

G Series CD Player Installation Guide

Important safety instructions

- Read the instructions.
- Keep these instructions.
- Follow all instructions.
- Do not use this apparatus near water.
- Clean only with a dry cloth.
- Install only in accordance with the manufacturer's instructions.
- Refer all servicing to approved service personnel.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE

Safety warnings

- Do not expose the product to dripping or splashing.
- Do not place any object filled with liquid, such as a vase, on the product.
- Do not place naked flame sources, such as lighted candles, on the product.

To avoid overheating

Do not position the product:

- In direct sunlight.
- Near heat sources, such as a radiator.
- Directly on top of heat producing equipment, such as a power amplifier.

The product normally runs warm to the touch.

To avoid interference

Do not position the product:

- Near strong magnetic radiation, such as near a power amplifier.
- Near to a television, or where connecting cables may be subject to or cause interference.

Radio interference

FCC Warning: This equipment generates and can radiate radio frequency energy and if not installed and used correctly in accordance with our instructions may cause interference to radio communications or radio and television reception. It has been type-tested and complies with the limits set out in Subpart J, Part 15 of FCC rules for a Class B computing device. These limits are intended to provide reasonable protection against such interference in home installations.

EEC: This product has been designed and type-tested to comply with the limits set out in EN55013 and EN55020.



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Part no: GCD/1

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<http://www.interface.co.uk/>

Introduction

This guide provides full information about unpacking the CD player and connecting it to the other equipment in the system.

Once you have connected the product, refer to the *G Series System Guide* for information about operating it.

CD player models

This Installation Guide applies to the G07 24-bit CD Player and G08 24-bit Upsampling CD Player. The main differences between each of these products are given in the following table:

Product	Analogue outputs	Digital out	Formats supported	Upsampling
G07	Unbalanced	Optical, digital	Audio CD	No
G08	Unbalanced and balanced	Optical, digital	Audio CD and Data MP3	Yes

Both models of the G Series CD player provide digital, optical, and phono analogue outputs.

G07 24-bit CD Player

The G07 incorporates advanced design – both digital and analogue. Multi-layer PCBs, four separate power supplies, the latest surface-mount technology, carefully selected audiophile-quality components, and of course Meridian's signature quality design and manufacturing.

The latest laser assembly is used in the G07, and is optimised for CD, CD-R, and CD-RW playback. In addition, the player will replay most hybrid discs, as well as DTS CDs for external decoding via the digital outputs.

The G07 maximises audio quality by reducing jitter to extremely low levels, for a smooth, open, well-defined sound and pinpoint stereo imaging. This is achieved by re-clocking the digital outputs and using a superb direct-coupled audiophile-quality output amplifier.

The G07 utilises 192kHz, 24-bit capable digital to analogue converters for the very highest analogue quality, while the internal circuitry includes a superb analogue design that complements the high-spec DACs and delivers 2V RMS with less than -90dB noise and distortion.

The result is dramatic stereo imaging, and a clear, open, and authoritative sound.

Both S/PDIF coaxial and Toslink optical digital outputs are provided, and all audio cable interfaces are via gold-plated connectors.

An RS232 serial port is provided for remote control operation. This port can be used to update the G07's system software, thanks to Flash ROM storage.

G08 24-bit Upsampling CD Player

The G08 is able to play virtually any compact disc, from conventional pressings to CD-R, CD-RW, and discs of MP3 files (64-256kbps). In addition, the player will replay most hybrid discs, as well as DTS CDs for external decoding via the digital outputs.

At the heart of the G08 are fully integrated electronics and a computer-style CD-ROM drive. Although it normally runs at standard CD speed, the drive is capable of spinning the disc much faster, allowing multiple high-speed re-reads to ensure accurate recovery of data from even the most difficult disc. This feature alone provides 10 times the error correction of a conventional CD player.

Once the digital data stream has been recovered from the disc, powerful on-board Digital Signal Processing (DSP) with the capability of an impressive 150 MIPS (million instructions per second) upsamples the digital information from the 44.1kHz, 16-bit signal of conventional CD to 24 bits, and to a sample rate of 176.4kHz for digital to analogue conversion to drive the analogue outputs, and 88.2kHz for the digital outputs.

