

1 Introduction

This manual is provided to assist the user in the installation and operation of the 222 in a standard Meridian Control Box.

1.1 How to use this manual

1.1.1 Layout of manual

This manual is divided into two main sections. The first section contains the introduction and the second section contains the installation and operation instructions.

1.1.2 Symbols

The following symbols are used throughout the manual.

1.1.3 Scope of this manual

This manual is intended for users who are responsible for the installation and operation of the 222 in a standard Meridian Control Box. It is not intended for users who are responsible for the maintenance of the 222.

It is important that the user reads this manual carefully before attempting to install or operate the 222. The user should also read the user manual for the 222, which is included in the 222 package.

NOTE: This is not a safety manual. It is intended to provide information on the installation and operation of the 222. It is not intended to provide information on the safety of the 222. For safety information, see the user manual for the 222.

The following symbols are used throughout the manual.

1.1.4 Symbols

The following symbols are used throughout the manual.

NOTE: The 222 is a safety device. It is intended to provide information on the installation and operation of the 222. It is not intended to provide information on the safety of the 222. For safety information, see the user manual for the 222.

1.1.5 Symbols used in this manual

The following symbols are used throughout the manual. A full list of symbols is provided in the user manual for the 222.

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222 PROGRAMMING MANUAL

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The information contained in this document is provided for the express purpose of setting up an installation containing Meridian 222™ Control Box.

Any other use is strictly forbidden.

1 Introduction

This manual is provided to explain the process of setting up a 222 in a *Meridian* Multiroom installation.

2 How to use this manual

2.1 Layout of manual

This manual is laid out in numbered sections, the main topics covered are:

- Introduction
- Programming, section 4.

2.2 Scope of this manual

This manual is intended for owners or installers. It provides information required to programme the 222 via an input device such as *Meridian* 213 or 221.

It is assumed that the 222 has been installed and cabled to your requirements. It is not intended that the user of this product should feel it necessary to be able to programme it. Programming is a one-time event that is controlled by the details of your installation.

NOTE This is not the only information available about the 222. The 222 is supplied with a user manual which describes the basic concepts of Multiroom and how to operate the 222. Technical information is available to retailers and installers in the following *Meridian* publications:

- *Meridian* Multiroom Technical Reference Manual
- *Meridian* 222 Service Manual
- *Meridian* 221 Service Manual

NOTE This Manual does not attempt to cover any issues of installation, nor does it cover issues of local electrical regulations or safety codes. You should satisfy yourself of the competence of the installer.

2.3 Conventions used in this manual

The following conventions are used in this manual. A **Bold** word refers to a user-specific part of the 222 or another *Meridian* product; e.g.

- **Sensor**. This refers to the infrared sensor in the glass display window.
- **Press CD**. This refers to a key on the front panel of a 221 or 209 handset marked 'CD'.

Text between square brackets is used to illustrate a display or cue in the front display window of a 221 or 213 that is connected to the 222. e.g.

- [1. cd. 27] is the display for System 1 selected, CD source and volume number 27.

Comms refers to the 200-Series inter-product communication system used between all *Meridian* 200 and Multiroom components.

Words appearing in the text in all upper case italics usually refer to a status of the system; e.g. 'in *RADIO*', refers to the state after pressing **Radio**. 'In *STANDBY*' would mean after pressing **Standby**.

3 General background

The general background to operating and using a 222 is described in the 222 user manual. Please refer to it and the *Meridian* Multiroom Technical reference manual if you are not able to understand these instructions.

It will be important that at the outset you understand what the signal routing, selection, controlling and source options of the whole installation are.

It may be a good idea that the owner spend some time reading the user manual before settling on the way the 222 is to be setup.

This manual describes how to programme the 222 when it is used with a 221 Smart Wall Panel. It is also possible to use a 213 and 209 system handset.

If the 222 has a 213 input and display device rather than a 221, then there are a few differences when a 209 is used to operate a 222:

- For a 207, **Repeat**, **Phase**, **Store**, **Cancel**, << and >> do not function via the 222. They do of course work directly to the 207.
- **Preset** and **Track** are irrelevant. The 222 directs commands according to the current source.
- Tracks on a 207 CD or preset stations on a 204 can be entered as numbers.
- * takes on the function of the **System** key of the 221.
- **Standby** takes on the function of the **Off** key of a 221.

