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Chapter 1 : Building a Home Recording Studio on a Budget - Home Music Studio 1

After scouring the internet, in an attempt to find the absolute best deals out there, I constructed a simple working studio with a total sticker price of just over dollars. Common recording advice states that since DAW software is resource intensive, you want to buy the fastest computer you can.

This guide will cover the most important pieces of recording equipment: Computers and iOS devices for recording. Nowadays, most recording setups are based around computers. At one time, it was best to use a high-powered desktop computer for the job, but now, technology has advanced enough that even mobile devices like smartphones can get the job done. And laptops are commonly used as the central unit of a full-scale home studio. For those who want to create a mobile studio, iOS devices iPads, iPhones, and the iPod touch are a great option. There is plenty of gear built specifically for these devices, which makes it easy to plug right in and get started. There are hundreds of apps available to do everything from simply tuning your guitar to creating full-fledged compositions using your iOS device. With an iPhone tucked in your pocket and a little extra gear, you can do some serious sound capture. When it comes to laptop or desktop computers, many models will work for your recording needs. While the cost of a Mac computer is typically a bit higher than a Windows PC with similar specifications, many musicians and recording engineers prefer Macs for their reliability, ease of use, and build quality. These Apple computers have a good reputation for handling recording gear well, without creating any unwanted surprises. The vast array of software that has been designed to function seamlessly with the Mac operating system is a big plus. For an affordable option in a Mac computer, beginning recording artists might consider the Mac Mini—a small, desktop box that connects to an external monitor and delivers all the features musicians love about Macs. Featuring the OSX operating system, a speedy Intel processor, and plenty of RAM for multitasking power the Mac Mini is your most affordable option for bringing a Macintosh computer into your home studio. One further advantage of Macs is the fact they come with GarageBand, a basic but easy-to-use recording application with which you can create surprisingly polished music. Read on to learn more about the software to capture and edit your music. The software that musicians and engineers use for their music production is commonly referred to as a digital audio workstation DAW program, and there are a lot of different DAW options to choose from. Ranging from more basic programs such as Ableton Live 10 Intro to Pro Tools—the choice of most professional studios—there is a DAW program that will match your music, budget and skills. Most digital audio interfaces explained in the next section often include some basic software that should be suitable for most beginners to create near-studio-quality recordings. FL Studio Producer Edition sports a new UI that scales up or down with your screen size while delivering a robust music-production environment. Free updates for life make it a great buy. This is where the digital audio interface comes in. So be sure to check the product descriptions for these details. Built to handle the needs of anyone who records vocals and instrument together, the Focusrite Scarlett Solo 2nd Gen USB Audio Interface delivers a sweet-sounding preamp and instrument input at a great price. The latest edition improves on the excellent sound of the original with a more even gain structure that makes balancing your mixes easier. The instrument input has been upgraded to handle the hottest pickups. If you need more inputs to record vocals and instruments simultaneously, the very affordable Tascam USx08 audio interface allows you to connect up to 8 microphones and 4 instruments while offering the convenience of USB connectivity. Read our Audio Interface Buying Guide to learn more about all the options available to match your recording needs and budget. To get started, you likely only need one quality microphone that you can put to use recording lots of different sound sources. So you will want to pick a versatile model that sounds good recording a wide range of frequencies. Be sure to read specs carefully to make sure your rig will provide any necessary power. For on-the-go recording, USB microphones get their juice from the host computer or interface, making them plug and play. Condenser microphones tend to be more costly than dynamics, but in recent years, many good-quality, lower-cost models have become available. The MXL , for example, is a

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great, multi-purpose condenser microphone that includes a shockmount and a pop filter. This quality condenser mic can plug right into your iOS device from which it also draws its power and can record a wide variety of instruments and vocals with great results. It also comes bundled with some great software from brands like PreSonus and iZotope. There are also many dynamic microphones suitable for the beginning studio setup. The Shure SM58 is a good choice for vocals and will also serve double duty in live performance. The Shure SM57 is a fixture in just about every pro recording studio for capturing instruments and vocals and is often used in both live and recording settings to mic guitar amp speakers. The Blue Spark SL Microphone provides classic, transparent sound and plenty of versatility, with a high-pass filter and dB pad, making it capable of accommodating loud vocalists, instruments or amplifiers with ease. To learn much more, read our expert Microphone Buying Guide.

Headphones for recording When you listen back to your recordings, you want the sound to be as accurate as possible so you know what you want to change in your mixes. A good pair of studio headphones is often the most cost-effective option for beginners. Their sealed design prevents pre-recorded sound from leaking into the microphone as you monitor the backing tracks while overdubbing new parts of the music. Studio headphones vary greatly in price. Plenty of good, accurate models are available within an affordable price range. Learn much more about choosing the right pair with our Headphone Buying Guide.

