



Phono Box DS3 B

True Balanced ready dual mono phono preamplifier



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

Color options:  

Input impedance: Stepless 10–1000 ohms, fixed 47kOhms
Input capacitance: 50, 150, 300, 400pF
Gain (+ 6dB using XLR Out): 40, 45, 50, 55, 60, 65dB
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, <0.5W standby
Dimensions: 206 x 72 x 205mm (with sockets)
Weight: 1480g without power supply

The new DS3 phono stage

The Phono Box DS3 B comes in a steel and aluminum chassis providing very high rigidity and splendid isolation from interference. Phono Box DS3 B is available in silver or black. Magnetic wooden side panels are sold separately.

B stands for balanced

In addition to settings for MM (Moving Magnet) cartridges, the Phono Box DS3 B allows you to upgrade to True Balanced operation with a MC (Moving Coil) cartridge on most Pro-Ject turntables. 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 the hum and noise picked up during the transmission. This is the same concept used with every microphone in every professional recording studio worldwide.



Discrete circuitry

The Phono Box DS3 B uses fully discrete audio circuitry 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 as neutral, natural, dynamic nor vivid as we'd prefer. This discrete circuitry is designed in a full dual mono configuration for optimal channel separation and clarity.

Passive EQ

After treating the balanced signals they are added back together and processed by the fully passive and discrete RIAA equalization stage. By keeping the gain stage fully symmetrical we can optimize the signal to noise ratio, 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, one balanced, one single ended. Switching between the two and all other settings are conveniently available on the front panel. Input settings for each input are stored individually and recalled automatically

A large gain range from 40dB up to 65dB is possible. You can match it with a wide variety of cartridges and seamlessly integrate it into the rest of your hifi system, matching the volume levels accurately to other sources like CD players or streaming devices. The loading options for MM and MC are designed for compatibility with a wide array of cartridges. Ultra low values like 50pF or 10 ohms allow you to account for special situations, for example less-than-ideal higher capacitance cables. The Phono Box S3 B has always got you covered!



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. This power supply is a highly energy efficient switch mode type with guaranteed standby power consumption of 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 the mains. When it is combined with a DC-blocker which avoids the saturation of a core with 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. Strong electromagnetic fields from big transformers in very close proximity can even penetrate the heavy steel/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, so our Power Box DS2 Sources would be another step up for your Phono Box DS3 B's performance.