

# welcome

Thank you for buying a Chord Electronics product.

Before you start to enjoy using your Chord Electronics product, please take a couple of minutes to read how to connect your audio equipment and loudspeakers to your Chord Choral product and how to maximise your listening experience.

# user guide for

pre amplifier

PRIMA

# pre-amplifier

PRIMA

The pre-amplifier is the control centre of your system. By connecting your audio sources to it you can choose the source you want at any particular time and control it.

You can also adjust the balance and volume before the signal is sent to a power amplifier. Your pre-amplifiers can be operated manually or via any Chord remote control.

# power amplifier

MEZZO

The power amplifier is the heart of your system, and your Chord amplifier offers stunning results providing effortless power across the whole spectrum of music's tonal span.

# phono stage

SYMPHONIC

The phono stage provides the vital conditioning needed for a signal coming from the stylus of your turntable and hugely amplifies the signal before it is fed to your pre-amplifier. Combining high performance and ease of use, the phono stage is an important component in a system that utilises a turntable.

# digital to analogue converter

DAC 64

This award winning, state of the art product converts the digital signal coming from your digital sources (such as a DVD/CD transport) into a suitable analogue signal that can be fed to your pre-amplifier.

# background

We want you to be confident using your new Chord Electronics product.

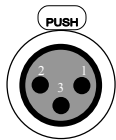
You are probably an audiophile with extensive knowledge of audio equipment.

However, you may not be!

So in the following section we explain a few basics to help you get started, or get you back up to speed if you are a little rusty.

# connecting your equipment

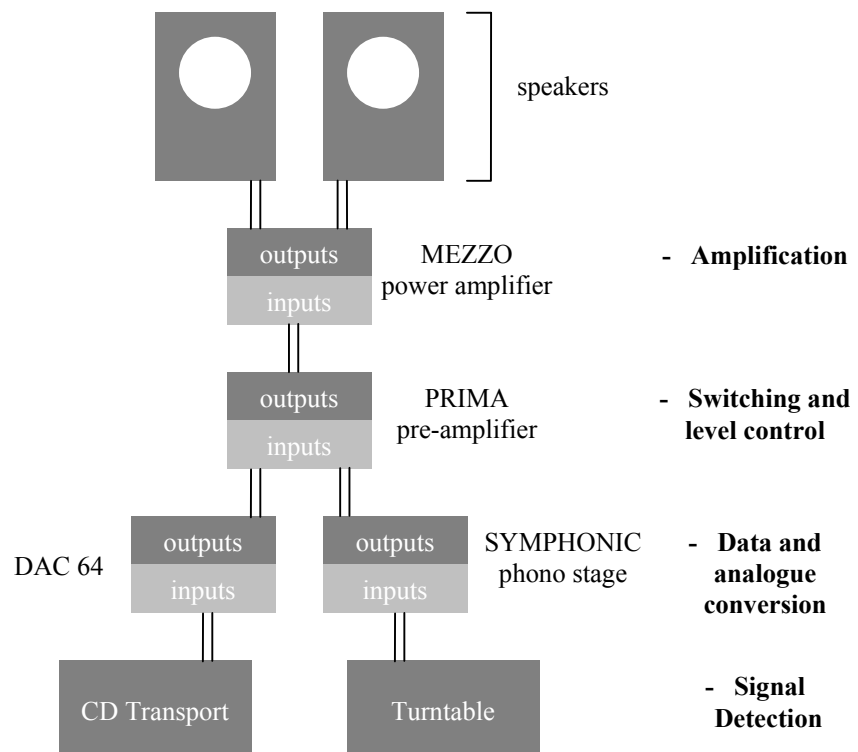
Chord amplifiers are supplied with and designed to be connected using balanced inputs. The interconnecting cables you use will depend on the available input and output sockets on your other equipment. We have installed unbalanced inputs on all Chord equipment, thus enabling you to mix Chord Electronics and other manufacturer's equipment.



Balanced inputs carry twice the strength of signal of unbalanced inputs and are able to be fed down long lengths of cable with less deterioration of signal. They are also less prone to interference than unbalanced inputs. Balanced inputs have three pins and use Neutric XLR style connectors. Pin 1 is earth, pin 2 is positive and pin 3 is negative.



Unbalanced inputs use RCA phono connectors, which are gold plated with teflon high performance dielectric insulators for optimum performance.



