

# welcome

Thank you for buying a Chord product.

Before you start to enjoy using to your Chord product, please take a couple of minutes to read how to connect your audio equipment and loudspeakers to your pre-amplifier or integrated amplifier and how to maximize your listening experience.

## user guide for

# Digital integrated amplifier

CPM 2800

The Chord CPM 2800 digital integrated amplifier is a further advancement in our range of successful integrated products. The CPM2800 includes additional digital functionality so direct and wireless connection of both digital and analogue source components can be accommodated. Based on our advanced amplifier and preamplifier technologies the CPM2800 is enhanced with a coax, optical and USB digital connection and our unique digital bluetooth wireless system.



# background

We want you to be confident using your new Chord amplifier.

You're 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're a little rusty.

## connecting your equipment

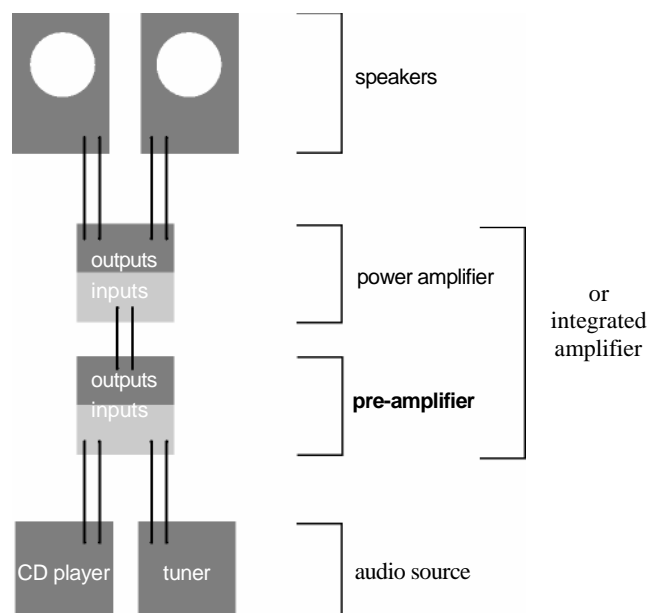
Chord amplifiers are supplied with and designed to be connected using balanced inputs. The interconnecting cables you use will depend on the available input and output sockets on your other equipment. We have installed unbalanced inputs on all Chord equipment, thus enabling you to mix Chord and other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



# when setting up

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

## **ventilation**

Your Chord integrated amplifier should have at least 5cm of clear space all around it to ensure a free flow of air at all times. When driven continuously at well above average levels, the temperature at the back of the unit may exceed 50°C. This is normal and no cause for concern, although it does highlight the need for adequate ventilation around the unit. We recommend that you do not place your integrated amplifier directly on a carpet.

## **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 integrated/pre-amplifier is connected to mains sockets that do not have an earth. If this is the case please ensure that:

1. Your integrated/pre-amplifier 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. Use the connecting points on your Chord unit and connect to an available earth point.
3. We recommend that an earthing method for your building is implemented.

## **safety warnings**

It is important that your integrated/pre-amplifier is earthed at all times via its own mains lead. Failure to do this may be hazardous. The power supply components within the amplifier 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.

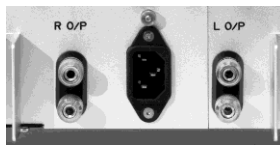
These units comply with EN 5008 1-1 and IEC 80 1/2

# outputs on the CPM 2800

You need to connect the outputs on the back of your integrated amplifier to your loudspeakers. You can use any speakers that match the output power of your amplifier. Note that the lower the impedance of your speakers the higher the output power.

## connecting to your loudspeakers

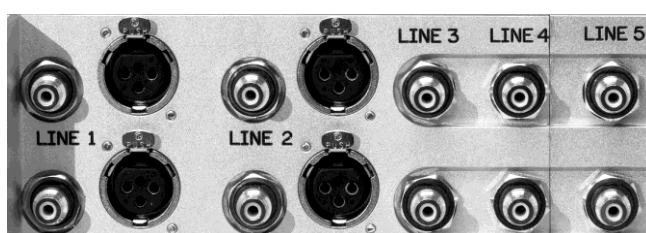
1. The loudspeaker connections are via four heavy duty gold plated binding posts marked L/OP and R/OP and these should be connected to your speakers.
2. On your remote control press HIFI and then OP 1 to output the signal to your loudspeakers or press the S button on the front panel until PRE is displayed.



