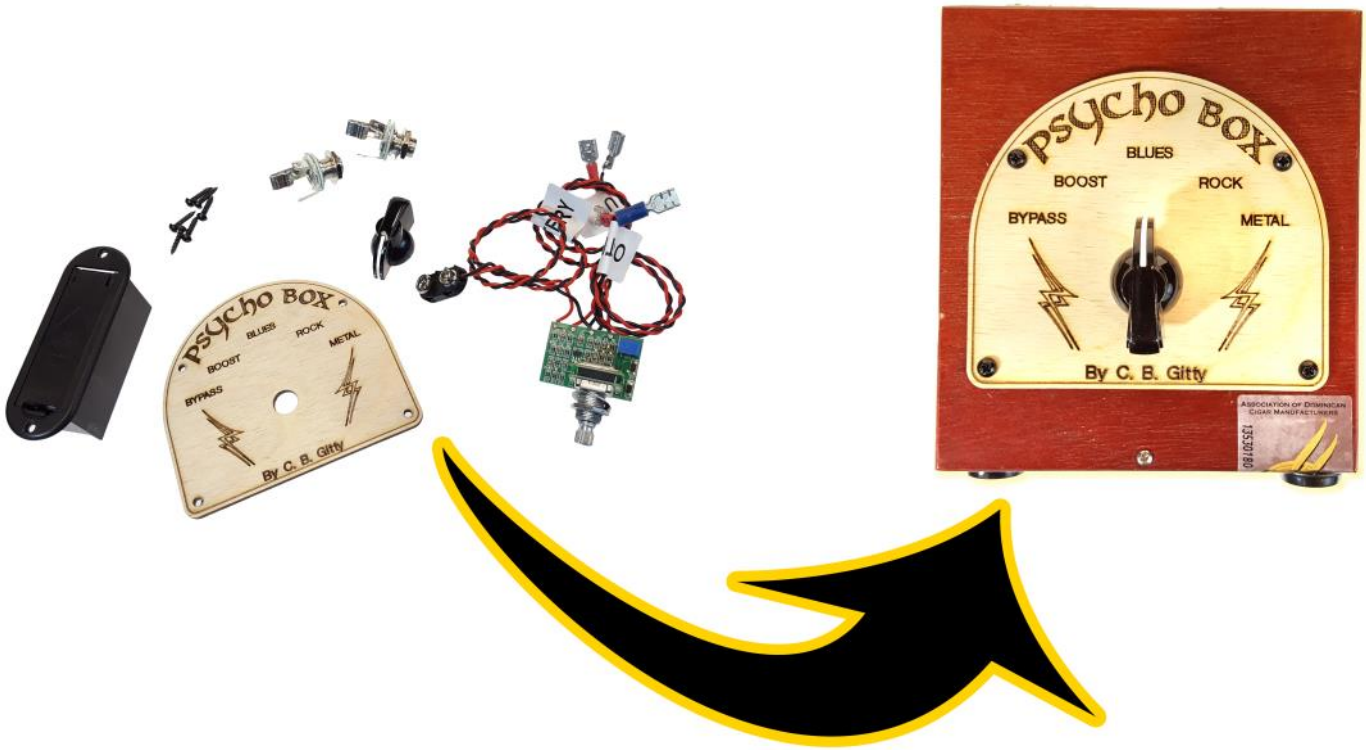
The Psycho Box Distortion Pedal Kit

Assembly Instructions



Product #: 52-018-01

GittyKits™ by C. B. Gitty Crafter Supply ®

View this guide in full color online:
www.CBGitty.com/PsychoBox

C. B. Gitty Crafter Supply www.cbgitty.com

SAFETY WARNING: This kit contains some small parts that could be choking hazards for young children. Always supervise children when building this kit, and follow all safety recommendations for any tools or supplies you will be using. Be careful of splinters and sharp edges on wooden pieces. Keep bags and other plastic packaging materials away from children, as they could be choking hazards. Read instructions fully before beginning.

Are you ready to build your own screaming distortion effects pedal? This Psycho Box kit takes our very popular Psycho Knob distortion driver board and gives you all of the parts and know-how you need to get it mounted into a cigar box and ready to play some screaming Rock leads! Best of all, we designed this kit to not require any soldering, so you can be up and rocking in no time!

Your Psycho Box Kit is like having four historic distortion/ overdrive pedals in one circuit! This easy-to-assemble unit fits neatly into a small cigar box or other similar housing and produces tones like some of the greatest players in rock history.

