

January 17, 2008

RE: ATCB005848

FCC ID: BEJ9QK-W93-R for LG Electronics

Following are our answers:

1. Please provide a better operational description or other supporting documentation that this frequency hopping spread spectrum transmitter meets the following:
 - (a) Pseudorandom hopping requirement in Section 15.247(a)(1) – describe how the hopping sequence is generated and provide an example of the hopping sequence channels,
 - (b) Equal frequency use in Section 15.247(a)(1) – describe how each transmitter meets the requirement that its hopping channels are used equally on average (e.g., that each new transmission event begins on the next channel in the hopping sequence after the final channel used in the previous transmission event),
 - (c) System receiver input bandwidth in Section 15.247(a)(1) – describe how the associated receiver complies with the requirement that its input bandwidth (either IF or RF) matches the bandwidth of the transmitted signal,
 - (d) System receiver hopping capability in Section 15.247(a)(1) – describe how the associated receiver has the ability to shift frequencies in synchronization with the transmitted signals,
 - (e) Coordination capability in Section 15.247(h) – describe if this transmitter can recognize other users within the spectrum band so that it individually and independently chooses and adapts its hop sets to avoid hopping on occupied channels and how this is accomplished.

Answer: Please attach file ([Operational Description 20Ch.pdf](#)) and upload to ATCB website.

2. In item one above, be sure to include the channel number and frequency of the channels that this transmitter uses. The test report shows there are 20 channels but the channel numbers go from 0 to 37. Apparently there must be some missing channel numbers because that amounts to 38 channels. Please clarify.

Answer: For this product, the total channels are 38. But the market product is used 20 channels and the channels are random. Although 20 channels are random, the high, middle and high channels are always fixed to used.

3. The user manual also does not indicate how to change channels if there is interference on the default channel that this transmitter is operating on. Please clarify.

Answer: This product has no channel select function for user. It's auto select while turn on, so manual has no any description about this.

4. On page 4 of the submitted test report, please identify the FCC accepted test procedure used to measure the characteristics of this frequency hopping spread spectrum transmitter. ANSI C63.4 does not describe how to measure channel separation, number of hopping channels, maximum bandwidth, dwell time, and output power for spread spectrum transmitters. Go to <http://www.fcc.gov/oet/ea/eameasurements.html> to locate this procedure's name.

Answer: We revised it, please attach file ([Test Report-R. pdf](#)) and upload to ATCB website.

5. Please amend the address for BEJ listed on the ATCB 731 application form. The address listed on this form is not the address in the FCC Grantee Code database. ATCB cannot change the address on the grant of Certification from the one listed on the FCC Grantee Code database since it is automatically filled in. If you want the address listed on the application form to appear on the grant of Certification, you must update the FCC database. For help performing that task, please contact Ms. Marianne Bosley of ATCB by email at Marianne@atcb.com.

Answer: We revised it, please attach file (**ATCB-Form 731.pdf**) and upload to ATCB website

6. Daniel Kim is listed as the contact person for LG Electronics on the FCC Grantee Code Database. As such, he is the authorized person to sign the agent letter and confidentiality request letter for LG Electronics. Unfortunately Jonghoon Park and Jong-Dae Lee have signed these letters submitted with this application. Please either provide a letter from Daniel Kim giving Jonghoon Park and Jong-Dae Lee the authority to sign the agent and confidentiality request letters for LG Electronics on this application or submit a new agent letter and confidentiality request letter signed by Daniel Kim for this application. Or you can have the FCC Grantee Code Database updated to show a new contact person for LG Electronics but this person must sign both of these letters. Please contact Ms. Marianne Bosley by email at Marianne@atcb.com if you need help changing the contact person for LG Electronics.

Answer: We revised it, please attach file (**W93-R Declaration of Compliance.pdf & W93-R FCC Request for Confidentiality.pdf**) and upload to ATCB website.

7. For Your Information – The average time of occupancy (dwell time) for this transmitter seems to have been calculated incorrectly. There are actually 10 hops per second instead of 9 hops per second as shown on the submitted plots. If you calculate the time interval between each hop, you can see that there is one more hop that can occur during the one second time interval shown if the plot is started immediately before the first hop. The device is still compliant with the requirements using 10 hops per second instead of 9 so there is no compliance issue. Please make sure that you show the maximum number of hops per time period shown in future plots of this nature.

Answer: The dwell time we measured sometime is 9 hops and sometime is 10 hops. So we take into calculate is according to the reappearability. The most reappear probability is 9 hops. Even if we take into calculate by 10 hops is also pass.

※ DoC Statement of User Manual

The DoC Statement was removed, the request from Taipei ATCB office.

Please attach file (**User Manual-R.pdf**) and upload to ATCB website.