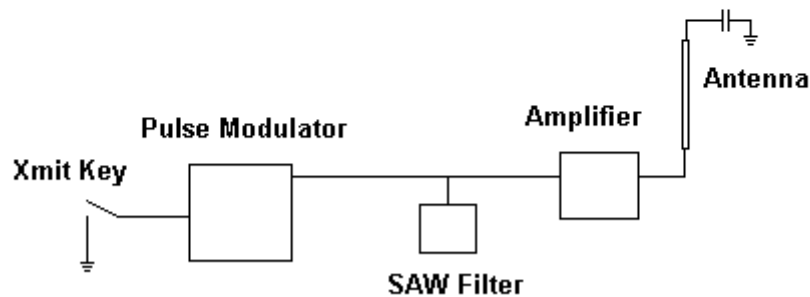


OPERATIONAL DESCRIPTION

LARCO Ultra-Small Transmitter



When the transmit button is pushed the code hopping IC (“pulse modulator” in the above picture) is enabled. This chip sends out a series of data bits corresponding to its programmed and individual transmitter ID combined with the programmed company ID according to a code hopping algorithm, plus a few extra data bits that tell which of the enable pins to the code hopping chip were enabled. There are four enables on the chip but we only use one for most of our applications and two for the dual channel remote transmitter and two again on each of the two transmitter boards in the four channel remote transmitter.

The bits coming out of the code hopping IC turn the saw filter on and off so that a “1” data bit turns the transmitter “on” and a “0” bit turns the transmitter “off”. A transistor in the output amplifies the signal.

A capacitor and resistor (not shown) take the original button press and extend the enable time to several seconds (around 25s) so the transmitter can repeat the message many times making it more likely that the receiver will get the message.