

## INTRODUCTION

G'Day! Congratulations on purchasing the MI Effects Boost 'n' Buff v.5 pedal. This is one of our favourite and most popular pedals in the MI family, which has had a facelift with the new version.

We asked you, the users of the Boost 'n' Buff, what would you want in a boost pedal and we aimed to deliver with more headroom, more clarity, and more versatility with a three-way boost mode and an operating voltage of ~24V! The Boost 'n' Buff is a multi-purpose tool that should be on all guitarist's pedal boards and is now on yours!

## FEATURES

### HEADROOM!!

Like most guitar tools, the Boost 'n' Buff is a pedal that always sounds best at its highest operating voltage. The previous version ran off 9V supply, or 18V with the use of two batteries. This newest version of the Boost 'n' Buff features some internal circuit wizardry that takes 9V ONLY (refer to *POWERING THE PEDAL* section) by DC adaptor or battery and internally supplies the pedal with approximately 24V! This means no more dual batteries, or additional 18V power supplies. Put 9V in, and enjoy the extra clarity, sparkle and headroom of the Boost mode.

### BYPASS, THE WAY YOU WANT IT.

One of the new features of the new boost 'n' buff is a switchable buffer. Now you can choose between the buffer, or true bypass. Each has its advantage, and this new option makes the Boost 'n' Buff even more flexible.

In 'Buff' mode, the Boost 'n' Buff acts as an ultra-high input impedance/low noise buffer when the pedal is off. In fact, the input impedance is approximately 5Meg. With such a high input impedance, your guitar pickups don't need to deliver a lot of current in order to reproduce their full natural bandwidth. You can drive cable lengths as long as you like without sacrificing tone, and due to the ultra-low noise design, you can use the Boost 'n' Buff out the front of dirt pedals or high gain amps without worrying about introducing any significant noise. So what's different about this buffer and the buffer you'd find on mass produced pedals? Well, the primary role of a buffer on a mass produced pedal is not to 'rescue' your guitar tone from degradation, but rather to drive the low quality transistor based switching system. The input impedance of these buffer circuits are thus designed not to keep all of the top end sparkle of your guitar tone. In some cases, the input impedance of this buffer is as low as 200kOhms, which is 25 times lower than the input impedance of the Boost 'n' Buff circuit. By adding the Boost 'n' Buff in your signal chain, especially near the front of your effects, you'll notice that in bypass mode your guitar signal will have a bit

more sparkle and top end detail. It's not that there are any special EQ-ing 'tricks', but rather that the Boost 'n' Buff is faithfully reproducing all of the frequencies that are coming out of your guitar. Your tone will feel a bit more powerful, with more punch and almost as if there's more dynamic range and 'sustain' (although these are not the right words to describe it). You've got to try it out to feel what I'm talking about.

The Buff mode is my favourite. In fact, V5 has a newly designed buffer mode which not only produces when lower noise performance, but also keep the output signal in phase with the input (so no phase inversion). To top it off, it's even lower output impedance, which means that it's driving capabilities are further enhanced. Pretty neat ha?!

Having said that, a buffer may not always be the best solution in every situation. For example, you may have another buffered pedal before the Boost 'n' Buff, in which case the effect of the buffer is negated somewhat. Also, you may be running into a super high-gain amp or pedal, and need to have as little noise as possible in your signal chain. In these kinds of scenarios (and there are of course other ones), you may find it better to use the Boost 'n' Buff in True Bypass mode.

One of the great things with the Boost 'n' Buff is that the bypass options are accessible from the outside of the pedal, so no need to open up the pedal to change the bypass mode. It also means that you can quickly A/B the two bypass modes, and work out which is better for your situation. As an aside, it's remarkable to see how much extra sparkle you get back with the buffer on. Give it a go. Plug your guitar into the boost and buff into your amp, and listen to the top-end detail achieved with the pedal in 'Buff' mode. The difference is more stark the longer the cables you use are. But as you will see by doing this little experiment, it doesn't take much cable to impact the top end of your tone.

### BOOST MODE

One of the big improvements we've made to the Boost 'n' Buff is a tripling of the flexibility of the pedal, but introducing 3 'modes', accessed via the 3 position mode switch.

