

# BPC5

Balanced Power Conditioner

Available as EU, UK, US and AUS version

### **BPC5** In Brief

Typically used for one amplifier up to 800W and digital/analogue source devices

### **Features**

- 4 power outlets & 2 isolated power zones
- 5A max. rated power output both zones combined
- 1x 200VA, 1x 800VA power zones
- Output zones allow you to isolate devices with switch mode PSUs from devices with linear PSUs for maximum performance
- Isolate modern digital sources from analogue sources like phono preamps or turntables for least amount of interference
- Cleaner power, more dynamics and larger

sound stages for your amplifiers

- Surge protection and DC blocker more than 2V
- Over voltage and under voltage protection
- Overload protection
- Rigorously tested to comply with highest industry safety standards

### **Toroidal Transformer**

- Super-silent, low noise, balanced isolating power transformer
- 1200VA / 5A combined peak power
- Excellent RFI attenuation of more than 57dB

# **Mechanical construction**

- Superb high-end build quality
- Massive aluminium frontplate and heavy steel case protect against interference



# **Design Background**

Not only typical main components like amplifiers, DACs or sources have an impact on sound quality, also the supplied power for each device is a very important puzzle piece to create a high end audio setup. It significantly contributes to the sonic quality of every audio product.

In order to offer the possibility of improving sound quality, we designed our BPC (Balanced Power Conditioner) series to take your listening experience to the next level.

# **General Description**

Our BPCs are equipped with multiple output zones. Each zone is capable to deliver a certain output power, which may not be exceeded.

The BPC5 has a maximum output of 5A split into a zone of 800 watts and one of 200 watts. Typical use of the BPC5 is powering sources like a phono preamplifier, a preamplifier, a CD player etc., but also power amplifiers with up to 800 watts of max. power consumption.

The biggest advantage of multiple zones is avoiding of

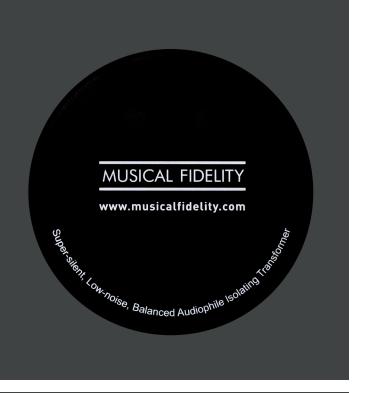
differential mode cross contamination between connected electronics. We strongly recommend connecting devices with switch mode power supplies in one zone and electronics with linear power supplies in the second one.

If the number of power sockets is not sufficient, a power strip can be connected as long as you don't exceed the maximum output power of the zone.

The use of a BPC results in a larger soundstage, clearer bass contours and a better separation of instruments.

### Toroidal transformer

The key to all toroidal transformer advantages is its efficiency and the key of efficiency is the transformers core. The core is a continuous strip of grain oriented silicon steel, wound as a clock spring under tension. There is no air gap, as we know from standard El transformer, resulting in a stacking factor of 95% of its weight. Typical efficiency figures for toroidal transformer are 90% which means that 90% of the input power is transformed into output power and just 10% are converted into waste like heat, electromagnetic radiation and mechanical vibration. Toroidal transformers therefore radiate about one tenth of the magnetic field of El transformers. Due to the Common Mode Rejection (CMR) we were also able to eliminate noise and get an even cleaner power.





# **Surge Protection**

Musical Fidelity BPC power conditioners protect connected equipment through their innovative series mode surge suppression that also pays attention to keep the power clean. Most surge suppression circuits are shunt-mode. Excessive voltage surges are "shunted" to ground, which raises the ground voltage and may contamine audio and video signals. Our design absorbs surges more than 2V above peak line voltage, so ground is not affected.

# Overload Protection & Input Voltage Detection

When the device detects an overload, the "No-Fuse-Breaker" will turn to protection mode. If you need to reset the device, just press the "No-Fuse-Breaker" and check your system to be sure that the device is not overloaded. All BPCs are equipped with an Under Voltage (UVP) and Over Voltage (OVP) protection. The LEDs on the front panel show the current working status. Green means, that the device is in normal working mode. If the LED is red, check if your input voltage is correct.



### **BALANCED POWER CONDITIONER**

# ELECTRICAL SAFETY & EMC TESTING

The entire BPC family was rigorously tested to ensure it complies with highest industry standards for electrical safety and electromagnetic interference mitigation. Tested by an accredited institute, adhering to strict international guidelines, no corners have been cut to guarantee performance and reliability.

