FCC ID: 2AB6OTX175X
MODEL: TX-175X

PRODUCT AND OPERATIONAL DESCRIPTION
LONG RANGE SYSTEMS
BEACH BUTLER TRANSMITTER

1.0 General Description

The Long Range Systems Beach Butler transmitter is a wall or pole mounted paging transmitter used to send commands and data to Long Range Systems staff paging products. The Beach Butler can operate on battery power, 2 AA batteries or connected to a Long Range Systems 120VAC to 5VDC converter. The transmitter is designed for outdoor use, has a single button user interface. It can be configured via a serial port with a single 64 character paging message. A repage interval if needed is also configurable, along with a Manager pager number and manager message To transmit a page, a user presses button labeled service.

2.0 Electronic Description

The Beach Butler is comprised of a DC to DC power converter, microcontroller, a FM exciter and encoder chipset set, a low pass filter, and matching network, and a fixed power amplifier. It has a single button user interface. It is configurable via a serial interface inside the battery compartment. Transmitter tuning is performed by an LRS technician with tuning capacitors, and therefore is not configurable or changeable by an end user. Amplifier gain is fixed limiting power output at the antenna port to around 75mW.

3.0 Wireless Description

The EUT transmits at a licensed frequency of 467.75 MHz, one channel , FSK modulation. The data is configured as a 64 character message by the end user. It has a transmit range of around ¼ mile. The intended use of the Beach Butler is mounted to a pool side umbrella pole. Mounting hardware is supplied with the installation kit to secure the device to a table, wall, or pole. Optionally a different umbrella mount is also available, and a battery eliminator kit which is inserted in place of the 2 AA batteries, so that the Beach Butler can be powered from an AC wall transformer. It is not designed nor recommended to be handheld. The Beach Butler antenna is wirewound soldered directly to the PCB and completely enclosed inside the plastic housing, with a minimum 1 cm separation distance to any point on the outside.