

## Power Requirements



25mA@9.6VDC - Use Boss  
PSA-100/110/120/220/230/240  
5.5mm/2.1mm Barrel Connector

**!!!WARNING!!!** DO NOT USE A COMPACT SWITCHING OR SWITCHMODE POWER ADAPTER (SUCH AS THE BOSS PSA-120S, THE ONE SPOT, THE POWER ALL AND SIMILAR MODELS) TO POWER THE BS2 BECAUSE THEY HAVE BEEN KNOWN TO DAMAGE IT. A SUITABLE ALTERNATIVE TO THE ADAPTER THAT WE RECOMMEND IS A HIGH QUALITY POWER SUPPLY SUCH AS THE BBE SUPA-CHARGER OR THE VOODOO LAB PEDAL POWER II.

## Connections & Switches

**INPUT:** Standard 1/4" mono jack that should be connected to the output of an electric guitar or the output of an effect pedal.

**MAIN OUT:** Standard 1/4" mono jack that should be connected to the input of an amplifier or the input of an effect pedal.

**ISO'D OUT:** Standard 1/4" mono jack that should be connected to (1) the input of a second amplifier or (2) the input of an effect pedal feeding a second amplifier or (3) the input of a tuner to prevent Ground Loop Hum/Noise or other noise problems that can be caused by some tuners... *Please note that if any pedals are used between the ISO'D OUT jack and a second amplifier, these pedals must be powered from a different source than the BS2, tuner and pedals feeding the first amplifier otherwise a Ground Loop will be created resulting in unwanted hum and noise...*

**SPLIT OUT:** Standard 1/4" mono jack that is connected directly (in parallel) to the MAIN OUT jack. Use this jack whenever a transformer-isolated signal/split is not necessary, such as when feeding the input of a pedal and/or some tuners...

**POWER:** Accepts power from an external AC Adapter with a 5.5mm/2.1mm barrel ...

... connector, see *Power Requirements* for more information.

**PHASE SW:** This pushbutton switch (IN = Normal & OUT = Reverse Phase) prevents any phase cancellation problems from occurring when driving a second guitar amplifier from the ISO'D OUT jack.

## Warranty

This product is warranted against failures due to defective parts or faulty workmanship for a period of one year after delivery to the original owner. During this one year period Axess Electronics will make any necessary repairs without charge for parts and/or labor. However, shipping charges to and from the repair location must be paid by the owner.

This warranty applies only to the original owner and is not transferable.

This warranty does not cover damage to the product as a result from accident or misuse.

This warranty will be canceled at the sole discretion of Axess Electronics if the product has:

- (1) Any signs of tampering, unauthorized service, or modifications.
- (2) Any damage resulting from physical abuse or failure to follow the operating instructions.

Axess Electronics' liability to the owner and under this warranty is limited only to the repair or replacement of the defective product. Call or write to Axess Electronics prior to shipping the product for repair.

Axess Electronics reserves the right to make any changes and/or improvements to the design of this product without any obligation to include those changes in any previously manufactured units.

## How To Reach Us

Mail: Axess Electronics  
251 Queen Street South #278  
Mississauga, Ontario L5M1L7  
Canada

Tel.: 416-410-9688

Website: <http://www.axess-electronics.com>

# BS2

## Guitar Audio Buffer/Splitter

- The **BS2 Guitar Audio Buffer/Splitter** prevents the loss of (1) signal level, (2) high end frequency response and (3) low end punch that is caused by cable capacitance and poorly designed input stage/circuitry of some effect pedals.
- The buffer circuitry used is a very high quality Op-Amp based design that is both low-noise and MUSICAL, don't let other's deceive you, nothing is transparent !!!
- Three outputs allow a single guitar signal to feed a tuner and two amplifiers without signal loss and/or tonal degradation.
- Two of the three outputs are connected in parallel, and the third is Transformer Isolated to prevent Ground Loop Hum/Noise when driving two amplifiers.
- The Transformer Isolated output is equipped with a Phase Reverse switch to prevent any phase cancellation problems from occurring when driving two amplifiers.
- Powered by a 9VDC Adapter (we recommend the Boss PSA-100/110/120/220/230 or 240 depending on your local AC supply voltage) with a 5.5mm/2.1mm barrel connector.
- Brushed finish with black anodize coating and laser-engraved printing.
- Housed in a compact (4.40" x 2.40" x 1.30") and rugged 0.064" thick aluminum enclosure for years of reliable use and performance.

## Overview

The BS2 has been designed as a solution to several problems that we've solved using custom-made buffers/splitters over the past several years.