### **Test Institute**

Institute for Testing and Certification, a.s., Testing Laboratory No. 1004.3

Sokolovska 573 686 01 Uherske Hradiste Czech Republic



Test Report No: 414105221AE1, 414105255AL1

They are therefore in conformity with relevant union harmonisation legislation directives:

- 2014/35/EU
- 2014/30/EU

The electrical safety protocols test the device's insulation, grounding, and fault protection mechanisms. They ensure that Musical Fidelity Balanced Power Conditioners operate within safe parameters, keep their power output stable and reliable, reducing the risk of electrical hazards to an absolute minimum. Exhaustive electromagnetic interference tests gauge the effective shielding against unwanted interference from external sources, guaranteeing pristine audio quality without any disruptive artifacts. Musical Fidelity Balanced Power Conditioners successfully meet and surpass all criteria, providing you with the peace of mind that your valuable HiFi equipment is in the best possible hands.

As always we have a strong commitment to transparency and quality. We want that your HiFi system is in the care of a device that has been extensively and independently validated by a reputable accredited test institute. This dedication to quality ensures that you'll enjoy the highest standard of sound performance, free from the compromises often seen in lesser quality and untested power solutions.

# **BALANCED POWER CONDITIONER**

# **ZONES**

		BPC3		BPC5		BPC10			BPC16		
Product	Type	300W	300W	200W	800W	200W	200W	1550W	2000W	600W	600W
A1	Power Amp	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA
MX-DAC/MX-Stream	Digital	MD	MD	MD	MD	MD	MD	MD	MD	MD	MD
M2s/M3si	Power Amp	1	1	-	MA	-	-	MA	MA	1	1
M2s/M3s/M6s CD	Digital	MD	MD	MD	MD	MD	MD	MD	MD	MD	MD
M3x/M6x/M8x Vinyl	Analogue	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA
M3x/M6x/M8x DAC	Digital	MD	MD	MD	MD	MD	MD	MD	MD	MD	MD
M5s/M6si	Power Amp	-	-	-	1	-	-	MA	MA	1	1
M6si500	Power Amp	-	-	-	-	-	-	-	1	-	-
M6s/M8s PRE	Analogue	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA
M6s PRX	Power Amp	-	-	-	1	-	-	MA	MA	-	-
M8xi	Power Amp	-	-	-	-	-	-	-	1	-	-
M8s-700m	Power Amp	-	-	-	-	-	-	-	1	-	-
M8s-500s	Power Amp	-	-	-	-	-	-	1	1	-	-
Nu-Vista Vinyl/Vinyl 2	Analogue	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA
Nu-Vista 600/600.2	Power Amp	-	-	-	1	-	-	MA	MA	1	1
Nu-Vista 800/800.2	Power Amp	-	-	-	-	-	-	1	MA	-	-
Nu-Vista PRE	Analogue	MA	MA	MA	MA	MA	MA	MA	MA	MA	MA
Nu-Vista PAS	Power Amp	-	-	-	-	-	-	-	1	-	-
Nu-Vista PAM	Power Amp	-	-	-	-	-	-	-	1	-	-
Nu-Vista CD/DAC	Digital	MD	MD	MD	MD	MD	MD	MD	MD	MD	MD

MD multiple digital sources: Zone can power multiple "Digital" products. Up to max. output power of the zone.

MA multiple analogue sources: Zone can power multiple "Analogue" products. Up to max. output power of the zone.

- single product. Power consumption of the product is already close to maximum output power of the zone.
- power consumption of the product exceeds the output power of the zone.

General guidelines for connecting devices:

Don't mix "Analogue" & "Digital" in one zone! Don't mix switch mode PSUs with toroidal/linear PSUs!

Keep Power Amps separate in their own zone: Don't mix Digital Sources with Power Amps!

Don't mix Analogue Sources with Power Amps!



BPC5

# **SPECIFICATIONS**

# **Power Conditioner**

- Output Voltage: 110-120V/220-240V
- RFI attenuation: > 57dB @ 235kHz, > 40dB @ up 1MHz
- 2 isolated power output zones
- Balanced toroidal power transformer
- Surge protection and DC blocker ≥ 2V
- Over voltage and under voltage Protection
- Overload protection

### Connections

- Power Outlets: 4 Outlets
- Isolated Power Zones: 1x 200VA, 1x 800VA
- Peak Combined Power Output: 1200VA / 5A
- Maximum Rated Power Output: 800VA / 5A

# General

- Mains voltages: 110-120V/220-240V. AC 50/60Hz
- Max. Consumption: 800W
- Dimension (WxHxD): 440 x 125 x 400 mm
- Weight: 20,6 kg net / 25 kg boxed