

**MERIDIAN 203 USER MANUAL**

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## 1 Introduction

The *Meridian* 203 Digital Converter is part of the 200-Series of advanced high fidelity equipment. Used with other components in the range, and a conventional Compact Disc Player, DAT recorder or compatible source, it offers the music lover all the benefits of the latest *Bitstream* Conversion technology.

The 203 takes a signal in the IEC 958 digital audio format from either a cable or optical fibre, locks to that signal, and produces an analogue output suitable for connecting to conventional audio amplifiers.

The 203 Digital Converter uses proprietary circuitry to implement a unique differential mode of two *Bitstream* converters for each channel. The design has been carefully optimised to provide the highest quality of sound available from any digital source.

In purchasing a *Meridian* 203 Digital Converter, you have acquired an advanced piece of equipment which will continue to bring you listening pleasure for many years. This manual will enable you to get the most from it.

## 2 About this manual

This manual deals with the installation of the 203 Digital Converter. Once it is installed, there is virtually nothing more to do. However, we do ask you to read this manual carefully, in order to get the best out of your new equipment.

In any manual of this nature, some technical terms must be used. We will explain these when we first introduce them.

### 2.1 Conventions used in the manual

A number in the range 201-220 refers to a component in the *Meridian* 200-Series range of audio equipment.

There are three lights on the front panel of the 203, named 'Power', 'Lock' and 'EQ'. Whenever we refer to these lights, they will appear in *italic* type. When the name is not italicised, for example 'switch on the power', it does not refer to one of the lights.

## 3 About the 200-Series

The *Meridian* 200-Series of high fidelity equipment is probably the most sophisticated family of hi-fi products currently available. It has been developed to operate at a variety of levels, from a simple single room installation to a whole-house music-management system.

The 203 Digital Converter is a very advanced *Bitstream* Converter. Its circuitry has been carefully optimised to provide the highest quality of sound available from Compact Discs, using the latest technology to ensure that the reproduced sound is as faithful to the original as possible.

Despite its high performance, each piece of equipment in the 200-Series has been designed for ease of use. Microprocessor control has been applied throughout the range to simplify operation. We have also paid great attention to the appearance of the units and have taken much care in the selection of the materials used in construction, to ensure that your *Meridian* 200-Series equipment will look as good in years to come as it does now.

## 4 Unpacking the 203

On opening the carton, you should have found the following parts:

- *Meridian* 203 Digital Converter
- Power cord
- This manual

If any of these items are missing, please contact your dealer immediately. We suggest that you retain the packing as it is designed to offer the unit maximum protection whilst in transit.

Although all 200-Series components have been designed to be robust, they should obviously be well protected when they are being transported.

## 5 Accessories

The following accessories are available from your dealer:

- digital interconnect 75ohm, 0.7m
- optical interconnect 0.7m
- power cord (Europe)
- power cord (USA & Canada)

In case of difficulty, they can also be ordered directly from the factory, the address of which can be found on the front of this manual.

## 6 Installing the 203

### 6.1 General precautions

Before carrying out any installation, you should check that the 203 is marked with the correct voltage for your local AC supply. If this is not the case, do not proceed with these instructions, but contact your dealer instead.

As a general rule, you should not make any connections to the converter, or to any other component in your system, whilst the AC power supply is connected and switched on.

### 6.2 Connections

You will need to connect the audio output of the 203 to your amplifier with a twin-screened audio cable or a pair of single-screened audio cables. These can have a considerable effect on the quality of the sound, and we advise you to seek your dealer's advice on the best type for your system.

The connections you make will depend on other components in your system and the digital source you wish to use. We will assume that you are going to use a Compact Disc Player, but if this is not the case, then substitute the appropriate input on your amplifier.

### 6.3 If you have a 201 Preamplifier

Connect the sockets marked 'Output Left/Right' on the rear of the 203 to the CD input on the rear of the 201.

### 6.4 If you are using D600 Loudspeakers

Connect the sockets marked 'Output Left/Right' on the 203 to either an analogue input on the D600s or the CD input on the 201. Follow the instructions in the D600 manual. The D600s are fully-programmable and you should consult your manual before deciding which input to use. If you have any doubts, your dealer will be able to help you.