Studio Monitors The best way to get accurate playback is through speakers specifically designed for the job. These speakers, referred to as studio monitors, come in different designs for different listening environments. In large studios—where the monitors might be positioned some distance from the recording engineer—mid-field or far-field monitors would be most appropriate, as they are designed to produce an accurate sound at a distance. Near-field monitors, on the other hand, are designed to be positioned directly in front of a listener, so they are the best kind to use in small home studios. Dig deeper with our Studio monitor buying guide. For a beginning recording engineer, a small set of near-field monitors designed for desktop use are a good option, as they fit take up little space while delivering an accurate representation of your recording.

Can you mix using just headphones? Check out our tech tip!

Studio subwoofers Adding subwoofers for studio monitoring is not always a necessity for recording beginners. However, by adding a more accurate response at low frequencies, subwoofers can enhance the results of your mixes, no matter what type of music you are recording. Of course, if you are planning to record bass-heavy music, such as hip-hop, a subwoofer might be a more essential consideration. To learn much more, read our Studio Monitors Buying Guide. In fact, there are some excellent standalone recorder options that provide great portability, extensive features, and excellent ease-of-use for very reasonable prices. Or, if you want a straightforward device for on-the-go field recordings, the Zoom H2n Handy Recorder is a perfect fit. The Zoom H6 Handy Recorder is a complete six-track recorder in a pocket-sized package. As an alternative to making individual selections, you may want to consider a recording package. These packages also save money on your total purchase price versus buying the separate components.

The On-Stage Stands Workstation is a good choice for the beginning studio, providing surfaces to hold your audio monitors, computer display and keyboard, and other recording gear. It can be assembled in two different ways to match your workspace and preferences.

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Chapter 2 : How much does a recording studio cost to build?

Now that the computer is out of the way, let's concentrate on audio interfaces. Remember that we've only got a budget of \$1, I cheated and didn't include the computer in our budget, assuming that you either had a good enough computer to start with, or that you could increase your budget to cover your computer costs.

Explore Our Voice Actors Setting a small home-based recording studio is becoming a mandatory step. Seriously, being a freelance voice talent with easy access to record anytime is essential to being successful in the modern age of voice acting. Thanks to the growing availability and use of in-home recording systems and technology, voice talent are now, and have been able to for much of the last decade, produce broadcast-quality audio recordings from the comfort of their own home studios. The quality of the recordings is on-par with recordings done in much more elaborate recording facilities. Because a professional talent uses a high quality microphone, digital audio recording software and work from an acoustically treated room. Home Recording Studios Is there a significant cost to building a home recording studio? If you want to climb the ladder of success in voice-over, you need to invest in the tools of the trade. The good news is that the overhead is relatively cheap compared to other business start-ups. What are the must haves? As mentioned earlier, we are assuming that you have some basic technology in your home to begin with such as a desktop computer, be it a MAC or PC, and a high-speed Internet connection. Following those items, you will need: The type of mic that works best for your voice and your budget will inherently be different from one person to the next. Think of it like trying on shoes. Go to a music store, tell them that you need a voice-over microphone, and ask if you can test 4 or 5 out to see which one sounds the best within your budget. Just keep in mind that the best does not necessarily mean the most expensive. It is about what sounds best with your voice. For example; large diaphragm mics are excellent at picking up low frequencies such as the bass drum, bass guitar and a deep male voice. A small diaphragm mic or small capsule mic will beautifully pick up higher frequencies such as an acoustic guitar, cymbals or the treble of the female voice. Every microphone on the market has a property called directionality or polarity which defines how sensitive the mic is to the ambient sounds around it. A Cardioid mic picks up the sound directly in front of it while limiting the ambient noises other mics pick up. This is the best directionality type for voice-overs. A Hypercardioid mic works in the same way but picks up even less ambient noises. Microphone kits are wonderful for those just starting out as they will include your microphone, a desktop stand, shock mount, XLR cable and a pop filter all in one box. Pop Filter A pop filter or pop screen is an essential part of your microphone kit. Audio Interface An audio interface is a piece of hardware that enhances the sound of your voice as it travels through your microphone, down your cables and into your computer. A good one will have the microphone preamp boosts sound as well as Phantom Power direct current voltage that powers condenser mics built right in making it compatible with whichever microphone you select now, and if you choose to upgrade your mic in the future, it will also work with high-end microphones like the Neumann TLM Recording and Editing Software If your mic is the most important piece of equipment, your recording and editing software is second. It is what will allow you to enhance your voice-overs with music, sound effects and edit out pauses and loud breaths. This is what will allow you to produce broadcast quality voice-overs for your clients. Here are our recommendations: Audacity is free, easy to use software you can download right to your computer. It is compatible with both Windows and MAC, and other operating systems. GarageBand comes free with most MAC computers and is an excellent choice for experienced or aspiring musicians. It allows you to sound like a rock star and even record multiple tracks at the same time. Adobe Audition is widely held as the preferred recording and editing software for professional voice talent. It also has excellent effects features that give voice-over tracks a rich, nuanced sound of the highest possible quality. This is professional grade at a reasonable cost. Pro Tools is designed to meet any audio recording need and will satisfy any creative endeavour, whether that be voice-over or music. What are the nice to haves? Movie productions and televised cartoons are generally recorded at full

