OD-2 Turbo Overdrive Volume

by **mbrad2112** » 22 Jul 2012, 23:31

Hi,

I have a MIJ OD-2 and I love it. However, the volume on it is quite lower than my other od/dist pedals. Even when the volume is maxed out. Does anyone know if this is a know problem? Are there mods that can be done to increase the volume? I primarily use the Turbo mode.

Advice?

Thanks,
New Member
mbrad2112

mbrad2112

Re: OD-2 Turbo Overdrive Volume

by **Pepe** » 23 Jul 2012, 00:55

Hi, there! I have sold my OD-2 and kept my OD-2R instead. It has MUCH more gain! With the OD-2R's volume at 12:00h you already have more gain than with the OD-2 at full volume.

Pepe

Re: OD-2 Turbo Overdrive Volume

by **DasBeef** » 23 Jul 2012, 01:25

Pretty sure it's a standard thing with the OD-2, and not a problem with your particular pedal. Think it was addressed when they released the OD-2r as Pepe mentioned.Hopefully someone should be able to point you int the direction of a mod....

DasBeef

Re: OD-2 Turbo Overdrive Volume

by **Laurie** » 23 Jul 2012, 01:33

I'm not terribly familiar with that circuit - never done any work on one myself. If it was my pedal and I was looking for more gain, I'd try reducing R50 down to maybe 3k3 (this will only affect the trubo mode).

Of cource changing D9, D10, and D11 to LEDs would increase the output too, but change the tone.

Laurie

Re: OD-2 Turbo Overdrive Volume

by **Pepe** » 23 Jul 2012, 07:43

> *Laurie wrote:*
> *Of cource changing D9, D10, and D11 to LEDs would increase the output too, **but change the tone**.*

That's the nice thing with the OD-2R. It sounds exactly like the OD-2, only louder. I made several 1:1 tests.

Pepe

Re: OD-2 Turbo Overdrive Volume

by **Dirk** » 23 Jul 2012, 15:29

So, what if you just mod the OD-2 to OD-2r specs, minus the external footswitch jack?

Dirk

Re: OD-2 Turbo Overdrive Volume

by **Guga Ramone** » 23 Jul 2012, 17:11

On OD-2r only the "Turbo ON" has more volume than on the OD-2? I really wish the "Turbo Off" had more volume, as it has a very beautifull sound and is vey good for boosting purposes.

Guga Ramone

Re: OD-2 Turbo Overdrive Volume

by **Pepe** » 23 Jul 2012, 17:56

The OD-2R's Turbo mode has a bit more boost PLUS (!!!) the overall volume level is drastically higher!

Pepe

Re: OD-2 Turbo Overdrive Volume

by **mbrad2112** » 23 Jul 2012, 21:05

Thanks everyone. I will look for and OD-2R and compare.

Mike

mbrad2112

Re: OD-2 Turbo Overdrive Volume

by **zentropa** » 24 Jul 2012, 08:01

I go away for a few years and there's a new forum when I come back

You are correct that the OD-2 has a much lower volume output than most distortions. I think it may be rooted in its input impedance as the SD-1 and black screw OD-1's suffer from similar volume concerns (with the OD-2r, SD-2, OD-3, etc. these were corrected).

I'm guessing you must be playing humbuckers with a resistance > ~11k?

Most single coils and lower output alnico II humbuckers aren't affected as badly (read as: you can still get a volume boost from the OD-2 with the guitar's volume set to 10).

The OD-2 and OD-2r do differ in sound a bit. Even though the circuit is very similar, the OD-2r is MIT and has a bit more "noise" in the tone and a little less string articulation. The overall tone remains the same and it's not as drastic a change in the ambient noise as something like the HM-2 in MIJ vs. MIT versions but it is about on par with the DS-2 MIJ vs. MIT.

I kept the OD-2 with my setup but I run into the same frustration when I play a few of my guitars.

zentropa

Re: OD-2 Turbo Overdrive Volume

by **Dirk** » 24 Jul 2012, 15:29

Welcome back Zentropa. I remember your name which is weird cause I'm terrible with names...

Dirk

Re: OD-2 Turbo Overdrive Volume

by **zentropa** » 24 Jul 2012, 15:50

Thank you, Dirk.

zentropa

Re: OD-2 Turbo Overdrive Volume

by **cctsim** » 24 Jul 2012, 23:21

The OD2 in turbo mode runs the discrete opamps that generate the overdrive off 5.6V power supply which explains the low ouput value. For more volume in this mode replace R39 with a wire.

