



**Nemko Test Report:** 5L0557RUS1

**Applicant:** MotorGuide

**Equipment Under Test:  
(E.U.T.)** Transmitter MVP300022

**In Accordance With:** **FCC Part 15, Subpart C, 15.249**  
Transmitters

**Tested By:** Nemko USA Inc.  
802 N. Kealy  
Lewisville, Texas 75057-3136

**Authorized By:**

  
David Light, Wireless Engineer

**Date:** 14 November 2005

*EQUIPMENT:* Transmitter MVP300022

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EQUIPMENT: Transmitter MVP300022

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**Section 1. Summary Of Test Results**

Manufacturer: MotorGuide

Model No.: Transmitter MVP300022

Serial No.: None

General: **All measurements are traceable to national standards.**

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with FCC Part 15.249. All tests were conducted using measurement procedure ANSI C63.4-2003. Radiated Emissions were made on an open area test site.

- |                                     |                            |                                     |                     |
|-------------------------------------|----------------------------|-------------------------------------|---------------------|
| <input checked="" type="checkbox"/> | New Submission             | <input type="checkbox"/>            | Production Unit     |
| <input type="checkbox"/>            | Class II Permissive Change | <input checked="" type="checkbox"/> | Pre-Production Unit |

THIS TEST REPORT RELATES ONLY TO THE ITEM(S) TESTED.

THE FOLLOWING DEVIATIONS FROM, ADDITIONS TO, OR EXCLUSIONS FROM THE TEST SPECIFICATIONS HAVE BEEN MADE.  
See " Summary of Test Data".



**NVLAP LAB CODE: 100426-0**

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*EQUIPMENT:* Transmitter MVP300022

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**Summary Of Test Data**

<b>NAME OF TEST</b>	<b>PARA. NO.</b>	<b>RESULT</b>
Conducted Emissions	15.207	Not Applicable
Radiated Emissions	15.249	Complies

**Footnotes For N/A's: This device is battery powered. Testing was performed using a fully charged battery.**

*EQUIPMENT:* Transmitter MVP300022

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**Section 2.           General Equipment Specification**

<b>Frequency Range:</b>	Single
<b>Operating Frequency(ies) of Sample:</b>	915.2 MHz
<b>Tunable Bands:</b>	N/A
<b>User Frequency Adjustment:</b>	Dip Switches
<b>Integral Antenna</b>	<b>Yes</b> <b>No</b>
	<input checked="" type="checkbox"/> <input type="checkbox"/>

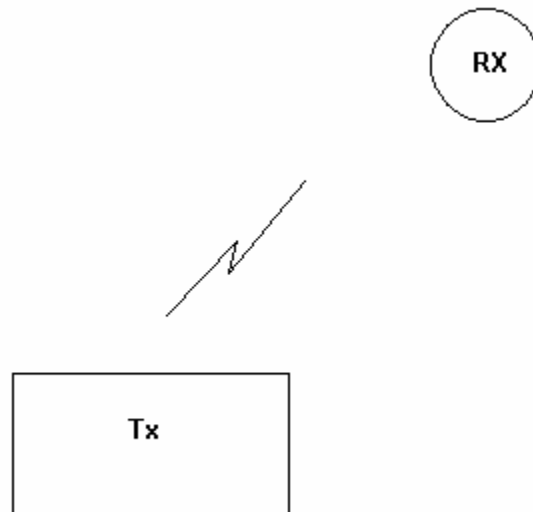
*EQUIPMENT:* Transmitter MVP300022

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**Description of Device Tested**

Remote control for trolling motor.

**System Diagram**



EQUIPMENT: Transmitter MVP300022

**Section 3. Radiated Emissions**

NAME OF TEST: Radiated Emissions	PARA. NO.: 15.249
TESTED BY: Kevin Rose	DATE: 11/02/2005

**Minimum Standard:** Para no. 15.249

(a) The field strengths shall not exceed the following:

Fundamental (MHz)	Field Strength (mV/m)	Field Strength (dBµV)	Harmonic (mV/m)	Harmonic (dBµV)
902-928	50	94	0.5	54
2400-2483.5	50	94	0.5	54

(b) Field strength limits are specified at a distance of 3 metres.

(c) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated limits of 15.209 whichever is the less attenuation.

(d) ...for frequencies above 1000 MHz, the above field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation.

**Test Results:** Complies

**Measurement Data:** See attached table.

**Test Equipment Used:** 759-791-1484-1485-1464-1016-993-760

Test Equipment Settings: RBW=1 MHz, VBW=1 MHz

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**Test Data - Radiated Emissions**

Meas. Freq. (MHz)	Ant. Pol. (H/V)	Atten. (dB)	Meter Reading (dBuV)	Antenna Factor (dB)	Path Loss (dB)	RF Gain (dB)	Corrected Reading (dBuV/m)	Spec. limit (dBuV/m)	CR/SL Diff. (dB)	Pass Fail Unc.
915.2	H	0	57.6	23.4	8.2	0.0	89.2	94.0	-4.8	Pass
915.2	V	0	51.2	23.4	8.2	0.0	82.8	94.0	-11.2	Pass

