Buffering: Mention any Pedals Hike Your Signal Too Much

by **visserman** » 13 Jun 2017, 17:42

I wish we had to option to switch the buffering signal on or off.

Buffering (as I understand it) boost your signal to compensate for any signal loss.

Do you need to use many pedals in a row to notice this? No!! Use the LS2 and see what it does to your signal. Not great. You even do not have to connect anything else just that one and you will notice the hike in signal.

Another one: FZ-2, string another pedal after it and you will notice how rubbery your bass strings will feel. Not great.

The DD-7 is also not good, but when you use it you will not notice it that much, apart from that your signal is louder.

I guess most people do not care much about this. I am also not too bothered in most cases but the FZ-2 is just bad, do not like what that does to your natural sound.

Just go through some of your most used pedals and see what you notice about your sound.
You will notice any changes in sound even when pedal Is switched off. Just play without the pedal (or pedals) and notice how your natural sound is. Some pedals are perfectly fine, I have also noticed changes which I actually preferred (Forgotten set-up as I tried lots of variations in set-up)

visserman

Re: Buffering: Mention any Pedals Hike Your Signal Too Much

by **Dirk** » 13 Jun 2017, 18:37

The only one I ever noticed it with, was an old Morley PWB, the chrome wah-wah.
Bypassed signal turned very dull, like turning down the tone control to halfway dull.

Dirk

Re: Buffering: Mention any Pedals Hike Your Signal Too Much

by **charmonder** » 13 Jun 2017, 18:48

> *Dirk wrote:*
> *The only one I ever noticed it with, was an old Morley PWB, the chrome wah-wah.*
> *Bypassed signal turned very dull, like turning down the tone control to halfway dull.*

thats not a buffered bypass is why. link to schematic

charmonder

Re: Buffering: Mention any Pedals Hike Your Signal Too Much

by **Pepe** » 13 Jun 2017, 19:52

My first thought as well. That sounds just like the "passive bypass" that is also found in the analog Marshall pedals of the current series (Jackhammer, Bluesbreaker II, etc.).

Pepe

Re: Buffering: Mention any Pedals Hike Your Signal Too Much

by **Laurie** » 14 Jun 2017, 13:13

> *visserman wrote:*
> *Buffering (as I understand it) boost your signal to compensate for any signal loss.*

Ummmm.... not really.

When the generic term "buffer"is used in reference to pedals, it almost always means that circuits are designed to be unity gain (voltage followers) - no transformation of signal level.

Laurie

Re: Buffering: Mention any Pedals Hike Your Signal Too Much

by **visserman** » 19 Jun 2017, 10:40

Yes I understand, it my wording and not giving myself enough time to explain.
I also can see the usefulness of buffering, but still, would it not be great to be able to activate any form of buffering when you want it, instead of it happening random at any time? Well when you go into that direction you enter to "Custom Build" kind of set-ups.

Talking about this unity gain, it definitely changes when using some pedals. Is it easy to remove any form of buffering? Is this a good idea or should one not try and just use pedals which leave your natural sound neutral?

visserman

Re: Buffering: Mention any Pedals Hike Your Signal Too Much

by **fuzzbuzzfuzz** » 27 Jun 2017, 08:51

A good buffer will restore any lost signal (volume/clarity of highs) yet impart little tonal color itself. Buffers - like most pedals - may have different output and input impedance levels. The latter may effect the tone of one pedal when proceeded by the buffered unit. A classic example would be a fuzz face. In short using a buffer is a trade off. On the one hand you retain something close to your "original" tone that existed with just guitar/cable/amp. On the other hand it will likely be slightly colored or at worst processed sounding if the buffer colors the tone too heavily. A succession of buffered circuits will impart greater coloring.

With regards to, which are not true-bypass (bar the Waza Tuner), I found that the signal became more artificial or anemic if more and more BOSS pedals were added to the chain. A strong signal but an altered one. That said the BOSS buffering is much better than others. I recall an horrendously plastic-y tone resulting from a Gibson SG> 4 Dano mini pedals > Marshall combination (and cheap fiddly patch cables).

The curious observation is that all BOSS are bot equal when it comes to tone sucking or restoring. Heavy digital processing I feel compounds the issue, such as switching on a PH-3 in the mix, digital mangling of your whole tone and a buffer.

