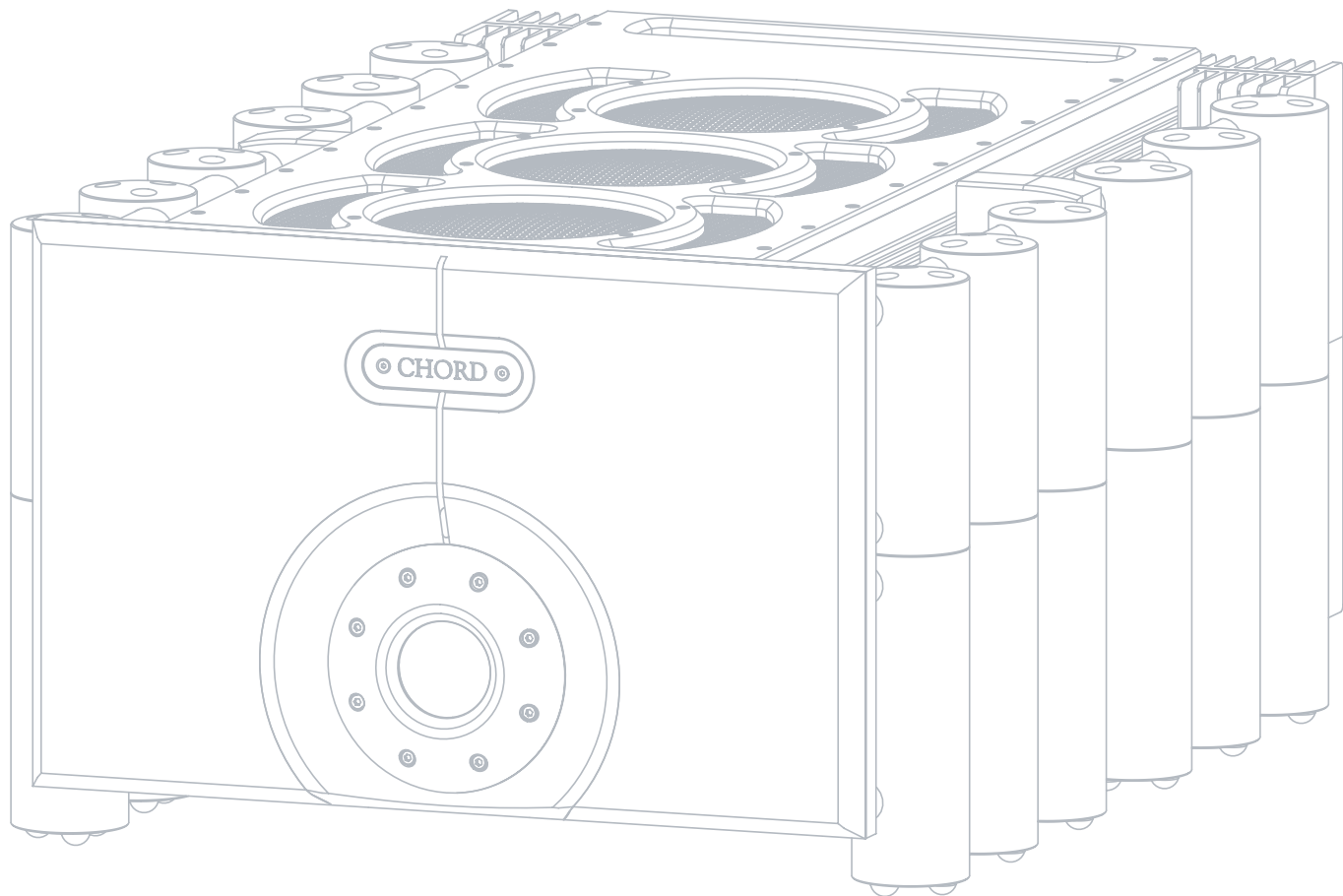


ULTIMA

Manual

V.1.0





Chord Electronics Ltd.