Upsampling enables filtering to take place far beyond the range of human hearing, as well as offering other audible benefits right across the audio band, for ultimate transparency from a CD source.

The G08 employs a triple buffering system to minimise jitter. This maximises high-frequency transparency and stereo image precision and stability.

This, and the digital electronics as a whole, is driven by a new design of high-stability clocking system which further reduces jitter and ensures that the highest level of detail is recovered from a disc. All digital data is accurately re-clocked. Multiple power supplies ensure that digital and analogue circuitry are kept apart and can provide the required power when called upon to do so.

The G08 player includes both balanced (on XLR connectors) and unbalanced (on phono connectors) two-channel analogue outputs. S/PDIF (Sony/Philips Digital Interface, IEC 60958) digital outputs are also provided and both optical (TOSlink/EIAJ) and coax digital formats are included. In addition, the digital outputs support surround-encoded bitstreams such as those derived from DTS-encoded CDs, which can be replayed via an external decoder.

Specifications

	G07	G08
THD	Less than 0.003%.	Less than 0.0025%.
Noise	Better than -99dB A weighted.	Better than -100dB A weighted.
Mechanism	Triple-beam laser.	ATAPI ROM Drive.
DSP		Upsampling using 150MIPS Motorola DSP56367.
Convertors	192kHz capable, 24-bit, dual differential, Delta-Sigma, superb Class A analogue design.	
Outputs	Digital: S/PDIF, coax, and optical (TOSlink). 44.1kHz Analogue: 2.3V RMS, 44.1kHz.	Digital: S/PDIF, coax, and optical (TOSlink). 88.2kHz or 44.1kHz. Analogue: 2.3V RMS, 176.4 kHz. Balanced: 4.6V RMS, 176.4kHz.
Comms	2 5-pin 240° DIN sockets, BNC socket, RS232 interface.	
Formats	CD Audio (CD-DA), CD-R, CD-RW.	CD Audio (CD-DA), CD-R, CD-RW, MP3.
Power	Transformer, fixed for local voltages, 50/60Hz, 25VA.	Universal supply, 100-240Vac, 50/60Hz, 25VA.
Dimensions	440mm x 90mm x 350mm (17.32" x 3.54" x 13.78") WHD.	
Weight	9kg (20lb) approx.	9kg (20lb) approx.
Controls	Front-panel soft keys include control of Play, Stop, Pause, Previous, Next, etc. Power button, Open/Close tray button. Full remote control of all features via MSR+.	
Display	Multi-character Vacuum Fluorescent Display. Note: Index points are not supported.	

Installing the CD player

This chapter explains how to install the CD player. It describes what you should find when you unpack the product, and how you should connect it to the other equipment in the system. You should not make any connections to the product or to any other component in the system while the AC power supply is connected and switched on.

Unpacking

The G07 24-bit CD Player and G08 24-bit Upsampling CD Player are supplied with the following accessories:

- MSR+ remote control with batteries, manual, and spare key caps.
- Meridian Comms lead.
- Power cord.
- This manual.
- *Meridian G Series System Guide*.

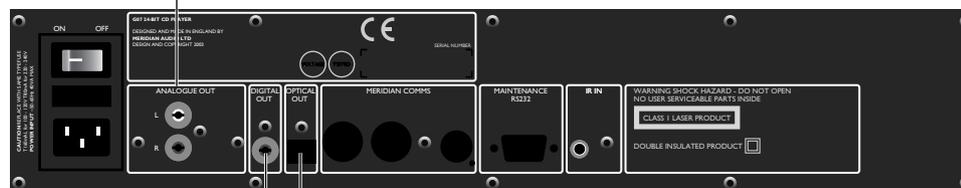
If any of these items are missing please contact your dealer.

Note: You should retain the packaging in case you need to transport the unit.

