Acoustic Analysis Brad Davis Music

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Reflection Comparison Report

This report details the results of analysis performed at BDM Studio B

Parameters of this test are very basic and are intended to show the the

reduction of reflections of the vocal booth and mix room of Studio B

All measurements are performed A weighted on the Sencore SP495 Sound Pro

Audio Consultant. Two tests were performed during the analysis.

RT60 measurement, and a graphic analysis of the room reflections.

The comparison of the two tests shows the difference between the untreated

The comparison of the two tests shows the difference between the untreated and treated wall surfaces. The measurements were taken in the physical center of the room.

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The room was treated with Sound Reflection Solution reflection panels mounted on the walls only. No other surface was changed between the tests. Tests were repeated 10 times Parameters during the tests were as follows:

UNTREATED

Max noise level 85 dB

Min room level 46 dB

Decay range 32 dB

Speaker distance 8.2 ft

Intervals 9 seconds

Continuous Pink noise was introduce through the speaker for 9 seconds to allow for frequency build up.

UNTREATED RT60 = 868ms

TREATED

Max noise level 85 dB

Min room level 45 dB

Decay range 34 dB

Speaker distance 8.2 ft

Intervals 9 seconds

Continuous Pink noise was introduce through the speaker for 9 seconds to allow for frequency build up.

TREATED RT60 = 420ms

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The results show a significant difference in the room reflections.

With the introduced audio being equivalent for each test, the SRS treatment decreased the Max noised level by 1 dB, Min room level by 1 dB, and Increased then decay range by 2 dB.

The significant measurement, RT60 was reduced by 448 ms

Also the FFT measurements were performed as an aside test just to analyze the effect on resonance in the room. There were significant reductions in frequency spikes in the TREATED FFT measurement as compared to the UNTREATED FFT.