Date : 1/21/11

Nemko Canada Inc.
303 River Road
Ottawa, Ontario, Canada
K1V 1H2

Attn: Director of Certification

FCC ID: QVEFSK4U
IC: 3683B-FSK4U
Model: RXT9200-0505E

Request Limited Modular Authority

We hereby request Limited Modular Approval based on the numbered requirements identified below as we address them to be included in our application for equipment authorization.

1. The modular transmitter must have its own RF shielding. This is intended to ensure that the module does not have to rely upon the shielding provided by the device into which it is installed in order for all modular transmitter emissions to comply with Part 15 limits. It is also intended to prevent coupling between the RF circuitry of the module and any wires or circuits in the device into which the module is installed. Such coupling may result in non-compliant operation.

   The unit has no shielding. This is an exception to the rules for Modular Approval. The unit was tested alone and meets the emission standard. The unit will be installed inside remote controls. There will be the module and a motherboard. The motherboard and the PCB will have a ground layer separation.

2. The modular transmitter must have buffered modulation/data inputs (if such inputs are provided) to ensure that the module will comply with Part 15 requirements under conditions of excessive data rates or over-modulation.

   The data rate for all the interface signals are fixed data rate. Also, the incoming data is buffered by buffers and a layer of logic circuits. The data does not go directly to the modulator.

3. The modular transmitter must have its own power supply regulation. This is intended to ensure that the module will comply with Part 15 requirements regardless of the design of the power supplying circuitry in the device into which the module is installed.

   The module has its own regulator and input-output filters. Hence it's independent of the input regulator.

4. The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204(c). The antenna must either be permanently attached or employ a "unique" antenna coupler (at all connections between the module and the antenna, including the cable). Any antenna used with the module must be approved with the module, either at the time of initial authorization or through a Class II permissive change. The "professional installation" provision of Section 15.203 may not be applied to modules.

   The antenna is a trace antenna that is a part of the PCB. Customer does not have access to the antenna and the antenna does not have a connector

5. The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another device during testing. This is intended to demonstrate that the module is capable of complying with Part 15 emission limits regardless of the device into which it is eventually installed. Unless the transmitter module will be battery powered, it must comply with the AC line conducted requirements found in Section 15.207. AC or DC power lines and data input/output lines connected to the module must not contain ferrites, unless they will be marketed with the module (see Section 15.27(a)). The length of these lines shall be length typical of actual use or, if that length is unknown, at least 10 centimeters to insure that there is no coupling between the case of the module and supporting equipment. Any accessories, peripherals, or support equipment connected to the module during testing shall be unmodified or commercially available (see Section 15.31(i)).

   The module was tested in a stand alone method as requested. The unit is only battery powered and was tested with batteries.

6. The modular transmitter must be labeled with its own FCC ID number, and, if the FCC ID is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: XYZMODEL1" or "Contains FCC ID: XYZMODEL1." Any similar wording that expresses the same meaning may be used. The Grantee may either provide such a label, an example of which must be included in the application for equipment authorization, or, must provide adequate instructions along with the module which explain this requirement. In the latter case, a copy of these instructions must be included in the application for equipment authorization.

The Label document shows that the module will be labelled with the FCC ID etc. An instruction is provided to the manufacturer of the final products to add the external label. Please see the Installation Instruction documentation.

7. The modular transmitter must comply with any specific rule or operating requirements applicable to the transmitter and the manufacturer must provide adequate instructions along with the module to explain any such requirements. A copy of these instructions must be included in the application for equipment authorization. For example, there are very strict operational and timing requirements that must be met before a transmitter is authorized for operation under Section 15.231. For instance, data transmission is prohibited, except for operation under Section 15.231(e), in which case there are separate field strength level and timing requirements. Compliance with these requirements must be assured.

   Once the data is in the module the timing inside the module is done via internal logic inside of the IC. Hence, the IC itself controls the transmission of the signal. This is done with the help of logic circuits. The test report shows compliance with 15.231(a).

8. The modular transmitter must comply with any applicable RF exposure requirements. For example, FCC Rules in Sections 2.1091, 2.1093 and specific Sections of Part 15, including 15.319(i), 15.407(f), 15.253(f) and 15.255(g), require that Unlicensed PCS, UNII and millimeter wave devices perform routine environmental evaluation for RF Exposure to demonstrate compliance. In addition, spread spectrum transmitters operating under Section 15.247 are required to address RF Exposure compliance in accordance with Section 15.247(b)(4). Modular transmitters approved under other Sections of Part 15, when necessary, may also need to address certain RF Exposure concerns, typically by providing specific installation and operating instructions for users, installers and other interested parties to ensure compliance.

   The test report shows RF exposure emissions meeting compliance with 15.231(a).

As SMK is requesting Limited Modular Approval, SMK will be the sole manufacturer of the module and all products it will be installed in, controlled by the installation document such that full compliance of the end product is always ensured.

Sincerely,

Leon Gateno

RF Engineer