

December 6, 2004

RE: Hetronic International

FCC ID: LW9-CS458TXN

I have a few comments on this Application. Depending on your responses, kindly understand there may be additional comments.

- 1.) It is not appropriate to call any transmitter other than a Part 15 Intentional Radiator an "Unlicensed Transmitter" regardless of the Rule section. Please specify a different description for this device and provide a revised Form 731.
- 2.) The Block Diagram provided does little to describe the transmitter. Please provide a proper Block Diagram for this device.
- 3.) All Licensed transmitters must have a Tune Up procedure. Please provide.
- 4.) If the antenna is permanently attached, should not this product be rated for RF power in terms of radiated units? Please explain.
- 5.) Kindly provide for me an understanding of how the transmitter was coupled to the spectrum analyzer. Was a loose coupling methodology used? I find it difficult to correlate the readings on the Occupied Bandwidth plots with the rated conducted Pout of ~40mW. Please explain.
- 6.) Was any conducted spurious emission data taken for this product as required by Part 2 of the Rules? If not, kindly explain.
- 7.) The plots labeled Figure 1 and Figure 2 do not have any vertical grid lines. This makes it very difficult to analyze. Please provide better plots.
- 8.) Please provide a rationale for the selection of the tone used to modulate this device (Sect. 2.3). The Operational Description indicates that serial data rates of up to 9600 baud are possible. Please provide a detailed description of the modulating intelligence.
- 9.) The EUT Description in Section 2.1 does not match the description provided in the Manual. Please review. Is Section 2.1 for a different product?
- 10.) The Test Setup photos show this device taped to a large rectangular object. Please identify. In addition, was this device tested in three orthogonal planes?
- 11.) Please provide a rationale for the requested emissions designator.
- 12.) Please provide the E and I through the finals.
- 13.) Unity gain is assumed for the antenna in the RF Exposure Exhibit. Please explain your reasoning.
- 14.) The Manual contains no required compliance information. Please provide.

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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.