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production studios in major city centres. For most voice-over purposes treating a room for sound absorption controlling echo, slap, and boom in a room is all that is needed and can be improvised to high audio standards using elements already available around your home. Here are a few tips on creating the ideal studio environment in your home. Take a look at the rooms in your house. The ideal room is cozy but comfortable to stand in and you should be able to move around a bit. A room without windows and a heavy door are best. If it has doors and windows, these areas are the most important parts of the room to treat as those are where the majority of the sound quality will be lost. Install insulation over windows, walls and the ceiling. Cork, rubber, or foam insulations are good options and are readily available from your local home building store. Large pieces of PVC piping strung up around the edges of the room also help to absorb sound. Alternatively, hang heavy fabric around the room that you may find in your storage room such as thick moving blankets or you could use several layers of heavy old curtains. If the room is cubic, hang fabric in the corners to create more of a triangular shape to the ceiling to lessen echo and boom. Some home based studios simply push mattresses or couches up against the walls to help create density and absorb sound from bouncing around the room. How does the clap test work? Stand in the room and clap your hands. If you hear an echo, more sound absorption is needed. The floor of the room should have thick carpeting as well. In fact, carpeting the entire room including the floor, walls, door and ceiling is an alternative option to cork, rubber, or foam insulations. Ask your local carpet store for their miss-cuts for an affordable, albeit colourful, option. Within it contains many useful sound absorption items, such as linens and clothing. If you create your recording space in a closet, remove the existing door and replace it with a heavy fabric secured with Velcro to create the best sound absorption for the doorway. Now for the exciting part! We are going there next!

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Chapter 3 : How to build an affordable recording studio | Creative Bloq

The DAW (Digital Audio Workstation) is the software used to record, edit, and mix music on your computer And the Audio Interface is the hardware used to connect your computer with the rest of your gear.

OK, so you are new. You have an idea of making and producing your own music. And you feel inspired. Perhaps you are a seasoned musician, tired of paying someone else to produce your music. Perhaps you are building a studio to record your band. Or you are into producing audio for video, film, podcasts. Maybe you have nothing more than a spark, the urge to create, a desire to fulfill a sense of artistic vision. You are welcome at the lab. You have found the right place and good people. We are here to help you build your own recording studio, your own laboratory for creative projects that works perfectly within your needs and budget. All the rules have changed in the past few years for putting together a recording studio and they keep changing. It used to be that you needed expensive multi-track recorders and mixdown machines, a roomful of outboard gear and processors, and more cables than you would want to count. Of course, you still can make a large studio with tons of outboard gear which sounds better than ever , or you can let computers and modern digital multi track machines replace hundreds of functions that used to require separate hardware units. We are not talking about a cheap, hissy, unprofessional sound, like we used to get with old 4 track cassette studios. Those days are gone. With the dawn of modern recording software called sequencers , with their full-featured digital mixers built right into software, you can expect your sound to rival the big boys in the studios downtown. For a modest investment in microphones, preamps, audio interfaces and software you can be well on your way. No, my friend, it does not work that way. You need to understand music to write music and you need to know how to use the gear or software that you have as tools. Talent is important, and there are many talents required to make a full production. Basically, we consider the studio itself to be a musical instrument. Like any instrument, you get good by practicing, trying different things, experimenting, mimicking, tweaking, mixing You supply the creativity, your musicality, your quest for musical beauty. You capture your tracks then tweak it down to a work of art. This process is the focus of TweakHeadz Lab. The goal of the studio tweak is to create art in its highest form of expression. The great masters of the recording arts learned their techniques by devoting their lives creating, capturing and tweaking sound. These secrets are hard earned, and used to be passed down from the pros to their apprentices at big studios. You would set up microphones, sweep the floor, run for coffee and take out the trash, then, one day they let you help them at the console. Those days are almost gone. TweakHeadz Lab is the modern day equivalent of that apprenticeship. If you read my articles carefully you will find many secrets of audio production. Enough to get you on your path. In your recording studio, you get to have three roles--musician as creator and performer , audio engineer, and producer. What stands between you and the masters is simply knowledge and experience. Their knowledge translates directly-- the tools in the modern software studio have the same names and functions as the classic hardware machines in a pro facility and are used in the same way. The big studios downtown have compressors, limiters, vocal processors, delays, reverbs, equalization, multi track recorders, computer automation and massive consoles that hook it all together. If you have a modern software package or hardware digital multitrack, you have all these tools too. They know exactly when and how to use EQ to clean up a track, when to use compression, the precise place to put reverb in the mix, how to record vocals, guitars, drums and how to level everything to make a stunning audio image. We will tell you the things that you absolutely must know for music production in a clear, simple, even entertaining way. We are not flying to Mars here except maybe musically , so we can have a little fun. After all, our music is something we want people to enjoy. You need to know how to tweak your computer as well as you know how to tweak your musical score. How to support Tweakheadz. To those who have supported the TweakLab in the past, you have our thanks! With your help, this site has become what it is today. Buying at zZounds is better than buying at many other stores. They have an easy return policy in case you run into trouble with your purchase and a

