Syn-Tech-II as repeater

Connections for using a Syn-Tech-II radio (such as the 7-3400 / 70-3800) in repeater service.

The information you need is from the Syn-Tech-II Service manual part 3 (TX/RX)

On page 4-15 see Option Port Type 1. The pin out of P923 is as follows When Option Port Type 1 is selected in the programming -

Pin 1 - Ground
Pin 2 - +5 Volts
Pin 3 - Det - (Unsquelched receive audio, de-emphasized)
Pin 4 - Valid code Det (add pull up to +5 with 10K)
Pin 5 - PTT (add pull up to +5 with 10K)
Pin 6 - Aux function control - high = on
Pin 7 - Carrier Received (COR) high = squelch open
Pin 8 - TX mode (indicator output)
Pin 9 - CTCSS decoded high = tone detected
Pins 10 thru 16 - Serial com - not used.

Make sure you have the resistors in place before programming or the transmitter will key up randomly.

J922 also has some useful connections. Pin 1 is tone in. This is the tone input to the transmitter and is not pre-emphasized. You can use this for your TX audio if you use flat audio and do not want to transmit CTCSS. Pin 2 is flat audio from the receiver. Tap into it but leave it connected to use the internal CTCSS decoder in the radio.

The manual is in the files section of the group for download.

One more thing - in the programming manual, it mentions turning off the priority sampling in Appendix A, page 7-3 of 70-1488 Version 3.0 (from the files section). You will probably want to do this as well.

73 – Dan
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