Tie it to ya

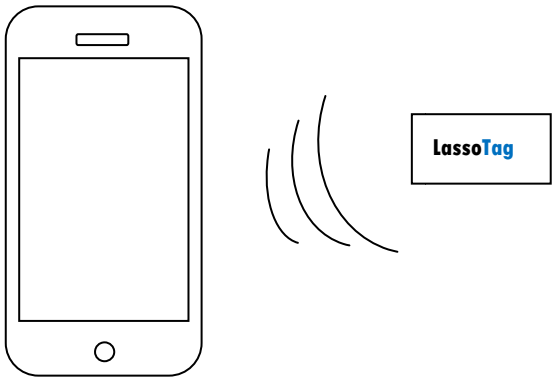
LassoTag Module Theory of Operation

LassoTag Modules utilize the Texas Instruments' CC2541 2.4GHz System on a Chip (SOC) configured to operate as a Version 4 Bluetooth Low Energy (BLE) compliant wireless device to communicate between a user supplied Bluetooth Master (typically a Smart Phone) and the LassoTag modules. The App running on the User's phone communicates with the LassoTag modules via the phone's internal Bluetooth radio to provide some basic status information about the LassoTag Modules – in range, connected, unconnected, moving, etc. Each LassoTag device has the CC2541 chip on a small PCBA with an integral "meandered F" antenna fabricated into the PCB. The module is powered by a rechargeable Lithium Ion battery and there are no external physical connections to the module during normal operation.

The radio frequency transmission incorporates 20 channels from 2.400GHz to 2.480GHz in the 2.450GHz frequency band to facilitate communication between the LassoTag module(s) and the Bluetooth Master. The end user does not control the transmission intensity (power) or duration as this is set in the device firmware at the factory. All equipment is set and tested at the factory to optimal settings for typical communication environments encountered by the system in the field.

There is no RF tuning to be done with this equipment as the antenna is hard wired and the frequency selection is determined within the set program and firmware in which it operates.

The batteries are not user replaceable, but they are rechargeable via a standard Micro USB cable provided with the system. The LassoTag module is designed to safely recharge the battery from any power supplied by a USB compliant power source.



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