451-468MHz Narrow Band Synthesized Transmitter
Tuning Procedure

Module to be tuned is placed on a tuning stand that reproduces the signals generated by the logic card when the transmitter is in the controller. The transmitter is also directly coupled to a spectrum analyzer.

Power is applied

The synthesizer is programmed for 460MHz when power is applied

A 50% duty cycle square wave is applied to the data line

Adjust R17 to produce a deviation of ~±1.5kHz

Adjust the mechanical trimmer on Y2 so the output is centered at 460MHz if necessary
(R11 may also be used to make very small adjustment to the center frequency)

Flip the switch on the tuning stand to hold the data line low, verify the low deviation

Flip the switch on the tuning stand to hold the data line high, verify the high deviation

Return the data switch to the center

Flip the frequency switch on the tuning stand low and verify deviation and center frequency at 451MHz

Flip the frequency switch on the tuning stand high and verify deviation and center frequency at 468MHz