



FCC Test Report

Report No: FCS202412403H01

Issued for

Applicant:	Shenzhen Hongtian Electronics Co., Ltd.
Address:	2nd floor of A3 Huafeng Official Science and Technology Park, Shiyan Street, Bao'an District, Shenzhen
Product Name:	RECOLX AI VOICE RECORDER
Brand Name:	RECOLX
Model Name:	JYDH-100
Series Model:	N/A
FCC ID:	2BLTK-JYDH100
Test Standard:	FCC 47CFR §2.1093
Issued By: Flux Compliance Service Laboratory Add: Room 105 Floor Bao hao Technology Building 1 NO.15 Gong ye West Road Hi-Tech Industrial, Song shan lake Dongguan Tel: 769-27280901 Fax:769-27280901 http://www.FCS-lab.com	

**TEST RESULT CERTIFICATION**

Applicant's Name.....: Shenzhen Hongtian Electronics Co., Ltd.
Address: 2nd floor of A3 Huafeng Official Science and Technology Park,
Shiyan Street, Bao'an District, Shenzhen

Manufacture's Name.....: Shenzhen Hongtian Electronics Co., Ltd.
Address: 2nd floor of A3 Huafeng Official Science and Technology Park,
Shiyan Street, Bao'an District, Shenzhen

Product Description

Product Name.....: RECOLX AI VOICE RECORDER
Brand Name: RECOLX
Model Name: JYDH-100
Series Model.....: N/A
Test Standards.....: FCC 47CFR §2.1093
447498 D01 Interim General RF Exposure Guidance v06

This device described above has been tested by Flux Compliance Service Laboratory, the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test.....:

Date (s) of performance of tests : Dec.13, 2024 ~ Dec.19, 2024

Date of Issue.....: Dec.19, 2024

Test Result.....: Pass

Tested by : Scott Shen
(Scott Shen)

Reviewed by : Duke Qian
(Duke Qian)

Approved by : Jack Wang
(Jack Wang)





TABLE OF CONTENTS

1. GENERAL INFORMATION	5
1.1 GENERAL DESCRIPTION OF THE EUT	5
1.2 TEST FACTORY	6
2. FCC 47CFR § 2.1093 REQUIREMENT	7
2.1 TEST STANDARDS	7
2.2 LIMIT	7
2.3 TEST RESULT	8



Revision History

Rev.	Issue Date	Contents
00	Dec.19, 2024	Initial Issue



1. GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF THE EUT

Product Name	RECOLX AI VOICE RECORDER	
Brand	RECOLX	
Model Number	JYDH-100	
Series Model(s)	N/A	
Model Difference	N/A	
Product Description	Operation Frequency:	BLE: 2402~2480 MHz
	Modulation Type:	BLE: GFSK
	Antenna gain:	BLE: 0 dBi
	Antenna Designation:	BLE: PCB
Power Supply	Input: DC 5V	
Battery	DC 3.7V 400mAh	
Hardware version number	V1.0	
Software version number	V1.0	



1.2 TEST FACTORY

Company Name:	Flux Compliance Service Laboratory
Address:	Room 105 Floor Bao hao Technology Building 1 NO.15 Gong ye West Road Hi-Tech Industrial, Song shan lake Dongguan
Telephone:	+86-769-27280901
Fax:	+86-769-27280901
FCC Test Firm Registration Number: 514908 Designation number: CN0127 A2LA accreditation number: 5545.01 ISED Number: 25801 CAB ID : CN0097	

2. FCC 47CFR §2.1093 REQUIREMENT

2.1 TEST STANDARDS

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to §1.1310 and §2.1093 RF exposure requirement

KDB447498 v06: Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies

2.2 LIMIT

According to KDB447498 D01 General RF Exposure Guidance v06 Section 4.3.1 Standalone SAR test exclusion considerations: "Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition, listed below, is satisfied. These test exclusion conditions are based on source-based time-averaged maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.²² The minimum test separation distance is determined by the smallest distance from the antenna and radiating structures or outer surface of the device, according to the host form factor, exposure conditions and platform requirements, to any part of the body or extremity of a user or bystander (see 5) of section 4.1). To qualify for SAR test exclusion, the test separation distances applied must be fully explained and justified by the operating configurations and exposure conditions of the transmitter and applicable host platform requirements, typically in the SAR measurement or SAR analysis report, according to the required published RF exposure KDB procedures. When no other RF exposure testing or reporting is required, a statement of justification and compliance must be included in the equipment approval, in lieu of the SAR report, to qualify for the SAR test exclusion. When required, the device specific conditions described in the other published RF exposure KDB procedures must be satisfied before applying these SAR test exclusion provisions; for example, handheld PTT two-way radios, handsets, laptops & tablets etc.²³ "

$$\left[\frac{(\text{max. power of channel, including tune-up tolerance, mW})}{(\text{min. test separation distance, mm})} \cdot [\sqrt{f \text{ (GHz)}}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where:} \right.$$

- f (GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.



2.3 TEST RESULT

Turn up

Mode	Detector	Turn up Power
BLE	PEAK	2±1dBm

Band/Mode	F (GHz)	Antenna Distance	RF output power including tune up		SAR Test Exclusion Threshold
		(mm)	dBm	mW	
BLE	2.48	5	3	1.99526	0.62843 < 3

Results: PASS, No SAR Require.

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