

EMC compliance Ltd.
82-1 Jeil-Ri, Yangji-Myun,
Yongin-City,
Kyunggi-Do, Korea

Confirmation letter for FM Transmitter

Applicant : 3SOFT, Inc.
FCC ID : UO7BD-100

We, EMC compliance, Ltd would like to answer following questions for requesting by the TCB.

1) How does this device operate?



1. Click icon for set-up mode.
2. Select output on Audio option. (Speaker, FMT, speaker & FMT)
3. Select FMT frequency by up & down key and press SET button.
4. CPU communicates with FM module by 12C data format method and send RF signals.
5. The signals are being converted in FM module.

Video input:

CCIR-656 format is the international standard of video signal and takes input from the main CPU(MP2520F). When CVBS video signal comes from the outside, the video decoder(SAA7113) IC converts it into CCIR-656 format and transfers it to the CPU. Then the CPU receives the signal and outputs it into LCD.

AC97

AC97 signal is the international standard of audio signal. It converts audio in an MP3 file or a video file into AC97 format in CPU and outputs it into WM9712 IC. AC97 format of a digital signal is inputted into WM9712, and WM9712 converts it into audio of an analogue signal, and outputs it into speaker, earphone etc.

Video output

For LCD, digital LCD is adopted whose resolution is 480(RGB)X272. CPU outputs video signal of R8bit, G8bit and B8bit, and LCD receives the signal and outputs video. Also, the video encoder(CX25874)IC receives the same video signal and converts it into CVBS signal of an analogue signal to make it viewed in general monitor.

SDRAM

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SDRAM is memory to execute the program in the CPU, making the program loaded onto the memory and flexibly run. Data line is read or written in 32 bits.

SD CARD

As a storage medium, SD CARD saves an MP3 file or a video file to enable these to be played in the set.

NAND FLASH

NAND FLASH is a storage medium containing all programs implemented in the set and delivered in a stored condition. CPU reads the program in FLASH to execute the program.

USB 1.1

USB 1.1 is international standard and supports the USB 1.1 DEVICE function in the set.

RS232

The GPS module conducts 232 communication with CPU. GPS delivers satellite information to CPU through 232 communication, and CPU receives the satellite information and indicates the current position in the screen.

[*References-Operation description file](#)

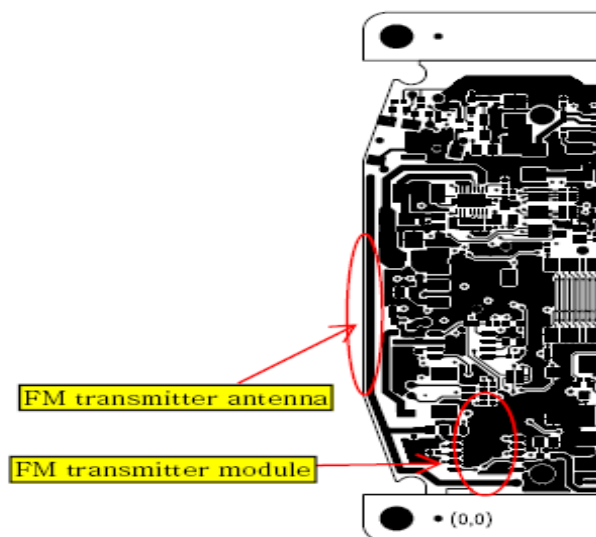
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2) Provide information on the device and its antenna.

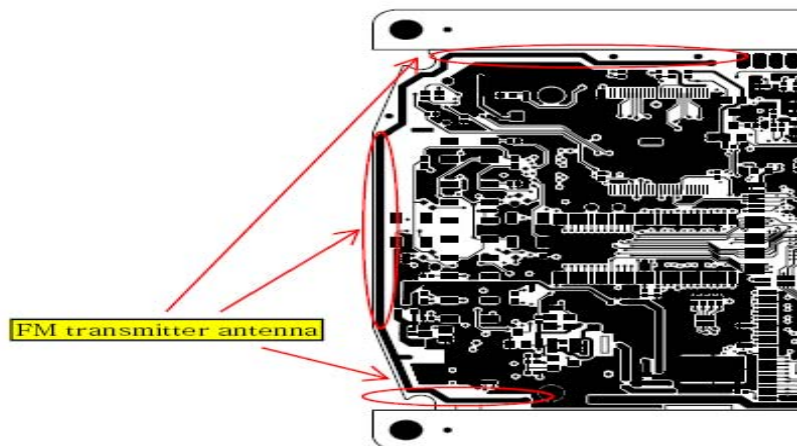
The EUT is composite device, main function is

