00 for 20-watts?...Doesn't sound like a good investment to me. Don't forget the time involved with doing this mod. I discourage the use of HIGH POWER and have posted bulletins on this subject! Never the less, I feel obligated to pass this info on to you, I am not the U.S. Government, I will NOT keep things from you! To follow is the 9600 baud Mod I received from Alinco. Alinco warns that the Warranty is void if this Mod is performed! KA1BOY has been great enough to try this Mod and says it works great for 1200 baud as well as 9600 baud! From all of us to you, THANK YOU BARRY! One point to remember, you will not be able to use the radio for voice. This mod uses the Mic Connector...

TRANSMITTER

1. Remove R-31
2. Remove C-40 (save this part, it is to be reused!)
3. Connect one leg of C-40 to PIN 7 of the VCO Board
4. Connect a jumper from the free leg of C-40 to the HOT end of C-35 The MIC input is now connected DIRECTLY to the VCO!

RECEIVER

1. Disconnect the PINK wire connected to the MIC connector and the PC Board from the PC Board
2. Reconnect the PINK wire to PIN 2 on the IF Board connector This eliminates the low pass filtering on the discriminator!

That is it to the MOD for the 110, 112, and the 1200! Remember, you now use the MIC Connector For inputting 9600 baud and it WILL work for 1200 baud! A special note to all SYSOPS out there...Buy this radio and do this MOD! It will allow users to set their TXDelay down to a lower setting giving the channel MORE throughput! USERS, make a DONATION to your SYSOPS so they can help make the system YOU are using, BETTER! We must all do our part to help! I would like to hear from all of you that tries this MOD!

I give partial credit to barry, ka1boy, for his input on this modification!!!

73 FELLOW PACKETEERS

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Article 3528 of rec.radio.amateur.packet:
Newsgroups: rec.radio.amateur.packet
From: pst@cisco.com (Paul Traina)
Subject: Re: 9600 baud mod for Alinco 110, 112, 1200 radios
Sender: news@morrow.stanford.edu (News Service)
Organization: cisco Systems, Menlo Park, California
References: <1992Jul26.043534.23205@cbfsb.cb.att.com>
Date: Sun, 26 Jul 1992 20:51:55 GMT

I have made this mod, and I have the following suggestions:

1. you can get a "map" of the board via FAX or snail mail from Alinco -- this helps a LOT (it's impossible to read component labels) -- Alinco is in Torrance Calif, in the phone directory.
2. Throw away C40, it is impossible for a mere mortal to do what they are suggesting. Replace that SMT C40 with an axial .01uf cap (non-polarized, anything kind you want, I used a tant.) and some insulation tubing over the leads (it needs to stretch 2 inches across the bottom of the pcb.

Alinco claims this mod makes 1200bps unusable, untrue, I use my modded 1200 on both 1200 and 9600 bps without noticable degradation of performance.