

NYX
ANALOG SYNTHESIZER
**Construction
3x 6 FPGA
Trainer
Board**



Nyx Construction 3x 6 FPGA Trainer Board Instruction Manual

[Home](#) » [NYX](#) » Nyx Construction 3x 6 FPGA Trainer Board Instruction Manual 

Contents

- [1 Nyx Construction 3x 6 FPGA Trainer Board](#)
- [2 Product Usage Instructions](#)
- [3 Frequently Asked Questions](#)
- [4 In the box you will find](#)
- [5 Bag contains](#)
- [6 INSTALLATION INSTRUCTION](#)
- [7 Documents / Resources](#)
 - [7.1 References](#)



Nyx Construction 3x 6 FPGA Trainer Board



Product Specifications

- 3x PCB boards
- Metal enclosure with the panel
- Midi to 3.5mm adapter

Product Usage Instructions

Step 1: Front Panel Assembly

- Add LED lenses to the front panel and secure them using the soft end of a screwdriver. Attach 5x10mm metal spacers with 5xM3 black screws.

Step 2: Top PCB Assembly

- Secure an M3 brass screw with an M3 washer and a 10mm metal spacer on the top PCB above the 2nd slider to the right.

Step 3: Attaching Top PCB to the Panel

- Insert the top PCB onto the panel, ensuring the alignment of switches. Use 2x11mm long M3 plastic spacers and 3xM3 brass screws to attach the panel to the top PCB.

Step 4: Bottom PCB Assembly

- Screw 2x12mm metal spacers with 2xM3 brass screws on the bottom PCB as the power supply base.

Step 5: Connecting PCBs

- Connect the bottom PCB to the top PCB and secure them with 3xM3 brass screws.

Step 6: Attaching Power Board

- Attach the power board to the assembly and secure it with 2xM3 brass screws.

Step 7: Adding Adhesive Feet

- Add adhesive feet to the enclosure to prevent slipping.

Step 8: Placing Unit in Enclosure

- Place the unit in the metal enclosure starting with the USB side first, then push down the rest of the unit.

Step 9: Securing Enclosure

- Screw in 4xM3 black screws to secure the unit in the enclosure.

Step 10: Attaching Knobs and Switches

- Screw in pots and rotary switches, ensuring they are not over-tightened. Use M10 nuts for rotary switches and M8 for pots.

Step 11: Finalizing Assembly

- Screw knobs onto pots and rotary switches to complete the assembly.
- Congratulations! Enjoy your new synth unit!

Frequently Asked Questions

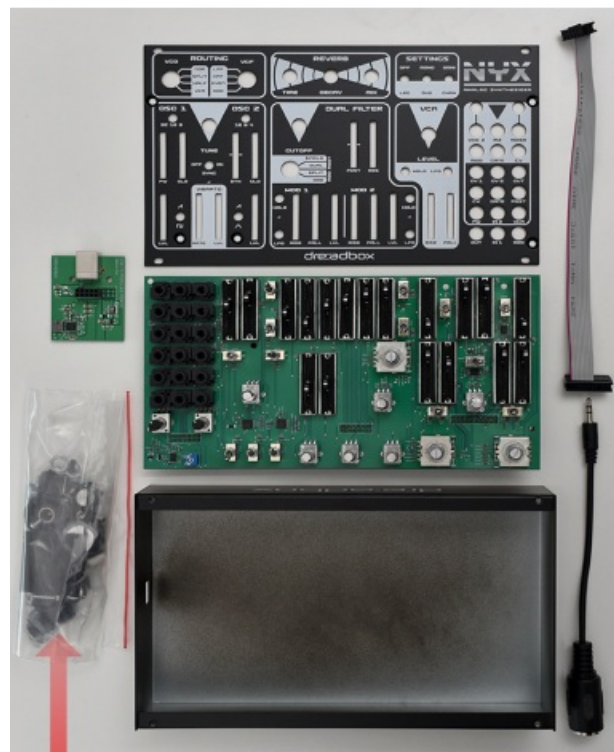
- **Q: What tools are required for assembly?**
 - **A:** You will need a flat 1.5mm wide screwdriver for the knobs, a PH1 screwdriver, a 10mm Allen key, and an 11mm Allen key.
- **Q: What should I do if the unit does not power up?**
 - **A:** Ensure that you have used the correct metal spacers (2x12mm) on the bottom PCB to prevent short-circuiting by the USB plug.

