



# 100 Phono Preamplifier

The 100 Phono Preamplifier is probably the world's most comprehensive Phono Preamp available. A key feature never achieved before is the ability to professionally digitalize analogue records.

Burmester's new 100 Phono Preamp is a highlight for all analogue-fans. The 100 is a reference to the successful 838 Phono Preamp from the 80's. The final result is a return to the roots of Burmester's story of success, combined with state of the art technology from the 21st century.





# 100 Highlights

The 100 Phono Preamp was designed to provide record-fans with an ultimate sound quality and a digital preservation of their tonal treasures. The 100 Phono Preamplifier aligns carefully selected building parts, circuit technology and precise engineering with faultless analogue sound. It represents the perfect intersection between the processing of finest analogue signals and practice-oriented technology.

With this device, it is possible to digitalize your analogue record collection in the highest-possible. The Signal-To-Noise ratio, responsible for acoustic noise, humming, or distortion, is at the highest possible level. All measurements of the phono preamp attain the absolute minimum that can be realized in theory and practice. Thus, in all probability they represent the state of the art at present and in the long term.

### INPUTS

Fully equipped, the 100 Phono Preamp offers two balanced phono inputs (XLR 3pol. female), which can be configured as MM or MC versions. Thus, it supports the connection of record players with two different cartridges or the connection of two record players, each having a different cartridge (MM/MC). The 100 Phono Preamp automatically recognizes the MM or MC module, and thus has a very simple operation. In addition to that, all settings (impedance, gain, subsonic, output 0 dB/+6 dB, Auto Adjust) are automatically stored and are available when changing inputs.

# XLR-CINCH-ADAPTERS

Record players are ideal balanced sources. Therefore, in order to achieve the best sound quality, tone arm leads should always be used with XLR- plugs. The plugs can be ordered from Burmester. If your tone arm cable does not have XLR plugs, you may use the provided adapters.

# INPUT RESISTANCE/ INPUT CAPACITANCE

The input resistance of the MC version can be adjusted. Thus, impedance can be adjusted to any cartridge. This certainly also applies to the adjustability of the input capacity in the MM version. The input impedances are changed via relay circuits. This results in a signal path which is as short as possible. Interfering signals can therefore be reduced to the absolute minimum. The input sensitivity can be selected in six steps for every module for an ideal level and volume adjustment.

### SUBSONIC FILTER

In order to achieve best sound results even for old or wavy records, a connectible subsonic filter prevents low-frequency deflections of the woofers.

### **AUTO ADJUST**

An exceptional highlight of the new 100
Phono Preamp is its AUTO ADJUST
function. With a simple touch of a
button, you will receive an automatic
adjustment of the cartridges' left and
right channel, up to a precision of 0,2 dB
(2 %) and to a channel imbalance of 6 dB.

# **OUTPUTS**

The output level can be set to fix or volume variable. In combination with an additionally adjustable output amplification of +6 dB, it is possible

to connect the phono preamp directly to power amps or active loudspeakers without a separate preamplifier. In that case, the volume can only be controlled via remote control. The balanced analogue output as well as the unbalanced analogue output are suited for phase reversal. Therefore, all different kinds of amplifiers can be connected. The analogue output stages are perfectly suitable for low-resistance inputs, due to the high driver capability of their X-Amp2 modules.

#### DC-COUPLING

The DC-coupled signal path without distorting capacitors results in a very precise reproduction of the low frequencies, because there is no phase shift in the audible range.

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#### A/D CONVERTER

Due to the 100 Phono Preamp's optional A/D conversion module (ADC) with USB and S/P-DIF outputs, the analogue signal from the record can be digitally recorded. This means, your record collection can be archived on CDs or your music server. Before the signal passes the A/D converter, it passes the Burmester X-Amp2 stages. As a result, the signal receives the Burmestertypical sound characteristics even before conversion. The sampling rate for the A/D conversion can be selected between 48 kHz/24 bit, 96 kHz/24 bit and 192 kHz/24 bit for a sound adjustment according to personal preferences and for obtaining the highest possible sound quality.

#### **VU-METER**

The modulation for the right, the left or the mono-sum of both channels is indicated by the VU-meter. Therefore,

with the according GAIN-setting, you can achieve the highest-possible resolution of the A/D converter. Furthermore, the level indicator shows imbalances between right and left channel instantly. At the same time, an inertia less LED (Overload) indicates over modulating of the A/D converter. The appearance can be configured individually or adjusted to other components with the illumination of the VU-meter and the dimmable LEDs.

#### **POWER SUPPLY**

The 100 Phono Preamplifier has an internal analogue power supply. Due to its very low power consumption in Standby mode (<1 W), it fulfils the highest environmental power requirements. Other units can be switched on by remote control due to the Master/Slave function via DC IN/OUT.

#### **MORE FEATURES**

The optional Burmester Link module allows the operation of control systems like AMX™ und CRESTRON™ via RS232 and USB.
The 100 Phono Preamp is equipped with vibration-isolating feet with carbon fibre clips for an ideal resonance decoupling.

The following functions can be controlled via remote: Input, Load Gain, Subsonic, High/Low-Output, ADC, DIM, Volume, VU-Meter.

With regard to measurements, the 100 Phono Preamp meets the highest possible standards. Thus, it is even suited for professional use. Whether you would like to use it for broadcasting studios, recording studios or as a tool for archiving record collections, the 100 Phono Preamp meets highest demands.

# **TECHNICAL SPECIFICATIONS**

Weight	9 kg (19.8 lbs)
Width	482 mm (19'')
Height	96 mm (3.8'')
Depth	344 mm (13.6'')
Inputs	max. 4 balanced / 7 unbalanced
Inputs Phono (MC / MM)	1x bal. module (MM or MC) + 1x bal. module (optional)
Analog Outputs	1 XLR, 1 RCA
Digital Outputs (with ADC)	1 XLR, 2 TOSLINK, 1 USB
Optional modules	AD converter
Automatic level adjustment of	yes (adjustable to 0.2 dB difference)
phono cartridge imbalance (Auto Adju	ust)
Input sensitivity adjustable	yes
Remote controlled	yes
BurLink	yes
REMOTE INPUT/ OUTPUT	1/1
Input impedance MC	33 Ω, 75 Ω, 220 Ω, 390 Ω, 1 kΩ, 47 kΩ
Input capacity MM	68 pF, 120 pF, 180 pF, 220 pF, 300 pF, 400 pF
Frequency response -3 dB	20 Hz - 20 kHz (< 0.25 dB)
Subsonic filter	10 Hz (-4 dB)
Unweighted signal-to-noise-ratio	MM: 84 dB, MC: 74 dB
Max. input voltage at 1 % THD+N	MM: 78 mV, MC: 8.5 mV
Input amplifications	MM: 37 - 52 dB, MC: 57 - 72 dB
Channel offset	< 0.1.dB

Technical modifications reserved.

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PRODUCTINFORMATION

100 PHONO PREAMPLIFIER

TOP LINE



# Burmester Audiosysteme GmbH

Burmester Audiosysteme GmbH is one of the world's most renowned manufacturers in the field of high-end audio systems. The owner-managed company based in Berlin was founded in 1977 by Dieter Burmester. With a clear focus on home and automotive audio, Burmester maintains global collaborations with industry leaders in other industries (including: Mercedes-Benz, Porsche and the Königliche Porzellan Manufaktur Berlin, among others) and is a member of Meisterkreis Deutschland and the Initiative for German Manufactures.