

A HOME STUDIO GUIDE FOR VOICE TALENT

Home Studio Handbook

Beginners guide to home studios

Nick Sanabria

HOME STUDIO HANDBOOK

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BEGINNERS VERSION

The Suggestions In This Guide Are The Express Opinions Of The Author Based On Years Of Actual In-the-trenches Experience And In No Way To Be Confused With Scientific Or Otherwise Factual Information.

There Were No Paid Endorsements In This Guide, Although In Hindsight, It Might Have Been A Good Idea.

The Drawings Were Done Using The Sketchup Program, All Screen Shots Are Courtesy Of The Manufacturers Noted: Audacity, Avid, McDSP, Harrison Mixbus, That Were Purchased And Used In The Making Of This Book.

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A FORWARD FROM THE AUTHOR:

This book and Home Studio Handbook (regular edition) are filled with advice, tips, tricks, and a lot of opinions that will get you along the learning curve of creating a workable home studio....take what works for you to better your sound, and forgive any snide commentary.

I will try to get you on the path of creating a good home studioon a budget.

Creating a great pro-sounding recording studio takes knowledge, planning, time, effort, and money. There are talent out there who have invested a lot of time and money in creating a recording space that sounds every bit as good as studios downtown.

They are your competition.

And just because “no one complains” doesn’t mean your space sounds great. More about “reality checks” later.

But here are some shortcuts to get you on the learning curve so you can invest in your career and upgrade as you can afford. (And should.)

I used to say “spend the big bucks and do it right the first time”but times, needs, and technology change, and frankly, you can’t afford to put all your money into a big budget studio before you have any income, or knowledge of what you actually need. You will have to learn to become a self-recording engineer, acoustician, and perhaps, even a contractor (say it with me: “Oh, we should be done in, say, two, tree weeks, tops” Good. Now you are officially a contractor.)

So be prepared to learn a bunch of new stuff and how to do it correctly. (Most of the basic construction tips are in Home Studio Handbook, or on Youtube)

If you are only doing remote auditions, you don't need a full studio build-out. If you are just starting out, or are new to self recording, you do not need an \$8,000 whisper room. What you need at this point is advice and "work-arounds" so that you can advance your career without spending an obscene amount of money up front. Build your career and invest in yourself with a better and better sounding home studio.

In "the old days" if you wanted great sounding recording gear, you ponied up a lot of money. Most studios leased equipment because it was so ungodly expensive to buy. Now, pretty much everything sounds good. And costs pennies by

comparison. Lucky you. But you still have to learn how to self record like a pro.

Here are some tips and tricks to get you up and running.

These are strategies so you can set up a rudimentary home recording studio for auditions, but in some cases, will work well enough to produce sound files that may be able to be used in actual productions. Results will vary.

Since you are starting out, I will outline how to set up and use a recording program, what equipment you will need for a basic set up, and ways to lower your noise floor and reduce room sound, and all on an extremely low budget.

I will throw in some more advanced options, and some opinions on demos, marketing, websites, etc.

A bit of extra curricular activity first:

Sign up for voice over and home recording groups on LinkedIn and Facebook. Go to Youtube and stalk all the how-to videos on the program you are interested in. And on home studios. And so on.

You can get many tips that will help you in everything from mic or interface selection, to editing tips, to opinions from guys who have been doing this a long time and know the drill. And it's a lot cheaper than 4 years at Columbia.



CHAPTER 1

Let's start with recording.

Use whatever computer you already own. Mac, PC, Desktop, tower, laptop or iPad will all work.....a smart phone will do in a pinch, but the editing capabilities are too limited and a small screen is tough to work on.

Isolating your computer:

A big mistake a lot of people make is putting the computer on the desk with, or right behind the microphone. If you have a flash memory computer that has no fan or hard disk noise, or an iPad, no problem....but I get files all the time with the signature hard disk whirr in the background. And if the talent normalizes (raising the volume of the file to make up for a file recorded too low)...it also raises the noise floor/hard disk whirr.

So move the mic away from the computer. Set your levels, then move the mic into your closet/recording space. If you have a tower, put it as far away from the mic as possible. Or put some pillows in front of it to block the noise.



Programs: Free:

Although **Garage Band** is free, I feel the editing is cumbersome, processors are limited, and it is not aimed at voice-over; it is a music-leaning program. You can use this, but I wouldn't recommend it. It's like using a hand saw when a circular saw is available for the job.

ProTools First: Free, but limited features, and a tease to get you to actually buy a full version of ProTools. (rant on this later)

Audacity. This is the default beginners program. It is basic, but has some advanced features that you can explore as you get comfortable with it. The more I play around with it, the more impressed I am with the depth of the program.

There are better programs out there, but you don't need to spend money at this point. Wait until you are making money hand over fist, and then upgrade...or not....your call. Another plus is that this is a very popular program with voice talent, so many people are familiar with it and can give you advice if you get stuck. And there are plenty of Youtube "how to" videos to show you how to use certain features.

It is a pretty straight forward download / install. Just make sure your computer and operating system are supported, (check the requirements on the Audacity website)

If you are using an iPad, Audacity is not supported, but a similar program; **Twisted Wave** (\$9.99) is available for iPad at the Apple app store. If you are going to record on your computer too, I

would recommend getting the same program for both.

It is much easier to learn one program, than have to switch between two systems.

A few tips on using Audacity.

It will take a while to get familiar with it, like all programs, there is a learning curve.

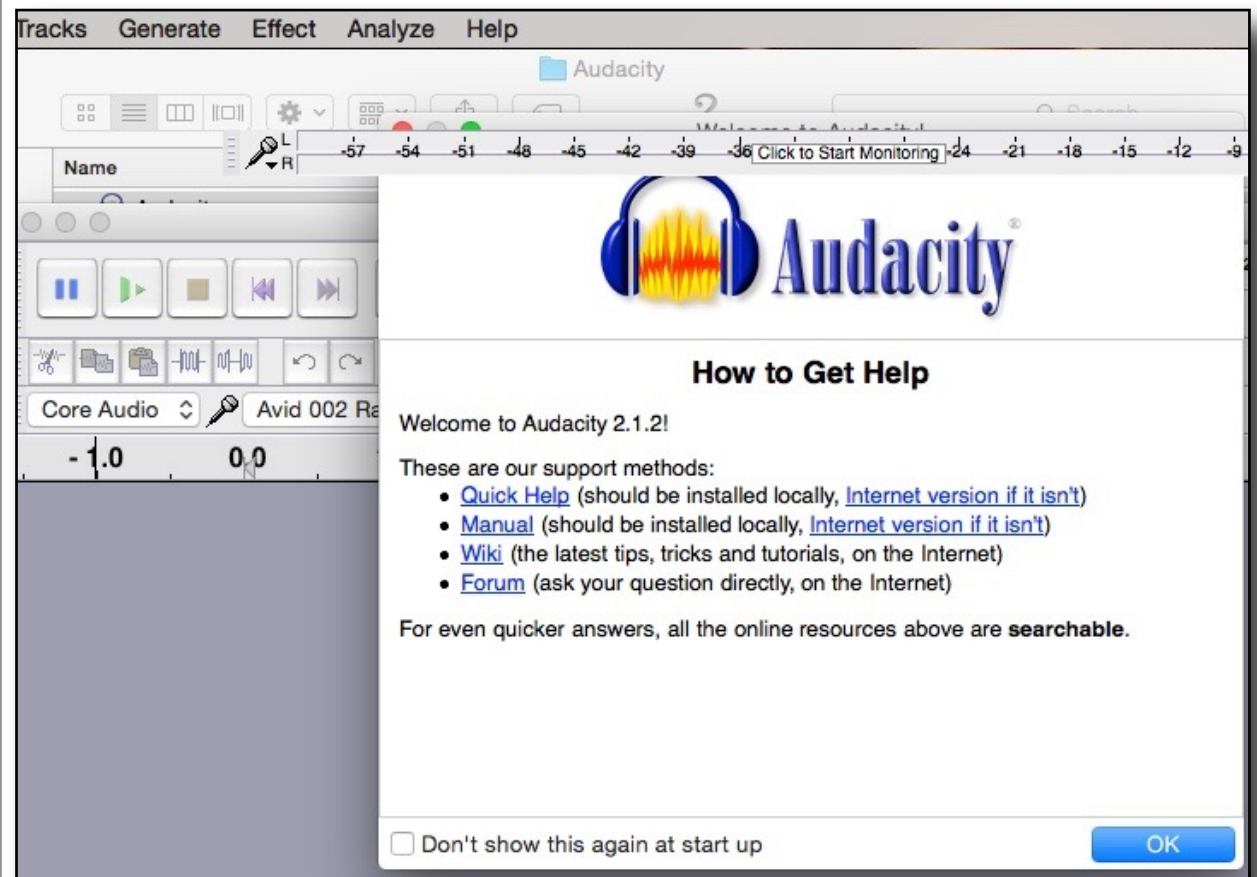
A few things to remember:

if you are getting a clicking sound on your recording, you need to set the buffer value higher.

Audacity>Preferences>Recording: audio to buffer: increase.

You will not be able to use your headphones coming out of your computer, since there will be a delay (latency increases delay) If you have a USB mic with a headphone out, use that, which is considered a “source” not “playback” feed.

Most of your questions can be answered here: go to “audacity help>quick help.”



The first thing is setting your input device: middle/upper left is a microphone icon with a dropdown menu. (mine says Avid 002 rack) Set to USB mic, or whatever interface box you are using.

Do not set to internal microphone, that is the mic in your computer and it is terrible.

Next to the mic input is a channel select: you probably just want 1 mono. (mine is marked 18; input device is Avid 002 device) Your input

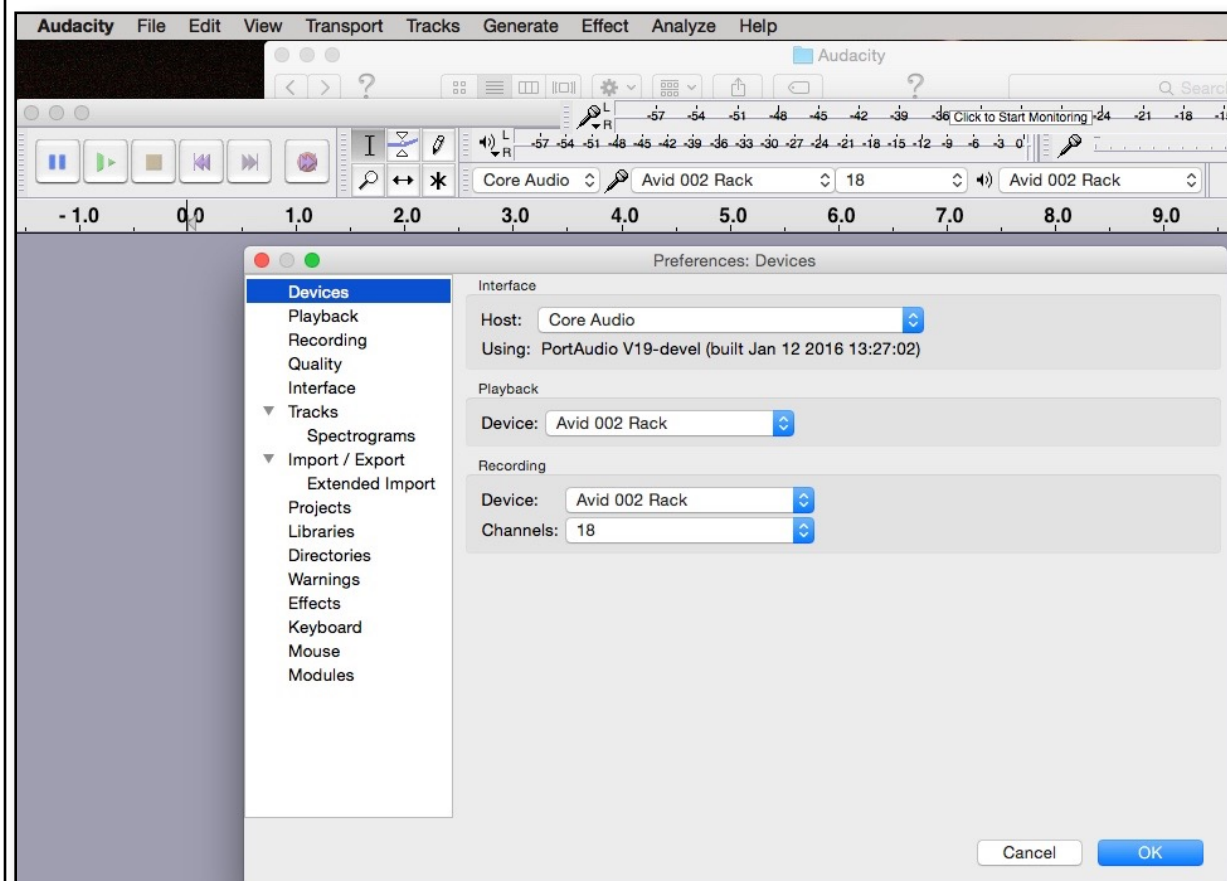
device, USB mic, or USB interface will normally default to channel 1.

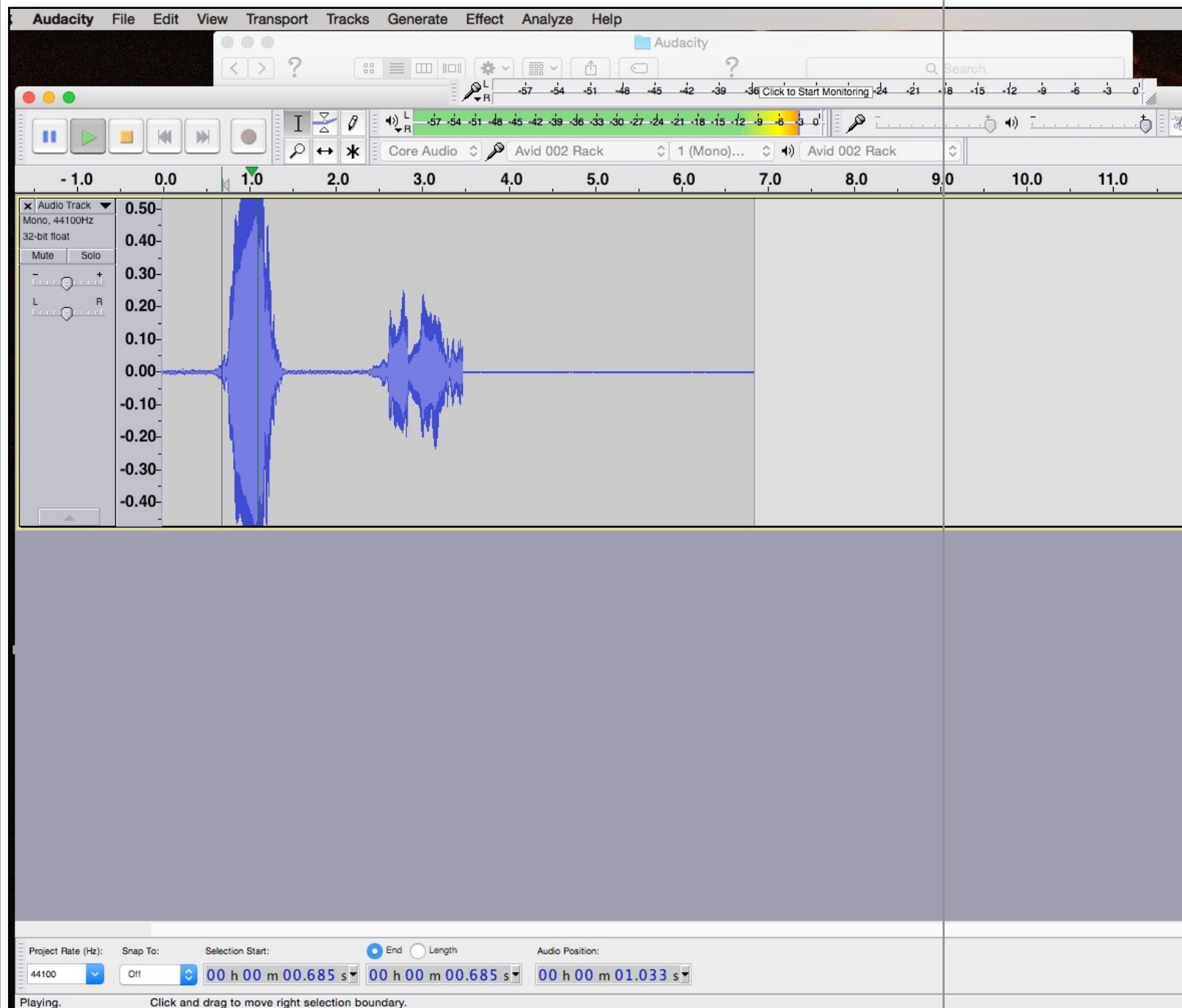
On the lower left is a project rate (Hz) 44100 is the default, and that is fine for voice.

Now hit the Red record button on the top left (right side of the transport) and you should be recording signal.

Set your record level (little slider near the microphone icon, upper right) so that you are going into the yellow, not quite into the red. The higher your mic setting, the higher the ratio between your voice and the noise floor.

The slider to the right of it is your output volume. (You may also need to set your output routerthe dropdown menu to the right of your channel select)





NOTE: if you record very low, when you bring up the volume of your voice to an appropriate level, you also bring the noise floor with you. (if you are recording -30db, and your noise floor is -70 db, when you normalize, or bring up the level to -3db, you have also raised the noise floor to -40 db, {or -37db to be accurate}.....which is unacceptable even for auditions) Which is why lowering the noise floor/"room sound" as low as possible is so important. Tips on that later.

You can stop recording by hitting the space bar, or clicking on the "stop button" (yellow square) on the transport

panel (upper left) or “stop / play” in your transport dropdown menu at the very top of your computer: There is a pause button, if you just want to pause and continue recording (II button)

And “undo” by command-Z on mac, control-Z on PC....or by clicking on the little curved back arrow above the output router, or undo on your edit dropdown menu bar at the top.

Rewind by hitting the double arrow facing left button in the transport section, by dragging the vertical bar in the waveform page back to the beginning, or drag the gray slider bar under the edit panel

Hit play (green arrow) in the transport section, or just hit the space bar. To stop, hit the space bar

again. (this is much easier than mousing back up to the top all the time)

Homework assignment: play around with this until you get familiar with it. Like practicing a musical instrument, you only get better by practice, practice, practice.

And you can't break anything. Try all sorts of things: “Gee....I wonder what this button does?....Whoa! UNDO!”

One little thing to note: there is a panel with 6 icons to the right of the transport.

The default is the vertical “I” beam. A few of the others are advanced functions.

If your screen suddenly looks alien, make sure the vertical bar is highlighted.

More on those later. And along with that, I will get into editing your tracks and improving the sound a bit later.

A quick side-bar on sound quality:

Using the same mic or mic/interface, all programs “sound” the same: they are converting signal coming into your computer to the same file format that all programs use. So no program “sounds” better than another. All 24 bit 44.1 recordings (using the same equipment and settings on different programs) sound the same.

And in many cases, the studio you will be sending files to want the files “raw” with no EQ, compression etc; they have REALLY expensive equipment that can better fix any flaws at your end.

YOUTUBE STUFF: SHOW ME, SHOW ME!

It may be easier to look at videos than to try to decipher print.

There are tons of Audacity “How To’s” on youtube, from beginner to advanced. For that matter on just about ANY program you might be considering, even Protools.

So here are a few links you might want to look at to get going.

In no particular order of preference:

<https://www.youtube.com/watch?v=8ClwSNm362E>

https://www.youtube.com/watch?v=mtVM2_tSCBQ

<https://www.youtube.com/watch?v=fGJ8wIRy7gA>

<https://www.youtube.com/watch?v=fshLRL3GWqE>

And there are many others: go to youtube, under search, type in Audacity Tutorials for beginners. Then go on to the more advanced tutorials. By the time you get through them, you will be able to teach me the finer points of Audacity.

SOME OTHER PROGRAMS TO CONSIDER ... or NOT.

Since all programs “sound” the same, the difference is how you modify the sound within the program, and it is a matter of features, ease of editing, processors / plug-ins available, and personal preference.

Most programs will allow a free trial period to see if you like the look and feel of it.

Do take advantage of this before you buy.