### 6.5 No other Meridian equipment

Connect the sockets marked 'Output Left/Right' on the rear of the 203 to an appropriate input on your amplifier. You should consult the manufacturer's manual to determine which input to use, but generally it will be labelled 'CD' or 'Aux'.

### 6.6 Digital connection

In all cases, a suitable digital connection must be made between your Compact Disc Player, DAT recorder or other source, and the 203 *Bitstream* Converter.

You can use an electrical or an optical interconnect. Wherever possible, we recommend that you use the optical method as this neither generates any interference, nor is it susceptible to any.

When you connect a signal to the optical input of the 203 it is detected. The 203 automatically uses the optical signal when it is available.

## 7 Siting

The 203 should not be placed on top of a power amplifier, but it can be stacked on either the 201 Preamplifier, the 204 tuner or a *Meridian* Compact Disc Player.

You should avoid sites where:

- it would be subjected to direct sunlight
- it is near a heat source, for example a central-heating radiator
- it could be subjected to strong magnetic radiation, for example very close to a television
- connecting cables may be subject to interference.

Try to keep all power and digital cables away from audio, antenna and loudspeaker cables. Some time spent laying out the cables carefully will repay you with the best possible performance later.

## 8 Setting up the 203

### 8.1 Checking

Before turning on the power, check once again that you have made all the connections correctly and that you have not disturbed any existing connections in the process.

### 8.2 If all is well

- Turn on the power switch at the rear of the unit. The *Power* light on the front panel will illuminate.

### 8.3 If there is a problem

Check the integrity of your power connections, including any fuses in your supply. If the light is still not illuminated and the rest of your system is functioning, contact your dealer for help.

### 8.4 Standby

The 203 is designed to be left connected to AC power at all times.

This *standby* state ensures that the components operate at maximum efficiency from the moment you start listening. It is perfectly safe and consumes a negligible amount of power. However, when you are not going to use your system for an extended period, for example when you are going on holiday, we would advise you to disconnect it from the AC power supply.

## 9 Starting up and using the 203

The 203 outboard converter operates whenever it receives a recognisable digital signal. It will automatically lock to the input signal (providing it is within the range 32kHz–48kHz).

When it locks, the *Lock* light on the front panel will illuminate and the 203 will produce an audio output.

### 9.1 No Lock light

A few Compact Disc Players, which do not conform to current practice, apply the digital signal to the output only when the disc starts to play. Although the scan and lock process in the 203 is extremely fast, in this situation you may miss the first note or two of your music. If this occurs, it does not indicate a fault in the 203 and it can be easily overcome by starting the disc in Pause mode. On most players, this is achieved by pressing Pause and Play simultaneously, but you should consult your player's manual for detailed instructions. At this point, you will see the *Lock* light illuminate, and you can start to play the disc, usually by pressing Pause a second time.

## 9.2 EQ light

The Compact Disc specification allows for discs to be recorded with preemphasis, which is corrected during playback. This facility allows the recording engineers to further improve the noise levels on the disc, rather like the *Dolby* system used on cassettes.

The EQ light will illuminate whenever a disc has been recorded with preemphasis. It will extinguish when a disc or track has no equalisation, when the player is paused, muted or moving between tracks.

## 10 Problems

The *Meridian* 200-Series hi-fi components are extremely reliable under normal conditions. However, because they are controlled by microprocessors, they can occasionally be susceptible to AC-borne disturbance and static discharges. This is true for any similar appliance, for example video recorders or microwave ovens. If you encounter problems with your system, switch off the AC-power for a short while. This action will cure most problems. If they persist, please consult your dealer.

### 10.1 Ticking sound in pause

On some Compact Disc players, you may hear a slight ticking sound when the disc is paused. This is perfectly normal and does not indicate a fault in your 203.

## 11 Cleaning

The main body of the 203 is epoxy-enamelled aluminium. To clean the case, use a cloth barely moistened with a solution of mild detergent and water. Disconnect the power cord before cleaning the unit. Ensure that no water is allowed to get inside the case and do not re-connect the power until you are certain that the 203 is completely dry.

The display panel is glass, the frame is plastic. Use a barely damp chamois leather on these areas.

Do not use abrasive cleaners on any part of the Digital Converter.

