

Suhr[®]

DUAL BOOST™

USER GUIDE



Thank you for purchasing the **Dual Boost™**. Please take the time to read through this guide to familiarize yourself with its many features and applications.

OVERVIEW

The Dual Boost is a versatile, dual-mode, transparent clean boost, housed within a compact, pedalboard friendly enclosure.

Constructed with the goal of delivering unrivaled sound quality, in an easy to use package, the Dual Boost pairs the highest quality components with an on-board charge pump circuit that delivers a pure audio path, superior dynamics, and wide dynamic range, all from a single 9-volt battery or 9-volt regulated power supply.

The Dual Boost features two independent modes, (each with their own Boost and Hi-Cut controls), a global Boost Range switch (+10dB/+20dB), and our proprietary mfx (Multi-Function Technology) switching.

No matter what your needs may be, the Dual Boost offers a comprehensive solution to preserving and boosting your signal without changing or coloring your original tone.

FEATURES

- **Dual Channel Clean Boost/Buffer/Line Driver**
- **Independent Boost and Hi-Cut Controls**
- **Selectable Global Boost Range Switch (+10dB/+20dB)**
- **Ultra Low Distortion, Low Noise Components Selected For Superior Signal Transparency**
- **Internal Charge Pump - Increased Headroom and Dynamic Range**
- **Assignable Bypass: Buffered/True Bypass**

GETTING CONNECTED

INPUT: Connect this jack to the output of your instrument or effects device.

Note: Connecting a cable to the input jack will power up the pedal. If using the internal battery, remember to unplug your cable from the input jack when you are finished playing in order to conserve battery life.

OUTPUT: Connect this jack to the input of an amplifier or another effect device.



OPERATING INSTRUCTIONS

POWER REQUIREMENTS

The Dual Boost can be powered via 9V battery or 9VDC regulated, center negative power supply.

BATTERY MONITOR

Upon powering up, the battery voltage is measured. If the voltage measured is lower than 5V, Dual Boost's LED will flash 3 times to alert you that it's time to replace the battery. Once the 9V battery is replaced, normal operation will resume. Should a battery fail completely (<4.5V), Dual Boost will switch itself into True Bypass mode and the LED will begin to flash. This feature ensures that your signal will continue uninterrupted and undistorted until you can replace the battery with a new one.

Note: The LED flash can be defeated by pressing the footswitch to turn it off.

Dual Boost features two channels, each with individual volume **Boost** and frequency **Hi-Cut** controls.

Boost (1 & 2): Gives your signal a clean boost in volume up to +20dB.

Hi-Cut (1 & 2): The Hi-Cut control is a low-pass tone control that allows you to shave off high frequency content. With the knob turned fully counterclockwise, there is no frequency reduction of your tone. With the knob turned towards the clockwise direction, more high frequencies are reduced. With the knob fully clockwise, frequencies can be reduced down to 1kHz.

Note: Buffering drives your guitar signal efficiently to your amp without tone loss. This happens when the pedal is bypassed in Buffered-Bypass mode, or is in effect on. The Hi-Cut knob helps reintroduce the warmth created by high frequency reduction via cable capacitance in cables when the guitar is plugged directly into an amp without buffering. Having the pedal in True Bypass mode leaves your signal unbuffered when your effect is off.

dB Boost Switch

- **Left** - Sets the max range of Boost 1 and Boost 2 to +10dB.
- **Right** - Sets the max range of Boost 1 and Boost 2 to +20dB.



On/Off Effects Status Indicator: The LED indicator displays Dual Boost's effect status, on/off, as well as the current channel [Green (Boost 1) or Red (Boost 2)].

TRUE BYPASS SWITCHING

Dual Boost allows for True Bypass switching (via relay) which removes the effect from the signal chain.

OPERATIONS (continued)

*mf(x)*TM = MULTI-FUNCTION TECHNOLOGY

Created to enhance your overall playing experience, we developed Multi-Function Technology (**mf(x)**). **mf(x)** is a proprietary foot switch technology that enables you to seamlessly select between Dual Boost's two distinct user modes, Green (Boost 1 & Hi-Cut 1) or Red (Boost 2 & Hi-Cut 2) during a performance by simply holding down the foot switch.

NOTE: Dual Boost has built in memory to recall the last mode of operation.

mf(x) MODES

- **Green (Boost 1 & Hi-Cut 1)** - Channel 1 of volume Boost and frequency Hi-Cut settings.
- **Red (Boost 2 & Hi-Cut 2)** - Channel 2 of volume Boost and frequency Hi-Cut settings.

EXTERNAL/REMOTE SWITCHING

FX LINK (See Diagram)

Dual Boost features proprietary FX Link technology which offers players the ability to externally control Dual Boost's bypass and operating modes in real-time via an external footswitch or control function switching device.

