

DESCRIPTION:

FOR TESTING PURPOSES:

The modular transmitter unit will be activated by pressing one of the buttons four push buttons connected to it. With the transceiver in transmit mode, this will cause the transmitter to transmit data. If the transceiver is in receive mode, the buttons will cause the receiver to tune into a single channel. The transceiver module is activated by connecting any of the digital inputs to the on-board regulated +5V supply on the controller board.

In the test system, one button on the transmitter operates output 1 on the receiver and broadcasts on 903 MHz, another operates output 2 on the receiver and broadcasts on 915 MHz, and the other operates output 3 on the receiver and broadcasts on 926 MHz. The fourth labelled button will cause the transmitter to transmit in FHSS mode. The toggle switch selects transmit or receive mode.

The transmitter control board operates on a +12V DC supply.

FOR NORMAL OPERATION:

The transmitter unit will be operated by switching the main power switch to the “ON” position and pressing one of the buttons on the transmitter enclosure. This will activate the transmitter on FHSS mode. Anytime the power is on but one of the buttons is not pressed, the transmitter will be powered down and the receiver will activate.

The system hops to channel frequencies that are selected by a pseudorandomly ordered list of hopping frequencies.

The input bandwidth of the receiver matches the hopping channel bandwidths of their corresponding transmitters, and shift frequencies in synchronization with the transmitted signals.