

The Voltage Research Laboratory
Encyclopedia **System Utilities Guide**

Important Information

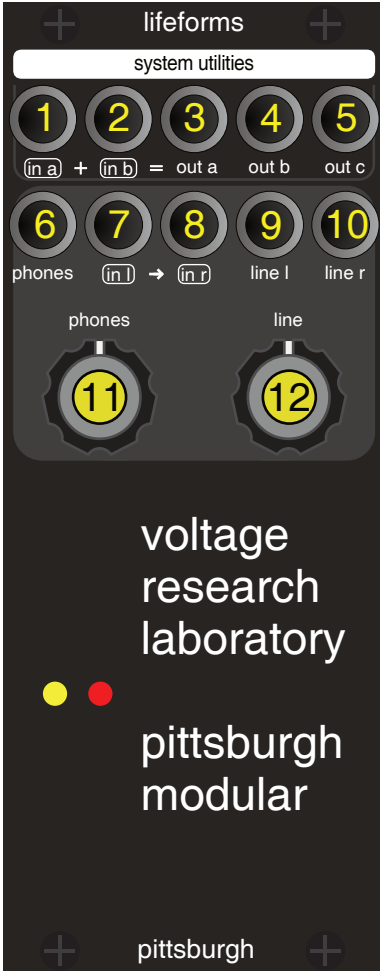


Read Instructions: Please read the System Utilities Guide completely before use and retain for future reference.

- **IMPORTANT Ribbon Cable Power Information:**
The Lifeforms System Utilities module is a eurorack format synthesizer module. The module can be installed, rearranged, removed, and replaced in any compatible eurorack enclosure from Pittsburgh Modular or other manufacturers. The Lifeforms System Utilities uses a standard 10 to 16 pin eurorack ribbon cable to connect the module to a bipolar +/-12v power supply. Please pay very close attention to the orientation of the ribbon cable when adding and removing modules. The stripe on the ribbon cable marks -12v. This stripe needs to line up with the -12v pins on the power rail and the -12v pins on the module. The Lifeforms System Utilities includes reverse polarity protection so it will not be damaged when plugged in incorrectly; however, as a general rule, failure to match up the pins correctly can result in damage to one or all the modules in a case. On a Pittsburgh Modular enclosure power rail, the -12v pins are clearly labeled. On the Lifeforms System Utilities module, the positive side of the pin connector is on top, and the negative sides of the pin connector is on the bottom so the red stripe should be toward the bottom of the module.
- Turn off and unplug the power from the case before removing the Eurorack power header attached to the System Utilities module. Failing to turn off the power before removing the Eurorack power header can damage the System Utilities module.
- The System Utilities is an electronic device. Exposure to water will cause the System Utilities circuitry to short circuit and may cause permanent damage.
- Do not attempt to modify the components of the System Utilities. Tampering with the circuitry may cause permanent damage.
- Do not place heavy objects on the System Utilities. The user interface is mounted on a PCB that can be damaged if stressed by excessive weight.
- Do not attempt to repair the System Utilities. Please contact Pittsburgh Modular regarding malfunctions of any kind.
- Pittsburgh Modular is not responsible for any damage or loss caused by improper use of the System Utilities.

