

VOODOO LAB

PEDAL POWER ISO-5

User's Manual

(Preliminary)

www.voodoolab.com

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Introduction

Pedal Power ISO-5 is an isolated power supply for powering guitar pedal effects and accessories. Its compact design is perfect for smaller pedalboards, rack shelves, or even as an additional power supply for larger boards. Pedal Power ISO-5 features five independent, filtered and regulated output sections, which will keep even the most sensitive vintage and boutique analog pedals dead quiet.

Pedal Power ISO-5 includes a high-current output which will properly power modern digital power-hungry effects like those from Eventide, Line 6, and TC Electronic. There's also a dedicated 18V output for those pedals which need the higher voltage for extra headroom.

Designed to meet the needs of professional users, Pedal Power ISO-5 will provide clean, consistent power, even with the poor AC line conditions often found on stage. Completely isolated output sections eliminate ground loops and unwanted interactions between effects, resulting in lower noise and noticeably improved tone.

All Voodoo Lab products are engineered and handmade in the U.S.A.

Unpacking

Your Voodoo Lab Pedal Power ISO-5 box should contain the following:

Pedal Power ISO-5 unit

Warranty card

AC line cord

DC Power cables:

- 5.5x2.1mm right angle barrel connectors (4)

- 5.5x2.1mm right angle to straight barrel connector (1)

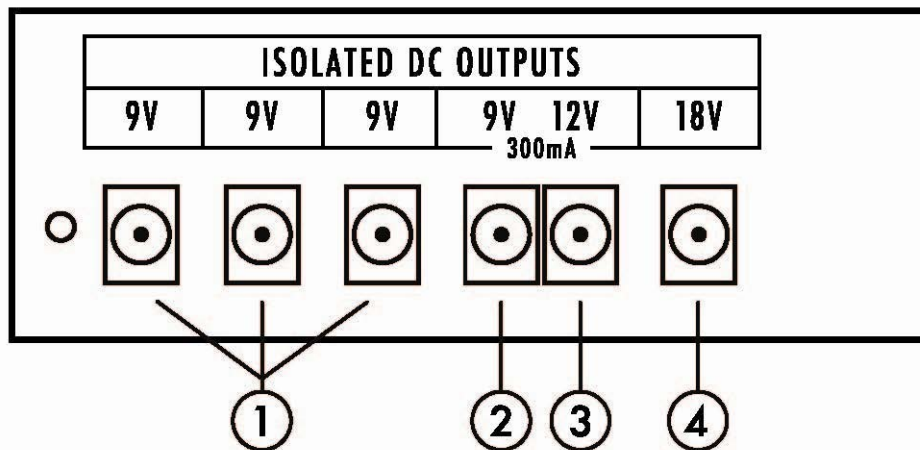
- 5.5x2.5mm right angle "red" barrel (1)

- 3.5mm right angle mini plug (1)

Connections

Pedal Power ISO-5 is powered directly from mains using the supplied AC line cord. This is a standard computer-type IEC line cord, so it's easy to obtain a replacement or different length.

Important: *Pedal Power ISO-5 is manufactured to operate from a specific supply voltage (100V, 120V or 240V) which is marked on the bottom of the unit. Attempting to operate at the wrong voltage without the correct step-down transformer may cause permanent damage.*



1) 9V outputs (3). Use for all ordinary pedals which operate from a 9V battery or require less than 100mA.

2) 9V high-current output. Use for devices which require up to 300mA. These effects will use multiple 1.5V batteries or a 9V regulated adapter (wall wart). This output can also power ordinary low current pedals.

3) 12V high-current output. Use for all devices which require 12V at 300mA or less. Most devices that use a 9V *unregulated* adapter should be powered from this output.

Note: The 9V and 12V high-current outputs are not isolated from each other (their negative terminals are common). It is preferred to use only one. If using both, combined output should not exceed 300mA.

4) 18V output. Use for 18V pedals which operate from two 9V batteries or require less than 100mA. Do not power 9V effects at 18V unless recommended by the manufacturer.

DC Power Cables

The Pedal Power end of each supplied DC power cable has a black barrel connector. The other end has either another identical barrel connector (center negative), a 5.5x2.5mm *red* barrel (center positive) or a 3.5mm mini-plug (tip positive). Use the standard right-angle black barrel connector cables with most common 9V battery operated pedals. Occasionally, a right-angle connector will not properly fit the power jack, so a cable with straight connector is also provided.

