



Rusty Box

Bass Preamp

The Tronographic Rusty Box is an instrument pre-amp in effect pedal format. Though optimized for bass guitar, the Rusty Box is also effective on regular guitar. It was designed to re-create the unique 1970's "hi-gain" solid-state bass amp tone whilst adding useful modern features such as a balanced line out, true-bypass and Master volume.

Features:

- Input Gain controls allow the musician to dial-in just the right amount of gain and drive
- EQ includes separate Middle, Bass and Treble controls, all tailored for bass guitar
- Boost Mode for extra volume/drive is activated with your foot
- Can be used as a DI box with a balanced output capable of driving 600Ω.
- True-Bypass: Input is connected to Main Out and nothing else

Common Configurations

Rusty Box as an Effects Pedal:

The Rusty Box can easily be inserted into a chain of effects, in an effects loop or as a single effect before an amp that has a pre-amp section. Connect your instrument or the output of the previous device to the *Input* jack on the Rusty Box. Connect the *Main Out* jack on the Rusty Box to the input of the next device in your chain. Use standard ¼-inch guitar cables for both connections in this configuration.

Rusty Box as a DI Box:

The *Main Out* jack on the Rusty Box outputs a balanced signal capable of driving a 600Ω load. As in the effects pedal configuration, connect your instrument or the output of the previous device to the *Input* jack on the Rusty Box using a standard ¼-inch guitar cable. For the *Main Out* jack, plug in a **balanced ¼-inch TRS cable**; this type of cable is necessary to properly use the Rusty Box as a DI. The other end of the balanced cable can go directly to a mixing board or similar balanced audio devices. Optionally you can also use the Rusty Box's *Line Out* jack to connect to a monitor amp near the musician (described below).

Rusty Box as a Pre-Amp for a Power Amp:

The *Line Out* jack on the Rusty Box outputs the unbalanced audio signal at full volume. This connection, made prior to the *Vol* knob in the circuit, is perfect for driving a power amp with its own input volume control. As in the two previous configurations, connect your instrument or the output of the previous device in the chain to the *Input* jack on the Rusty Box then connect the *Line Out* jack to the input of the power amp. Use standard ¼-inch guitar cables for both connections in this configuration.

Controls

INPUT GAIN Knob: sets the gain for the input amplifier stage in the Rusty Box. As you turn the *Gain* knob clockwise, your signal will get louder and be driven harder. You can obtain distortion when this control is turned above 9 o'clock and the BOOST function is activated. The Input Gain knob works in conjunction with the HI/LO toggle switch located below it.

HI/LO Toggle Switch: This switch gives the Rusty Box the equivalent functionality of high and low input jacks on an amplifier. Setting this switch to the HI setting is just like plugging into the high input jack; high impedance with full signal amplitude. Setting this switch to LO is just like plugging into the low input jack; your input signal will be attenuated and the input impedance is reduced. In short the HI setting is louder, the LO setting is lower in volume with slight treble attenuation.

BOOST Footswitch and LED: When the *Boost* switch is activated, the gain of the input stage is boosted or increased. The *Boost* footswitch can be used to give your sound extra volume and drive while you are playing your instrument. Use the *Boost* footswitch to toggle in and out of Boost mode. When lit, the LED in the *Boost* block indicates that the *Boost* function is activated. When *Boost* is inactive or the *Rusty Box* is in *True-Bypass* mode, the *Boost* LED will turn off.

MID Knob: is part of the *Rusty Box* EQ section. Turning the *Mid* knob clockwise will increase the level of the middle frequencies of your signal. To obtain a "scooped" sound turn the *Mid* control down below 12 o'clock.

BASS Knob: also part of the EQ section, turning the *Bass* knob clockwise will increase the level of your signal's bass or low frequencies.

TREBLE Knob: is the last control in the EQ. Turning the *Treble* knob clockwise will increase the level of your signal's *treble* or high frequencies.

VOL Knob: is the master volume control, controlling the output volume at the *Main Out* jack. The *Vol* knob has no effect over the output volume at the *Line Out* Jack.

EFFECT Footswitch and LED: the *Effect* footswitch is used to toggle the *Rusty Box* between *Effect* mode and *True-Bypass*. When the LED in the *Effect* block is lit, the *Rusty Box* effect is activated. When the LED is off, the *Rusty Box* is in *True-Bypass* mode. In *True-Bypass* mode, the *Input* jack is connected directly to the *Main Out* jack; the *Line Out* jack is therefore muted. In addition, the *Main Out* jack will be unbalanced in *True-Bypass* mode.

Connections

INPUT Jack: is the audio input connection for the *Rusty Box*. Plug your instrument or effect output into this jack. The input impedance presented at the *Input* jack when *Input Gain* is set to *HI* is 250k Ω ; when set to *LO* it is 18k Ω .

LINE OUT Jack: is an unbalanced audio output at full volume. If using the *Rusty Box* as a pre-amp before a power amp, you can connect *Line Out* directly to the power amp. The *Vol* knob will have no effect on the signal at the *Line Out* jack. To change the volume of the signal out of the *Line Out* jack use the *Input Gain* knob, *Boost* footswitch or *HI/LO* toggle switch. The *Line Out* jack is muted when in *True-Bypass* mode.

MAIN OUT Jack (Bal/Unbal): is the main audio output jack. *Main Out* can be used as either a balanced output, by plugging in a 1/4-inch TRS cable or as an unbalanced output, by plugging in a standard 1/4-inch guitar cable. The *Vol* knob will adjust the volume of the signal present at the *Main Out* jack. In addition, the *Main Out* jack is a high current drive output capable of driving a 600 Ω load.

We recommend using the *Main Out* jack when using the *Rusty Box* as an effects pedal where its output is sent to other pedals or to an amp with a pre-amp section.

In *True-Bypass* mode, the *Main Out* jack is unbalanced. When using the *Rusty Box* as a DI box we recommend you do not switch to bypass mode, leave the *Rusty Box* in effect mode at all times.

PWR Jack: connect the output plug from the AC Adapter into the *PWR* jack. For best results we recommend you use the AC Adapter supplied with your *Rusty Box*. If using an aftermarket AC Adapter, please be sure that it delivers between 24VDC and 40VDC with a minimum current rating of 100mA. **The barrel connector plug coming from the AC Adapter must be center positive.**

Warranty Information

Tronographic will repair your *Rusty Box* free of charge due to manufacturer defect or if it is damaged during normal use for up to 2 years from the date of purchase. Please contact us at sales@tronographic.com for further information.