

FrSky Electronic Co., Ltd.

Digital Telemetry Radio System




Main Model: TARANIS X9D
Serial Model: HORUS X12D, X16D, S4D, S6D

May 15, 2013
Report No.: 13020317-FCC-H1
(This report supersedes NONE)



Modifications made to the product : None

This Test Report is Issued Under the Authority of:

		
Deon Dai Compliance Engineer	Alex Liu Technical Manager	

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Test result presented in this test report is applicable to the representative sample only.

RF Exposure Evaluation Report

To: KDB447498-D01-V05

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Country/Region	Accreditation Body	Scope
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Taiwan	BSMI , NCC , NIST	EMC, RF, Telecom , Safety
Hong Kong	OFTA , NIST	RF/Wireless ,Telecom
Australia	NATA, NIST	EMC, RF, Telecom , Safety
Korea	KCC/RRA, NIST	EMI, EMS, RF , Telecom, Safety
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Mexico	NOM, COFETEL, Caniety	Safety, EMC , RF/Wireless, Telecom
Europe	A2LA, NIST	EMC, RF, Telecom , Safety

Accreditations for Product Certifications

Country/Region	Accreditation Body	Scope
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Japan	MIC, (RCB 208)	RF , Telecom
Hong Kong	OFTA (US002)	RF , Telecom

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1. EXECUTIVE SUMMARY & EUT INFORMATION

The purpose of this test programme was to demonstrate compliance of the FrSky Electronic Co., Ltd., Digital Telemetry Radio System and model: TARANIS X9D against the current Stipulated Standards. The Digital Telemetry Radio System has demonstrated compliance with the KDB447498-D01-V05.

EUT Information

EUT Description : Digital Telemetry Radio System
Main Model : TARANIS X9D
Serial Model : HORUS X12D, X16D, S4D, S6D
Antenna Gain : 2 dBi
Input Power : **Switching Adapter**
Model: YN6W-1200050VZ
Input: 100-240V 50/60Hz 0.2A
Output: 12.0V 0.5A
Maximum Conducted Peak Power to Antenna : 18.58 dBm
Classification Per Stipulated Test Standard : KDB447498-D01-V05

2. TECHNICAL DETAILS

Purpose	Compliance testing of Digital Telemetry Radio System with stipulated standard
Applicant / Client	FrSky Electronic Co., Ltd. No.100 Jinxi Road ,Wuxi, Jiangsu, China
Manufacturer	FrSky Electronic Co., Ltd. No.100 Jinxi Road ,Wuxi, Jiangsu, China
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: info@siemic.com
Test report reference number	13020317-FCC-H1
Date EUT received	April 23, 2013
Standard applied	KDB447498-D01-V05
Dates of test	April 27, 2013 to May 08, 2013
No of Units	#1
Equipment Category	DSS
Trade Name	Frsky
RF Operating Frequency (ies)	2404-2479 MHz(Tx)
Number of Channels	47CH
Modulation	2-FSK
FCC ID	XYFX91216DK

3. MAXIMUM PERMISSIBLE MEASUREMENT

FCC §2.1093 - RF EXPOSURE MEASUREMENT

Applicable Standard

Device use in hand, this is extremity exposure condition, please refer to follow:

According to KDB447498-D01-V05

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:

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:

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

- $f_{(\text{GHz})}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation¹⁷
- The result is rounded to one decimal place for comparison

Test Result: Pass

The min test separation distance is 25mm (antenna to user)

The exclusion thresholds power is 120.009 (mW)

Maximum peak output power at antenna input terminal: 72.11 (mW)

72.11 (mW) < 120.009 (mW)