

POCKET NOISE SILENCER

EWS PNS-1 Instruction Manual

Thank you very much for purchasing PNS-1. Please read this instruction manual so you can enjoy this product for many years to come.

PNS-1 is a DC power distributor with a powerful built-in noise filter. By connecting this to a commercially sold 9V adaptor (*Specifications of compatible adapters are listed in below Description of Functions column), you can distribute clean electric source from the DC with significantly reduced noise element to multiple effects.

During the recent years, popularity of switch-type adapters has grown very quickly. Although these adapters have wide range of input voltage, are smaller in size and weight, and capable of high capacity output current, because of their structure, they are known to cause very specific high frequency noise.

PNS-1 uses powerful noise filter to significantly eliminate this high frequency noise but its system is completely passive and will not consume incoming power.

It is also effective in significantly eliminating the noise element when you connect linear-type adapter. Each input and output terminals are setup with protective circuit. This is a counter measure against troubles caused by misusage such as using wrong output short-circuit or polarity.

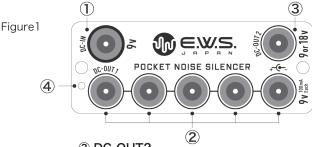
Figure 2

Jumper Pin

18V (Default)

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■Description of Functions



① DC-IN

This is where you connect the DC 9V output terminal from the adapter. Please only input terminal with regulated center negative.

If you are powering multiple effects from PNS-1, please add each effect's consumption current amount and make sure it does not exceed the current capacity of the connected adapter. Regarding the adapter's current capacity, we recommend using an adapter that has extra current that puts out about 1A~2A.

2 DC-OUT1

There are five DC9V output terminals. Each terminal can supply up to 100mA (500mA in total) of DC9V power. You can use the common 2.1mm DC cable to supply the power to each effect. Please note that DC-OUT1 terminals will not supply power to effects that require more than 100mA of consumption current.

Each terminal is setup with protective circuit. If one of the outputs short-circuits, the other output terminals will continue to work normally, however, once the shorted circuit is resolved to normal state, DC output will recover automatically.

③ DC-OUT2

This output terminal is defaulted to DC18V. However, it's designed to be switched to DC9V if needed. In order to switch the output from DC18V to DC9V or back to DC18V, please follow the following steps:

- 1) Disconnect the power to the PNS-1 and all DC cables, making sure the LED is not on.
- 2) Change the jumper pin, that's located inside the PNS-1. See Figure 2.

Factory setting is DC18V output. DV18V is created with the charge pump IC by doubling the DC9V input, but due to the charge pump's attribute of approx

0.6~0.8V voltage drop, it is not an exact double voltage of the input power. Also, although it can supply up to 100mA, there will be an approx. 1V voltage drop.

With this terminal is configured with DC9v output, it can supply up to 650mA of power. This will allow you to power those digital effects needing DC9v power but with large mA consumption requirements. However, please be advise that there are noise issues specific to digital effects that may mixed into other analog effects connected to the PNS-1

Also when 9V output is chosen, you can use the DV cable to link to another PNS-1. You will be able to connect to more effects by using two PNS-1 but please be careful that this total amount of consumption current does not exceed the adapter's current capacity.

*Although rare, some effects operate in 9V, but with reverse polarity. PNS-1 cannot supply power to these effects even if you interchange the polarity of DC cable. This specification is same for DC-OUT1 and DC-OUT2. Please check the power supply polarity indication on the effects before you connect them.

* When DC-OUT2 is set to 9V, the total output current becomes 1,150mA by adding the output current of 100mA x 5 = 500mA of DC-OUT1 and the output current of 650 mA of DC-OUT2.

4 POWER LED

This will light when the power is turned on. When you disconnect the power, POWER LED will remain lit for about 10 seconds before turning off. This does not mean the unit is damaged. This is due to gradual discharge of charged current in PNS-1's noise filter parts. Also, LED will not light when you connect an adapter with different polarity. In this case, please disconnect the adapter output terminal from PNS-1 and immediately stop the power supply.

■Main Specifications

Input: DC9V, 5.5x2.1mm barrel connector / Output Terminal: DC9V×5 output, DC9-18V×1 output 5.5x2.1mm barrel connector / I/O Power Polarity: Center negative / Size: 88×34×30mm / Weight: 114g / Accessories: Instruction Manual, Warranty Certificate

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