**Basic system diagram**

# when setting up

To ensure that your Chord product works efficiently and safely, please pay particular attention to the following issues.

## **ventilation**

Your Chord product should have at least 5cm of clear space all around it to ensure a free flow of air at all times. We do not recommend that you place your Chord product directly on a carpet as this can damage the equipment through blocked ventilation.

## **mains lead and plug**

All Chord equipment comes supplied with the correct mains lead and plug. This should be used at all times.

## **if you need to fit a plug for UK/Europe**

Connect the blue wire to the neutral terminal

Connect the brown wire to the live terminal

Connect the yellow/green wire to the earth terminal

## **if you need to fit a plug for US/Canada**

Connect the white wire to the neutral terminal

Connect the black wire to the live terminal

Connect the green to the earth terminal

## **earthing issues in Europe**

In some European countries a hum may occur if your processor is connected to mains sockets that do not have an earth. If this is the case please ensure that:

1. Your equipment is connected via a multi-way mains block which contains an earth point at each socket outlet. This is to ensure that the chassis metalwork of each item is connected together.
2. We recommend that an earthing method for your building is implemented.
3. Use the connecting points on your Chord unit and connect to an available earth point.

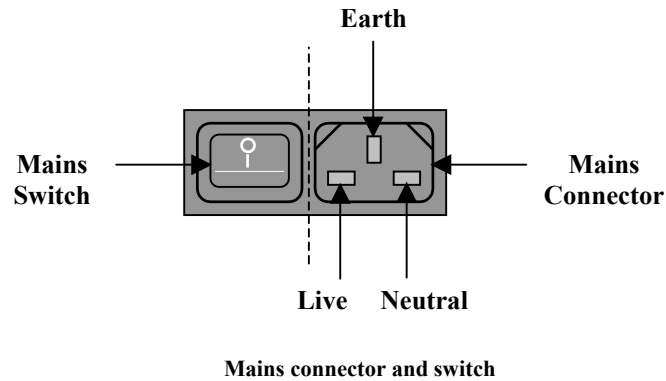
**safety warnings**

It is important that your equipment is earthed at all times via its own mains lead. Failure to do this may be hazardous. The power supply components within the units are designed to be operated at lethal voltages and energy levels. Circuit designs that embody these components conform with applicable safety requirements. Precautions must be taken to prevent accidental contact with power-line potentials. Do not connect grounded test equipment.

This unit complies with EN 50081-1 and IEC 801/2

# mains connection

The mains connector of your Choral product is at the back of the unit. Plug the female end (socket) of the mains cable into the power connector of your Choral product, and the male end (plug) of the mains cable into mains wall socket or mains extension socket. The mains connector type will differ slightly for each Choral product. This is due to the highly compact nature of this range requiring differences in chassis metalwork for each product.



# powering up

Press the bottom part of the power switch labelled 'I'.

# powering down

Press the top part of the power switch labelled 'O'.

# outputs on the PRIMA

You need to connect the outputs on the back of your pre-amplifier to a power amplifier in order to drive your loudspeakers. There is a pair of balanced XLR outputs, which will drive a 68Ω load.

## connecting to your power amplifier

1. Use the XLR style output connectors to connect your PRIMA pre-amplifier to the XLR style input connectors of your power amplifier.
2. If you are using the PRE AMP REMOTE, then press the button marked **O/P 1**.
3. If you are using the Chord touch-screen remote control then press the **OUTPUT 1** LCD touch pad, which is on page 3 of the **CHORAL SERIES** device menu.



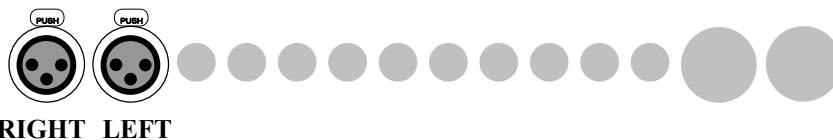
**Main outputs on the PRIMA**

# balanced inputs on the PRIMA

You can connect up to five items of source input equipment, such as CD player, Video, Tuner etc. to the inputs on your pre-amplifier.