THIS IS PURE AUDIO

Contents

0.0

1.0 Safety instructions	07	2.0 Warranty	13	3.0 Getting to know ULTIMA	17	4.0 Setting up ULTIMA	23
1.1 Introduction	08	2.1 Warranty period & registering your purchase	14	3.1 Getting to know ULTIMA	18	4.1 Placement	24
1.2 Protection against liquids & heat	09	2.2 Making a claim & warranty exclusions	15	3.2 The front panel	19	4.2 Connecting ULTIMA to ancillary equipment	25
1.3 Dismantling & Radio frequency interference	10			3.3 The top panel	20	4.3 Audio inputs	26
1.4 Connecting your equipment	11			3.4 The rear panel	21	4.4 Audio outputs	27
						4.5 Power-on sequence and 12V trigger	28
						4.6 Earthing issues in Europe	29

0.0

Contents

Safety instructions

1.0

- 1.1 Introduction
- 1.2 Protection against liquids & heat
- 1.3 Dismantling & Radio Frequency interference
- 1.4 Connecting your equipment

1.0

Safety instructions

Introduction

1.1



ULTIMA is the cornerstone of Chord Electronics' amplification, standing as our ultimate reference amplification - beaten by none.

Before operation, we strongly advise that you read this user manual thoroughly, storing it in a safe place along with your original receipt of purchase, in case you should require assistance in the future.



 *Made in* **BRITAIN**

Protection against liquids & heat

1.2



The ULTIMA is not protected against liquids of any kind. Never place containers of liquid on ULTIMA. Never allow ULTIMA to come into contact with moisture or liquids; doing so could result in electrocution or damage to the ULTIMA internal circuitry.

Be aware that liquids, including water that has dried, can leave minerals that can affect the PCB and other components, which could eventually lead to oxidisation and short-circuiting.

If the ULTIMA comes into contact with moisture or liquids, immediately disconnect from the mains power supply, and connected equipment, and contact Chord Electronics for further advice.



The ULTIMA has internal thermal protection that will cut the power supply if reached.

Never operate the ULTIMA near sources of heat or naked flames as this will decrease the lifespan of the internal components. It is advised that you do not operate the ULTIMA in an area of direct sunlight or on top of significant heat-producing devices.

Please be aware that it is entirely normal for the ULTIMA to become warm during use, particularly within a stacked configuration. If you are concerned about the temperatures, please switch the device off and consider a different placement.

Dismantling & radio frequency interference

1.3



There are no user-serviceable components within the ULTIMA or its power supply. Dangerous voltages/currents exist within the ULTIMA and its power supply, posing a severe risk of electrocution and/or fire.



Never attempt to open, dismantle or apply internal third-party devices to it or insert anything other than the listed interconnects or speaker cables within this user manual.

If the ULTIMA develops a fault or the casework becomes damaged, immediately disconnect from the mains power supply and connected equipment and contact Chord Electronics for further advice.

With a thick, solid aluminium chassis, the ULTIMA's casework largely protects the sensitive internal circuitry from radio frequency interference. However, for optimal performance, it is recommended that the following points are observed:



1. Consider placing the ULTIMA away from wireless routers.



2. Separate the ULTIMA from amplifiers using toroidal transformers.



3. Operate mobile phones at a distance to avoid interference.



Although the ULTIMA is largely shielded, it can generate radio frequency interference that may have an effect on radio and television reception. If this occurs, please reconsider your placement.

Connecting your equipment

1.4

Before connecting the ULTIMA to any equipment, consult the manufacturer's user guide to confirm compatibility.

When connecting the ULTIMA to any equipment, make sure that all devices are off, including the ULTIMA. Once connected, switch all equipment on starting with the source and ending with the amplification. Initially, operate the ULTIMA with your preamp/device on its lowest gain setting and lowest volume setting, gently increasing to a comfortable listening level. Never operate the ULTIMA at excessive sound levels; permanent hearing damage and loss can occur.

ULTIMA is supplied with its own grounded 16A-rated mains IEC cable and it is important that the amplifier is earthed at all times via this cable, or an appropriate alternative. Failure to do this could be hazardous in the unlikely event of a fault.