AUDIO EDITORS (like Audacity) generally use destructive edits: when you perform an edit, or

apply EQ, it is permanent....you have to “undo” to get back to your original audio.

NOTE: A good strategy is to copy the original track, move to the right of the original and paste it, and do all the edits on the clone. That way, you still have the original if you paint yourself into a corner. And it is digital: you don't lose quality by copying and pasting.

Here is a list of other programs, with approximate costs, which some consider better than Audacity, but reasonable in cost, and yield slightly more professional results with better processing, ease of use, better graphics, and editing features.

Sound Forge PC only: plug in friendly. \$60 / 99 (recommended)

Twisted Wave: Mac only: \$80.00 (recommended)
A more professional program similar to Audacity.

Adobe Audition Both Mac/PC subscription:
\$19.mo. excellent program many talent swear by.
(But I detest subscription models)

WARNING: ADVANCED STUFF AHEAD: DAWs



(screen shot of Protools)

Digital Audio Workstations, (DAW) however, preserve the original audio and creates an edit list in a visual waveform (like an audio editor) that you can edit just like in an audio editor, but the

original audio is not permanently changed. The big difference is in the plug-ins. They modify the sound without destructively changing the audio. You can go back and change the EQ if you want at any point, add more compression, even add additional plug-ins to tailor the sound. Much more flexible.

However, most of these are studio grade, advanced, capable of 80+ tracks, and are ungodly complex with features and routing procedures that I have never even touched on. (but quite a few that I have, and am grateful for)

DAW:

Apple Logic Pro: MAC only: \$199 (recommended)

Cakewalk Sonar Artist: \$99 (limited); Platinum:
PC only \$199.00 (recommended)

Cubase Elements: \$99 BOTH PC/Mac more music leaning

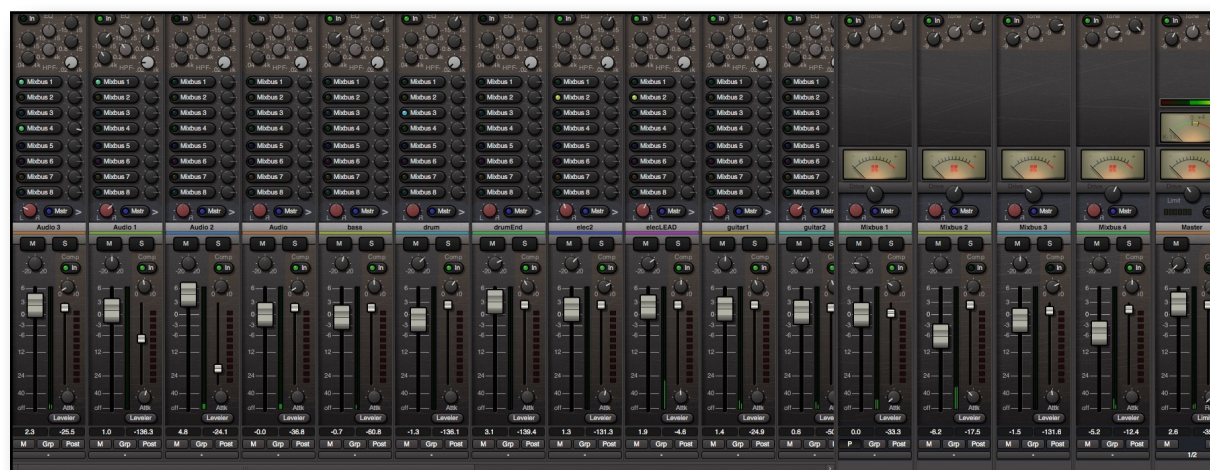
Ableton Live 9 Lite: \$99 BOTH..More music leaning

Protools: industry standard: \$30/ mo. BOTH mac/pc (recommended grudgingly)

Protools First: free, but tricky, limited features...both Mac/PC

Presonus Studio One 3 Artist: Free (limited); \$99 BOTH Mac/PC

Reaper: \$60 supports VST/ AU plugs: (recommended)



Harrison Mixbus: \$80 BOTH mac/pc: VST (PC), AU(Mac) plugs, or proprietary(\$). (2core minimum...other requirements) (advanced: protocols level) (recommended)

These are advanced programs, but once you are over the learning curve, they are quicker to use, edit, and allow a host of 2nd party plug-ins that can solve virtually any problems you need to fix.

IPAD:

Auria/ Auria Pro: \$50 Great features, built in eq/ compression

Twisted wave: \$10.00 (like desktop version) both recommended.

Wave Pad (\$79.00...I have not previewed this software as of this writing)

I have used Protools since 2000 and am very familiar with it and can edit very quickly.....it's true with any program: the longer you have a program, the better and faster you get, and the more you understand advanced techniques to improve your workflow.

I mention this because you may not want to initiate another learning curve when upgrading to another program. Audacity is a good getting your toes wet program, does enough to get you by.....but does not have the flexibility and 2nd party plug-in support you may need to solve problems down the road.

You cannot add a "debreath" program from Waves, for instance.

Or advanced noise reduction with Izotope RX5.

But, you can use those programs as stand alone and treat your files pre/or post as a get-around. It means an extra step or two, and some added time, but if you don't mind taking the small

time needed, you can accomplish the same goal and results.

There is a school of thought: Get Protools because EVERYBODY in the industry uses it, and it is the Cadillac program..... so you may as well bite the bullet and get it so you can talk shop with the big boys.

However: some do not like AVID (I exaggerated when I said "some") and their subscription pricing structure and pay-to-play customer support.

So if you also do music, check out free trials of the different programs and get one that appeals to you. I would recommend giving the Harrison Mixbus a trial run.

Sounds great, built in EQ, compression/limiting and tape saturation. VST/AU plug-in support, plus proprietary plug-ins (individual purchase)

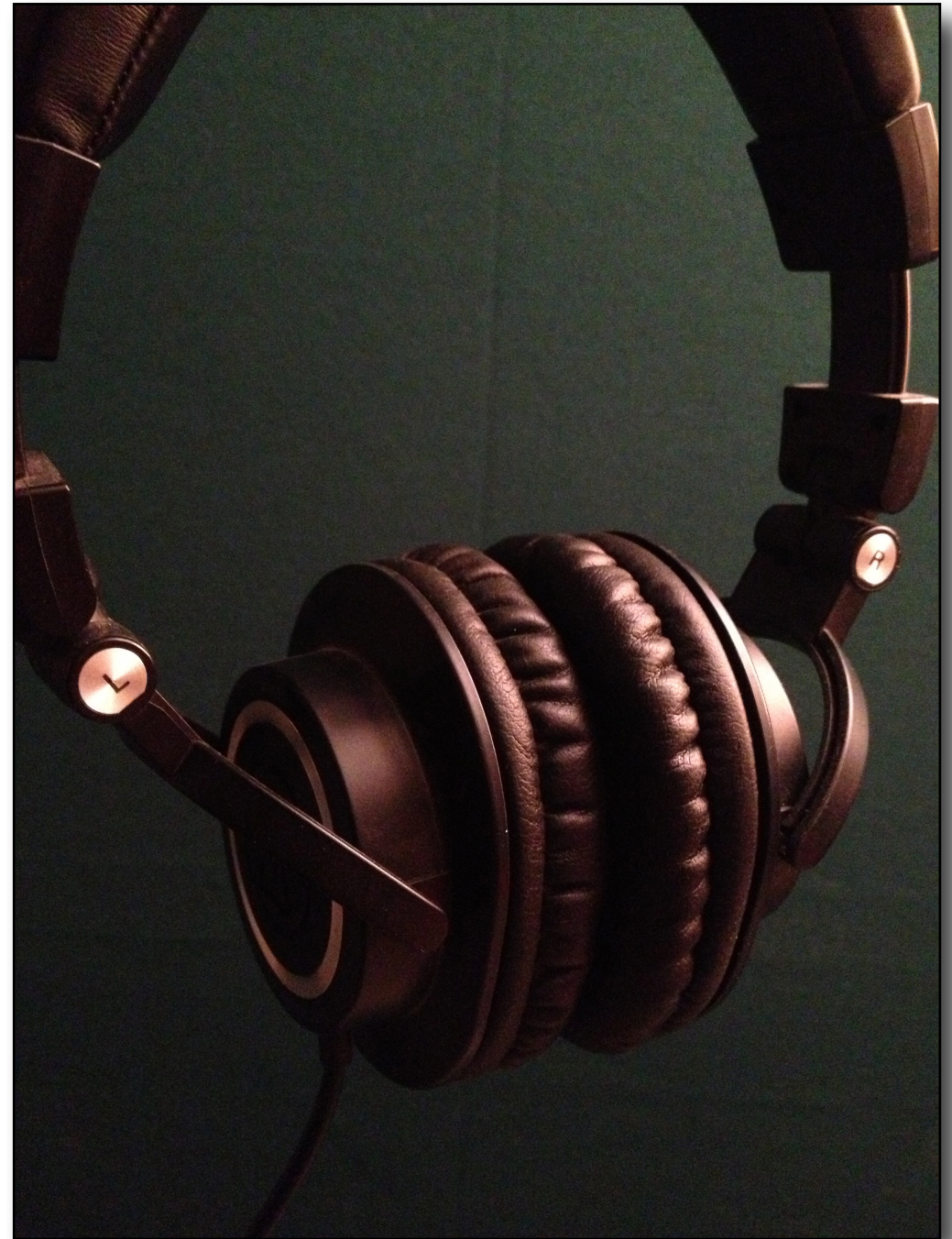
OP/ED:

I have used many of the programs listed above, although I am not at the expert level that I am with Protools.

But with all DAWS....LONG LEARNING CURVE.
That's where the videos can speed things up.



(pictures have nothing to do with the topic..just filling blank space)



If you do have your heart set on getting Protools, buy it through Sweetwater....they have a staff of tech's who can get to your problem and fix it quickly, with no fee. (full disclosure: I get no kick-back...sorry, I'm from Chicago, I meant "commission" from them, been doing business with them for years and have found them to have excellent customer service, knowledgeable techs...and good prices don't hurt, either.)

Thoughts on upgrading:

My current thinking is to upgrade all your programs when you get a new computer with a new operating system. I have upgraded OS's in my Mac with mixed results. I wanted the new AAX plug-ins, so I upgraded to OS10.10 and got Protools 11. Not only did I lose some of my favorite programs, (that did not make the jump from the RTAS system), I had to upgrade (see pay extra) for most

of my other programs as well to work with the new OS. It was costly, and time consuming, and I had to learn new protocols that, in my mind, were arbitrary in nature.

When I have to get a new computer, I will upgrade if I need to. I spent months learning and re-learning how to use the "upgrades"...and in some cases, buying new plug-ins from different manufacturers that performed better than the "new and improved" upgrades.



Personal Philosophy:

Learn to use what you have; wring the most out of it; make a wish list, and upgrade when you absolutely have no other choice, OR when you buy a new computer.

My feeling, based on experience, is that it is usually better to buy a new computer over trying to shoe-horn a new operating system into your old computer. There are hidden hinges: you might not have fast enough processors to handle the added load; the look and way you are used to using your computer will change, you will have to learn new pathways to get to what you want to do.....you might need to buy more RAM, your old programs may need to be upgraded, and you may lose features you really liked.... If you are a computer geek, you can get around most of this, but for the average voice-guy...just wait to get a new computer with a new operating system before you upgrade..

(And we all remember the Vista debacle.)

And if you are starting out from scratch: get the most computer you can afford...and get extra RAM.

CHAPTER 2

Microphones

Microphones: Under \$100.00

With a USB mic, you don't need an interface box that goes between your microphone and the computer. You will need an interface if you are using a professional grade mic. A good interface box (that plugs into your USB port) runs about \$125 if you already have a professional mic, either a dynamic or condenser. Focusrite makes a darn good interface. Something for a later upgrade.



Back to the USB mic: The Audio Technica AT2005USB (\$79.00) is a good sounding mic, as is the Shure MV5 (\$99), the Blue Snowball (\$69) sounds ok. I hesitate in recommending any of the other low cost USB mics because of reported self noise problems.

Next step up: USB mics: over \$100.

These have more features, and sound a bit closer to studio grade mics.

Apogee MiC96 (\$199)

Blue: Yeti (\$129) Yeti Pro (\$249) Spark Digital (\$199)

AT2020USB+ (\$149)

Shure MV51 (\$199)

Aphex Microphone X (\$199)

WARNING: ADVANCED STUFF AHEAD:

PROFESSIONAL QUALITY MICS:



If you use a pro mic, you will need an interface box that plugs into your computer. Most have phantom (+48volt) that is needed to power condenser mics. There are great 2 input interfaces starting at around \$125 (Focusrite) and going up to Apogee (\$595) or UA Apollo (\$899) and the sound quality of any of these is terrific when mated with a studio quality mic.

DYNAMIC MICS

Dynamic mics do not need phantom power, but some need an additional gain boost in the form of a Cloud Lifter; a \$149 line booster. These are needed with a mic like the SM7b, one of the voice-over recommended mics. Dynamic mics are rugged and will generally outlast most careers. I am still using a Shure SM57 from 1974, that went on the road, from dive bar to dive bar, for many years. It still works, still smells like beer.

Dynamics are less sensitive, so they tend to lessen the noise floor, and you work these mics a bit closer, which further increases the ratio between signal and noise floor, and that also helps in not picking up “the room”.

Recommended mics are the Shure SM7b

(mated with a Cloudlifter line booster....the SM7b, in particular, needs a lot of gain; the cloudlifter provides that using phantom power.)

Electrovoice RE-20, and the Heil PR40 All are in the \$400 range.

But there are many mics that may work better for your voice.

We had an engineer who suggested we try a Beyer M-88 dynamic for male voices; it was brighter than the mic we had been using. So it pays to try different mics before you buy.

CONDENSER MICS:



Condenser Mics: Need phantom power to power the capsule: generally have larger diaphragms and pick up more detailed sound. There are so many mics in this category, it is nearly impossible

to compare them. There are many mics in the \$300 to \$400 category, that you likely will be able to find one that flatters your voice better than the others. My favs: AKG214; ADK Vienna, Shure KSM27, but those are for my voice, yours will probably be different. Neumann is in the \$1,000 range, but a favorite of many pro voice talent.

SHOTGUN MICS:



These are condenser mics with a very tight pattern, and tend to reject sound from the sides and the back. The Sennheiser 416 is an industry favorite for “taking the room” out of the recording. Not cheap, in the \$1,000 range. My go-to mic.

Other manufacturers make shotgun mics in the \$250 and up range.

How do you find the right mic for you?

FINDING THE PERFECT MIC:

Some strategies: (most involve a decent dinner, or an expensive bottle of booze)

Do some homework first: ask other talent which mic they recommend.

Ask studio guys which mic they would use on your type of voice.

Become a troll on the Sweetwater website.

Go to the local college that has a studio program and ask the prof to use you as a guinea pig for the students to find the best mic for voice-overs (sometimes this even works)

Borrow one from a fellow voice talent.

Do a “shoot out” at a local studio with their intern after hours. Try each mic and see which one sounds best with your voice. (remember, they are probably going through a REALLY expensive pre-amp. Ask if they can make it “flat” and tell them what you are trying to accomplish)

See if you can rent some mics from the local music dealer, or equipment rental facility (usually these are primarily video equipment rental, but some have a mic locker)

One warning about Chinese mics: the quality control is iffy at best on Chinese mics: their \$80 mics are made to look like real expensive mics, but generally sound like \$80 mics. If you go to a music store and try 3 of the exact same model mic, you will get 3 different sounds. But if you find one that sounds great, you could get a decent mic for a

pretty good price. Once again, quality control is iffy so your mic could poop out (technical term) after a few months. Or not. Your gamble.



And stuff on eBay and Craig's list, is luck of the draw unless you are dealing with a reputable seller. You might get a mic that is virtually used up, has been damaged, (still works, sort of) or doesn't work at all. Or you could get a decent sounding mic. If it looks like a real expensive mic and is just too cheap to pass up.....pass it by unless you need a prop.

ACCESSORIES:

Get a shockmount (\$10 to \$49) for your mic stand (mic stand \$39.00) and put the desktop mics on a pad (a hot pad will do or a small piece of carpet) to isolate them from the desktop, which will pick up vibration from the computer. (More on reducing the noise floor later)

Also: with all the mics, you will need a pop filter, popper stopper, etc, (\$17 to \$21 and up) to avoid plosives and P-pops. (very bush league)

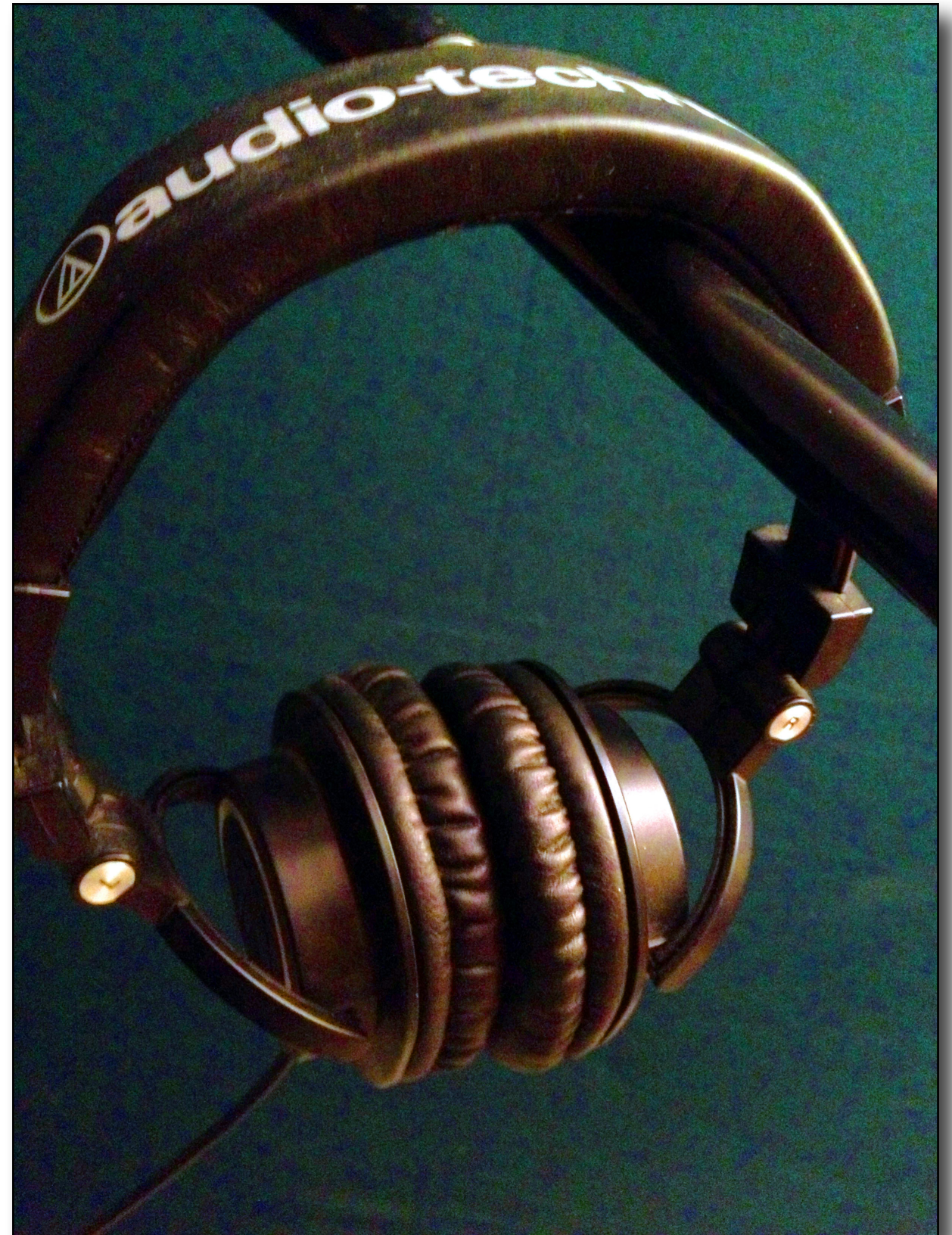


CHAPTER 3

Monitors

HEADPHONES:

Use what you have to monitor what you have recorded. Ear buds are better than nothing. “Beats” headphones are ok, but be aware they have accentuated frequencies (low end) that are increased to make listening to music sound “thumpier”. A good pair of headphones on a budget are the AKG K240 (\$69) that are a more accurate for monitoring, although the highs are slightly accentuated, so you can hear any mouth noises, etc.



