

MX920 Duplexer Installation

INTRODUCTION

The MX920 series of radios has the option for a RF Duplexer to be fitted internally.

This application note describes the fitting and re-alignment procedure for the MX920 should it be required.

REQUIRED EQUIPMENT

1. Duplexer
2. Duplexer option kit.
 - 8x M4 Screws
 - Duplexer mounting plate
3. Pozi Screwdrivers #1 #2

FITTING DUPLEXER

The MX920 has provision to mount a mobile style duplexer in the upper right-hand aperture of the chassis (as viewed from the rear). This is the same location in which an internal battery would normally be fitted. If no mains power supply is required and the duplexer is fitted and an internal battery is required the battery may be fitted in the location where the PSU would normally go.

INSTALLATION

The Duplexer must be tuned to the correct RX & TX operating frequencies, before proceeding.

Care must be taken in fitting of duplexer with in the radio. Please see the following step-by-step procedure;

1. Remove 5 screw on the top outer cover using Pozi Screwdriver #1
2. Remove batteries if fitted, locate the four mounting Holes on the MX920 Centre plate. See figure 2
3. Take the Duplexer mounting plate and place into position on the MX920 centre plate. Insure the correct orientation of the duplexer plate.

4. Fasten the two plates together with the supplied M4 screws using Pozi Screwdriver #2
5. Now place your Duplexer on top of the Duplexer mounting plate. Note. The duplexer bracket is universally drilled for many different duplexers. Choose the most suitable mounting holes for your duplexer.
6. Fasten the Duplexer to mounting plate with the supplied M4 screws using Pozi Screwdriver #1.
7. Re-fit top outer cover and fasten.
8. Ensure the correct TX/RX, RF cables are connection to the correct ports of duplexer as required.
Eg. If the TX frequency (415Mhz) is lower than the RX frequency (425Mhz) then connect PA RF POWER OUT (CN7) via coax lead to Low port of duplexer. Connect the High Port of duplexer to the RX INPUT (CN6).



Figure 1. MX920 Rear Panel with Power Supply and Duplexer fitted. (RF Connecting cables not shown)

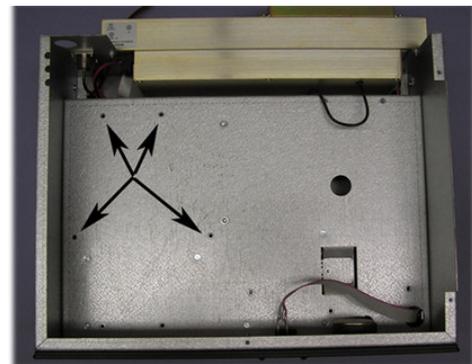


Figure 2. Inside View of MX920 Centre Plate. Arrow indicate positions for Duplexer mounting.