In the box you will find

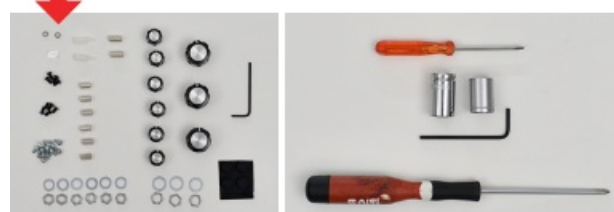
- 3x PCB boards
- A plastic bag with the parts
- The metal enclosure with the panel
- Midi to 3,5mm adapter
- 1 ribbon cable for modular use



Bag contains



Bag contains:



- 4x rubber feet
- 1x 2mm Allen key
- 11x M3 brass screws

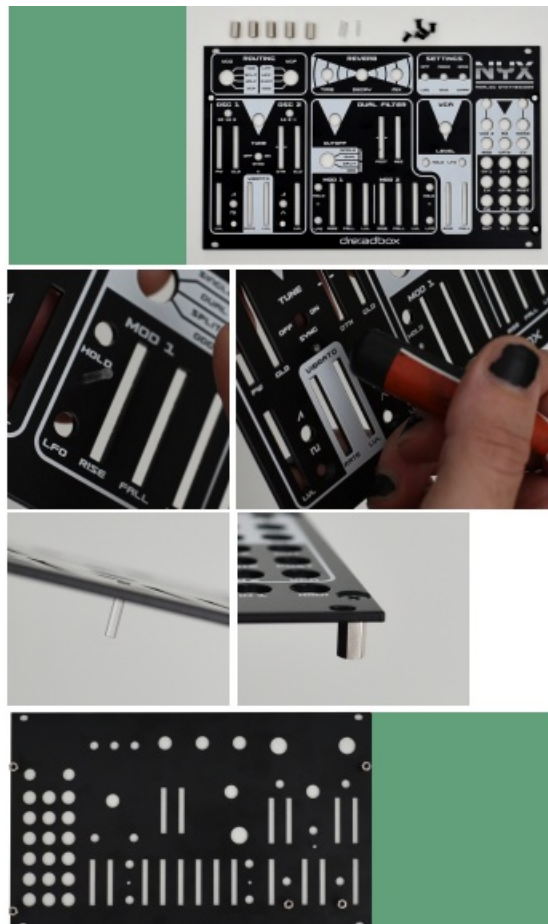
- 4x M3 black screws for panel mounting
- 5x M3 black screws countersunk type
- 2x metal spacers 12mm long M3
- 6x metal spacers 10mm long M3
- 2x plastic spacers 11mm long M3 double-ended
- 6x M8 nuts and washers
- 3x M10 nuts and washers
- 1x M3 washer
- 6x small knob
- 3x big knob
- 3x LED lens

Additionally, you will need to have

- A flat 1,5mm wide screwdriver for the knobs
- A PH1 screwdriver
- A 10mm Allen key
- A 11mm Allen key

