#### Leighton Design Services 4019 Windward Drive Tega Cay, SC 29708

Supplementary Information
Regarding Electromagnetic Compatibility Testing
Performed on the Model TTID-GT1 Transmitter
Sold by
International Marketing, Inc.
25 Penncraft Ave., Suite C
Chambersburg, Pennsylvania 17201

by Harold Leighton

**26 November 2008** 

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#### **Abstract**

As discussed in the conference call of November 12, 2008 between the cognizant FCC and industry personnel listed herein, this document presents supplementary information regarding Electromagnetic Compatibility on the Model TTID-GT1 transmitter of the TTTX system; a trailer tracking system sold by International Marketing, Inc.

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#### 1.0 Introduction.

As discussed in the conference call of November 13, 2008 among the cognizant personnel listed below, this document presents supplementary information regarding Electromagnetic Compatibility Tests performed on the Model TTID-GT1 transmitter sold by International Marketing, Inc.

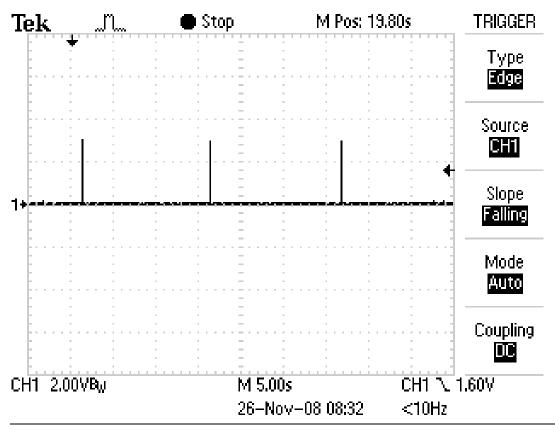
#### 1.1 Cognizant Personnel.

Ms. Katie Hawkins, Electronics Engineer Federal Communications Commission 7435 Oakland Mills Rd. Columbia, Maryland 21046 (301) 362-3030

Mr. Alan Lesesky, President Vehicle Enhancement Systems, Inc. 1439-10 Dave Lyle Boulevard Rock Hill SC 29731 (440) 241-3598 ALesesky@aol.com

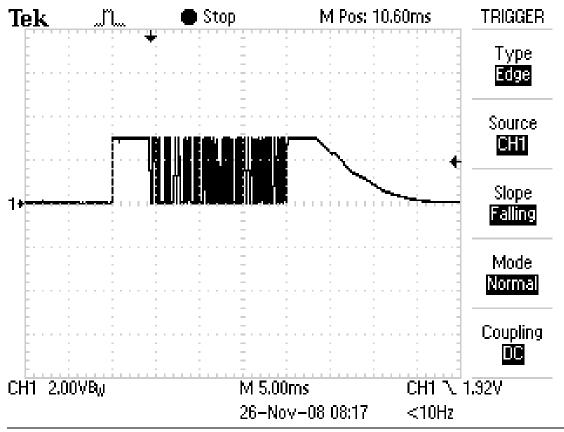
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## 2.0 Scope capture of time between transmissions:



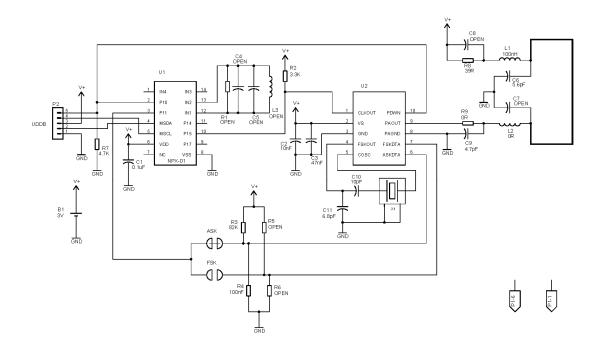
<u>Transmission interval (15 seconds)</u> using a Tektronix TDS1002 oscilloscope

### 3.0 Scope capture of typical transmission:



Typical transmission
using a Tektronix TDS1002 oscilloscope

# 4.0 Schematic:



11/25/2008 08:20:00p f=0.98 C:\Program Files\EAGLE-4.11r2\projects\WPX-1\npx1\_rev\_B.sch (Sheet: 1/1)

# 5.0 Parts list:

QTY	LOCATION	DESCRIPTION	MANUFACTURER	PART NUMBER
0		SCHEMATIC	NA	NPX_TX_VES
1		PCB	TBD	NPX_TX_VES
1	BAT1	BATTERY HOLDER	KEYSTONE ELECTRONICS	3002
1	BAT1	BATTERY CR2032	PANASONIC BSG	CR2032
1	C1	CAPACITOR, 0.1uF, X7R, +/-10%, SM0603	KEMET	C0603C104K4RACTU
0	C8	OPEN		
1	C3	CAPACITOR, 47nF, X7R, +/-10%, SM0603	PANASONIC-ECG	ECJ-1VB1C473K
0	C4	CAPACITOR, 680pF, COG, +/-1%, SM0603	TDK	C1608C0G1H681J
0	C5	CAPACITOR, 150pF, COG, +/-1%, SM0603	TDK	C1608C0G1H151J
1	C6	CAPACITOR, 5.6pF, COG, +/-0.1pF, SM0603	ROHM	MCH185A5R6DK
0	C7	OPEN		
1	C2	CAPACITOR, 10nF, X7R, +/-10%, SM0603	PANASONIC-ECG	ECJ-1VB1C103K
1	C9	CAPACITOR, 4.7pF, COG, +/-0.1pF, SM0603	AVX	06035J4R7BBTTR
1	C10	CAPACITOR, 10pF, COG, +/-1%, SM0603	PANASONIC-ECG	ECJ-1VC1H100D
1	C11	CAPACITOR, 6.8pF, C0G, +/-0.1pF, SM0603	ROHM	MCH185A6R8DK
1	L1	INDUCTOR, 100nH, SM0603, +/-2%	PANASONIC-ECG	ELJ-RER10GF3
1	L2	0 OHM JUMPER, SM0603	ROHM	MCR03EZPJ000
0	L3	COIL, 125KHz, RFID	COILCRAFT	4308RV-295XGLD
0	P1	HEADER, 1x5x.1	SULLINS	PTC05SAAN
0	R1	RESISTOR, 100K, +/-1%, SM0603	ROHM	MCR03EZPFX1003
1	R2	RESISTOR, 3.3K, +/-1%, SM0603	ROHM	MCR03EZPFX3301
1	R7	RESISTOR, 4.7K, +/-1%, SM0603	ROHM	MCR03EZPFX4701
0	R3	RESISTOR, 82K, +/-1%, SM0603	ROHM	MCR03EZPFX8202
1	R4	CAPACITOR, 100nF, X7R, +/-10%, SM0603	KEMET	C0603C104K4RACTU
0	R5	OPEN		
0	R6	OPEN		
1	R8	RESISTOR, 39 OHM, +/-1%, SM0603	ROHM	MCR03EZPFX39R0
1	R9	0 OHM JUMPER, SM0603	ROHM	MCR03EZPJ000
1	U1	IC, MICROPROCESSOR, NPX-1	GE/PHILLIPS	NPX-C01783
1	U2	IC, 434 MHz TRANSMITTER	INFINEON	TDK5100F
0	X1	CRYSTAL, 13.56MHz	TOKYO DENPA	TSS-3B 13,56 MHz
1	X1	CRYSTAL, 13.56MHz	QVS	QCM45-21AFT10-13.56 MHz