The audio sockets on the rear of the 203 are gold-plated and need no cleaning if gold-plated phono plugs are used. Otherwise, we recommend that you remove and replace the plugs at least once a year. A proprietary contact cleaner can be used to some advantage.

## 12 Help

Even the most experienced user can run into 'finger trouble'. This section is designed to help you when things do not appear to be working normally.

If no sound can be heard from your loudspeakers, the most likely causes are:

- No power is reaching the 203 or the entire system
- The audio cable between the 203 and your preamplifier has become disconnected
- The preamplifier is not turned on
- The preamplifier is not set to the correct input or is in tape-monitoring mode
- The volume control is set to its minimum or is in 'mute' condition

## 13 Maintenance & Service

The *Meridian* 200-Series of hi-fi components have 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 203 Digital Converter fails to function correctly it should be returned, in its original packing, to your *Meridian* dealer.

In case of difficulty, please write to:

- In the UK, Boothroyd Stuart Ltd.  
13 Clifton Road, Huntingdon,  
Cambridgeshire, PE18 7EJ.
- In the USA, *Meridian* America Inc.  
14120-K Sullyfield Circle, Chantilly, VA 22021  
Tel (703) 818 3028, Fax (703) 830 7825
- Outside the UK, contact the importing agent for the territory. A list of *Meridian* agents abroad is available from the above addresses.

No responsibility can be accepted for the 203 whilst in transit to the factory or an agent and customers are, therefore, advised to insure the unit.

## 14 Guarantee

The 203 Outboard *Bitstream* Converter is guaranteed against defects in material and workmanship for 12 months from the date of purchase.

The guarantee is void if it has been subjected to misuse, accident or negligence, or has been in any way modified without the written authorisation of Boothroyd Stuart Ltd. Attempted servicing by unauthorised people may also invalidate this guarantee.

Labour and carriage charges are not covered unless by local agreement.

When seeking service under guarantee, proof of the date of purchase will be required.

Outside the UK, local warranty liability is restricted to equipment purchased within the territory. Our agents abroad 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 United Kingdom.

## 15 Radio interference

**NOTE** the 203 is a digital audio device which has been designed to very high standards of Electromagnetic compatibility.

**FCC WARNING:** This equipment generates, uses 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.

If this equipment does cause or suffer from interference to/from radio or television reception, then the following measures should be tried:

- Reorient the receiving antenna or route the antenna cable of the receiver as far as possible from the 203 and its cabling.
- Ensure that the receiver uses well-screened antenna cable.
- Relocate the receiver with respect to the 203.
- Connect the receiver and the 203 to different AC outlets.
- If the problem persists, contact your dealer.

**EEC** This product has been designed to comply with EN55013 and EN55020.

**REMEMBER** to switch off all units before changing any connections.

## 16 A brief history of 203

*Meridian* were the first company in the field to work successfully on an enthusiast's CD player, and achieved world recognition for the classic MCD player. A professional version of the MCD, the PRO-MCD followed and is still widely used in recording studios today. The 207 and 206 followed, and were considered to be among the finest CD players available in the world at any price.

The 208 was the next step in the continuing evolution, and incorporated all of *Meridian's* experience coupled with the latest technological innovations including differential *Bitstream* Conversion and third-generation decoding and servo techniques. These changes, pioneered by *Meridian* further improved sound quality and offered much faster operation.

The 203 Digital Converter is a logical development of the pioneering work that *Meridian* have done. Now, users of other manufacturer's Compact Disc players and digital equipment can uplift the performance of their audio system to *Meridian* standards. The 203 is a high quality outboard *Bitstream* Converter, which will provide the highest quality from any digital source.

## 17 Specification

Frequency response	20Hz — 20KHz ± 0.2dB
Distortion	<0.004%
Noise	<94dB
Conversion	<i>Bitstream</i> PDM, differential time-aligned mode. 256 times over-sampling, 2 bits. Passive filtering.
Precision	16 bits
Inputs	32kHz—48kHz
Cable input	IEC958, 75ohm
Optical input	EIAJ
Output	Fixed 2V, 12 ohms
Display	Power, Lock and EQ indicators
Finish	Black textured enamel and glass
Dimensions	168 mm x 100 mm x 320 mm (6.3" x 3.9" x 12.6")
Weight	2kg (4 lbs)