The supplied region-specific 16A mains IEC cable can be substituted for an alternative power cable, however, please make sure that it has an earth. If any cable becomes damaged you must discontinue use and replace it immediately to avoid the risk of electrocution.

ULTIMA must be permanently connected to a source of power. The included mains lead simply plugs into the ULTIMA IEC mains socket. If the mains lead is prematurely disconnected ULTIMA may still hold charge for up to 15 minutes.



WARNING: Never disconnect the power cable during operation. Only disconnect when ULTIMA is off. If the power cable is disconnected during operation there is a risk of damage to connected equipment.



Warranty

2.0

- 2.1 Warranty period & registering your purchase
- 2.2 Making a claim & warranty exclusions

2.0 *Warranty*

Warranty period & registering your purchase

2.1

At point of sale, Chord Electronics Ltd. provides the ULTIMA with a comprehensive five-year warranty* which covers defects in materials and workmanship through fair wear and tear.

*The warranty is transferable with proof of purchase, however is not available on ex-demonstration products.



Please use the form below to record the details of your purchase in the event that these are required at a later date, we further advise that all purchases are registered with Chord Electronics at: chordelectronics.co.uk/register-product/

RETAILER:	
UNIT COLOUR:	
DATE OF PURCHASE:	
TRANSACTION ID:	

Making a claim & warranty exclusions

2.2

In the unlikely event of a claim, you must provide Chord Electronics with the details of the claim, including your original proof of purchase and serial number in order to validate the nature of the repair.

Upon receipt, Chord Electronics will make an assessment within 30 days and provide a reasonable solution.

All warranty repairs must be carried out by Chord Electronics or an approved service centre to guarantee the quality and safety of the repair.

WARRANTY EXCLUSIONS: The warranty does not cover connected equipment, personal injury or development natural patina of the metalwork and will be null and void if the following is applied: wilful neglect; modification or tampering of the product; improper use of the product; acts of God; damage caused by a connected device; mechanical shock; fire or application of excessive heat or repair/modification by a non-authorized third-party vendor.

Getting to know ULTIMA

3.0

3.1 Getting to know ULTIMA

3.2 The front panel

3.3 The top panel

3.4 The rear panel

3.0

Getting to know Ultima

Getting to know ULTIMA

3.1


ULTIMA is our absolute reference amplifier which uses a brand new analogue topology, Chord Electronics' first all-new design since its inception. Before operation, we strongly advise you read this user manual thoroughly, storing it in a safe place along with your original receipt of purchase, should you require assistance in the future.



The front panel

3.2

With only two buttons, everyday operation of ULTIMA is simple and you can tailor the brightness of the feature lighting to suit the ambience of your listening room.