DESKTOP/COMPUTER SPEAKERS:

These are relatively inaccurate, but are less fatiguing than headphones. You may not be able to pick up some mouth noises, and will not be able to hear room tone and noise floor.

POWERED NEAR FIELD MONITORS:

There are tons of models ranging from \$300 a pair (self powered: you don't need a separate power amp) to "ungodly expensive." You don't need "U-E" unless you have a big time studio.

Generally, you will use these for editing, but you will still want to listen on headphones for more detail. You will want to separate these from the desktop using isolation pads, or the vibration will transmit through your desktop creating resonant frequency boost.

For most desktops, a 6" woofer is more than sufficient for relatively accurate monitoring.



CHAPTER 4

Soundproofing and Sound Treatment

SOUND PROOFING:

Don't confuse sound proofing with sound treatment. Sound proofing is very expensive, and requires mass to block sound, building decoupled walls, floating floors, double doors, etc. What you need is to control reflections in your recording space, to make a "deader" sound with no echo, or "room tone", a euphemism for reflected sound.



People will spend upwards of \$8,000 on a whisper room, (or 4 to 5k for a small studiobricks room) which is a small room you place in your bedroom, den, etc. It isolates some sound coming in, but not all. And they need sound treatment, or they just sound like you are recording in a closet with no clothes. (boxy, or sh*tty sound..another technical engineering term)

But if you are set on spending an unreasonable amount on getting a whisper room, you can easily build one yourself for a fraction of the cost. A home made whisper room should cost well under \$1,000 in materials. The labor is on you. Learn to use power tools (a \$200 investment) and build your own. And chances are it will sound better, too. And since you built it, you can take it down when you move, or expand it when you need to. I can tell you how to do this, no biggie. Basic construction techniques, a bit of sweat (and plaster dust) and viola! Great sound!

I digress, back to beginners tips and tricks:

Which brings me to

Strategies for sound treatment:

Save \$8,000 and put your “booth” in your closet. Put aside some of that money for future equipment upgrades, better noise control, a concerted marketing effort including a demo or two and a website,and a trip to Vegas.

If you have a walk-in closet, congratulations, you have a whisper room.

If you have a regular closet, you still have a “stage-whisper” room.

Push the clothes aside, or remove some so you have a space where you can put the mic stand. Try different parts of the closet, and try with the mic facing out, or you backing in between the clothes with the mic facing you. Try with the door open, and shut. (In the case of a wall closet this will become humorous.) See what sounds best.

NOTE: fluorescent lights in closets make noise. Use either a music stand /light combo, an ipad with your script on it, or a floor lamp. (use an LED bulb... incandescents give off heat, the last thing you need in a confined space.)

But all small spaces like closets, have an ugly mid bass frequency rise, usually in the 400 to 600hz range. You can lessen this by hanging an Owens Corning 703 cloud over the mic position. (see section below) or a few on the side walls or inside the closet door. And try to keep the mic in the middle of the space away from the walls.

And consider buying some bass traps for the corners where low frequencies build up. Experiment, since every space is different. Do try to get the space as neutral sounding as possible; you can tweak a little with EQ later, but the better the sound to start, the better the sound out.

LOWERING THE NOISE FLOOR: GETTING RID OF “ROOM TONE” (Euphemism for bad sounding studio)

There are many things in your room that make noise, especially your computer. If the fan makes noise, you have to put it away from the microphone, or put it in an isolation box. If your hard drive whirs, you have to put it on a pad (a hot pad is a quick, easy solution) to isolate it from your desktop, which will vibrate with the hard drive and amplify it like a speaker. If you can still hear it, find another place for it away from the microphone, and low to the floor...the further from the back of the mic, the better.

Remove the vent cover grill: the slats make turbulence which gives you that hissing sound. Then build a “fort” out of chair cushions, pillows, etc. to direct the flow of air away from the mic. (Or just turn the thermostat down so the furnace/air shuts off)

When you lower that you will hear noise through the windows: pull the curtains, close the blinds, and hang some moving blankets on hooks that just clip over the curtain rods you have up.

When you lower that noise, you will hear the clock ticking..... and a hum you never heard before (it is the ceiling fan going downstairs)

The more you quiet the room, the more noises you will become aware of that were masked by the other sounds.

And to identify any noises that are subtle: **using headphones**, turn your mic up all the way and point it in different areas of your room. You will hear sounds that you can try to eliminate, that together, make up your noise floor.

CARPETING:

Remnants, thick throw rugs, and ugly carpet (see cheap) are an inexpensive sound absorbing material, and also have a sound blocking quotient, too. They may be too heavy to hang from a curtain rod, but if draped over a PVC frame, can eliminate more sound coming from windows than moving blankets. (if you use both, it will attenuate the sound even more) On the floor, they will control reflections and deaden sounds coming from below. In a basement, walls of carpet hanging from the rafters will create a much deader space for recording. Add carpet above and on the floor, and you have a pretty good space for recording. And it's nice and cool in the summer.

Carpeting, however, absorbs some higher frequencies, but does little to stop lower frequency build up. You can lower that a bit by hanging the carpeting a foot away from the concrete walls. The air cavity will diminish some of the lower frequency energy, but you will still need to use the equalizer on your program to tailor the sound to your space's particularities. (Every room has its own)

In a pinch: prop your mattress up against the window: it will absorb some outside sound and add to cutting down room reflections.

If you do not have a closet you can use, find the quietest spot in your space and set up a fort using cushions, mattresses, carpeting, etc. to see if you can get it completely quiet with no reflections. If this is a complete pain in the ass, here is how to build some really good absorbers for a lot less than foam wedge tiles:

2X2/DOUBLE-KNIT/OWENS CORNING 703 ABSORBER PANELS:

Ken Goeress (Exakte) taught me this when I renovated my first downtown studio:

These absorb a much broader range of frequencies than wedge tiles; look better and last forever. (some foam tiles break down after 10 years or so) And per foot, are much cheaper. Work better. Look better. Cost less. What's not to like here?

You build a frame from 2"X2"s or 1"X3"s. Use drywall or deck screws...much more stable than nails...pre drill/counter sink the holes.. or if you have a nail gun, use glue....(wait a minute...if you have a nail gun you don't need my instructions.) I like a 4 foot by 4 foot frame: easy to hang, and is big enough to absorb a lot of reflections. Although, a 2 ft by 4 ft. also work if you are going to hang multiple panels.

Totally up to your design sensibilities. (The ones pictured are 1' X 4' bass traps, using 1"x3" boards)



(note counter sunk holes in frame: no cracking)



Use double-knit polyester as the material to cover the frame; it acts like grill cloth on a speaker.

Get the stretchy kind. You can find it at Vogue Fabrics in Evanston IL. And order on line. It comes in a variety of colors that will fit in with your decor.

Stretch the fabric over the frame, stapling one side with an electric stapler, (unless you want to develop a kung-fu grip using a manual stapler) Then pull and stretch the fabric to the opposite side and staple. Repeat on the ends.



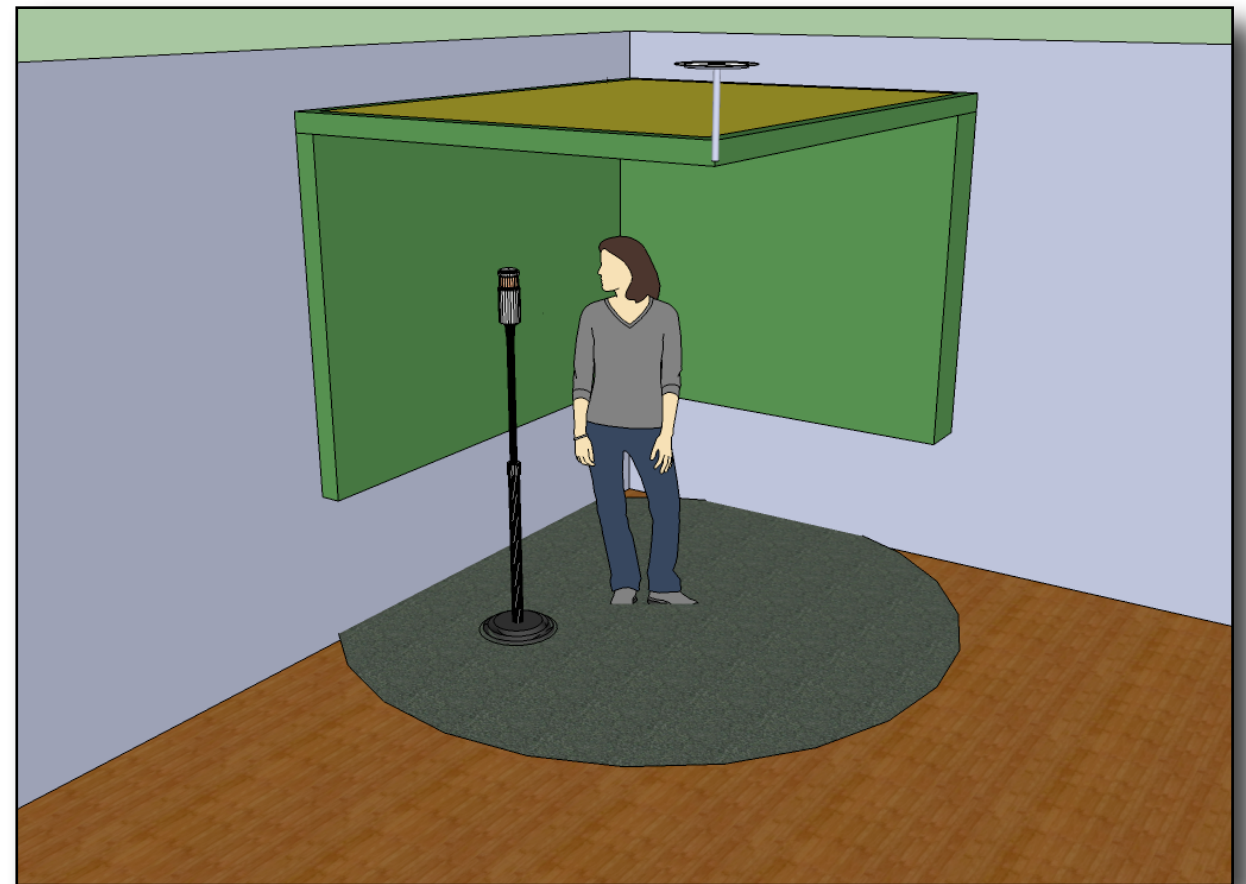
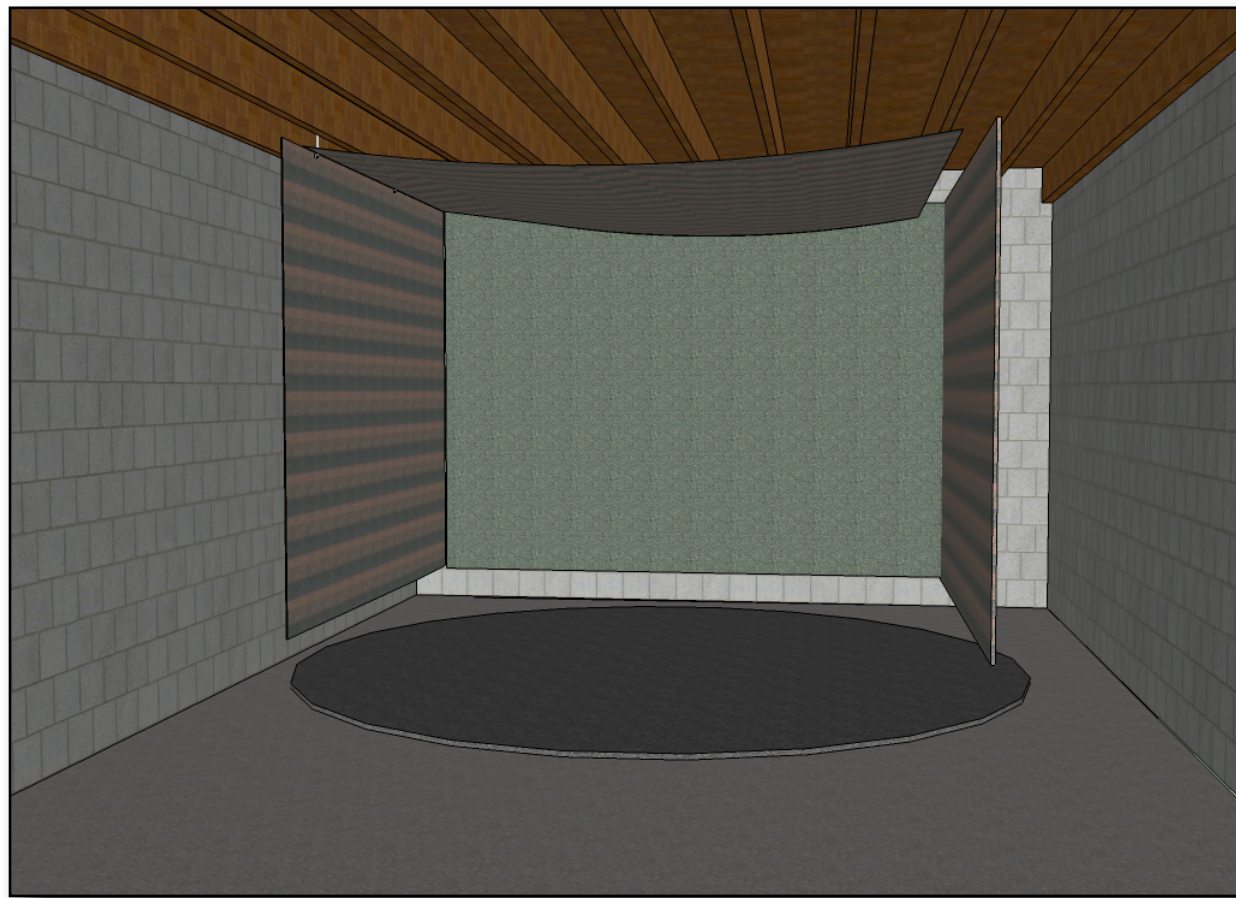
Put 2" thick Owens Corning 703, or equivalent, in the back, and some duct tape across the fiberglass just to hold it in when you affix it to the wall using drywall screws. If you want to hang it like a picture, or are unsure of where you want to install it, staple cardboard over the back and put on picture wire. Then put up picture hangers and experiment to find the best spot. This is also a good strategy for apartments.

(BTW, toothpaste makes an excellent hole filler so you can get your security deposit back.)

Cost per panel is much cheaper than foam wedge tiles, work better and look better too. Box of 6 2" thick 2'X4' Owens Corning 703 panels is about \$70; lumber about \$5 per frame, Double knit: \$5/yd. Viola.

BASEMENTS:

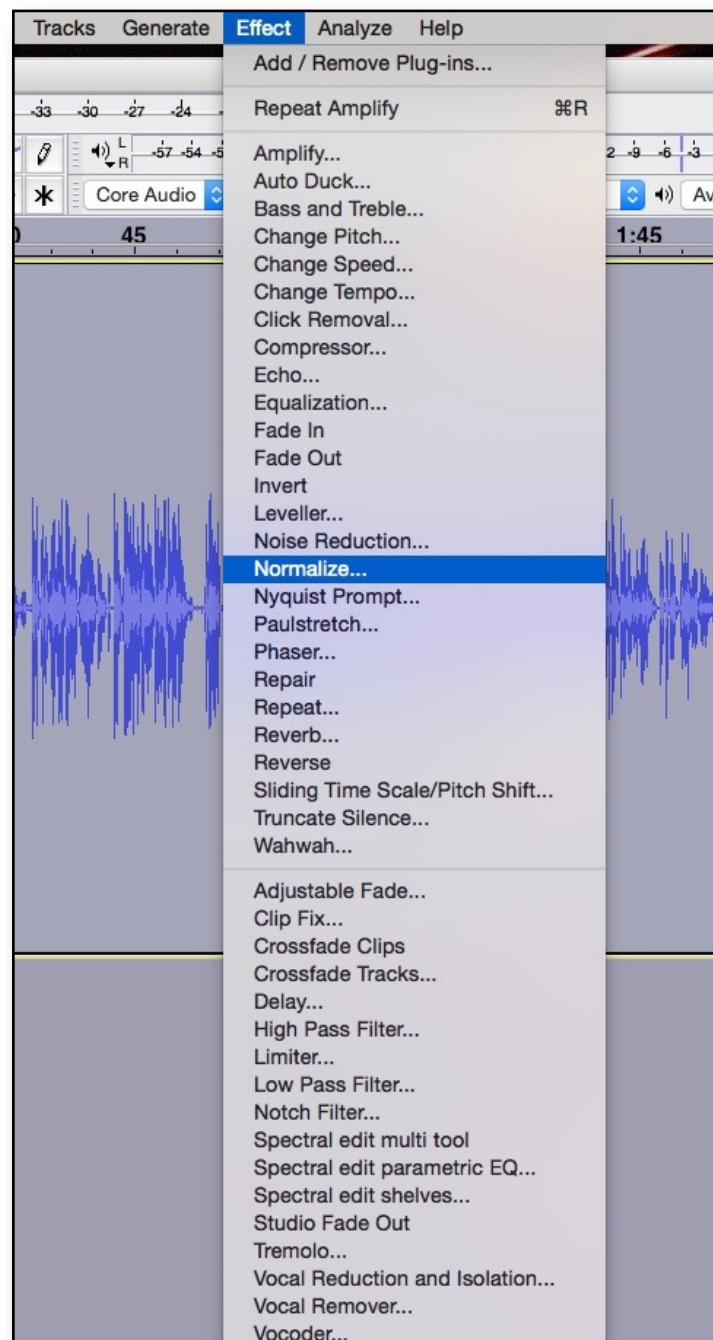
Your basement has built in soundproofing: the walls are surrounded by dirt (mass) that blocks sound. However, all your mechanicals (HVAC, water heater, etc) are there too. But if you make a “fort” (hang carpeting from hooks...see carpeting section) or make an enclosed area in a quiet corner of the basement (and turn off the furnace while you are recording) this can also make for a good sounding area.



Using the 703 panels described above on the walls and joists above the microphone position, and a nice, thick rug on the floor, will make for a pretty quiet, reflection free space. And since it is open, ventilation is not a problem.

CHAPTER 5

Processors, plug-ins



I'm going to use Audacity for the processor examples, most audio editors come with a host of effects (processors). These will be some rudimentary uses and explanations.

