



www.BigJoeStompBoxCompany.com

POWER BOX

8-OUTPUT ISOLATED DC POWER SUPPLY

USER MANUAL

WHAT'S INSIDE / SPECIFICATIONS

The PB-101 contains the following:

1 - Big Joe Power Box	1 - Adapter Cable, 2.5mm, reverse polarity, female/male-green
1 - Power cord	
4 - Connector Cable, 5.5mm X 2.0mm, male/male, short	1 - Adapter Cable, 3.5mm, reverse polarity, female/male-blue
4 - Connector Cable, 5.5mm X 2.0mm, male/male, long	2 - Battery Snap Cable, 9 volt adapter, black
1 - Adapter Cable, 2.1mm, reverse polarity, female/male-red	1 - Warranty Card

Physical:

6.0" x 3.4" x 1.75"
Weight 2lbs

Input:

IEC connector
120v 60Hz (USA)
230v 50Hz (EUROPE)
100v50 60Hz (JAPAN)

Outputs:

Eight (8) isolated
5.5mm x 2.1mm,
center negative barrel,
connectors.
Short circuit protected

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POWER REQUIREMENTS

Guitar effect manufactures typically do not specify the power usage requirements of their products. Usually the only data available is the power rating information listed on the AC adaptor included with the effect. While this does not tell you the exact output required by the effect, at least you know that the effect does not require more than the power output of the power supply included. If your guitar effect does not come with an AC adaptor, then you may not have any idea at all, but generally speaking, if your stomp box or effect can run on a 9v battery, it will likely require less than 60mA.

Some Distortion boxes require as little as 5mA while some older analog delays may pull closer to 50mA. So, since each of the eight 9v isolated outputs on the Big Joe Power Box provides at least 100mA (two are rated at 300mA), you can easily power multiple effects from each of the eight Big Joe Power Box outputs. However, when doing so it is important to understand that these additional effects on the output will not be isolated for each other.

BASIC OPERATION

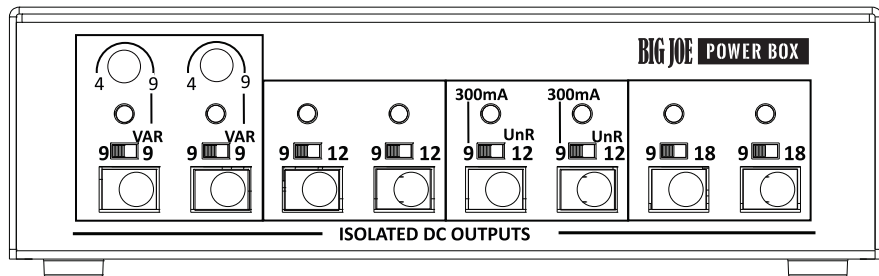
The Power Box is turned on by attaching female end of supplied grounded 3-wire power cord into the back of the Big Joe Power Box unit, and then plugging the male end of the supplied grounded 3-wire power cord into an AC power outlet. Unit is turned off by unplugging the power cord. When unit is powered all eight LED's will illuminate in the color appropriate for the voltage switch position selected. Most likely they will be all green if you are using the unit out of the box for the first time. Once you have determined the appropriate voltage and polarity requirements of each guitar effect you want to power, you simply plug the supplied connector cables into the Power Box with the corresponding ends of the connector cables plugged into the guitar effects you wish to power.

Warning: Power Box unit should not be exposed to dripping or splashing liquids and no objects filled with liquids, such as vases, shall be placed on the unit.

Reversed Polarity: Most DC powered stomp boxes utilize a tip-negative polarity jack which is consistent with all eight outputs on the Big Joe Power Box. If you have an effect that is wired for tip positive polarity, you can still use the Power Box, by attaching one of the Reverse Polarity cables (red, green or blue) provided.

GENERAL DESCRIPTION

FRONT PANEL:



1. TWO POSITION, SLIDE SWITCH, OUTPUT POWER SELECTORS

A two position voltage output switch is associated with each of the eight power outputs. This switch allows you to select various combinations of output voltages. Two of the outputs can be switched from 9v to 18v. Four of the outputs can be switched from 9v to 12v: two regulated, and two unregulated. And two of the outputs can be switched from 9v to 9v (VAR).

