

DIG DEEP MK1

Sub-Harmonic Octaver

www.opfxs.com

User Manual

Rev. 26/11/2021

CONTROLS

DRY: sets level of dry input signal. DRY pot can both boost or reduce gain.

SUB: sets level of lower octave.

Function: used to set various functions, SUB ATTACK, SPLIT OUT, TRACKING, SUB TONE

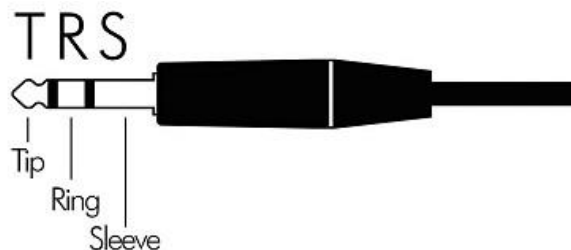
Internal Trimmer: input level

FUNCTION switch settings

SUB ATTACK: toggles between FAST and SLOW attack of octave down signal.

How to toggle between fast and slow SUB ATTACK: with pedal bypass LED turned ON, keep FUNCTION switch pressed for 2 seconds, LED will flash a few times indicating successful change.

SPLIT MODE: toggles between MONO and SPLIT output. MONO mode mixes SUB and DRY on a single channel. SPLIT mode, as it says, splits SUB and DRY on different channels. You need to use a Y jack or adapter to work. In SPLIT mode the TIP of the jack carries the DRY signal and RING carries the SUB signal. This is very useful to route DRY and SUB to different audio paths.



When pedal is in SPLIT mode the current absorption increases by 10mA.

How to toggle between MONO and SPLIT output: put pedal in bypass status by pushing bypass footswitch, keep FUNCTION switch pressed for 2 seconds, LED will flash a few times indicating successful change.

TRACKING (8 steps): sets tracking for different guitars and pickup types. This setting affects the octave down response to your guitar. It's a 8 steps setting, so up to 8 different tracking options. When setting TRACKING low (CCW) it will move the sub octave range toward low frequencies. When setting TRACKING high (CW) it will move the sub octave range toward high frequencies.

As a general rule, low tuned guitars, 7-string guitars, baritones etc. will prefer a low TRACKING setting. Standard tuned 6-strings guitars will go better with a high TRACKING setting.

How to set a new TRACKING: press FUNCTION once. LED will start blink at 1 sec rate. Set new TRACKING by moving the DRY knob and play to test which TRACKING setting works best. When done press FUNCTION once again to exit.

SUB TONE (12 steps): sets the tone of sub octave, from dark (CCW) to bright (CW). It's a 12 steps setting, so up to 12 different tone options.

How to set a new SUB TONE: press FUNCTION once. LED will start blink at 1 sec rate. Set new SUB TONE by moving the SUB knob and play to test which setting you prefer. When done press FUNCTION once again to exit.

While setting TRACKING and SUB TONE, both SUB and DRY levels are held and not affected by moving the respective knobs. This is useful for setting TRACKING and SUB TONE while playing with previous levels of SUB and DRY.

TRACKING and SUB TONE values are changed and saved only after moving their knobs. So if you press FUNCTION by accident or want to set TRACKING or SUB TONE only there's less risk to perform an undesired modification.

All settings are saved inside internal memory and recalled at power on of the pedal.

Tips with tube amps: some tube amps can be easily overloaded with certain settings of Dig Deep by pushing preamp section into saturation. This happens when amount of dry signal is low and bass content is too high. Such a combination produces high harmonics and sort of ring modulation distortion, while it could be considered an interesting sound shaping feature it could annoy who is looking for a clean sound. To avoid such effect there are a number of possibilities to get around it.

- set SUB at zero and adjust DRY so that it's at the same level of bypass. Raise SUB until you find the sweet balancing where you have a good amount of octave down effect compared to dry signal.

- Decrease the preamp gain on your tube amp and increase the master level to compensate for volume drop if occurs.

Dig Deep has been engineered to work with guitar but it responds well to different type of instruments and sound sources.

For best and accurate tracking always put Dig Deep before any pedals/effects that alter the harmonic content. It's not a rule, feel free to experiment at your own taste!

INTERNAL TRIMMER

Internal trimmer sets the input level to prevent distortion with high level output instruments. By default it's set full CW, meaning max input level. Turn it CCW to decrease the input level until you get a clean sound. For setting the trimmer you need to remove the chassis bottom cover.

Specs:

Powering: 9V DC with center negative DC Jack 2.1mm (BOSS™ standard)

Current consumption @ 9V DC:

- 90mA in MONO mode
- 100mA in SPLIT mode

Input nominal level: instrument

Input Impedance: 500k Ohm

Output Impedance: 600 Ohm

Bypass: true-bypass