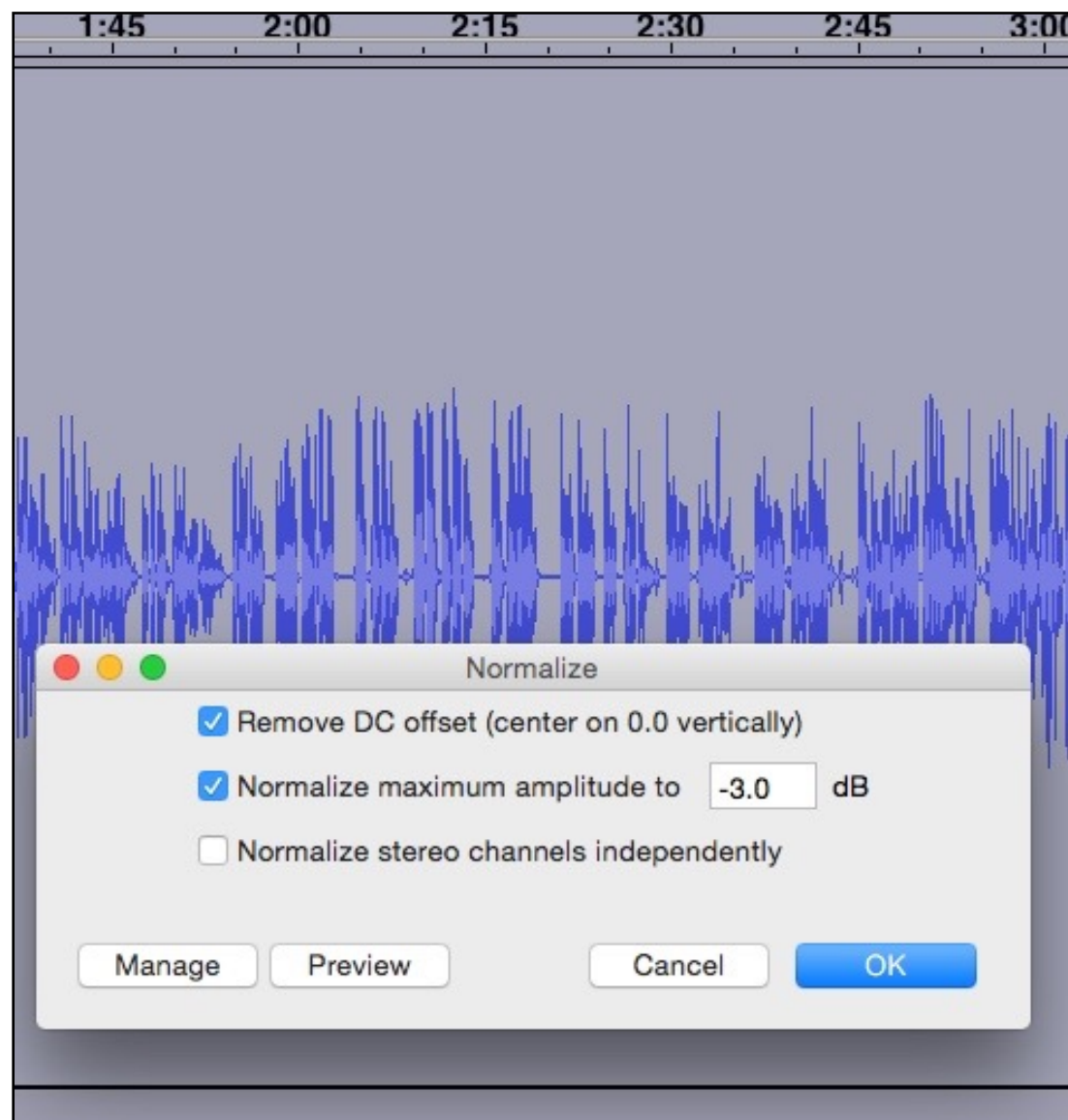
I suggest you play around and experiment, since your room/system/etc, will be different from everyone else's.

All the processors can be found in the Audacity "Effects" pull down menu. There are quite a few very useful tools in here that rival many of the standard and 2nd party plug-ins used in more expensive DAWs.

There are great 2nd party programs that you can use in stand alone mode, that is, you have to export your audio to desktop in .wav or .aiff and process them outside of Audacity. For instance, if you wanted to use Izotope RX noise reduction, you would import the exported .Wav file into Izotope and process it, then import it back into Audacity for editing. Extra steps, but you are using a much better noise reduction program than the one that comes with Audacity. (although Audacity's is pretty good)

NORMALIZE:

This brings the highest peak up to the amount you set in the threshold: for instance, if you set the threshold to -3 db; the highlighted section will raise in volume so that the loudest part is -3db from 0db.



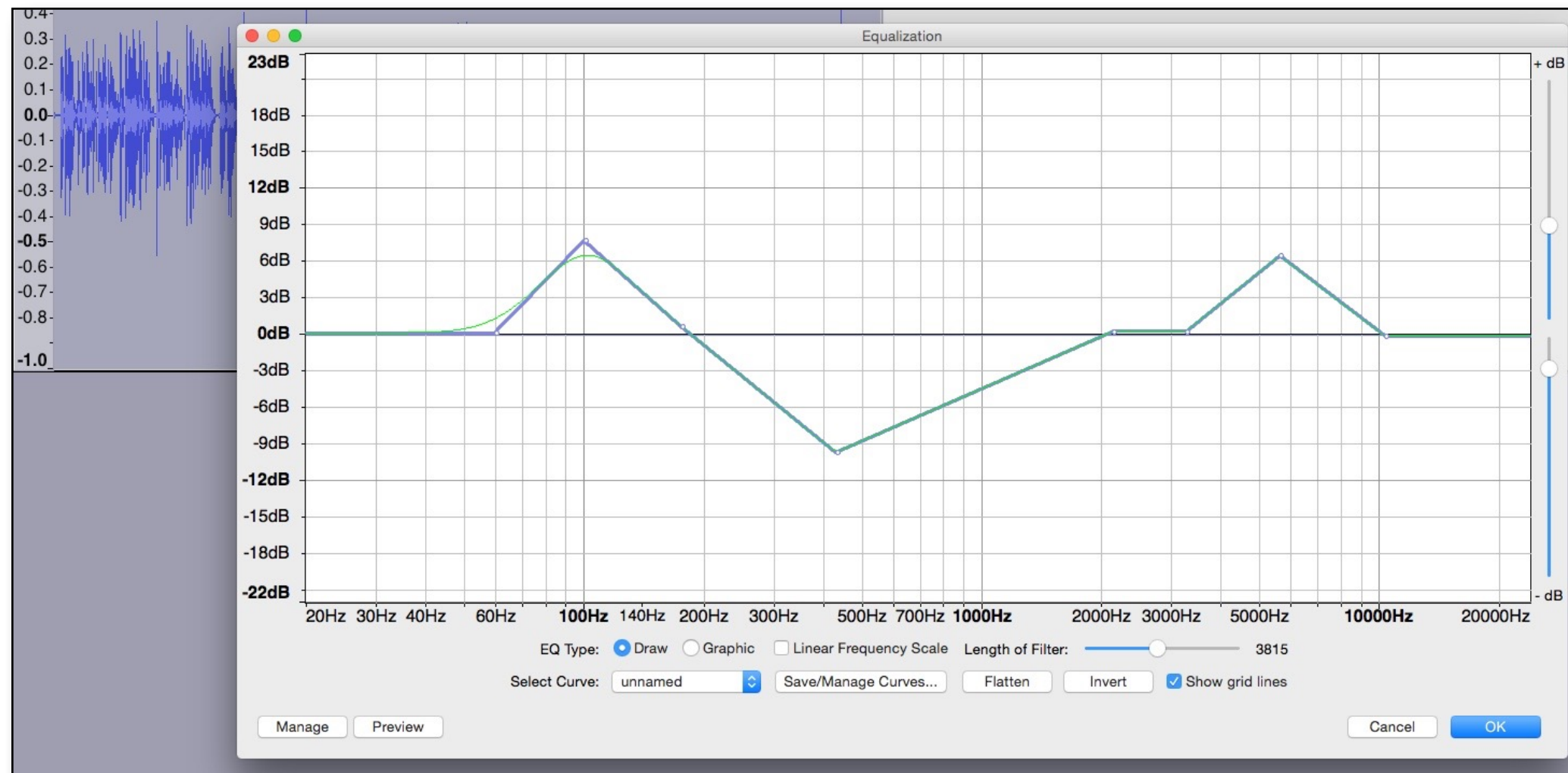
The problem with normalizing is if you recorded at a very low volume and your noise floor is -40; when you

normalize (raise) the signal by, say 12db, your noise floor is raised with it, and is now -28db.

Normalize can be useful after you have cleaned up and brought your signal up a good level, and then use it if the audio book, for instance, requires the signal to be at -6db. But there are other ways to do this.

EQUALIZATION:

I usually suggest using EQ as your first processor, (after noise reduction, if you must) The curve shown in the example improves the sound found in most small “closet” booths, untreated whisper rooms, and small spaces that usually get a mid-bass bump and are lacking a bit in high end.

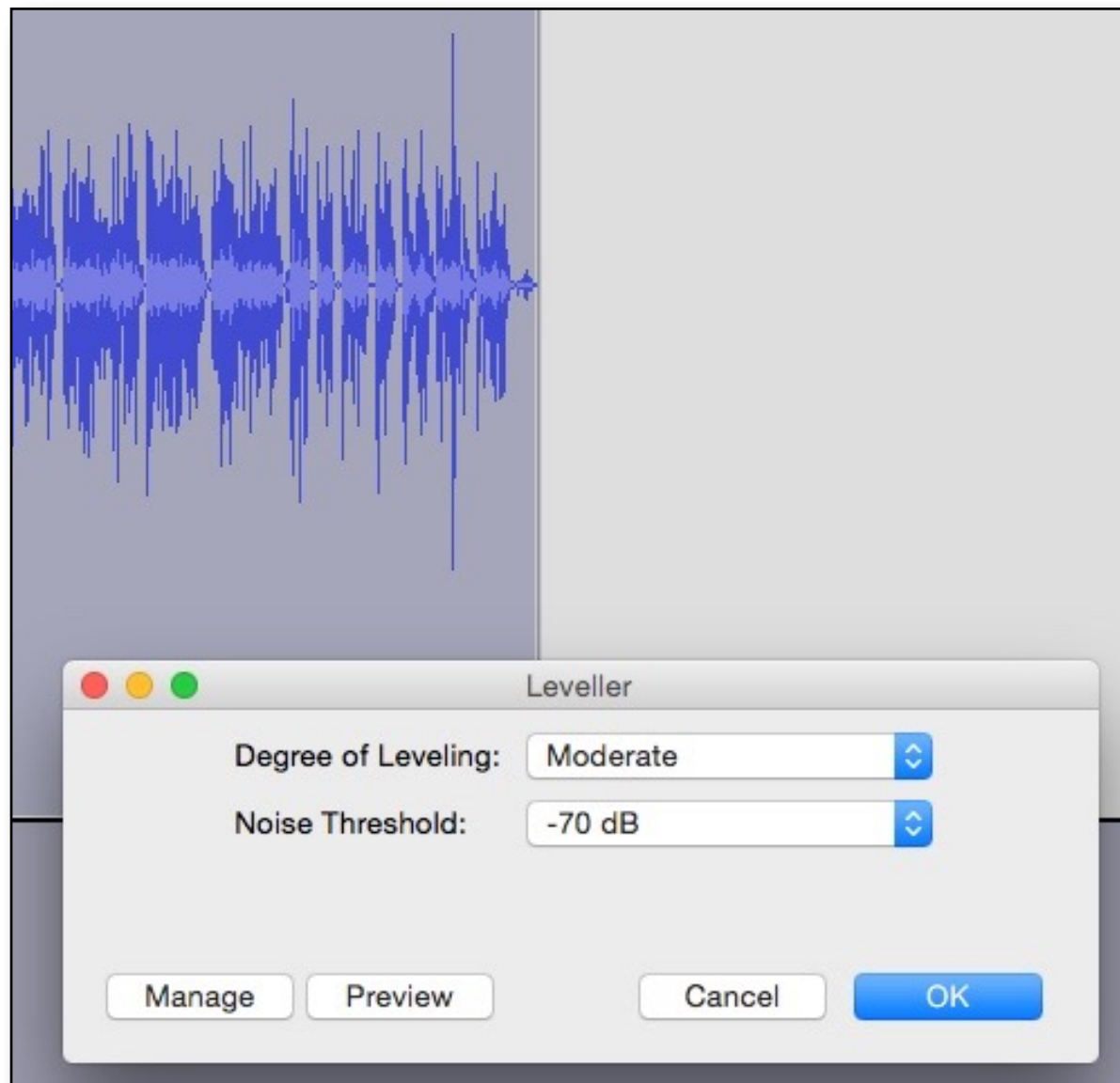


Yours may vary greatly. You will have to experiment. With Audacity's processors you have to process, and undo, change values, process, undo; repeat until it sounds good. A lot of trial and error, but once you are in the ballpark, you can tweak a little to make up for day to day differences in sound. You draw a curve, such as the example, by mousing a clicking on the line, then

pull the dot up or down to create an eq curve.

Once you have an EQ you are satisfied with, you can name it and save it using the Save/Manage Curves button. This saves you having to recreate a curve for different sessions.

LEVELING:

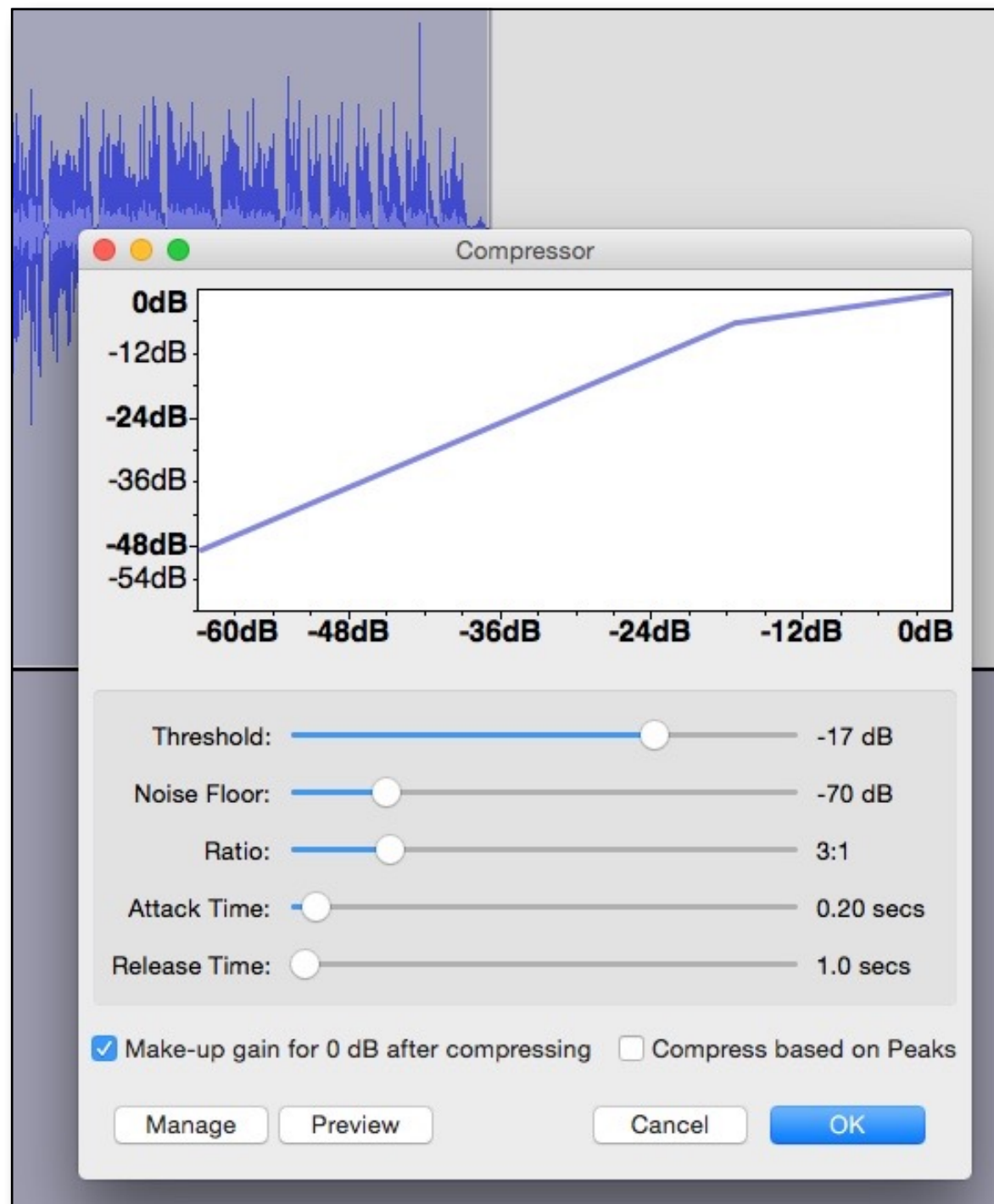


A leveler is an automatic gain rider that brings the louder parts down and the softer parts up. It does not work as fast as a compressor or limiter, so some quick loud peaks can sneak through. It is not as aggressive as a compressor, so it has a slightly more transparent sound. You may need to use a limiter before you master/bounce/export to catch any peaks that would go into the red.

Experiment with the different degrees: Moderate is good, but aggressive may work better on some program materials, as light may work better on others. See what sounds best to you.

(Note, you don't have to use all these effects at once, it may be overkill, but try one, two, three or all of them to see what sounds best.)

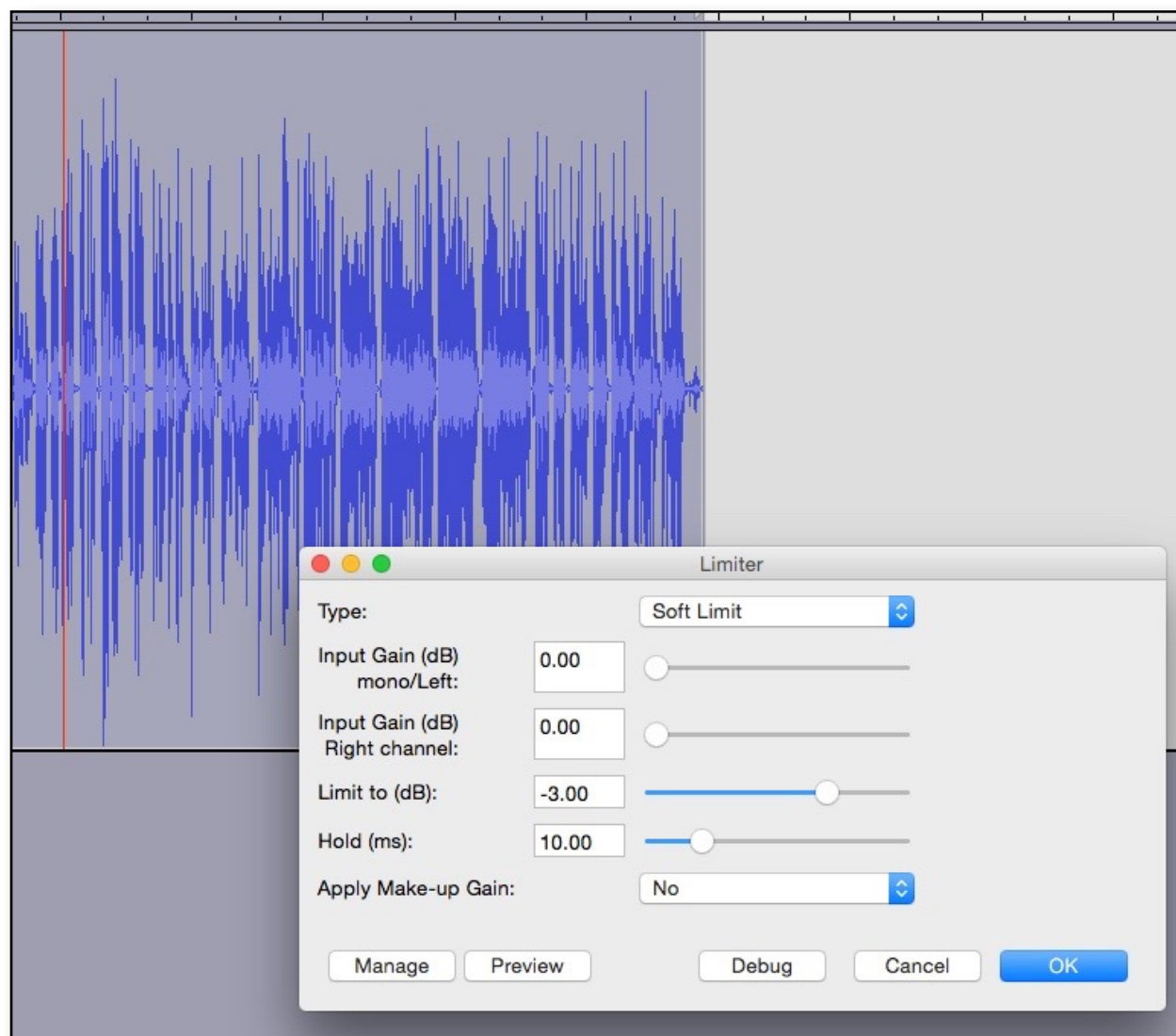
COMPRESSOR:



A compressor automatically lowers the volume of the parts that go above the threshold you set. It does not raise the softer parts like a leveler, it squashes the loud parts so you can raise the overall volume. For instance, if the loud parts go up to 0db at several parts, but the rest of the program is at -20 db, a compressor will lower the loud parts so you can raise the overall volume, say 5db, making the variance smaller between the loud parts and the soft parts. It also tends to “smooth out” the sound.

However, if the threshold is set too aggressively, you will hear a pumping sound, that is very distracting, and bush league.

