



FC This device complies with part 15 of the 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.

BROTHERS INSTRUCTIONS



DIGITAL BRAIN. ANALOG HEART.®

OVERVIEW

Boost. Drive. Fuzz. Not necessarily in that order. Designed in collaboration with Resonant Electronic Design™, Brothers™ is built upon two independent JFET / IC analog channels comprising a total of six unique boost, drive, or fuzz circuits in one small enclosure. The pedal can be routed in thirty-three distinct ways, including mixing them in parallel or changing the order of the effects. As with every Chase Bliss pedal, you can save everything and recall presets instantly, on-the-fly either on the pedal or with MIDI. Every knob and switch is connected to a little digital brain while your guitar signal stays 100% analog the entire time and never gets digitally processed. Since the control of the effect is digital, it opens up unprecedented effects and features that have never been heard or offered in analog stompboxes.

MASTER

Sets the master volume of the pedal regardless of whether channel A or channel B are on individually or used together.

GAIN A

Sets the gain of channel A for all modes (i.e. boost, drive, fuzz). The tapers on these knobs change according to effect type to emphasize the "sweet spots."

TONE A

This is the tone stack for channel A for all modes (i.e. boost, drive, fuzz). The tapers on these knobs change according to effect type to allow for the most useful and musical sweep. The tonestack on channel A has an emphasis on transparency.

GAIN B

Sets the gain of channel B for all modes (i.e. boost, drive, fuzz). The tapers on these knobs change according to effect type to emphasize the "sweet spots."

TONE B

This is the tone stack for channel B for all modes (i.e. boost, drive, fuzz). The tapers on these knobs change according to effect type to allow for the most useful and musical sweep. The tonestack on channel B has a general emphasis on midrange.

MIX / STACK

This knob is used only when both channels are active. It serves two purposes dependent on where the "PARA | A >> B | B >> A" toggle is set. If the toggle is set to "PARA" then this knob controls the "MIX" between the two channels as they will be wired in parallel. If the knob is all the way counterclockwise, then the effect will be 100% channel A. If the knob is all the way clockwise, then the effect will be 100% channel B. If the knob is in the middle at "noon" then there will be a 50/50 mix between channel A and channel B. All other knob positions reflect in between states. If the "PARA | A >> B | B >> A" toggle is set to "A >> B" then the circuit from channel A is cascaded in series into the circuit from channel B. If the toggle is set to "B >> A" then the circuit from channel B is cascaded in series into the circuit from channel A. This knob is now controlling "STACK" which is essentially a volume control between the two circuits. That is, you can control how hard the first channel hits the second channel.

PARA | A > B | B > A TOGGLE

This toggle is used only when both channels are active. "PARA" sets the channels in parallel, while the other two position set the channels in series. "A >> B" means channel A is cascaded in series into the circuit of channel B. "B >> A" means channel B is cascaded in series into the circuit of channel A.

BOOST | DRIVE | FUZZ TOGGLES

These toggles select which type of effect is associated with each channel. The circuits in channel A were designed in collaboration with Resonant Electronic Design™ while the circuits in channel B were designed by Chase Bliss Audio™.

A & B BYPASS STOMPS

Activates or bypasses each channel. These can be changed to a momentary bypass or momentary active via a dip switch in the back of the pedal if it is desired. This pedal allows for “True Bypass” via a relay, or buffered bypass selectable via a dip switch in the back of the pedal.

LOWER TOGGLE

This switch recalls presets. The right position recalls preset #1, the left position recalls preset #2. The middle position will always reflect wherever the knob positions, toggle positions, and dip switch positions are currently at. In order to save to the right preset slot, you hold down the right stomp (bypass) for 3 seconds and then hold down both stomp switches simultaneously for another 3 seconds. The LED blinks and your setting is saved. For the left slot, you do the same thing but hold the left stomp first. If you recall a preset, and move a knob, you will notice that the LED above the toggle goes dim. This is to signify that something has changed on the preset. If you want to save this change in the preset, you will have to save it again.

IN / OUT

¼" mono input jack.