**(F)ULL BOOST** – This is a full frequency boost regardless of the gain and volume settings. It not only boosts the volume, but seems to really lift your tone as well. It's difficult to explain. You've just got to feel it. This is perfect for solo volume boosts. The one thing to note is that if you're going to use digital effects in your signal path, I'd suggest putting the Boost 'n' Buff after the digital effects to avoid overloading the A/D converters.

**(T)REBLE BOOST** – I tuned this mode to be a more of a dramatic treble boost than the old Boost 'n' Buff. I figured that if the full boost option is now available, then it would be possible to make the treble function a bit more prominent. At maximum gain, not only do you have an amazing amount of boost (approximately 35db), but the frequency response is perfectly tailored

to driving a valve amp. It is literally like hot-rodding your amp with an extra tube stage. Also, with the 24V headroom, your sound will be 'cleaner' going into the amp, so that there's less colouring from the transistor.

**(M)ID BOOST** – This came about because I quite liked how the treble boost pushed an already overdriven amp, but for some amps, I found that too much top end made the tone too harsh (For others it was fine). So by rolling off some of the highest frequencies, and beefing up the mids, we were able to get the extra gain, cut and richness, but without the ice-pick.

## VOLUME AND GAIN CONTROL

Turn down the volume, and use the built in gain of the Boost 'n' Buff to get mild dirt sounds, boosting different parts of the frequency spectrum with the MODE switch. Finally, by mixing the relative levels of volume and gain, you can now coax a wider range of timbres from the pedal.

### !!!CRACKLE!!!

*The gain pot will "crackle" when moved – both in boost and bypass mode. This is expected of the circuit as the pot resets the DC operating point of the transistor... there is no cause for alarm. Set it and boost!*

TIP: Another interesting application is using the Boost 'n' Buff in the FX loop of an amp to act as a secondary volume control. Since it has ample headroom, line level signals are not a problem. So even if your FX loop is line level, you can still get quite a bit of boost using the Boost 'n' Buff. This way, your FX loops can also double as a solo volume booster as well as a standard FX loop. By putting the Boost 'n' Buff in the FX loop, you can use it to boost the volume of an overdrive channel. If you're using the overdrive channel of your amp, then putting any booster between the guitar and amp will just increase the amount of distortion as opposed to increasing volume. By putting it AFTER the preamp (in the FX loop), you can achieve volume boosting without affecting preamp tone.



## POWERING THE PEDAL PLEASE READ CAREFULLY!!!

### THE BOOST 'N' BUFF VERSION 5 PEDAL RUNS OFF 9V ONLY. REPEAT. ONLY USE A 9V BATTERY OR 9V DC POWER ADAPTOR.

The Boost 'n' Buff v.5 is designed for 9v, and will not run better at higher voltages (for technical reasons). In fact you can cause damage to the circuit if a higher voltage is applied.

The 9 volt DC port (which accepts a standard barrel jack with a Negative centre pin.) or 9V battery may be used. If using battery to power the new Boost 'n' Buff, and the pedal begins to sound different, please monitor the voltage of the battery with a multimeter and/or replace the battery with a new one.

If using a battery, the pedal is powered when a plug is inserted into the input jack. So when not in use, disconnect the input plug to maximise battery life.

To access the battery, unscrew the 4 screws at the bottom of the pedal and remove the bottom plate.

## REGISTRATION & WARRANTY

To register your pedal, you can email your name, contact details, purchase date, and retailer details along with the pedal serial number to: [register@miaudio.com](mailto:register@miaudio.com)

Alternatively, you can send the above information to the postal address on the front of this manual. **PLEASE REGISTER YOUR PEDAL.** In the long run, it will be difficult to have your pedal serviced if you need to if the pedal is not registered.

This pedal carries a 5 year warranty that covers all repairs due to manufacturer error. It does not cover any damage due to user mishandling, shipping, acts of God, and abuse. The owner should contact MI Audio directly for all repairs, and any work done by anyone other than MI Audio voids the warranty. All shipping costs are the responsibility of the owner, and are to be paid in advance of any work performed on the pedal. The owner may be asked to provide a copy of the sales receipt for verification.

## DISCLAIMER

The owner or user assumes responsibility for death, injury and/or damages relating to the operation of this device. MI audio assumes no responsibility for death, injury or damages relating from the operation of this device. I am always thinking of ways to improve things, so all specifications are subject to change without notice.