UpTone Audio

UltraCap
LPS-1.2

User Guide

Made in U.S.A.

Thank you for purchasing an UpTone Audio UltraCap LPS-1.2.

This revolutionary and sophisticated ultra-low-noise 1.1-amp linear power supply uses 140 Farads of supercapacitors and optical isolators in a bank-switching arrangement, controlled by software logic in an FPGA. While one bank of supercaps feeds the output regulators, the other bank charges. At no time is the external AC>DC "energizing" supply ever connected to the output of the LPS-1.2. 100% isolation from both AC mains noise and, as importantly, complete blockage of detrimental leakage currents is achieved.

In a quality music system, the UltraCap LPS-1.2 will, depending upon the components powered, result in worthwhile sonic improvements. We suggest you prioritize using the LPS-1.2 on devices which are directly in the analog or digital audio signal path, and/or in locations where an isolated power supply is likely to be most effective.

The LPS-1.2 can be set by the user to output any one of four DC voltage levels: 5 volts, 7 volts, 9 volts, or 12 volts. The size of both the DC input and output barrel jacks is 5.5mm x 2.1mm, and the center pin is positive. The LPS-1.2 ships with a 70cm long, 16awg coaxial DC cable with 5.5mm x 2.1mm plugs at both ends.

During manufacturing, each unit has been carefully tested under full load to assure reliable performance within its limits. Your LPS-1.2 is covered by a 3-year warranty. Do contact us if you ever have difficulty or need advice or service.

Please read this entire instruction booklet to learn important information about installation and operation of the UltraCap LPS-1.2.

Installation and use of the UltraCap LPS-1.2 is simple:

Charging Power:

The DC power input requirements of the UltraCap LPS-1.2 are not related to your intended output voltage and load. The quality of the output of the "energizing" supply does not at all affect the quality of the LPS-1's output to your component. However, the LPS-1.2 does require that the AC>DC supply feeding its charging circuits fall into a specific voltage range and with enough current for the task.

All LPS-1.2 units are shipped with a fully certified, world-voltage compatible, 7.5 volt / 4.8 amp AC>DC adapter. This 36-watt adapter is a higher wattage model than that supplied with either UpTone's REGEN products or the first generation LPS-1. The expansion of output voltage range (to include 9V and 12V) with the newer LPS-1.2 necessitates use of an "energizing"/charging supply capable of at least 36 watts.

If you choose to charge the LPS-1.2 with an AC>DC supply other than the one we include, then it must be a regulated power unit that falls within the following output ranges: • 7.5 volts / 4.8 amps, • 9 volts / 4.0 amps, • 12 volts / 3.0 amps, • 18 volts / 2.0 amps, or • 24 volts / 1.5 amps.
Do not attempt to charge the LPS-1.2 with a supply of less than 7.5V or more than 24V. Be certain that the AC>DC unit is capable of at least 36 watts (higher is okay).

During use, it is normal for the case of the LPS-1.2 to become very warm—perhaps even hot—under full load. Do not worry at all. Even when hot, all parts are operating at less than half their thermal ratings.

Startup and Operation:

It is recommended that during the first days of use you place the LPS-1.2 with its back panel facing where you can see the POWER LED lamp. The lamp changes color to indicate status.

1) Set the blue rotary switch to the desired output voltage using the included screwdriver.
2) Attach the supplied DC cable to the device you wish to power and then to the "OUTPUT" jack of the LPS-1.2.
3) Plug the supplied AC>DC power adapter into the "+DC IN" jack.
4) Fully press the Power Switch button of the LPS-1.2.
4) Wait while the LPS-1.2 performs all its startup/reset calibrations; The light will be red, then orange, and finally green. Depending upon the output voltage selected and the prior state of charge of the unit, the red>orange>green boot time will take between 15 seconds and 120 seconds.

Meaning of the Power LED Colors:

GREEN: • Normal operation; the LPS-1.2 is outputting the DC voltage it is set to and the current load of your attached device is not exceeding 1.1 amps.

RED: • Flashing red (five red pulses, then a brief pulse of green) means that your connected device is drawing more than a continuous 1.1 amps. The LPS-1.2 will shut off its output voltage and then return to solid green once the load is reduced.

• Solid red means the LPS-1.2 is not outputting any voltage. Unplug the AC>DC supply from the input, wait until the red light goes off completely, then plug the charging supply back in and wait through the entire red>orange>green boot cycle.

We hope the UltraCap LPS-1.2 enhances your music system.

UPTONE AUDIO LLC • MARIPOSA • CALIFORNIA • U.S.A.
Phone 1-209-966-4377 • uptoneaudio.com