RF EXPOSURE REPORT

Report No.: 20231217G18403X-W2

Product Name: Universal Remote Key

Model No.: XEKF

FCC ID: 2AI4T-XEKF

Applicant: Shenzhen Xhorse Electronics Co., Ltd.

Address: Floor 28, Block A, Building NO.6, international innovation Valley, Nanshan District, Shenzhen

Dates of Testing: 12/29/2023–01/03/2024

Issued by: CCIC Southern Testing Co., Ltd.

Lab Location: Electronic Testing Building, No. 43 Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China.

Tel: 86 755 26627338 **Fax:** 86 755 26627238

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Test Report

Product.....:	Universal Remote Key
Brand Name..... :	Xhorse
Trade Name ..... :	Xhorse
Applicant.....:	Shenzhen Xhorse Electronics Co., Ltd.
Applicant Address.....:	Floor 28, Block A, Building NO.6, international innovation Valley, Nanshan District, Shenzhen
Manufacturer.....:	Shenzhen Xhorse Electronics Co., Ltd.
Manufacturer Address.....:	Floor 28, Block A, Building NO.6, international innovation Valley, Nanshan District, Shenzhen
Test Standards..... :	47 CFR Part 2.1093
Test Result.....:	Pass
Tested by .....:	Chuiwang Zhang 2024.01.03
	Chuiwang Zhang, Test Engineer
Reviewed by.....:	Chris You 2024.01.03
	Chris You, Senior Engineer
Approved by..... :	Yang Fan 2024.01.03
	Yang Fan, Manager

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Change History		
Issue	Date	Reason for change
1.0	2024.01.03	First edition

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	Universal Remote Key
Model No.	XEKF
Device Type	Portable Device
Operation Frequency	315 MHz; 433.92 MHz
Modulation Type	ASK
Antenna gain	2.0 dBi
Antenna Type	PCB Antenna

Note 1: The information of antenna gain and cable loss is provided by the manufacturer and our lab is not responsible for the accuracy of the antenna gain and cable loss information.

1.2. EUT Description

EUT has been tested according to the following standards.

No.	Identity	Document Title
1	47 CFR Part 1	Practice and Procedure
2	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
3	KDB 447498 D01 General RF Exposure Guidance v06	RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices

1.3. Laboratory Facilities

FCC-Registration No.: 406086

CCIC Southern Testing Co., Ltd EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Designation Number: CN1283, valid time is until Jun. 30th, 2025.

ISED Registration: 11185A

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A on Aug. 04, 2016, valid time is until Jun. 30th, 2025.

CAB number: CN0064

A2LA Code: 5721.01

CCIC-SET is a third party testing organization accredited by A2LA according to ISO/IEC 17025. The accreditation certificate number is 5721.01.

1.4. Laboratory Location

Company Name:	CCIC Southern Testing Co., Ltd.
Address:	Electronic Testing Building, No. 43 Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China

2. Technical Requirements Specification in CFR Title 47 Part 2.1093

2.1. Evaluation method

According to KDB 447498 D04 Interim General RF Exposure Guidance v01 RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices.

RF Exposure Test Exemptions for Single Source:

Per § 1.1307(b)(3)(i)(A), a single RF source is exempt RF device (from the requirement to show data demonstrating compliance to RF exposure limits, as previously mentioned) if the available maximum time-averaged power is no more than 1 mW, regardless of separation distance.

This exemption applies to all operating configurations and exposure conditions, for the frequency range 100 kHz to 100 GHz, regardless of fixed, mobile, or portable device exposure conditions. This is a standalone exemption, and it cannot be applied in conjunction with any other test exemption.

According to the calculation formula of power:

$$EIRP = P \times G = \frac{(E \times d)^2}{30}, \text{ So } P = \frac{(E \times d)^2}{30 \times G}.$$

Where:

P = Transmitter output power in watts

G = Numeric gain of the antenna in the direction of interest relative to an isotropic radiator

E = Electric field strength in V/m --- $10^{((dB\mu V/m)/20)}/10^6$

d = Measurement distance in meters (m) --- 3 m

2.2. Evaluation Results

Frequency (MHz)	Maximum field strength@3 m (dBμV/m)	Maximum field strength@3 m (V/m)	Antenna Gain (dBi)	Antenna Gain (numeric)	Distance (m)	Output power (mW)	Limit for SAR test exemption (mW)
315	38.61	0.00009	2.0	1.58	3	0.000001	1
433.92	51.93	0.00039	2.0	1.58	3	0.000030	1

2.3. Conclusion

Cuz Output power < 1mW, The device is exempt from the SAR test and satisfies RF exposure evaluation.

** END OF REPORT **