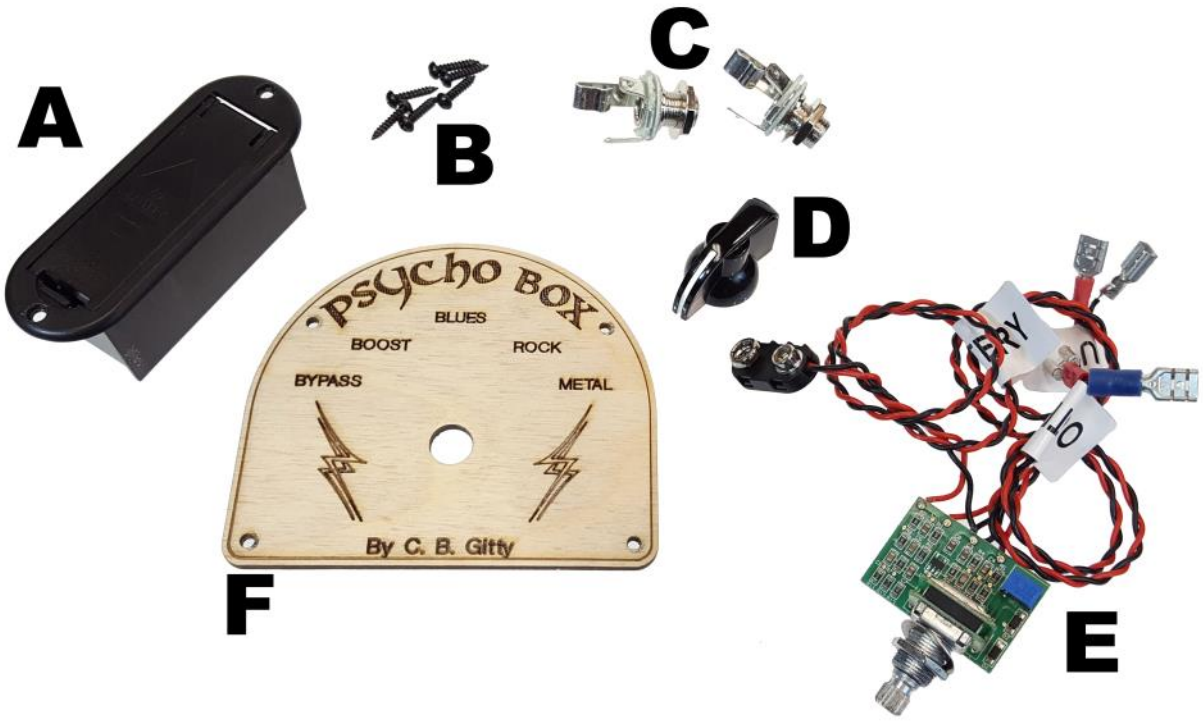
Want to build more?

Visit www.CBGitty.com/Kits for our full line of musical instrument kits!

- Position I is BYPASS and turns the effect off, delivering clean guitar tone.
- Position 2 is BOOST, giving a slight treble boost, ala Brian May's tone with Queen. This setting cleans up muddy pickups and offers a great option for punchy, clean solos.
- Position 3 is BLUES, hearkening to the natural grit of Elmore James' tone. You can also find convincing Pete Townshend "Won't Get Fooled Again" overdrive here.
- Position 4 is classic ROCK distortion, ala Jeff Beck and the Foo Fighters.
- Position 5 is appropriately called METAL, delivering a mid-scooped Slash/Guns'n'Roses tone.

Note: Each setting has endless tonal possibilities depending your instrument of choice, amplifier and even the internal blue gain adjuster.

PART 1—KIT CONTENTS & TOOLS NEEDED



Kit Inventory

Refer to the labeled photo above to identify each of the parts in your kit. Verify that everything is present and that you are familiar with what's what.

A. (1) Black plastic 9-volt Battery Tray with (2) mounting screws

B. (6) Black Phillips-head screws

C. (2) Mono phone jacks

D. (1) Chickenhead Pointer Knob

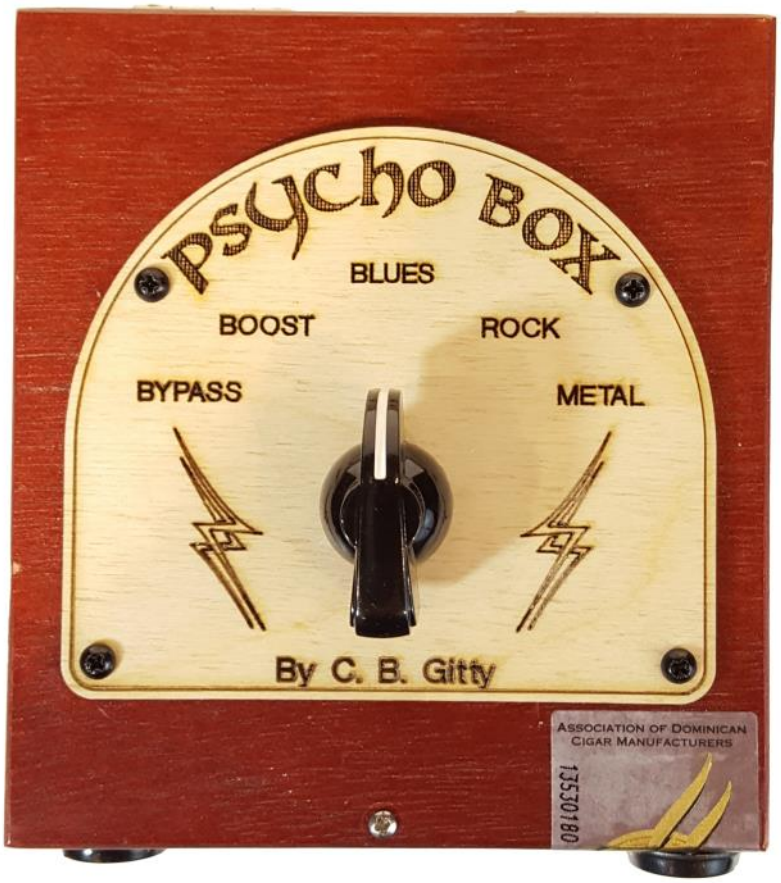
E. (1) Pre-wired Psycho Knob Circuit Board with leads & quick connectors

F. (1) Laser-engraved Faceplate with (4) mounting screws

Not Shown: (1) Small Cigar Box *(optional, depending on kit options chosen. If included, box styles will vary. If using your own box/enclosure, some modification of the steps below may be needed.)*

Tools Needed

The following tools and supplies are what we recommend for completing this kit—they are the same ones we used when making this guide. You may be able to substitute other tools and methods, but please before using any tool (hand or power) make sure you follow all safety recommendations!



- **Drill (Power or Hand) and drill bits**
- **Phillips screwdriver**
- **Small keyhole saw or similar (optional—drilling multiple holes may suffice)**
- **Small adjustable wrench or pliers**
- **Small standard (blade-style) screwdriver**

The photo on the previous page shows a completed Psycho Box built from this kit. You can refer to this diagram throughout the rest of these instructions, if you are not sure where we're headed. Please note that the style of cigar box, whether it came with the kit or was supplied by you, will vary from what is shown here, as may locations of the components.