## connecting to your source input equipment using balanced connections

1. Use the XLR style input connectors to connect your PRIMA pre-amplifier to the XLR style output connectors of your source input equipment.
2. If you are using the **PRE AMP REMOTE**, then press the button marked **1** that is grouped with main line bus buttons. The main bus buttons are grouped with the button marked **M**.
3. If you are using the Chord touch-screen remote control then press the **MAIN LINE 1** LCD touch pad, which is on page 1 of the **CHORAL SERIES** device menu.

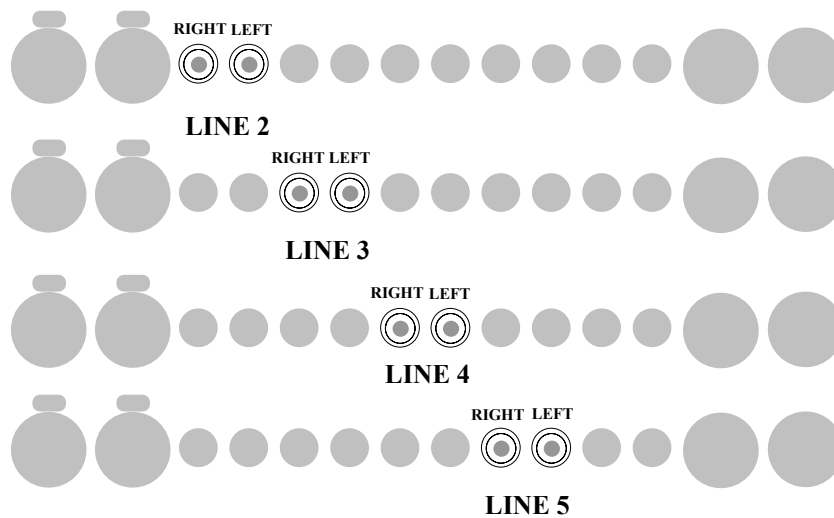


Balanced inputs on the PRIMA – LINE 1

# unbalanced inputs on the PRIMA

## connecting to your source input equipment using unbalanced connections

There are 4 pairs of unbalanced phono input connections on the PRIMA. These are shown in the diagrams below.



### Unbalanced inputs on the PRIMA

1. Use any of the four pairs of phono style input connectors to connect your PRIMA pre-amplifier to the phono style output connectors of your source input equipment.
2. If you are using the PRE-AMP REMOTE, then press the appropriate button marked either: **2**, **3**, **4** or **5** that is grouped with main line bus buttons, depending on the line input connectors that you have used. The main bus buttons are grouped with the button marked **M**.
3. If you are using the Chord touch-screen remote control then press the appropriate LCD touch pad, which are on page 1 of the **CHORAL SERIES** device menu.
  - Use **MAIN LINE 2** for the LINE 2 input connectors.
  - Use **MAIN LINE 3** for the LINE 3 input connectors.
  - Use **MAIN LINE 4** for the LINE 4 input connectors.
  - Use **MAIN LINE 5** for the LINE 5 input connectors.

# tape recording using the PRIMA

You can use the PRIMA to tape record the signal from an input source whilst you are listening to your main signal from another input source through the main outputs.

## connecting to a tape recorder to tape an audio source

use the pair of phono style connectors that are furthest to the right, next to the XLR style output connectors.



## Tape line outputs

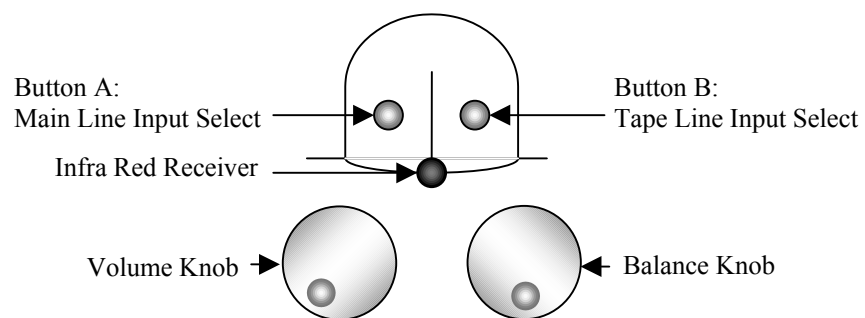
### assigning an input source line to the tape line output

1. If you are using the **PRE AMP REMOTE**, press the corresponding numbered button, for the desired line input. Use the numbered buttons that are grouped with the button marked **T**.
2. If you are using the Chord touch-screen remote control, use the corresponding LCD touch pad that relates to the line input that you are using. These LCD touch pads are found on page 2 of the **CHORAL SERIES** menu and are labelled **TAPE LINE 1**, **TAPE LINE 2**, **TAPE LINE 3**, **TAPE LINE 4** and **TAPE LINE 5**.

