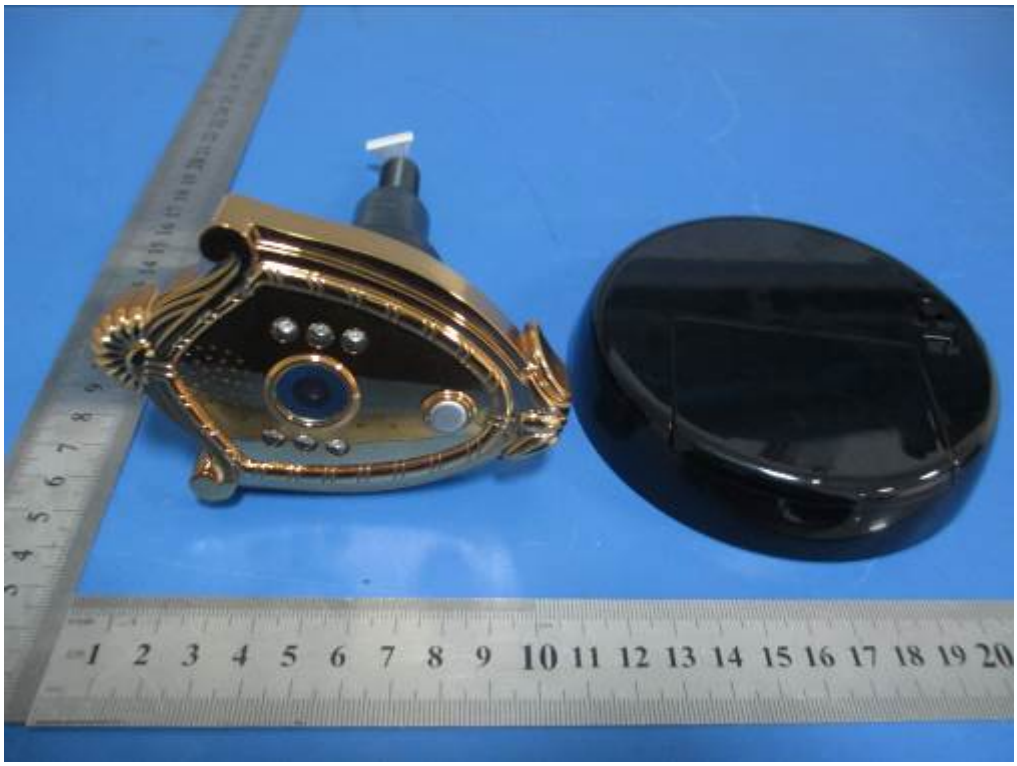
Jinan Qianxi Yahu Industry Co.，Ltd

Yahu Wireless Room Access System(Outdoor Unit)

Main Model: T600-2001
Serial Model: See P5

February 18, 2014
Report No.: 14050001-FCC-H-I



(This report supersedes none)

Modifications made to the product : None		
This Test Report is Issued Under the Authority of:		
Deon Dai	Alex Liu	
Deon Dai **Compliance Engineer**	**Alex Liu** **Technical Manager**	

This test report may be reproduced in full only.
Test result presented in this test report is applicable to the representative sample only.

SIEMIC, INC.
Accessing global markets

RF Exposure Evaluation Report

To: §15.247 (i), §2.1093

Laboratory Introduction

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.

In addition to testing and certification, SIEMIC provides initial design reviews and compliance management through out a project. Our extensive experience with China, Asia Pacific, North America, European, and international compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

Accreditations for Conformity Assessment

Country/Region	Scope
USA	EMC , RF/Wireless , Telecom
Canada	EMC, RF/Wireless , Telecom
Taiwan	EMC, RF, Telecom , Safety
Hong Kong	RF/Wireless ,Telecom
Australia	EMC, RF, Telecom , Safety
Korea	EMI, EMS, RF , Telecom, Safety
Japan	EMI, RF/Wireless, Telecom
Singapore	EMC , RF , Telecom
Europe	EMC, RF, Telecom , Safety

This page has been left blank intentionally.