PART 2—ASSEMBLY

Step 1—Decide on Component Placement

Depending on the cigar box (or other enclosure) you'll be using, start by planning out where to place the components. There are four main things to be placed: the input jack (from the guitar), the output jack (to the amp), the battery holder tray, and the face plate/circuit board knob assembly.

Before deciding, first think about whether you will want your cigar box (or other enclosure) to stand up or lay flat. This is entirely up to you, and will depend on the style of box you are using. In general though, we recommend going for a layout that will be more stable and less likely to fall over all the time, so a "lay flat" arrangement is usually better.

> Always do "dry fit" layouts of your parts before drilling or cutting holes, to make sure things will fit where you want them to go.

Usually, placing the Face plate/Psycho Knob circuit in the center of one of the box's panels makes sens. We recommend having the input and output jacks on separate sides of the box, or on two corners of a single panel. This can help with keeping the input and outputs separate. We also recommend leaving a little room below where the jacks will be for labeling them.

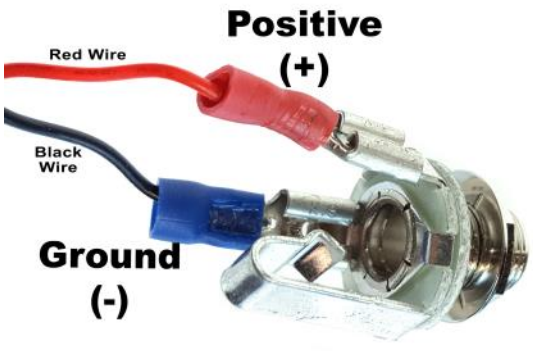
The battery holder compartment can be placed wherever is convenient, just consider placing it near the bottom edge of the box so that the weight of the battery helps stabilize the unit.

Do a "dry fit" of the parts before you start doing any drilling or cutting. Lay the components out roughly in the places you want them to go, to make sure everything will fit like you expect. One more thing—if you are using a larger box/enclosure, make sure that the pre-wired leads will reach from the circuit board to where you want the jacks and battery compartment to be.

Step 2—Wiring

Because this is a no-solder kit, the wiring portion is pretty straightforward.

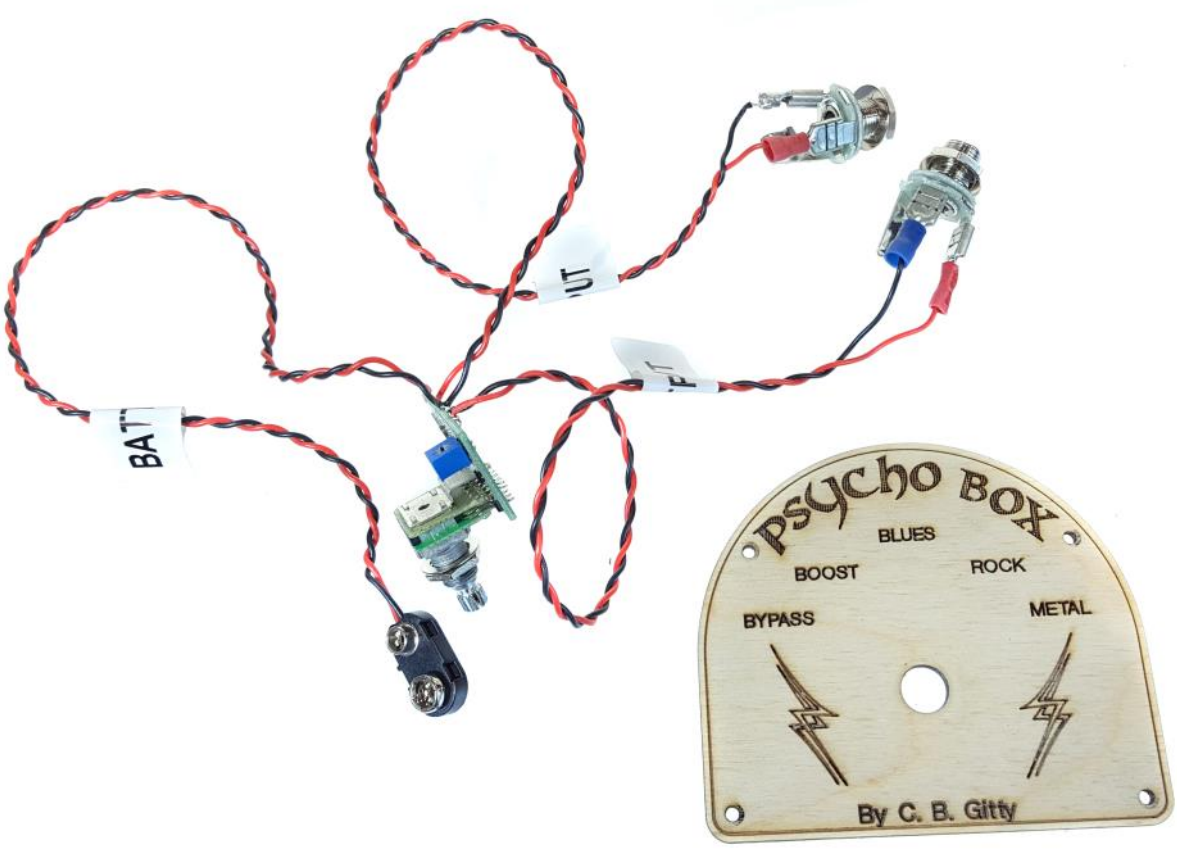
The pre-wired leads on the Psycho Knob circuit board come with press-on connectors, that slide onto the lugs on the back of the



jacks. The red connectors (attached to the red wires) should be pushed onto the positive jack lugs, and the blue connectors (attached to the black wires) should be connected to the negative/ground jack lugs. See the photo above for a visual reference.

