# Powering different pedal types

Each individual rig is different, therefore if you have questions about using the CIOKS CRUX power supply please e-mail your detailed questions including the power requirements of your specific pedal directly to <a href="mailto:support@cioks.com">support@cioks.com</a>.

# **Technical specifications**

Input: 24V DC

Output: 9V DC / 2700 mA or

12V DC / 2000 mA

Total output power: max. 24W

Size: 40 x 88 x 25,4mm (1.6x3.5x1.0")

Weight: 135g (0.3lb)

Warranty period: 5 years worldwide

# What's in the box?

- 1 x CRUX adapter
- 1 x L2415 DC Link cable
- 2 x Flex cables, #1050 and #3050
- Mounting hardware for Pedaltrain and Templeaudio boards
- 1 x Product manual
- 1 x Flex Guide
- 1 x CIOKS sticker sheet





User's Manual Version 1.00 – December 2022

### 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 a quarter of a century, CIOKS has designed the CRUX power supply which is part of our Future Power Generation product range. CIOKS CRUX is the ultimate add-on to CIOKS DC7 if you are using a Neural DSP Quad Cortex, a Line 6 HX-series pedal or another power-hungry 9V or 12V multi-effects pedal. Simply connect the CRUX to the 24V outlet on DC7, set the correct voltage on CRUX, connect the appropriate CIOKS Flex cable from CRUX to your multi-effect pedal and you are good to go.

Using CRUX frees up the outlets on DC7 that would otherwise be needed to run these devices (for instance four for a Neural DSP Quad Cortex and two outlets for a Line 6 HX Stomp), allowing you to run more pedals along with your multi-effects device. CRUX therefore provides a simpler, more reliable setup and gives you more options for connecting additional pedals.

## **Features**

- Converts the 24V aux outlet on DC7 into a powerful 9 or 12V outlet with a total power of 24W
- Powers a Neural DSP Quad Cortex with DC7 saving you 4 outlets on the DC7
- Overload and short circuit protected outlet
- Overvoltage protected outlet protecting your equipment
- CIOKS CRUX has the same 1-inch profile (25,4mm) as CIOKS DC7
- Compatible with CIOKS MiniGRIP for drill-free mounting underneath Pedaltrain boards\*
- One 24V DC Link cable included
- Two Flex cables included
- Designed in Denmark, assembled in Poland
- 5-year worldwide warranty
- 5 Flex cables included
- Designed in Denmark, assembled in Poland
- 5-year worldwide warranty

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<sup>\*</sup>Sold separately

### Overview

## Left side

On the top left side you will find the 24V DC Input which is used to connect CRUX to the 24V Aux outlet on DC7. On the bottom left side you will find the 9/12V DC outlet which is used to connect the multi-effects device

### Top

CIOKS logo has a red LED placed in the middle of the letter 'O' and this functions as a global status indicator.

The dipswitch in the bottom is used to switch between 9 or 12V DC

## Right side

The two holes on the right side have metric M4 threads are to be used with the MiniGRIP bracket (*sold separately*) for mounting CRUX to Pedaltrain boards with no drilling required.

### Bottom

The four detachable rubber feet are situated on the bottom of the enclosure. On this same surface you will find two holes with metric M4 threads which can be used to mount CRUX to a pedalboard.

# **Getting started**

- 1: Connect the CRUX to the 24V outlet on DC7 using the included DC Link cable
- 2: Set the correct voltage on CRUX (9V or 12V depending on what your multi-effects pedal requires)
- 3: Connect the appropriate CIOKS Flex cable from CRUX to your multi-effects pedal and you are good to go.

# **Advanced LED Monitoring feature**

The isolated 9/12V outlet has its individual LED status indicator. The indicator is lit in normal operation. The LED light gets dim when you operate just on the edge of the current mA limit for the voltage you have chosen on the outlet. If you overload or short circuit the 9/12V outlet, the LED indicator turns off. The light intensity of the status LED will be higher when the output voltage is set to 12V.

### Global status indicator

If CRUX power supply is powered of a solid 24V DC power source sufficient to provide enough current and everything functions normally the red LED inside the O letter in CIOKS logo will be lit. If the source supplying CIOKS CRUX power supply is too weak and/or the voltage on the input of CIOKS CRUX is too low the indicator will turn off.

# **Pedalboard mounting**

### General

The most secure way is using the drill template on the product sheet and then drill two positioned  $\emptyset4,5$ mm or  $\emptyset5,0$ mm holes in the pedalboard and fasten CRUX to it with the two included screws. Due to the extremely low profile and low weight you can also use Dual-Lock tape or industrial Velcro to fasten CRUX below any type of pedalboard. In general for mounting in a rack, pedalboard or other structure we recommend using the two threaded M4 holes and matching metric M4 screws. Remember not to penetrate CRUX more than 5mm with the screws used.

### Pedaltrain

For Pedaltrain boards we recommend an easy alternative way of mounting CRUX using the Mini GRIP bracket where no drilling is needed.

# Temple Audio

The two threaded M4 holes in the bottom of CRUX are aligned with the grid of Templeboards and allow for very easy mounting on top or below any Temple Audio pedalboard with the two included screws. If you want to make a distance between the board's surface and CRUX to allow space for the Temple Audio finger screws you can get a set of three 8mm hex stand-offs with matching screws (order no. 4HEX) and then use two of these with the threaded holes in the bottom of CRUX.

### Included cables

### Flex cables

CIOKS offers a wide 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:

- 1 x Flex 1050 Type 1 5,5/2,1mm DC-plug, centre negative, L-shape, 30cm (black)
- 1 x Flex 3050 Type 3 5,5/2,5mm DC plug, centre negative, L-shape, 50cm (yellow)

## DC Link cable

A DC Link cable in 25 cm length is included is used to connect CRUX to the 24V Aux outlet on the CIOKS DC7 power supply.

## Mounting hardware

We have included all the needed mounting hardware to mount the power supply on top or underneath a Pedaltrain or a Temple Audio pedalboard. You can of course also attach it to other types of pedalboards.

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