

Operational Description

1) General description

The product, ABC-200-HC-010, is a transmitter that transmits RF signals to the receiver to control the Actuators and Massagers. The product is operating at 315 MHz and transmits RF control signals that consist of 8bit-preamble, 16bit-address, 8bit-DATA (control signals), and 8bit checksum.

2) ENCODER

When the user presses any button on it, the micro controller (U1) transmits TX DATA to the oscillator through the R8.

3) OSCILLATOR

The oscillator consists of Q3, Y2, C13, and other components. The frequency is generated via 315 MHz SAW resonators.

4) RF AMPLIFIER

The RF signals from the oscillation circuit are amplified by Q2, through RF matching circuit, radiated via the antenna.

5) PCB PATTERN ANTENNA

All tuning and verification are performed by the manufacturer and there are no adjustments required by the user. No external ground is required or used with this transmitter.