

# COLOUR BOX

## STUDIO GRADE PRE-AMPLIFIER

### INTRODUCTION

Thanks for purchasing a Colour Box! The JHS Pedals Colour Box is designed and created to allow you to recreate the infamous guitar tones of the Beatles, Pink Floyd, Led Zeppelin, and countless others with your live rig, or in a studio environment by using 100% analog circuitry true to the design and schematic of vintage Neve\* circuitry. The Colour Box is completely free from any digital modeling. Never before have "direct in" tones been available from your guitar amp in the way that the Colour Box delivers them. Aside from creating these "direct in" tones, the Colour Box covers all the ground that you would expect a high quality studio preamp to cover. From your microphone, bass, keyboard, or even your acoustic guitar, it does it all. We have gone to great lengths to bring the color and character of a real vintage console to your feet or studio desktop.

### INPUTS/OUTPUTS

You will notice that in addition to the normal 1/4" instrument input/output found on a guitar pedal, we added an XLR input and output so that The Colour Box can be used as a vocal, bass, acoustic, or keyboard preamp live or in the studio. The 1/4" mono output and the XLR output are independent and allow you to run parallel outputs to two destinations. For example, run the 1/4" mono out into your guitar amplifier and at the same time run the XLR output to your front-of-house mixing board. Another example of using parallel outputs would be to track amp tones and the "direct in" sound of your performance onto two separate tracks.

### UTILITY SWITCHES (LOCATED ON SIDE)

**INSTRUMENT/XLR SWITCH** - This switch lets you choose between 1/4" or XLR input. Set the switch to "Inst." when plugging in a 1/4" jack. Set the switch to "XLR" when plugging in an XLR cable.

**-20dB SWITCH** - This is a standard 20dB pad for use with the XLR input. Use this if you're experiencing clipping from the XLR input and know that the pad works whether the pedal is on or off. This pad does not have any effect if using the "Inst" input.

### CONTROLS

**MASTER** - The Master Gain (labeled "Master") is what would typically be considered as a Volume control. Other terms are "master volume" or the "output trim."

**PRE-Vol** - The Pre Volume (labeled "Pre-Vol") can be used the same as you would a Drive knob on an overdrive pedal. In this circuit, the Pre Volume is between the two gain stages, and the setting of the Pre Volume determines how much signal continues to the second stage.

**STEP** - The Step Gain (labeled "Step") changes the gain of each preamp stage in five stages. Rotating the "Step" knob from left-to-right will increase the gain by the following:

1st is X 18 dB, 2nd is X 23 dB, 3rd is X 28 dB, 4th is X 33 dB, 5th is X 39 dB

**HI PASS** - The Highpass spans from 60Hz to 800Hz with a 6dB per octave slope. This control allows you to only let high frequencies pass. In return you will find a vast palette of tones that sit perfect and inspire textures that you have never heard from your rig. The toggle switch will turn the Highpass on or off.

**EQ CONTROLS** - The tone control section is a highly modified Baxandall type that is tuned for less control interaction and more boost/cut capability. The center frequencies are Treble 10kHz, Middle 1kHz, and Bass 120Hz, with +/- 17dB of control.

### POWER

The Colour Box runs on 18v DC negative center power. We supply an adapter but you can also use any standard 18v DC pedal power supply or voltage doubling cable like the Voodoo Lab found here: [http://www.voodoolab.com/shop/index.php?cPath=22\\_24\\_32](http://www.voodoolab.com/shop/index.php?cPath=22_24_32).

### INPUT MODES & OUTPUT FUNCTIONALITY

The Colour Box offers two different Input Modes and you must choose which mode you need based on your application. There is a Input Selector switch on the side of the case which is labeled Inst/XLR. Simply put, use "Instrument" mode when you are plugging in a 1/4" cable into the Colour Box. Use the "XLR" mode when you are plugging an XLR cable into the Colour Box. You must select between Inst/XLR mode in order for the pedal to correctly work. If you plug in a 1/4" cable but have selected XLR Mode, the pedal will not work. The reverse applies as well. Here is a further description of the two modes and their applications...

#### 1. INSTRUMENT ("Inst") INPUT MODE

When in INSTRUMENT MODE, there are two options of use that are further explained below. The Colour Box can be used as an always-on Preamp/DI OR it can be used as an effect which is turned on/off.

**USE AS AN "EFFECT PEDAL" (aka turning the pedal on/off while playing)** - If you plan to use the Colour Box as an effect pedal and will be turning it on/off while playing, then you HAVE to use the 1/4" Output. The XLR output can be used at any time in any Mode, but it will only pass signal when the Colour Box is turned on. To use the Colour Box as an effect pedal, simply connect the 1/4" output into any amplifier (guitar/bass/keyboard), mixer, recording interface, or direct box and use the pedal as you normally would use any other guitar/bass pedal in your rig. If you use the Colour Box as an effect where you will be turning it on/off, we recommend only using the standard 1/4" output and not relying on the XLR output since the XLR output will be inactive anytime the pedal is turned off. As a rule-of-thumb, please remember (in Instrument Mode) that if the Colour Box is turned off, the XLR Output is totally inactive and will not pass signal, however the 1/4" output will always pass signal (either bypass signal or effected signal).

**USE AS AN ALWAYS-ON "PRE-AMP / DI BOX"** - When using the Colour Box as an ALWAYS ON preamp, you can use the XLR output to plug straight into an audio mixer or recording interface and there is no need to use a separate direct-box. In an always-on circumstance, the 1/4" output will also pass effected signal to whatever it is plugged into as long as the pedal is ON, this allows you to split your signal to two separate sources at the same time. The XLR output will only pass signal when the Colour box is turned on.

#### 2. XLR/Microphone INPUT MODE

In this mode, the pedal accepts XLR microphone cables and passes a clean bypass signal through the XLR Output when switched off. The 1/4" output also passes signal in this mode so you can pass a microphone through the Colour Box into an amp or line level input. The 20dB pad is available in this mode only and works when the pedal is on and off.

\* in both modes the XLR out has a slightly lower noise floor if running as a line-in to your mixer or interface.

\*The word/name Neve® is a registered trademark of AMS Neve Ltd. The JHS Pedals Colour Box pedal is in no way affiliated with AMS Neve Ltd.