

FCC Laboratory  
7435 Oakland Mills Road  
Columbia, MD 21046

July 09, 2007

Attention: Application Examiner / Reviewing Engineer  
Re: Confirmation Letter for FM Transmitter  
Applicant: Humax Co., Ltd., FCC ID: O6ZSV4

To whom it may concern,

We, Onetech Corp., would like to answer following questions for requesting by the TCB, Compliance Certification Services Inc on behalf of our customer, Humax Co., Ltd.

1) How does this device operate?

The SV4 is a satellite receiver that consist of the following individual pieces: 1. Satellite radio with internal FM modulator, 2. DC power adapter, 3. External remote radiating antenna, 4. Satellite Antenna  
It shall be operated in a car.

2) Provide information on the device and its antenna.

This device has an FM modulator, internal antenna and external remote antenna. In the SV4 the modulator is contained in the satellite receiver with the internal antenna mounted in the radio.

The satellite radio receives the satellite signal from the satellite antenna, decodes the audio signal to base band and couples it to the FM modulator contained in the SV24 receiver. The output of the FM modulator is coupled to either the internal antenna or the external remote antenna depending on the users preference. If performance is satisfactory with the internal antenna, then it is expected that the customer would not install the external remote antenna. The internal antenna is a short vertical monopole arrangement. The external remote antenna is a length of coax cable with the last 15 inches having the shield braid removed. At the end point of the braid, a ferrite bead is added with the cable looped three times.

3) How is it installed?

The unit is installed with the radio mounted in a manner that avoids blocking the view of the road by the driver. The internal antenna will normally be activated at this time and the customer will locate and tune the satellite radio to output its signal on an unused FM channel in his locale. After determining the appropriate channel, the user will tune his car radio to the same channel. If performance is not satisfactory the user is instructed to mount the external remote antenna adjacent to the window glass antenna if the vehicle has one or as close as possible to the vertical whip antenna or shark fin antenna whichever is applicable. After mounting the remote antenna it is plugged into the FM output port which automatically decouples any internal antenna.

4) What test procedure was used?

The system is bench tested according to the procedures in ANSI C63.4.

Cables are manipulated on the table top to maximize the FM band signal level. Cables are also bundled as per the instruction in ANSI C63.4 and are then moved around to maximize the FM band signal. Both internal antenna and external remote antenna configurations are tested.

5) If tested in a car, how was it configured/tested?

The external remote antenna was attached as a function of the FM auto antenna arrangement. If a window glass antenna is used the remote antenna is placed adjacent to it and along its length and attached with the adhesive fixtures provided. If a fender mount antenna is used, the remote antenna is placed vertically along the roof support column nearest the car antenna. If a shark fin antenna is used, the remote antenna is placed on the window glass as close as possible to the shark fin antenna.

Measurements were made at a distance of 3 meters from the auto on a minimum of 8 equally spaced radials around the vehicle. All measurements were made at a firm with a description of their facilities filed with the FCC pursuant to Section 2.948 of the FCC rules.

6) Was the tuning range properly verified?

The test lab should indicate in the report that the tuning controls were manually adjusted to verify maximum tuning range.

All controls, manual and software were adjusted to determine the maximum tuning range capability of the unit. This range is specified in the measurement report and is 88.1 to 107.9 MHz.

Please refer to the statement and test data on page 12 and page 13 of the test report.

7) Was the bandwidth properly tested with maximum audio input?

Maximum internal modulation was used since the radio does not have an external audio input. The modulator audio input level control was set to maximum to perform this test. All OBW measurements are made at maximum audio input levels.

If you have questions or need further information, please contact the undersigned.

Sincerely,



Y.K. Kwon / Director

Onetech Corp.