Audio connections

G07 24-bit CD Player

Analogue outputs



Digital output

Optical output

Use this output

ANALOGUE OUT

DIGITAL OUT

OPTICAL OUT

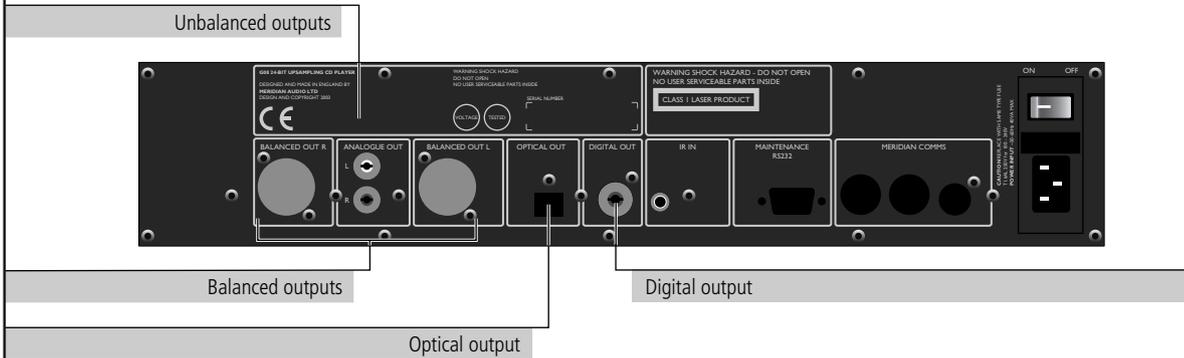
To connect to this

The analogue inputs of a preamplifier, such as the G01 Control Unit, or an integrated amplifier, such as the G51 Receiver, using analogue phono leads.

The digital input of a surround processor, such as the G68 Digital Sound Controller, or DSP loudspeakers, using a 75Ω digital cable.

The optical input of a digital preamplifier or digital recorder, using a Toslink optical cable.

G08 24-bit Upsampling CD Player

**Use this output**

BALANCED OUT

ANALOGUE OUT

DIGITAL OUT

OPTICAL OUT

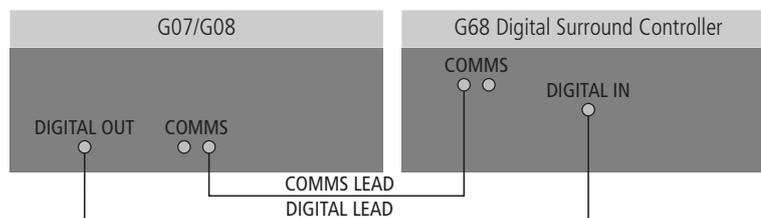
To connect to this

The balanced analogue inputs of a preamplifier, such as the G02 Balanced Control Unit, using XLR leads.

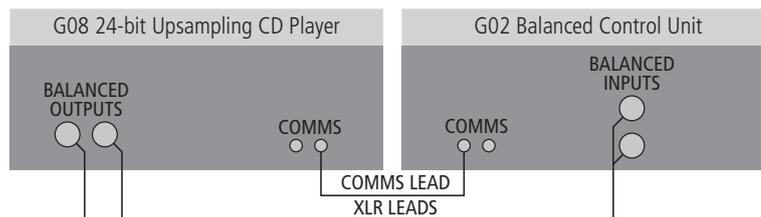
The unbalanced analogue inputs of a preamplifier, such as the G01 Control Unit, or an integrated amplifier, such as the G51 Receiver, using analogue phono leads.

The digital input of a surround processor, such as the G68 Digital Surround Controller, or DSP loudspeakers, using a 75Ω digital cable.

The optical input of a digital preamplifier or digital recorder, using a Toslink optical cable.

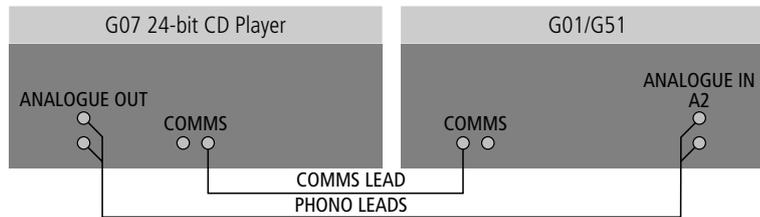
To connect to a digital surround controller (eg G68)

- Connect the DIGITAL output from the G07 or G08 to a suitable DIGITAL input on the digital surround controller, using a digital lead.
- If the digital surround controller is a Meridian product connect together the COMMS sockets using the Comms lead provided.

