11- Operational description

The Wireless Remote is made to wirelessly transfer commands to the main ultrasound device through the WheelProbe 2.

There are three push-buttons used to transmit the following commands: Record/Stop, Next Index, Reset Encoder Position.

If desired, these commands can be entered directly on the ultrasound device.

The Wireless Remote is powered from a 3 V CR2032 button cell and transmit data at a 433.92 MHz frequency.

It is based on Linx technologies' encoder (MS series) and transmitter (LR series). The encoder is configured to use a 9600 baudrate.

Whenever a button is pressed, the encoder wakes up, encode the pressed button, send it to the transmitter as long as the button is pressed and go back to sleep when the button is released.

When the transmitter receives the encoded data, it wirelessly sends the data to the WheelProbe 2 which relays the command to the ultrasound device through its GPIO connector.