

# CXU UNIVERSAL DISC PLAYER





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# Important safety instructions

For your own safety please read the following important safety instructions carefully before attempting to connect this unit to the mains power supply. They will also enable you to get the best performance from and prolong the life of the unit:

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with a dry cloth.
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 13. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as the powersupply cord or plug having been damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE AND OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHOULD NOT BE PLACED ON THIS APPARATUS.

Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.

TO COMPLETELY DISCONNECT THIS APPARATUS FROM THE AC MAINS, DISCONNECT THE POWER SUPPLY CORD PLUG FROM THE AC RECEPTACLE. POUR DECONNECTER COMPLETEMENT L'APPAREIL DU RESEAU D'ALIMENTATION, DECONNECTER LE CORDON D'ALIMENTATION DE LA PRISE MURALE.

THE MAINS PLUG OF THE POWER SUPPLY CORD SHALL REMAIN READILY ACCESSIBLE. LA PRISE DU RESEAU D'ALIMENTATION DOIT DEMEURER AISEMENT ACCESSIBLE"

Only use the mains cord supplied with this unit.



This product utilises a Laser. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure. Do not open covers and do not repair yourself. Refer servicing to qualified personnel.

CAUTION CLASS SR VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. WOOD DIRECT FOR EXPOSURE.

VORSICHT MASSES SI SCHORTINGE LIND UNSCHITTINGE LEGESTRAHLING WENN NACHS STREET FOR STANDARD STAND

This label is located on the laser protective housing inside the product.



CAUTION Risk of electric shock. ATTENTION
Risque de choc electrique.

ACHTUNG

Vorm öffnen
des gerätes.
Vetzstecker ziehen.



The lightning flash with the arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of un-insulated 'dangerous voltage' within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the service literature relevant to this appliance.



The symbol on this product indicates that it is of CLASS II (double insulated) construction.



# WEEE symbol

The crossed-out wheeled bin is the European Union symbol for indicating separate collection for electrical and electronic equipment. This product contains electrical and electronic equipment which should be reused recycled or recovered and

equipment which should be reused, recycled or recovered and should not be disposed of with unsorted regular waste. Please return the unit or contact the authorised dealer from whom you purchased this product for more information.

# CE mark This product

This product complies with European Low Voltage (2006/95/EC), Electromagnetic Compatibility (2004/108/EC) and Environmentally-friendly design of Energy-related Products (2009/125/EC) Directives when used and installed according to this instruction manual. For continued compliance only Cambridge Audio accessories should be used with this product and servicing must be referred to qualified service personnel.



# RCM (Regulatory Compliance Mark)

This product meets the Safety, EMC and Radio Communications requirements of the ERAC and ACMA.

# FAI

# **CU-TR Mark**

This product meets Russia, Byelorussia and Kazakhstan electronic safety approvals.

# Ventilation

Important – The unit will become hot when in use. Do not stack multiple units on top of each other. Do not place in an enclosed area such as a bookcase or in a cabinet without sufficient ventilation.

Ensure that small objects do not fall through any ventilation grille. If this happens, switch off immediately, disconnect from the mains supply and contact your dealer for advice.

Please ensure there is ample ventilation (at least 20cm clearance on the top, side and rear). Do not put any objects on top of this unit. Do not situate it on a rug or other soft surface and do not obstruct any air inlets or outlet grilles. Do not cover the ventilation grilles with items such as newspapers, tablecloths, curtains, etc.

# Positioning

Choose the installation location carefully. Avoid placing it in direct sunlight or close to a source of heat. No naked flame sources, such as lighted candles, should be placed on the unit. Also avoid locations subject to vibration and excessive dust, cold or moisture. The unit can be used in a moderate climate.

This unit must be installed on a sturdy, level surface. Do not place in a sealed area such as a bookcase or in a cabinet. Do not place the unit on an unstable surface or shelf. The unit may fall, causing serious injury to a child or adult as well as serious damage to the product. Do not place other equipment on top of the unit.

Due to stray magnetic fields, turntables or CRT TVs should not be located nearby due to possible interference.

Electronic audio components have a running in period of around a week (if used several hours per day). This will allow the new components to settle down and the sonic properties will improve over this time.

# Power sources

The unit should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power-supply to your home, consult your product dealer or local power company.

This unit can be left in Standby mode when not in use and will draw <0.5W in this state. To turn the unit off, unplug it from the mains socket.



# Overloading

Do not overload wall outlets or extension cords as this can result in a risk of fire or electric shock. Overloaded AC outlets, extension cords, frayed power cords, damaged or cracked wire insulation and broken plugs are dangerous. They may result in a shock or fire hazard.

