



# Phono Box DS3 B

**Balanced, dual mono & fully discrete audiophile phono stage**

MSRP 599 € (incl. VAT)

- **NEW** balanced XLR in- & outputs
- **NEW** 5-pin mini XLR balanced input
- **NEW** fully symmetrical & discrete gain stage
- **NEW** fully passive & discrete RIAA equalisation
- **NEW** fully discrete audio circuitry - NO Op-amps!
- MM & MC capable
- Balanced & single ended in- & output
- Dual mono design
- Continuously variable input impedance loading
- Most precise MC cartridge matching
- Superior low noise / low distortion
- Trigger in- & output
- Heavy aluminium casing protects against interference
- Available in silver or black
- Magnetic wooden side panels available separately
- Made in Europe

Colour options: ● ●

**Input impedance:** Stepless 10 – 1000 ohms or fix 47kOhms  
**Input capacitance:** 50, 150, 300, 400pF  
**Gain (+ 6dB using XLR Out):** 40, 45, 50, 55, 60, 65 dB  
**SNR MM (40dB):** 104dBV, 111dBV - ,A' weighted  
**SNR MC (60dB):** 85dBV, 91dBV - ,A' weighted  
**THD at 1 kHz:** <0,001% MM, < 0,004% MC  
**THD (20Hz-20kHz):** <0,005% MM, < 0,01% MC  
**RIAA-equalization accuracy:** < 0,25dB / 20Hz - 20kHz  
**Subsonic filter:** at 20Hz with 18dB/octave  
**Input:** 1x 5-pin mini XLR / 1x pair XLR / 1x pair RCA phono  
**Line-level output:** 1x pair RCA, 1x pair XLR  
**Wiring XLR sockets:** 1 ground, 2 "hot" and 3 "cold"  
**Trigger In/Out:** 12V on/off detector  
**Outboard power supply:** 18V/500mA DC  
**Power consumption:** 18V/max.290mA DC, <0.5 W standby  
**Dimensions:** 206 x 72 x 194 (205 with sockets) mm  
**Weight:** 1480g without power supply

## The new DS3 phono stage

The Phono Box DS3 B has a steel chassis which is covered by screwed aluminium panels. This construction brings very good rigidity and splendid isolation against interferences. Phono Box DS3 B is available in silver or black. Magnetic wooden side panels are sold separately.

### „B“ stands for balanced

The Phono Box DS3 B employs a true fully balanced gain stage design. Connect your turntable either with the 5-pin mini XLR cable or standard XLR cables & profit of the balanced signal path. Symmetrical, or also called balanced, transmissions consist of a hot and a cold (also called + and -) signal. Both signal chains effectively carry the same musical information. A true balanced gain stage can now extract the final musical information out of the +/- signals and subtract, remove, all noise that could potentially be added along the transmission. As there are two separate signal chains, we also needed two individual amplifier sections.



### Discrete Circuitry

The Phono Box DS3 B uses fully discrete audio circuitry. A discrete circuit is composed of electronic components which are disparate, individual devices, also called discrete components. Countless hours of listening tests and years of experience have shown us that even the very best Op-Amps do not tend to be so neutral, natural, dynamic or vivid. Standard phono pre-amplifiers with integrated circuits have a few tens or hundreds of components, but discrete designs will employ hundreds or thousands of components by comparison.

### Passive EQ

After treating the balanced symmetrically they are added back together and processed by the fully passive and discrete RIAA equalisation stage. By keeping the gain stage fully symmetrical we can optimize the signal to noise ratios, giving the EQ section the best source to work its magic on. Fully split passive equalization allows for better impedance matching and lower deviation from the ideal RIAA curve. For the balanced XLR outputs, a discrete balancing stage generates a symmetrical signal, so you benefit from balanced signal transmissions again. The single ended RCA outputs run their own fully discrete output stage, served directly by the RIAA EQ.



### Cartridge loading options

You can connect two turntables at the same time & easily set everything on the front plate. Each input settings are stored in the memory.

Large ranges from 40dB up to 65dB are possible. A fully balanced design makes all the difference here, handling amplification levels this high. You can perfectly match it with a wide variety of cartridges and perfectly integrate it into the rest of your Hifi system, matching the volume levels accurately to other sources like CD players or streaming devices. Load impedance can be set continuously via potentiometer, a system invented by Pro-Ject Audio Systems. It allows you to seamlessly adjust the impedance during playback and immediately assess the impact of different loading options. This is necessary to find just the right load impedance for your cartridge. No other manufacturers implement this feature in this extreme way!

### External power supply

The Phono Box DS3 B is powered from an external adapter. It is important to keep all the parts which can radiate electromagnetic fields out of the amplifier range. This is the reason why we are using an outboard power supply. Due to legal requirements, this power supply must be a switch mode type with guaranteed stand-by mode power consumption 0,1W.

An outboard power supply with linear construction is even better, because it can offer much cleaner power. When you want to manufacture such clean and really high-end power supplies, you have to use a transformer with a very low core saturation and preferably with shielding between primary and secondary windings.



### Power Box DS2 Sources - linear power supply upgrade

Low core saturation decreases radiation of the outer electromagnetic field which can be inducted into sensitive circuitry. Shielding between windings work as a very efficient filter which effectively suppresses interference from mains. When it is combined with a DC-blocker which avoids the saturation of a core by DC current, the resulting filtration is even better. The mechanical vibration of the transformer is also reduced. It is critical that the transformer in use is also vacuum impregnated. Obviously, such a transformer becomes larger than one would expect. Also, much more expensive. That is why such a power supply requires a cabinet the size of the Phono Box DS3 B itself. The location of the power supply shouldn't be close to Phono Box DS3 B. Additionally, the Phono Box DS3 B shouldn't be exposed to big transformers in power amplifiers or other appliances which can cause electromagnetic interference either. Strong electromagnetic fields from big transformers in very close proximity can even penetrate the heavy metal/aluminium chassis of the Phono Box DS3 B. Even a chassis like this has its limits! The best arrangement is to keep the Phono Box DS3 B as far away as possible from those harmful electromagnetic fields.

Our Power Box DS2 Sources would be another step up for your Phono Box DS3 B's performance.