# everyday use of the PRIMA

## controls on the PRIMA

The diagram below shows the controls on the PRIMA



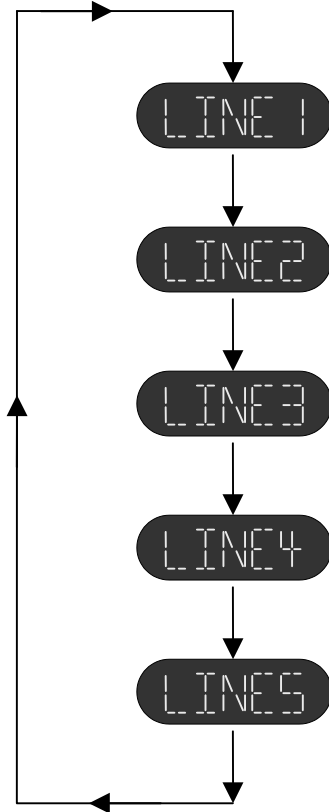
**Controls on the PRIMA**

**assigning an input to the main line outputs**

Your PRIMA uses the main line by default and the display will read:



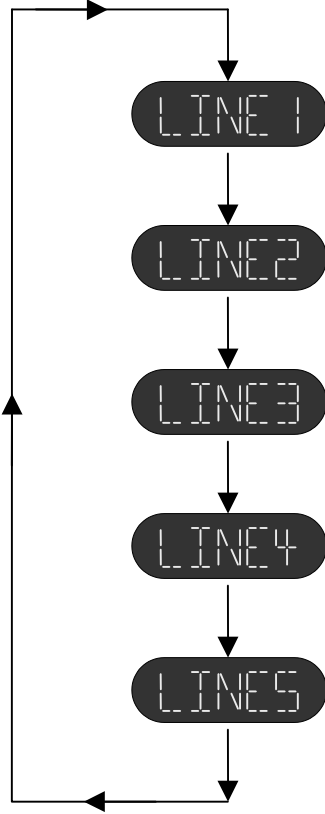
To assign the main output with a particular input signal, press the button A several times to cycle through the 5 line inputs until, the one you wish to use is displayed. The options are shown in the diagram below:



**Cycle of input selection options for the main line outputs**

**assigning an input to the tape line outputs**

To assign the tape line output with a particular input signal, press the button B several times to cycle through the 5 line inputs until, the one you wish to use is displayed. The options are shown in the diagram below:



**Cycle of input selection options for the tape line outputs**

**viewing the settings for the main line**

To view the settings for the main line press and hold button A for two seconds. The first information that is shown is the current gain setting for the input line that is assigned to the main line output. The PRIMA stores the gain setting for each input line. There are six gain settings available in total that can be assigned to each input line and these are shown below. After the gain setting has been shown for a second, the input line that is currently assigned to the main line is displayed.

**viewing the settings for the tape line**

To view the settings for the tape line press and hold button B for two seconds. The first information that is shown is the current gain setting for the input line that is assigned to the tape line output. The PRIMA stores the gain setting for each input line. There are six gain settings available in total that can be assigned to each input line and these are shown below. After the gain setting has been shown for a second, the input line that is currently assigned to the tape line is displayed. When you are viewing the tape line settings, the display will indicate it is the tape line settings you are viewing using the letters 'TP'. The number of the input line that is assigned to the tape line is also shown. The diagrams below show the possible display settings for each input that can be set to the tape line outputs.



**Input lines that can be assigned to the tape line outputs**

**listening to the input assigned to the tape line**

If you wish to listen to the input that you have assigned to the tape line, you must assign the same input to the main line outputs using button A.

**adjusting the volume**

Use the volume knob to adjust the volume manually. A clockwise turn of the knob will increase the volume and an anti-clockwise turn of the knob will decrease the volume. The volume range runs from 0 to 98 and is displayed on the PRIMA as you alter the volume. If the outputs are muted, a volume change will un-mute the outputs to prevent large changes in volume from damaging your loudspeakers. The volume level is shown on the display as the word VOL and a two digit level as shown in the example diagram below.