4 Programming

If at any time the 222 does not respond in the way these instructions suggest, the programming will be the reason and this situation is probably normal.

4.1 Resetting the 222

Loosen the cover of the 222 and identify the pair of switches. These are in one corner of the 222 and are labelled 1 and 2.

- switch 1 is the reset switch. This can be used at any time to reset the microprocessor in the 222, e.g. if it is disturbed by static.
- switch 2 is the setup switch.

To reset the 222 move switch 1 on (up) and then off after a few seconds.

4.2 Cold Boot

A fundamental reset is available for the 222 which is referred to as cold boot. This reset erases all the setup information in the EEPROM and returns the 222 to the factory settings.

To perform a cold boot:

- Put switch 1 and 2 on (up), AND
- Hold down **Off** key on 221 (**Standby** on 209)
- While holding **Off** put switch 1 off, then 2 off.

If all is well the 221 will respond with [rESet]. The 222 has now returned to its initial conditions.

4.3 Getting into setup mode

Before you can programme the 222 you need to get it into *SETUP* mode.

- Ensure that the 222 is connected to a 223 power supply, and that the 223 is not overloaded.
- Check all cabling to the 222 against the planning drawings.
- Check that the 223 is switched on. If it is, the green light will show behind the **Off** key of a 221.
- Check that the system controller (201, 202 or 207) is powered up and connected to the network.
- Check that the 222 responds to the 221, press **CD** and see a display like [1. cd. 32].
- Try another input key.
- Try a source that is functioning, can you hear it?
- If all is well it is likely that the 222 is functioning.

If this is the first time of setting up the 222 perform a cold boot as described in the previous section. Otherwise to get into the setup mode:

- Put switch 2 up
- You are now in *SETUP*.

REMEMBER It is OK to experiment with the programming process, if you get lost simply restore the 222 with a cold boot.

4.4 System-wise programming

You will have to follow through the instructions of sections 4.5 and 4.6 once for each of the three possible Systems (1,2 and Local).

The 221 will have presented you with a display like this [1. cd.1.cd.].

There are eight character positions in the display window of the 221, as well as three lights which are:

- **red** for **System 1**
- **green** for **System 2**
- **yellow** for **System Local**.

For now we start to set up **System 1**. If the **red** light is not on press **System** until it is.

4.5 System parameters

4.5.1 Controller type

The first character, shown as 1. defines the type of controller that the **System** is connected to. The options are:

- 1. for a 201 or 202
- 7. for a 207
- n. for non-existent.

This parameter is set only once for each system and must be set before going on to define the inputs and sources.

NOTE it is possible to have different controllers on each **System**. We could have a 201 as the **System 1** controller and a 207 as the **System 2** controller if the house was wired accordingly.

NOTE you cannot make a system non-existent if no others have yet been defined. If you intend to make **System 1** non-existent for this 222, start first setting up **System 2** with the green light in the window.

Move between 1, 7 and n controllers with the **Volume up** key.

- Choose a value

4.5.2 Volume control

If the volume control for this system is in the controller you need not set this option. If the 222 contains its own volume control i.e. it receives fixed level audio on this **System** then we need to set the **F**. flag in the second position on the display.

- Do this with **Volume down**. The display will be like [1.F.cd.1.cd.].
 - Clear the volume fixed flag with **Volume down**.
- NOTE** The 'F' flag allows the 222 to control a 211.

4.5.3 Start system

When the 222 comes out of *STANDBY* it defaults to one of the **Systems**. We call this the **Start system**. The **Start system** is identified by the very last full-stop (period) being lit.

- Set **Start system** with **Off**. See the message [Strt].

NOTE this is not a toggle. The only way to clear a **Start system** is to make another **System** into the **Start system** or to declare this system non-existent.

4.5.4 Protocols

The protocols for this system are set by adjusting the last character in the 221 display. (That is the one immediately preceding the **Start system** dot.

