Test Report # 316340 C

Equipment Under Test:	MixPre-10T
Test Date(s):	12/23/16, 8/28/17 – 8/30/17 and 9/26/17
Prepared for:	Sound Devices Attn: Kevin Pulvermacher E7556 State Road 23/33 Reedsburg, WI 53959

Report Issued by: Coty Hammerer, EMC Engineer

Signature: Coty Hammerer Date: 10/23/17

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Signature: Date: 10/23/2017

Report Constructed by: Coty Hammerer, EMC Engineer

Signature: Coty Hammerer Date: 10/18/17

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EXHIBIT 1 INTRODUCTION

1.1 Client Information

Manufacturer Name:	Sound Devices
Address:	E7556 State Road 23/33
Contact Name:	Kevin Pulvermacher

1.2 Equipment Under Test (EUT) Information

Product Name:	MixPre-10T
Model Number:	MixPre-10T
Serial Number:	OD01107206000

1.3 Product Description

The MixPre-10T is the newest member of the groundbreaking MixPre Series of recorders, mixers, and USB audio interfaces. This lightweight, 10-input/12-track recorder offers world-class sound quality, flexible powering, and built-in, highly accurate timecode generator/reader – perfect for production sound mixers, field recordists and sound designers. The MixPre-10T features eight Sound Devices' Kashmir™ microphone preamps. These high-performance, ultra-low-noise, discrete, Class-A mic preamps were handcrafted by Sound Devices. The Kashmir mic preamps feature a -130dBV noise floor, analog limiters, and new 32-bit A-to-D converters to ensure the highest quality audio recordings that far surpass those of other recorders using simple off-the-shelf, IC-based mic preamps. The MixPre-10T includes a Murata BLE module (Model # P2ML3599 Type ZS).

1.4 Compliance Statement

The MixPre-10T was evaluated against the SAR test exclusion threshold listed in FCC KDB 447498 D01 General RF Exposure Guidance v06 Section 4.3 (1) and RSS 102 issue 5. As such, the MixPre-10T is found to be compliant as a mobile and portable device and, as such, is exempt from SAR testing.

EXHIBIT 2 SAR Minimum Separation Distance

2.1 BLE Transmitter

The EUT was evaluated against the SAR test exclusion threshold listed in FCC KDB 447498 D01 General RF Exposure Guidance v06 Section 4.3 (1).

Transmitter output power:

Channel Frequency (MHz)	Max Peak Conducted Output Power (dBm)
2402	-1.635
2440	-1.583
2480	-1.666

Frequency = **2440 MHz**
Output Power = **-1.583 dBm**
Tune-up Tolerance = **1 dB**
P_{out} including tune-up tolerance = -1.583 dBm + 1 dB = -0.583 dBm = **0.874 mW**

2.1.1 1-g Head/Body Minimum Separation Distance

d (Separation Distance) ≤ 5mm; use 5 mm in calculation per KDB 447498

(0.874 mW / 5mm) * √(2.440 GHz) = **0.27 < 3**

The EUT meets the power requirement and thus, SAR testing is exempt.

EXHIBIT 3 RSS 102 Compliance

Frequency (MHz)	Exemption Limits (mW)				
	At separation distance of ≤5 mm	At separation distance of 10 mm	At separation distance of 15 mm	At separation distance of 20 mm	At separation distance of 25 mm
≤300	71 mW	101 mW	132 mW	162 mW	193 mW
450	52 mW	70 mW	88 mW	106 mW	123 mW
835	17 mW	30 mW	42 mW	55 mW	67 mW
1900	7 mW	10 mW	18 mW	34 mW	60 mW
2450	4 mW	7 mW	15 mW	30 mW	52 mW
3500	2 mW	6 mW	16 mW	32 mW	55 mW
5800	1 mW	6 mW	15 mW	27 mW	41 mW

Frequency (MHz)	Exemption Limits (mW)				
	At separation distance of 30 mm	At separation distance of 35 mm	At separation distance of 40 mm	At separation distance of 45 mm	At separation distance of ≥50 mm
≤300	223 mW	254 mW	284 mW	315 mW	345 mW
450	141 mW	159 mW	177 mW	195 mW	213 mW
835	80 mW	92 mW	105 mW	117 mW	130 mW
1900	99 mW	153 mW	225 mW	316 mW	431 mW
2450	83 mW	123 mW	173 mW	235 mW	309 mW
3500	86 mW	124 mW	170 mW	225 mW	290 mW
5800	56 mW	71 mW	85 mW	97 mW	106 mW

Note: Table 1 from RSS 102. The exemption limits represented in this table apply to 1-gram tissue, head and body, evaluation (uncontrolled). For limb-worn devices where the 10 gram value applies, the exemption limits for routine evaluation in the table are multiplied by a factor of 2.5

3.1 BLE Transmitter

Frequency = **2440 MHz**
Output Power = **-0.583 dBm**
Tune-up Tolerance = **1 dB**
Antenna gain = **2.7 dBi**
P_{out} including tune-up tolerance = -1.583 dBm + 1.0 dB +2.7 dBi = 2.117 dBm = **1.63 mW**

3.1.1 1-g SAR Exemption:

Interpolating between 1900 MHz and 2450 MHz for 2440 MHz at a separation distance of **less than 5 mm** yields the exemption limit of **4.1** mW.

When evaluated against RSS 102 issue 5 section 2.5, table 1:

1.63 mW < 4.1 mW

The EUT meets the power requirement and thus, SAR testing is exempt.