

FCC Part 15D – Compliance Information

EUT AND PRODUCT INFORMATION

Type of Equipment	UPCS (DECT 6.0)
Applicant Name	Sennheiser Electronic Corporation
Address	One Enterprise Drive, Old Lyme ,CT .06371
Contact	Greg Beebe
Telephone	+1 860 434 9190
Email	gbeebe@sennheiserusa.com
Grantee Code	0007220122
IC Company Number	DMO
Brand Name	Sennheiser
Model Number	Same as Model name

	FP	PP	Repeater
EUT Type/System	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
FCC ID	DMOCBDDGG	DMOCDHDGG	
Industry Canada ID	2099A-D10BSPHONE	2099A-D10HS	
Model name	D 10 BS PHONE D 10 BS USB D 10 BS USB ML DW BS - US DW BS USB - US DW BS USB ML - US DW BS ML-US DW BS PHONE - US SD BS-US SD BS USB-US SD BS USB ML - US SD BS ML -US SD BS PHONE - US OR BS -US OR BS Blue -US	D 10 HS DW 10 HS DW 20 HS DW 30 HS SD 10 HS SD 20 HS SD 30 HS OR 10 HS OR 10 Blue –HS	
HW Version	IFB V4D, WCB V2C	V3C	
SW Version	V0122	V0122	
Maximum Antenna Gain	2 dBi	2 dBi	
Can the EUT be Initiating Device	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> YES
Does the EUT transmit signaling channels	<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input type="checkbox"/> YES
Max number of slots in use simultaneously	4TX/RX	1TX/RX	
Test standard:	<input checked="" type="checkbox"/> FCC part 15D	<input checked="" type="checkbox"/> RSS-213, Issue 2 / RSS-GEN, Issue 3	
Frequency Band	1921.536 – 1928.448 MHz		

FCC Part 15D – Compliance Information

Number of RF Channels	5	
Frame Period	10 ms	
Max. Burst length		
Min. Burst Length		
Minimum Number of System Channels	5 frequencies, 12 single time slots per frequency giving 60 channels	
Supported DECT Slot Types	<input checked="" type="checkbox"/> Full Slot	<input checked="" type="checkbox"/> Long Slot 1,5
Operating Mode	<input type="checkbox"/> Simplex	<input checked="" type="checkbox"/> Duplex

FCC Part 15D – Compliance Information

ANTENNAS				
Base (FP)	Antenna	Type	Internal	External
	1	F-Type	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	2	F-Type	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	3		<input type="checkbox"/>	<input type="checkbox"/>
	4		<input type="checkbox"/>	<input type="checkbox"/>
Does RX and TX use the same antenna(s)?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Handset (PP)	Antenna	Type	Internal	External
	1	Single pole	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	2	F-Type	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Does RX and TX use the same antenna(s)?			<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

ANTENNA DIVERSITY			
	Antenna	Diversity Supported	
		TX	RX
Base (FP)	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	3	<input type="checkbox"/>	<input type="checkbox"/>
	4	<input type="checkbox"/>	<input type="checkbox"/>
Handset (PP)	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

VOLTAGE AND TEMPERATURE RANGES			
VOLTAGES	FP	PP	Repeater
Nominal Voltage	110V AC / 5.9V DC	3.7V	
Cut-Off Voltage (if applicable)		3.3V DC	
POWER SOURCE	Type		Manufacturer
Base or Repeater			
Handset (PP) (charger)	Power Adaptor / Base station- all base stations		Sennheiser model PSAA05E-060
Data Connections	<input type="checkbox"/> PSTN <input checked="" type="checkbox"/> Others (please specify) USB DECT (portable part) headsets DW / SD / OR / OR Blue , Laptop with softphone program and Cisco IP phone SPA504G		


FCC Part 15D – Compliance Information

ANCILLARY EQUIPMENT	
Description	DECT (portable part) headset DW / SD / OR / OR Blue , Laptop with softphone program and Cisco IP phone SPA504G
Type	
Manufacturer	Sennheiser

HOST DEVICE	
Description	
Type	
Manufacturer	

ADDITIONAL INFORMATION

FCC Part 15D – Compliance Information

MANUFACTURERS DECLARATIONS		
FCC part 15.323 (c)(5)		
The applicant declares that the system in this application has more than 40 duplex system access channels defined, and that the system is operating in Least Interfered Channel (LIC) mode in accordance with this section.		
Applicant Agrees	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
FCC part 15.323 (c)(5)		
No device or group of co-operating devices located within 1m of each other shall during any frame period occupy more than 6 MHz of aggregate bandwidth, or alternatively, more than one third of the time and spectrum windows defined by the system.		
Applicant Agrees	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
FCC part 15.323 (c)(10)		
The applicant hereby declares that the system in this application does use the criteria of (c)(10) of this section.		
Applicant Agrees	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
FCC part 15.323 (c)(11)		
The applicant hereby declares that system in this application does not use the criteria of (c)(11) of this section.		
Applicant Agrees	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
FCC part 15.323 (c)(12)		
The provisions of (c)(10) or (c)(11) of this section shall not be used to extend the range of spectrum occupied over space or time for the purpose of denying fair access to spectrum to other devices.		
Applicant Agrees	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
FCC part 15.307 (b)		
The Applicant is a participating member of UTAM, Inc. and will provide an affidavit from UTAM, Inc. certifying this.		
Confirmed By Applicant	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
ADDITIONAL REMARKS:		
>		
DECLARED BY:		
>11-12-2014	>Edina Mujan	
Date	Name (print)	Signature

FCC Part 15D – Compliance Information

About this document

This document specifies the information that is needed to select the correct testcases and test procedures for testing to FCC Part 15D. The form must be completed by the applicant and submitted to Nemko before testing is started.

Preparation of Equipment for Testing

Note (a): Number of samples for testing

The following samples are needed for FCC 15D testing:

RF Conducted Tests:

One sample with a 50 ohm antenna connector (preferably SMA Female). Only one antenna connector is needed for these tests even if the equipment has more than one antenna.

Monitoring Tests:

One sample with 50 ohm antenna connectors fitted to all antennas (preferably SMA female). Additionally we need a companion device that will work together with the EUT, the companion device must also have antenna connectors on all antennas.

Radiated Tests:

One sample with integral antennas. This sample will be used to measure Antenna Gain, Part 15B and Power-Line Conducted tests.

Note (b): Monitoring Tests

Monitoring tests are performed by establishing a connection from the handset (or the initiating device) to the base station (or the responding device). Most tests are performed by establishing connections from the initiating device to the responding device and observing which channel and/or timeslot is used.

For monitoring tests we need a EUT and a Companion device that both have antenna connectors on all antennas (preferably SMA female, again). Additionally, we need access to the CLK100 signal on the Base Station, this is necessary because some of the tests require that the interferers are synced to the DECT frame.

Note (c): Connection to an external power supply

Means of connecting the equipment to an external power supply shall be supplied by the applicant together with the equipment to be tested.

Battery operated equipment shall be supplied with the necessary batteries and chargers. All tests on battery operated equipment will be performed with batteries.

Note (d): Burst Mode

Most RF tests are performed with the EUT in force transmit mode. Software and necessary programming tools must be submitted to Nemko together with the test samples before start of testing.

Note (e): Test-Mode (Loopback Mode)

Some FCC test may also be performed in Loopback Mode with a CMD60 or similar DECT tester. If loopback mode is implemented in the EUT, the method for setting the equipment in Loopback should be submitted to Nemko together with the test samples before start of testing.