DAISY CHAIN CONNECTORS

If you need more than 8-outputs, a tip-negative Daisy Chain cable can be connected to any one of the eight Power Box outputs. Depending on the power consumption of the effects you intend to run off the Daisy Chain, you can significantly expand the number of effects that you can power with the Big Joe Power Box. The exact number of effects you can run off of each of the eight outputs with a daisy chain is limited by the total power consumption requirements of all of the effects you are attempting to power – not to exceed 100mA or 300mA depending on the output selected (see Output Chart). However it is important to understand that while the effects on the Daisy Chain will be isolated from the other Big Joe Power Box outputs, the effects on the daisy chain will not be isolated from each other.

It is also important to make sure that you utilize one of the reverse polarity connectors if you are attempting to power a tip-positive effect to one of the Daisy Chain outputs.

CONNECTORS

The Big Joe Power Box comes with a varied collection of interconnection cables. These cables should cover most stomp box and guitar effect applications you encounter (see Typical Connection Chart).

Most of today's stomp boxes and guitar effects are tip-negative, so the eight black connector cables, four short, four long, should work in most instances. Simply plug them direct into your effect and the Big Joe Power Box. However, if you are not sure about your guitar effects polarity, you should consult with the manufacturer of your effect before plugging into the Big Joe Power Box. Otherwise you run the risk of damaging your effect.

If your effect is determined to be tip-positive then, depending on the barrel size of the connector jack on your effect, one of the three reverse polarity colored cables (Red, Blue, Green) should work. If you have a stomp box which does not have a power jack at all, then you can still power it with the Big Joe Power Box by using the cable with the 9v battery snap.

2. 9V 100mA, TIP-NEGATIVE POWER OUTPUTS

There are eight isolated 9v, tip-negative power outputs suitable to power most stomp box effects. Six of these outputs are 100mA and two are 300mA. The 300mA outputs are particularly useful for power hungry effects.

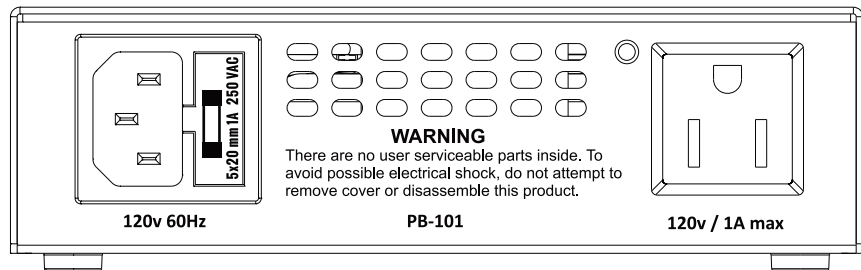
3. VOLTAGE INDICATOR LED'S

An individual, 3-color, LED is associated with each of the eight power supply outputs. The LED changes color depending on which output voltage is selected with the two position slide switch. Color indications are as follows: 9 volt - Green, 12 volt - Amber, 18 volt - Red

4. VARIABLE OUTPUT VAR CONTROL

Two of the 9v power outputs can be switched to variable outputs. This control helps simulate the effect of a low battery condition, and is sometimes useful for stomp boxes that sound and behave differently at lower voltages.

BACK PANEL: PB-101 (USA)



1. FUSE PROTECTED AC POWER JACK (5x20mm, 1A time lag 250VAC fuse)

This is a standard, IEC type connector. Plug power cable into this jack and connect to your countries standard wall outlet: US 120VAC, EURO 230VAC, JAPAN 100VAC. This Jack is protected with a 5x20mm, 1A time lag 250VAC fuse. Fuse is accessed under cover plate on jack. Use small screw driver to pop cover plate off. Extra fuse is also provided inside cover plate.

2. AC AUXILIARY JACK

This is a courtesy AC outlet for convenient powering of AC powered effects: wall wart adapters, battery chargers, or Midi foot controllers.

This jack is not for your amplifier.

