NUX


# Cerberus

INTERGRATED EFFECTS & CONTROLLER

地狱犬 合并式效果器

Owner's Manual 操作指南

## WARNING

To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

## CAUTION

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The lightning symbol within a triangle means, “Electrical caution!” It indicates the presence of information about operating voltage and potential risks of electrical shock.

The exclamation point within a triangle means, “Caution!” Please read the information next to all caution signs.





# Introduction

## Welcome to Cerberus

Thank you for purchasing the Cerberus, a powerful equipment to guitarists with new design philosophy and utmost quality!

Cerberus is a combo effect unit that’s as easy as a stompbox. It’s uncompromised quality, full implement of MIDI and portable size takes this little monster to professional market.

Ease of use and convenience were crucial in the design of Cerberus, guitarists will focus their idea to musical sense rather than LCD and boring menu.

Cerberus also offer the most flexibility and the ease of connections among the gears your favorite. Your boutique pedals, tube amplifiers and modern effects with midi supported are linked seamlessly by Cerberus.

Product information is updated regularly, so be sure to check www.nuxefx.com for the latest news.

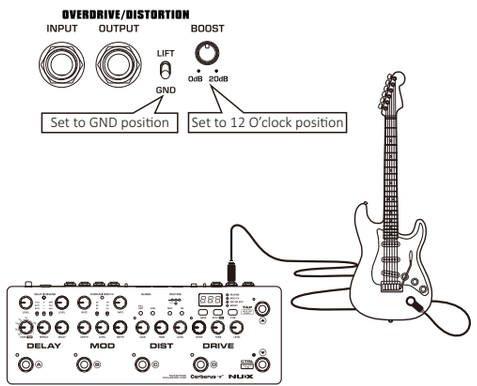
## Features:

- Full midi implementation
- Sixteen effects
- Ultra-low latency (In to Out 0.68ms-2.04ms)
- Software editor and upgrades via USB
- Analog overdrive & distortion Circuits
- True bypass (OD/DIST Module)
- 2 exclusive pedals in 1 board
- 88.2khz/32bit AD/DA converter & processing
- Full knobs control without additional menu parameters

## Quick Start

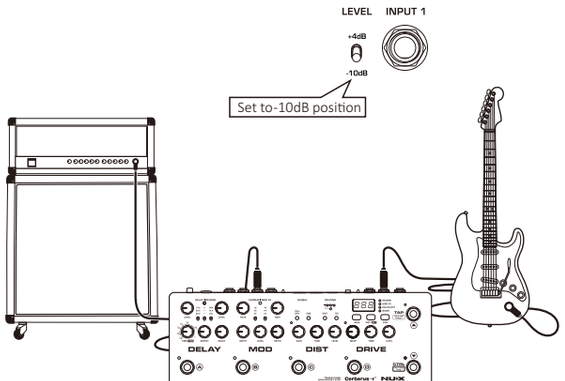
### Step 1:

Connect your guitar to OVERDRIVE/DISTORTION module input.




### Step 2:

Connect a guitar cable from the OUTPUT1 to instrument input on your amplifier.

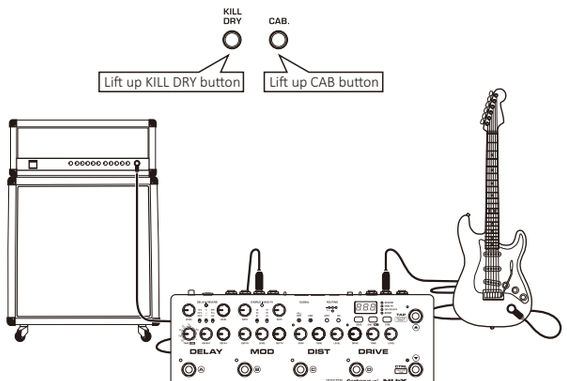





## Quick Start

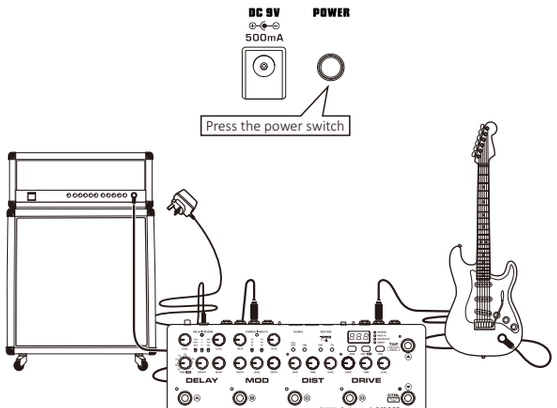
### Step 3:

Set all knobs to the 12 O'clock position. Make sure power switch is in power off position.




