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Part no: 501/501V/1

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In choosing the 501/501V Control Unit you have acquired a component that combines major advances in audio and engineering design. The 501 Control Unit is a full function preamplifier for use with high performance analogue sources. It provides six audio inputs, each of which can be individually adjusted for sensitivity, and identified on the four-character alpha-numeric display. A very high quality MC or MM phono stage is available as an option for the dedicated LP input.

In addition, the 501V Control Unit provides video switching for up to eight video inputs.

This guide is designed to enable you to obtain the best possible results from the unit, and it includes information about customising the unit to your own requirements.

If you have just purchased the 501/501V Control Unit you should first turn to the chapter Setting up the Control Unit, page 33, which explains how to unpack and install the control unit correctly.
The Meridian 500 Series

The Meridian 500 Series is a unique system of digital, analogue, and video components designed to meet the demand for absolute quality, ease of use, and lasting value.

The flexibility of the Meridian 500 Series is such that you can assemble a system as simple or as complex as you need, perfectly suited to your musical and environmental requirements, and with the ability to add to it or change it at a later date should your requirements change. The 500 Series is also compatible with the existing Meridian 200 Series and 600 Series components.

Each Meridian 500 Series component is housed in a matching slim line case. Front panel controls provide access to the most important functions, and the full range of functions is available from the Meridian System Handset using a simple and intuitive control interface.

500 Series communications

The Meridian 500 Series includes a sophisticated communications link, to ensure that any configuration of units will work together as a fully integrated system.

The 500 Series communications system allows you to control any combination of units using a single handset, and ensures that your commands from the handset are interpreted unambiguously. Any unit can be designated as the controller for the system, allowing you to position the other units out of range from the handset beam if desired. It also allows all the units to be switched off from the front panel of any unit in the system.

Professional features

The 500 Series also includes features for professional users, including RS232 computer control (501, 562, and DSP5000), and balanced outputs (563).

The following pages give examples of four suggested configurations to illustrate the flexibility of the Meridian 500 Series.
506 Compact Disc Player

The 506 Compact Disc Player is an integrated CD transport and converter, providing both digital and analogue outputs.

The 506 Compact Disc Player is ideally suited for use with the Meridian 555 Stereo Power Amplifier and A2 Loudspeakers, with control over the volume and source selection provided by the 501 Remote Control Preamplifier.

The 504 FM Tuner is an ideal addition to the system if radio reception is required.

500 Compact Disc Transport

The 500 Compact Disc Transport provides a precision digital output, and can drive DSP5000 Digital Loudspeakers directly.

A 562 Digital Controller can be added to cater for conventional analogue sources, such as the 504 FM Tuner, and provide source selection between up to 12 different analogue or digital sources.
The digital output provided by the 500 Compact Disc Transport can be decoded by the 563 Digital to Analogue Converter to provide a high-quality audio output for use with a conventional audio preamplifier.

The 563 Digital to Analogue Converter can also decode digital signals from other sources, including LaserDisc players and Digital Audio Tape.

The 501V Control Unit is a full function preamplifier for use with any analogue source, and includes video switching for complete control of systems that include video sources such as a LaserDisc player and video recorder.

It provides a high-quality audio output ideal for use with the Meridian M60 Active Loudspeakers.
The 562V Multimedia Controller is the ideal control unit for use with the Meridian D6000 Digital Loudspeakers.

It provides direct digital inputs for digital sources, such as the 500 Compact Disc Transport and LaserDisc sound, together with precision Delta Sigma Analogue to Digital Conversion, for conventional analogue sources such as the 504 FM Tuner and video sound.

It also includes video switching for CVBS and S-VHS signals, such as from a satellite receiver, LaserDisc player, or video recorder.
## Specification and accessories

### Specification

| **MM input option** | Sensitivity adjustable 0.5 – 3mV for 5cm/s @ 1kHz.  
Overload point 47mV @ 1kHz.  
Cartridge load 47kΩ || 100pF. |
| **MC input option** | Sensitivity adjustable 38 – 210µV for 5cm/s @ 1kHz.  
Cartridge load 220Ω || 10nF. |
| **A2 – A6 inputs** | Sensitivity adjustable 27 – 150mV.  
Input impedance 20kΩ. |
| **Tape output** | Output 1.5V. |
| **Main outputs** | Output 1.4V rms, 3V rms maximum. |
| **Headphone output** | 2V maximum. |
| **Distortion** | Less than 0.01% input to output. |
| **Noise and hum** | Less than -90dB for high-level analogue inputs.  
Less than -70dB for MM input.  
Less than -60dB for MC input. |

### Display

Four character display for current source, volume, mute, and copy source.

### Communications

Two 5 pin 240° DIN sockets, RS232 interface.

### Finish

Black textured enamel and glass.

### Dimensions

88mm x 321mm x 332mm (3.46" x 12.64" x 13.07").

### Weight

5kg (10lbs).