EXP / CV

¼" TRS jack for expression pedal (parameter selectable via dip switch in the back of the pedal). Tip goes to wiper. We recommend Mission expression pedals (EP-1 or EP-25k). Can also be used to for 0-5V Control Voltage (CV) on tip – the ring should be left floating in this case. There are many expression pedals that work with Chase Bliss Audio products, the Mission stuff just happens to be what we have here.

EXT(A) / MIDI

¼" TRS jack. This can be used as a secondary switch to activate / bypass channel A with a momentary normally open (NO) switch. In addition, it can be used to interface the pedal with a Chase Bliss Midibox. Much more information on this in the MIDI manual.

POWER & OTHER INFO

This pedal consumes ~60mA and should be operated with a standard 2.1mm 9V DC center negative adapter with current supply capabilities of 100mA or more. A battery can also be used but be mindful that the pedal will not last and maintain optimal performance more than a few hours at this high of a current draw. Input impedance of this device is 1M, and output impedance is 10k.

EXP / CV CONTROL & DIP SWITCHES

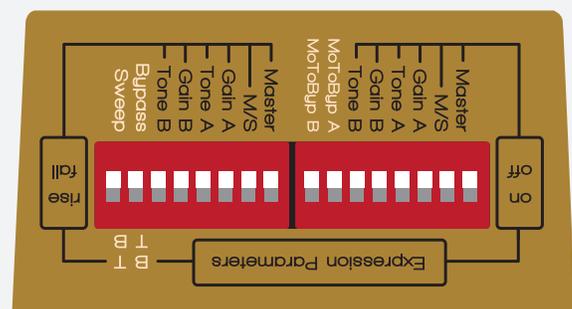
The Master, M/S, Gain A, Tone A, Gain B, and Tone B dip switches in the left bank allow you to control parameters via Expression Pedal / CV.

SETTING EXPRESSION / CV RANGE

The range of the expression / CV is controlled by the parameter knob position and the “sweep” dip switch. For example, if you wanted an expression pedal to control the master parameter from zero volume to unity gain, you would make sure the “sweep” dip switch is in the bottom position and set the master knob at unity gain. If you need more volume you simply turn the master knob up slightly. This will increase the maximum range of the expression pedal. This allows you to control multiple parameters with an expression pedal, but you can fine tune the range that you want for each parameter.

UNDERSTANDING THE DIP SWITCHES

When you save a preset, all of this information gets saved. The parameters in **black** below correspond to an expression pedal (if one is plugged in).



The Master, M/S, Gain A, Tone A, Gain B, and Tone B dip switches on the left side simply turn that parameter on or off expression / CV capability.

Master, M/S, Gain A, Tone A, Gain B, and Tone B dip switches on the right side control whether or not the parameters will rise

Continued on next page

(go clockwise with expression) or fall (go counterclockwise with expression)

MoToByp A

Momentary engage or bypass for channel A. It changes from “momentary engage” or “momentary bypass” dependent on what state (i.e. active or bypass) the pedal was in when this dip switch was changed. If the channel was engaged, then it acts as a momentary bypass. If the channel was in bypass, then it acts as a momentary engage.

MoToByp B

Momentary engage or bypass for channel B. It changes from “momentary engage” or “momentary bypass” dependent on what state (i.e. active or bypass) the pedal was in when this dip switch was changed. If the channel was engaged, then it acts as a momentary bypass. If the channel was in bypass, then it acts as a momentary engage.

Bypass

“B” stands for “buffered bypass” and “T” stands for “true bypass.”

Sweep

This controls where ramp sweeps. In “T” (top) the expression control will occur between the current knob position and the max position (fully clockwise). In “B” (bottom) the expression control will occur between the current knob position and the minimum position (fully counterclockwise).

NOTE: It may seem overwhelming and difficult for users to take all this in at first. My suggestion is always to forget about the dip switches for a while when you get the pedal. Get to know the basic functionality of it, and then if/when you want to experiment with ramping or expression, it will likely be easier.

Some of these concepts are much easier to explain and demonstrate on video, and I have many tutorials available on my youtube channel at www.youtube.com/c/ChaseBlissAudio.

We also love to hear from customers and answer questions so feel free to write us anytime at chaseblissaudio.com/contact.