In the OD2r, they changed the power supply to 8V and there is a two-transistor (Q17-Q18) booster decoupling the tone and the level controls and boosting the signal for both modes.

cctsim

Re: OD-2 Turbo Overdrive Volume

by **zentropa** » 24 Jul 2012, 23:45

Sweet. That r39 trick should work for many. Is it a similar reason that the sd-1 and later od-1's struggle with high output pickups?

zentropa

Re: OD-2 Turbo Overdrive Volume

by **Ptak** » 15 Jan 2014, 09:13

If I did the R39 jumper, would the pedal sound the same as an OD-2R for both modes?

I'm trying different dist/od's with my amps 2nd channel and I'd like to try an OD-2R but they're harder to find and more expensive. If the jumper makes it an OD-2R without the switch then I'd be all for that. If I liked it and it was my #1 winner I'd hunt down the R version.

Ptak

Re: OD-2 Turbo Overdrive Volume

by **Pepe** » 15 Jan 2014, 09:56

Hunt the R version down anyway.

Pepe

Re: OD-2 Turbo Overdrive Volume

by **Ptak** » 16 Jan 2014, 05:13

If I don't like it (which i'll know after about 1hr into playing) then the hunt would be a waste. If the pedal sounds the same with the jumper I could buy one right now for less.

Ptak

Re: OD-2 Turbo Overdrive Volume

by **cctsim** » 17 Jan 2014, 02:10

> *Ptak wrote:*
> *If I did the R39 jumper, would the pedal sound the same as an OD-2R for both modes?*

R39 will only affect the turbo mode.

cctsim

Re: OD-2 Turbo Overdrive Volume

by **Ptak** » 17 Jan 2014, 10:09

So there's no mod for the normal mode then?

If not, I guess I'll have to hunt one down!

Ptak

Re: OD-2 Turbo Overdrive Volume

by **cctsim** » 17 Jan 2014, 20:17

You can also replace R62 with a wire. This will affect both modes and will boost the signal a bit.

If you are handy with a soldering iron you can build a small booster like SHO or LPB-1 (they are like 6 components) and connect it between the tone and level control.

cctsim

Re: OD-2 Turbo Overdrive Volume

by **Ptak** » 18 Jan 2014, 08:44

thanks!

Ptak

Re: OD-2 Turbo Overdrive Volume

by **zentropa** » 10 Oct 2015, 16:58

Random corpse resurrection...

I finally got around to modding my OD-2.
A few notes: Replacing R39 with a wire will cause a HUGE volume increase on the pedal in turbo mode... almost double. It basically puts the pedal inline with the OD-2R in turbo mode for output (e.g. going from maxed level to ~11 o'clock).
The schematic I found had R39 at 1.8K ohm. I'm guessing something closer to 1k might be better. The wire alone in R39 will leave a massive disparity in volume between the 2 modes.

R62... is not easy to get to... it's on the secondary board mounted up near the pots. I don't consider myself proficient enough at soldering (or understanding schematics) to trust myself getting to this one, but if it will have a similar impact to R39, I would expect it to push the output close to the OD-2R, if not slightly louder.

zentropa

Re: OD-2 Turbo Overdrive Volume

by **SoldMySOB** » 06 Aug 2016, 06:18

After reading your post here I didn't need a schematic diagram to find the R62 (thank you). And the fact that I just needed a VERY short bit of thin wire to bypass it meant I didn't have to go shopping, yay! So I opened up my OD-2 to see how hard it was to get at. If u remove the dials and drop that little board out (I removed the led as well, 1 screw) it's easy to get to, I didn't totally gut the whole thing, left the input and output jacks in place. I didn't remove any parts from the board just jumped R62 on the back side, very easy to access! I'm no electrician, I do have a small gas soldering iron mainly for fixing leads. Anyhow all went good and my old MIJ OD-2 is now awesome! Didn't make a great deal of difference but just enough for me to bother using it, I did keep that pedal in the bottom of a box with all my other unused pedals because of its volume issue, not anymore, I'm over the moon about it! Always liked it's sound, just couldn't deal with the volume. I thank you soooo much for your info and highly

recommend everyone do this mod immediately to fix their broken from new boss OD-2 pedal!!! Cool bananas

SoldMySOB

Re: OD-2 Turbo Overdrive Volume

by **Pepe** » 06 Aug 2016, 07:28

Awesome first post! Welcome to the forum! Now you know, why I love the OD-2R. Hook it up to a synthesizer if you can.

Pepe