CONTENTS

1 EXECUTIVE SUMMARY & EUT INFORMATION

The purpose of this test programme was to demonstrate compliance of the Jinan Qianxi Yahu Industry Co.，Ltd, Yahu Wireless Room Access System(Outdoor Unit) and model: T600-2001 against the current Stipulated Standards. The Yahu Wireless Room Access System(Outdoor Unit) has demonstrated compliance with the § 15.247 (i), §2.1093.

EUT Information

EUT Description	**Yahu Wireless Room Access System(Outdoor Unit)**
Main Model	**T600-2001**
Serial Model	**C200-2001, C500-2001, F200-2001, F600-2001, F700-2001, F900-2001, F910-2001**
Series Number	**201309**
Antenna Gain	**2dBi**
Input Power	**Battery:** **Model: XL-903450** **3200mAh 3.7V**
Classification Per Stipulated Test Standard	**§ 15.247 (i), §2.1093**

Note: All models have the same constructions, circuit diagram and PCB layout. Only model name are different.“2001” refers is our Wireless Room Access system, before "-" difference is that the auxiliary lock is different.

2 TECHNICAL DETAILS

Purpose	**Compliance testing of Yahu Wireless Room Access System(Outdoor Unit) with stipulated standard**
Applicant / Client	**Jinan Qianxi Yahu Industry Co.，Ltd Building 3, No. 322, Shunfeng Road,High tech Zone of Jinan,Shandong**
Manufacturer	**Jinan Qianxi Yahu Industry Co.，Ltd Building 3, No. 322, Shunfeng Road,High tech Zone of Jinan,Shandong**
Laboratory performing the tests	**SIEMIC (Nanjing-China) Laboratories NO.2-1,Longcang Dadao, Yuhua Economic Development Zone, Nanjing, China Tel: +86(25)86730128/86730129 Fax: +86(25)86730127 Email: China@siemic.com.cn**
Test report reference number	**14050001-FCC-H-I**
Date EUT received	**September 13, 2013**
Standard applied	**§ 15.247 (i), §2.1093**
No of Units :	**#1**
Equipment Category :	**Spread Spectrum System/Device**
Trade Name :	**Yahu**
RF Operating Frequency (ies)	**2410.875 MHz~2471.625MHz**
Number of Channels	**19CH**
Modulation	**GFSK**
FCC ID	**AGS-OUTDOOR**

3 MODIFICATION

NONE

4 TEST SUMMARY

The product was tested in accordance with the following specifications.
All testing has been performed according to below product classification:

Test Results Summary

FCC Rules	Description of Test	Result
§15.247 (i), §2.1093	RF Exposure	Compliance

5 MEASUREMENTS, EXAMINATION AND DERIVED RESULTS

5.1 §15.247 (i) and §2.1093/ – RF Exposure

Standard Requirement:

According to §15.247 (i) and §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.

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at *test separation distances* ≤ 50 mm are determined by:

[(*max. power of channel, including tune-up tolerance, mW*)/(*min. test separation distance, mm*)] · [$\sqrt{f_{(GHz)}}$] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,[16] where

- $f_{(GHz)}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation[17]
- The result is rounded to one decimal place for comparison

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 is applied to determine SAR test exclusion.

Routine SAR evaluation refers to that specifically required by § 2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to qualify for TCB approval.

One antenna is available for the EUT (FHSS product).The minimum separation distances is 5 mm.
The maximum average output power(turn-up power) in low channel of FHSS product is 2.97 dBm=1.98 mW
The calculation results= 1.98/5* √2410.875=0.61<3
The maximum average output power(turn-up power) in middle channel of FHSS product is 2.27dBm=1.69 mW
The calculation results= 1.69/5* √2441.250=0.53<3
The maximum average output power(turn-up power) in high channel of FHSS product is 2.97 dBm=1.98 mW
The calculation results= 1.98/5* √2471.625=0.62<3
According to KDB 447498, no stand-alone required for FHSS product, and no simultaneous SAR measurement is required .

Test Result: Pass