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lowest price guarantee. What could be better? You get a great store, the right price, EZ returns and you support one of the best user supported sites on the internet. Our fans tell it best. You are the Alton Brown of music engineering! Consider the Guide as a classroom and each article a lesson. The Guide is a series of articles. It starts with the core basics of modern music technology and progresses through advanced concepts of studio production. There are approximately 75 classes which you can see in the guides menu. MIDI is a form of computer data that keyboards and computers can send back and forth that turn on notes. You can write musical notes on a computer screen and the data turns notes on and off on the keyboard or sound module. Likewise you can play notes on your keyboard and the computer will "record" these commands to turn on and off notes. What is a Digital Audio Workstation? There are editing tools that let you control every aspect of the production down to very fine details. Effects and processors of high quality are increasingly being added to these applications. Modern DAWs now can fulfill many recording studio functions that were possible only in expensive studios a decade ago. What is a multi-track recorder? A multi-track recorder is a recording device that allow you to record audio directly to separate tracks. Once all the tracks are added, they can be mixed down to a stereo master recording. The major difference between a hardware multi-track recorder and a computer sequencer is that the sequencer can record and edit MIDI data and the multi-track cannot. What is a Recording Studio? A Recording Studio is a collection of devices that allow you to capture different "takes" of performances and assemble them into a finished audio product. A typical studio has microphones, multitrack recorders, mixers, instruments, and audio processors. With the exception of microphones, most every piece of hardware from a traditional recording studio has a software counterpart.

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Chapter 4 : Tweakheadz Â· Guide To Home And Project Music Studios

Thanks to constant advancements in digital technology, everyone can record at home, and everyone can own a studio. But while many settle for an eggbox-clad bedroom setup (a myth we'll debunk later), there is another way Build your own professional-quality recording studio. Yes, it's a Mohammed.

It is important to elevate your studio monitors because in order to get the best sound, your speakers should always be at ear level. Studio desks are also designed to hold your gear. If you have a lot of hardware, it would seem unreasonable to leave it all out on your desk. This is largest reason why the idea of building a DIY studio desk is so attractive. The best part about all of this: The most important part of this whole process is to take your time and not rush on any steps. In this article, I have compiled 5 of the best home recording studio desk plans on the web. Nothing listed here will be too expensive. If you pick the right wood, no cutting is involved. Assembling this desk is very easy and will take less than an hour. There are no legs or support to this desk. Everything is held into place by brackets. The materials can be bought very cheaply at almost any hardware store. Brackets and plywood are the main ingredients to this build. Take caution in selecting your brackets! Make sure it will fully support the weight of all your gear. Your whole desk collapsing with all of your equipment on it can be both a traumatizing and expensive experience. Overall, this build is excellent for a complete beginner, somebody who is on a tight budget, or anyone who has limited space. His DIY recording studio desk is simple, sleek, and best of yet, cheap to buy materials for. Not sure if it will come back. There are both good news and bad news for this studio desk plan. The bad news is that this plan costs money. So is this plan worth paying for? If you like the design of this desk based on its pictures, it is worth paying for. Like I said, the instructions are very detailed. There are 14 pages that will tell you everything you need to know if you want to build this desk. It consists of two levels: An upper shelf and of course a desk-top. Check out my article on the best studio desks for a good selection. Along with the material list and two diagrams, Larry also shot a video explaining how he built the desk. I liked the fact that exact measurements were supplied in the plans. This desk is made to hold all of your studio hardware that you might have. It is especially made for racks. The second shelf of this desk has plenty of room for two studio monitors and two computer monitors. This desk is most importantly strong and solid. Its made out of pine, which is a fairly inexpensive wood, but provides the strength you need to support heavy equipment. Two of them are diagrams and the last one is a material list. My favorite part of this desk is its huge slide-out tray. It is perfect for storing your midi keyboard or synthesizer. Underneath the shelf is a perfect area for any hardware racks you might have. This desk consists of pretty basic and inexpensive materials. It is mainly made out of two-by-sixes and plywood. It appears the JackDanielsRecording website is down. I can no longer share the link to this build. This bar looks great and is built to last. It is also the most expensive build in this article. The first part of this desk that I noticed was its dedicated storage for racked-equipment. This desk has plenty of room for them. The build quality of this desk is superb. It gets its strength from the red oak it is made out of. The desk gets its dark color from an ebony stain with polyshade. A part about this desk that I liked was that when you place your studio monitors on its shelf, they are at a perfect height. I also liked that the studio monitor stands were separate from the main part where your computer monitors would go. Rather just buy a desk? We still got you covered! Click here to read our article on the best home studio desks you can pickup on Amazon. Summary In conclusion, there are many different recording studio desk plans out there that each offer a unique style. Building your own desk is both a fun and rewarding experience! If you have enjoyed this article, you might also want to subscribe to our mailing list.