### Consumption

20VA.
### Video specification (501V only)

<table>
<thead>
<tr>
<th><strong>V1 – V6 inputs</strong></th>
<th>Composite unbalanced RCA phono 75Ω, 0.5 – 1.5Vp/p.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>S1, S2 inputs</strong></td>
<td>S-VHS 4 pin MiniDIN.</td>
</tr>
<tr>
<td><strong>Monitor output</strong></td>
<td>Unbalanced RCA phono 75Ω, 1.5Vp/p to monitor.</td>
</tr>
<tr>
<td><strong>VCR outputs 1, 2</strong></td>
<td>Unbalanced phono 75Ω, 1Vp/p to VCRs, identical signal via splitter.</td>
</tr>
<tr>
<td><strong>Main S-OUT</strong></td>
<td>S-VHS 4 pin MiniDIN.</td>
</tr>
<tr>
<td><strong>VCR1, VCR2 S-OUT</strong></td>
<td>S-VHS 4 pin MiniDIN, two function select outputs for SCART.</td>
</tr>
</tbody>
</table>

Meridian Audio reserves the right to amend product specifications at any time.

### Available accessories

The following accessories are available from your dealer:

- MM phono module.
- MC phono module.
- Meridian System Handset.
- Power cord Europe.
- Power cord Canada and USA.

The MM and MC phono modules convert the LP audio input (A1) for use with a moving magnet or moving coil pickup, respectively.

The Meridian System Handset provides access to all the facilities provided by the 501/501V Control Unit, including those available from the front panel controls. In addition, it allows you to control any other 500 Series units in your system.

If you have problems purchasing these items, you can order them direct from Meridian Audio Limited, who can also supply a range of cables suitable for connecting the 501/501V Control Unit to other equipment.
This chapter provides a visual summary of the functions of the control unit in order to identify and help explain each of the controls which you will use to operate the unit.

It also describes how to switch on the control unit, and use it with conventional audio sources.

Unless otherwise specified, each function is available from the front panel or the handset.
Front panel

1 Source
Selects the source.

2 Copy
Copies a selected source to the tape output.

3 Mute
Mutes the sound.

4 Display
Blanks the display.

5 ▼ (Decrease)
Decreases the volume.

6 ▲ (Increase)
Increases the volume.

7 Off
Switches to standby.
Selecting a source

During normal use the control unit should be left in the standby state. This uses a negligible amount of electricity, but ensures that the components of the control unit operate at maximum efficiency from the moment you start.

If you are not going to use the control unit for a period of several days you should switch the unit completely off, at the rear panel, and disconnect it from the AC power supply.

To switch on from standby

- Press Source (front panel), or select a source by pressing the appropriate source key on the remote control.

If the 501/501V Control Unit is part of a Meridian system, it will automatically switch on any other unit in the system, such as the CD player.

To select a source

- Press Source (front panel) until the display shows the source you require, or press the appropriate source key on the remote control.

The display shows the source, and volume setting.

For example, if you select the CD input the display will show:

By default, the following six sources are available:

<table>
<thead>
<tr>
<th>Source</th>
<th>Label</th>
<th>Input</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD</td>
<td>CD</td>
<td>A2</td>
</tr>
<tr>
<td>Radio</td>
<td>RD</td>
<td>A3</td>
</tr>
<tr>
<td>LP</td>
<td>LP</td>
<td>A1</td>
</tr>
<tr>
<td>TV</td>
<td>TV</td>
<td>A5</td>
</tr>
<tr>
<td>Tape1</td>
<td>T1</td>
<td>A4</td>
</tr>
<tr>
<td>Tape2</td>
<td>T2</td>
<td>A6</td>
</tr>
</tbody>
</table>

To switch to standby

- Press Off (front panel) or Standby (remote control).

The display will show:

If you have other Meridian 500 Series equipment connected to the control unit, these units will also switch to standby.
Adjusting the volume

The 501/501V Control Unit allows you to adjust the volume in precise steps of 1dB, where 9dB is equivalent to doubling the loudness.

The current volume setting is displayed in dB on the front panel display, and can be varied in the range 1 – 99dB. When you first switch on the control unit the volume is set to 65, which is similar to the midway position of the rotary volume control on a conventional preamplifier.

To decrease the volume

- Press ▼ (front panel), or ▼ (remote control).

For example, the display will show:

CD55

To mute the sound

- Press Mute.

The display will show:

Mute

To restore the sound

- Press Mute again.

Alternatively the sound will be restored if you adjust the volume.
Changing the display and balance

To change the display

- Press **Display**.

Each time you press **Display** the display will step between the following options:

<table>
<thead>
<tr>
<th>Display option</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source and volume.</td>
<td>RD65</td>
</tr>
<tr>
<td>This is the usual display.</td>
<td>Rad</td>
</tr>
<tr>
<td>Source only (full label).</td>
<td></td>
</tr>
<tr>
<td>Blank.</td>
<td></td>
</tr>
</tbody>
</table>

To change the balance

You can adjust the sound balance on the 501/501V Control Unit using the following procedure.

