

EXTREME MEASURES

PART 1 OF OUR HIGH END AUDIO INSTALL

BY PAUL MORTON PHOTOS BY PAUL MORTON & SHANE REICHARD

Today, boys and girls, we are about to begin a trek into new and exciting territory - today we enter the realm of truly high-end audio. With all the installation how to's we have covered in the past we have yet to show you how to build a system of this magnitude and do so in such great detail. With this article we will begin the installation of a system with three amplifiers, ten speakers and all the necessary accoutrements. We will show you how to install every audio component you ever wanted and how to do so in the cleanest manner possible.

Our project takes place in a completely reconditioned '64 Chevelle. This car was re-built from the ground up. Its frame and suspension have been powder coated and the 400 horsepower (or is that horsepower?) small block under the hood was bathed in billet aluminum. Every detail of this car had been thought out prior to being rebuilt, reconditioned or actually fabricated from scratch. With all the attention to detail that went into the rebuilding of this classic Chevrolet, the stereo system had to be top notch as well - a shafted radio tied to a pair of 3-inch full-range drivers wasn't going to cut it this time. No, this car was incredibly detailed and the stereo had to be as well.

The first step in building a sound system of this magnitude (or

any stereo system for that matter) was to make a plan. You can't just start tossing product into a car and hope for the best knowing just how true this fact was after rebuilding the beat-down muscle car, its owner sat down with Mike Chang of Xtreme Audio in Anaheim, California to map out a high end sound system. The team started in the trunk where there really were no rules. Besides the fact that no major holes could be cut, the trunk was open for just about anything Mike put together a host of Tube Driver amplifiers, PPI signal processors, Alumapro Subs and Lightning Audio accessories that would make any "mobileaudiofile" drool - we will show you more about that in part 3.

The car's interior, however, had a few restrictions. Being a classic Chevrolet, the owner didn't want a lot of modern audio equipment confusing the mostly stock look he was after. This being the case Mike built a set of sweet kick panel pods and hid them behind color matched carpet—this was the easy part. The Source unit proved to be somewhat more of a challenge as it had to be out of sight and easily accessible at the same time. This is where the owner actually came up with an outstanding idea. He wanted to mount the faceplate from his Pioneer source unit on an overhead console from a late model Suburban—those muscle car guys

will splice anything together. Of course this design meant separating the source unit from the face plate and making that face plate fit in a console that was way too narrow. Fortunately Mike Chang has been known to pull off such impossible feats and make them look easy - we will show you how he did it in part 2.

Once the design was complete and all the appropriate products were in hand, Mike and his crew started by giving the classic Chevrolet a thorough sound deadening treatment. Anything that could possibly transmit noise into the vehicle was coated, covered or isolated with some form of Cascade Audio Engineering sound deadening material that's what we will cover in this article. Check it out and know that there is much more to come.



1- Because none of the interior had even been installed in the car yet, we were able to start sound deadening immediately. First we spread on VB-1 viscoelastic damping compound, better known as mud. This material, when dry, will effectively eliminate vibration and reduce noise by turning vibration energy into friction or low level heat. Before application of the mud we cleaned the soon to be dead area with lacquer thinner.



2- To make sure the mud is properly mixed, or if you want to add some water (yes it is water based and non-toxic) for thinning purposes, VB-1 can be mixed with a power drill and mixer like this.



3 – A simple body filler knife makes for the best application tool.



4 – The idea is to spread a thin, even coat of the VB-1 to the entire inner of the door.



5 – Clean up is not a problem with the VB-1 as it is water-soluble and will clean up with a damp cloth – much like real mud. You must clean up any overage before it dries however, as once its hardened VB-1 is there to stay.

6 – Remember to smile often when sound deadening.



7 – VB-1 is also available in a spray can, it's called VB-1S, and can be applied by itself or sprayed over a thin layer of the spread of VB-1. The spray also works great for those hard to reach areas. Notice the towel that was used to keep overspread off the paint – it's that easy to keep everything clean.

8 – The ceiling of the '64 also receives a layer of VB-1.





9 – When working overhead like this it is a good idea to cover the floor and anything else you don't want mud to fall on.



10 & 11 – Next came the Vb-2 vinyl-copolymer damping sheets. This adhesive backed material is said to offer twice the dampening and less than half the weight of asphalt based damping materials and is extremely formable.



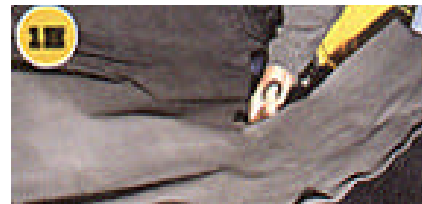
12 & 13 – Just as with the door panels, we were able to use existing interior panels to determine the shapes for our VB-2. This piece will fit perfectly on the rear package tray.



14 & 15 – Even the C-pillars got the VB-2 treatment. We used the VB-2 on any accessible panel that had the potential to transmit noise into the car.



16 & 17 – Next came the VB-3 barrier pads. VB-3 incorporates a lead spectrum between dual isolating foam layers. Noise that travels through the outer layer of foam hits the lead and is virtually stopped in it tracks allowing almost no noise to get through to the other side. Being the perfect medium to keep road, tire, engine and gear noise out of the vehicle, the cars entire floor was lined with VB-3.



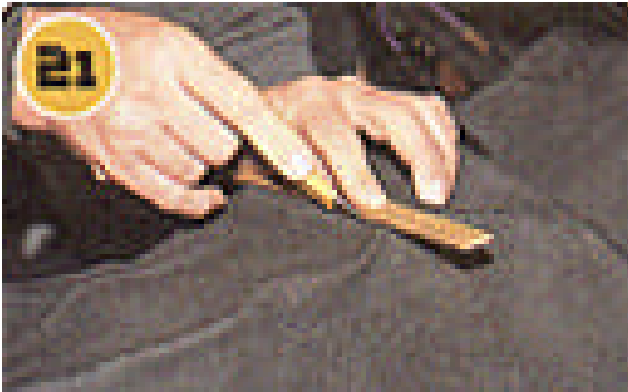
18 – Next the initial pieces are cut into shape.



19 – A good pounding helps form the lead to the floor panels.



20 – Some spare strips of VB-2 work like a tape to seal any joints between the various pieces of VB-3 on the floor. To prevent noise we don't just want to set barriers in place, but join them together as well so that we can effectively seal out noise.



21 & 22 – Any obstacles in the way of our VB-3 can be worked around with a razor knife. The flap was cut out around the center console mount, and then tucked back under it and sealed with more VB-2.



23 – And there you have it. The entire interior of our Chevelle is dead and ready for audio.

SOURCES

CASCADE AUDIO ENGINEERING
19135 Kiowa Rd.
Bend, OR 97702
(541) 389-6821
www.cascadeaudio.com

PIONEER ELECTRONICS
2265 E. 220th St.
Long Beach, CA • 90810
(800) PIONEER
www.pioneer-usa.com

LIGHTNING AUDIO CORP.
1835 E. 6th Street, #6
Tempe, AZ • 85281
(602) 966-8278
www.lightningaudio.com

**PRECISION POWER, INC./
TUBE DRIVER**
4829 S. 38th Street
Phoenix, AZ • 85040-2964
(800) 62-POWER
www.precisionpower.com

**ALUMA PRO/
SYNTRONIC INSTRUMENTS, INC.**
100 Industrial Road
Addison, IL • 60101
(630) 543-9112

XTREME AUDIO
2116 West Lincoln
Anaheim, CA • 92801
(714) 533-2833
www.xtreme-audio.com