Chapter 5 : How to build your own studio in 11 easy steps | MusicRadar

Building a home studio is overwhelming and expensive at first. So start with the basics. Building your bedroom studio setup as your needs and skills grow is your best bet.

How much does a recording studio cost to build? Have you ever wondered how much it might cost to build your own recording studio? But, if you want to know the inside answer from professional audio engineers and music producers, on how much it costs to setup your own home studio, or a professional studio like theirs continue reading or listen to their own words here: Blige, Kelly Clarkson, Usher, Dr. Home Recording Studio A home studio is a great way for new artists to document songs they have written, and share them with others. Each mic should be used for unique recording situations. Audio Interface An audio interface allows you to plug in your instruments and convert the analog signal into digital information for your computer to read. Digital Audio Workstations Digital Audio Workstations DAWs allow you to edit, add effects, and mix your recordings, then export your project to specific file types for sharing. They allow you to explore a range of digital software instruments. Studio Monitors Not all speakers are right for critical listening. Studio monitors have a flat, balanced response which allows you to mold your frequencies to perfection. Although, not unheard of. It has a lot to do with the room in which you record. And, the experience of the engineer. All recorded live, at the same time, in the same room. My favorite way to record a band is to put them in the room and put microphones up in a way that works and have them play the song. That is hard to do if your computer and interface can only handle 2 inputs at once. A pro studio can be put together with just an MBox and a laptop. There is nothing wrong with being able to produce great music or work on film and TV shows at home with a simple setup. With that said, if you are wanting to have a facility to bring an artist into and have them be creative and comfortable, having a world-class facility can be very expensive. These are usually much more affordable, but give you less options for quality. You can do a lot with a computer and a good set of monitors. If you want to track vocals you need a nice mic and a decent vocal chain. If you want to track drums you need quite a few mics and pre amps, a multi-channel converter, and a good sounding room. Hundreds of thousands if not millions. There are so many great studios struggling to keep their doors open, most studios will give freelance engineers a cheap rate just to keep the rooms booked. Find a studio you like, build a relationship with them, the more projects you bring in the more flexible the rates will be. Location Location is key. This would be considered a small studio. Sound Management Every room has problem spots, and every room is unique, so setting a room up for optimum listening conditions can get expensive. Costs vary from a few hundred to thousands plus. Spend time and money on creating the atmosphere. Go paint the walls the right color. Hang the right pictures. Buy a few simple acoustic soundproofing that you can put together yourself. Put the right couch in there. As far as the gear it really depends on the kind of music guy you are. Like, my setup at home is tailored to what I need most from it, instant access to laying down ideas. You have to decide on a few things. How long are you going to stay there? So, you know, it depends on the term of your loan, but say you did a year loan. So, what is that? You can book that studio out. You got to book out that room out at least 20 days a month, just to cancel everything out. So, do you want to build a commercial studio? Like, people ask me that question a lot. Additional Equipment Most professional studios have a large inventory of gear readily available. General Upkeep Upkeep includes electricity, insurance, internet, phone, office supplies, and amenities for clients bottled water, food, etc. Thinking about building a recording studio? The best way to learn how gear works and how best to use it is from an audio professional. Now you could beat your head against the wall trying to find these experts and get them to sit down and talk with you OR you could get in touch with us, the Recording Connection. We knock on doors for you so you are on the inside dealing directly with a bona fide audio engineer from day one. Take our survey to find out if you have what it takes to succeed in the music business! In fact, we only take about 1 in 20 applicants. With the advent of digital music, recording studios are sometimes thought of as being industry dinosaurs. The entry level for setting up your