 **WARNING:** You must keep all vents clear.

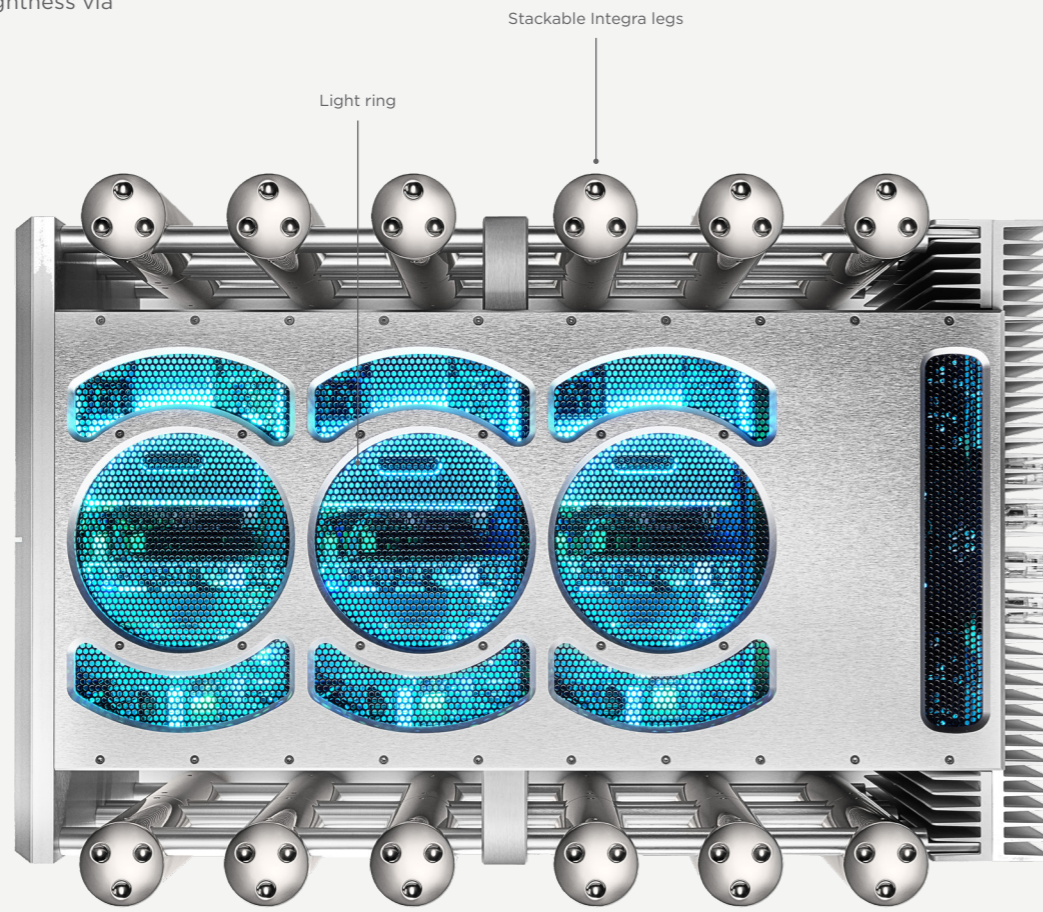


The top panel

3.3

The top panel has no user configurable options. Instead, three teal feature light rings illuminate. If you find that these rings are too bright for your listening room you can control the brightness via the front panel.