INSTALLATION INSTRUCTION

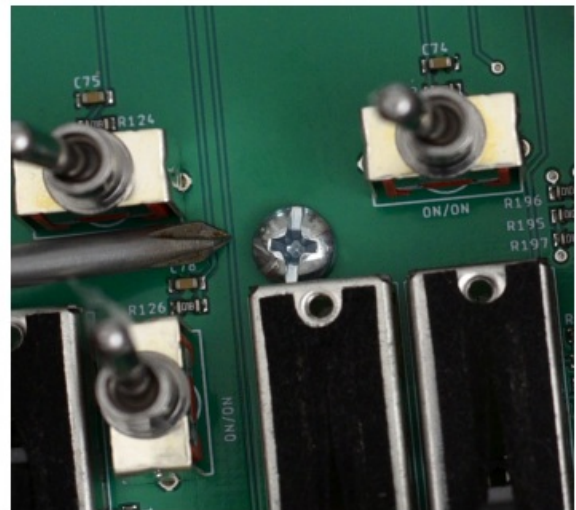
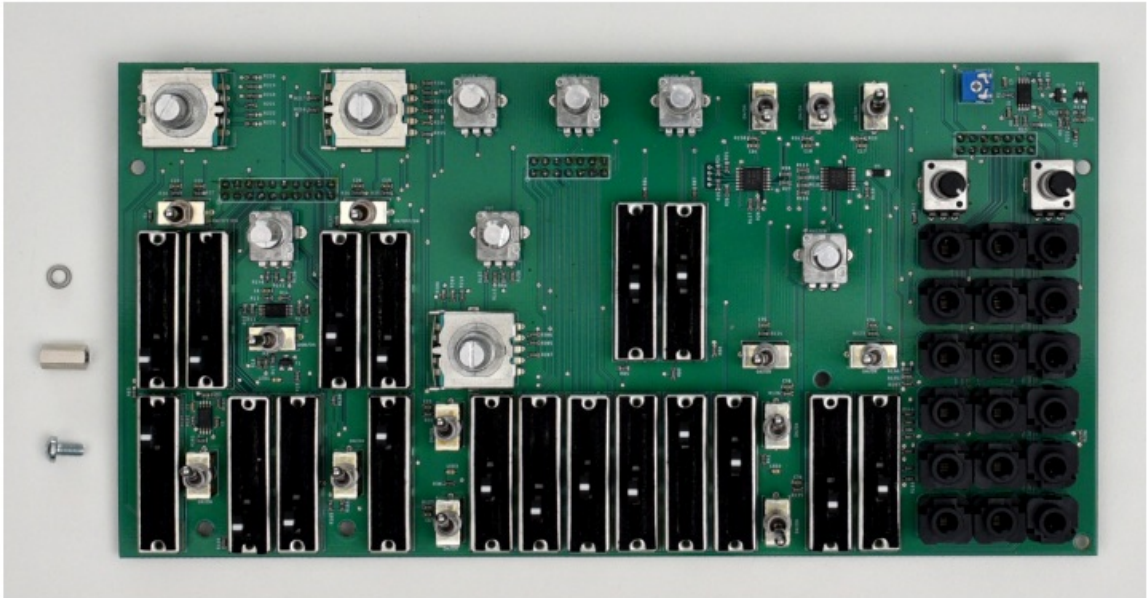
1. **Step 1** On the front panel add the LED lens and push them with the soft end of the screwdriver so that they stick firmly in place. Then add 5x10mm metal spacers with 5xM3 black screws as shown.



2. **Step 2** On the top PCB above the 2nd slider to the right as shown in the picture, add an M3 brass screw