**Volume display**

**changing the balance**

Use the balance knob to shift the balance between the left and right loudspeaker. A clockwise turn of the knob will shift the balance to the right speaker and an anti-clockwise turn of the knob will shift the balance to the left speaker. The centre of the balance control knob is at the lowest position of rotation, this is for product styling.

# using the PRE-AMP remote control with the PRIMA

Your PRE AMP remote control is a universal controller for all existing Chord pre-amplifiers and integrated amplifiers. For optimum use hold your control flat and point it directly at your integrated/pre amplifier.

## **selecting your input source**

press one buttons marked **1**, **2**, **3**, **4** or **5** of the main line controls as shown on page 18.

## **adjusting the volume**

1. Press the volume control marked ▲ to increase the volume.
2. Press ▼ to decrease the volume. The volume chosen will be shown on the digital display with figures from 0 to 98.

## **changing the balance**

1. Press the balance button marked ► to move the balance towards the right.
2. Press ◀ to move the balance to the left. The direction you are moving the balance towards will be displayed on the digital display.

## **mute**

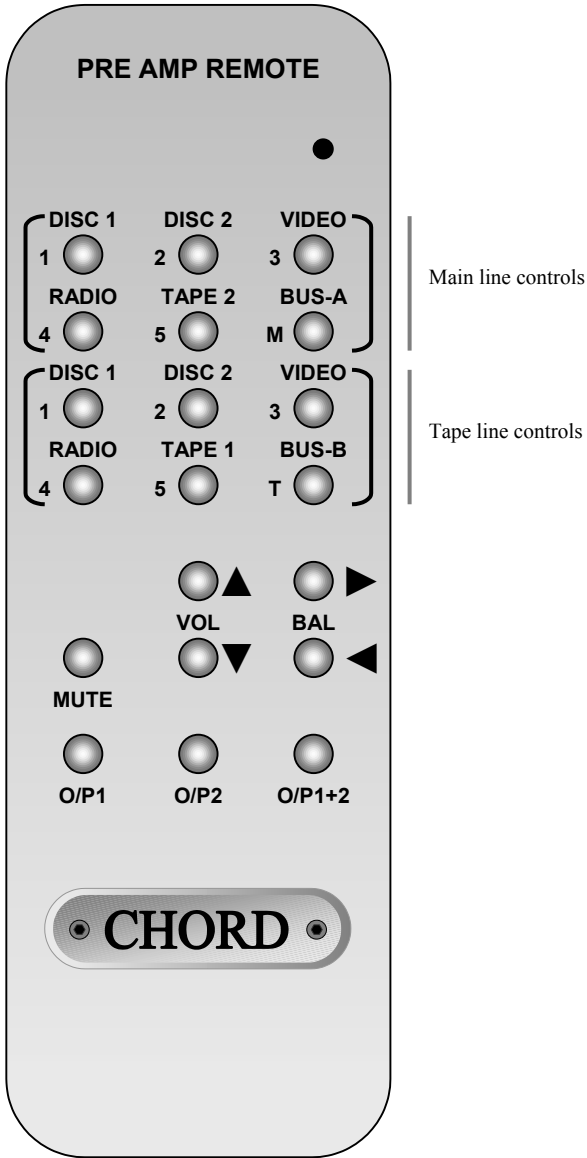
1. Press the button marked **MUTE** to mute the amplifier.

## **to unmute**

1. Press the button marked **MUTE** again to unmute or
2. Press one of the volume buttons marked ▲ or ▼ or
3. Turn the volume knob on your amplifier up or down or
4. Press one of the buttons marked **O/P1** or **O/P1+2**.

## **input gain control**

See page 21



**PRE AMP REMOTE layout diagram**

# using the Chord touch-screen remote control with the PRIMA

The Chord touch screen remote control comes supplied with its own user manual, which describes in full how to use it and how to navigate its menus. The touch screen LCD touch pads allow control over the assignment of input signals to the main line and tape line. Volume, gain adjustment and muting are achieved using the mechanical buttons whilst you are in the menu for the Choral series.

## **entering the Choral series menu of the touch screen remote**

1. To turn on the remote press any of the mechanical buttons
2. Navigate the main menu of the remote by using the large LCD touch pads that show arrows until the **CHORAL SERIES** LCD touch pad is shown.
3. Press the **CHORAL SERIES** LCD touch pad to enter page 1 of the Choral series menu.

