



ROGERS LABS, INC.

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June 6, 2006

Mr. Andrew Leimer
Federal Communications Commission
Equipment Approval Services
P.O. Box 35815
Pittsburgh, PA 15251-3315

Applicant: Lectrosonics, Inc.
581 Laser Road
Rio Rancho, NM 87124

Equipment: FCC ID: DBZUM450
FCC Rules: Part 2 and 74

RE: Request for additional information Correspondence reference number: 30976

Mr. Andrew Leimer:

A copy of the request is shown below for reference.

To: Scot Rogers, Rogers Labs, Inc.
From: Andrew Leimer
Andrew.Leimer@fcc.gov
FCC Application Processing Branch

Re: FCC ID DBZUM450
Applicant: Lectrosonics Inc
Correspondence Reference Number: 30976
731 Confirmation Number: EA573521

1) The device has 16 frequency blocks and the User's Manual indicates that the blocks of operation are stamped on the device. This implies that there are multiple devices to cover all frequencies applied for in the application. All variations of a device must be electrically identical to have one FCC ID. Please explain.

2) The powers in the test report do not match those in the line items in the application. Please explain

3) Per 47 CFR 1.1307(b) all FCC-regulated transmitters must comply with FCC RF exposure requirements. For portable devices (47 CFR 2.1093), the limit is SAR not MPE, therefore MPE "estimate" e.g., per OET 65 equation (3), is not applicable for FCC

compliance purposes. To ascertain whether there could be RF exposure compliance issues for this device, please provide info about:

- a) "thickness" of beltclip, i.e., distance from back of device to users body.
- b) source-based time-averaging duty-factor (firmware-based), if applicable, and related average conducted output power
- c) application review could be expedited with appropriate SAR measurement results, if already available

Response:

- 1) The device is manufactured in frequency blocks, which are electrically identical in every way except in the selection of certain passive component "trim" values in tuned circuits. In this way, the units are built on exactly the same printed circuit boards, using the same schematic, and are tuned for the sub-band they are intended to cover as marked on the housing. Although variable trimmers could be used to tune a unit to any sub band, fixed trim values are used instead of variable trimmers to improve stability and long-term reliability. The range of the trim values is very small.

Since the units are all ordered and sold using the same model number, it makes sense to have a single FCC ID, and to test representative samples of the full range - the low, mid, and high blocks. We have received approval for more than 50 similar transmitters in the past using this approach, with the "variation" between blocks being no different from that traditionally achieved using variable capacitors and inductors. There has never been a problem in practice since all devices are fully tested during manufacture to ensure compliance with part 74 requirements. In addition, not all of the possible frequency blocks are actually produced since some fall into spectrum for which there is no Part 74 usage. Currently, only blocks 21-29 and 37 are available.

- 2) The 731 form contained incorrect information in line entry 2 and 3 of the equipment specifications section (the power output of the device). These lines should be corrected to represent the output power of the device as 0.25 Watts each.

731 form should be correct as follows:

Equipment Specifications

Line Entry	Lower Frequency	Upper Frequency	Power Output	Tolerance	Emission Designator	Microprocessor Number	Rule Parts	Grant Notes
1	537.6	608	0.25	4.2 ppm	180KF3E		74.861	M4
2	614	793.5	0.25	4.2 ppm	180KF3E		74.861	M4
3	944.1	951.9	0.25	4.2 ppm	180KF3E		74.861	M4

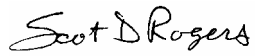
- 3) a) The belt clip increases the separation distance from the antenna to the user by 0.5 inches.
- 3) b) The device operates at 100 percent duty cycle and offers no time averaging opportunities.
- 3) c) The unit has not received SAR testing. A similar 0.25Watt, body worn, unit (FCC ID: DBZSMQ) received SAR testing at the request of the manufacture for internal reference and documentation. This information has been supplied to the FCC with the DBZSMQ application. The SMQ product SAR report demonstrates compliance to SAR

requirements. The SMQ, UM450, and other products are considered representative samples of this design.

Should you require any further information, please contact the undersigned.

Thank you for your consideration in this matter.

Sincerely,

A handwritten signature in cursive script that reads "Scot D. Rogers".

Scot Rogers
Rogers Labs, Inc.
Enclosures