PMP functions: MP3 play, File up and down mode, Navigation, FM transmitter

A pattern antenna is used on PCB board for transmitting.



TOP



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BOTTOM

*References-Operation description

3) How is it installed?

This device use 12V DC battery, External antenna is not used for transmitting.

*References- Test report/Page 7 -4.1 production description

4) What test procedure was used?

Test procedure is ANSI C63.4:2003.

Please refer to test report.

*References- Test report/Page 1 Test Procedure

Test report/Page 10 - 5.2 Standards & results

Test report/Page 10 - 6.1.1/2 Conducted Emission

Test report/Page 13~14 - 6.2.1/2 Radiated emission

Test report/Page 18 - 6.3.1/3 Occupied Bandwidth

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

N/A

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.

Yes, The tuning range is 88.1 ~ 107.9MHz, (100KHz step)

Revised contents : a few pictures were taken and put in the test report (setting as program firmware)

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*MIN(88.1MHz)



*STEP(100KHz)

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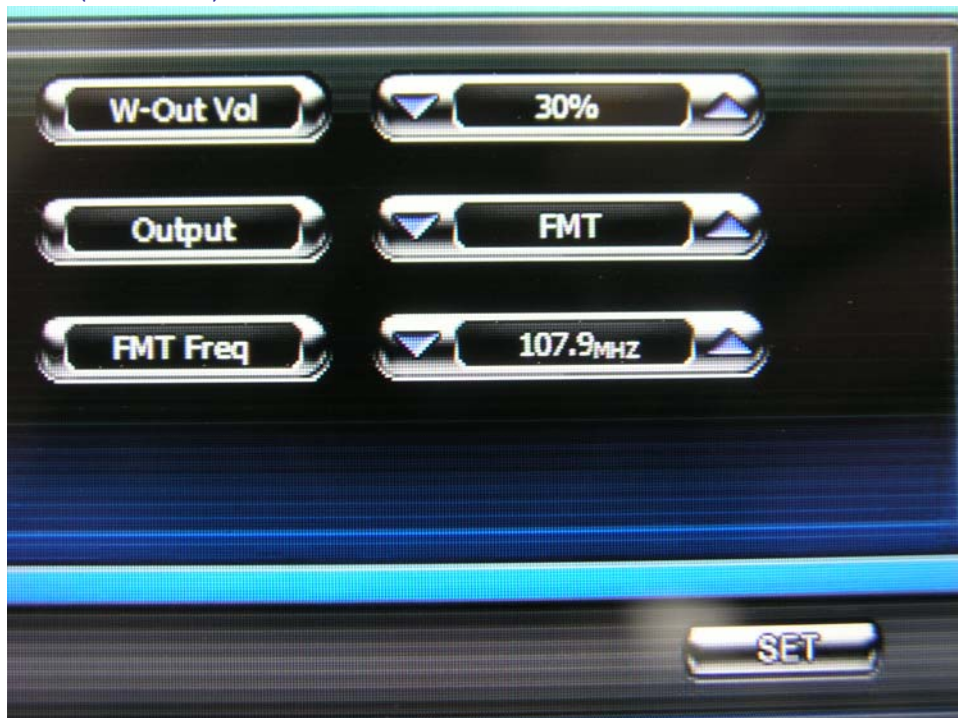
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*MAX(107.9MHz)



*References- Test report/Page 21 – 6.5 Tuning controls

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

Of course. MP3 file was used for testing. Maximum setting is required in Transmitting mode.(88.1 ~ 107.9MHz)

*References- Test report/Page 19~20 – 6.3.3 Test data