

### Not included accessories

#### *Mains Link Adapter or Mains link cable*

This adapter or cable type allows you to link two or more of the link power supplies together and power several units using one single mains power cord.

#### *Mains Adapter – universal*

This mains adapter is available as a kit incl. mounting hardware to secure the connection. It converts the IEC C13 mains outlet into two universal wall type mains outlets (one EU/US/UK type and one EU/US type) allowing you to connect two adapters of the plug-in type or any other mains powered appliances of your choice to it and power them via the courtesy outlet.

#### *More Flex cables and Booster Flex*

To power one pedal using one outlet you simply use a single suitable standard Flex cable and that's it. In case the plug type or length you need is not included with your unit there's a big selection of standard Flex cables to choose from and order them separately. In case of an odd voltage or current requirement you might need one of the Special Flex cables available. Please read more about these and how to use them on CIOKS web site. They really open up for even more versatility and flexibility in terms of what you can power with your unit.

### Powering different pedal types

This issue is different for every individual rig, therefore please e-mail your specific questions regarding powering your pedals using CIOKS power supplies directly to [support@cioks.com](mailto:support@cioks.com).

### Technical specifications

AC mains input: 110-120VAC 60Hz or 220-240VAC 50Hz, max. 48W  
AC mains output: same voltage as connected to AC input, max. current 6A~

Outputs: Outlet 1-2: 9 or 12V DC / 100mA each, isolated  
Outlet 3-4: 9 or 12V DC / 200mA each, isolated  
Outlet 5-6: 9 or 12V DC / 400mA each, isolated  
Outlet 7-8: 12V DC / 400mA each, isolated

Size: 217x88x40mm (excl. rubber feet)  
Weight: 1.2kg

Warranty period: 5 years worldwide

### What's in the box?

- PowerFactor 2 power supply
- mains power cord
- 17 Flex cables
- pedalboard mounting hardware incl. screws, washers, stand-offs and a hex key
- manual
- product sheet (drill guide)
- Flex guide

# Eventide®

## PowerFactor 2

### Power Supply for Effect Pedals



### User's Manual

Version 1.1 – March 2017

### Introduction

Since 1991 the Danish company CIOKS has been providing guitar and bass players with reliable power supplies dedicated for effect pedals. After more than two decades in this business we've designed the next generation professional power supply dedicated for powering up to five Eventide pedals along with other standard 9V pedals. The result is the PowerFactor 2.

### Features

- 8 outlets configured in 8 isolated sections with a total current of 2.200mA
- 4 powerful DC sections specially designed for Eventide pedals
- 2 isolated outlets ideal for medium current 9 or 12V pedals or one more Eventide pedal
- 2 isolated outlets ideal for standard 9 or 12V pedals
- toroidal transformer
- short circuit protection of all outlets
- advanced LED monitoring of each outlet
- 120 or 230V mains voltage operation
- detachable mains power cord
- courtesy AC mains outlet
- CIOKS unique mains link feature
- 17 Flex cables included
- compatible with Pedal Train and Temple Audio pedalboards
- all needed hardware for pedalboard mounting included

## Overview

### *Front*

On the front of the enclosure you'll find 10 outlets of the power supply as RCA sockets which all are centre positive. Correct polarity for the pedal is achieved by using the right Flex cable.

### *Top*

CIOKS logo has a red LED placed in the middle of the letter 'O'. When this LED is lit the power supply is connected to mains and operates.

On top of the enclosure you see the output voltage and max. current rating of each outlet printed just above the outlet sockets. The top figure is the voltage and the DC in the middle line tells you it's a direct current outlet. Since all outlets have two possible voltage settings both values are stated as 9/12. The bottom figure states the maximum current capability of each outlet in mA.

The status of each isolated output is shown by a LED indicator also situated on top of the enclosure just above the voltage figure. Operation of this advanced and unique monitoring feature is described in detail later on.

### *Left side*

On the left side of the enclosure you'll find the AC power input connector, which is a C14 type according to the IEC 60320 standard. On the same side as the AC mains input you'll find the mains voltage selector switch and fuse compartment.

Mains voltage selector switch should be used for setting the correct mains voltage 115 or 230V.