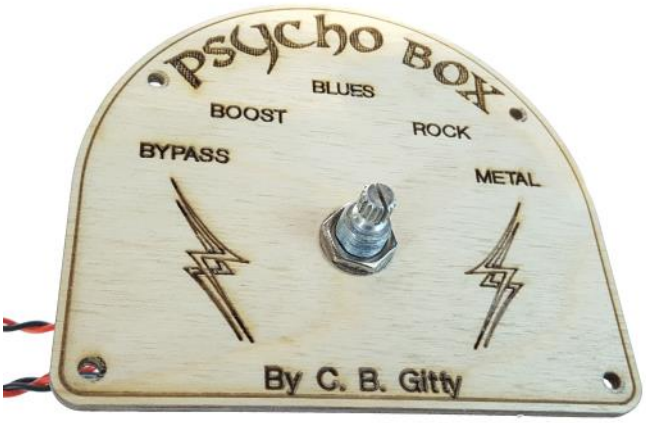
If the press-fit connectors seem a little loose on the jack lugs, use some pliers to gently squeeze them to make a tighter fit. If you are comfortable with soldering, you can of course remove the crimp connectors and solder the leads directly to the jack lugs, for a more permanent and professional connection.

Do this for both sets of leads/jacks, to end up with what's shown in the photo below.

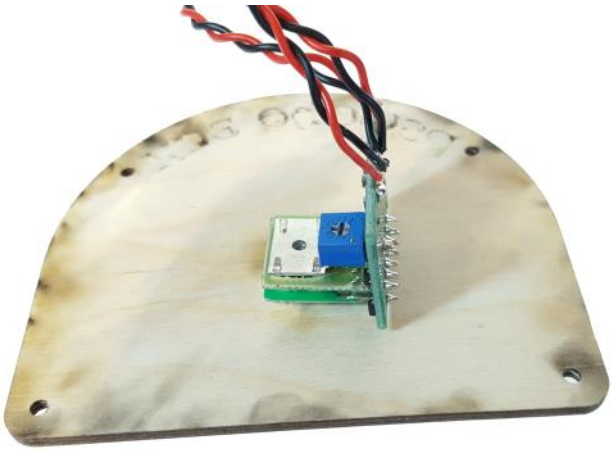


Step 3—Mounting the Circuit Board & Knob

Remove the nut and washer from the shaft of the control potentiometer on the circuit board. Then push the

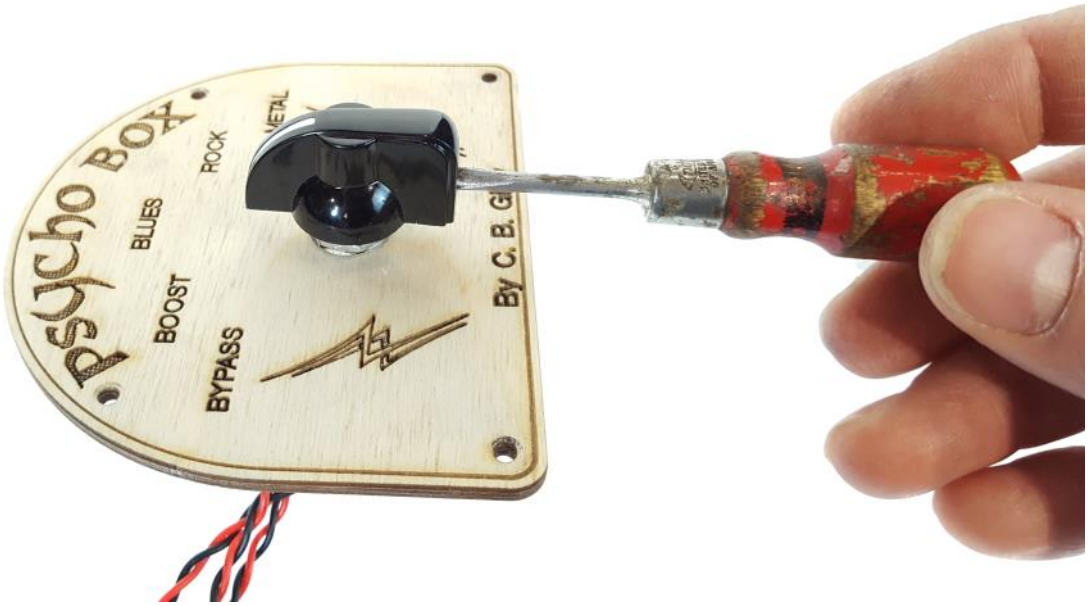


Front



Back

threaded shaft through the hole in the face plate, and finally put the washer and nut back on and tighten it down. Use a small wrench, or pliers (carefully) to tighten the nut.

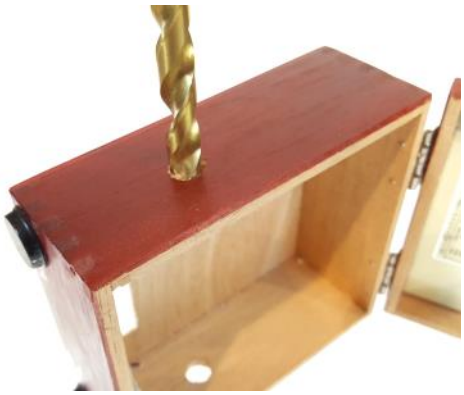


Next, use a small standard screwdriver to loosen the set screw in the chickenhead knob. Turn the Psycho Knob selector all the way to the left (towards Bypass), and then click it two times to the right. This should put it into the “Blues” position. Now put the chickenhead knob over the shaft and tighten it down with the pointer going straight up towards the “BLUES” text on the faceplate. Tighten down the screw and then turn through all the positions to make sure it lines up with the words correctly.

