



11/28/07

KSC Industries, Inc,
881 Kuhn Drive Building 200
Chula Vista 91914, USA.

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

Attn: Director of Certification

Request for Limited Modular Approval for Soundcast 50RFM

Dear Sir,

We request limited modular approval of Soundcast 50RFM wireless audio system based on the following requirement in FCC Public Notice "Part 15 Unlicensed Modular Transmitter Approval". Since the Soundcast 50RFM wireless audio system does not have its own power supply regulation as required in item number 3 of the FCC public notice, we will use the exact same power supply regulation used for the FCC certification test fixture in our products to ensure that the final products are compliant with FCC regulation.

FCC requirement and KSC response:

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.

KSC response: Soundcast 50RFM has its own RF shielding.

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.

KSC response: Soundcast 50RFM has an analog to digital converter that is fixed at 48 kbps data rate.

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.



KSC response: Soundcast 50RFM does not have its own power supply regulation. The final product will have a motherboard for the Soundcast module that has the exact power supply regulation as on the test fixture.

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.

KSC response: The antenna for Soundcast 50RFM is permanently attached to the module and is included in the approval.

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 centimetres 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)).

KSC response: The modular transmitter is tested in a stand-alone configuration. The AC and DC power line and data input/output lines connected to the module do not contain ferrites. The length of these lines is more than 10 centimetres. There is no any accessories, peripherals attached to the module except the test fixture that provides power supply regulation.

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: SUD-50RFM” or “Contains FCC ID: SUD-50RFM.” 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.

KSC response: There will be a label on the RF shield and there will be exterior label that has the wording "Contains FCC ID: SUD-50RFM".

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.

KSC response: KSC will be fully responsible for the integration of final products for its customers for Soundcast modules. KSC will ensure that the final products using Soundcast module comply with rules applicable to the transmitter.

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.

KSC response: KSC will be fully responsible for the integration of final products for its customers for Soundcast modules. The final products will be completed sealed and consumers will have no access to the Soundcast module.

Regards,
Jim Wei
Sr. Applications Engineer
KSC Industries, Inc.