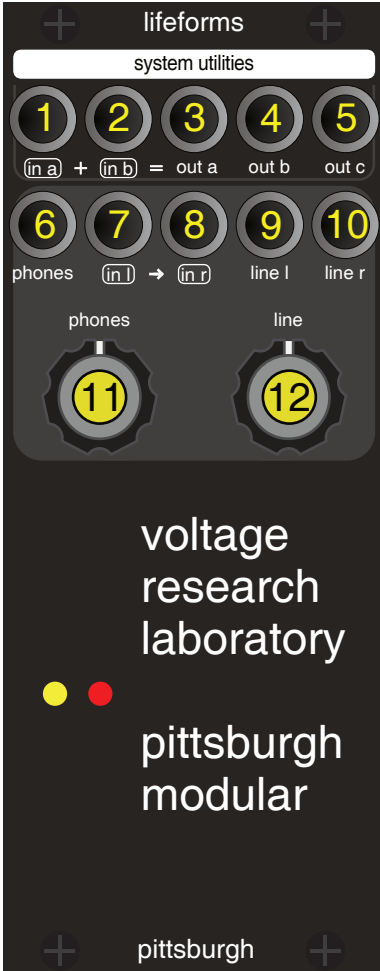
The System Utilities Guide Revision 0

User Interface Controls



1. Mixer / Splitter Input A
2. Mixer / Splitter Input B
3. Mixer / Splitter Output A
4. Mixer / Splitter Output B
5. Mixer / Splitter Output C
6. Headphones Output
7. Left Audio Input
8. Right Audio Input
9. Left Line Output
10. Right Line Output
11. Headphones Output Level Knob
12. Line Output Level Knob

System Utilities Module



Module Overview

The System Utilities module is specific to the Voltage Research Laboratory acting as the logo panel while expanding the functionality of the Voltage Research Laboratory with a few additional features.

Utilities include an Output Section with adjustable headphone and unbalanced line outputs plus a Buffered Signal Mixer and Splitter section.

Buffered Signal Mixer and Splitter

The mixer / splitter section is a standalone audio or CV processing module included to enhance the functionality of the Voltage Research Laboratory. Because of the flexible design, the functionality of the section can vary based on the needs of the patch. MIXER/SPLITTER INPUT A (1) is unity gain mixed with MIXER/SPLITTER INPUT B (2). The mix is sent to 3 individually buffered outputs MIXER/SPLITTER OUTPUT A (3), MIXER/SPLITTER OUTPUT B (4), and MIXER/SPLITTER OUTPUT C (5). The mixing and splitting functionality can be used simultaneously or one at a time.

Output Section

The Output section passes a mono, dual mono, or left, right stereo signal to a headphone output and left and right line level outputs. The headphone output and line outputs each have a dedicated level control.

The LEFT AUDIO INPUT (7) is normaled to the RIGHT AUDIO INPUT (8) so if no cable is patched into the RIGHT AUDIO INPUT (8) the signal from the LEFT AUDIO INPUT (7) is sent to both channels of the HEADPHONE OUTPUT, LEFT LINE OUTPUT, and RIGHT LINE OUTPUT.

More Information

Eurorack Specs

Panel size: 10hp.

Module depth: 22mm.

Power consumption: +12v 42mA, -12v 39mA. Does not require +5v. Reversed power polarity protection. Due to the complexity of this module, it requires a significant amount of power. Please use a clean, high quality power source for optimum performance.

Warranty

For a period of one year after the date of original purchase, the Lifeforms System Utilities module manufactured by Pittsburgh Modular Synthesizers LLC, is warranted to function properly and be free of defects in materials and workmanship. Should a factory installed hardware fail during the warranty period, contact Pittsburgh Modular Synthesizers LLC. We will repair it (or at our option, replace it) at no charge, and pay the cost of shipping it back to you. This warranty is void if in our opinion the Lifeforms System Utilities module has been damaged by accident, mishandled, altered, improperly serviced, or repaired by the customer where such treatment has affected its performance or reliability. This includes but is not limited to damage related to incorrectly attaching power ribbon cables. In the event of such misuse/abuse by the customer, costs for repairs plus two-way shipping costs will be borne by the customer. Products found defective should be returned to the factory carefully packed, as the customer will be responsible for freight damage. Incidental or consequential damages or costs incurred as a result of product malfunction are not the responsibility of Pittsburgh Modular Synthesizers LLC.

Service and Contact Information

Please contact us for service or other information related to the Lifeforms System Utilities module or any other Pittsburgh Modular product.

www.pittsburghmodular.com/contact



Pittsburgh Modular Synthesizers