A compressor will give you a “louder” waveform over a leveler, but try one, then the other; experiment, and see which works best to your ears.



LIMITER:

A limiter is a compressor with a very high ratio, sometimes called a “brick wall” limiter; it does not let anything past the threshold you set. If you set it to -3db, the loudest part will not go past -3db. This is a useful tool if the requirements of

the audio program are -3 db, you process this as your last step before exporting/mastering.

Experiment with the “type” Soft Limit/ Hard limit settings. Generally, you do not want to apply make-up gain for voice.

Preview your settings using the preview button.

This is a good idea on all of the other processors (effects) and can save you from having to process, undo, process, undo, etc.

(sorry, I probably should have mentioned this at the top of this section)

These are typically the most used processors by pro studios on a day to day basis for voice work.

Other Effects: Many of the other processors in the effects menu are music oriented, like phaser, echo, reverb, pitch, etc, but put down Facebook for an hour and experiment. You might find something cool when that Halloween voice-over is needed.

PLUG-INS:

Unlike audio editors, like Audacity, DAW plug-ins can be adjusted on the fly while you are listening; do not permanently affect the original audio (non-destructive) and can be changed after saving and reopening the session. This is the advantage of a DAW system over an audio editor. And since most of the work talent does is just “record it, send it off, & fuggedaboutit”, this is usually not an issue. However...if you are doing audio books and need to do a pick up session, do re-tracks, re-edits, inserts, etc....then perhaps a DAW might be a better fit for you. (there are ways around this for audio editors, so no need to have workstation envy)

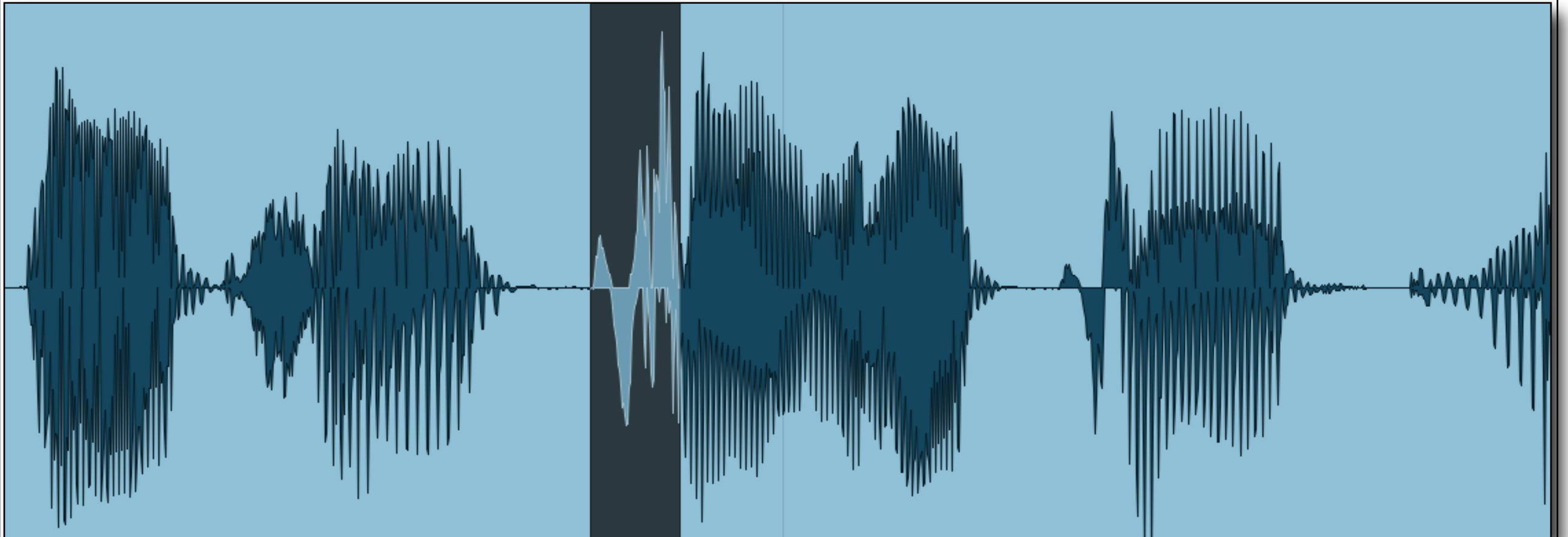
The advantage is you can make adjustments while you are listening to the changes, replace plug-ins with different plug-ins on the fly; and the biggest advantage is there is a wider choice of plug-ins from a variety of manufacturers to solve virtually any problem, and create any kind of sound.

Pro studios use the same plug-ins available to everyone. And the manufacturers go beyond what is available in Audacity. But to be fair, for a free program, those Audacity guys have come up with some pretty respectable and usable processors....I have spent thousands on banks of plug-ins that are terrific, solve any audio problem I run across.....but Audacity's are in the ballpark, and for most talent doing at home auditions, or even self recorded program material, they are impressive.

But if you need an aggressive noise reduction program like Izotope RX, you will have to use it as a stand alone audio editor, like Audacity. First you record into Audacity; export the audio file to your desktop as a .WAV file. Import that file into Izotope; process the file using one of the noise reduction programs in RX; export the file to the desktop as a .WAV; import that file back into Audacity and get editing. In a DAW, you can do that all within the DAW without leaving it.

CHAPTER 6

Editing



In this chapter I will give you some basic tips for editing using Audacity, some features that you might not know about, and general fixes of faults that occur in most recordings. The purpose is to make seamless edits, make it appear that no breath was taken at that spot, and that any mouth noises, nose noises, clicks, pops plosives and other distractions never happened.

EDITING:

Here are a few tips to edit a “keeper” track.

Basic Tools:

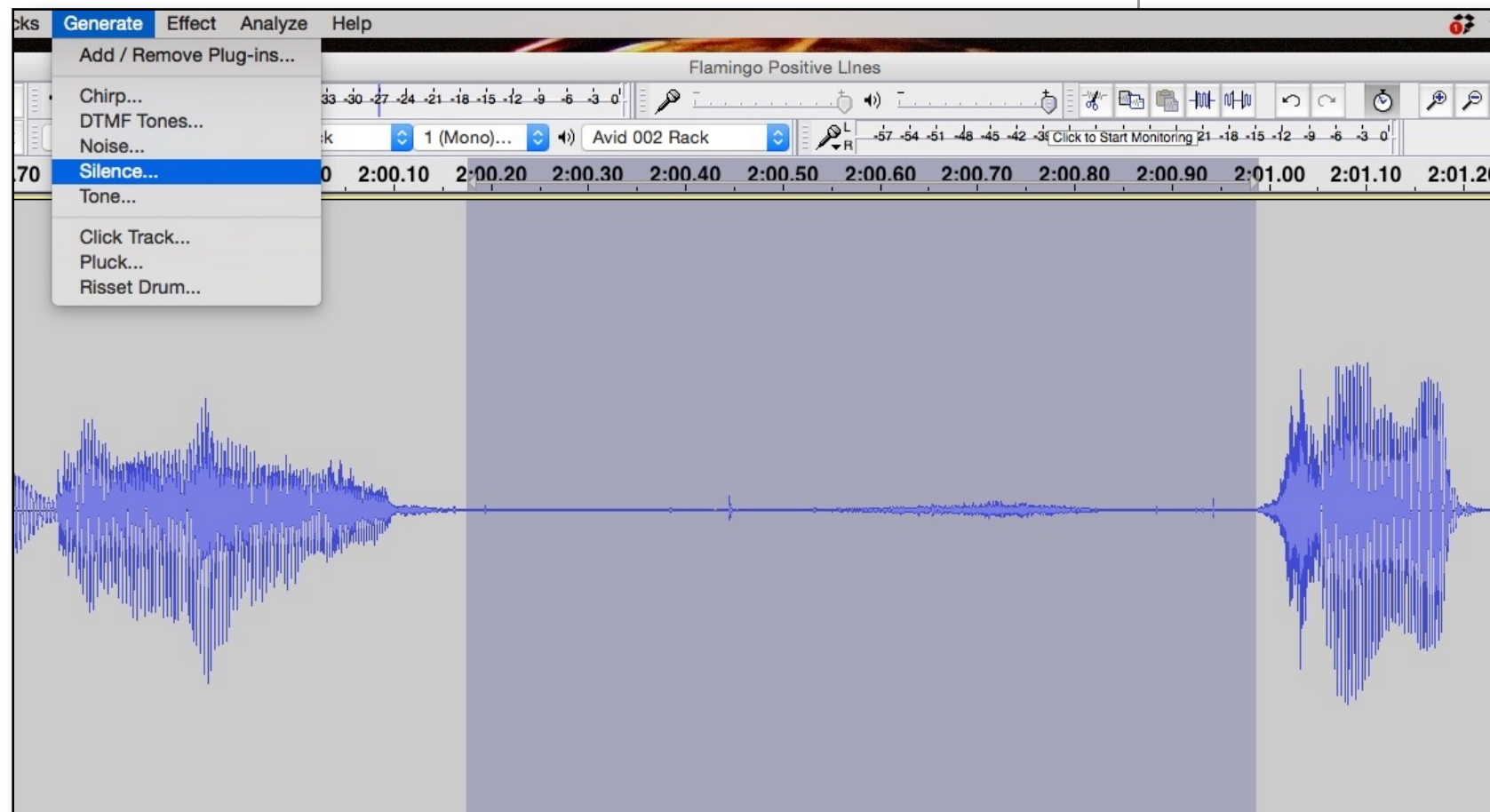
Insert silence: from the Generate menu

Cut; Delete; (or scissors tool)

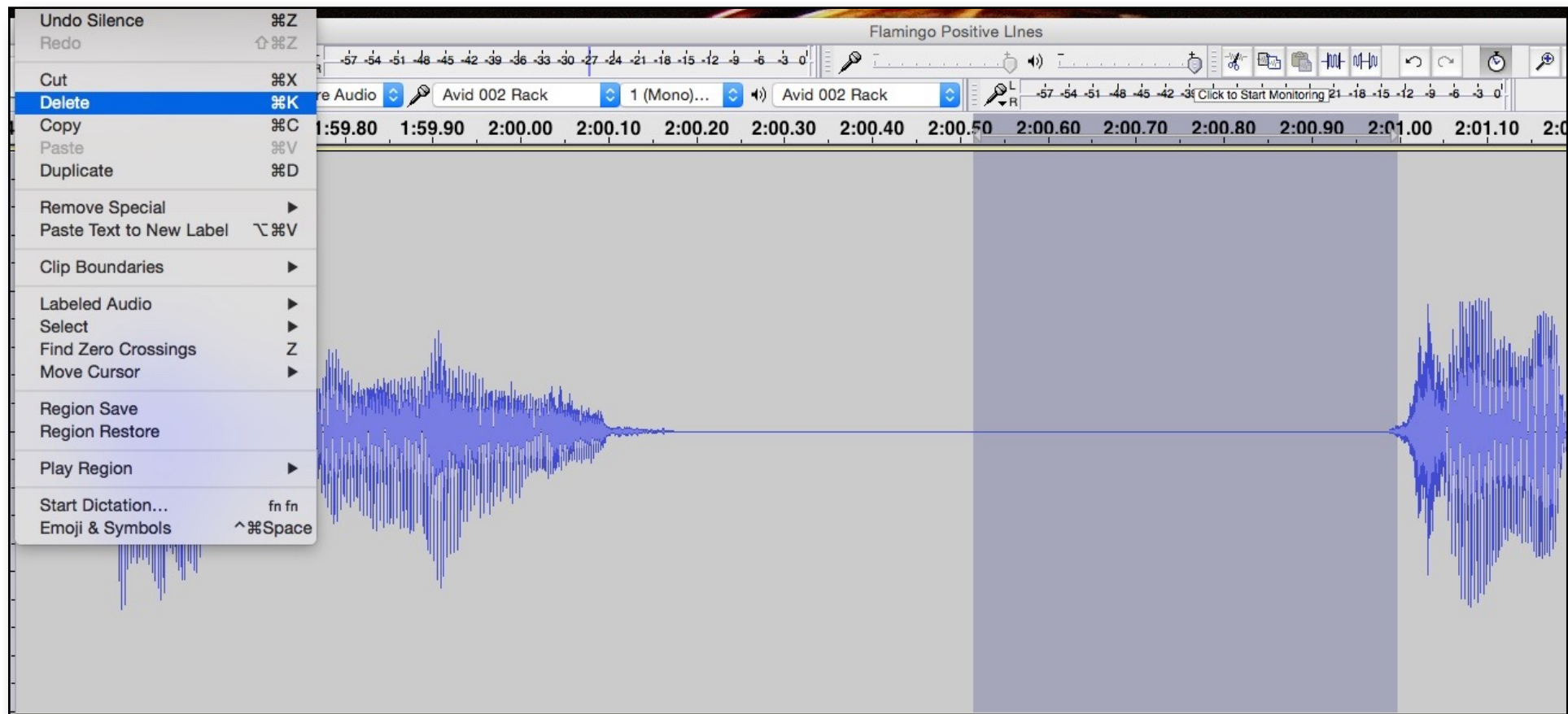
REMOVING BREATHS:

A: Highlight at the end of the word before the breath, and at the beginning of the word after the breath. (Highlight on the null point...the line in the middle: highlight where the waveform crosses the null point. *NOTE: if you do not cut at the null point, you will hear an audible click.)

B: From the Generate menu, pull down “insert silence”



After you click the prompt button, the line with the breath will be flat.



C: Now Highlight, and remove $\frac{1}{2}$ the space between the words: Use Cut or Delete from the edit menu or the little scissors icon at the top. It will remove the space highlighted in the example above, sliding the audio, eliminating the highlighted space; and it should now sound like no breath was taken at that spot, and the sentence was read in one breath. ($\frac{1}{2}$ the space is just a suggestion, you may have to experiment to make it seamless.)

REMOVING MOUTH NOISES, CLICKS, SIBILANCE.

Tools: **Repair audio** from the effect menu

Pencil tool from the icon menu (upper left)

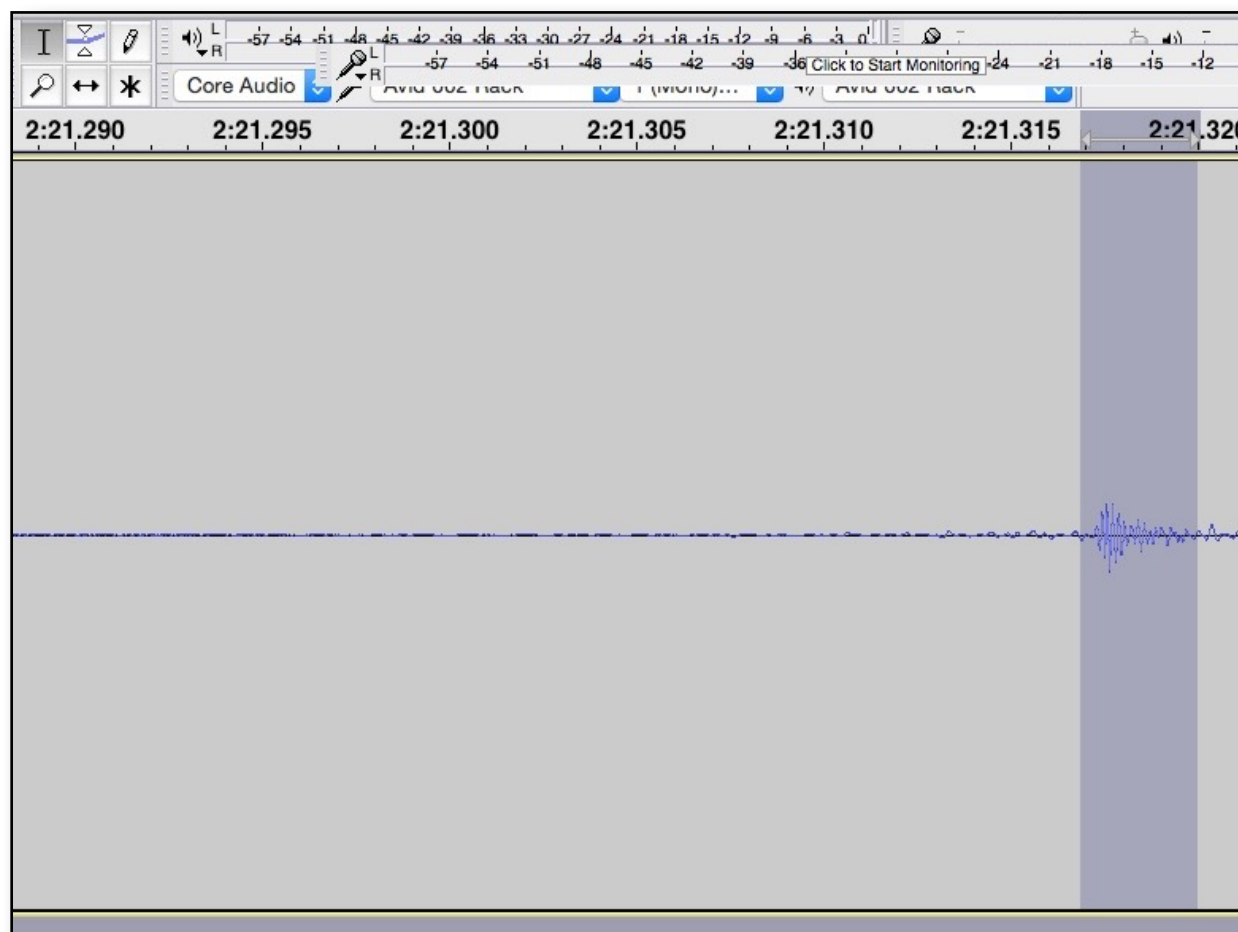
Insert silence from Generate menu

Cut/Delete/Scissors

Amplify from Effects menu

There are several ways to remove these:

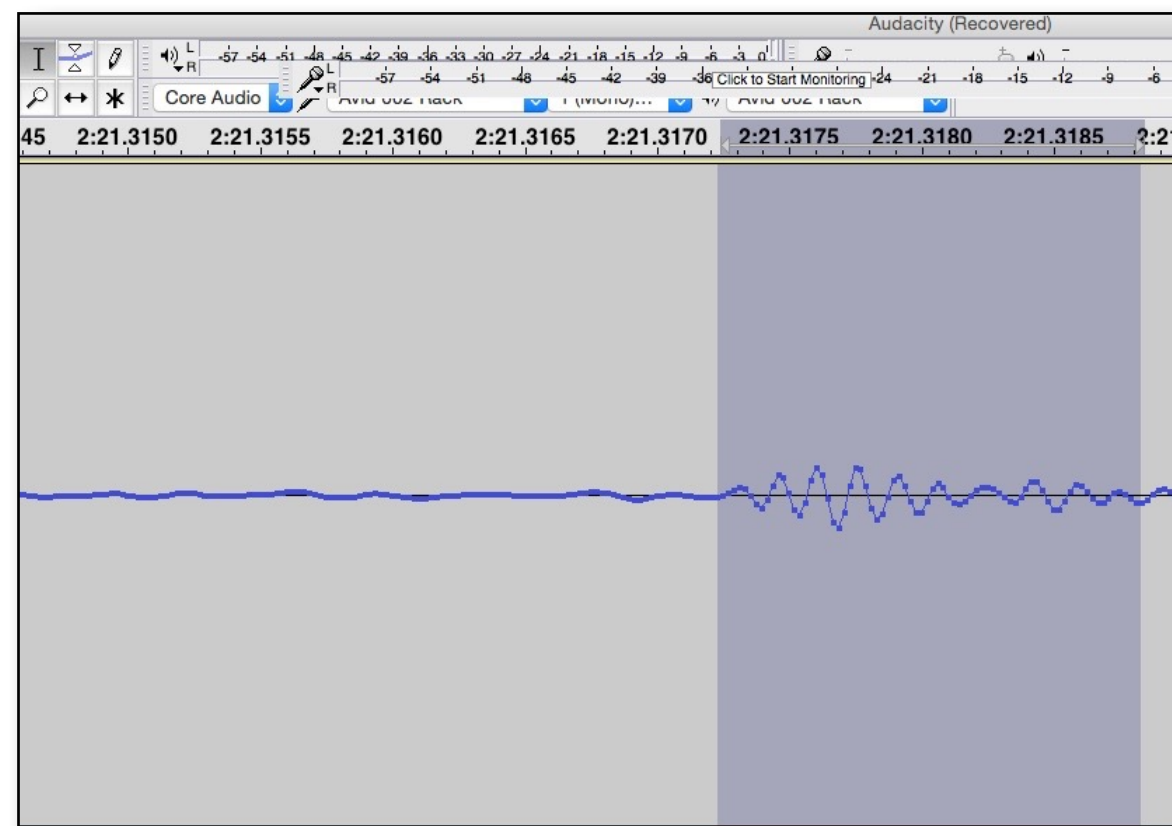
A click, which may be in the middle of a word,