## **using the LCD touch pad controls to select an input**

1. Use the large LCD touch pads with arrows on them to change between the pages of the Choral series menu
2. Page 1 of the menu contains controls to assign inputs to the main line. There are five inputs to choose from: **MAIN LINE 1**, **MAIN LINE 2**, **MAIN LINE 3**, **MAIN LINE 4** and **MAIN LINE 5**. Pressing the **MAIN LINE LISTEN** LCD touch pad will allow you to view the settings for the main line.
3. Page 2 of the menu contains controls to assign inputs to the tape line. There are five inputs to choose from: **TAPE LINE 1**, **TAPE LINE 2**, **TAPE LINE 3**, **TAPE LINE 4** and **TAPE LINE 5**. Pressing the **TAPE LINE LISTEN** LCD touch pad will allow you to view the settings for the main line. To actually listen to the input line you are taping, you will need to assign the same input line number to the main line.

## **adjusting the volume**

1. Press the mechanical button marked **VOL+▶** to increase the volume.
2. Press the mechanical button marked **◀VOL-** to decrease the volume. The volume chosen will be shown on the digital display with figures from 0 to 98.

## **changing the balance**

1. Press the mechanical button marked **▲CH+** to move the balance towards the right.
2. Press the mechanical button marked **CH-▼** to move the balance to the left. The direction you are moving the balance towards will be displayed on the digital display.

## **mute**

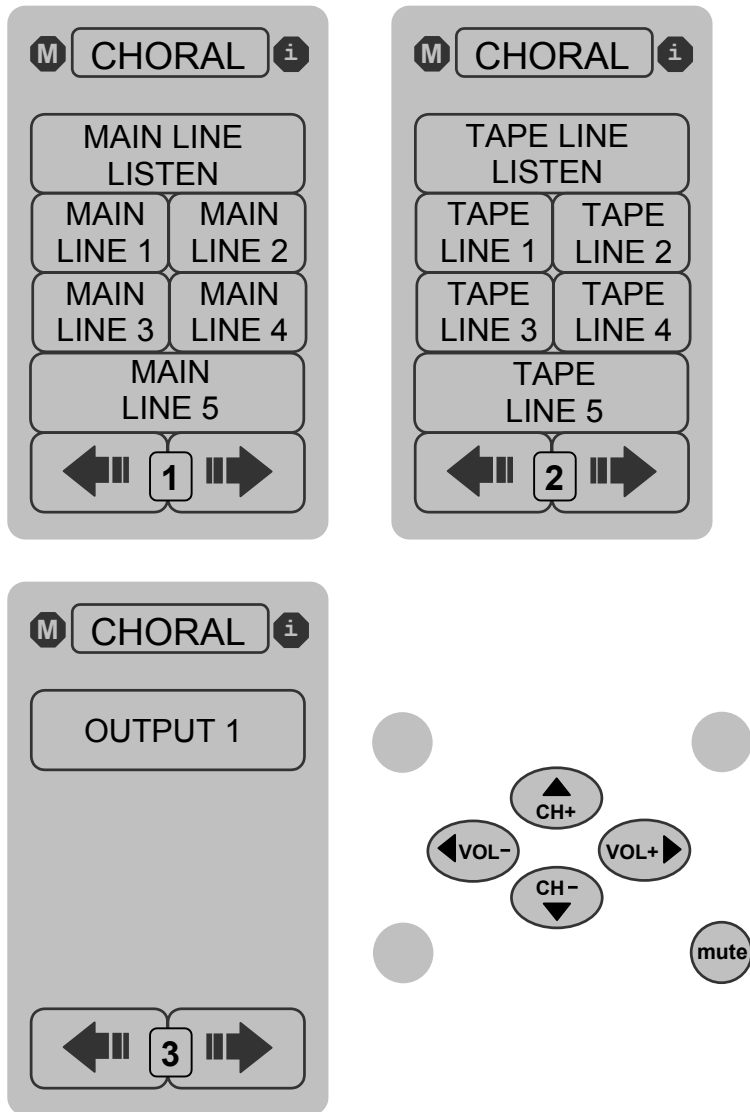
1. Press the mechanical button marked **mute**.