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own recording studio has become far less expensive than it was just a decade ago. So, how much does a home recording studio cost? You can use a new laptop with a few microphones as your recording studio, or you can go all out and buy soundboards and synthesizers. The first step towards building your own home music studio is examining the room and deciding what can be done with this. If you are setting up the recording studio in your room or in your basement, it is important to remember this room must be acoustically sound. This all makes a huge difference on the record. It is suggested that everyone go out and get acoustic foam and stick it on the walls to provide proper acoustics. There are other additional costs to consider. Will you be giving the room a makeover before moving equipment in there? If this is your own personal studio, this may not be necessary, but if you will be renting out your studio, re-designing it can help bring in clientele, who will be looking to check if the studio looks professional or not. You can also keep instruments handy for yourself or your clients to use. You may skip out on this particular section but sometimes, musicians will forget their instruments and have to borrow them from the studio. There are also times when artists may want to tinker around with an instrument during the recording process. No matter how much a music studio costs, it is easy to make a profit off of the studio. As long as you have the right technology to make artists sound better, artists will keep coming around.

Chapter 6 : 5 Awesome Recording Studio Desk Plans on a Budget

Clearly the theme throughout much of Graham's advice is to keep it simple, start small, don't spend too much, get to work, and have fun! As you record more and more at home, you'll discover ways to solve problems WITHOUT spending money or adding gear (though a nice preamp does sound pretty good about now).

What do you want to become? Music is the lightest form of entertainment besides writing, and so has been a natural pioneer in technologies limited by storage size. And in turn, technology has inexorably flattened the costs involved in recording and producing music — all the while, adding new innovations to the art. Twenty years ago, building yourself a home recording studio was an involved and awfully expensive endeavor. But with just a laptop, a digital audio workstation like Ableton or Logic, and a good set of speakers, some artists can produce music on at a professional level. And from my vantage point, music is experiencing a real renaissance as tens of thousands of artists create a screaming variety of music across dozens of genres. My own recording studio is now made up of a couple microphones, an audio interface, my laptop, DAW, speakers, and a couple of MIDI controllers. Not long ago, this would have been nowhere near enough to create music that sounds any good. But technology transforms music production with startling speed. As prices have become low enough that kids can afford to set up their own studios — and be wildly successful bedroom producers — the amount of people buying audio gear has skyrocketed. Manufacturers have jumped on the trend. Miraculously, the number of audio products has continued to grow exponentially even as the number of people available to purchase them has multiplied. Luckily, building your home studio is simple. Some pieces of equipment are necessary across nearly all studios. This is important because your budget is going to restrain what you can do with your studio. Building a studio can come down to two basic principles. Your studio is only as good as the weakest link. This is the most important rule. No matter how good the rest of your studio, your sound and production will ultimately rest on the weakest part of your setup. That might be a piece of gear, like a bad microphone; it might be the room acoustics; it might be that your singer is awful; or it might even be you. The key is in understanding where the weakest link is and working to fix that first. This rule is best explained using audio — though it applies equally to producers who work purely in their recording software. All audio in a recording studio is captured in a sequence of steps called the signal chain. From this point, you might apply more processors, like compressors or equalizers, that still count as parts of the signal chain. Sometimes, you simply need to work on your production skills; other times, you may need to work with better artists. The signal chain starts at the source. When you look at recording equipment to purchase, look through your signal chain for the weakest link. Spend as much as possible on as little as possible. This is the companion rule to 1. If you limit yourself to the pure necessities — wherever you find weak links in your signal chain — then your budget stretches much further. The microphone is much further to the front of the signal chain. If your source material already sucks by the time it gets to your DAW, then no matter the brilliance of those plugins, your material is still going to suck. Rule 2 applies to more than the amount of gear you have. The price of your audio interface is essentially divided across the number of channels. Think through your needs, minimize as much as possible, and then spend as much as you can on that minimized end result. The Bare Essentials 1. You almost certainly already have one of these. The short and sweet test: The long, frustrating test: Digital audio workstation Digital audio workstations are where the real work of music production occurs. Inside this software, you can record, process, and edit audio. This audio might be recorded in your studio, or you might download it as samples, or you may create audio with software synthesizers. A brief breakdown of preferences: Speakers or headphones Ah, monitoring: Perhaps the most important part of production and mixing is accurately hearing what your music actually sounds like. Yet people always seem to skimp on investing in professional headphones or studio monitors. But truly, a great monitoring setup can cause an incredible improvement in the quality of a home studio. A proper set of studio monitors is the solution. Some electronic artists get by with just these three elements in the studio — plus a healthy dose of

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software plugins and synthesizers. But what if you do need to record audio? Audio interface The most important functions of an audio interface are to amplify weak voltages transmitted by a microphone and to transform sound from voltage to digital bits for your DAW. My personal preference is the Apogee line. The problem with high-quality microphones is that they pick up the soundscape so well. At this point, your cables are far from the weakest link in your audio chain. A good couch, a couple of chairs, and some decent lighting and decor goes miles towards getting people comfortable to perform or settle into a writing and production session. For nearly anyone recording, mixing, or mastering audio, my next step would absolutely be to figure out your home studio acoustics. Daily Music Career Info!