Be sure to insert each power cord securely. To prevent hum and noise, do not bundle the interconnect leads with the power cord or speaker leads.

# Cleaning

To clean the unit, wipe its case with a dry, lint-free cloth. Do not use any cleaning fluids containing alcohol, ammonia or abrasives. Do not spray an aerosol at or near the unit.

# Battery disposal

Please dispose of any discharged batteries according to local environmental/electronic waste disposal guidelines.

# Connections

Before making any connections, make sure all power is turned off and only use suitable interconnects.

# Servicing

These units are not user serviceable. Never attempt to repair, disassemble or reconstruct the unit if there seems to be a problem. A serious electric shock could result if this precautionary measure is ignored. In the event of a problem or failure, please contact your dealer.

# Wi-Fi information

# **FCC Statement**

DECLARATION OF CONFORMITY WITH FCC RULES FOR ELECTROMAGNETIC COMPATIBILITY

We, Cambridge Audio, of Gallery Court, Hankey Place, London SE1 4BB, declare under our sole responsibility that this device,

CXU with Wi-Fi module

to which this declaration relates, complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Caution: Exposure to Radio Frequency Radiation.

The device shall be used in such a manner that the potential for human contact during normal operation is minimized.

When connecting an external antenna to the device, the antenna shall be placed in such a manner to minimize the potential for human contact during normal operation. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

# **Federal Communications Commission Notice**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- · Increase the distance between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

# **IMPORTANT Note:**

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter

2 .4GHz operation of this product in the USA is firmware-limited to channels 1 through 11.

# Modifications

The FCC requires the user to be notified that any changes or modifications to this device that are not expressly approved by Cambridge Audio, may void the user's authority to operate the equipment.

# Canada-Industry Canada (IC)

IC number: 9095A-752BD004

This radio transmitter model number WD752-BD-N has been approved by Industry Canada.

This Class B digital apparatus complies with Canadian standard ICES-003. This device complies with Industry Canada License exempt RSS standard(s). Operation is subject to the following two conditions.

(1) this device may not cause interference and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

# **IMPORTANT NOTE:**

# IC Radiation Exposure Statement

This equipment complies with RSS-102 limits set fourth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator and your body.

The transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

# Industrie Canada (IC)

Nombre IC: 9095A-752BD004

Cet émetteur radiophonique numéro de modèle WD752-BD-N a été approuvé par Industrie Canada.

Cet appareil numérique de Classe B est conforme à la norme canadienne ICES-003. Cet appareil est conforme aux normes RSS exemptes de licence d'Industrie Canada. Son fonctionnement est soumis aux deux conditions suivantes :

(1) cet appareil ne doit pas provoquer d'interférence nuisible et (2) cet appareil doit accepter toute interférence reçue, y compris les interférences pouvant provoquer un fonctionnement indésirable.

# **NOTE IMPORTANTE:**

IC Déclaration sur la radioexposition

Cet équipement est conforme aux limites RSS-102 préconisées pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à une distance minimale de 20 cm entre le radiateur et votre corps.

L'émetteur ne doit pas être co-placé ni fonctionner en conjonction avec une autre antenne ou transmetteur.



# Europe-European Union Notice

Radio products with the CE alert marking comply with the R&TTE Directive (1995/5/EC) issued by the Commission of the European Community.

Compliance with this directive implies conformity to the following European Norms.

- EN 60950-1 Product Safety.
- EN 300 328 Technical requirement for radio equipment.
- EN 301 489 General EMC requirements for radio equipment.

# Limited warranty

Cambridge Audio warrants this product to be free from defects in materials and workmanship (subject to the terms set forth below). Cambridge Audio will repair or replace (at Cambridge Audio's option) this product or any defection parts in this product. Warranty periods may vary from country to country. If in doubt consult your dealer and ensure that you retain proof of purchase.

To obtain warranty service, please contact the Cambridge Audio authorised dealer from which you purchased this product. If your dealer is not equipped to perform the repair of your Cambridge Audio product, it can be returned by your dealer to Cambridge Audio or an authorised Cambridge Audio service agent. You will need to ship this product in either its original packaging or packaging affording an equal degree of protection.

Proof of purchase in the form of a bill of sale or receipted invoice, which is evidence that this product is within the warranty period, must be presented to obtain warranty service.

This warranty is invalid if (a) the factory-applied serial number has been altered or removed from this product or (b) this product was not purchased from a Cambridge Audio authorised dealer. You may call Cambridge Audio or your local country Cambridge Audio distributor to confirm that you have an unaltered serial number and/or you made a purchase from a Cambridge Audio authorised dealer.