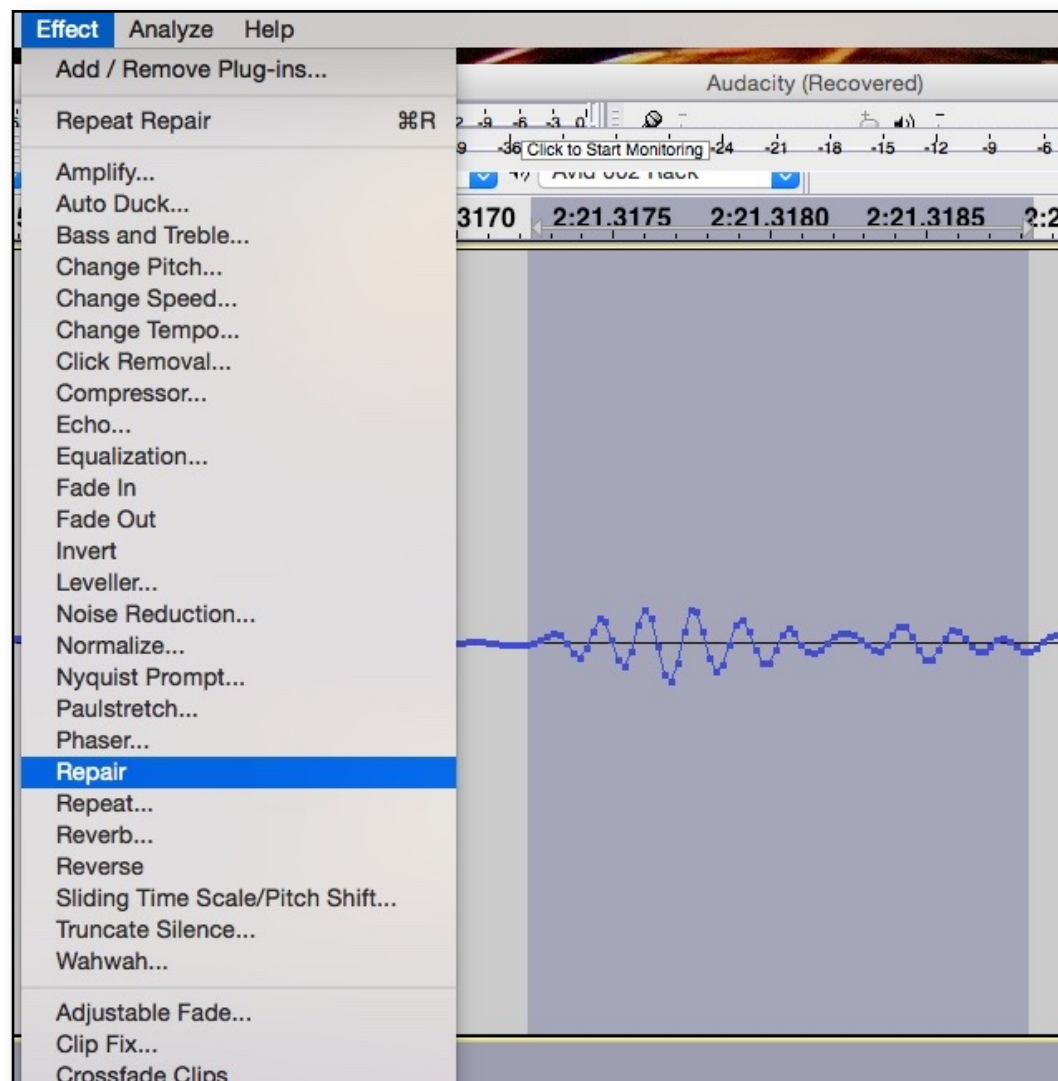
looks like a jagged line. like you'd see on a seismograph

If it is in between words, you can just insert silence or delete it.

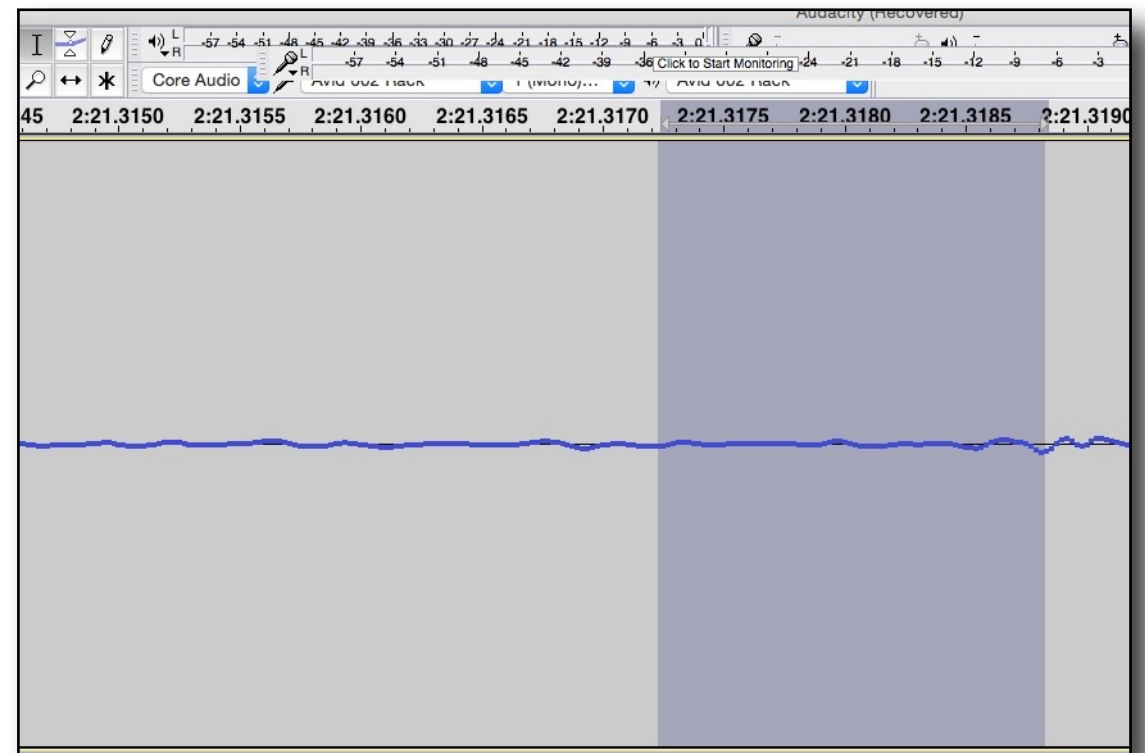
If it is in the word itself:



1: zoom in until you can see a jagged line in the waveform until you can see little dots.



click on “repair audio” from the effect menu. (It has to be a very short segment of the waveform for it to work. If you keep getting the “too long a segment prompt, make the highlighted area smaller and try again)

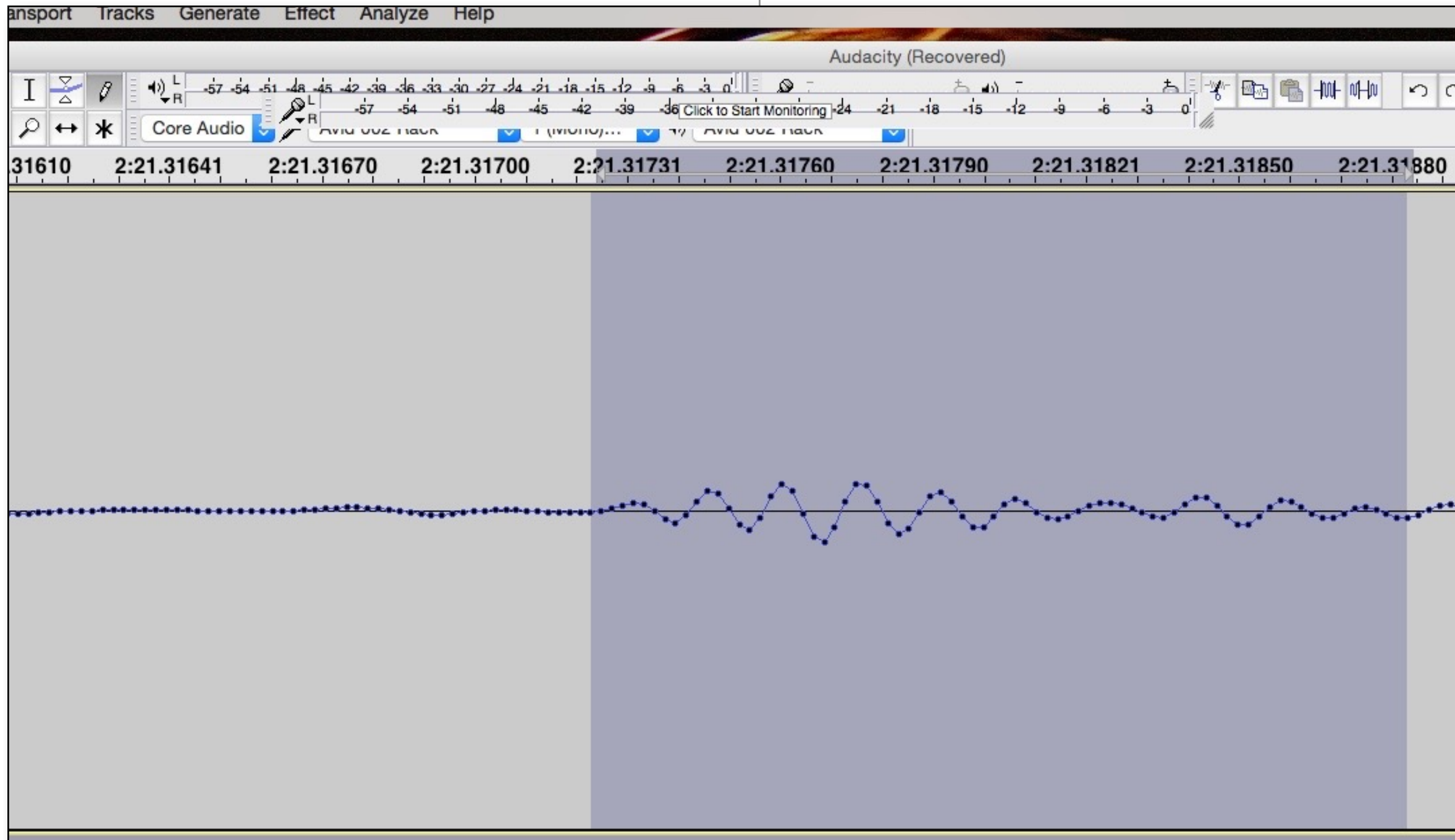


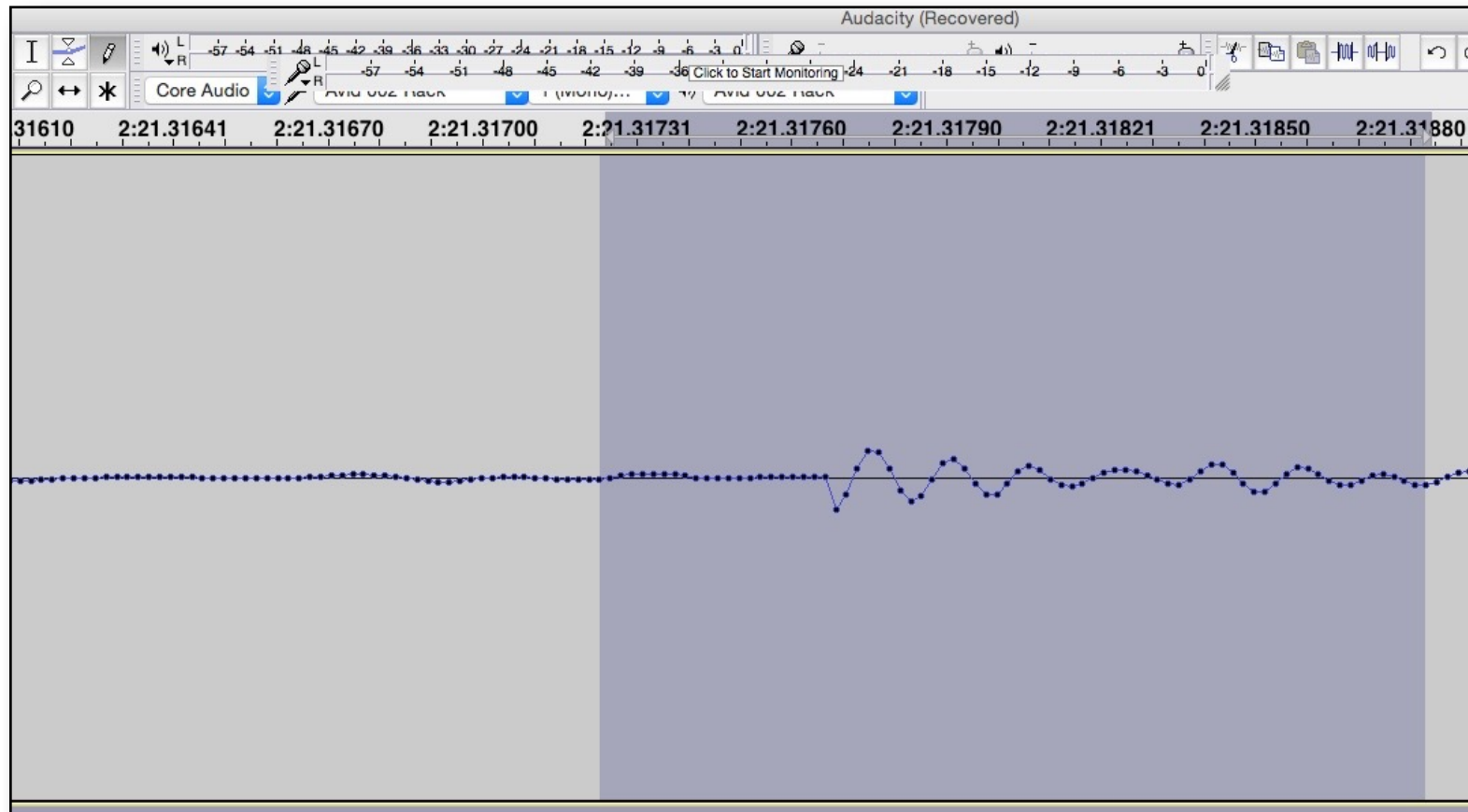
Your finished audio should look like this.

STRATEGY 2: REDRAWING THE WAVEFORM

Zoom in as above, but click on the pencil tool in the icon menu in the upper left.

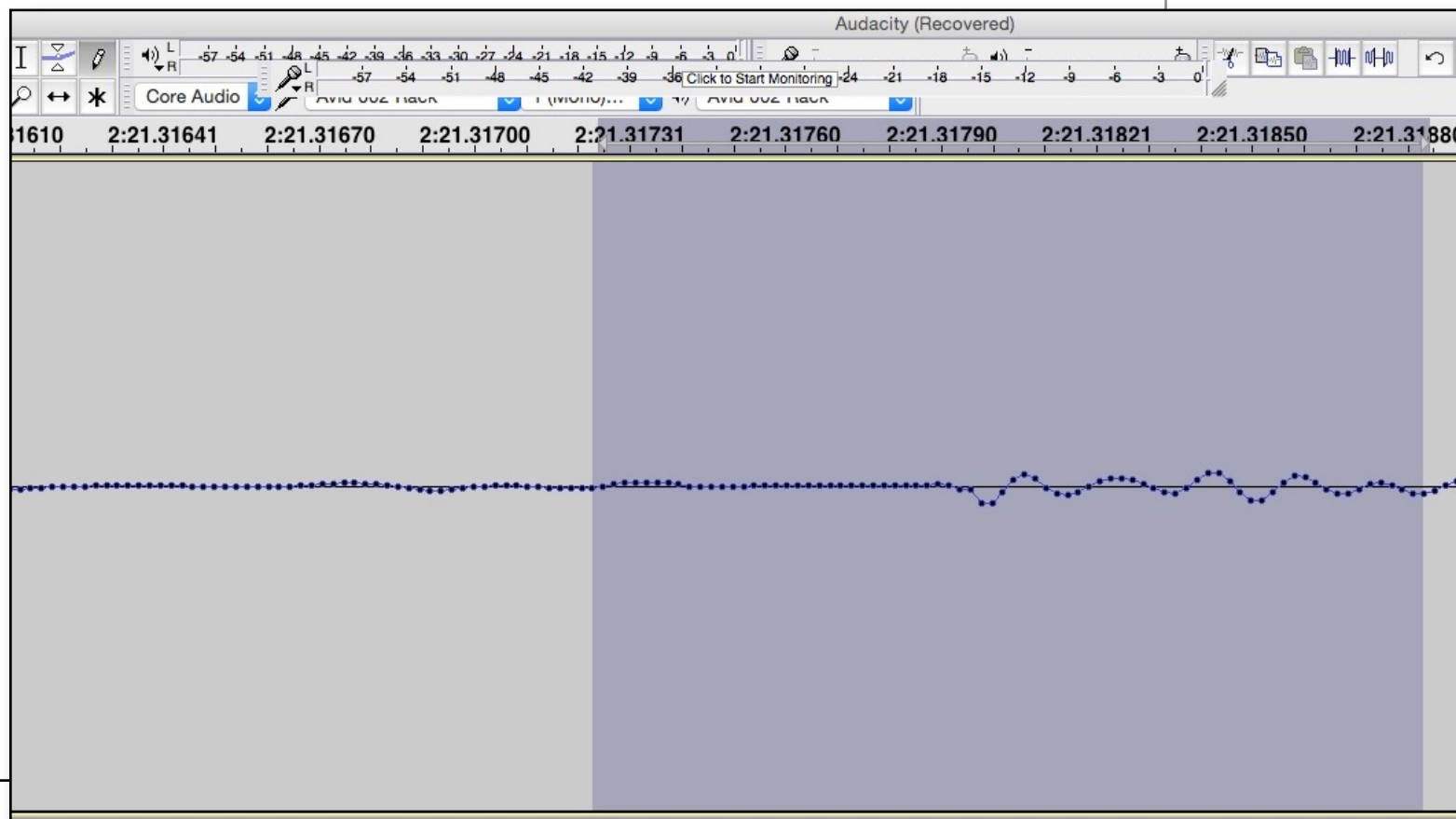
(the “I” bar is your default editing tool...be sure to re-click that when you are done with the pencil tool)





Now take the pencil and draw through the jagged line to redraw the waveform to flow like the others preceding it. With a little practice, this will become second nature, and can be used in many other programs like Protocols.

(the pencil tool did not show up on the screen shots, but you can see the result as the waveform was redrawn.)



3: Nose/nasal honks; clothes noise: In between words you will see a waveform where there should be none...and it may be attached to the end of the word, which makes it a bit trickier.

Highlight on the null points (you may have to estimate where the noise begins if it is attached) and insert silence....that should do it...if not, try a little more or a little less until it has “gone away”.

You can also try a fade-out from the effects menu, but it has to be out before the noise is audible.

Again, experiment.

SIBILANCE:

if you have very sibilant “s’s” there are a few strategies that work:

1: lower the volume manually using the amplify tool from the effects menu: set it at -6db (to start) highlight the “s” (which looks like a football) and process.