# Analogue inputs on the CPM 2800

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

## connecting an analogue source



1. Use either XLR or RCA connectors to the left and right pairs marked Line 1 or Line 2.
2. Connect RCA cables to the source inputs labeled Line 3 to Line 5.

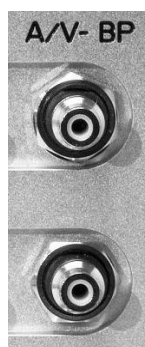
# Digital inputs on the CPM 2800

You can connect digital source components to the coax BNC input and the Optical TosLink input. There is also a USB input for connection to a computer. The USB software will automatically install and the sound settings should change to use the USB Audio device so you can stream music directly from your computer.



# AV Bypass input on the CPM 2800

There are a pair of RCA inputs marked AV-BP specifically for the AV Bypass connection. These inputs can be used to connect directly to an AV processor and pass the signal directly to the amplifier section so that the volume function is bypassed. To switch on AV Bypass mode press the S button or OP 2 on the remote until AV BP is displayed.



**Please note there is no volume control on the AV Bypass input so do not connect anything other than an AV Processor with it's own volume control to this input.**

# everyday use

## **turning on your integrated amplifier**

1. When you plug your amplifier into the mains using the supplied mains lead the power indicator on the front panel will glow red which means that the amplifier is in standby mode.
2. Press the power button beneath the power indicator and after a few seconds it will glow green indicating that the amplifier is ready for use.

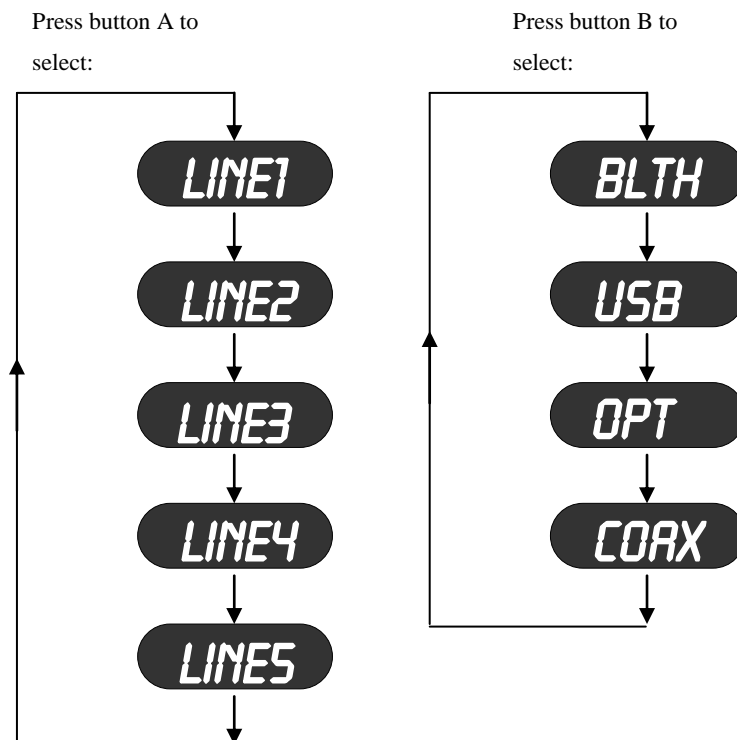
## **automatic shutdown**

1. If there is a major overload or short circuit the integrated amplifier will detect this and shut down automatically and the power indicator will fade and switch to red. The integrated amplifier should then be switched off immediately at the mains.
2. When the fault has been rectified the integrated amplifier can be switched on and will power up as usual. You should wait at least two minutes before turning the integrated amplifier on again at the mains to allow the power supply protection circuitry to reset itself.

### select your input source

Your digital integrated amplifier can select either analogue inputs or digital inputs.

To scroll through the input sources press button A for analogue inputs. Press button B to digital inputs.



### adjusting the volume

Use the volume knob to adjust the volume manually.

### changing the balance

Use the balance knob to shift the balance between the left and right loudspeaker.

