

GamuT

GamuT International A/S, Oesterled 28, Bygning A, DK-4300 Holbaek, Denmark
Telephone no: +45 70 20 22 68 Fax no: +45 59 43 97 26
www.gamutaudio.com

User Guide

GamuT D3 Dual Mono Preamplifier

GamuT

GamuT International A/S, Oesterled 28, Bygning A, DK-4300 Holbaek, Denmark
Telephone no: +45 70 20 22 68 Fax no: +45 59 43 97 26
www.gamutaudio.com

GamuT D3 Dual Mono Preamplifier

User Guide

SAFETY INSTRUCTIONS:

Never let children (or grownups) push anything into holes or slots in the case - this could result in an electric shock and could cause damage of the equipment.

Never guess or take chances with electrical equipment of any kind - it is always better to be safe than sorry.

Warning: To prevent fire or shock hazard do not expose this appliance to rain or moisture.

Warning: No user serviceable parts inside. Refer servicing to a qualified technician. Never remove covers unless qualified to do so. This unit contains **dangerous voltages**.

DO read the user's guide before you attempt to use this equipment.

DO ensure that all electrical connections (including the mains plug, extension leads and interconnections between pieces of equipment) are properly set and in accordance with the manufacturer's instructions.

Check that the GamuT D3 mains fuse rating is set correctly for **your local mains voltage**.

DO NOT obstruct the necessary all-around ventilation: especially **DO NOT** place the set close to curtains or on soft furnishing such as carpets. Overheating can cause unnecessary damage and shorten the life of the equipment.

Unpacking

Please read this guide before you start using the GamuT D3. Remove the cables from the carton if included, and carefully unpack the D3 from the protective plastic packing.

Mains power

The GamuT D3 can be connected to mains power using an IEC mains cable. A more expensive mains cable may in some cases improve the sound quality.

Switch it on using the switch situated under the bottom plate beneath the front right corner. The blue light on the front will light up.

Inputs

The GamuT D3 features 5 inputs; 4 phono inputs labelled **MM/MC**, **Tuner**, **Tape**, and **HTH**, and also one XLR input labelled **CD L & R in** on the rear panel. They all have gold-plated RCA/phono sockets or gold-plated XLR sockets. The input selector switch is not in the signal path; it just feeds DC to the high-quality NEC relays placed near the input sockets to keep the signal path short.

The input impedance is 20kOhm for the RCA inputs. This works well with most quality signal sources with a normal output impedance. If a MM/MC option is fitted, the MM/MC RCA input has a plug-in board with loading resistors, 47kOhm standard.

The XLR input sockets are electronically balanced, with 40kOhm balanced. Both Pin 2 and Pin 3 are 20kOhm referring to Pin 1.

If you have not purchased the optional MM/MC board, this input functions as an auxiliary input for normal signals.

You can use the balanced input for any balanced signal source such as a CD player or DAC. You can also use it with a pair of RCA female/XLR male adapters for unbalanced sources.

Remote control (optional)

The remote volume can always be activated regardless of input. To use the remote to select inputs and to use the mute function, you must use the left knob on the D3 to select REMOTE.

There are three remote control unit options:

1. GamuT RC1 plastic silver amp/CD-player remote unit (standard from September 2004)
2. GamuT RC2 aluminium silver amp/CD-player remote (optional)
3. Marantz RC3200 programmable remote with touch-screen (optional)

There are two ways of selecting inputs with the Marantz RC3200 remote: You can press AMP, and then use the left or right cursors to switch between the inputs. Alternatively, you can press the input button you want twice.

The Marantz RC3200 remote does not have an MM/MC button. Press the VCR button twice instead, or use the left cursor to step until you reach MM/MC. With Marantz software or directly via the RC3200 menus, you can customize the buttons to your preferred size, text and number. Please see the RC3200 user manual for further details.

To adjust the level with the remote, use VOL up and down on the left side of the remote. Press mute on the remote to mute all inputs, press again to resume play.

In case the remote does not function, switch the Gamut D3 off and then on again quickly using the rear panel mains switch. This will reset the logic. If it still does not work, then check if the RC3200 needs new batteries. For further fault-finding, please refer to the RC3200 manual.

Recording from an input source

When you want to make a recording, always de-select the remote and use the left selector knob on the GamuT D3 to choose your input signal. By following this procedure, you can avoid by mistake ruining your recording by unintentional use of the remote.

NB: Please also note that the mute function also changes the recording output level.

Level control

We have selected an expensive ALPS dual logarithmic potentiometer for this preamplifier for setting the listening level. To reduce noise, we have selected a 1kOhm version. Such a potentiometer cannot make the sound disappear completely, even when you turn it down to the lowest setting. Just stop your CD player or select MUTE with the input selector.

Gain level

The GamuT D3 has a 6dB gain stage after the level control. This approach works well with signal sources like CD, SACD, DVD, and laser disc players, most tape recorders, and tuners.

Our GamuT C100, D200, M200 and M250 power amplifiers can be set for only 0.77V input for full output power, and most stationary CD players have 2V output, so the gain level is adequate. You will have to turn the level up a little higher than on other preamplifiers.

The advantage of having to turn up the level control higher than normal is that the output gain stage noise level is reduced. So this is better for SACD and DVD-audio sources. You will notice that the noise is very low when you turn the level completely down.