 **WARNING:** You must keep all vents clear.

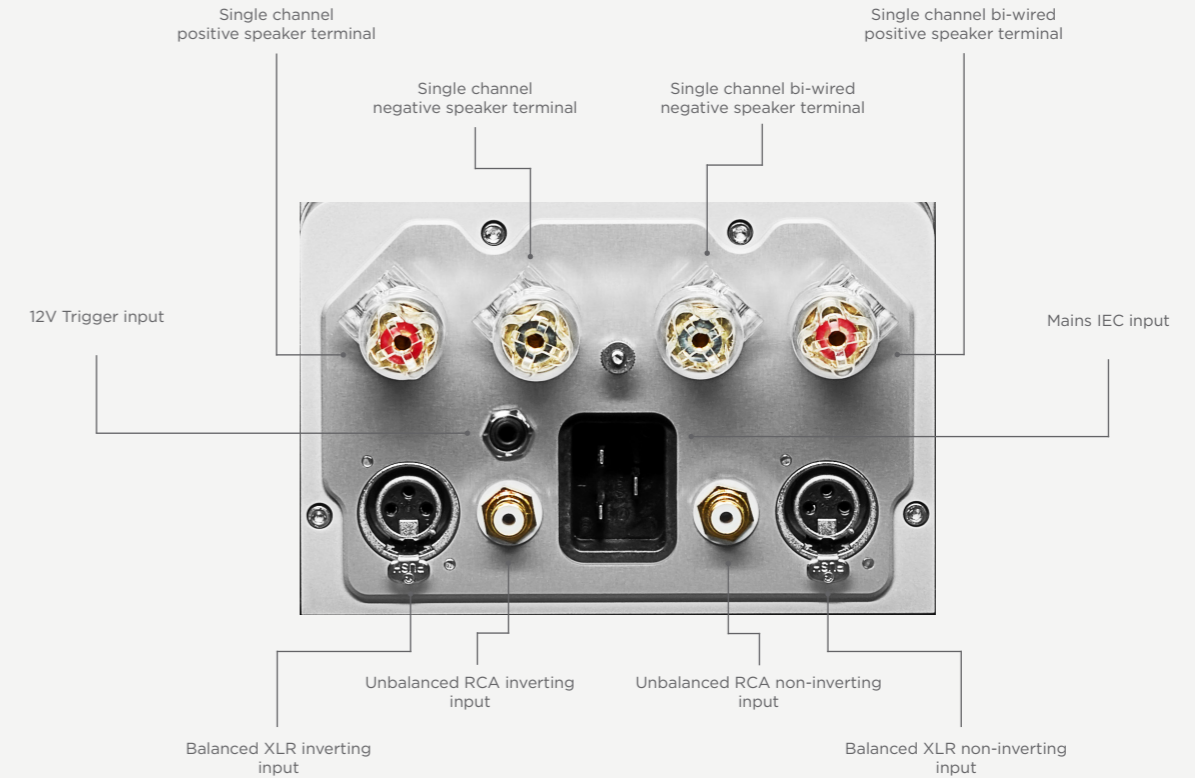


The rear panel

3.4

Despite being a mono amplifier, ULTIMA offers a comprehensive suite of connectivity to suit the system that you intend to pair it with.

 **WARNING:** You must keep all vents clear.



Setting up ULTIMA

4.0

- 4.1 Placement
- 4.2 Connecting ULTIMA to ancillary equipment
- 4.3 Audio inputs
- 4.4 Audio outputs
- 4.5 Power-on sequence and 12V trigger
- 4.6 Earthing issues in Europe

4.0

Setting up ULTIMA

Placement

4.1

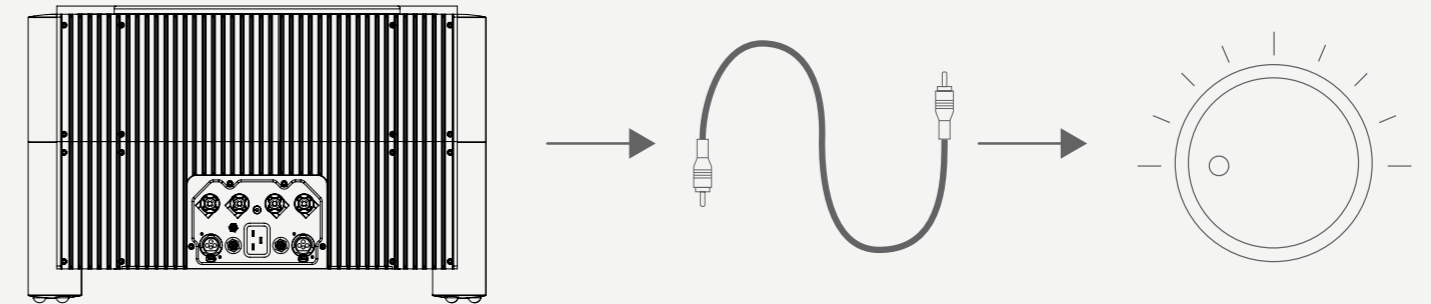
Whilst ULTIMA will operate normally within a Chord Electronics Reference configuration stacked via the Integra legs, it is recommended that ULTIMA is allowed to 'breathe' with 10cm of space around it to convection-cool during operation.



Connecting ULTIMA to ancillary equipment

4.2

When connecting the ULTIMA to equipment within the signal path, ensure all devices are switched off. It is recommended that once all equipment is properly connected, that the volume setting is operated to its lowest setting, before slowly being raised to a comfortable listening level. Always observe partnering manufacturers' guidelines.

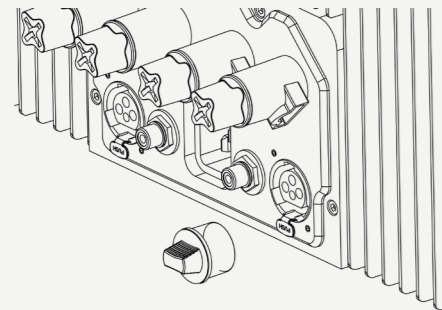


Audio inputs

4.3

ULTIMA is equipped with both inverted and non-inverted balanced XLR inputs as well as inverted and non-inverted unbalanced RCA inputs. ULTIMA has no ability to switch between the inputs therefore, only one must be used.