**Note:** The balance can only be adjusted with the remote control.

- Press ◀ (remote control) to move the sound to the left.
  
  The display will show the number of dBs added to the left channel:

- Press ► (remote control) to move the sound to the right.
  
  The display will show the number of dBs added to the right channel:

- Press ▼ (remote control) to centre the balance.
  
  The display will show:
Recording a source

The 501/501V Control Unit allows you to copy any one of the standard sources to the tape outputs, independently of the source you are listening to.

To copy a source to the tape output

Press Copy.

Each time you press Copy the control unit will step between the following options:

<table>
<thead>
<tr>
<th>Display</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSrc</td>
<td>Copy Source. The current source is fed to the tape output.</td>
</tr>
<tr>
<td>CAtt</td>
<td>Copy Attenuate. The tape output is muted.</td>
</tr>
<tr>
<td>C CD</td>
<td>Copies the first source to the tape output.</td>
</tr>
<tr>
<td>C RD</td>
<td>Steps through each source in turn, etc.</td>
</tr>
</tbody>
</table>

When Copy is set to anything other than Copy Source the Copy indicator is illuminated on the front panel.

For example, to record a radio broadcast press Copy until the display shows: C RD

You can now listen to a CD, by selecting the CD source, without affecting the recording.
Using the Video Features (501V only)

This chapter explains how to use the video features in the 501V Control Unit to select the video source you want to watch, or to choose which video source to copy to a video recorder.

Note that these instructions do not apply to the 501 Control Unit, which does not include the video option.
Selecting a video source

With the 501V Control Unit you select the video source you want to watch in exactly the same way as selecting an audio source.

On the 501V Control Unit each source can be associated with both audio input, and a video input.

For example, by default the TV source selects audio input A5 (for TV sound), and video input V5 (for the TV picture).

Last valid option

The audio or video input for a source can be defined as LV (Last Valid), in which case selecting the source will leave the audio or video input unchanged.

For example, by default the CD source defines the video input as LV. This allows you to select TV followed by CD to watch the TV picture while listening to a compact disc, instead of the TV sound.

To select a source

Press Source (front panel) until the display shows the source you require, or press the appropriate source key on the remote control.

For example, if you select the TV input the display will show:

TV65

By default, the following six video sources are available:

<table>
<thead>
<tr>
<th>Source</th>
<th>Label</th>
<th>Video input</th>
<th>Audio input</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV</td>
<td>TV</td>
<td>V5</td>
<td>A5</td>
</tr>
<tr>
<td>Cable</td>
<td>Cb</td>
<td>V4</td>
<td>A5</td>
</tr>
<tr>
<td>Teletext</td>
<td>TX</td>
<td>V5</td>
<td>LV</td>
</tr>
<tr>
<td>VCR1</td>
<td>V1</td>
<td>V1</td>
<td>A6</td>
</tr>
<tr>
<td>VCR2</td>
<td>V2</td>
<td>V2</td>
<td>A4</td>
</tr>
<tr>
<td>LD</td>
<td>LD</td>
<td>V3</td>
<td>A1</td>
</tr>
</tbody>
</table>
Using the Video Features (501V only)

Recording a video input

With the 501V Control Unit you can copy the audio and video components of a source to the tape and VCR outputs, independently of the source you are listening to.

To copy a video source

- Press **Copy**.

Each time you press **Copy** the control unit will step between the following options:

<table>
<thead>
<tr>
<th>Display</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSrc</td>
<td>Copy Source. The audio and video components of the current source are fed to the tape and VCR outputs.</td>
</tr>
<tr>
<td>CAtt</td>
<td>Copy Attenuate. The tape and VCR outputs are muted.</td>
</tr>
<tr>
<td>C CD</td>
<td>Copies the first source to the tape and VCR outputs.</td>
</tr>
<tr>
<td>C RD</td>
<td>Steps through each source in turn, etc.</td>
</tr>
</tbody>
</table>

When **Copy** is set to anything other than Copy Source the **Copy** indicator is illuminated on the front panel.

For example, to record a TV programme press **Copy** until the display shows: [CTV]

The TV sound and picture will now be fed to the tape and VCR outputs, respectively.

You can then select another source without affecting the recording.
Customising the Control Unit

This chapter explains how to customise the 501/501V Control Unit to your preferred configuration.

The simplest way of configuring the control unit is to choose one of the standard settings, which are designed to cater for the six most common configurations of sources and inputs.

Alternatively, you can configure each source individually to suit the other equipment in your system. You can choose the label used for each source, and balance the input sensitivities so that the sound level remains the same when you switch between sources.

Finally, the 501/501V Control Unit provides several settings that you can alter to optimise the way in which it works with the other equipment in your system.
Choosing standard settings

The 501/501V Control Unit provides six alternative standard settings, called Types, which configure all aspects of the control unit into the six most commonly needed configurations.