This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of, or to any part of, the product. This warranty does not cover damage due to improper operation, maintenance or installation, or attempted repair by anyone other than Cambridge Audio or a Cambridge Audio dealer, or authorised service agent which is authorised to do Cambridge Audio warranty work. Any unauthorised repairs will void this warranty. This warranty does not cover products sold AS IS or WITH ALL FAULTS.

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Some countries and US states do not allow the exclusion or limitation of incidental or consequential damages or implied warranties so the above exclusions may not apply to you. This warranty gives you specific legal rights, and you may have other statutory rights, which vary from state to state or country to country.

For any service, in or out of warranty, please contact your dealer.

# CAMBRIDGE

# Compatible disc types



# **BD-Video**



Supports Blu-ray with Bonus View and BD-Live content, including Blu-ray 3D discs. A 3D-capable display with compatible glasses is required for 3D playback. BD-R/RE, both single- and dual-layer are also supported.



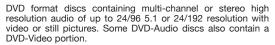
# **DVD-Video**



DVD movie discs in DVD+RW/DVD+R/DVD-RW/DVD-R formats.



#### **DVD-Audio**





# Super Audio CD

High-resolution stereo or multi-channel audio. Note: some SACDs use a hybrid format with both a CD and a high resolution DSD layer.



# Compact Disc

Supports standard Red Book CDs, as well as HDCD and CD-R/

**M///HD** =

High-definition digital video camera format, often in the form of a DVD±R or flash memory.

# Discs that cannot be played

- · BDs with cartridge
- DVD-RAMs
- HD-DVDs
- · Data portion of CD-Extras
- $\bullet$  DVDs / Blu-Rays with a different region code to the Blu-ray player you have purchased.
- · Some DualDiscs: A DualDisc is a two sided disc with DVD on one side and digital audio on the other side. The digital audio side does not generally meet the technical specifications of the Compact Disc Digital Audio (CD-DA) format so playback is not guaranteed.
- · Audio discs with copy-protection may not be playable.

# **BD-ROM** compatibility

Since the Blu-ray Disc specifications are new and evolving, some discs may not play properly depending on the disc type, version and encoding. It is possible that a Blu-ray disc manufactured after the player was manufactured uses certain new features of the Blu-ray Disc specifications. To ensure the best possible viewing experience, the player may need a firmware or software update from time to time.

# Copyright protection

This Product incorporates copy protection technology that is protected by U.S. patents and other intellectual property rights of Rovi Corporation. The use of Rovi Corporation's copy protection technology in the product must be authorized by Rovi Corporation. Reverse engineering and disassembly are prohibited.

# Region management information

This player is designed and manufactured to respond to the region management information of DVD or BD discs. If the region number of a BD-Video or DVD disc does not correspond to the region number of this player, this player cannot play the disc.

BD-Video: This player plays BD-Video with marks that match the code on the back of the unit (i.e. A, B or C).

Discs that have no region coding are also playable. These usually have all 3 region codes on the packaging in a pyramid.









DVD-Video: This player plays DVD-Video with marks that match the region code on the back of the unit (i.e. 1, 2, 3, 4 or 5).

Discs that are encoded for All regions are also playable.













# Cinavia notice

This product uses Cinavia technology to limit the use of unauthorized copies of some commercially-produced films and videos and their soundtracks. When a prohibited use of an unauthorized copy is detected, a message will be displayed and playback or copying will be interrupted.

More information about Cinavia technology is provided at the Cinavia Online Consumer Information Center at http://www.cinavia.com. To request additional information about Cinavia by mail, send a postcard with your mailing address to: Cinavia Consumer Information Center, P.O. Box 86851, San Diego, CA, 92138, USA

# Disc care and handling

To keep the disc clean from scratches or fingerprints, handle the disc by its edge. Do not touch the recording surface.

Blu-ray Discs record data in very high density and the record layer is very close to the disc surface. For this reason, Blu-ray Discs are more sensitive to dust and fingerprints than DVD. Should you encounter playback problems and see dirty spots on the disc surface, clean the disc with a cleaning cloth. Wipe the disc from the Center out along the radial direction. Do not wipe the disc in a circular motion.

Do not use record cleaning sprays or solvents such as benzene, thinner and anti-static spray.

