



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

April 7, 2005

RE: FCC ID: D04LIBUHX\_ATCB002281  
Attention: Gregory M. Snyder

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

1. Please note that the alignment of the block designations and the blocks is off on pages 9, 18, 28 and 31 of the operational description (Confidential\_AR400US Operational Description.pdf). Please correct.
2. Please note that the manual does not appear to have any of the required FCC statements (i.e. 15.21 and 15.105). Please provide a manual with all required FCC statements.
3. Please note that the operational description mentions use at frequencies not approved for US operation. These frequencies are listed for EU operation. Please note that 15.5 states that a device under part 15 cannot be manufactured with user accessible controls of functions that allow the device to operate on non-US frequencies. Please verify that the US product as sold in the US cannot be made to operate on any non-US frequency.
4. Please note that the FHSS device operational description mentions "CW differential drive level". Also, please note that the operational description mentions CW. Please verify that this is not an indication that the FHSS device transmits only a CW signal at some point. Please note that this would not be allowed as it would not meet the definition of a FHSS device (mainly – a spread spectrum system in which the carrier is modulated with the coded information in a conventional manner causing a conventional spreading of the RF energy about the frequency carrier.)
5. FYI – the operational description should be for US only products and need not consider other countries.
6. Please note that the operational description states the output of the device is 1W yet the 731 and test report state the output is only 0.491W. Please be consistent in the documentation. Please correct the appropriate documents to reflect the actual power of the device as will be granted.
7. Please note that the 731 states the device is seeking certification under 15.225. Please note that the particular frequency allocation under 15.225 is between 13.11 and 14.01MHz. The frequency listed on the 731 is 7.6 to 8.7MHz range. Please provide a 731 that accurately reflects the device in question. Please also include the field strength level for this frequency range on the 731.
8. Please note that MPE is only good for devices that are greater than 20cm from the person. Thus, calculating a 'safe' distance less than 20cm has no meaning. Please provide the level MPE at 20cm in the MPE report.
9. Page 8 of the schematics (Confidential\_LIBUHX Schematics.pdf) appear to mention filtering at 13.6MHz. The report states the device operates in the 8MHz range. Please explain.
10. Please provide some additional information on the algorithm used to determine the pseudo-random hopping sequence to show that the hopping sequence is truly pseudo-random.

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](http://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.