Step 4—Drilling/Cutting Holes

The input and output jacks need holes that are 3/8” or so in diameter, so use an appropriately sized drill bit for those.

You will also need to make a larger hole underneath where the faceplate is to be mounted, that will accept the circuit board with enough extra room for it to be positioned. You can drill a starter hole and use a keyhole or jigsaw to cut the hole, or you can just drill a bunch of holes with your 3/8” bit to make an opening. It’s not pretty, but it works!

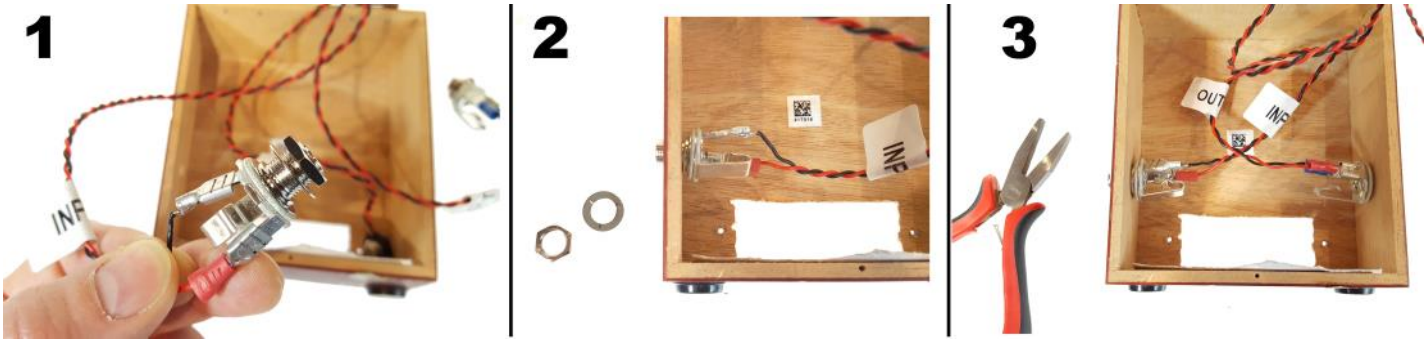


To make the opening for the battery compartment, use a pencil to mark out a rectangle just slightly over 7/8" x 2 3/8", and then drill a 3/8” hole in each of the four corners. You can then use a small saw to cut out the rest of the rectangle. It’s always better to start smaller and then enlarge as needed.

If you don’t have a small saw, just drill more holes to rough out the rectangle and then use a file, rasp or sharp box cutter to clean up the edges until the battery compartment fits easily. Be careful of wood chipping and splintering, since the lip of the battery compartment doesn’t provide much cover.

Step 5—Mounting the Components

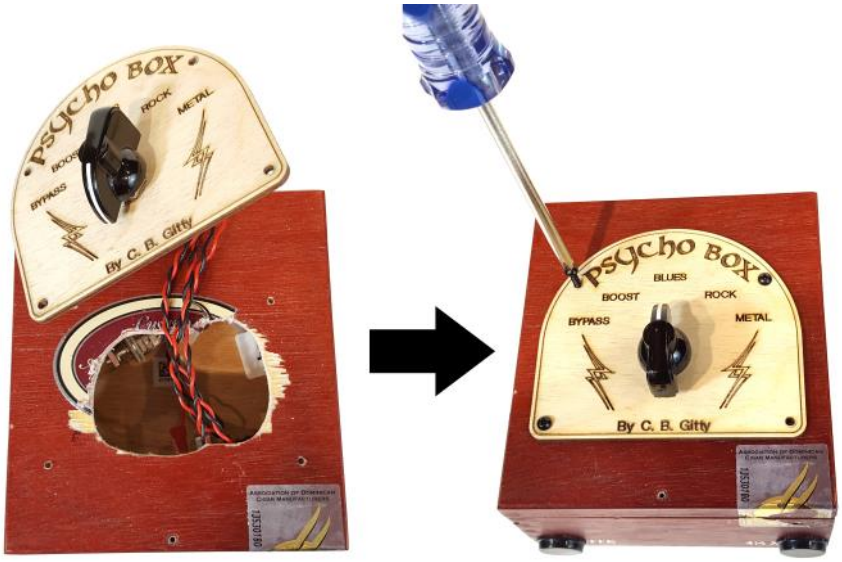
Remove the nuts and washers and push the threaded shafts of the phone jacks through the holes you drilled, then put the washers and nuts back on and tighten them down.