The options are:

- Blank, system 'open'.
- U, in use protocol
- n, no-control protocol

For an explanation of these see the section on protocols in the 222 user manual or the explanation in the *Meridian* Multiroom Technical Reference.

- Rotate between the options with **Stop**.
- Choose a setting

4.6 Sources and inputs

If you are satisfied with the four system adjustments, you must now set up the information for each of the source keys.

This information is displayed in the character positions 3-7.

- Press **CD** and see a display like [?. cd.1.cd.?

The first 'cd.' reminds you that it is the **CD** key that you are setting up. It is also the **CD** input of the 201, 202 or 207.

The next character tells the 222 to which of the **Comms** the source is connected. This could be the location of the source. The options are:

- **n.** for a source that cannot be controlled by the 222, e.g. turntable.
- **1.** for a source connected to **Comms1**.
- **2.** for a source connected to **Comms2**.
- **L.** for a source connected to **Comms Local**.

Rotate between these choices with **Mute**.

- Choose the correct setting.

The next character pairs tell the 222 whether a controllable source is:

- **cd.** a 207-type CD player
- **rd.** a 204-type radio

There are no other options at this time.

NOTE this setting is ignored if you previously chose **n.** for **Comms** connection.

- Choose the setting **cd.** or **rd.** with **Next** or **Prev**.

When you are satisfied with these settings move on to the next source key. For example:

- Press **Radio** and repeat the steps in this section.

NOTE If you have chosen 207 as the controller, i.e. for this **System** there is a 7. in the first position, **Radio** will give you the display [7. Li.1.rd.]. This tells you that the **Radio** key is mapped to the **Line** input of the 207. Also **Tape1** will give you the display [7. t3.n.cd.]. **Tape2** and **Video** are not available and will not appear.

4.7 Finishing off

You will have finished setting up the 222 when you have defined the system parameters and all source parameters for each of the three systems. That is:

- Work through section 4.5 for **System 1, 2 and Local**
- For each **System** set up the parameters for all six source keys.

NOTE if you make a system non-existent you do not have to set up its source keys since these will be inaccessible.

Make a careful note of all the settings for each 222 in the installation.

4.8 Returning to normal

To return to normal mode:

- Press down switch 2
- Replace the cover on the 222
- Test the installation to see if you got the result you expected.

5 Service

There are no user-serviceable parts inside the 222. Should the unit need service, contact the dealer who supplied it or, in case of difficulty write to:

- In the UK, Boothroyd Stuart Ltd, 13 Clifton Road, Huntingdon, Cambridgeshire, PE18 7EJ.
- Outside the UK contact the importing agent for the territory. A list of *Meridian* agents abroad is available from the above address.

The owner is responsible for the Product during transit therefore we recommend that you retain the original packing.

For on-site service we make available service EPROMS and EEPROMs so that where possible setup information will not be lost.

6 Guarantee

The 222 is guaranteed against defects in material and workmanship for 12 months from the date of purchase.

The guarantee is void if the product has been subject to misuse, accident or negligence, or has been in any way modified without Boothroyd Stuart Ltd written authorisation. Attempted servicing by unauthorised people may result in loss of guarantee.

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

When seeking service under guarantee, it is necessary to produce dated proof of purchase.

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 equipment not supplied through them.

This guarantee does not limit your statutory rights within the UK.

7 Keys

In the following list key meanings in programming are shown.

Move between menu items with:

System	Rotates between System 1, 2 and Local
CD	CD input.
Radio	Radio input.
LP	LP input.
Tape1	Tape1 input.
Tape2	Tape2 input.
Video	Video input.

Select system related parameters with:

Volume up yellow Choose system controller 201, 207, none.

Volume down yellow Clear or set fixed volume flag. 'F' for a 211

Off Sets the Start System.

Stop Sets protocols, open (blank), not available or in-use.

Select source and input parameters with:

CD	CD input.
Radio	Radio input.
LP	LP input.
Tape1	Tape1 input.
Tape2	Tape2 input.
Video	Video input.
Mute	Choose Comms identity for each input in turn. Choice of n, 1, 2 and L.
Next	Choose <i>Meridian</i> source type cd. or rd.
Prev	As Next
Play	Not used in programming.