Electromagnetic Compatibility Criteria for Intentional Radiators

§ 15.319(i) RF Exposure

RF Exposure Requirements: **§1.1307(b)(1) and §1.1307(b)(2):** Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines.

RF Radiation Exposure Limit: **§1.1310:** As specified in this section, the Maximum Permissible Exposure (MPE) Limit shall be used to evaluate the environmental impact of human exposure to radiofrequency (RF) radiation as specified in Sec. 1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of Sec. 2.1093 of this chapter.

For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:
[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR, where:

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

For Wi-Fi Transmitter:

POWER (dBm)	Tune-up Tolerance(dBm)	POWER(mW)	Distance(mm)	Freq(GHz)	< 3
10.31	1	13.52	26.19	2.437	0.8

For Bluetooth Transmitter:

POWER (dBm)	Tune-up Tolerance(dBm)	POWER(mW)	Distance(mm)	Freq(GHz)	< 3
9.167	1	10.39	22.17	2.48	0.74

The total power of simultaneous transmission is 0.8+0.74 = 1.54 < 3

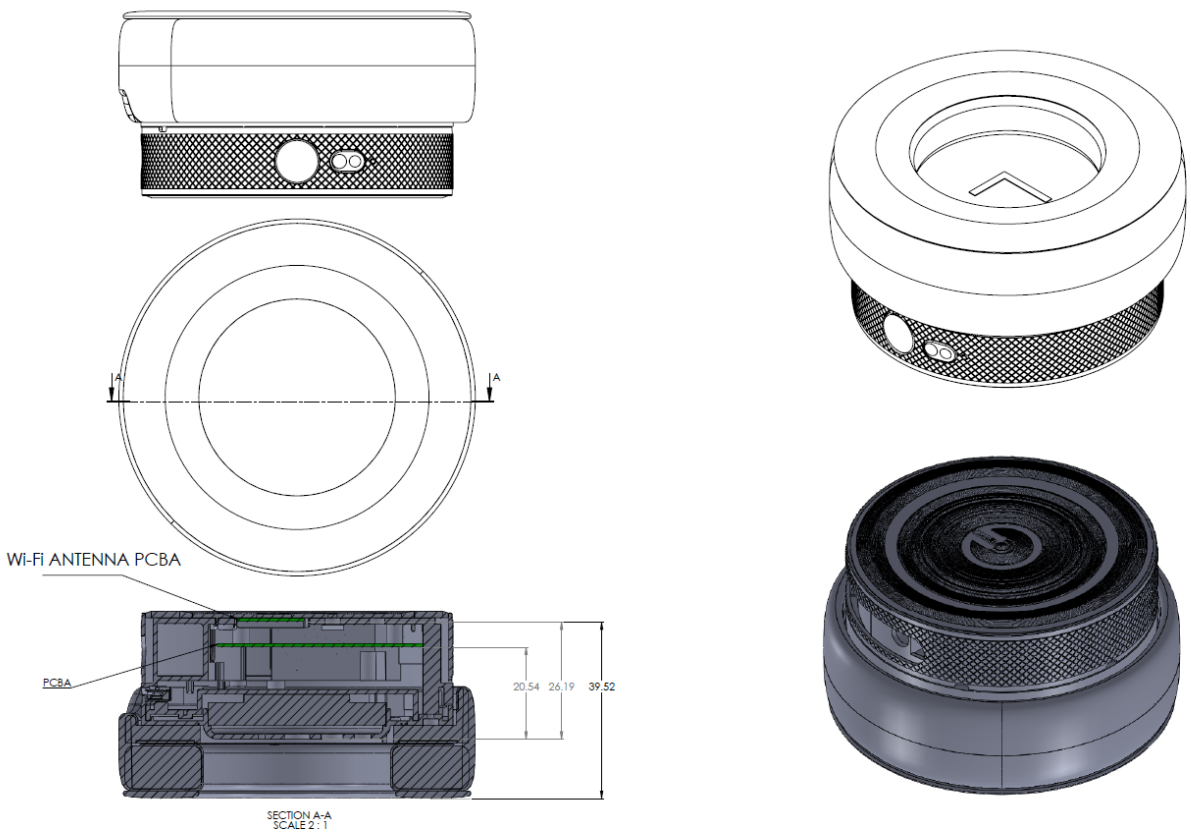

Figure 1. Muzik Live Left Ear (Wi-Fi) Device Diagram

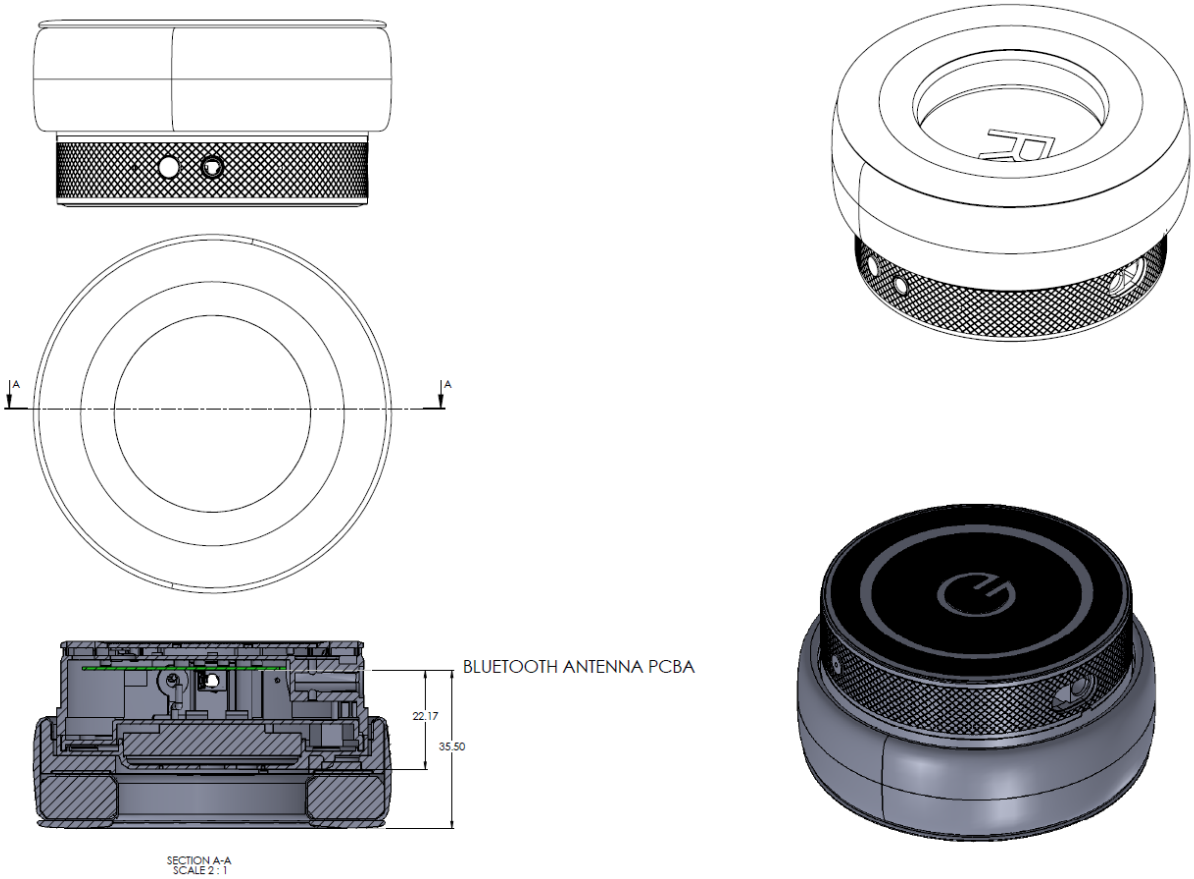

Figure 2. Muzik Live Right Ear (BT) Device Diagram