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Chapter 7 : The 9 Home Recording Studio Essentials for Beginners

Buy an audio mixer. A mixer is an essential piece of equipment for any home recording studio. The mixer handles all your inputs (such as microphones, guitars, and keyboards), allows you to adjust each input's settings, and routes the output to your audio interface and into your computer.

In this post you will learn several tips to building a home recording studio on a budget. These two areas will become the foundation to understanding home music studio design. This includes keeping unwanted noise out like the neighbors barking dog as well as isolating one recorded source from another. Sound absorption is the ability to control the decay or bounce of any audio source within your home music studio. As a general rule, the larger the space and the smoother the surface of the walls and ceiling, the more sound absorption will be needed. Sound isolation Building a home recording studio on a budget can require a great deal of creativity. Consider your studio space and what sources you intend to record. Is it in a basement? What rooms are above your space? Where are the windows or possible isolation issues that could come from outside? Think through the audio you intend to record. Percussion and acoustic drum sets often require the most isolation as they typically produced the highest db levels. Take a look at the image below for a general purpose and inexpensive design. Isolation is best created by high density material and the elimination of vibration. In the above design, drywall and insulation are used to create high density in a small space. Two or more walls like this can be created and attached at the corners to provide a free-standing isolation option. If the ceiling in your space has considerable noise bleed through, both in and out, an R or better insulation may be helpful to install. Again the idea here is to create as much density between your recording sources and unwanted noise as possible. Drywall is another inexpensive ceiling option for building a home recording studio on a budget. Sound absorption The next major consideration to building a home recording studio on a budget is sound absorption. High locker room shower. Sound, especially at higher frequencies, will bounce off most smooth surfaces. First consider what is in your room. Is the floor wood, cement or any other smooth surface? One affordable fix would be to attach egg crate foam to the walls itself. Studio foam panels can be purchased but they can get very pricey. Use a hot glue gun or staples to attach them to the wall. Hopefully you found some value in these tips to building a home recording studio on a budget. Do you have any more ideas I may have missed?

Chapter 8 : The Super Cheap Recording Studio for Broke Musicians

This article will teach you how to build a basic, but high quality in-house audio recording studio. And while it will record sound effects and music, its main goal is to record the human voice for narration, voice overs, client presentations, and various speaking parts in web/radio/tv commercials.

Your web and media projects need audio. Lance Evans takes you through the basics of building an in-house studio. Shares You can get pro-quality sound from a home set-up - if you do it right As the web and other projects become increasingly high-def multimedia based, great quality audio is a component we all must embrace. This is true with high end work, but even budget web promotions and client presentations become more alive with the addition of good quality narration, sound effects and music. Many shops think audio is either too hard to do in-house and send it out. Or by contrast that it is so easy they can throw it off to the new intern to do at his cubicle. While both extremes can be true, many day-to-day projects fall somewhere in between. This article will teach you how to build a basic, but high quality in-house audio recording studio. Understanding the basic audio studio The entry level recording studio has gotten very accessible over the years, both in price and complexity. The basic audio recording pipeline is: So a basic playback pipeline is: You certainly have a computer, software can be anything from the free Audacity program on up. You might also have a stereo and speakers from your pre-smartphone days. You also have a mic in your laptop, webcam and headset, but this should get upgraded fast. You even have a DAC: This is fine for playback, but you will want an external unit for recording that offers more functionality. If properly prepared, and if your noisy cubicle neighbours hold it down. A better option is to seek out an extra small office, or a conference room where you can set up and break down as needed. As a home studio, basements, garages, extra bedrooms and even walk-in closets work well. Choose your weapons Schematic of a basic audio recording studio Choosing the hardware to build a studio with can be daunting. We looked at, and used, a range of items from top vendors, and share our favorites. Culprits include echo and reverberation, and low-end bass resonances. Pro acoustic panels can cost a fortune. So my favorite alternative-on-the-cheap is to use 72xinch moving blankets as baffle material. Great in the studio, or on location. These are 80xinch, a heavy 11 pounds to absorb sounds, and up to 80 per cent effective if used correctly. Basic blanket set up is easy: Drape a blanket and secure with spring clamps. Stuck recording in your cubicle? Try the very affordable Microphone Isolation Shield from Monoprice. Popular brands include Audio-Technica, Sennheiser and Shure. Quality mics can cost thousands. Large diaphragm mics are traditionally desirable for smooth voices. In our testing the Lollipop delivered on sound quality, and came with a nice shock-mount suspension system, and carry case. Powerful software, with an upgrade path to the full versions. Traditional audio recording studios are a beast to buy, setup and run. But there are great simpler options Your playback system Hearing your tracks play back is a great feeling, but the hardware you choose will be important. A good set of headphones will always offer the best bang for the buck, but plan on getting some studio speakers. What kind of playback system do you want? Do you want 5. Many conference rooms are set up for it too, making it viable for quality presentations. We looked at three options: If you have an audiophile bent, the same distributor also sells the GemTune tube amps. Tube amps are considered the best, particularly with vocals and acoustics. Self-powered studio monitors Studio speakers with built-in amplifiers have become semi-standard today. We looked at two great powered monitors. The tweeter is actually stacked atop the midrange driver. Three drivers offer a smoother sound, with a crisp high end, neutral midrange, and a low end that reaches deeper with its 6-inch Kevlar woofer. The sound was so good, I was able to actually hear the compression on steaming music, forcing me to switch streaming services! A larger version, the M has an 8-inch woofer. The other monitor system we looked at came from KRK, a company that has almost taken over the studio monitor market with their wonderful VXT and Expose speakers. The sound from it was crisp on the high end, with a controlled punch on the lower end. While both speakers had great bass for their size, neither reached down to the bass floor the way a subwoofer can. With its