**to unmute**

1. Press **mute** again to unmute or
2. Press the volume mechanical buttons up or down or
3. Turn the volume knob on your amplifier up or down or
4. Press the **OUTPUT 1** LCD touch pad on page 3 of the choral series menu.

Input gain control

See Page 21



**LCD Touch Pads and mechanical buttons in the menu for the PRIMA**

# input gain control on the PRIMA

You can adjust the input gain on your input devices so that you can align the volume levels of your different inputs. There are six settings, which are x0.25, x0.50, x0.75, x1.00, x1.25 and x1.50.

Most modern input devices such as CD players have an unbalanced output voltage of 2V and a balanced output 4V, which does not require any increased gain amplification. In fact, to increase the gain on such an output level can lead to distortion of the signal.

However, older audio equipment may have an output voltage of less than 2V, in which case you may like to adjust the input gain.

## **increasing the input gain of the input assigned to the main line**

1. Press **M** on the pre amp remote followed by the **VOL** button marked **▲** or
2. Press the **MAIN LINE LISTEN** LCD touch pad on the Chord touch screen remote followed by the mechanical button marked **VOL+▶**.
3. Each time you carry out steps 1 or 2, the input gain assignment will be stepped up through the available settings.

## **reducing the input gain of the input assigned to the main line**

1. Press **M** on the pre amp remote followed by the **VOL** button marked **▼** or
2. Press the **MAIN LINE LISTEN** LCD touch pad on the Chord touch screen remote followed by the mechanical button marked **◀VOL-**.
3. Each time you carry out steps 1 or 2, the input gain assignment will be stepped down through the available settings.

## **increasing the input gain of the input assigned to the tape line**

1. Press **T** on the pre amp remote followed by the **VOL** button marked **▲** or
2. Press the **TAPE LINE LISTEN** LCD touch pad on the Chord touch screen remote followed by the mechanical button marked **VOL+▶**.
3. Each time you carry out steps 1 or 2, the input gain assignment will be stepped up through the available settings.

## **reducing the input gain of the input assigned to the tape line**

1. Press **T** on the pre amp remote followed by the **VOL** button marked **▼** or
2. Press the **TAPE LINE LISTEN** LCD touch pad on the Chord touch screen remote followed by the mechanical button marked **◀VOL-**.
3. Each time you carry out steps 1 or 2, the input gain assignment will be stepped down through the available settings.

**gain settings**

Once you have adjusted the gain setting on an input device your amplifier will remember the setting, even if it is switched off for many months. The six available gain settings are shown below as they are displayed on the PRIMA.



**Gain settings as displayed**

# maintenance of the PRIMA

## **adjusting the settings**

Always remember to make any changes to settings with the volume set low or an instant burst of sound could damage your loudspeakers

## **cleaning**

To clean finger marks and other blemishes from your amplifier spray clear glass cleaner onto a soft lint free cloth and then use the cloth to gently clean your amplifier.

## **changing the batteries in the PRE AMP REMOTE**

Simply undo the four small cross head screws on the side of your remote control. You may need to run a sharp knife along the join to remove the battery casing, then replace with four new AAA batteries as shown inside the battery compartment.

## **servicing**

There are no user serviceable parts in your Chord amplifier, and it should only be serviced by Chord Electronics Limited or their expressly approved Service Agents.

# frequently asked questions about the PRIMA

## **I've connected all the wires up but I can't hear any sound?**

Ensure that you've selected the correct input line for your connections.

## **why is there no display when I've turned the amplifier back on?**

You need to wait for two minutes after switching the unit off before switching it on again.

## **why is there humming coming from the loudspeakers?**

Check that you've earthed the unit. The interconnects need to be properly screened and placed away from mains cables. Using balanced inputs and outputs instead of RCA phono types can reduce interference.

## **the sound coming from the loudspeakers is distorted**

Check that the speakers are connected properly. It may be that the volume is turned up too high for your speakers or that you have set the gain for the input device too high.

Note:- if you are using the Chord DAC 64 converter always set the gain to 0.5

## **the amplifier was in standby mode and has turned itself off**

Changing connections while the amplifier is on, for example, dropping the stylus onto a record can cause the unit to shutdown. Check that the speaker cables have no stray inner core wires touching each other and bridging across speaker terminals, as this can cause a short circuit.