To connect the G08 to a preamplifier with balanced inputs (eg G02 Balanced Control Unit)

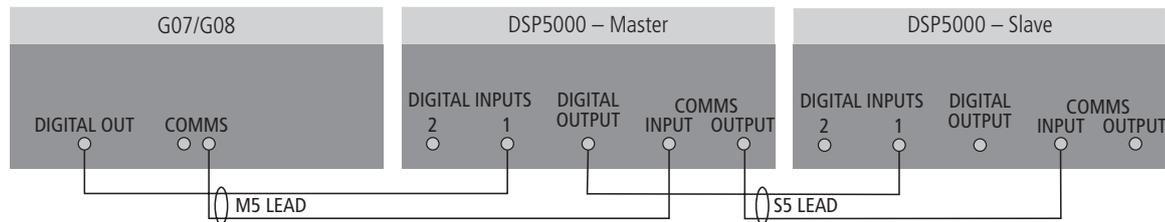
- Connect the BALANCED outputs from the G08 to the balanced inputs on the preamplifier, using XLR leads.
- If the preamplifier is a Meridian product connect together the COMMS sockets using the Comms lead provided.

To connect to a preamplifier with unbalanced inputs (eg G01/G51)



- Connect the ANALOGUE OUT outputs from the G07 or G08 to the unbalanced inputs on the preamplifier, using phono leads.
- If the preamplifier is a Meridian product connect together the COMMS sockets using the Comms lead provided.

To connect to Meridian DSP loudspeakers (eg DSP5000s)

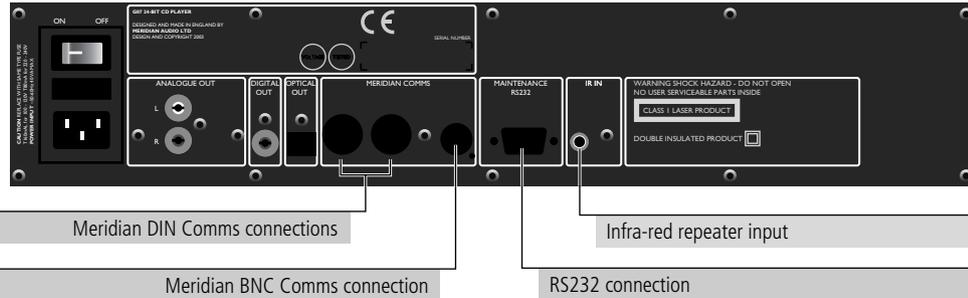


The G07 and G08 can be connected directly to Meridian DSP loudspeakers to create a complete compact stereo system, with volume and other preamplifier controls provided by the loudspeakers via the MSR+.

- Connect the DIGITAL output and a COMMS socket from the master DSP loudspeaker to DIGITAL INPUT 1 and the COMMS input on the other (slave) DSP loudspeaker, using an S5 lead.
- Configure the loudspeakers as described in the *Meridian DSP Loudspeaker User Guide*.
- To display the system source and volume on the CD player, choose Type 2; see *Resetting the product*, page 13.

- Connect the DIGITAL output and a COMMS socket from the CD player to DIGITAL INPUT 1 and the COMMS input on the DSP loudspeaker chosen as the master, using an M5 lead.

Communications connections

**Use this connection**

DIN COMMS

BNC COMMS

RS232 connection

IR IN

To connect to this

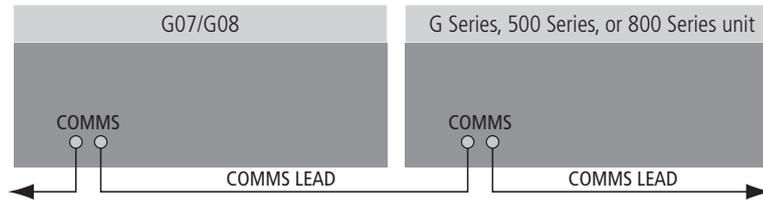
Other Meridian G Series, 500 Series, or 800 Series equipment, or Meridian DSP loudspeakers.