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built-in watt amplifier peaking at over watts , it was easily able to rattle the window panes with its tight bass. It filled in the low end wonderfully. While you are unlikely to be recording voice-overs in this range, sound effects, stock music and music you create on computer could all contain these low frequencies. Surround sound The effect of engulfing the listener in a full audio environment is awesome. If your working in your cubicle, you can set up your own 5. Plus an amplifier that supports 5. We found a way to get a great sounding 5. Great sound, and more controls than your studio will ever need. Higher units in the series have even more power and options. For a speakers we found one of the best sleeper deals in audio, from BIC America. In business since , they make great sounding affordable speakers. And can be had from Amazon. This serious surround system was far too powerful for the 20xfoot testing space, and gave a real theater sound. Summary Audio is important part of our work, and increasingly important for web projects. By tapping into the affordable high-quality tools available today, anyone can afford to set up a home, or entry-level corporate recording studio. Tell us about your studio, and share your tips in the comments.

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Chapter 9 : The Easiest Way to Make a Cheap Recording Studio - wikiHow

The nature of sound means that preference does come into play, but this doesn't mean that good studio acoustics are not quantifiable. The subject was broached many years ago by such organisations as the BBC, and guidelines laid down, depending on the studio's use, stating the reverberation times best for different uses.

From soundproofing to floating floors! Shares A garden shed is a good place to start Thanks to constant advancements in digital technology, everyone can record at home, and everyone can own a studio. So, here are the 11 most-important factors to consider when building your own studio. From soundproofing to floating floors to, er Location, location, location The first consideration when contemplating building a studio is where to build it. For example, converting a garage in your garden will probably leave a decent amount of space inside after soundproofing, with minimal noise escaping. However, a room in a house or flat may be impossible to soundproof completely and leave you unreasonably cramped after doing so. Let in the light Daylight is such an important ingredient when it comes to creating a nice place to work in, and a lack of it can make your workplace feel like a prison cell. Close and seal the doors Your studio will have at least one doorway to contend with and, like the window, this is another potential area for sound leakage. Simply using a heavy door can help, though adding weight by building a regular door up or applying a layer of Sheetblok a special vinyl material designed to act as an effective sound isolation barrier can have the same effect. Make sure each door seals completely when shut - regular sealing strips are available from DIY stores, but there are sets commercially available specifically for this purpose. Surprisingly easily overlooked, the supply of air into the studio is important, not only to avoid lapsing into unconsciousness mid-paradiddle, but also for the preservation of the recording equipment, on which moisture can collect. One final consideration is to avoid putting the inlet vent where the sun shines, so to speak, as it will pull in unwanted hot air during the summer. If space allows, run a new wall of high-density concrete blocks internally, mounted on thin neoprene a type of synthetic rubber compound so that the blocks are not directly on the floor. Tie them to the outer walls using acoustic wall ties and, once you have soundproofed the original roof using mineral wool placed between the beams and a couple of layers of plasterboard mounted on resilient channel, do the same thing again on a second roof mounted to the new internal wall. These internal walls can then have 2x2 timber attached vertically, again mounted on neoprene, and after pushing in 2" thick mineral wool inbetween the studs, our two layers of plasterboard can be fitted onto resilient channel. However, cutting out plug sockets will destroy your carefully built soundproofing. To float a floor, wooden beams can be placed on rubber U-Boat supports at regular intervals and, with neoprene strips inbetween, a chipboard floor can be screwed on top. Floating floor A much simpler and cheaper solution is to use PlatFoam to raise separate pieces of kit off the ground. PlatFoam comes in the form of long 3"x2" strips of high density foam which can be laid a few inches apart with a sheet of plywood placed on top to create a floating riser.