### Step 4:

Connect power adapter to main power and to the power input on Cerberus.



## Quick Start

### Step 5:

When Cerberus is in Manual mode, press footswitches to engage the effects.

In Manual mode, the reverb effect cannot be engaged by pressing DELAY footswitch. There are two ways to turn on/off reverb separately:

1. Set the level knob of reverb fully left to turn off the reverb effect.
2. Assign CTRL foot switch to reverb effect, turn on/off reverb effect.

In Manual mode, the MOD FX effects and chorus effects will be engaged simultaneously when MOD effect footswitch is pressed. There are two ways to turn on/off MOD FX module separately:

1. Set the depth knob of MOD FX fully left to turn off the MOD FX effect.
2. Assign CTRL foot switch to MOD FX effect, turn on/off MOD FX effect.

Hold the CTRL foot switch to enter Tuner mode. Pluck a single string at a time to see its pitch. Adjust each string until they're all in tune.

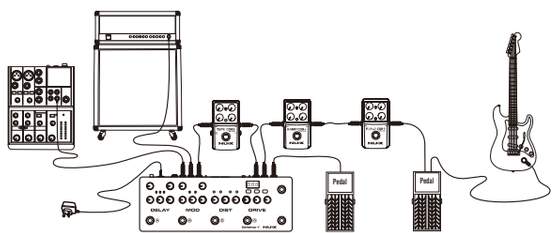
You can now experiment with all of Cerberus's features starting by hold the TAP foot switch to enter preset mode. Press A/B/C/D and Bank UP/DOWN foot switches to hear each preset.

When you want to edit effects or tap tempo, put the unit in Edit mode and recall a preset, and then press the foot switches of current preset again, the unit switches to edit mode and "ED" appears in the display.

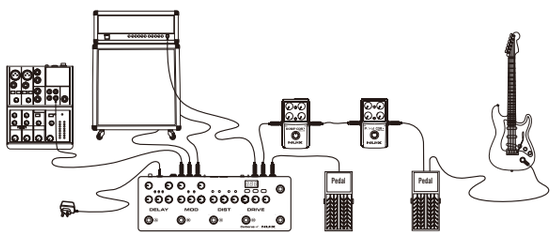


## Typical Setups

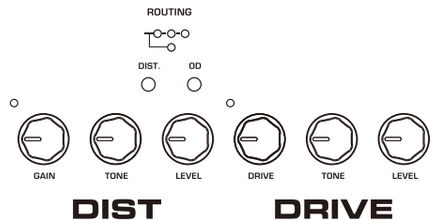
Classic Setup




4-Wire Setup



## DRIVE/DIST(Overdrive/Distortion)




| DRIVE | DIST |
|---|---|
| DRIVE:<br>Sets the gain of the drive. | GAIN:<br>Sets the gain of the dist. |
| TONE:<br>Sets color of the sound. | TONE:<br>Sets color of the sound. |
| LEVEL:<br>Sets volume of the drive. | LEVEL:<br>Sets volume of the drive. |

Cerberus allows you to choose among four different signal routings. A routing defines how the signal runs through the unit. To Switch among routings, press ROUTING switches.

| Serial Routing 1 | Serial Routing 2 | Parallel Routing | Toggle Routing |
|---|---|---|---|
| DIST OD | DIST OD | DIST OD | DIST OD |

Serial Routing 1:
The signal is going through the overdrive section first and then to the distortion section. If you want to use the overdrive section to push the distortion section, this routing is for you.