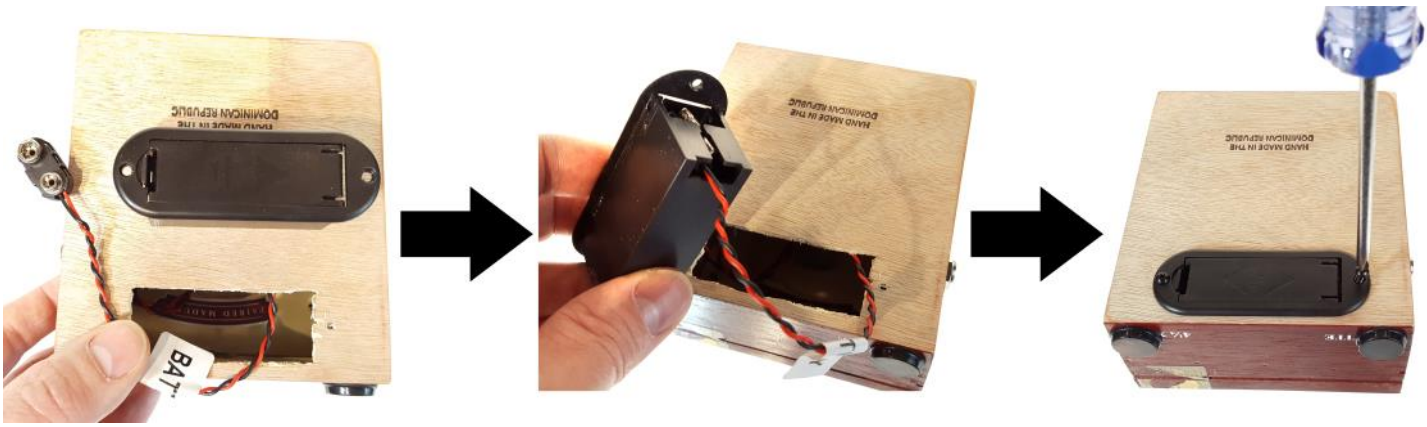


Next, put the faceplate in position, making sure the circuit board fits cleanly and easily down through the opening you made for it in the box panel. If it doesn’t fit easily, adjust/enlarge the hole until it does. Screw in the face plate mounting screws (drill pilot holes with a small drill bit if need be).

Then, place the battery holder compartment into its opening and screw in the mounting screws (drill pilot holes if necessary).

Insert the battery connector clip through the larger top hole in the side of the battery tray, and push it down through the slot as shown, before mounting into your box/enclosure.





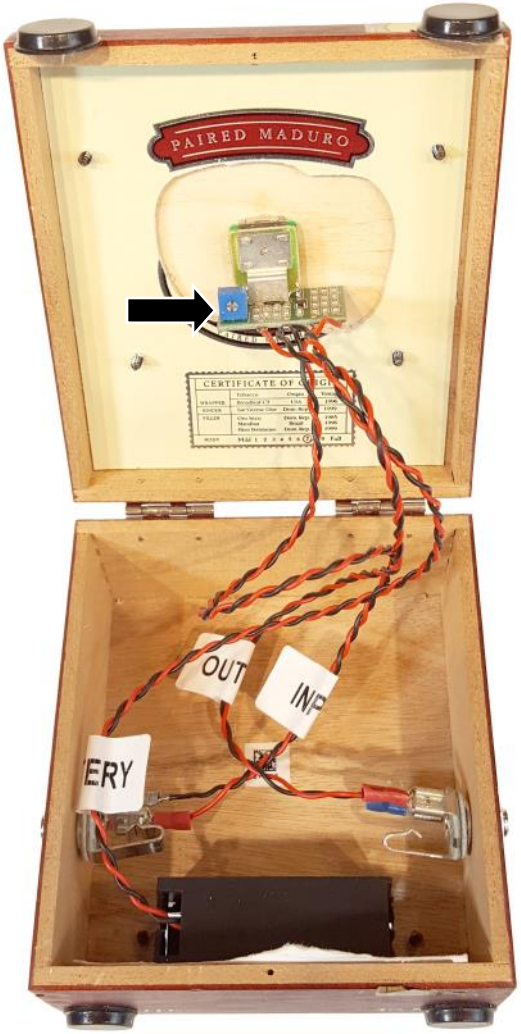
Step 6—Adjusting the Gain

There is a small blue square “trim pot” on the circuit board—it is indicated by the arrow in the photo below. This is the “gain” control for this circuit, and controls how strong the board’s effect on the sound will be. Turning it to the right increases the effect, and to the left decreases. You can play around with this to get the exact sound you want.

Step 7—Finishing Touches

It can be a nice addition to put some rubber or felt feet on the bottom panel of your Psycho Box. These can be found at most hardware stores, and can help keep your Psycho Box from sliding around.

The photo below shows the inside of the Psycho Box once everything has been installed and connected. Yours will probably look different depending on the type of box/ enclosure you used, and where you decided to place the components. We include it here for general reference.



You may want to seal your Psycho Box shut, using screws, a small latch, box corners or some other hardware. Methods of doing this will vary widely depending on the style of box/ enclosure you chose. Please remember that if you permanently seal your box (like with glue), you won’t be able to get in there to adjust your gain pot (unless you make an access hole in the back).

Consider adding labels under/near your input and output jacks to help you remember which is which. “Guitar” and “Amp”, “Input” and “Output” or some other labels can be a big help.

Bonus Section: Mods and Hacks

There are several ways that you can mod and hack your Psycho Box to make it even cooler. Please note that these are general suggestions that will require some DIY research on your part—we do not have pre-written guides for these things! We include them here to help jump-start your creativity and DIY spirit.

Add a Panel-mount Gain Control

You can desolder/pop off the onboard gain pot and replace it with a panel-mount variety that can be adjusted from outside the box. A 10KOhm linear-taper pot works well for this.

Add a Volume Control

You could wire a volume potentiometer into the circuit in between the input jack and the circuit board. Some experimentation to find the right pot value would be necessary.

Add a Tone control

Adding a tone pot with an appropriate capacitor in between the input jack and the circuit board would affect how much high-end (treble) signal was able to get to the board. You could also try adding one between the circuit board and the output jack to see what effect that would have. We haven't tried this, so this is full DIY experimental territory!