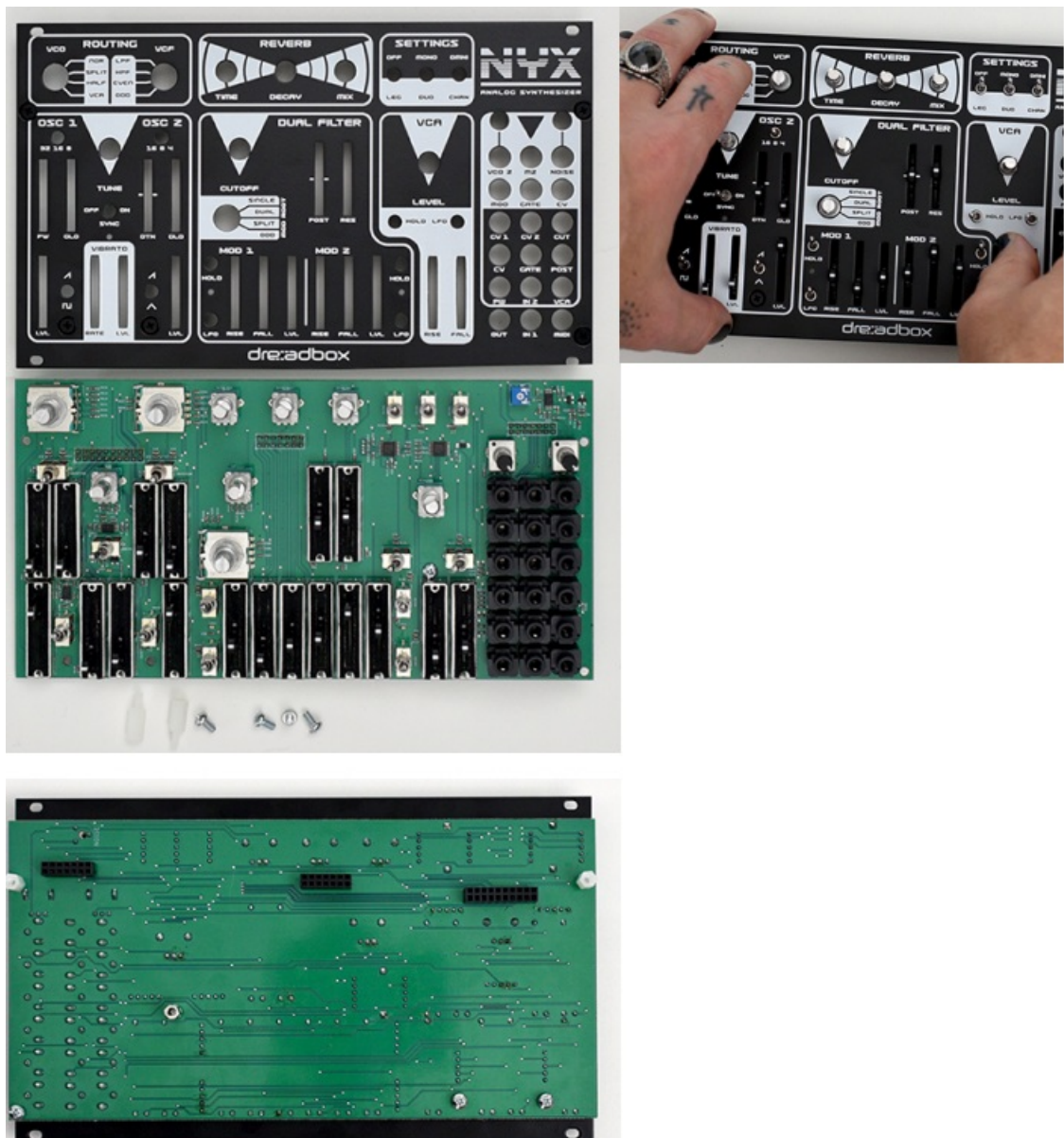
through the front side and secure it with the M3 washer + a 10mm metal spacer from the bottom side.

- Make sure the screw is tight enough to straighten the washer.

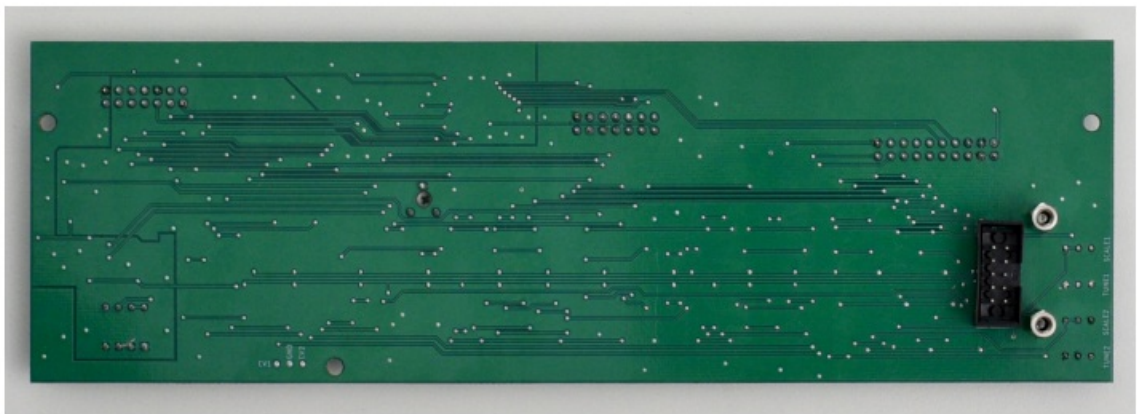
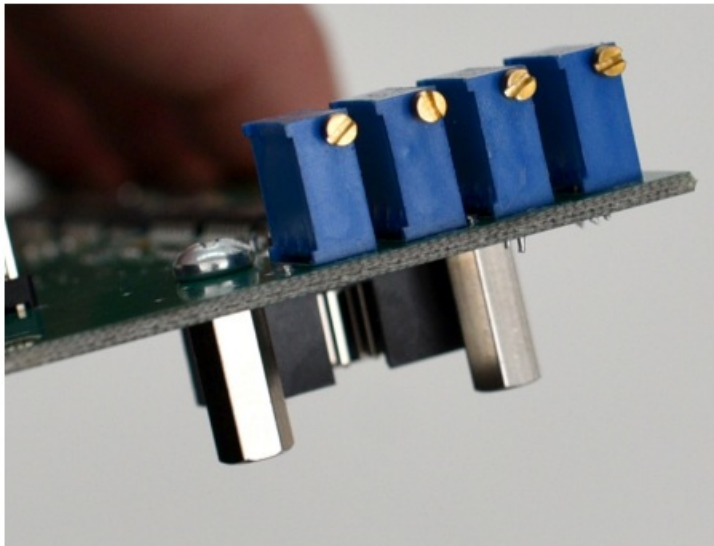