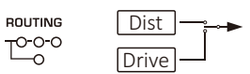

Serial Routing 2:
The signal is going through the distortion section first and then to the overdrive section.






Parallel Routing:
The signal is processed in parallel by the two sections, and they provide their owner characteristics.

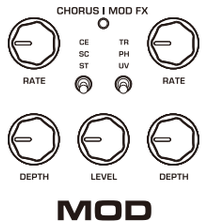

Toggle Routing:
Use the Drive and Dist foot switches as toggles for overdrive and distortion.




## NOTE:

*The selected routing is stored as part of each preset.*

## MOD(Chorus/MOD FX)




| Chorus | MOD FX |
|---|---|
| RATE:<br>Sets rate of the chorus. | RATE:<br>Sets rate of the mod fx. |
| DEPTH:<br>Sets depth of the chorus. | DEPTH:<br>Sets depth of the mod fx. |
| LEVEL:<br>Sets level of the effect. | |

Cerberus use remarkable algorithm for highly accurate recreate of analog BBD circuit and the associated pulsating driver circuit.

CE (Vintage Chorus)
This models the first chorus effect pedal which was released in 1976. It has very warm and organic sound of an analog chorus unit.

SC (Analog Chorus)
This models the very popular chorus pedal in whole 80's. Original one was designed with only rate and depth control. We add level knob to control overall amount of chorusing.

ST (Modern Chorus)
This models the rich sound of an analog chorus unit with 5-knob and yellow stomp box which is always treated as standard analog chorus.

Cerberus packed three modulation effects into MOD module. It allows you to combine chorus, phaser, tremolo and uni vibe.

TR (Tremolo)
This effect is based on the highly acclaimed tremolo circuit found in some opto based stompbox.

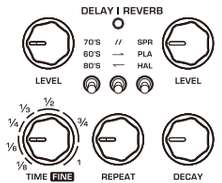
PH (Phaser)
This models a popular and respected analogue phaser, housed in a orange yellow stompbox.

UV (Uni-vibe)
This effect generates a truly unique effect tone, a mix of chorus, tremolo, rotary and phaser.





## DELAY/REVERB




| Delay | Reverb |
|---|---|
| LEVEL:<br>Sets the level of the delay. | LEVEL:<br>Sets the level of the reverb. |
| REPEAT:<br>Sets feedback of the delay. | DECAY:<br>Sets time of the reverb. |
| TIME/FINE:<br>Sets time of the delay. | |

70's (Analog Delay)
This effect is a analog delay based on an authorial emulation of a solid stage time delay line (BBD – Bucket Brigade Device) characterized by a red classic stomp box.

60's (Tape Echo)
This models a vintage analog tape echo, which was originally create by using a playback head. The delay time was adjusted by modifying the motor speed, so you can hear a unique pitch shift when you adjust the delay time.

80's (Digital Delay)
This effect is more than a simple repetition of sound in the early age of digital world. A mix of multiple delay onto a guitar recording track.

## NOTE:

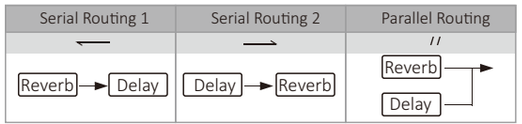
*Hold [ALT] button and adjust TIME/FINE knob for fine tune delay time in 1ms.*

SPR (Spring Reverb)
This models a spring reverb inside a guitar amp. Use the level knob to adjust the mix ratio of the reverb sound. Use the decay knob to adjust the reverb time.

PLA (Plate Reverb)
This is a plate reverb that contains a brightness tone and natural reverb sound.

HAL (Hall Reverb)
This models a rather large hall and preserves the natural characteristics of guitar sound. Excellent for a discrete reverb with long reverb time.

Delay/Reverb module allows you to choose among three different signal routings. A routing defines how the signal runs through the units.




Serial Routing 1:
The signal is going through the reverb section first and then to the delay section.

Serial Routing 2:
The signal is going through the delay section first and then to the reverb section.

Parallel Routing:
The signal is processed in parallel by the two sections, and they provide their owner characteristics.





## Making Global Settings

Settings that are shared by the entire Cerberus are called “Global settings.” They are not stored as a part of each preset.