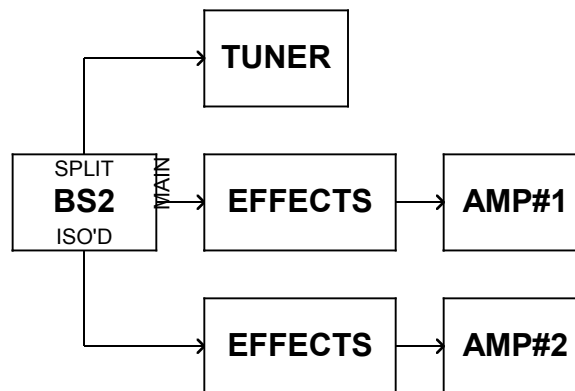
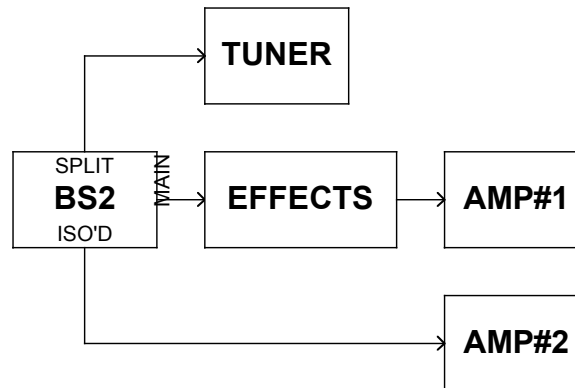
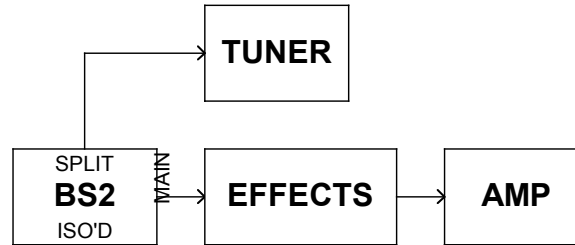
As a buffer, the BS2 should be used as early in the signal path as possible. Ideally it should be the first thing your guitar plugs into to, but unfortunately that can't always be the case. Some Fuzz and WAH pedals do not like to be fed with a buffered signal. If you find these pedals don't sound right with the buffer in front of them, simply connect the buffer after these devices. In this situation, it would be ideal if these pedals had true-bypass switching to ensure the BS2 gets the best possible signal it can... Using the BS2 in this application will prevent the loss of (1) signal level, (2) high end frequency response and (3) low end punch that is caused by cable capacitance and poorly designed input stage/circuitry of some effect pedals.

As a splitter for driving two amplifiers with the same effect pedals, the BS2 must be used last in the signal chain so that both amplifiers get the same sound... If using the BS2 in this manner, you may want to consider getting a second one to use as a buffer to prevent some of the losses described above (using the BS2 as a buffer). If one of the amps is to get a dry un-effected signal or is to be fed with a separate chain of pedals, then the BS2 can be used as a buffer and the second amplifier or pedals can simply be fed with a signal from the ISO'D OUT jack (to prevent Ground Loop Hum/Noise).

*Please note that if any pedals are used between the ISO'D OUT jack and the second amplifier, these pedals must be powered from a different power source than the BS2, tuner and pedals feeding the first amplifier otherwise a Ground Loop will be created resulting in unwanted hum and noise...*

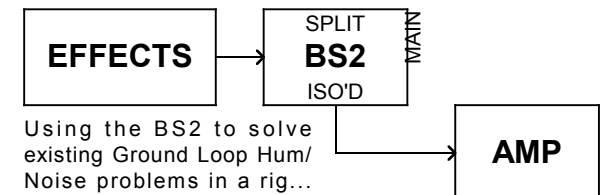
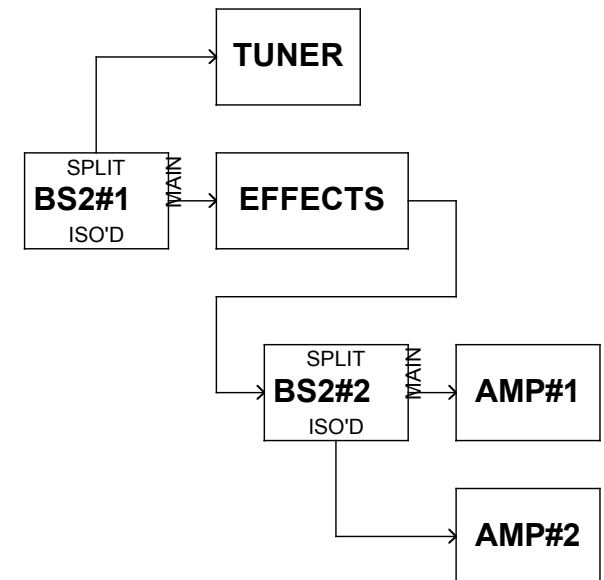
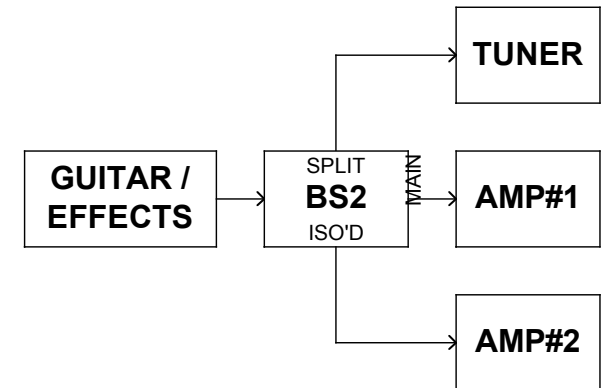
In all of the above applications, the SPLIT OUT jack can be used to feed the input of a tuner as long as the tuner doesn't cause a Ground Loop (resulting in unwanted hum and noise) or other noise problems that some tuners are known for...

## Applications



These effects must be powered from a different source than the BS2, tuner and effects for AMP#1 otherwise a Ground Loop will be created resulting in unwanted hum and noise...

## Applications



Using the BS2 to solve existing Ground Loop Hum/ Noise problems in a rig...