

If you are reading this, most probably, you are about to build Erica Synths DIY Output module. This module is 35mm deep, skiff friendly, has solid mechanical construction and doesn't require wiring. Output module allows you to interface your modular synth with external gear – mixers or other synths with commonly used 3,5mm stereo jack, as well as it has high quality headphones preamp for monitoring your modular masterpieces. The module has L and R inputs, if you make stereo patches, but for mono patches R input is normaled to L input, so you automatically route the output to stereo mixer.

The DIY Output kit comes in three versions:

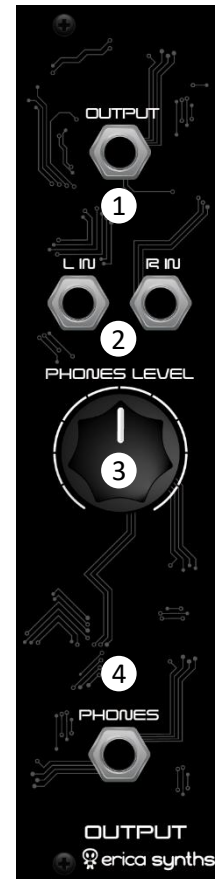
- 1) Set of 2 PCBs with presoldered headphones preamp chip + mechanical parts (PCB connectors, spacer, 3,5mm stereo jacks),
- 2) Set of 2 PCBs with presoldered headphones preamp chip+ mechanical parts + panel,
- 3) Full kit.

FEATURES:

- L and R inputs
- 3,5mm stereo output jack
- 3,5mm headphones jack
- Headphones volume adjustment
- Skiff-friendly design

SPECIFICATIONS:

- | | |
|--------------------------|------------------------------------|
| • Audio output amplitude | line level (optionally adjustable) |
| • Panel width | 6HP |
| • Module depth | 35mm |
| • Power consumption | 20mA@+12V, 7mA@-12V |



- 1 This is 3,5mm stereo output jack
- 2 These are L and R inputs. R is normaled to L, so for mono patches use L only!
- 3 Adjust headphones volume!
- 4 This is 3,5mm stereo headphone output!

ASSEMBLY

Take precautions with regard to electrostatic discharge (ESD) safety. Handling components should be done in electrostatically safe environment. Use personal and workplace grounding. Any discharge (even a minor one) from body to a component may permanently damage it.

Our PCBs have silkscreened both component values and designators nevertheless we highly recommend you to print out files with component placement before you start assembly of the module. And, please, at least take a look on this manual!

Some components are marked as NU (not used) – leave those unpopulated! Some components are market as OPTION (those are for optional modifications) – leave those unpopulated for now. Main board comes with presoldered headphones amplifier IC.

1

Solder resistors and diodes on both PCBs (Controls board and Main board) and ferrite beads on the controls PCB! Pay attention on orientation of diodes! In order to save space and make the module more compact, resistors on main board are installed vertically (**you also may want to replace them with 0805 smt resistors**). See the close-up for correct installation! Pay attention on resistor placement – don't accidentally install them in the testpoint hole!

Controls board



Main board



2

Solder IC socket and ceramic capacitors on the main board!



3

Solder electrolytic capacitors on the main board! Mind their polarity! Some capacitors are non polarized.



This is the negative lug of the electrolytic capacitor!

4

Solder capacitors, voltage regulator, ferrite beads, stereo potentiometer and mono jacks on the Controls board! **Do not solder stereo jacks!**



5

Turn Controls board around and solder female connectors, PSU connector, electrolytic capacitors and resettable fuses! Capacitors and fuses must be placed horizontally! Also install 11mm spacer.



6

Place stereo jacks in relevant places (**do not solder them yet**), install the panel, fix it with jack nuts and solder stereo jacks.



7

Now you can connect both PCBs together, fix them with 3mm screw. Install potentiometer knob and – module is ready to use! ENJOY!

