



American Telecommunications Certification Body Inc.

6731 Whittier Ave, McLean, VA 22101

September 23, 2002

RE: FCC ID: H25VXS250

Attention: Joe Desjardins

I have a few comments on this Application.

- 1 Please provide the factory tune up procedure and the parts list. If these are to be confidential, please resubmit a corrected request for confidentiality including these documents. Please be aware that the tuneup Max power and the power measured in the EMC and SAR reports must agree.
- 2 Please note that the FCC states that if there is a difference between the Max SAR power and the Max EMC power, the SAR is to be tested at the higher level. While within 5%, the levels in the EMC for Max power are 24.8dBm and in the SAR the Max power is 24.6dBm. Please either retest the device with the Max power being used in the SAR, or explain why the SAR report was not done at the Max power. In your explanation, please cover how the lower SAR level may or may not affect the SAR of the device.
- 3 In your rf caution statement you state, "Only antennas specifically designed and tested by DTC for on-body applications should be used." In another part of the manual you state, "You may use the VBS/VBL series transmitters with other manufacturers antennas." For consistency, please clarify which statement is accurate (e.g. other manufacturers antennae with similar characteristics as measured in the filing??). Please correct the statements so they are consistent throughout the reports.
- 4 The manual lists the ANT-2 (linearly polarized dipole antenna). The ANT-2 is a 'rubber ducky' type antenna which when used would be close to and possibly touching the body. What steps have been done in SAR testing to test this antennae? How was the dipole shown to comply to SAR limits? Please explain.
- 5 Your rf exposure statement on page 3 of the manual attests to the fact that this device will be used in "General Population/Uncontrolled environments". Please note that CFR47 Part 2.1093(d)(2) states, "Limits for General Population/Uncontrolled exposure: 0.08 W/kg as averaged over the whole-body and spatial peak SAR not exceeding 1.6 W/kg as averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the hands, wrists, feet and ankles where the spatial peak SAR shall not exceed 4 W/kg, as averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube)." Please note that body worn equipment in the uncontrolled environment must meet the 1.6W/kg, not the 8W/kg for controlled environment. Please note that in a controlled environment, even in those instances where transitory movement may exist, "the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means." The SAR measured in the SAR report shows this device to be 2.7 W/kg – thus the device appears to fail. Please explain why you believe this is not a failure since the use of this device will be in the general public and that general public may not be informed of the rf exposure possibilities. If this device is to be used only in a controlled environment, you will need to correct all documentation dealing with rf exposure to so indicate. You must also show how this device is to be kept out of the general public/uncontrolled environment – or you must show how during its operation in the uncontrolled environment, the general public will be informed of the potential rf exposure hazards. Please note, warning labels on the device may not be sufficient.

A handwritten signature in cursive script that reads "Dennis Ward".

Dennis Ward

<mailto:dward@AmericanTCB.com>

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.