Operator's Manual:

Version 2, released February 2015



1. INPUTS (1 AND 2)

The StepABout allows you to preamp and equalize two audio INPUT signals and route them as two audio OUTPUT signals, in various mix combinations. The INPUTs can be from any audio source — a two-channel instrument like The Stick, a pair of mono instruments, or any combination of two signals.

Examples of INPUT combinations could be:

INPUT 1	INPUT 2
Stick bass	Stick melody
Stick bass	electric bass
Stick melody	electric guitar
electric guitar	acoustic guitar
acoustic bass	electric bass
electric guitar 1	electric guitar 2

2. FOOTSWITCHES

The four-button switching matrix routes the INPUT signals to the two OUTPUTs (A and B) in any combination from "full-bypass" to both INTPUTs going to both OUTPUTs. When these switches are all bypassed no signal will be present at either OUTPUT A or OUTPUT B, but a mono mix of the two inputs is still sent to the HEADPHONE and TUNER outs. A blue LED above each switch indicates when a routing path to OUTPUT A or B is active. If you want to plug or unplug your instrument, first bypass all of the routing switches to avoid pops at the OUTPUT jacks.

3. OUTPUTS MAIN OUTS (A and B)

The two OUTPUTs are unbalanced 1/4 jacks, for running into effects pedals, mixers, amplifiers or computer audio interfaces. When all four routing switches are bypassed, there will be no signal present at either OUTPUT. The signal level at these OUTPUTs is like a high-level instrument out. Unbalanced shielded guitar cables with a tipsleeve connector should be used.





B A PHONE OUT B A

HEADPHONE OUT

The signal at this jack is the mix of the two preamplified INPUTs in mono. This is an amplified stereo mini headphone jack. Use only for headphones.

The HEADPHONE OUTPUT level controls only the volume of the HEADPHONES output jack.

TUNER OUT

The signal at this jack is the mix of the two preamplified INPUTs in mono. It is a 1/4'' TS jack, and can also be used as an unswitched combined signal for processing if desired.



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4. BassXX[™] PREAMPS

The preamp circuit controls the volume and tone of each INPUT's signal. Five controls - VOLUME, BASS, TREBLE, MIDRANGE FREQUENCY and MIDRANGE GAIN affect each INPUT individually.

VOLUME

Each INPUT has a VOLUME control knob. This adjusts the level of each signal from $-\infty$ to +4 dB of gain. Considerably more gain can be added by boosting the EQ controls.

BASS AND TREBLE

Each INPUT has its own BASS and TREBLE controls. The BASS control boosts and cuts by ± 12 dB, functioning

like a shelving eq with a 100Hz top point and less effect below 30 Hz. The TREBLE control boosts and cuts by ±15 dB. The TREBLE control is asymmetrical, boosting like a parametric but cutting like a shelving band, as shown in the frequency plot above. The frequency for the TREBLE control is 8 kHz. When boosted this increases the articulation of an instrument's sound without adding hiss. When cut it functions similarly to a passive tone control on a guitar.

MIDRANGE FREQUENCY

Each INPUT has its own knob for MIDRANGE FREQUENCY selection. This controls the center peak of the bell curve for the MIDANGE GAIN knob. The range is from 240 Hz to 1100 Hz. The bandwidth extends far beyond these center peaks, however, overlapping with the BASS and TREBLE ranges for versatile tone sculpting.

MIDRANGE GAIN

Each INPUT has its own knob for MIDRANGE GAIN control. The MIDRANGE can be boosted or cut by ± 12 dB. when boosted the eq curve's peak is broad, for adding midrange thickening. When cut, the peak is narrower, which is helpful in eliminating unwanted resonances.

HEADROOM

While the BassXX preamps have high headroom for low noise operation, turning all of the knobs up to maximum can potentially cause distortion. If this happens, reduce the volume to retain the desired tone settings.

5. POWER



Power is provided by an external 12 volt DC power supply or 6 1.5 volt AA batteries. To turn the unit off make sure the DC power is not connected, or, if using batteries, make sure there is nothing connected to the INPUT 1 jack. If the battery level is low the LB (low battery) LED will flash.

BATTERY OPERATION

The battery power of the unit is switched on by plugging an instrument cable into the INPUT 1 Jack. If an active 12-volt power supply is connected to the DC in jack, this will automatically shut off the battery power, but if the supply is not active, the battery power will be on as long as a cable is plugged into the INPUT 1 jack.



SPECIFICATIONS

INPUTS: Two 1/4" TS (mono) jacks (1,2 in), impedance: 2.2 MOhm EDS (electrostatic discharge) protected, unbalanced

BassXX^m Preamps (2) Bass control: -30 Hz, $\pm 12dB - 100Hz \pm 9dB$ (-3dB point) Parametric mids: 240 ... 1100 Hz, $\pm 12dB$ Treble control: 8kHz, $\pm 15dB$

MAIN OUTPUTS: Two TS 1/4" jacks (A,B out) (can also accommodate standard TS plugs) Output impedance: 47 kOhm, unbalanced Frequency range: 5Hz to 40kHz ±1.5dB

HEADPHONE OUT: always active mono mix of both inputs, with mix volume control. Max gain boost over preamped signal: 20dB Headphone amp: DC-coupled for loud clean output. impedance: >32ohm

POWER: Consumption ca. 80 mA @ 9 volts Batteries: 9 volt DC, from six 1.5 volt AA batteries (batteries not included). Power Supply: 12V, min. 200 mA (inner pin +, outer contact -)

DIMENSIONS: 7" (17.8 cm) deep, 7 3/4" (19.7 cm) wide, 2 1/2" (6.4 cm) high.



