



# ROGERS LABS, INC.

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August 24, 2006

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: DBZUM450H  
FCC Rules:            Part 2 and 74

Gentlemen:

The 731 form and application have been electronically submitted and any attachments will be up loaded to your web site to be used in obtaining a grant of certification. It is requested that the information contained in the printed circuit board layout, operational description, block diagram, and schematics of the application be held confidential per Section 0.459. A statement of confidentiality will be attached with the application at the time of submittal. Short term confidentiality addressed under another cover letter has also been requested. Attached below reflect correspondence between the FCC and Lectrosonics outlining understanding of requirements and number of FCC identifiers for each model.

Any special fee for request of confidentiality will be submitted with the application.

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

Thank you for your consideration in this matter.

Sincerely,

Scot Rogers  
Rogers Labs, Inc.  
Enclosures

-----Original Message-----

From: Joe Dichoso [mailto:Joe.Dichoso@fcc.gov]  
Sent: Monday, July 31, 2006 12:06 PM  
To: Bob Cunnings  
Cc: Andrew Leimer; Rashmi Doshi; Joe Dichoso  
Subject: RE: FCC ID DBZUM450 (Lectrosonics, ref. 30976)

Hi Bob,  
This is acceptable. For your specific proposal, there are small changes between each model under each identifier. Each identifier covers approximately 80 MHz.  
Please let Andy know what you want to do with the pending filings. Do you plan on requesting dismissal and filing new ones?  
Thanks,  
Joe

-----Original Message-----

From: Bob Cunnings [mailto:cunnings@lectrosonics.com]  
Sent: Friday, July 28, 2006 1:54 PM  
To: Joe Dichoso  
Subject: RE: FCC ID DBZUM450 (Lectrosonics, ref. 30976)

Hello Joe,

1. Functionally, there is no difference between units in any given group (id nbr). All of the functional parameters such as power output, occupied bandwidth, spectral purity, etc. are identical for all, no matter what the operating frequency. All product is comprehensively tested before shipment to guarantee that units operating in different frequency "blocks" (each 25.6 MHz wide) are indistinguishable

2. Structurally, only small differences in the values of a few "select" components are found between units within a particular group (id nbr). In the case of the subject UM450, the matrix of select part values looks like this, arranged to make clear which frequency blocks are grouped under which proposed id numbers:

Ref. DBZUM450L DBZUM450M DBZUM450H DBZUM450V  
(block 21-23) (block 24-26) (block 27-29) (944-952 MHz)

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C1	7.0	6.0	5.0	5.0	4.0	4.0	3.0	3.0	2.7	1.5
C2	2.7	2.4	2.2	2.2	2.0	2.0	2.0	1.8	1.8	1.0
C15	4.0	3.3	2.7	2.7	2.4	2.4	2.2	2.2	2.0	1.5
C5	3.3	2.2	3.3	2.4	3.3	1.8	1.8	1.8	2.0	1.2
C6	1.5	1.5	1.0	1.0	0.7	0.7	0.7	0.7	0.7	0.6
C12	10	9	12	10	10	9	8.2	7.0	7.0	3.3
C13	3.3	5.0	7.0	7.0	5.0	5.0	4.0	3.3	4.0	2.4
C17	10	7.0	6.0	5.0	4.0	3.9	3.9	3.3	4.0	1.5
L9	82	68	68	68	56	56	47	47	47	15
L4	82	68	68	68	56	56	47	47	47	27
L2	27	27	22	22	22	18	18	18	18	12
L1	18	18	18	18	15	15	15	12	12	10
L6	15	15	15	15	12	12	12	10	10	10

L17 100 82 68 68 56 47 47 47 39 39  
L8 120 120 120 120 120 120 120 120 68 68  
RESON. 630 660 700 730 760 800 860 870 920 1260

Values for capacitors in pF, inductors in nH, and for the ceramic resonators MHz (related to frequency range of the block). These "select" part values are always defined in a table found in the schematic for the product.

As you can see these overall range of adjustment within any group (id nbr) is less than 2:1, well within the range of adjustment traditionally accomplished by use of trimmer capacitors and variable (slug tuned) inductors. Of course the purpose is the same - to center the tuned circuits on the block (sub-band) of interest. It's just that the use of the fixed value parts in these locations eliminates the problems associated with traditional variable components when subjected to vibration, thermal cycling, etc.

Otherwise, the units are identical in design and construction, all built from the same schematic on the same printed circuit boards, with all other circuit components exactly the same.

3. The same grouping scheme would be used for the "SMD" and "SMQ" products, as well as any other future transmitter designs submitted under part 74 rules. They are very similar in this respect to the UM450 - for them, a total of 11 "select" parts are defined, with the same basic pattern of variation seen in the table above, with less than a 2:1 change within any given group (id nbr), and often much less.

Once an understanding is reached we are ready to submit new filings as you recommended.

Thank you,

Bob Cunnings  
Lectrosonics, Inc.