Inversion relates to the phase of the incoming signal. During normal operation for Chord Electronics products, the use of the inverted inputs is advised, however, you may select non-inverting if desired by removing the cap covering the XLR input. If you remove the cap please take great care to connect both amplifiers with the same inversion to avoid an out-of-phase configuration.



WARNING: ULTIMA must be connected to a dedicated preamplifier, or a device capable of attenuating its output. Failure to attenuate the volume before it enters ULTIMA could result in irreversible hearing damage, speaker damage and could void the warranty.



Balanced XLR inverting input

Balanced XLR non-inverting input

Unbalanced RCA inverting input

Unbalanced RCA non-inverting input

Audio outputs

4.4

As ULTIMA is a mono amplifier, it only supports a single speaker output, however, it has four speaker terminals. Both positive speaker terminals originate from the same source, as does the negative speaker terminals. Do use the additional two positive and negative terminals if you wish to bi-wire your speakers.

In order to connect ULTIMA to loudspeakers, use high-quality loudspeaker cable terminated with 4mm banana plugs or 6mm spades. Bare wire can be used, but it is not recommended.

Connect the black (negative) terminal from ULTIMA to the negative terminal on your loudspeaker and the red (positive) terminal from ULTIMA to the red positive terminal on your loudspeaker. Repeat if you wish to bi-wire the same speaker.



Single channel positive speaker terminal

Single channel negative speaker terminal

Single channel bi-wired negative speaker terminal

Single channel bi-wired positive speaker terminal

Power-on sequence and 12V trigger

4.5



POWER-ON SEQUENCE:

During normal operation, when ULTIMA is in standby mode the large power button on the front panel will illuminate an red colour. To power-on ULTIMA press the large power button once until you feel a click. ULTIMA's power button will now change to a green colour whilst it begins its initial safety checks.

During this phase do not increase the gain on the input device as you cannot determine its final amplified volume which can damage the connected speakers.

Once the amplifier has passed the safety check and is operational, after approximately ten seconds, the amplifier will display a teal colour.

12V Trigger: A 12V trigger can be used to remotely turn ULTIMA on or off. Please refer to the below diagram to correctly wire your 12V trigger.

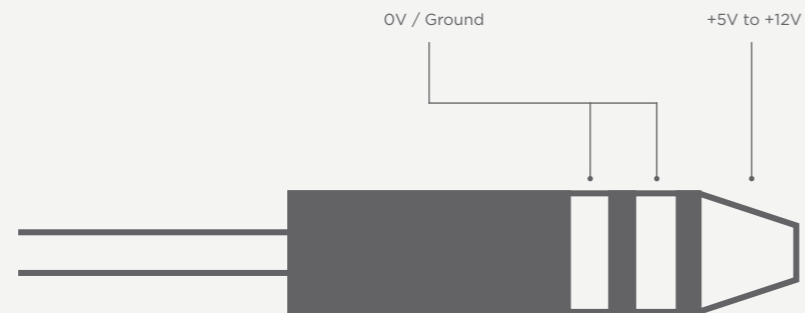
When a 12V trigger is sensed by ULTIMA the colours displayed on power button will be different.

During standby the large power button on the front panel will illuminate an orange colour, however just like the power sequence without the 12V trigger a green colour will be displayed once you switch the unit on and it performs its safety checks. You should still not increase the gain on the input device.

Once the amplifier becomes operational the power button will display a continuous purple glow.



WARNING: In the rare event that a fault is detected the amplifier will switch itself off. If this occurs discontinue use immediately and seek help from your Chord Electronic's retailer.



Earthing issues in Europe

4.6



In some European countries, a hum or buzz may occur if the amplifier is connected to mains sockets that do not have an earth or adequate earth. If this occurs, please ensure that your equipment is connected via a good-quality multi-way mains block which contains an earth point at every socket outlet.

We recommend that an earthing method for your building is implemented.



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