

TEDDY TOOL

BUILD GUIDE

THANK YOU SO MUCH FOR PURCHASING THIS TEDDY KIT!

As with everything we make at TEDDY we try to keep it as simple as possible, but yet useful in relation to music, sound or performance. Oh, and affordable! All keywords when it comes to the main philosophy of TEDDY Modules. And in the process of creation you will learn things about how your modules work or even getting acquainted with the materials you're working with. So yes, we dare to say our modules are fun for beginners as well as advanced builders.



Exploding Shed guides on Synth DIY

<https://www.exploding-shed.com/synth-diy-guides>

And as a hello and thank you towards our Leipzig friends we would also like to tell you about their great webshop with all kinds of kits, projects, tools and material in case you need some (more) quality products for your (new) hobby. And yes, there are way more places to find info, but we've pointed you to a place where we ourselves are happy about sharing with you.

SO, WHAT'S THIS MODULE ALL ABOUT?

The TOOL module is a tool. Duh! And actually it is a bit boring to explain what it does, but we are who we are, so ... We will still try to make something of it.

The TOOL is divided into two separate parts. The top part is a passive multiple. And as you can see, there is no real indication which jack is in and which jacks are out. But that doesn't matter because it's passive.

And because it's passive, it opens up the possibility to do naughty things. For example to put in 2 signals which will get added, because that's how voltages work. It can lead to unwanted behaviour too, but hey, it would not be fair if we wouldn't mention it, right?

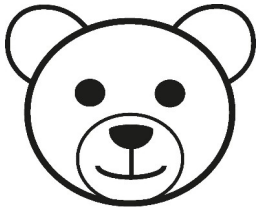
The bottom part is a simple passive switch. This means that you can put a signal in the upper jack and depending on the status of the switch it is routed to either output A or output B.

But wait!

You could also put 2 live signals into input A and input B. That way, depending on the status of the switch, output A/B becomes the signal of your choice!

So yeah, it might be the simplest of all modules, but there is a lot of practical fun to be had with it concerning (re)routing signals.





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A FEW GENERAL POINTERS BEFORE WE START ...

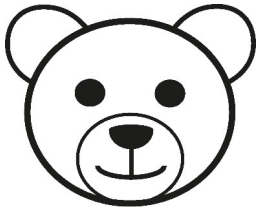
Well, it's time we start making this thing. And because you're "building and learning" our Build Guide looks a bit different than ones you possibly already have seen in the past. We haven't labelled the parts for example. It's all in a bag and you will simply need to learn how to read or measure values. This way you will get a better feeling of what you are doing and why. And of course there is a reasonable multimeter in your workplace, right?

REMINDER: If this is all new to you, please take some time to read about Synth DIY. TEDDY Modules do NOT come with a guarantee of a working module if you mess up.

1. The first rule in soldering is you go from low to high, where it is about the height of the components. Reason: It's easier to flip the board when there aren't things sticking out. Really, it is that simple! There might be moments however we will advise you to not follow this first rule because it sometimes gets tricky to solder specific parts if everything else is in its place;
2. The BOM a.k.a. Bill of Materials is the guideline of all the things that have to be soldered. You will find it on the next page(s). Check and double check the values of the components before you solder them;
3. Some components are polar meaning there is a positive and negative side. Or more general, how they work is dependent on their orientation;
4. With diodes, there is ALWAYS one side with a stripe/line. This should match the line on the PCB;
5. Electrolytic capacitors - the big black ones - have one longer leg which is always the positive one. The side of the capacitor where the shorter leg is has a mark (white line). There are also *Non Polar* versions of the electrolytic capacitors, but they miss the marking on the case so it doesn't matter how you solder them, even if one leg is longer than the other one;
6. IC's have a marking at Pin 1, and Pin 1 is always the first pin left of the indent at the PCB Marking. So it's important you align the dent on the IC-holder with the dent on the PCB. Don't ever solder the IC's directly without the holder. It's way easier to replace the IC this way in case you mess things up;
7. For transistors or other three legged elements, always align the flat side of the component to the flat side on the PCB.

This is not a full list of all possible elements, so if there is something extra just as big as a diode, fit it in with them. One of the most important lessons in electronics: Think logically.

Get acquainted with your material and (try to) think logically!



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SOLDERING THE TEDDY TOOL MODULE

In this chapter all the specifics about soldering the TOOL will be written down. But we're keeping it very to the point because the important stuff is already written in the previous chapter. Which part goes where can be found in the BOM on the next page(s).

1. Add the jacks and the button in their place, drop the faceplate over them and loosely tighten the nuts where needed;
2. Turn the PCB over, stabilize it a bit and solder the points that need to be soldered. Please note: Make sure the button is flat to the PCB, so first do 1 pin, push it towards the PCB, reflow that one pin and then do the other pins;
3. Tighten the nuts;

You did it! The module is done!

And there we have it, the final words that need to be said. Everything you do is your own responsibility. You are working with voltages, currents and high temperature molten metal. Be careful, be responsible, RTFM and if you are not sure, ask for help.

We *CAN* not (and *WILL* not) take responsibility for *YOUR* mistakes.

There is a FaceBook group called TEDDY Modules Support which is a community driven 'builders helping builders' and you can find all our contact information below.

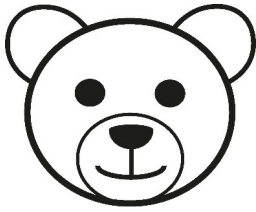
CONTACT INFORMATION

website: teddy.modules.nu

mail: teddy@modules.nu

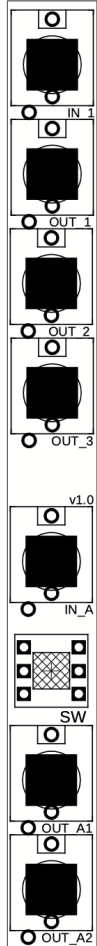
shop: bearmodules.etsy.com

fb support: www.facebook.com/groups/teddymodulesupport



TEDDY TOOL

BILL OF MATERIALS



HARDWARE

THONKIES	7	IN_1, OUT_1, OUT_2, OUT_3, IN_A, OUT_A1, OUT_A2
SWITCH (LATCH)	1	SW