

The
Broadcasters' Desktop Resource
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... edited by Barry Mishkind – the Eclectic Engineer

Microphone Talk

The MudGuard for Microphones



by Mark Shander

[August 2011] Among the greatest challenges to recording in the field, as well as mobile production in general, are room reflections and echoes due to the physical surroundings. Mark Shander discusses a solution that solves the problem.

Noise-canceling microphones and DSP processsing can do wonders in reducing unwanted artifacts in many cases. But room echoes – the reflection of sound waves off of walls and back into a microphone – has been a very difficult challenge to address.

That is, until now.

THE STUDIO CHALLENGE

Isolating a microphone, and recording a source without signal reflection, yields an incredibly clean recording. Without such treatment, reflections off hard walls and large furniture can create major problems in getting a clean, crisp recording. Perhaps one of the more nightmare scenarios is when a client calls you into his office – a series of large glass windows – to record an important commercial.

You might as well set up in an echo chamber.

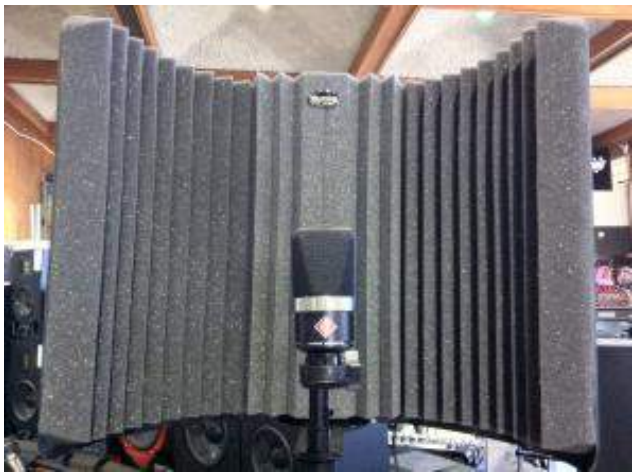
In permanent studios and in larger facilities, or any facilities that are frequently used for recording, it is expected that the walls would be treated to help minimize reflections. Alternatively, portable walls with acoustic material, similar to the way cubicles in offices are set up, could be used for the purpose of recording.

By using something like Auralex' Studiofoam, room ambiance, as well as reflected sound, can be controlled.

External noise bleed and sounds coming from the back of the microphone are reduced, regardless of the microphone's pickup pattern. This permits some very creative mixing techniques that might not be otherwise possible.

A GREAT SOLUTION

To make the Auralex product more flexible and easier to use, they have released a new portable version of their product, called MudGuard, which is surprisingly affordable, portable and effective.



Auralex MudGuard

The MudGuard is a Studiofoam product that unfolds to surround and isolate a microphone, and really allows the dynamics and characteristics of the microphone to shine.

It is refreshing to find such a simple product that turns out to be a very elegant solution to the challenge.

While voice recordings would seem to be the greatest benefactor of MudGuard, acoustic instruments, as well as multi-track recordings benefit as well. Even percussion instruments achieve better recordings, especially those that would typically cause room-related issues, like drums.

PUTTING IT TO THE TEST

We recently used the MudGuard to record some woodwinds and flutes. The result was clean, clear recordings yielding details like the sound of wind passing over the instrument to be captured.

This result was really due to the ability to focus on, and listen to, subjective material listeners would normally not be able to distinguish or focus on below room sound or reflection noise.

Another test, mostly for effect, was to use MudGuard when mixing a bass drum. It worked a little like cupping hands around the sound of the drum to create a fuller sound, while diminishing sound reflections. It really opened up the sound and made an amazing difference in the sound when recording the drum track. It added punch without reducing dynamic range electronically.

EASY TO USE

Having a little custom product like this makes it easy to carry and set up. The MudGuard easily mounts on most microphone stands.



The MudGuard mounts easily

Some recording engineers I spoke to regarding the product were critical and thought they could create something like this themselves, but they agreed the benefits were well worth the cost.

I then asked why they have not created something like this themselves and everyone replied that they just have not taken the time to do so.

Indeed, based on the value of one's time, the cost to construct a product like this, and the benefit achieved, it really is more cost-effective to just acquire MudGuard for your studio or mobile gear kit. Then you can take a professsionally manufactured, well-designed, differentiated product with you, rather than trying to build one yourself.

To sum it all up, the Auralex is a highly-recommended, cost-effective solution. It is available now at music stores and broadcast supply houses. Additionally, you can find out more about MudGuard from Auralex Acoustics at www.auralex.com.

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Return to The BDR Menu