I ran my BCB-6 with 4 vintage BOSS analog units and the TU-2, with a Maxon AD-80 delay at the end. The latter darkened the tone noticeably. I looped the entire chain and experimented with inserting a MI Audio Boost n Buff. After twiddling I could get 95% close to the amp/guitar/cable signal alone. That said if I simply place a BOSS after the Maxon the effect was much the same.

I recently use a BOSS OC-3 without it being in a true bypass loop. I feel it slightly helps the signal retain strength but as I have so many non TB pedals its rather hard to be conclusive!

Perhaps few really notice! 😄

fuzzbuzzfuzz

Re: Buffering: Mention any Pedals Hike Your Signal Too Much

by **visserman** » 27 Jun 2017, 15:40

Good post Fuzzbuzzfuzz! I just wish you could switch the buffering off, but that option does take you into the realm of custom build pedals.
It is interesting that over time one seem to become more and more critical about tone (and playing) issues. I feel using any kind of pedal is often a trade off. I guess we just have to accept it!

visserman

Re: Buffering: Mention any Pedals Hike Your Signal Too Much

by **Mark123** » 27 Jun 2017, 15:53

I once tested a whole bunch of boss pedals for tonesuck. CS-2 was really bad (tested two units), with all others (don't recall which but a whole lot of ODs, choruses, delays I think) I noticed no difference at all.

Mark123

Re: Buffering: Mention any Pedals Hike Your Signal Too Much

by **visserman** » 27 Jun 2017, 16:10

You actually do not have to use that many, but I guess most people will not notice it straight away, cone you will check you will notice. Question then is: "Does it really matter?" Once you start to hear it it may make you feel different about using pedals.

Radical pedals like Fuzz are fine, since anyone will accept that they alter your sound, this is what we like eh? But a pedal like LS-2? Something like that should be a neutral as possible, but it is not!

visserman

Re: Buffering: Mention any Pedals Hike Your Signal Too Much

by **Mark123** » 27 Jun 2017, 17:27

I'd have to test the LS-2.
Note: I performed my test using the LS-2, but not sure if I tested the LS-2 itself

Mark123

Re: Buffering: Mention any Pedals Hike Your Signal Too Much

by **sclitheroe** » 28 Jun 2017, 02:48

The selectable true bypass in the TU-3w must use a relay, and it really surprises me Boss didn't go that route for all their Waza pedals. In fact, I don't see why they don't modernize their lineup and implement this feature on substantially all of the lineup - they've certainly recouped their R&D on designs that are 40 years old (!) at this point. If you don't want to make them Waza, and invest in core circuit R&D, call them the "modern classic" series or something.

I feel like Boss has ignored the trend towards bigger boards - an all Boss board is certainly possible, but string 5-6 of them together (which is easy, and on the small side for a lot of modern boards... an OD, a distortion, a trem, delay, and verb, and you're already at 5, without adding anything above and beyond what I would call essentials..), and the issue of all those buffers isn't just noticeable, it's significant compared to a properly buffered board (ie. with as few buffers as possible, but not zero buffers)

Does it matter playing out live? No, probably not. But that's besides the point - it sucks that as designed, if you use too much of their product range together, it degrades your signal.

"Here's 36 different current production compacts (not counting tuners, the LS-2, etc), but if you use more than five, your tone will suffer, sorry about that."

Or maybe I just need fewer pedals on my board

Long story short - I like variety, I like goofing around with pedals, and I like having a board with a bunch of pedals. And that's why I've mostly pivoted away from Boss as a core brand, towards Catalinbread. The FRV-1, TE-2, and DM-2w all have their spot on my board, and I love them, but I'm loathe to swap in my BD-2, SD-1, TR-2, and DS-1 on top of those three - I've tried it, and it doesn't sound great.

sclitheroe

Re: Buffering: Mention any Pedals Hike Your Signal Too Much

by **Franzoni** » 28 Jun 2017, 11:08

I'm using a LS-2 at the the very front on my board so i can A/B between guitars faster or if i break a string as my main guitar has a GK-3 attached to it as well at as going to my usual setup.....can't say i've noticed any real hike in volume or tone loss but i'm not as fussy as i used to be these days so it works and does what i want it to do plus sounds ok and makes my life a bit easier with setting up/wrapping up i'm a happy bunny..... .....

I can also attest to the legendary robustness of Boss compacts as my LS-2 has a 15" EV speaker dropped on it at a gig once and survived with a slight crack as the side of the footswitch bit and a broken switch (thanks Laurie who very kindly send me a spare on as they are hard to get here...!)....

Franzoni