### Using the Bluetooth Input

Select the Bluetooth (BLTH) input and then referring to your mobile phone (or Bluetooth device) instructions, search for new paired devices. The CPM2800 will be identified as CPM2800 then a number. Select your CPM2800 and enter the passcode when prompted by your phone (**the passcode is set to "0000"**) Confirm that you wish to connect to the CPM2800 device.

The CPM2800 should now be locked to your phone, and able to receive high quality digital audio.

If you lose connection, for instance if the CPM2800 is switched off or you change inputs, then you can reconnect by looking at the list of paired devices on the phone and selecting connect.

The CPM2800 bluetooth receiver will automatically disconnect when not using the bluetooth.



# using the remote control

The Stealth Remote control is a universal controller for all Chord products.

This can provide a totally integrated audio solution. For full information please consult the additional remote control manual provided.

For optimum use hold your remote control flat and point it directly at your digital integrated amplifier.



**selecting your input source**

1. Press HIFI.
2. Press one of: Line 1, Line 2, Line 3, Line 4 Line 5 for the analogue inputs.
3. Press one of: TP-01, TP-02, TP-03, TP-04 for the digital inputs.

**adjusting the volume**

1. Press the button marked Vol + to increase the volume.
2. Press Vol - to decrease the volume. The volume chosen will be displayed on the digital display with figures from 0 to 98.

**choosing your output**

1. Press OP 1 for the main preamplifier output ( PRE is displayed )
2. Press OP 2 if you are using AV Bypass input ( AV BY is displayed )

**changing the balance**

1. Press the balance button marked Bal + to move the balance to the right.
2. Press Bal - 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 Mute to mute the amplifier.

**to unmute**

1. Press Mute again to unmute or
2. Press the volume buttons up or down or
3. Turn the volume knob on your amplifier up or down.

# maintenance

## **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.

## **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

## **why aren't any of the remote control buttons working?**

Press HIFI to set up the remote control for pre-amplifier functions.

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

Ensure that you've selected the correct input (eg Line 1) and the correct output (eg Output 1).

## **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. Interference can be reduced by using balanced inputs and outputs instead of RCA phono types.

## **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 as this can cause a short circuit.

## Product Specifications

### Pre-Amp Section

Unbalanced Inputs:	Line 3, Line 4, Line 5
Balanced Inputs:	Line 1, Line 2 are 3-pin female XLR inputs both with RCA Phono style input sockets wired asymmetrically in parallel
Digital Inputs:	Coax BNC, TOSLink Optical, B type USB
Wireless Input:	Bluetooth A2DP
AV Bypass:	2 x RCA Phono style inputs
Intermodulation Distortion:	-100dB all inputs
Signal to Noise Ratio:	-93dB all inputs
Frequency Range:	2.5Hz – 200kHz (-3dB)
Harmonic Distortion:	10 Hz –91dB, 1kHz –93dB, 10kHz –90dB, 20kHz –87dB
Channel Separation:	10 Hz 90dB, 1kHz 90dB, 10kHz 90dB, 20kHz 85dB
Channel Balance:	0.01dB
Input impedance:	Unbalanced 47kOhms, Balanced 94kOhms (Line 1 & Line 2)

### Power Amp Section

Output Power:	120W rms per channel @ 0.05% distortion into 8 Ohms 170W rms per channel into 4 Ohms
Dynamic Headroom:	180W rms per channel into 8 Ohms 220W rms per channel into 4 Ohms
Frequency Response:	-1dB, 0.8Hz to 46kHz (8 Ohms) -3dB, 0.8Hz to 77kHz (8 Ohms) -1dB, 0.8Hz to 39kHz (4 Ohms) -3dB, 0.8Hz to 75kHz (4 Ohms)
Signal To Noise Ratio:	Better than –103dB, 'A' weighted two thirds
Channel Separation:	-80dB
Output Impedance:	0.03 Ohms
Output Inductance:	2.6mH
Output Connections:	2 x rhodium binding posts
Slew rate:	70V per $\mu$ S, 1kHz 20V square wave
Gain:	23dB
Stability:	Unconditional
Dimensions:	420mm (w) x 355mm (d) x 133mm (h)
Weight:	16Kg

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