

From: Generic Office of Engineering Technology [oetech@fccsun27w.fcc.gov]
Sent: Friday, June 29, 2007 12:13 PM
To: Ollie Moyrong ES-MPK
Subject: Response to Inquiry to FCC (Tracking Number 235259)
Inquiry:

The device falls under the scope of Permit But Ask list for Category 1 ? 15.239 FM transmitter.

Inquiry: New Application

Grantee: Navico, Inc.

FCC ID: D6NLOWFMMOD2V1

EUT Description: GPS Product with built in FM Transmitter

Below are the answers for the following FCC questions:

- i. Describe the operation of the device.

This device is an FM Stereo Modulator that creates a wireless audio link for a GPS navigation device. It links pre-recorded music or turn-by-turn directions to the user's FM car radio. No additional wiring is necessary. The broadcast frequency is fully adjustable throughout the FM band in 200 kHz steps from 88.1 to 107.9 MHz. The user is instructed to tune their FM radio to a vacant FM radio frequency and then manually tune the device to the same frequency.

- ii. Provide information on the device and its antenna.

The device is a GPS Navigation System/MP3 player intended for use in cars.

- Power consumption: 22mA@ 5V
- RF Output: Loop Antenna Radiation Output
- Audio Input: Cable Internal to the Host Board
- Carrier Frequency: Frequency Modulated
- Transmission Frequency: Tunable from 88.1 to 107.9 MHz in 0.2 MHz steps.
- Physical dimension: 34.19x33.19x8.07mm
- Weight: 10 g (.022 lb)
- Main Functions: Provides the full FM band tuning range in 0.2 MHz steps.
- Antenna: Built-in internal antenna.

iii. How is it installed?

- i. Install the mounting bracket of the device to the vehicle and place the device on the mount.
- ii. Plug the power cable of the device into the vehicle's light socket.
- iii. Tune the FM radio to a vacant FM radio frequency and then manually tune the device to the same frequency.

iv. Describe the test procedure used.

The test procedure used was ANSI C63.4 following the requirements in 15.239.

v. If tested in a car, describe how it was configured and tested.

It was not tested in a car. Testing was performed on an Open Area Test Site and a semi-anechoic chamber.

vi. Was the tuning range properly verified?

Yes, the lowest channel is 88.1 and the highest channel is 107.9. The tuning controls were manually adjusted to verify maximum tuning range. Refer to page 9 of the Test Report for more details.

vii. Was the bandwidth properly tested with maximum audio input?

It was determined that the highest OBW was produced by playing the following MP3 file: Do Me Like 3-15.mp3. This file was continuously playing through all testing. The volume control was set to maximum level.

viii. Provide a test report.

The test report is attached.

Response:

The data looks good, and passes the permit but ask.

Do not reply to this message. Please select the [Reply to an Inquiry Response](#) link from the OET Inquiry System to add any additional information pertaining to this inquiry.