

November 21, 2008

RE: FCC ID: H25PD2TX100S\_ATCB006930 Attention:

I have a few comments on this Application. Please note that further comments may arise in response to answers provided to the questions below.

- Please note that for the grant it is only necessary to list the highest emissions designator in modulation content. Lower modulation values are included in the highest. For example you list a number W7D emissions designators from 1M20W7D to 7M70W7D. Please note that unless you specifically want all designators on the grant 7M7W7D should be sufficient for all. Please let me know how you want the grant to be in this situation.
- Please note that the tune up procedure required by the FCC to be submitted is not an attestation that the user cannot adjust power and frequency, but is the actual manufacturers tune up procedure used at the factory to set these values. If possible please provide this document.
- 3. Please note that the Retlif test report and most other documents are labeled as confidential. Please note that these documents cannot be held confidential. These exhibits will not be uploaded to the FCC as confidential information. The only exhibits that will be uploaded as confidential will be the operational description, schematics, block diagram and parts list/tune up. Please confirm your understanding of this fact.
- 4. Please note that the internal photos are incomplete. Internal photos must be of the top and bottom of all boards and must show the transmitter portion with shields removed. Please provide all necessary internal photos for this applications.
- 5. Please note that the rf exposure statement for this device is not accurate. This device appears to be a mobile device using a separation distance of 20cm as stated on page 3 of the manual. As such this device is not under 2.1093 but is under 2.1091 of the FCC rules. While this device may not be subject to routine evaluation (i.e. measured MPE), it is subject to MPE calculations using conducted antenna terminal power and antenna gain. As such, an MPE report is required for this application. Please provide a properly calculated MPE report with this application. The formula to be used in these cases is

$$S = \frac{PG}{4\pi R^2}$$

For the frequency range used the MPE is 5mW/cm^2. You will need to solve an R of 20cm and an antenna gain of the highest antenna used in the device. This means that with a conducted antenna terminal power as listed (110mW) and the stated 20cm separation, the highest antenna gain that is allowed with this device will be 23.58dBi. This also needs to be explained in the manual.

6. Please note in reference to item 5 above; the manual clearly states that abody worn microphone is used with this device. Please also note that this then clearly indicates that the device is also worn on the body (i.e. how can a body worn mic be used if the device itself is not also worn on the body). If this device can be worn on the body as clearly indicated on page 5 of the manual, then SAR is required per 2.1093 of the FCC rules. Please confirm if this device can or cannot be used in a body worn configuration (i.e. cannot be carried on the body during times of use by the end user). If the device cannot be used, then please remove and show how this device cannot operate with a body worn microphone. If this device can be used on the body, please provide the appropriate SAR report.

Dennis Ward

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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. Except as described in §0.459, correspondence and responses 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.