If you do not hit the end stop of the volume control when playing loudly, then there is no technical reason to have more gain than you need. Too much gain after the level control degrades your signal to noise ratio.

Also, the potentiometer works better when it is turned higher up.

Outputs

The main XLR outputs have Pin 1 ground, Pin 2 plus and Pin 3 minus.

This is the IEC international standard. Some other brands have Pin 2 and 3 reversed.

They will work, but the absolute phase will be reversed. You can solve this by reversing the wires in the male plug of your balanced interconnects.

Next to the XLR outputs are 2 pairs of RCA/phono sockets. The first pair marked **Out** is the output to a power amplifier in case you want to use RCA connectors. It has its own buffer amplifier with 6dB gain, so that you do not disturb the Common Mode Rejection Ratio (CMRR) of the balanced outputs. You can also use this for an active subwoofer.

The second pair of RCA/phono sockets marked **Tape Out** serves as recording output. It has a fixed level and no gain.

It also has its own buffer amplifier, so that the recorder load does not disturb the main signal path.

The BYPASS functions

The GamuT D3 has two bypass functions. These bypass functions are as default switched off. If you want to use one or both of them, each has a designated small chrome breaker switch placed on the rear panel, one on each side of the CD XLR inputs. This enables you to enjoy the shortest possible signal path for e.g. your CD source without having to unplug the preamplifier, while you still have the preamplifier ready for your tuner and other sources when using the other input selector positions.

The first bypass is for connecting an XLR-connected source like a high-quality CD player or DAC with built-in level control directly to your power amplifier. The switch on the rear panel marked **Bypass enable** for the XLR input must be activated (pressed down) before the function is available on the input selector's BYPASS position. After activating the breaker switch, turn the input selector clockwise until you reach the position where the WARNING! LED starts flashing. This is to warn you that if you turn one more click clockwise, the signal from the XLR input sockets will be connected directly to the output sockets, and therefore directly to your power amplifier, which immediately will play at full volume level if it is turned on.

The second bypass is for any RCA/phono source connected to the HTH input, e.g. if you wish to use your power amplifier to drive the Main L and R output signals from a surround processor. Although HTH stands for Home Theater, you can use this input for any normal line source. Activate the switch on the rear panel marked **HTH direct enable** by pressing it downwards. The function is now available on the input selector's HTH position.

You must reduce the output level on the source unit when using any of the BYPASS functions or the resulting sound level will be extremely loud and potentially harmful to your hearing sense and your loudspeakers. It may also frighten people and animals.

The GamuT D3 preamplifier's active parts are now bypassed, and the signal will now only pass through a high-quality relay, the connectors, and circuit board tracks.

However, the built-in level control in some CD players and DACs does not sound good, especially at low levels. This is often due to a low-quality potentiometer or to calculation errors made when rounding off in the digital level control. 24-bit calculations are not good enough for a 16-bit signal; you need 32-bit calculations. Also reducing the level by 20dB will bring many DACs in trouble, as you are reducing the signal to noise ratio by the same 20dB, and increasing the distortion level. You will in these cases get the best sound quality by using the level control of the GamuT D3 and setting the CD player or DAC output level to maximum.

Cleaning the cabinet

The lid and the front panel are made of aluminium, which is non-magnetic. The chassis is made of non-magnetic stainless steel. The front panel letters are engraved down into a panel. Do take care not to scratch the soft polished surface.

Clean only with a little pure alcohol on a soft cloth or tissue paper.

Do not use brass polish or other abrasives. You will ruin the protective coating finish.

A lifetime of enjoyment

We have selected long-life parts for the GamuT D3, so you can enjoy your music for a long time. Please keep the specially made packing in case you need to move.

The two knobs are machined and finely sanded aluminium with shafts of 6mm brass. The shafts are running in self-lubricating bearings.

The relays are high-quality telecom type NEC EA 2 relays.

The Sound

The GamuT D3 is designed to match our power amplifiers, and it uses the same low noise power supply technology. It has a distortion so low that it is difficult to measure. Typically, we measure 2nd and 3rd harmonic at 0.0002%, which is -114dB below the signal level.

The technology platform used is a super low-noise operation amplifier and dual FET hybrid circuit. Using our many years of experience with professional audio equipment and grounding, we have designed a uniquely fine sound quality at a very attractive price.

It is actually better sounding than our older passive control unit. This is partly due to the high output impedance of a passive level control.

A 20 kOhm passive level control normally has a maximum output impedance of 5 kOhm. The output impedance of the GamuT D3 is 75 Ohm. It can therefore better control the interconnect cable.

A few specifications

Power consumption is 14W

Distortion is below normal test equipment limits. Typically, 2nd harmonic level is -114 dB

Noise is 100dBA below 2V

Input impedance is 20 kOhm unbalanced, 40kOhm balanced

Output impedance is 75 Ohm unbalanced, 150 Ohm balanced

The Neutrik gold-plated XLR sockets use Pin 2 as +, Pin 3 as -, and Pin 1 as GND

Service

The simplicity of the GamuT D3 means that very few parts can break down. Should you ever require service, you can either contact your dealer or distributor, who can solve any problems locally, or you can contact us in Denmark.

Please write your GamuT dealer's telephone number here:

Finally, we wish you many pleasurable years of enjoyment.

With our sincerest and best wishes,

GamuT International A/S
www.gamutaudio.com

GamuT D3 OW2004/7