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

By default, the control unit is supplied set to Type 1.

If you have a system containing only Meridian 500 Series units then you should choose one of Types 5, 1, 4, or 3. These give progressively larger numbers of inputs, as shown in the tables on page 21 (501) or page 22 (501V).

If your system includes any Meridian 600 or 200 Series units you should choose Type 2 or Type 6. For more information see *To connect to Meridian 600 or 200 Series equipment*, page 38.

To select a standard setting

- Switch off any power amplifiers that are connected to the control unit.

- Turn off the control unit, using the power switch on the back panel.

- Turn on the power again while holding down the **Off** key on the front panel.

The display will show:

![Type](image)

It will then show:

![Ty 1](image)

- Press ▼ or ▲ to change the type number.

For example, to select Type 3 the display shows:

![Ty 3](image)

- Turn off the control unit using the power switch on the back panel.

- Turn on again to use the standard settings you have selected.
## 501 standard settings

The following table shows the options configured by the six standard Type settings on the 501 Control Unit:

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Label</th>
<th>Input</th>
<th>Gain</th>
<th>Comms</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>CD</td>
<td>CD</td>
<td>A2</td>
<td>0dB</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>Radio</td>
<td>RD</td>
<td>A3</td>
<td>2dB</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>LP</td>
<td>LP</td>
<td>A1</td>
<td>2dB</td>
<td>–</td>
</tr>
<tr>
<td>3</td>
<td>TV</td>
<td>TV</td>
<td>A5</td>
<td>8dB</td>
<td>–</td>
</tr>
<tr>
<td>6</td>
<td>Tape1</td>
<td>T1</td>
<td>A4</td>
<td>2dB</td>
<td>–</td>
</tr>
<tr>
<td>2</td>
<td>Tape2</td>
<td>T2</td>
<td>A6</td>
<td>2dB</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>CDR</td>
<td>CR</td>
<td>A2</td>
<td>0dB</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Cable</td>
<td>Cb</td>
<td>A5</td>
<td>8dB</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Text</td>
<td>TX</td>
<td>=</td>
<td>n/a</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>VCR1</td>
<td>V1</td>
<td>A6</td>
<td>8dB</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>VCR2</td>
<td>V2</td>
<td>A4</td>
<td>8dB</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>LD</td>
<td>LD</td>
<td>A1</td>
<td>0dB</td>
<td>–</td>
</tr>
</tbody>
</table>

= Last valid input, displayed as LV.

Types 2 and 6 have the same source configuration as Type 1.
# 501V standard settings

The following table shows the options configured by the six standard Type settings on the 501V Control Unit:

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Label</th>
<th>Input</th>
<th>Gain</th>
<th>Comms</th>
<th>C-video input</th>
<th>S-video input</th>
<th>FNSEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>CD</td>
<td>CD</td>
<td>A2</td>
<td>0dB</td>
<td>1</td>
<td>=</td>
<td>=</td>
<td>=</td>
</tr>
<tr>
<td>4</td>
<td>Radio</td>
<td>RD</td>
<td>A3</td>
<td>2dB</td>
<td>2</td>
<td>=</td>
<td>=</td>
<td>=</td>
</tr>
<tr>
<td>1</td>
<td>LP</td>
<td>LP</td>
<td>A1</td>
<td>2dB</td>
<td>–</td>
<td>BL</td>
<td>=</td>
<td>=</td>
</tr>
<tr>
<td>3</td>
<td>TV</td>
<td>TV</td>
<td>A5</td>
<td>8dB</td>
<td>–</td>
<td>v5</td>
<td>=</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>Tape1</td>
<td>T1</td>
<td>A4</td>
<td>2dB</td>
<td>–</td>
<td>=</td>
<td>=</td>
<td>=</td>
</tr>
<tr>
<td>2</td>
<td>Tape2</td>
<td>T2</td>
<td>A6</td>
<td>2dB</td>
<td>–</td>
<td>=</td>
<td>=</td>
<td>=</td>
</tr>
<tr>
<td></td>
<td>CDR</td>
<td>CR</td>
<td>A2</td>
<td>0dB</td>
<td>–</td>
<td>=</td>
<td>=</td>
<td>=</td>
</tr>
<tr>
<td></td>
<td>Cable</td>
<td>Cb</td>
<td>A5</td>
<td>8dB</td>
<td>–</td>
<td>v4</td>
<td>=</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Text</td>
<td>TX</td>
<td>=</td>
<td>n/a</td>
<td>–</td>
<td>v5</td>
<td>=</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>VCR1</td>
<td>V1</td>
<td>A6</td>
<td>8dB</td>
<td>–</td>
<td>v1</td>
<td>S1</td>
<td>2(1)†</td>
</tr>
<tr>
<td></td>
<td>VCR2</td>
<td>V2</td>
<td>A4</td>
<td>8dB</td>
<td>–</td>
<td>v2</td>
<td>S2</td>
<td>2(1)†</td>
</tr>
<tr>
<td></td>
<td>LD</td>
<td>LD</td>
<td>A1</td>
<td>0dB</td>
<td>–</td>
<td>v3</td>
<td>=</td>
<td>1</td>
</tr>
</tbody>
</table>

= Last valid input, displayed as LV (audio), Nv (video), NS (S-VHS), or NF (FNSEL). † 2 in Type 1, 1 in Type 3 or 4. Types 2 and 6 have the same source configuration as Type 5.
Configuring the sources

When the control unit is set to one of the standard settings the twelve source selection keys on the remote control select the standard labels and inputs, as shown in the table on page 21.