MODES

The FX Link Mode status is given upon power up. The LED will flash once. FX Link consists of the following two modes:

Green (default) - Use this mode if you have an external switching system to remotely control your effects.

TIP - On/Off (Normal) Latching

RING - On/Off (Channel Select) Latching

Orange - Use this mode to remotely toggle between Dual Boost's two mf(x) modes via a single momentary (unlatching) footswitch. The use of this mode does not impact the functionality of the built in footswitch.

TIP - Channel Toggle Momentary (unlatching)

CHANGING FX LINK MODE / POWER UP PROCEDURE

Dual Boost is shipped by default in Green (Green FX LINK) mode. To change FX LINK modes, press and hold the footswitch while powering up Dual Boost. The LED will illuminate (orange/green) temporarily to indicate the FX LINK mode. To return Dual Boost to the previous FX LINK mode please repeat the previous power up procedure.

NOTE: If using a battery to power Dual Boost, you will need to unplug the cable from the input jack. While holding down the footswitch, plug in the cable to change the FX LINK mode.



FX LINK SWITCH ILLUSTRATION

Right: Dual Boost will power up in the **ON** state.

Center: Dual Boost can be switched remotely via the FX Link jack. In this position, Dual Boost's state will be dictated by the status of foot switch connected to the jack. If the FX Link jack is not utilized, Dual Boost will power up in the **Bypass** state.

Left: Dual Boost will power up in the **Bypass** state

SAMPLE SETTINGS

SUBTLE TRANSPARENT PUSH



When set to the more mild 10dB boost range, the Dual Boost compliments the interaction between your guitar and amplifier, enhancing playability while retaining dynamics.

TRANSPARENT BOOST



At this setting, the Dual Boost can take a clean amp and push it into overdrive, or take an already overdriven amp to the next level with more saturation and sustain, without drastically changing the fundamental tone.

BASS/TREBLE BOOST



The Hi-Cut control is used to dial in the boost to be transparent or to impart some coloration. In this example BOOST 1 will give you a bass boost, while BOOST 2 will give you a perceived treble boost.

SPECIFICATIONS*

Input Impedance:	1M Ohm
Output Impedance:	< 1K Ohm
Power Connector:	9Vdc regulated, center negative, 2.1mm x 5.5mm
Operating Voltage:	4.5V to 9V (nominal 9V)
Maximum Voltage:	10Vdc
Reverse Battery Protection:	Yes
Over Voltage Protection:	Yes
Current Consumption:	21 mA (MAX)
Estimated Battery Life:	19 Hours (ON) to 19.775 (OFF) [Alakline]
Fx Link Connector:	1/8" stereo
Fx Link Maximum Voltage:	3.3Vdc
Shield to Tip:	Boost 1
Shield to Ring:	Boost 2
Dimensions:	2.50" Width x 4.50" Depth x 1.25" Height
Weight:	0.6 lbs.
Accessories:	N/A
ROHS Compliant:	Yes

**All specifications subject to change without prior notice.*

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WARRANTY FOR SUHR AMPLIFIERS AND ELECTRONIC PRODUCTS

JST warrants for lifetime from date of purchase by the initial retail purchaser that this product shall be free from defects in workmanship. Electronic components such as capacitors, resistors, filters, transformers, jacks, and pots are covered for 5 years. Any parts determined defective by JST within the five (5) year term shall be repaired or replaced by JST without charge for parts and labor provided the unit is returned, transportation costs prepaid, to JS Technologies, Inc., 601 Crane Street, Unit A & B, Lake Elsinore, CA 92530, or to such facility authorized by JST. JST will pay shipping costs to return the unit to its owner. Defects in workmanship will be determined by JST for limited lifetime coverage.

This warranty does not cover damage caused by accident, misuse, abuse, neglect, unauthorized or improperly performed repairs, alterations, and/or wear and tear occasioned by use of the product, and does not include any expense for inconvenience or loss of use while the product is being repaired or replaced. JST expressly disclaims any liability for consequential damages arising from the sale, use, or inability to use the product. Any warranty implied by law, including any warranty of merchantability or fitness, is expressly limited to the one (5) year warranty term for the parts on our amplifiers and electronic products. The foregoing statements of warranty are exclusive and in lieu of all other remedies. Workmanship lifetime warranty is limited strictly to the original retail purchase of the instrument registered with JST within 10 days of purchase from an authorized JST dealer or distributor. JST will pay shipping costs to return the unit to its owner within the mainland U.S.

The above warranty policy only applies to customers in USA. If you are an international customer, please check with your distributor and the dealer in your country for warranty matters. Warranty issues must be handled through your dealer or distributor. If you are an international customer who purchased (or plan to purchase) from a US dealer, we can handle warranty matters direct but you will be responsible for shipping both ways. We encourage international customers to purchase through your local distributor or dealer for this reason. Our international distributors are setup to handle warranty issues in their respective countries. If you do not have an authorized Suhr dealer in your country, please contact us direct for further details.