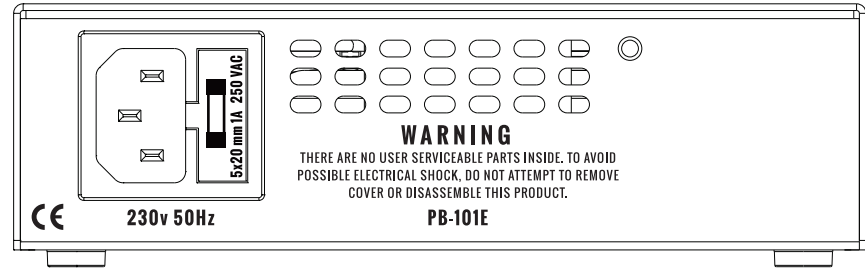
INSTALLING THE POWER BOX

Although the Big Joe Power Box can be used as a stand-alone power supply, the best and most common installation is on a pedal board. A pedal board application, allows you to securely attach the Power Box, and appropriate output connection cables, in a way that will protect everything, particularly the cables. One of the most common problems with non-pedal board applications is output connection cables wearing out due to constant stress and excessive flexing. A pedal board application allows you to secure and attach connection cables with Velcro, nylon cable wraps, twist ties etc. The foot print of the Big Joe Power Box is compatible with other pedal boards available from most manufactures, but works particularly well with our Big Joe Stomp Box Pedal Board.

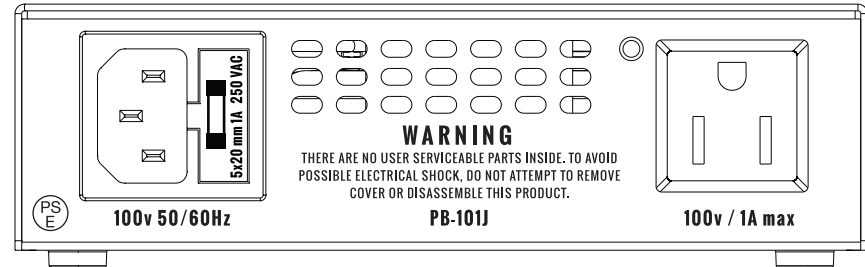
OUTPUTS

OUTPUTS	1	2	3	4	5	6	7	8
CURRENT	100	100	100	100	300	300	100	100
SWITCH	LEFT	LEFT	LEFT	LEFT	LEFT	LEFT	LEFT	LEFT
DC VOLTAGE	9v	9v	9v	9v	9v	9v	9v	9v
OUTPUT	REG	REG	REG	REG	REG	REG	REG	REG
LED COLOR	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN	GREEN
SWITCH	RIGHT	RIGHT	RIGHT	RIGHT	RIGHT	RIGHT	RIGHT	RIGHT
DC VOLTAGE	9v VAR	9v VAR	12v	12v	12v	12v	18v	18v
OUTPUT	REG	REG	REG	REG	UnREG	UnREG	REG	REG
LED COLOR	GREEN	GREEN	AMBER	AMBER	AMBER	AMBER	RED	RED

BACK PANEL: PB-101E (EUROPE)



BACK PANEL: PB-101J (JAPAN)



INTRODUCTION

The Big Joe Power Box offers isolated, noise free DC power outputs capable of providing power to any battery operated guitar effect. Isolated power is the best way to protect your signal path from unwanted noise and interference. Clock noise from digital effects, noisy distortion signals, oscillation artifacts, etc. are all problems that build up in your signal path when using a single power source to drive multiple effects. Wah Wah and Treble boost effects in particular are notorious for picking up noise.

The Big Joe Power Box has eight Isolated 9v power outputs with switch combinations to convert to various 12v and 18v outputs options. The Power Box also features two variable (VAR) voltage controls to simulate worn out batteries and an AC courtesy jack for pedals requiring AC only. Multi color individual LED's for each of the eight outputs makes it easy to see the output voltage selected for each output. The Big Joe Power Box is simply the best solution for all your power requirements.

REGULATED OR UNREGULATED?

Regulated adapters deliver constant voltage no matter what the load. If your effect came with a regulated adapter, any of the eight regulated 9v DC outputs will work. However, unregulated adapters only operate at rated voltage at rated load. At lower loads, voltage could be 20-30% higher. What this means is that voltage from a 9v DC unregulated adapter will typically be closer to 12v DC at low load. So, if the current demand of the effect you are trying to power is low, you may need to power your effect with one of the 12v DC regulated outputs. Otherwise you can use one of the 9V regulated outputs. If there is any doubt, consult the manufacturer of your effect before attempting to power it.

Some effects specify AC power, but can also operate from DC power. Peak voltages from AC sources are approximately 40% higher so, depending on the load, an effect that operates with 9v AC may need to use one of the 12v DC outputs. Again check with effect manufacturer if you are unsure.

Courtesy output jack: Some effects operate form AC only. To power these type effects you will need to use the courtesy output plug on the back of your Big Joe Power Box unit. *Do not use this courtesy jack to power your amplifier.*