If the configuration you want is not catered for by one of the standard settings, you can configure each source individually.

The 501/501V Control Unit provides 12 sources corresponding to the 12 source selection keys on the remote control:

CD, Radio, LP, TV, Tape1, Tape2, CDR, Cable, Text, VCR1, VCR2, and LD.

For each source you can configure:

- The label used for it on the front panel display, from 45 alternative labels.
- The audio input it selects.
- The comms type and address, to identify other Meridian 500 Series equipment.
- The video and S-VHS inputs it selects (501V only).

The procedure for doing this is as follows.
To configure a source

- Turn off the control unit, using the power switch on the back panel.
- Turn on the power again while holding down the Display key on the front panel.

The display will show:

- Press Source until the left-hand pair of characters identifies the source you want to configure.

For example, to configure the CD source the display initially shows:

- Press Copy (front panel), or ▶ and ◄ (remote control), to step between options.

The right-hand pair of characters shows the current value of the option.

The options are summarised in the table shown opposite.

To change an option

- Press ▲ or ▼ to step between the alternative values for the option.

When you have finished programming sources:

- Switch off at the back panel, and then switch on again to restore normal operation.
<table>
<thead>
<tr>
<th>Option</th>
<th>Initial value</th>
<th>Alternative values</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Label</td>
<td>CDCD</td>
<td>CD, RD, LP, etc.</td>
<td>See page 26.</td>
</tr>
<tr>
<td>Audio input</td>
<td>CDA2</td>
<td>A1 – A6, or LV.</td>
<td>Choose A1 to A6 to specify the input, or LV to use the last valid input.</td>
</tr>
<tr>
<td>Comms type</td>
<td>CD1C</td>
<td>IC – 8C, or NC.</td>
<td>Choose IC for a Meridian CD player, 2C for a Meridian FM Tuner, or NC otherwise.</td>
</tr>
<tr>
<td>Address</td>
<td>CD1A</td>
<td>1A – 8A.</td>
<td>Allows you to have up to eight of each source type.</td>
</tr>
<tr>
<td>Video input*</td>
<td>CDNv</td>
<td>V1 – V6, Nv, or BL.</td>
<td>Choose V1 – V6 to specify an input, Nv to use the last valid input, or BL to blank the input.</td>
</tr>
<tr>
<td>S-VHS input*</td>
<td>CDNS</td>
<td>S1 – S2, or NS.</td>
<td>Choose S1 – S2 to specify an input, or NS to use the last valid input.</td>
</tr>
<tr>
<td>FNSEL output*</td>
<td>CDF0</td>
<td>F0 – F2, or NF.</td>
<td>Choose the function select output signal you want to send to the TV, or NF to use the last valid output.</td>
</tr>
</tbody>
</table>

* 501V only.
Examples of configuring the sources

The following examples illustrate how you can configure the source options to your own requirements.

To change a source label

Display the source you want to configure, together with its current label, as described in the previous sections.

For example, to configure the Radio source label choose:

- Press ▲ or ▼ to step between the alternative labels.

For example, to use the label FM for the Radio source set it to:

The following table shows the available source labels together with their meanings:

<table>
<thead>
<tr>
<th>Source</th>
<th>Logo</th>
<th>Source</th>
<th>Logo</th>
<th>Source</th>
<th>Logo</th>
<th>Source</th>
<th>Logo</th>
<th>Source</th>
<th>Logo</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD</td>
<td>CD</td>
<td>VCR 2</td>
<td>V2</td>
<td>VHS</td>
<td>VH</td>
<td>S-VHS</td>
<td>SV</td>
<td>DAB</td>
<td>DB</td>
</tr>
<tr>
<td>Radio</td>
<td>RD</td>
<td>LaserDisc</td>
<td>LD</td>
<td>Jukebox</td>
<td>JB</td>
<td>Betamax</td>
<td>βm</td>
<td>Dig. Sat.</td>
<td>DS</td>
</tr>
<tr>
<td>LP</td>
<td>LP</td>
<td>Satellite</td>
<td>SA</td>
<td>CD-ROM</td>
<td>Rm</td>
<td>Camera</td>
<td>Ca</td>
<td>ADC</td>
<td>AD</td>
</tr>
<tr>
<td>Tape 1</td>
<td>T1</td>
<td>CDX</td>
<td>C2</td>
<td>DAT</td>
<td>DT</td>
<td>Video 8</td>
<td>V8</td>
<td>R-Reel</td>
<td>RR</td>
</tr>
<tr>
<td>Tape 2</td>
<td>T2</td>
<td>78 rpm</td>
<td>78</td>
<td>DCC</td>
<td>DC</td>
<td>CD-Video</td>
<td>CV</td>
<td>FM tuner</td>
<td>FM</td>
</tr>
<tr>
<td>CDR</td>
<td>CR</td>
<td>CD-1</td>
<td>C1</td>
<td>Phono</td>
<td>Ph</td>
<td>Aux</td>
<td>Au</td>
<td>AM tuner</td>
<td>AM</td>
</tr>
<tr>
<td>Cable</td>
<td>Cb</td>
<td>CD trans.</td>
<td>C1</td>
<td>MiniDisc</td>
<td>MD</td>
<td>Mixer</td>
<td>Mx</td>
<td>MW tuner</td>
<td>MW</td>
</tr>
<tr>
<td>Teletext</td>
<td>TX</td>
<td>Photo CD</td>
<td>PC</td>
<td>Line</td>
<td>Li</td>
<td>Simul</td>
<td>SB</td>
<td>SW tuner</td>
<td>SW</td>
</tr>
<tr>
<td>VCR 1</td>
<td>V1</td>
<td>CD Lib.</td>
<td>CL</td>
<td>Mic</td>
<td>Mi</td>
<td>Computer</td>
<td>PC</td>
<td>LW tuner</td>
<td>LW</td>
</tr>
</tbody>
</table>
To change the video input for a source

- Display the source you want to configure, together with the current video input, as described in the previous sections.

For example, to configure the CD video input choose:

- Press ▼ or ▲ to choose the video input.

For example, if you always want the TV picture when you select CD set it to:

To set up a source for simultaneous broadcasts

- Choose a source you are not already using.
- Assign a suitable label to the source; SB is suggested.
- Configure the audio input to A3 (Radio).
- Configure the video input to V5 (TV).

When you select the source you have configured you will get radio sound and a TV picture, as required for simultaneous broadcasts.

To set up a system with two CD players

- Configure the source you are going to use for the first CD player.
- Configure the source you are going to use for a second CD player, with a different address.

The remote control will now automatically control whichever of the CD players you have selected with the CD or CDR source keys.
The 501/501V Control Unit allows you to program the level of each source independently, to suit your other equipment, so that when you switch between sources the volume stays the same.

When you are programming levels the control unit operates as a preamplifier with a fixed volume setting equivalent to 65. This level is chosen to be comfortably loud on average sources. You can switch between sources and adjust the relevant input levels to achieve the setting you want.

You can increase the sensitivity of any source by up to 15 steps of 1dB. The loudest source, usually CD, should therefore be chosen as the reference.

**Programming levels**

**To balance input levels**

- Switch off any power amplifiers that are connected to the control unit.
- Turn off the control unit, using the power switch on the back panel.
- Turn on the power again while holding down the Mute key on the front panel.

The display will show:

- Release the Mute key.

The display will show the normal standby condition:

- Select the source that sounds loudest and make it your reference.
- Switch to another source in the usual way.
Customising the Control Unit

- Use the ▲ and ▼ keys to change the sensitivity.

For example, the display will show:

12dB

- Switch between the source you are changing and the reference source until they sound equally loud.

- Repeat the procedure for your other sources.

- When you have finished programming levels, switch the power off and on again to restore the control unit to normal operation.

If you know the output level of your sources you can probably set the gains by calculation. The following table shows the correspondence between the gain and sensitivity on the standard audio inputs and on the LP inputs:

<table>
<thead>
<tr>
<th>Gain</th>
<th>A2-A6</th>
<th>LP MM</th>
<th>LP MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>0dB</td>
<td>150mV</td>
<td>3mV</td>
<td>210µV</td>
</tr>
<tr>
<td>3dB</td>
<td>110mV</td>
<td>2.2mV</td>
<td>150µV</td>
</tr>
<tr>
<td>6dB</td>
<td>75mV</td>
<td>1.5mV</td>
<td>110µV</td>
</tr>
<tr>
<td>9dB</td>
<td>54mV</td>
<td>1.1mV</td>
<td>75µV</td>
</tr>
<tr>
<td>12dB</td>
<td>38mV</td>
<td>750µV</td>
<td>54µV</td>
</tr>
<tr>
<td>15dB</td>
<td>27mV</td>
<td>550µV</td>
<td>38µV</td>
</tr>
</tbody>
</table>
Specifying information about your system

In addition to configuring the sources, and programming their levels, you can configure many other aspects of the operation of the 501/501V Control Unit to suit the way your system is set up, and the way in which you want to use it.