Add Some Box Corners

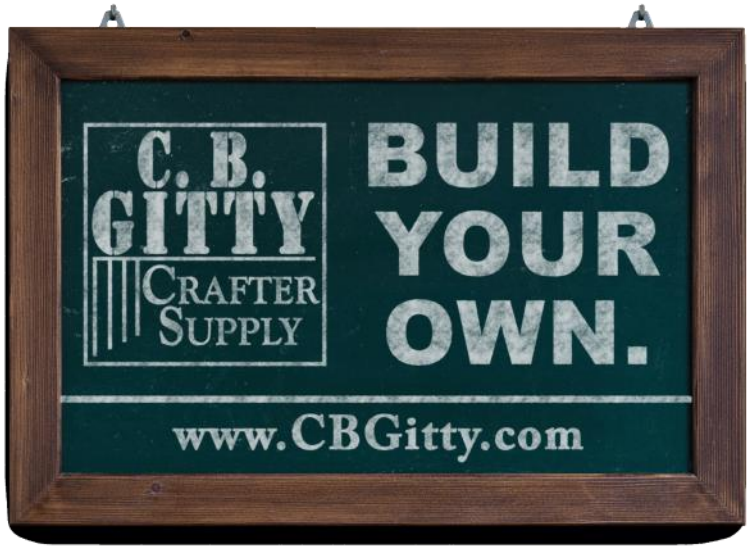
Decorative metal box corners can be a nice addition to a cigar box build, and we have a wide range of them available at www.CBGitty.com. In addition to looking good and protecting the corners of your box, some of them can also serve a utilitarian purpose—they can help seal your box shut!

CLOSING

We hope that you've enjoyed this process of building yourself an awesome distortion pedal from this kit, and that you'll have fun making music with it. **But your kit-building career doesn't have to stop here!** C. B. Gitty Crafter Supply offers a variety of musical instrument and amplifier kits featuring cigar boxes and other reclaimed materials, from the simplest one-string diddley-bows to 4-string cigar box guitars. **www.GittyKits.com**

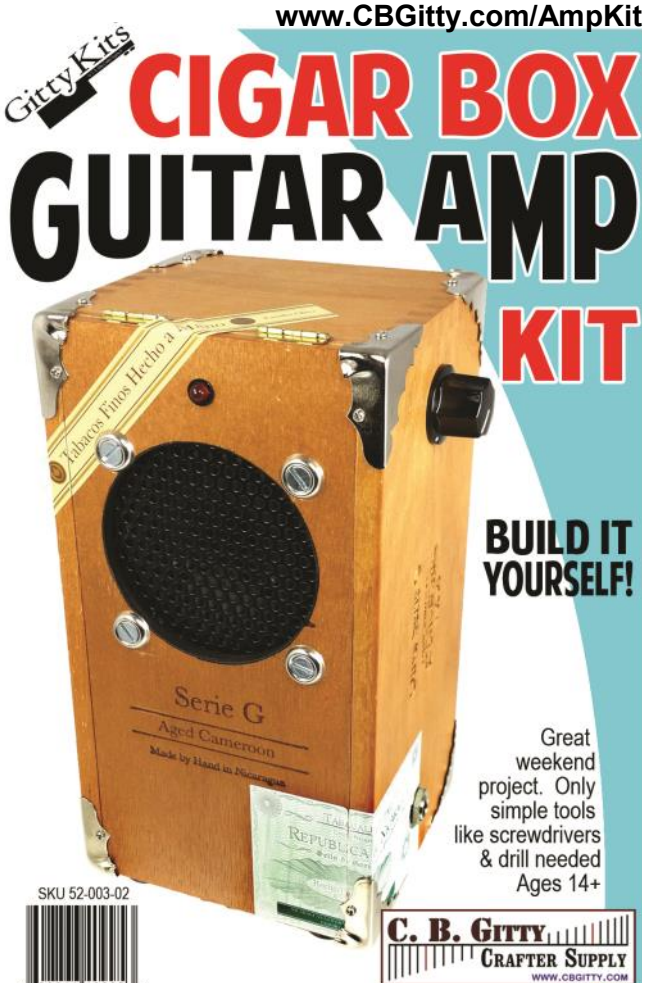
We also have a huge variety of parts and accessories that you can use to branch out and build your own custom instruments. **www.CBGitty.com/CigarBoxGuitarParts**

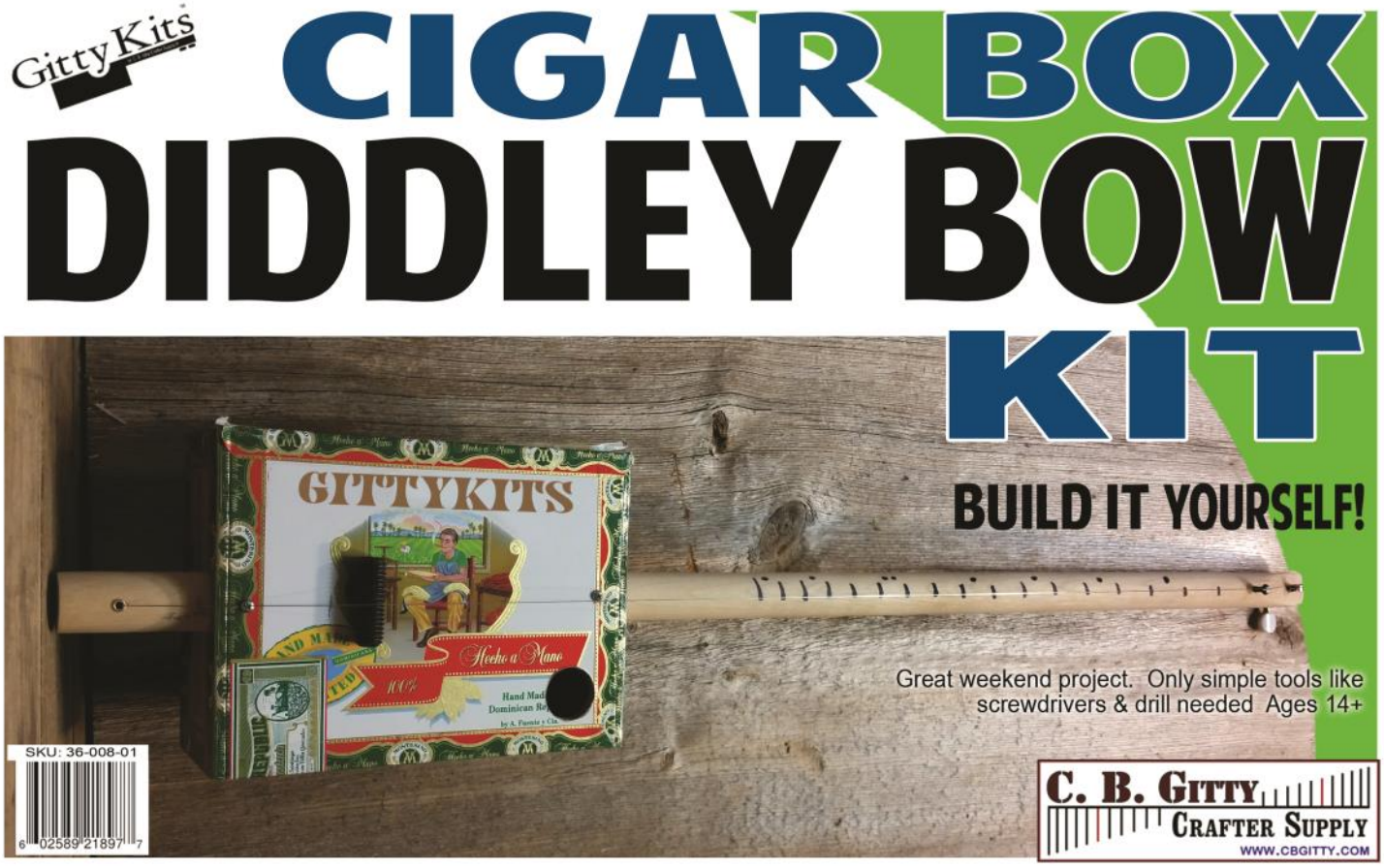
Want to share your new creation with the C. B. Gitty community? Browse on over to **www.CBGitty.com/Share** and upload photos/videos and descriptive text. Show off the awesome thing you've made!



