



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

March 4, 2003

RE: FCC ID: BQI02DR-10110
Attention: Tim Johnson

I have a few comments on this Application.

1. You state that there is no tune up procedure except for establishing the center frequencies. How is the power out of the device set at the time of manufacture so as not to exceed the limits as reported in the application?
2. Please provide the parts list as required by 2.1033.
3. A note on the external photos states that you do not use the two antenna terminals on the back right of the unit. However, the schematics are not clear as to which antenna terminals are selected (i.e. which jumpers are used in this device). Also, the manual indicates that selection is possible between antenna sets A and B. This appears to be selecting the four possible antenna connectors. Please clarify which jumpers on the schematics are used and which are not. Please clarify what the designations in the manual mean in relation to actual selectable antennae. Also, please explain how the two unused antenna connectors are prevented from use at the time of manufacture. Alternately, please show photos of this device without the unused connectors.
4. Please note that there appears to be a shielded section on the top of the transceiver board. Please remove this shield and provide photos of the circuitry underneath. Alternately, if this is not a shield, please explain what it is.
5. Please note that the data in the fundamental field strength table on page does not match your sample calculation. Please note that the calculated field strength would seem to be $\text{antilog}(-0.2+107+29.4)/20 = \text{antilog}(106.8+29.4) = \text{antilog}(136.4/20) = 6.6V$. Please also note that the cable and antenna factors in the first table do not match those in the other tables. Please provide your cable and antenna factors so a correct evaluation of the correct field strengths can be made. Alternately, please correct your report to provide accurate measurement data for the fundamental field strengths of the EUT.
6. Please define what your 'slow' hopping statement means more clearly. You state the device is a Frequency Hopping Spread Spectrum type" transmitter. What does this mean? Is it a Spread Spectrum device? If it is a spread spectrum device, please provide evidence of the pseudo random frequency generation? If it is not a spread spectrum, please clearly identify the type.
7. The plots provided would tend to say that the emissions designator may not be accurate. Please provide measurement data using correct Res BW to justify the emissions designator.
8. Please note that your temperature data is insufficient to show compliance to 2.1055 and 95.1115e. 2.1055b states, "Frequency measurements shall be made at the extremes of the specified temperature range and at intervals of not more than 10° centigrade through the range." The range of operation has not been specified in the documentation provided and therefore you are responsible to show compliance to the temperatures in the generic temperature stability section in 2.1055. Please provide temperature measurements for every 10 degrees C for the full range of temperature variations. Alternately, please provide the technical specifications from the manufacturer giving the temperature range of the device and provide temperature stability measurements for every 10 degrees in that range as specified in CFR 47.

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.