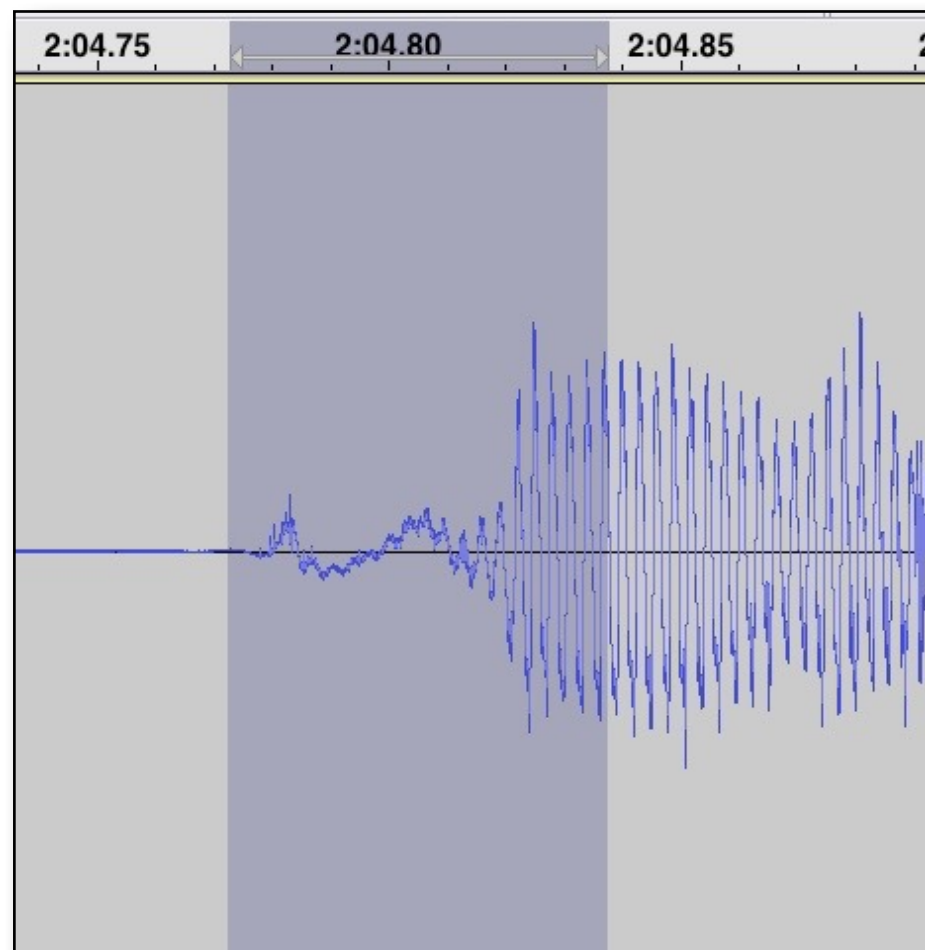
#2: if it is a long, drawn out “s”, you can use the scissor tool to remove some of the middle, cutting down the length. Keep the start and finish of the “s” or it will sound clipped. An “s” waveform is so dense, that you can cut anywhere in the middle and not hear a click.

#3: you can lower the volume using the volume change tool (two triangles next to the I-beam tool) to manually draw the volume change to the waveform in the edit window, but I find this to be very time consuming, and just lowering the volume using “amplify” with a negative value is also more accurate.

PLOSIVES, P-POPS

Even with a pop filter, some invariably get through. These can also be “f”s, “b”s and “c”s (others too if you are creative)

On the waveform, a Plosive looks like an elephant trunk: dense and curved. (the waveform highlighted on the edit title page is a plosive....easier to see than in Audacity)



Tools:

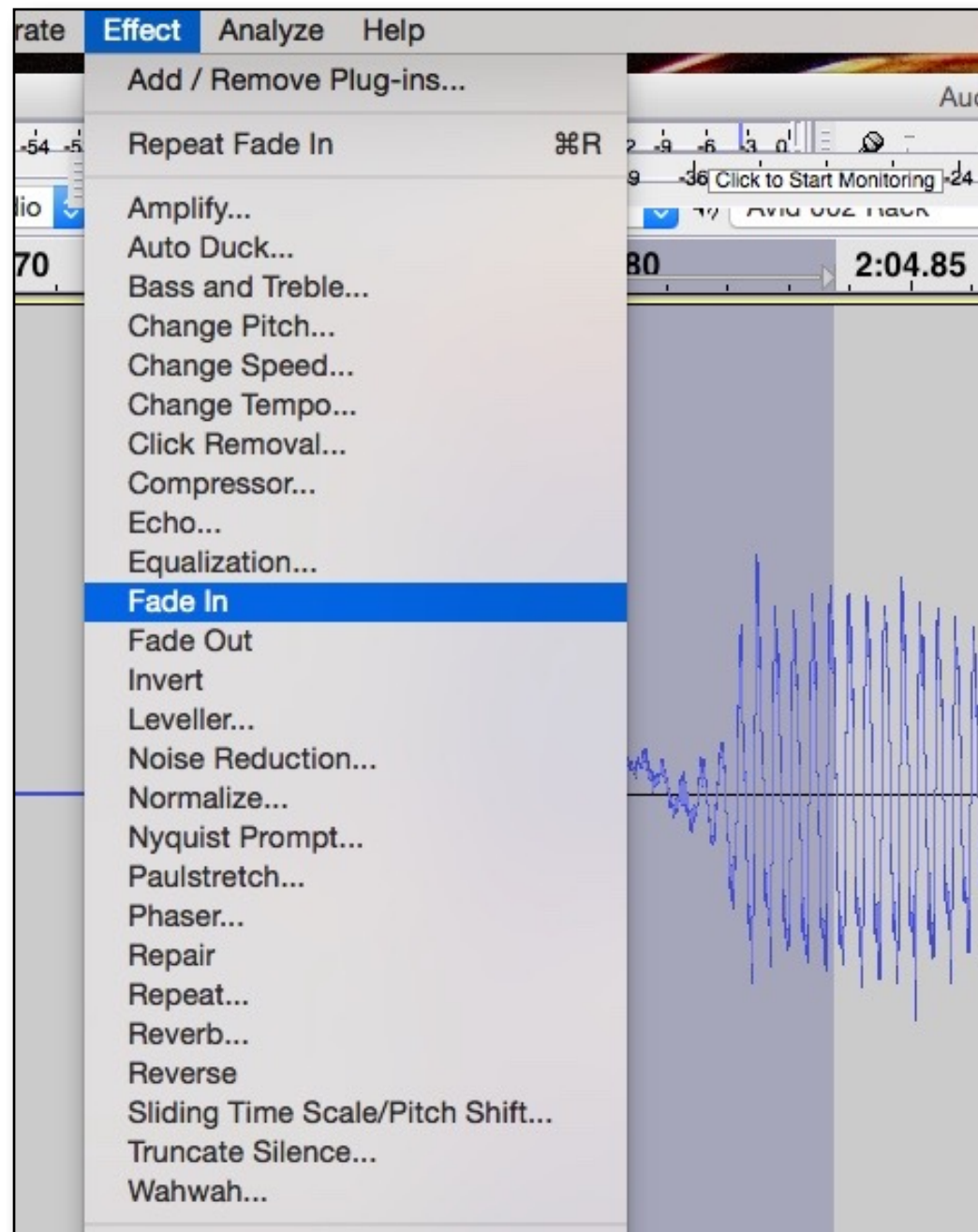
fade in from the effects menu

amplify from the effects menu

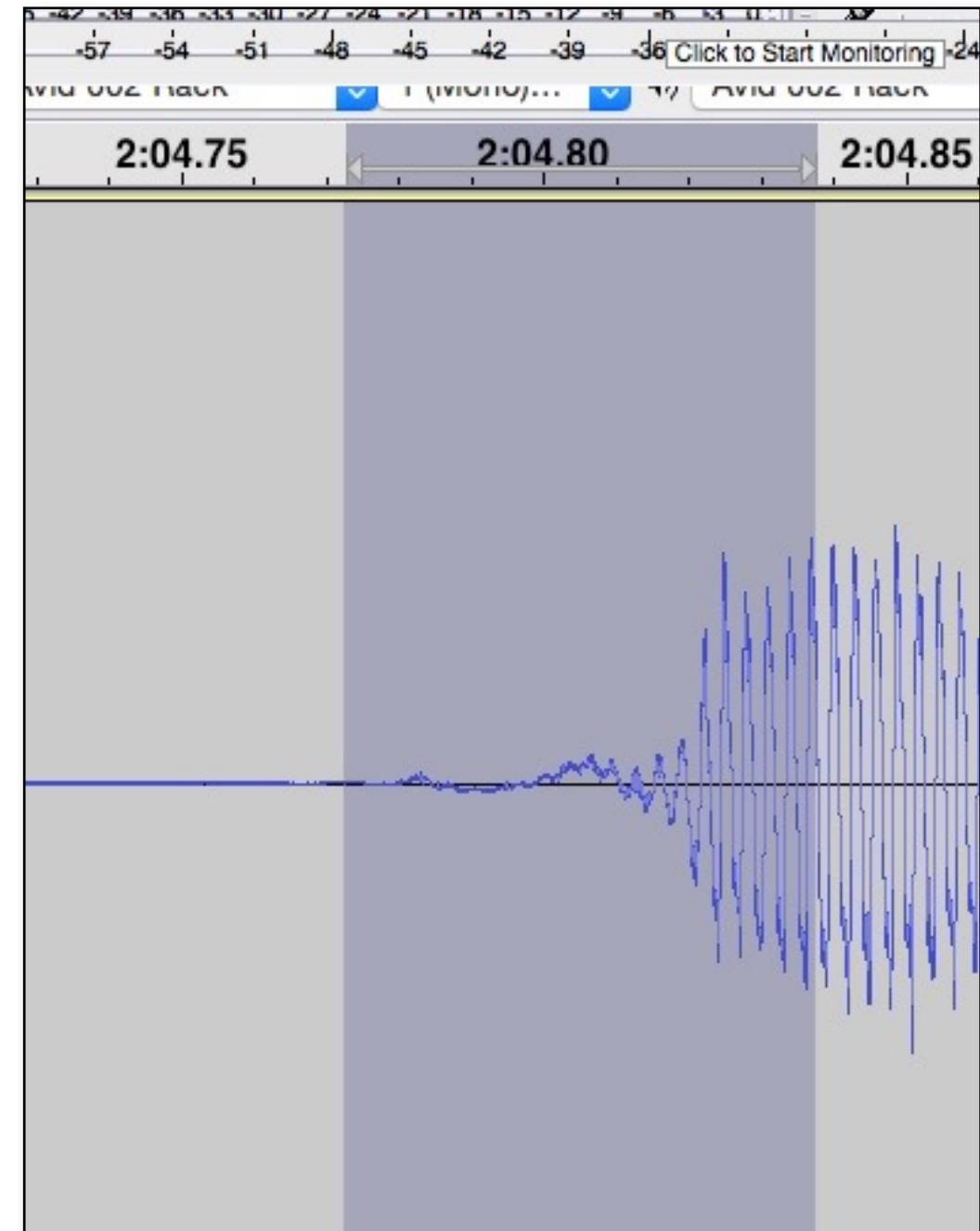
STRATEGIES:

The quickest and the one that usually works best is the **fade in** from the effect menu. You want to highlight from the beginning of the plosive into where the waveform gets louder.

(example on left)

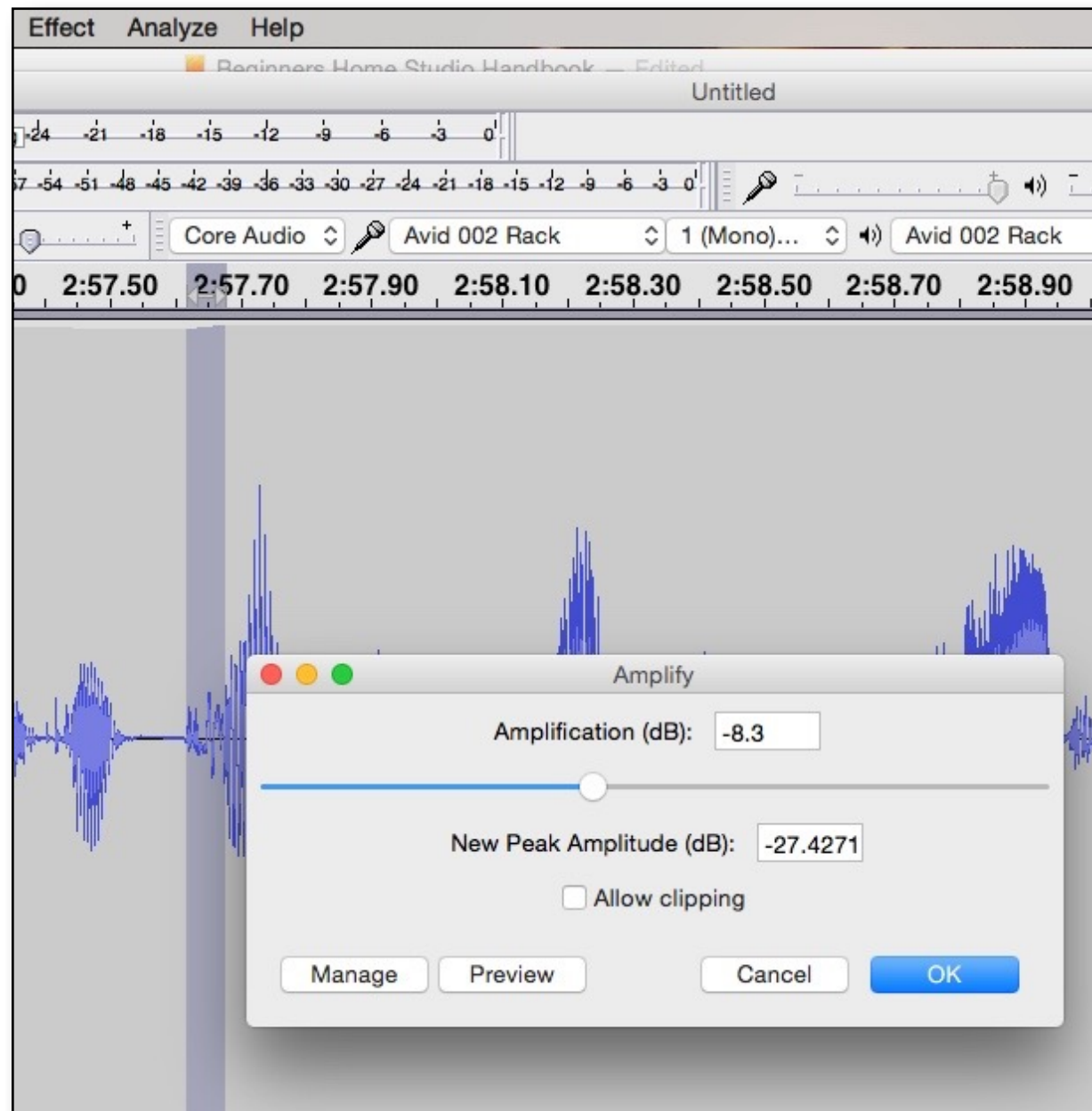


You may have to go further into the word, but if you go too far, you may lose the P altogether.



And this is how it should look when processed.

2 Volume change:



Highlighting the plosive up to a null point in the word waveform, lower the volume using Amplify, lower the amplification to -8db to start...if too much, back off and try -7db or -6db

You may have to highlight less into the word than you can with a fade, since you are lowering the volume of the whole highlighted area, not just ramping up volume as you would with a fade up.

Why you should get your noise floor, or “room tone” VERY low:

If you have “room tone” on your track, when you add silence, there will be a noticeable “hole” in your audio if you have ambient sound. Listen on headphones and you will clearly hear it.

Go back and do more sound treatment...the goal is to get it as low as possible.

If you still have audible sound, try using **noise reduction** as your first effect edit, even before EQ which should be first in the chain. Your goal is to have the sound in between words as silent as when you insert silence.

And if that doesn't work, you may have to insert “room tone” instead of insert silence. This is a pain in the ass, but works.

Before you record the program, record about 3 or 4 minutes of room tone. Copy and paste it to a separate track below your voice track, and hit Mute on the room tone track.

That way you won't hear it when you play back your voice track.

Now when you need to add silence, as in the remove breath example, copy an approximate size piece of room tone, and paste it into the highlighted space above. It will overwrite the breath, but you will still have to trim it using the 1 / 2 space removal trick.

Be sure to highlight at the end of the word and the beginning of the next before you paste.

Even if you are a bit short, or long, you will be cutting time out anyhow, so it shouldn't matter.

Or if you get really cocky, you can copy the estimated amount that would be left AFTER removing the 1 / 2 space and paste that in saving a step.....you devil, you.

This is a pain in the ass that can be avoided by fixing your room, but I know that is not always possible.

A few other notes: 2nd party noise reduction programs:

Izotope makes the RX line of noise reduction tools. They have a stripped down version for about \$130.00 (which goes on sale for \$99 from time to time) which I use and would recommend. (full disclosure: I have the \$400 full featured version; there is an advanced version, \$1,100.)

The big versions are more for commercial studios.

There are other manufacturers that make noise reduction programs, but I have found RX the best for the money.

Other effects in the Effect menu:

Fade out, which I did not cover, can be used to lessen the volume of a consonant if you have a hard “Tuh” or “Puh” or “Duh” at the end of a word. Just like the fade in on a plosive, do the same going out on a word.

Most of the other effects are for music, although echo and reverb might come in handy for producing a halloween voice.

And **pitch shift** can raise or lower your voice from cartoon to phone stalker.

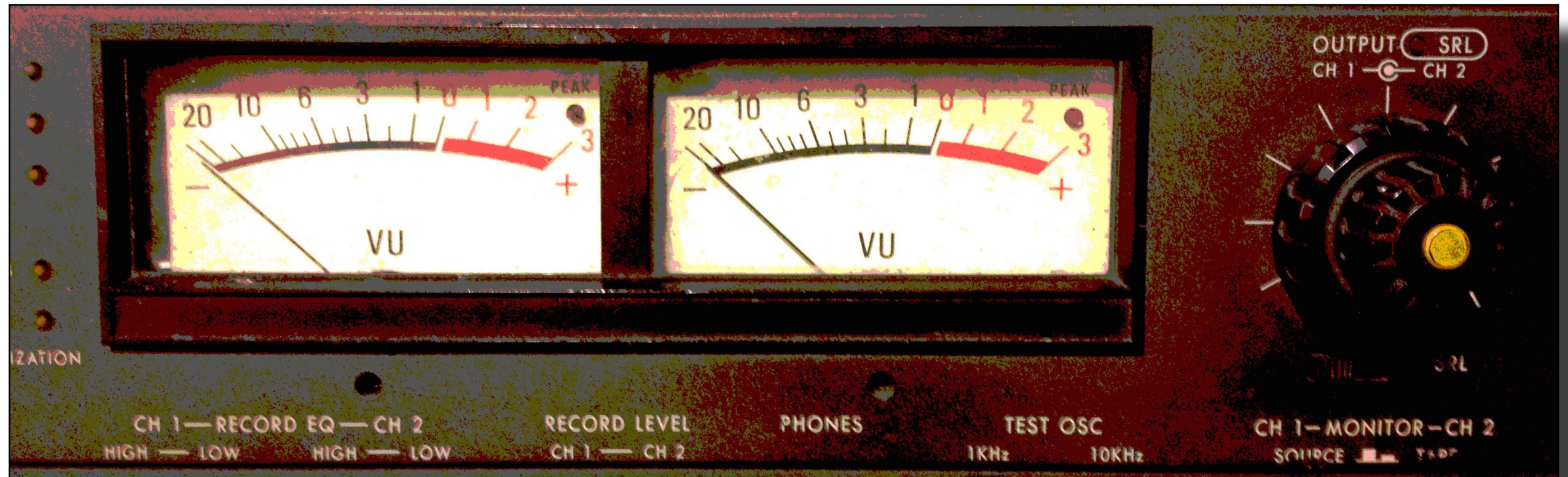
Tempo, Sliding time scale, are a bit glitchy and change the quality of the audio, so I would not recommend them for time compression. **Change speed** also changes the pitch up or down as you increase or decrease the speed. Not usable either.

The rest are pretty much for music use, multi channel production, or whippy-doo effecty-effects. (like **reverse**, or **wah-wah**) Nothing to see here, move along.

But it never hurts to play around with them just to see what they can do. You never know. Something might inspire you. Or it could just be a big waste of time.....a giant time suck like Facebook. Your call.