## CAB. (Cabinet simulation)

Cabinet simulation provide a direct interface of the Cerberus’s output to a mixing console or headphones. There are two ways to enable the cabinet simulation:

1. Connecting headphones to phones jack will enable the cabinet simulation automatically.
2. Press CAB button to enable the cabinet simulation and “CAB” appears in the display. Only the OUTPUT2 of the Cerberus engage cab simulation. You can still connect OUTPUT1 to guitar amplifier for monitor.

## KILL DRY

With the switch in ON position, no clean signal passes through the Cerberus. “NOD” appears in the display. This is the setting to use if you connect the unit in a parallel loop or in an aux send/return on a mix.

## LIFT/GND switch


Normally, you can set this switch to the GND position. If you’ve connected the EXT LOOP jacks to an amp, a ground loop may occur, producing noise. If this occurs, you may be able to eliminate the noise by moving this switch to the LIFT position.

## I/O LEVEL switch


Normally, you can set this switch to the -10dB position when you are using guitar amp as input. If you’ve connected the output to mixer or amp’s send/return loop, moving this switch to the +4dB.

## Using the Effects

### BOOST knob (Volume Boost)


To give you a boost of extra volume when you need it, the adjustable CTRL foot switch delivers up to 20dB of extra volume. By adjusting the boost knob on the rear of the unit, you can preset the amount of boost you'd like the CTRL footswitch to deliver.

### Assigning the CTRL footswitch functions


Here's how to assign the effects that will be turn on/off by the CTRL footswitch.

1. Press the CTRL button.
2. To select the function that you want to assign by the CTRL footswitch.

REVERB:
To turn on/off the effect of reverb module.

MOD FX:
To turn on/off the effect of MOD FX module.

OD/DS BYP:
To turn on/off the effect of overdrive and distortion instantly.

BOOST:
To turn on/off the volume boost.



## Saving/Calling Up Preset

The Cerberus has three operating modes: Manual mode, Preset mode and Edit mode.

Manual mode: the tones are produced by the actual positions of the front-panel knobs for the various effects.

Preset mode: allows you to save tone settings and recall them for later use.

Edit mode: take current preset to return to manual mode temporarily so that you can use TAP tempo, CTRL and tuner in preset.

### Presets and Banks

In preset mode, a combination of effects together with a group of parameter settings is called a "preset". A group of four patches is called a "bank", and respective presets in a bank correspond to the footswitches.

A total of 128 presets are organized into 32 banks that you can freely read from or write to.

### Changing Among The Modes

1. Press and hold TAP footswitch to switch between Manual mode and Preset mode.
2. Press the footswitch which is same with the current preset letter to enter Edit mode.
3. Press and hold TAP footswitch to return to Preset mode from Edit mode.

| Manual Mode | Preset Mode | Edit Mode |
|---|---|---|
|  |  |  |

## Saving/Calling Up Preset

### Saving Tones

You can perform preset-write operations either in Manual or in Preset mode. When performing a preset-write operation switches the unit into preset mode.

Until you perform a preset-write operation, switching off the power or changing presets will lose any tones you've created.
A write operation will cause any tone already saved at the destination preset to be lost.

1. Press [SAVE] button, the pedal indicators flash.
2. Choose the preset number and letter where you'd like to save the patch by press BANK [▲▼] and preset (A through D) footswitches.
3. Press [SAVE] button again for saving. After a patch-write operation switches the unit into preset mode.

NOTE:

*To stop the save procedure, press [exit] button.*

### Calling Up Tones

To switch presets, use BANK [▲▼] and letter footswitches (A through D).

1. Press BANK footswitches to choose the bank number which you want to switch.
2. Press any one of the letter footswitches from A through D.

### Editing Tones in the Presets

In preset mode, editing effects is impossible. When you want to make tone changes, put the unit in edit mode.

1. Press the same letter footswitch as current preset letter on the display. The unit switches to Edit mode and "Ed" appears in the display.
2. Use the controls and footswitches to modify the tone.
3. Press and hold TAP footswitch to return to preset mode.



