

## **MSF-5000 connection info To RLC controllers**

This info pertains to the older Eprom based repeaters (CLB and similar types) not the newer digital types although the connections may be similar.

I haven't played with one yet.

Also this is assuming you have a known good working repeater.

These are the connections I use

### **RLC DB9**

**Pin 1 GND---**to good ground point on control board

**Pin 2 PL Detect---** see note 1

**Pin 3 PTT---** TP 9 (local push to talk)

**Pin 4 TX audio---** see note 2

**Pin 5 RX audio---**to to pin 39 on J800 expansion connector

**Pin 6 GND ---**use for tx audio ground (see note 3)

**Pin 7 COR---** TP 7 is a good place for this

**Pin 8 GND---**use for rx audio gnd (see note 3)

**Pin 9 GND---**NC

Note 1: after many hours of head scratching and blurry eyes reading schematics and experimenting with different points on the control board, it was found to be easier to add an external pl decoder, I like the selectone or com spec, on the selectone boards use the following connections, they work for me.

B+-- pin1 of J800 expansion connector

Gnd and mic hook--- good control board ground on the radio

Audio input--- to pin 39 of J800 same as receiver audio

Decode (-) to pl detect to controller

Note 2: TX audio can be had in few areas , the easiest is pin 37 tx audio on J800  
I use pin 13 of U834, you will have to add some resistance to tailor your audio to your liking and not over drive the amplifier, I started with a 20K ¼ watt resistor, use more or less resistance to get the audio the way you like it, or use pin 6 of U838 which is after the amplifier (U834) but you still have some audio filtering. Using U834 gives good strong audio

Note 3: your audio grounds can be combined on the radio control board at Pins 7,8,9,and 10 on J800 expansion connector.

Controller commands 005 (port) 3, 013 (port) 10 with this configuration, also when you go to RLC control, make sure the PL disable and acc disable switches are in the up position