



American Telecommunications Certification Body Inc.  
6731 Whittier Ave, McLean, VA 22101

January 2, 2007

RE: GRAND MATE CO., LTD

FCC ID: UMP650

After a review of the submitted information, I have a few comments on the above referenced Application.

- 1) FYI....In the future, please appropriately fill out section III 4(a) and section III 9 appropriately of the 731 form.
- 2) FYI....The application includes information for both the TX and RX. However, please note that the Certification will only cover the TX device. The RX must either be Certified under a separate FCC ID, or DoC'd using an appropriate lab as required under the FCC requirements for DoC. Additionally, please note that exhibits like block diagrams, external photos, internal photos, etc., should only be provided for the TX portion of the device. Please be careful of this in the future. Please confirm that the RX will be handled properly.
- 3) The block diagram should show the frequencies of all oscillators in the TX portion of the device (CFR 2.1033(a)(5)). Please update.
- 4) Part of the TX contains RF circuitry on a small daughter board. The FCC requires the front and back of each board, even when integrated into the device. Additionally the board should be free of any stickers as shown in the provided photographs. Please provide and update the internal photograph exhibits accordingly. Additionally, when updating this exhibit, please only provide an exhibit for the TX portion of the device (i.e., removing all RX related photos).
- 5) The schematics should be adjusted to only show the TX portion of the device. Additionally, the schematics provided appear to be missing the RF circuitry from the daughter board contained in the TX. Please update the schematics as appropriate.
- 6) The users manual is missing information required by 15.21 and normally provided 15.105. Additionally note that the manual may require additional information required by 2.1077 if it is DoC approved.
- 7) ANSI C63.4 requires that portable devices are measured while positioned in each of 3 axis. This does not appear to have been done. Please review.
- 8) Please explain the spurious limit of 61.9 dBuV/m @ 3m. My calculations show this should be 55.6 dBuV/m @ 3m based upon the fundamental frequencies.
- 9) The emissions data appears to be average from the plots provided. However the FCC also requires to show compliance to peak limits which are 20 dB higher than the average limit using the appropriate detectors. Please reference 15.35. Please correct.
- 10) The average data appears to be taken using a 10 HZ RBW. Note that the plots on page 43 show that the TX does have a pulsed nature of approximately 25 msec in length (actual time should be measured). Therefore for purposes of average measurements, the VBW should not be lowered below 1/Ton time (i.e. 1/25 msec = 40 Hz). Therefore it appears that average measurements were taken using too low of a VBW. Please review and correct as necessary.
- 11) FYI....The test report appears to cover both the TX and RX. The conducted emissions are from the RX portion of the system and therefore were not reviewed in the test report.

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The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information may result in application termination. Correspondence should be considered part of the permanent submission and may be viewed from the Internet after a Grant of Equipment Authorization is issued.

Please do not respond to this correspondence using the email reply button. In order for your response to be processed expeditiously, you must submit your documents through the AmericanTCB.com website. Also, please note that partial responses increase processing time and should not be submitted.

Any questions about the content of this correspondence should be directed to the sender.