Future Meridian components.

A computer, for configuring the CD player.

A G12 IR Receiver, or approved alternative infra-red repeater. Contact your dealer for details.

To connect to other Meridian G Series, 500 Series, or 800 Series equipment



In a system of Meridian products, one of the products acts as the controller for the system, receiving infra-red commands from the MSR+, and then, if appropriate, relaying them to the other products via the Comms link.

The following procedure should be used to set up the Comms correctly between several products:

- Connect one of the DIN COMMS sockets on the back panel of the CD player to one of the COMMS sockets on another G Series, 500 Series, or 800 Series unit, using the Comms leads provided with the products.

The sequence in which you connect the units is not important.

- Switch all the units to standby.
- Press **Clear** (MSR+).

Each unit will display:

Auto

One unit will then be designated as the controller, and display:

Con.

All the other units will be configured as non-controllers, and display:

Not Con.

If for any reason the automatic setup does not work, make sure you are operating the MSR+ from a position where all the units can receive the infra-red, and try again.

If this fails:

- Restore the default operation by selecting one of the standard types; see *Resetting the product*, page 13.

Note: Do not, under any circumstances, connect any equipment other than Meridian G Series, 500 Series, or 800 Series to any socket marked COMMS on the back of the product.

Resetting the CD player

This chapter explains how to reset the CD player using the front-panel controls.

Resetting the product

The CD player provides several alternative standard settings, called Types, which configure all aspects of the product into the most commonly needed configurations.

Choosing one of the Types overrides any other configuration you may have performed, and so can be used to reset the configuration of the unit.

To reset the configuration

- If necessary press **On/Off** to put the CD player into standby.
- Press **More**.

The display shows:

```
Version                               Reset
```

- Press **Reset**.

The display shows:

```
Reset Player
Exit                               Yes
```

- Press **Yes** to reset the CD player settings.

The display shows the current Type:

```
Volume display off
Type 1
Exit                               ▼ ▲
```

- Press **▲** or **▼** to step through the available Types.

Resetting the CD player

A description of each Type is shown on the top line of the display. As you select each Type the CD player is reset to that Type.

When you have selected the Type you want:

- Press **Exit** or **On/Off** to return to standby.

Types

The following table lists the available Types:

Type	Description
Type 1	Volume display off.
Type 2	Volume display on.
Type 3 (G08 only)	Volume display off, digital output limited to 44.1kHz.

Although the CD players do not include a volume control, they can optionally display the system source and volume, for example when used with a pair of DSP420 In-Wall Loudspeakers.

Troubleshooting

We expect you to achieve superb results with the CD player. If, however, you encounter any problems, either when installing it, or during operation, please check the following pages for suggested solutions.

If these suggestions fail to cure the problem, please contact your Meridian dealer for further assistance.

General operating problems

The front panel shows 'Error' or 'No Disc' when attempting to play a disc

- Check that the disc is positioned correctly in the tray.
- Try playing another disc. If this disc works, check the problematic disc for signs of dirt or damage.

The CD player will not play a particular disc

- The disc may be scratched or faulty. Examine it for damage, and try playing it on another product.

Although we have made every effort to ensure complete compatibility with all supported disc types, it is impossible to check the correct operation of every function of the G Series CD player with every available disc; furthermore, some discs currently on sale do not conform to the agreed format specifications. We cannot therefore accept any responsibility for discs that will not play correctly, even if they play correctly on other brands of player.

There are several Web sites that give details of discs with known playback problems. Please check these to see if the disc is listed.

No lights are displayed when switching on

- Check that the AC power supply is connected correctly.
- Check that the **ON OFF** switch on the back panel is in the **ON** position.

