## This Information Is Provided By

## CBTricks.com

How to install the Powerband RFX75 on New Production (Spring 2010) Cobra 29 Series Radios

Liability of damages to any equipment is the sole responsibility of the user!

Downloading, viewing, or using any information provided on these pages automatically accepts the user to the terms of this agreement!

Modifications are provided for information purposes only!

Supporters of CBTricks.com paid for the hosting so you would have this file.

CBTricks.com is a non-commercial personal website was created to help promote the exchange of service, modification, technically oriented information, and historical information aimed at the Citizens Band, GMRS (CB "A" Band), MURS, Amateur Radios and RF Amps.

CBTricks.com is not sponsored by or connected to any Retailer, Radio, Antenna Manufacturer or Amp Manufacturer, or affiliated with any site links shown in the links database. The use of product or company names on my web site is not endorsement of that product or company.

The site is supported with donations from users, friends and selling of the Site Supporters DVD's to cover some of the costs of having this website on the Internet instead of relying on banner ads, pop-up ads, commercial links, etc. Thus I do not accept advertising banners or pop-up/pop-under advertising or other marketing/sales links or gimmicks on my website.

All the money from donations is used for CBTricks.com I didn't do all the work to make money (I have a day job). This work was not done for someone else to make money also, for example the eBay CB sellers.

All Trademarks, Logos, and Brand Names are the property of their respective owners. This information is not provided by, or affiliated in any way with any radio or antenna Manufacturers.

Thank you for any support you can give.

For information on how to Support CBTricks.com http://www.cbtricks.com/support/

The user is solely responsible for making sure that any modifications made to the radio unit must meet all Federal and State Regulations or the Country of use! Liability of damages to any equipment is the sole responsibility of the user! Downloading, viewing, or using any information provided on these pages automatically accepts the user to the terms of this agreement! Modifications are provided for information purposes only! Disclaimer: CBTricks.com does not warrant the accuracy of the information contained herein nor is it responsible for any errors or omissions and assumes no liability for the content on this site. While CBTricks.com uses reasonable efforts to include accurate and up to date information, CBTricks.com makes no warranties or representations as to its accuracy or timeliness and assumes no liability or responsibility for any errors or omissions in the content of this site.

## RFX75 – Cobra 29 Installation (new production units as of Spring 2010)

- 1. Locate the capacitor at C10 on the RFX75 and carefully cut it off the board.
- 2. Cut the Yellow and Blue wires off the RFX75 board.
- 3. Cut the RX OUT coax cable off the RFX75 board. Take care to cut it close enough to the PCB so that it does not short out on anything.
- 4. Before any modification to the radio, do a complete test of all functions and confirm that the radio is 100% operational.
- 5. Drill and mount the RFX75 on the back of the radio using the supplied hardware.
- 6. From the radio, remove the 82pF disc capacitor located near L12.
- 7. From the radio, remove L12, L26, and the final transistor.
- 8. With the radio front panel facing you, remove the 15pF disc capacitor to the right of L15 (keep part for later next step).
- 9. On one lead of 15pF capacitor, solder a 2 inch piece of wire. Install the other lead of the 15pF capacitor in the right hole (radio front panel facing you) where L12 was removed. Solder the other end (wire) to the jumper that is connected to D3. This reconnects the RX circuit of the radio.
- 10. With radio front panel facing you, locate the 1K ohm, ½ watt resistor just to the left of the antenna connector. Solder the RF OUT coax (red color tubing) center conductor to the side of this 1K ohm resistor closest to the front panel of radio. Solder the shield of the coax to chassis ground (ground tab on the antenna connector).
- 11. Route the RF IN coax (yellow color tubing) through the hole where the final transistor was so that it can easily be soldered to the solder side of the radio PCB. Solder the coax center conductor to the trace that connects to the front hole of where L26 used to be. Solder the shield of the coax to DC Ground.
- 12. Solder the Orange wire to the front side of L15 (located just in front of where final transistor was).
- 13. Solder the Red and Black wires to the back of the radio's DC power jack (observe polarity!).
- 14. On the solder side of the circuit board, add a small ground jumper from the ground trace of T1 to the ground trace of C72.
- 15. After double checking your work, install the top cover on the radio, then retune transmitter to proper specs. Please note that it is important to have the top cover on the radio while doing the final transmitter tuning.
- 16. IMPORTANT: If the carrier is higher than 15 watts you should take the following steps to reduce the carrier to below 15 watts.
  - a. After confirming that the radio is functioning properly, remove the jumper located in front of L26. Install a 1000μF, 16 volt electrolytic capacitor in its place with the negative lead in the rear hole and the positive lead in the front hole.
  - b. On the solder side of the radio's circuit board add a 10 ohm 33 ohm, ¼ watt resistor across the two points where the jumper was. This will allow you to adjust the carrier The higher the resistor value, the lower the carrier. Typically, 33 ohms is about right.
- 17. If the carrier is not high enough do the following: Install a 10pF 68pF, 50 volt (or higher) disc capacitor across the disc capacitor that is just in front of L16. This is usually a 270pF capacitor.

The user is solely responsible for making sure that any modifications made to the radio unit must meet all Federal and State Regulations or the Country of use! Liability of damages to any equipment is the sole responsibility of the user! Downloading, viewing, or using any information provided on these pages automatically accepts the user to the terms of this agreement! Modifications are provided for information purposes only! Disclaimer: CBTricks.com does not warrant the accuracy of the information contained herein nor is it responsible for any errors or omissions and assumes no liability for the content on this site. While CBTricks.com uses reasonable efforts to include accurate and up to date information, CBTricks.com makes no warranties or representations as to its accuracy or timeliness and assumes no liability or responsibility for any errors or omissions in the content of this site.