CHAPTER 7

EQ fixes, Reality checks, Opinions, Demos, and Websites



This is the final chapter with a bunch of tips and tricks and opinions I have gathered over the years. However, my opinion changes daily, so do not take any of this as the gospel...but you might find something useful or mildly amusing at the least. The Home Studio Handbook (full version) has more advanced tips if you need help with multiple channel mixing, production, mastering, etc.

USING EQ TO FIX PROBLEMS WITH YOUR SPACE

This is where accurate monitors or headphones is important: you cannot blindly change EQ unless you know that what you are hearing is accurate.

Good headphones are a very good investment.

Most small rooms, closets, carpet forts, etc, suck up high frequencies, so you will have to add some high end: try adding 3 to 4db at 4khz, undo, try at 5Khz, undo, try 6Khz, etc, until you find the frequencies and amount that sound best.

Also, since most small spaces have a mid-bass frequency rise, around 400Hz, try dipping that frequency -4 to -6 db...and then try down to 300Hz or up to 700Hz to find the right one for your space. More detail below.

GETTING RID OF BOXY-"CLOSET SOUND"

You should always try to treat your recording space first: making the room "flat" using absorbers and bass traps is the goal....that way you will not need to use as much, if any EQ to minimize the room's problem frequencies. But that is not always possible, so.....

Using the EQ: set the frequency at 400hz, dip about -6db, and sweep the frequency between 300 and 900hz. You should hear the boxiness lessen at a certain frequency. Raise and lower the db until it sounds natural. Now experiment with the Q (width / slope) of the EQ to fine tune.

REALITY CHECK:

Now that you have become familiar with your program, lowered your noise floor, constructed a booth and are confident that your files sound AMAZING.....time for a reality check.

Send your files to a friend in the studio biz; listen to them in your car; on your phone; play them on your parent's stereo (or yours if you have one); and through your smart tv.....if they still sound AMAZING and everyone agrees, congratulations! You are the first in history.

Usually your studio bud will say "There is no bass in the 100hz range, but a rumble below 60hz.....a huge mid bass bump at 400hz, giving you a "boxy" sound, and not enough 5khz.....and you can hear the noise floor pumping because you used just a tad too much compression, or the "noise reduction" is too aggressive and cuts off the ends of some words.....and I can hear clicks in some of your edits."

You need this.

Now you know what to fix, and be aware of in the future.

Fix it, and send a "new and improved" file for another evaluation. And bring by a bottle of good scotch, bourbon, or libation of choice as a thank you.

UPGRADING: OP/ED ON EQUIPMENT LUST:

I came up in a time when you had to make the equipment you owned sound like equipment you couldn't afford. You learned quickly how to get the most out of what you had, until you had scrimped and saved to get the next big piece of equipment that would make you sound that much better.....and so on.

We were equipment sluts, always checking out the newest gear that would make us a star. And we got smarter and better by doing this...and it worked until digital came on line, where just about everything sounds great.

I have changed my position on always upgrading to the best you can afford....and then upgrade again as you make more money and can justify it.

You may get a great sound out of a \$200 mic, or find that you just sound AMAZING out of Neumann or a Sennheiser 416 with a Focusrite or Apogee interface and a Universal 610 tube pre-amp. If it makes you happy, go for it. You will have more confidence in your reads, knowing that you sound like you recorded in a "real" studio.

However, with a bit of practice, experimentation, reality checks, and getting tips and tricks from any number of sources, you can come really close to that \$4,000 system mentioned above.....and put that money into marketing, websites, demos, and promotion that will get you more business than your dream studio set-up may..... but, if you have your heart set on it....go for it...there is no downside to sounding better any way you can. And always keep that as your goal.

I know many successful talent who have modest systems that they have used for years; they sound good, professional, and by using the same system

long term, have learned it's shortfalls and how to compensate for them. They concentrate on their reads and not on their equipment (the ultimate goal here).

And like it or not, the bar has been lowered in the business. Clients are no longer insisting on recording in a top flight studio to get guaranteed pristine audio; if they can get pretty good sound out of you for no charge, that trumps better sound and a \$600 or \$700 bill from a studio.

It is one reason big studios are on the endangered species list. Nothing personal. Just business.

Plus the fact that most audio now is delivered in mp3's, which is a diminished quality format (small file size, and transmits easily via the internet) and listened to with ear buds or on mobile devices; the desire for "hi-fi" is only held by a few purists. As long as it is broadcast acceptable (a pretty wide latitude) or meets

audiobook requirements (primarily noise floor and level) you are generally in the ballpark with a basic system. If your client insists, you may need to make some changes or tweaks, but you can usually do that using the program you already have, or by lowering your noise floor even more aggressively.

Sorry....I digress yet again....Back to you.....

MAKING YOUR OWN DEMO:

(Before you listen to me, get a linkedin account, and join some voice over groups like Voice Over Professionals, and get all the differing opinions on this. This is just mine, as we used to make demos for talent, too. Point of reference: I was a copy-writer at Leo Burnett before I did voice/studio stuff, so this was a bit easier for me...and again, this is my opinion...I have been known to be wrong: I sold gold at \$35.00 an ounce..."It won't go higher", and I once put \$50 on "Lady-Go-Diva" to win.

There are some well respected and reputable demo producers that do a very good job writing, coaching, and producing a demo for you. But the tab is around \$3,000....or more. And then there are some demo mills that use dated music and the same copy for every talent that walks in the door.

Save some money and some grief and do one yourself.

A pretty good demo is better than no demo. You can't get a booking without a demo. (Ok, you can, but it is unlikely) As you book, replace pieces with parts of the spots you actually did. Constantly update. And get rid of that Oldsmobile spot....it dates your demo.

If you don't have a clue, go to local agents websites and listen to every talent demo in your voice-range/category. Pay attention to the ones getting all the work. They are doing something right and should give you that clue as to what is selling.

You can listen to demos out of your category for pace, production, types of spots, etc. for general ideas, but try to stick to your demographic/age. Remember, Ad guys hear with their eyes first, so if you are 28, don't bother putting on an old man impersonation on your demo....even if it is dead on. (I can cite numerous examples of talent being

selected on the merits of a demo / audition, but when they showed up at the session, they were rejected for not being the “right type””she’s too old to sound like a teen ager” or “He’s too tall for the role in our radio spot”)....AND put your best spot first....so many producers / writers / deciders listen to :08 of a demo and if they don’t hear what they are looking for RIGHT THAT SECOND, will click on the next demo and so on.....(Yes, I once worked at an agency and did just that...because I was “soooooo busy”).....I digress again.

Ask your agent, or an agent you are interesting in signing with, to give you some direction as far as copy, what types of spots, and where they think you would fit in on their roster.

A: you will get useful info, and B: they will be flattered you listened to what they had to say and give you a shot.

If you have done a bunch of self recorded auditions, start there. Pick the best ones, and then add some new ones to fill in where your strengths are.

First trick: use different mics, or different areas to record your voice. Nothing sounds more home-made than every take sounding sonically exactly the same.

Or move the mic around in your studio / booth to get a different sound.

And record at different times of the day. Your voice changes slightly as the day progresses. Or record a couple of spots at a friend’s studio. The point is to make each segment sound like it was recorded at different studios.....like you would if these were parts of real spots you really did...and edited them together.

Record :20 / :30 of each spot....you will edit the best :10 out and produce that, adding music and / or sound effects.

You will need to buy music beds: there are on-line music libraries that have music downloads on the cheap. Google “royalty free music” Average price: \$20-\$49/ drop.

Same for sound effects: drop fee licenses for most sound effects are under \$10.00

HOMEWORK: Listen to the types of music being done on television commercials similar to the spots you are producing. Find something similar. It will ring as “authentic” to the listener. Even though you like Little Wayne, it will not ring true under your Pampers spot. The trick is to make the listener believe these were real spots.

“L.I.AR.” or Listen In Another Room:

Mix the APPROPRIATE music on a separate channel from the voice, balance it using the volume faders until it sounds perfect..... then hit play

and LEAVE THE ROOM. (trust me, this works) What you hear in the hall will give you a true idea of the balance between the voice and the music. (Yes, I am assuming you have speakers.....if not, play it through your computer speakers....better than nothing) The reason this works is a mystery...there are theories, but they all sound like hot air to me. But this will give you a good indication of how it will sound on someone else’s equipment.

Figure out an order now that you have 6 :10 second pieces. Then go back and do a few more and cut a few down to :05. Think about the pace and cut rate of the demos you listened to on the agency websites. Pretty fast, huh? Makes them exciting....it doesn’t matter you can’t tell (expletive deleted) about acting ability or interp....but energy, energy energy!

PUNT: Have a local studio that actually does commercials produce your voice tracks. They know what music is currently popular, and may cut you a deal on needle drop fees. And you have the benefit of another set of ears in the business who do actual spots on a day to day basis. Depending on rates, this shouldn't cost more than \$500/600. Watch what he/she does, see how it's done, and do your next demo yourself.

PUNT 2: Record several scripts at a local studio and have the engineer produce them with music and SFX. Record others at another studio. You will get different sounds, and different direction. The engineers know what the agencies are looking for in sound, read, pace, etc. since they do this every day.

You should have 8 to 10 spots on your demo, and it should be :60. Anything over that is seen as "not professional". And master at 128kbps mp3... industry standard, so it can email and download quickly.

WEBSITE:

Now that you have a flashy demo you are proud of, you need a platform to sell it from. And that would be your website. And just like demo houses, there are any number of website developers who are more than happy to take your money and keep you on the hook for any changes you want to make....if you can ever find them again.

And once again: LEARN TO DO IT YOURSELF!!!!

There is a program I use, Everweb, (Mac only, \$85) that is drag and drop simple. There are others, (I have heard good things about Wordpress) but I can't vouch since I haven't learned them, and frankly, have no desire to do so.

So just like you did on your demo, go look at everyone's voice-over website, get some ideas, get a program, get some graphics, figure out what you want to say about yourself, type it out and attach it to the home page. Try to put as little on as possible: once again, Ad guys have the attention span

of sand flies: (I know this first hand: I started my career as an agency copywriter) so just the facts, Ma-am.

Nice Graphic to catch your eye. Your name.
(clever byline optional) Where to reach you.
Email / cell / agent. Mp3 Demo.

If you want to put Bio, use a second page with a link on the first page.

Buy a URL from Godaddy: (\$14 a year or less)

Buy hosting time from Godaddy(\$75.00 year or less) I like these guys because they have great customer service: if you have a problem, they fix it right the first time. (I know, somebody else's slogan)

Get a FTP host, like Cyberduck (free) or one of many others to transfer your files up to your hosting site. Check your website on computers / mobile, etc. Tweak.

Now you can change copy, add pages, change your demos, etc....without having to chase down your web guy who is now in Colorado working for Godaddy anyhow, but doesn't have time to work on your site: "Maybe next month..I'm out of red bull and Cheetos right now."

All of this is a shortcut to using pros who can admittedly do a better job.....but learning how to do your own demo and websites will save you a poopload of money you don't have when you are starting out. Just like with equipment, as you gain experience, you will see where and what to invest in to continue your career. You may find a demo producer or web developer who can produce your vision of where you want to be, when you have gone as far as you can doing it yourself.

Learning curve.

And it never hurts to learn the basics.

A FINAL WORD:

Now that you have your feet wet and are all excited about using your new studio and all the tricks you have learned, remember, it is all to make your reads sound better....that is the point here. Once this all becomes second nature, you will be able to concentrate on your read, which is what you are here for....not to become a recording engineer at a big studio.

Well, I suppose you can, but believe me, it is no life for an actor, watching other people recording while you are stuck behind a console, knowing full well you could have done a much better read, and absolutely KILLED IT on the first take..... Sorry..... Projecting again.

If you'd like, pick up a copy (at the iTunes book store), or I can send you a PDF of the Home Studio Handbook, a Home Studio Guide for Voice Talent which goes into greater detail about what I have covered here.

Remember: Try Something, mess it up.

Then look at this book to see how to do it.

Then go to the manual to see how to do it.

Then go to Youtube to see how to do it.

Then go back and try it again until you get it to work.

This also works for assembling Ikea furniture.

Have fun! And go out and nail that audition!

Best,

Nick Sanabria.

ACKNOWLEDGEMENTS: SPECIAL THANKS

Jim Doherty: recording engineer / director / voice-talent, creative partner, and colleague for 20 some years, whom I had the distinct pleasure of working with on a daily basis.

Debby Kotzen: Agent: Naked Voices (Chicago)

Kate Bacon: Management: WellDunneTalent

Bruce Bendinger: Copyworkshop. Ace Creative Director, Educator, Author. Fun projects. Showed me how advertising should be done.

Ken Nordine: (Word Jazz) whose incredible talent and home studio were an inspiration for me to attempt my first studio build.
(You should look up his work; his creative use of words and sound will open your ears to what Theater of the Mind can be)

John Metzger: Studio Designer / Builder. Chicago Media Works. John did the heavy construction on one of my studio build-outs.

It was as solid as a bank vault, and wanted to thank him for his terrific work. Many of the construction techniques in this book were from observing his work.

Linda and John Kelly, who helped renovate and soundproof my first downtown studio. (learned a lot of construction tips from them, too.)

And a big thank you to Danny Gustafson and all of our clients who were willing to take a chance on some of our hair-brained ideas. (which all worked out great....except one) Who supported us (literally) and kept coming back with incredibly fun projects. (well, except that one)

And all the talented voices who came through my studios, who made every day of my career a joy. (and provided some great stories, too.)

Rose Abdoo, Kate Burns, Mike Bacarella, Jim Barton, Kristie Berger, Sherri Berger, Sue Berg, Jerry Bloom, Paul Bolger, Linn Burton, Margaurite Bynum, David Bryson, Shelly Carlson, Bryon Carmody, Adam Conway, Tom Cramer, Michael Freeman, Charles Fuller, Shirley Hayes, Tracy Johnson, Rich Koz, Patricia Martinez, Kevin McAllen, Jonathan Menchin, Ralph Metz, Nina Montelione, Paul D. Morgan, Lisa Murray, Rose Nadolsky, Jamie Newell, Mike Noonan, Gary Price, Tony Pesce, Christine Rosencrans, Allen Rubin, Lisa Sesma, Margaret Scott, Cappy Silver, Emily Simer, Kim Spelman, Lesley Spencer, Alan Stagg, Darren Stephens, Laura Stigler, Tom Test, Lisa Taylor, Nancy Veselica, Ellie Weingardt, Fred Young, Tim Walkoe, Darryl Warren, Teri Wilder, Jeff Zimmerman, and Mike Ditka, Steve Carell, Alice Ghostly, Orion Samuelson, Emilio Estevez, and many more talented voices whom I may have overlooked unintentionally.

The orchestra is starting to play; thank you all again.

LINKS (YOU MAY HAVE TO COPY AND PASTE THESE INTO YOUR BROWSER)

ADK mics: www.adkmic.com Great sounding line of mics for VO and pro studio applications. Top notch sound; good company.

Ken Goerres: EXAKTE: Ken is an audio genius and Grammy nominated producer/engineer; I use his near-field monitors, some of his high-end wiring, and he showed me the double-knit/703 / frame absorber design (and Luanne bass trap design) which has made all of my studios sound and look fantastic. www.exakte.com and www.audioconductors.com

Sweetwater: This is a great resource for gear, software, and they have terrific customer service. If you have a problem, they have tech support. Can source an entire studio from computer to microphones, monitors, to sound attenuation products. www.sweetwater.com

ATS: acoustic products: good source for Owens Corning 703 rigid fiberglass, or generic equivalent. Other useful sound attenuation products. www.atsacoustics.com

Guitar Center: Many locations, good source for mics, monitors, headphones, plug-ins, sound attenuation. www.guitarcenter.com

Vogue Fabrics: Great source for double knit polyester: low prices, large selection of colors. www.voguefabricsstore.com

The Copy WorkShop. This is a very smart group of people who publish books on advertising. Several are practically industry bibles. Get one or two. Or at least go to their website and listen to some classic radio commercials. Pick up some copywriting chops too, so you can save your client's half-baked script. www.adbuzz.com

Jordan Reynolds: California Voice Talent/Musician/home studio owner who has a very entertaining and informative video tour of his studio; and a nice little breakdown on building absorber panels (slightly different than the ones outlined in the "BOOTHS" chapter.)

Good info, someone you should know. www.jordanreynolds.com (click on blog, scroll to down to video tour.)

cont.

LINKS, CONT. AND SOME SUGGESTIONS, TOO.

Greg Bennett: www.ethanhartguitars.com For those of you who are musician/ guitar players, Greg has a beautiful line of guitars you should check out. These things could put Viagra out of business. He also invented the glider capo, which may be one of the cleverest capo designs in history.

www.youtube.com/watch?v=Bo_FVbZSww

Joy Tillis: WJOY music clearance/licensing: www.wjoymusic.com
If your client wants to license a pop song, Joy is always my first call.

Kate Bacon: WellDunne entertainment marketing: TV, promo, cable. blog.welldunnetalent.com This newsletter has a ton of information on who is moving to what position at what station, job openings at stations; newly hired station voice talent (promo/topical/image)

GENERAL ADVICE:

Linkedin groups: You should get an account and sign up for Small Recording Studio Networking (for studio tips) and Voice Over Professionals. Many smart opinions offered and debated on a variety of subjects. Check into other groups too, and check into some of the Facebook group discussions on studio procedures, voice-over tips, etc.

Youtube: there are a ton of videos on constructing bass traps, sound panels, making a cheapo booth to a pro booth with a floating floor.

Watch all of them. You will get some great ideas, construction tips, and know what to expect when you build your own.

Mix Magazine, Electronic Musician, Pro Audio Review, etc. Industry magazines that will alert you to new gear, new programs, new plug-ins, that may help you work faster and sound better. Get a subscription. These magazines are like the Chadwick's catalog for gear sluts.

AES, NAB, Namm, etc.: Trade shows. Get a pass from someone and go. The latest breaking technology is shown at these shows. You may be able to score a beta version either free, or at a greatly reduced price. Sometimes. (always ask)

Visit as many recording studios as you can. You will pick up some great tips on design, placement of mix position, absorber/diffusion arrays, even decorating/interior design elements. As they always say in Hollywood, "Steal from the best". (I'm just talking ideas here.)

One last piece of advice that may get you as far as any tips in this handbook: NETWORK!!!!!!! You will get more work from people you have a relationship with than from any other source. There are a ton of people in this business and personal connections are the only way to separate yourself from the herd. (ok, "heard"). BUT you still have to sound as good as the best. And good luck to you; this career can be as much fun as you can have legally. Stop reading. Go make a new contact.

GO! (I heard a reflection, you still need to tweak your room.)

ABOUT THE AUTHOR:

Normally these are written in third person because it is a bit embarrassing to toot one's own horn, but times change. BFD.

I started in the business doing home recording in the analog era, when you had to make crappy sounding equipment sound as good as equipment you couldn't afford. You learned a lot of tricks, swapped ideas with other guys doing recording, and watched closely when you were actually in a real recording studio.

I am a guitar player; backed up Tanya Tucker on one of her early national tours. That led to a job at Leo Burnett as a copywriter. (It's too complicated to get into) Was a second chair voice-over fill-in at Burnett, and got interested in the voice-over business. Took some improv classes at Second City. Built a home studio in my apartment. Got married, moved to a house, built a second home studio and then gained enough clients to move to an historic downtown Chicago studio that had been vacant and needed major renovation. Ken Goerres (Exakte) taught me a bunch of guerrilla studio techniques that allowed me to improve the sound and the visual impact of the space for a very reasonable price. I hired an engineer, Jim Doherty, who is a skilled director, recording engineer, and was a creative

partner in the business of making sound. We built a second studio after the first building was turned into a Hard Rock Hotel; we were at the second location for 12 years until the business shifted to home based studios. Built a home studio from scratch using most of the techniques outlined in the BOOTH chapter. And it sounds as good as the downtown spaces.

I have picked up a tremendous amount of information from friends; engineers, studio designers, construction guys, and Ed at Harold's True Value Hardware (who knows tools like nobody else).....and hope that some of what I have learned will be of benefit to you.

If you must know more, go to my linkedin page, www.linkedin.com/pub/nick-sanabria/0/403/758

www.nicksanabria.com (voice over)

www.radiocityrecording.com (studio / music)

www.yourpersonalannouncer.com (300+ silly announcer lines app for iPhone / iPad)

And www.homestudioconsultants.com if you get stuck.