Note that any settings that you configure are reset to standard values when you choose one of the standard settings: see Choosing standard settings, page 20.

To configure the control unit

- Turn off the control unit, using the power switch on the back panel.
- Turn on the power again while holding down the Display key on the front panel.

The display will show:

It will then show the first configuration option:

- Press Copy to move between the options.
- Press ▲ or ▼ to change the value of the current option.

The table below shows the options you can configure.

<table>
<thead>
<tr>
<th>Option</th>
<th>Initial Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications mode (500 or 200)</td>
<td>500</td>
</tr>
<tr>
<td>Controller mode (Auto, Con, or NCon)</td>
<td>Auto</td>
</tr>
<tr>
<td>System address (1–8)</td>
<td>SA=1</td>
</tr>
<tr>
<td>Product address (1–8)</td>
<td>PA=1</td>
</tr>
<tr>
<td>Volume control (Vout or Fout)</td>
<td>Vout</td>
</tr>
<tr>
<td>Volume mode (VolM or VolS)</td>
<td>VolM</td>
</tr>
<tr>
<td>Menu mode (N, 1, or 2)</td>
<td>↔N</td>
</tr>
<tr>
<td>Video version (501 or 501V)</td>
<td>501</td>
</tr>
<tr>
<td>200 Series CD player (N or Y)</td>
<td>CD?N</td>
</tr>
</tbody>
</table>
These settings are configured automatically to appropriate values when you choose one of the standard Type settings, and you should not normally need to alter them; see Choosing standard settings, page 20.

To choose fixed output

- Press **Copy** to choose the volume control option.

The display will show the normal variable output setting: 

- Press ▲ or ▼ to change to fixed output.

The display will show: 

The control unit will now give a fixed 0dB output, equivalent to a volume setting of 80, for use with Meridian D600 loudspeakers or a second preamplifier.

If you have other specific requirements not catered for by the standard settings please refer to the Meridian 500 Series User Guide, or consult your Meridian dealer.
Setting up the Control Unit

This chapter explains how to install the 501/501V Control Unit. It describes what you should find when you unpack the control unit, how you should connect it to your other audio equipment, and the siting constraints.

Before you begin installation, you should ensure that your control unit is the correct voltage for your local AC supply. If it is not, do not try to install the control unit, and contact your dealer.

You should not make any connections to the control unit or to any other component in your system whilst the AC power supply is connected and switched on.
Unpacking

The 501/501V Control Unit comes in a box containing the following components:

- 501/501V Control Unit.
- 1 power cord.
- 1 500 Series communications lead.
- This manual.

You are advised to retain the packing in case you need to transport the unit.

To position the control unit

Do not place the control unit:

- In direct sunlight.
- Near heat sources, eg a radiator.
- On top of a power amplifier, as the heat generated may damage the control unit.

However, it can be stacked on a 506 Compact Disc Player and 504 FM Tuner, if you have these Meridian components in your system.

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 to comply with the limits set out in EN55013 and EN55020C.
Connecting the control unit

Rear panel

Audio connections

The following table gives details of the six audio inputs:

<table>
<thead>
<tr>
<th>Use this input</th>
<th>To connect to this</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A1</strong></td>
<td>A turntable pickup with optional MM/MMC module.</td>
</tr>
<tr>
<td><strong>A2 to A6</strong></td>
<td>Other audio sources.</td>
</tr>
</tbody>
</table>

The following table gives details of the audio outputs:

<table>
<thead>
<tr>
<th>Use this output</th>
<th>To connect to this</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Out</strong></td>
<td>Power amplifier or active loudspeakers. Both outputs are identical to allow bi-amping.</td>
</tr>
<tr>
<td><strong>Tape Out</strong></td>
<td>Tape recorder output.</td>
</tr>
</tbody>
</table>

The audio inputs should be connected using high-quality screened cable, taking care to connect the left and right channels correctly.
Video connections (501V only)

The following table gives details of the eight video inputs:

<table>
<thead>
<tr>
<th>Use this input</th>
<th>To connect to this</th>
</tr>
</thead>
<tbody>
<tr>
<td>V1 to V6</td>
<td>Composite video signals, using phono connectors.</td>
</tr>
<tr>
<td>S1 or S2</td>
<td>S-VHS signals, using miniDIN connectors.</td>
</tr>
</tbody>
</table>

The following table gives details of the six alternative video outputs:

<table>
<thead>
<tr>
<th>Use this output</th>
<th>To connect to this</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor</td>
<td>Video input for a TV or monitor, using a phono connector.</td>
</tr>
<tr>
<td>VCR Out 1 or 2</td>
<td>Composite video recorder inputs, using phono connectors.</td>
</tr>
<tr>
<td>Main S-OUT</td>
<td>S-VHS input, using a miniDIN connector.</td>
</tr>
<tr>
<td>VCR1 or VCR2 S-OUT</td>
<td>S-VHS video recorder inputs, using miniDIN connectors.</td>
</tr>
</tbody>
</table>

The composite video connections should be made with high-quality 75Ω screened cable. We do not recommend the use of audio cables, which do not have adequate shielding or the correct impedance, or cables intended for UHF applications, as these do not provide adequate shielding in the 1-30MHz region.