The fuse is the only part, which may be replaced by the user. In case it's blown, replace with a 5x20mm, T 630mA (slow blow/time lag) type. In the fuse compartment you'll also find one extra replacement fuse.

### *Right side*

On the right side you'll find the AC mains courtesy outlet connector, which is a C13 type according to the IEC 60320 standard. The current drawn from this outlet should not exceed 6A.

### *Bottom*

The four detachable rubber feet are situated on the bottom of the enclosure. On this same surface you'll find 8 holes with metric M4 threads, which should be used for easy mounting of the power supply to a pedalboard. Preferably use the included screws and do not use screws, which would go further than 5mm inside the unit. Have a look at the mounting guide on CIOKS web site.

## Getting started

First make sure that the voltage value chosen on the voltage selector switch matches the mains voltage in your wall socket. Connect the mains power cord to the power supply and mains. Using the right Flex cable types connect your pedals to the outlets of power supply making sure that the voltage and current is correct for every pedal.

## Powering Eventide pedals

Eventide pedals should be connected to the power supply using green Flex cables which have a 5.5/2.5mm positive centre DC plug at the pedal end. There are five of these Flex cables included and they allow connecting five Eventide pedals to the power supply. The first two Eventide pedals you should be powered using outlets 7 and 8. The next one or two Eventide pedals should be connected to outlets 5 and 6 in 12V setting. If you happen to have a fifth Eventide pedal please connect it to outlets 3 and 4 both in 12V setting using the parallel adapter Flex followed by a green standard Flex cable.

## Advanced LED Monitoring feature

Each isolated outlet has its individual LED status indicator. The indicator is lit in normal operation. Its light gets dim when you operate just on the edge of the current limit. If you overload or short circuit an outlet, the respective LED indicator turns off.

All indicators take into account the actual level of mains voltage when monitoring a possible overload. The current limits for each outlet or section of the power supply are specified at nominal level of the mains voltage. In Europe it's 230V, 115V in United States and 100V in Japan. If the mains voltage is higher than nominal, you can draw more current from the power supply than stated in the specifications. This would never be a problem. A more common situation though, is when the mains voltage is lower than nominal. In such a case maximum current ratings for each outlet or section might be diminished.

The advanced LED monitoring of each isolated outlet will alert you in case of an overload or short circuit. If such a situation happens you know where to look to solve the problem. A glance at the LED status indicators and you have proof of 100% clean power to your pedals.

## Included accessories

### *Flex cables*

CIOKS offers a great selection of different Flex cable types for connection your pedals to the power supply. Below you see a list of the included Flex cables with your unit:

- Standard Flex type 1 – black with 5.5/2.1mm centre negative DC plug x5
- Standard Flex type 2 – red with 5.5/2.1mm centre positive DC plug x1
- Standard Flex type 4 – green with 5.5/2.5mm centre positive DC plug x5 (Eventide)
- Standard Flex type 5 – black with tip positive 3.5mm jack plug x1
- Standard Flex type 6 – black with 9V battery clip x1
- Split Flex type 1 – black with two 5.5/2.1mm centre negative DC plugs x1
- Stack Flex type 1 – black with 5.5/2.1mm centre negative DC plug x1
- Parallel adapter Flex – sand grey with two male and one female RCA plugs x2

Split Flex should be used if you'd like to power two pedals with the same voltage using only one outlet.

Stack Flex can be used to obtain 18V by using two 9V outlets or 24 with two 12V outlets.

Parallel adapter Flex should be used with two outlets with the same current rating and exactly the same voltage. You'll get the same voltage and the sum of currents. You can use the two 200mA outlets both in 12V setting with the parallel adapter Flex followed by the green type 4 Flex to obtain 12V with 400mA to power a fifth Eventide e.g. the H9. Using the parallel adapter Flex with the first two outlets will give you a 200mA source able to power a medium current draw pedal.

For further information about Flex cables please have a look on CIOKS web site.

### *Mounting hardware*

We've included all the needed mounting hardware to mount the power supply on top or underneath a Pedaltrain or a Temple Audio board. Please have a look at the mounting guide on CIOKS web site for a step-by-step mounting guide. You can of course also attach it to other types of pedal boards.