There is interference on the radio and/or television when the CD player is switched on

Before following the steps below, ensure all units are switched off.

If this equipment suffers interference from, or causes interference to, radio or television reception, then the following measures should be tried:

- Reorient the receiving aerial (or antenna) or route the antenna cable of the receiver as far as possible from the CD player and its cabling.
- Ensure that the receiver uses well-screened antenna cable.
- Relocate the receiver with respect to the CD player.
- Connect the receiver and this product to different AC outlets.

Audio problems

There is no sound when playing a disc

- Check that the preamplifier is switched on, and the volume is at an appropriate level.
- Check that the CD player is connected correctly to the other components of your system; see *Installing the CD player*, page 5.

- Check that the correct source has been selected on your preamplifier.
- Try playing another disc. If this disc works, check the problem disc for signs of dirt or damage.

Creating MP3 discs (G08 only)

MP3 discs can be created from a computer using appropriate MP3 encoding software and a CD-ROM writer.

Generate the MP3 files with a data rate of at least 128Kbits per second. Ensure all filenames have a .mp3 extension. Group the tracks into folders to create separate albums on the disc. Do not create folders within the folders.

Tracks and albums are played in the order in which they are recorded onto the CD-ROM. Usually this will be in alphabetical order of filename. To determine the playing order prefix the track and album names with 01, 02, 03 etc, and sort the list into alphabetical order before making the CD-ROM.

If artist and album names are stored in each file's ID3 tags these can be displayed on the CD player's front-panel display.

Maintenance

Cleaning

To clean the case, display panel, and keypad

- Disconnect the power cord before cleaning the unit.

The exterior surfaces of Meridian G Series products are made from solid anodised aluminium, powder coated steel, thermoplastic rubber, and glass.

They are designed to be easily wiped clean with a dry, lint free cloth. Greasy marks should be removed by light rubbing with a slightly damp cloth and a trace of proprietary glass cleaner. Do not use any other solvent or abrasive based cleaners. Dust can be removed from the disc drive tray with a small dry brush when the drawer is open.

Ensure that no liquid enters the casework and that the product is completely dry before re-connection.

To clean the audio connections

The audio sockets on the back of the product are gold plated and do not need to be cleaned if gold-plated plugs are used. Otherwise, it is recommended that you unplug and reconnect the plugs at least once a year. A proprietary contact cleaner can be used to some advantage.

To change the mains fuse

- Remove the mains connector, and pull out the drawer above the power input to access the fuse.

Before replacing a blown fuse, it is best to ascertain the cause of the failure.

The fuse drawer includes a spare fuse. This should be replaced by a fuse of the same rating.

Service and guarantee

Service

The Meridian G Series of hi-fi components has been carefully designed to give years of untroubled service. There are no user-serviceable parts inside the case, nor do the units require any form of maintenance.

In the unlikely event that your product fails to function correctly, it should be returned, in its original packaging, to your Meridian dealer.

In case of difficulty within the UK or USA please contact the appropriate sales and service address shown on page iv.

In case of difficulty outside the UK or USA, contact the importing agent for the territory. A list of Meridian agents outside the UK is available from Meridian Audio.

No responsibility can be accepted for the product whilst in transit to the factory or an agent, and customers are therefore advised to insure the unit. When seeking service under guarantee, proof of the date of purchase will be required.

Guarantee

The product is guaranteed against defects in material and workmanship for two years from the date of purchase.

The guarantee is void if the product has been subject to misuse, accident, or negligence, or has been tampered with or modified in any way without the written authorisation of Meridian Audio Limited. **Note:** Connecting anything other than the correct network lead to the Comms sockets may cause damage to the product which will not be covered by this guarantee. Attempted servicing by unauthorised people may also invalidate this guarantee. Labour and carriage charges are not covered unless by local agreement.

Outside the UK, local warranty liability is restricted to equipment purchased within the territory. Our agents outside the UK are only under contractual obligation to service under-guarantee equipment sold through them. They are entitled to make a non-refundable charge for any service carried out on other equipment.

This guarantee does not limit your statutory rights within the country of purchase.

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