Harmonics

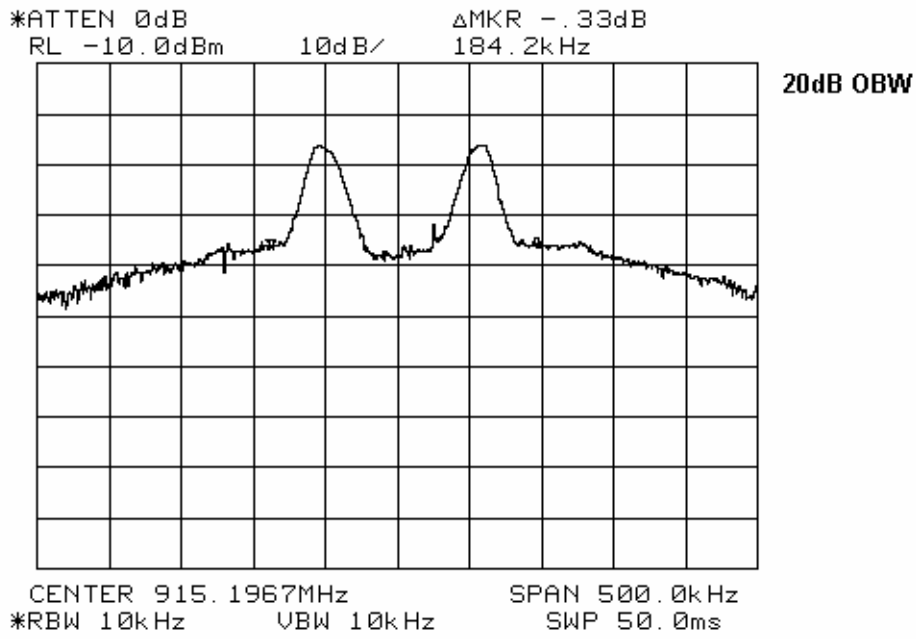
Frequency (MHz)	SPECTRUM ANALYZER READING	EQUIPMENT CORRECTION FACTORS	CORRECTED READINGS.	SPEC	MARGIN	PEAK/ AVG	POL
1,830.50	48.2	-2.1	46.1	54	-7.9	Peak	Horiz
1,830.50	46.8	-2.1	44.7	54	-9.3	Peak	Vert

Spectrum was searched from 30 MHz to 9200 MHz. All emissions within 20 dB of the specification limit of 54 dB $\mu$ V/m are reported.



EQUIPMENT: Transmitter MVP300022

20 dB Bandwidth



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Radiated Photographs



EQUIPMENT: Transmitter MVP300022

**Section 4. Test Equipment List**

Nemko ID	Description	Manufacturer		Serial Number	Calibration Date	Calibration Due
		Model Number				
1034	ANTENNA,LP	A.H. SYSTEMS		121	06/08/04	06/08/05
		SAS-200/510				
1484	Cable 2.0-18.0 Ghz	Storm		N/A	08/26/05	08/26/06
		PR90-010-072				
1485	Cable 2.0-18.0 Ghz	Storm		N/A	08/02/05	08/02/06
		PR90-010-216				
993	Horn antenna	A.H. Systems		XXX	01/08/02	01/09/04
		SAS-200/571				
1016	Pre-Amp	HEWLETT PACKARD		2749A00159	11/12/04	11/12/05
		8449A				
791	PREAMP, 25dB	ICC		398	11/12/04	11/12/05
		LNA25				
1464	Spectrum analyzer	Hewlett Packard		3551A04428	01/14/05	01/15/07
		8563E				
760	Antenna biconical	Electro Metrics		477	08/04/05	08/04/06
		MFC-25				

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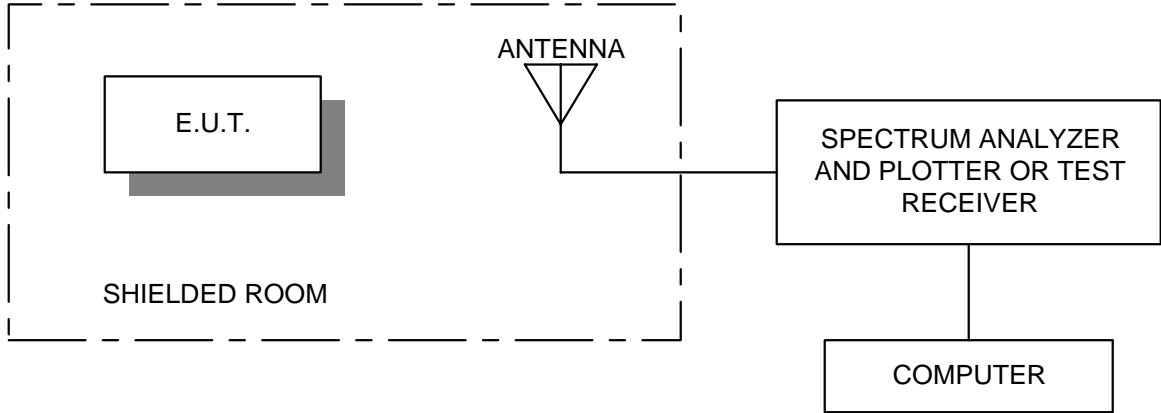
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**ANNEX A**  
**TEST DIAGRAMS**

EQUIPMENT: Transmitter MVP300022

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**Radiated Prescan**



EQUIPMENT: Transmitter MVP300022

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**Test Site For Radiated Emissions**