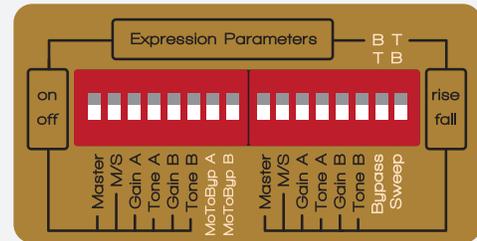
Thank you so much for purchasing this product and ENJOY!

chaseblissaudio.com

All presets created by Mason Stoops.
Hear them at soundcloud.com/chaseblissaudio

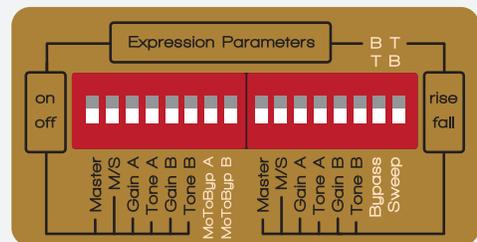
AUTOMATONE

Active Channels **A** **B**



COLD SWEAT

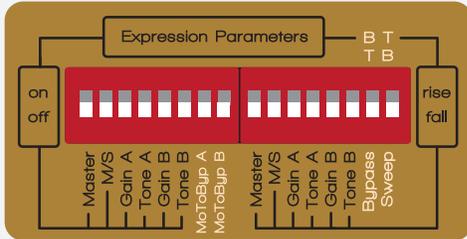
Active Channels **B**



Example presets continued on next page

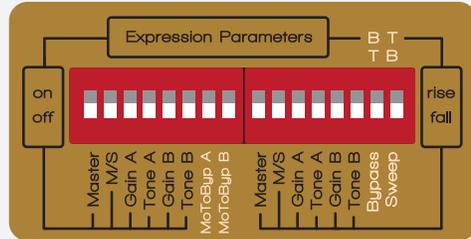
CROW'S NEST

Active Channels **A**



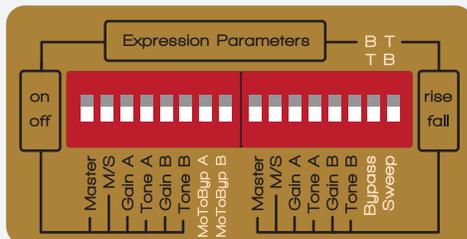
GAIN THE ROCK JOHNSON

Active Channels **A B**



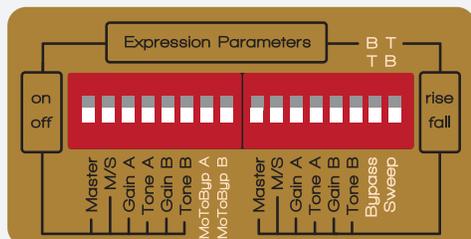
ESCALATOR TEMPORARILY STAIRS

Active Channels **A B**



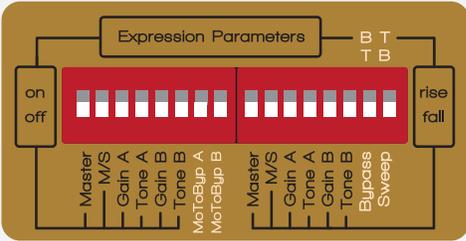
MUTINEER

Active Channels **A B**



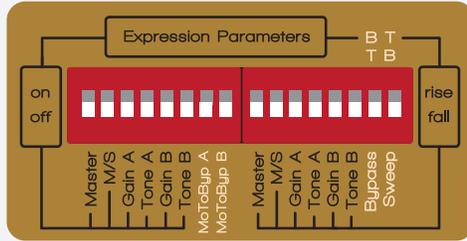
OUT YOUR OWN BACKYARD

Active Channels **A** **B**



SHOTGUN SHINDIG

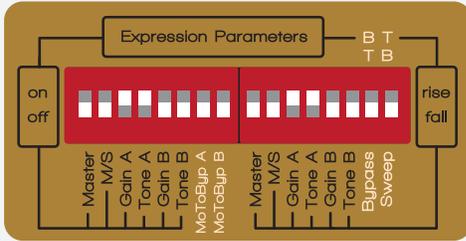
Active Channels **A** **B**



QUANTUM IV

Active Channels **A** **B**

▼ Expression Controlled



STATIC ADDICT

Active Channels **A** **B**