In addition, the 501V Control Unit provides two FN-SELECT function selection outputs, which can be used to provide automatic switching of the monitor inputs. These provide standard SCART signals; for more information please refer to your dealer.

To connect to a tape recorder

- Connect the analogue output from the tape recorder to the Tape 1 input on the control unit (or another input if you prefer).
- Connect the Tape Out from the control unit to the analogue input on the tape recorder.
To connect to other Meridian 500 Series equipment

- Connect one of the COMMS sockets on the rear panel of the control unit to one of the COMMS socket on another 500 Series unit (excluding the 563), using the 500 comms lead provided with the other unit.

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

Then configure the units with the following automatic setup procedure:

- Switch all the units to standby.
- Press Clear on the handset.

Each unit will display:

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

This is the unit that will respond to the handset.

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

Your system is now set up and ready for use.

- If, for any reason, the automatic setup does not give the configuration you want, restore the default operation by selecting Type 1 as described in To connect to Meridian 600 or 200 Series equipment, page 38.

- If you want to change the automatic setup configuration refer to the Meridian 500 Series User Guide.

Note: Do not, under any circumstances, connect any equipment other than Meridian 500, 600, or 200 Series to the socket marked COMMS on the rear of the control unit.
To connect to a 555 Stereo Power Amplifier

- Turn off the control unit, using the power switch on the back panel.
- Turn on the power again while holding down the Off key on the front panel.

The display will show the current Type setting:

- Press ▲ or ▼ on the front panel to change the Type setting.

If your system includes a Meridian CD player select Type 2; otherwise select Type 6.

For example, if you select Type 2 the display will show:

- Switch the power off and on again to restore the control unit to normal operation.
- To return to 500 COMMS operation repeat the above procedure, and select Type 1, 3, 4, or 5. For more information see Choosing standard settings, page 20.

To connect to Meridian 600 or 200 Series equipment

If your system includes any Meridian 600 or 200 Series units, with 600 COMMS or 200 COMMS sockets, you should set all the 500 Series units to 200 COMMS operation using the following procedure:

- Connect one pair of the sockets marked Main Out L and R on the rear panel of the 501/501V Control Unit to the INPUT sockets on the rear panel of the 555 Stereo Power Amplifier.
Troubleshooting

This section describes problems you may encounter when using the control unit, and includes suggested solutions.

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

No lights are displayed when switching on

- Check that your AC power supply is connected correctly.
- Check that the ON OFF switch on the rear panel is in the ON position.
- Check that the fuse on the control unit rear panel and the fuse in the unit’s power plug have not blown; see To change the mains fuse, page 41.

There is hum on the LP input

The LP input is the most sensitive input on the control unit.

- Check that the tone arm is connected to the technical ground of the control unit.
- Check that the tone arm is connected to the power ground in the turntable.
- If you are using a magnetic pickup, check that there is not another piece of equipment too near to the turntable or the left-hand side of the control unit. If so, re-position the equipment to cure the problem.

There is hum on other inputs

- Check your other equipment.
- Consult your dealer.
There is interference on the radio and/or television when the control unit is switched on

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

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 aerial (or antenna) or route the antenna cable of the receiver as far as possible from the 501/501V Control Unit and its cabling.
- Ensure that the receiver uses well-screened antenna cable.
- Relocate the receiver with respect to the control unit.
- Connect the receiver and this product to different AC outlets.

Communication is not working between the 501/501V Control Unit and other Meridian products

- Check that all products are interconnected using the correct comms leads.
- If the installation includes 200 Series or 600 Series units, check that all 500 Series units are set to 200 mode.
Cleaning

When cleaning the control unit bear in mind that the front of the control unit is plastic, and the display panel and lid are glass.

Disconnect the power cord before cleaning the unit.

**Note:** Do not use abrasive cleaners on any part of the control unit.

To clean the case, display panel, and keypad

- Use a slightly damp cloth.

Ensure that no water is allowed to get inside the case, and do not reconnect the power until you are certain that the control unit is completely dry.

To clean the audio and video connections

The audio and video sockets on the rear of the control unit are gold-plated and need no cleaning if gold-plated phono 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 next to the power input to access the fuses.

Before replacing a blown fuse, if possible ascertain the cause of the failure.

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

Service

The Meridian 500 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 control unit 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 ii.

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

No responsibility can be accepted for the control unit 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 501/501V Control Unit is guaranteed against defects in material and workmanship for 2 years from the date of purchase.

The guarantee is void if the 501/501V Control Unit 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 that connecting anything other than the correct network lead to the COMMS sockets may cause damage to the 501/501V Control Unit 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 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.
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