3. **Step 3** Insert the top PCB to the panel as shown, it needs some pressure and alignment of the switches.

- You will need 2x11mm long M3 plastic spacers to be screwed into the 2 top corner holes and 3xM3 brass screws to be screwed into the 3 bottom holes.
- All from the underside of the top PCB to attach the panel to the top PCB as shown.



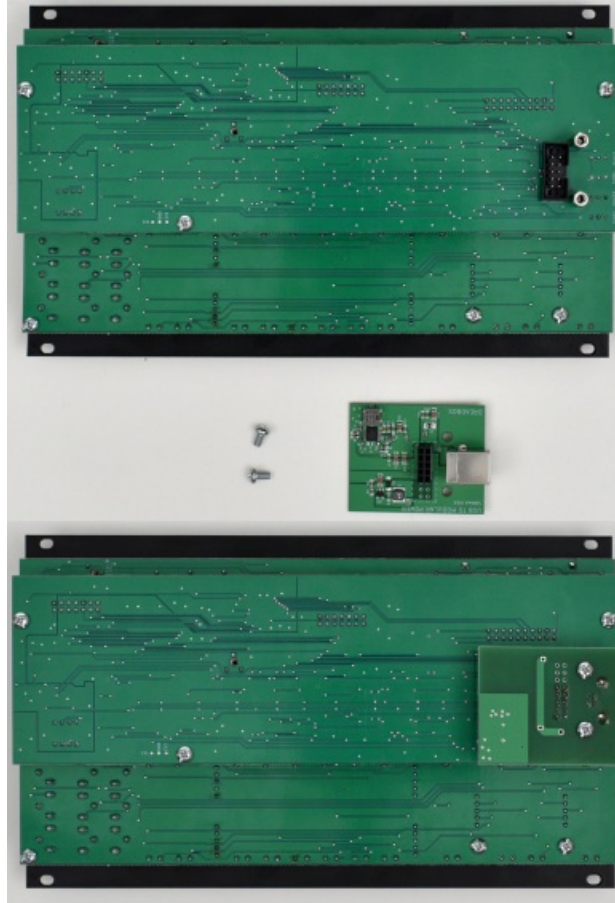
4. **Step 4** On the bottom PCB, screw the 2x12mm metal spacers with 2xM3 brass screws as shown (they will serve as the power supply base).
 - Make sure to use the long 2x12mm metal spacers, or else the USB plug will short-circuit the unit and it will not work on power up!!!



5. **Step 5** Connect the bottom PCB to the top PCB and fix them with 3xM3 brass screws as shown.



6. **Step 6** Attach the power board to the assembly as shown and secure with 2xM3 brass screws.



7. **Step 7** Add the adhesive feet to the enclosure.



8. **Step 8** Place the unit in the metal enclosure. To easily achieve this, place the unit with the USB side first, and then push down the rest.



9. **Step 9** Screw the 4xM3 black screws so that its held to the enclosure as shown.



10. **Step 10** Screw in the pots and rotary switches, taking care that the rotary switches should not be over-tightened but not too loose. The M10 nuts are for the rotary switches and the M8 for the pots.



11. **Step 11** Screw the knobs to the pots and rotary switches as shown.



Congratulations! Enjoy your new synth unit!

Documents / Resources



[Nyx Construction 3x 6 FPGA Trainer Board](#) [pdf] Instruction Manual
Construction 3x 6 FPGA Trainer Board, Construction, 3x 6 FPGA Trainer Board, FPGA Trainer Board, Trainer Board, Board

References

- [User Manual](#)

[Manuals+](#), [Privacy Policy](#)

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