



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

October 7, 2003

RE: Cattron-Theimeg Inc.

FCC ID: CN2ETH-15

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

- 1) The block diagram and operational description show an optional amplifier in the RF circuitry. Please explain if this was present or not and which version this is (20 mW or 450 mW). Also, please note Question 7 below. Note that due to the expected difference in power levels and spurious emissions, each model will likely require a different FCC ID and also the expected output power with the optional output amplifier installed will likely not meet with 15.231 levels. It is also suggested that the operational description be adjusted to clarify exactly which model is covered by this application.
- 2) It is uncertain where and how the antenna is integrated into the device. Please provide additional photos to show this. Also, if the gain of the antenna is known, please provide.
- 3) From the users manual, it appears that this device may contain Spring Return to Center Toggle switches, Maintained Toggle switches, Momentary Push button switches, and Rotary Select. Note that the maintained toggle and rotary select switches do not automatically release. Since it appears that these devices are customizable, therefore what causes the device to deactivate TX within 5 seconds when these types of buttons are used. Also, note that the description of the device in the test report mentions a single-paddle, while this function does not appear to be integrated in this device.
- 4) From the users manual, it appears that this device may also contain side panels and/or analog switches. Note that 15.231 typically does not typically allow for analog style proportional controls as use of these controls may be deemed as sending data versus a simple on/off command. Please provide further information regarding the use of these controls in this product and how the device will maintain the requirements of 15.231(a).
- 5) The users manual also mentions the possibility of an optional external antenna. Note that 15.231 is based on field strength readings and therefore any changes to the antenna can affect the results. Please explain if this device will be offered with this option or not.
- 6) Since this device contains selectable frequencies via the dip switches contained in the device, please provide a list of the TX frequencies. If this device may contain various lists due to coding, please provide the actual lowest and highest adjustable center frequencies. The FCC prefers the grant for these devices to be approved only for the specific tunable frequencies.
- 7) The output power given in the test report is < 1 mW, while the block diagram/schematic/operational description exhibits mention 10-20 mW. Note that given a 0 dBi gain antenna and the results obtained, it appears that the output is significantly below 1 mW. It appears that the exhibits provided may be for another transmitter. Please explain and provide any corrected exhibits necessary.

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Examining Engineer

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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.