Before powering your pedal with a standard black barrel connector, you must verify that the pedal requires “center negative” polarity to prevent damage. Some common exceptions with their power jacks wired for “center positive” are the Fulltone ‘69, SoulBender, and Octafuzz pedals and Moogerfoogers. Reverse polarity cables are available from Voodoo Lab to properly power these pedals.

Boss Pedals

There are two types of Boss pedals which operate from a 9V battery. These are identified by the type of power supply specified, either PSA or ACA. Almost all Boss pedals specify the PSA type adapter and operate at 9V. Boss pedals which specify the ACA type adapter require a higher voltage and should be powered by the 12V output.

Boss Twin pedals, such as the DD-20 (which require more than 100mA), should be powered from the 9V high-current output.

Line 6 Modeling Pedals

Line 6 Tone Core pedals and Pocket POD can be powered from any available 9V output using a standard black 5.5x2.1mm barrel cable.

You can power Line 6 modeling pedals, like DL4 or MM4, using the 12V high-current output with the *red* 5.5x2.5mm barrel cable.

Note that PODxt, M13 and JM4 looper cannot be powered by the Pedal Power ISO-5.

TC Electronic

TC Electronic's Nova pedals such as the Delay, Modulator and Reverb are powered from the high-current 12V output using a standard black 5.5x2.1mm barrel cable. Other TC Electronic pedals which can be powered from a 9V battery, such as the Classic series, can operate from any of the 9V outputs.

Eventide

The Eventide stompboxes (TimeFactor, ModFactor and PitchFactor) are powered from the high-current 12V output using the *red* 5.5x2.5mm barrel cable.

Additional Cables

The DC power cables supplied with your ISO-5 are suitable for most common pedal effects. If you need additional cables, different lengths, reversed polarity, or a special connector, these are available from Voodoo Lab.

Visit www.voodoolab.com/cables.htm for more information.

Isolation

Pedal Power ISO-5 has five isolated output sections. This is sometimes referred to as “galvanic isolation” and means that there is no direct electrical connection between each output. Similarly, when you power your effects with batteries, they are also isolated because there is no electrical connection between the batteries.

Most power supplies are not isolated. Their output jacks are simply bussed together or use a daisy chain cable. This allows unwanted electrical current to flow between the outputs, commonly called a ground loop. The result is added noise. The isolated outputs of Pedal Power ISO-5 eliminate this noise.

Another benefit is that you can power both negative ground and positive ground effects with Pedal Power ISO-5. Negative ground effects are by far the most common, however the Fuzz Face and Octavia are some well known examples of positive ground circuits. Attempting to power positive ground pedals together with negative ground pedals from a non-isolated power supply will not work and may even damage the supply.

There are a couple of other tricks you can get from an isolated supply like Pedal Power ISO-5. You can use a special Y-cable which connects two 9V outputs in series to get an additional isolated 18V out. Occasionally, a pedal requires a bipolar supply, using two batteries for +9V and -9V. Isolated outputs work fine for this, non-isolated supplies do not.

Specifications

Input: IEC connector
120V 50/60Hz (North America model)
100V 60Hz (Japan model)
230V 50/60Hz (Europe/Australia model)

Model and input power are marked on the bottom of unit.

Outputs: 5.5x2.1mm barrel connectors center negative
Short circuit protected.

9VDC (3) - 100mA
9/12VDC - 300mA
18VDC - 100mA

Physical: 4.9" wide x 3.4" deep x 1.8" tall (124 x 86 x 44 mm)
1.24 lbs (0.56 kg)

Special: Toroidal power transformer

Warranty

Voodoo Lab warrants this product against defects that are due to faulty material or workmanship for a period of five years from the date of original retail purchase. This warranty does not include damage to the product resulting from accident or misuse. This warranty is given to the original purchaser only and it is not assignable to any other person.

If the product should become defective within the warranty period, Voodoo Lab will repair it or replace it free of charge, provided it is returned freight prepaid to Voodoo Lab with a valid RMA (return material authorization) number.

This warranty shall not apply to any goods that have been repaired or altered by anyone other than the manufacturer. There are no warranties which extend beyond the terms described herein. Should you experience any difficulty with this Voodoo Lab product, contact us as described below. If it is determined that the product must be returned to the factory for repair, you will be issued an RMA and given shipping and packaging instructions.

How to Reach Us

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