www.CBGitty.com/CanjoKit

www.CBGitty.com/AmpKit





www.CBGitty.com/DiddleyKit

NEW

Some of the latest gear from CBGitty.com

AJ Gaither "Arkansas Tenor"—$229.99

The cigar box guitar designed & stage tested by the Midwest Troubadour! Special EADB "Arkansas tenor" tuning . Acoustic/electric.

Tin Can Microphone Kit—$19.99

Build your own real working microphone! Sounds like a vintage AM radio - perfect for vocals and harmonica. Great for ages 12+

www.CBGitty.com/MicKit

Cigar Box Guitar Amps - $54.99 and up

These custom amps are handmade in our New Hampshire workshop. Great for practice, studio & busking.

www.CBGitty.com/guitar-amps

The Acoustic Pro Cigar Box Guitar - $299.99

Rich, lush acoustic tones, designed for stage & studio use. Depression Era ingenuity meets modern electronics. Our finest sounding acoustic/ electric… ever

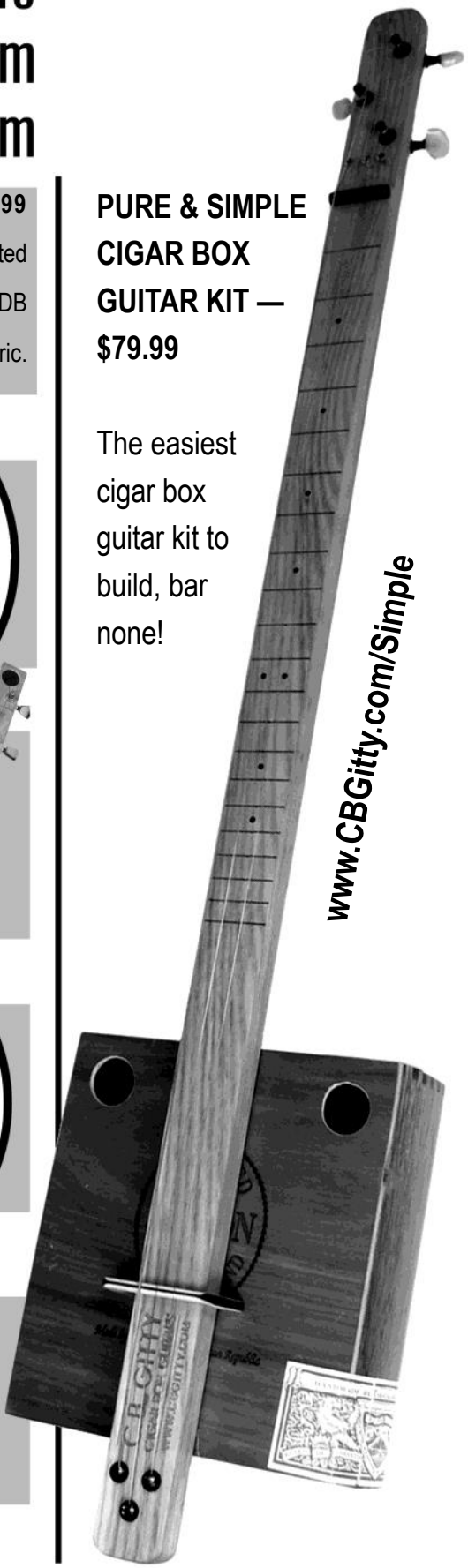
www.CBGitty.com/AcousticPro

Complete Cigar Box Guitar Fretting Starter Kit: $89.99

Fret Saw & Miter Box, Fretting Hammer, Bevel File, Fretting Scale Templates, 18 feet of fret wire, *39-page Fretting Guide CD* **www.CBGitty.com/FretKit**

PURE & SIMPLE CIGAR BOX GUITAR KIT — $79.99

The easiest cigar box guitar kit to build, bar none!



www.CBGitty.com/Simple