



## Results of sound level testing of Freenotes Outdoor Musical Instruments on 8-18-2009.

The Instrument used to record data was a precision sound analyser – class 1.  
Type Norsonic Nor116.

Each musical instrument was placed sequentially in a large open space (approximately 100 acres). All instruments were played vigorously by two players at a time using appropriate beaters. Recordings being taken over five (5) minute intervals at distances of Zero (0) meters (at source), Ten (10) meters and Fifty (50) meters.\*

Background noise levels remained fairly constant throughout the entire recording time with an A-weighted Leq over five (5) minutes of 39.6 decibels.

Provided below a summary table of the average sound levels recorded taken from three (3) recording intervals (as above\*). All measurements below are A-weighted Leq given in decibels.

Instrument	At Source	32.9 ft	164 ft
Contrabass Chimes	90.4	60.6	52.9
Imbarimba/Piper/Rhythm	90.5	67.3	57
Manta Ray	93.6	79.7	53.1
Pegasus/Merry/Melody	92	64.1	54.5
Flying Amadinda	86.7	63.2	51.2
Swirl/Griffin	90	64.1	54.5
Tuned Drums	91.1	77.3	64.7
Duet	90.5/92	67.3/64.1	57/54.5

Provided below a summary table of the peak sound levels recorded taken from three (3) recording intervals (as above\*). All measurements below are A-weighted Max (Fast) given in decibels.

Instrument	At Source	32.9 ft	164 ft
Contrabass Chimes	110.4	75.9	65.4
Imbarimba/Piper/Rhythm	100.7	77.3	67.2
Manta Ray	104.1	92.5	66
Pegasus/ Merry/Melody	103.	81.1	71.1
Flying Amadinda	100.1	72.5	60.4
Swirl/Griffin	99.7	73.8	72.1
Tuned Drums	102.7	88.5	74.9
Duet	100.7/103	77.3/81.1	67.2/71.1