

Aquatron Remote control transmitter description

1. Overview

The Aquatron remote control transmitter is a self contained battery powered handheld radio frequency unit designed to send wireless data to a power supply which controls a swimming pool cleaning device.

2. Description

The Aquatron remote control unit consists of a membrane keypad, battery, and PCB which includes a micro-controller, transmitter circuit, impedance matching and filter circuit, and printed style antenna.

3. Clocks and frequencies

The unit is controlled by a micro-controller which uses an internal (on chip) 4 MHz oscillator. The transmitter IC utilizes a 10.000MHz crystal oscillator and outputs a 433.92MHz radio frequency signal.

4. Antenna

The units' antenna is a printed type "meander" trace which is an integral part of the PCB. The Antenna trace is 70 mm (2 3/4 inch) length, 1.2mm (50 mil) wide, 1oz copper thickness on FR4 type substrate. The antenna layout is shown in attached file "Internal photos".