## Other Functions

### Tuning the Guitar

1. Press and hold the CTRL footswitches to enable the tuner on. All sound will be muted.

Ready to tuning

2. Play a single open note on the string to be tuned.

note name and sharp sign

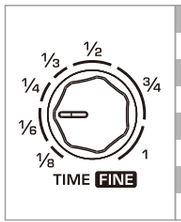
3. Tune so that the desired pitch is displayed and both tuning guide indicators light up.


Flat Tuned Sharp

### Setting Delay Time

You can set delay's tempo by pressing TAP footswitch with tempo of a song. This section describes how to carry out the operation when in Manual mode. When you're in Preset mode, you can accomplish the same operation by entering Edit mode.

1. Set the tempo subdivision of note by knob.




| Fraction | Tempo Subdivision |
|---|---|
| 1 | Quarter-note |
| 3/4 | Dotted 8th-note |
| 1/2 | 8th-note |
| 1/3 | 8th-note triplet |
| 1/4 | 16th-note |
| 1/6 | 16th-note triplet |
| 1/8 | 32th-note |

2. Press the TAP footswitch at least twice in time with the song's tempo.

## Other Functions

### Using External Expression Pedal

An external expression pedal is used to manually control volume of Cerberus. The Volume parameter is positioned before the mod and delay sections.

Calibrating Expression Pedals
As different manufacturers deliver expression and volume pedals with varying potentiometer types, it is important to calibrate the connectors on the Cerberus to the connected pedals for optimal performance.

1. Make sure that you have connected your pedal to the Exp. Jack.
2. The display now reads “DN”, place your pedal in minimum position (“Heel down”) and press ENTER.
3. The display now reads “UP”, place pedal in maximum position (“Toe down”) and press ENTER.
4. Calibration finish.



## Appendices

### Preset List

| Preset | Tempo Subdivision |
|---|---|
| 01A | Raw blues for rhythm |
| 01B | Power lead |
| 01C | Mellow Drive |
| 01D | Clean chorus verb |
| 02A | Hot riff for metal |
| 02B | Machine gun |
| 02C | Tremolo and verb |
| 02D | Post rock age |
| 03A | Heavy metal with single coil |
| 03B | Vintage phaser |
| 03C | Funky chorus rhythm |
| 03D | Arena hard rock |
| 04A | Soft rock with wide chorus |
| 04B | Tape echo |
| 04C | Super crunch lead |
| 04D | 70’s warm delay |

05A-32D are empty preset section, you can save your personal preset to these locations.

## Appendices

### Overall Data

| | |
|---|---|
| Effect types | 16 |
| Effect modules | 8 |
| Preset memory | 32 banks x 4 presets |
| Display | 3-dighta 7 segment LED |
| Sampling accuracy | 44.1kHz/32Bit |
| Processing accuracy | 88.2kHz/32Bit |
| THD+N | <-93dB(0.007%) @1kHz |
| Frequency response | 20Hz-20kHz ±1dB |

### Overdrive/Distortion

| | |
|---|---|
| I/O type | Mono/Mono, GND LIFT |
| Input Impedance | 1MΩ |
| Input level | -20dBu |
| Maximum output level | +4dBu |
| A to A latency | 1.26ms (Maximum) |

### Modulation/Delay

| | |
|---|---|
| I/O type | Mono/Stereo |
| Input Impedance | 1MΩ |
| Input level | -10dBu/+4dBu |
| Maximum output level | 16dBu |
| A to A latency | 0.68ms |

### General

| | |
|---|---|
| Dimensions | 320 x 110 x 65mm<br>12.6” x 4.3” x 2.6” |
| Weight | 1260g/2.78 lb. |
| Current consumption | 275mA |
| Options | Power Adapter ACD006 |

- 0dBu = 0.775 Vrms
- Design and specifications are subject to change without notice.



**CE mark for European Harmonized Standards**

CE Mark which is attached to our company's products of Battery mains the product is in fully conformity with the harmonized standard(s) EN 61000-6-3:2007+A1:2011 & EN 61000-6-1:2007 Under the Council Directive 2004/108/EC on Electromagnetic Compatibility.



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