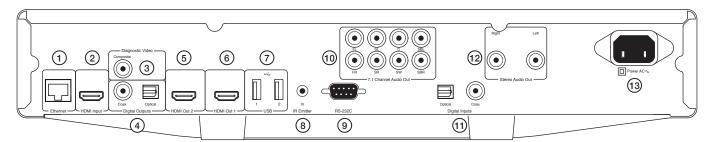
Do not attach labels or stickers to discs as this may cause the disc to warp, become imbalanced or too thick, resulting in playback problems.

Avoid exposing the discs to direct sunlight or heat sources.

Do not use the following discs:

- Discs with exposed adhesive from removed stickers or labels. The disc may get stuck inside the player.
- Warped or cracked discs
- Irregularly shaped discs, such as heart or business card shapes.

# Rear panel connections



# 1. Ethernet LAN port

Used for Playback of context from the Internet or Network attached storage drives and servers, also used for discs supporting BD-Live that provide interactive features when the player is connected to the Internet.

# 2. HDMI input

This input is used to connect to a source device such as a set-top box or other HDMI Source.

# 3. Diagnostic video

Use for diagnostic purposes. Connect to a TV/Monitor via a 75 ohms RCA/ Phono cable designed specifically for video use.

# 4. Digital outputs

Optical and Coaxial digital audio outputs, optionally used to connect to a suitable Audio/Video Receiver for surround sound decoding (output must be set for "Bitstream". Refer to the "Audio setup" section). HDMI is however the preferred correction to AV Receivers as the latest lossless CODECS are only supported over HDMI. These outputs can also be used to connect to a separate DAC or digital recording device (output must be set for "LPCM" Refer to the "Audio setup" section).

TOSlink Optical - Use a high quality TOSlink fibre optic cable.

S/P DIF Coaxial Digital - Use a high quality 75 ohm digital RCA/Phono interconnect cable designed specifically for digital audio use.

# 5. HDMI output 2

Secondary HDMI output. Both outputs 1 and 2 can be used at the same time to send the same audio/video to two displays (with both being 3D TV compatible) or to send audio over one HDMI link and video over the other.

Always use a "HDMI 1.4 High Speed" certified Cable.

HDMI 1 and 2 both support Audio Return Channel from TVs that have this function. See later section.

# 6. HDMI output 1 (primary output)

The HDMI (High-Definition Multimedia Interface) is a purely digital connection that can carry both audio and video. Use a dedicated HDMI cable to connect to a TV/Monitor or AV Receiver with a compatible HDMI input.

Always use a "HDMI 1.4 High Speed" certified Cable.

This output is the primary output and benefits from the Darbee video processor. Both this output and output 2 are 3D TV compatible

HDMI 1 and 2 both support Audio Return Channel from TVs that have this function. See later section.

# 7. USB port 1 and 2

Port for interfacing to a flash/memory card or Mass Storage Device (such as a portable hard-drive)

# Notes:

- This unit supports USB Mass Storage Class Bulk Transport devices only. Most USB thumb drives, portable hard disk drives and card readers conform to this device class. Other USB devices such as MP3 players, digital cameras, and mobile phones that include their own memory management may not be compatible.
- Supported USB drives must be formatted with the FAT (File Allocation Table), FAT32 or NTFS (New Technology File System) file system.
- In some cases, an incompatible USB device may cause the player to stop responding. If this occurs simply turn off the power, remove the USB device, and turn the player back on.
- The player accesses the USB drive in read-only mode. In order to minimize the risk of data corruption, it is recommended that you only unplug the USB device when playback has completely stopped.

# 8. IR (Infra-Red) emitter in

Allows modulated IR commands from multi-room systems or IR repeater systems to be received by the unit.

# 9. RS232C

Used for control of the CXU in Custom Install situations. A full protocol is available for the CXU on our website.

# 10. 7.1 channel analogue audio output

If Down-mix is set to "7.1 CH" in the Speaker Setup page (Down-mix mode section) of the CXU's Setup menus, these sockets provide 7.1 output from the CXU's built in Surround-Sound decoder. This can be used to connect to the 7.1 audio line-level inputs of an amplifier/AV receiver or amplified speaker package if required. Similarly, Down-mix can be set to "5.1 CH" to provide 5.1 output. If Down-mix is set to "LT/RT", "Stereo" or "V.Surround" the Left and Right outputs only are active and provide a stereo or stereo downmixed output. Refer to the "Speaker configuration" section of this manual for more information information.

# 11. Digital input

Optical and Coaxial digital audio inputs, used to connect to:

TOSlink Optical - Use a high quality TOSlink fibre optic cable.

S/P DIF Coaxial Digital - Use a high quality 75 ohm digital RCA/Phono interconnect cable designed specifically for digital audio use.

# 12. Stereo audio out

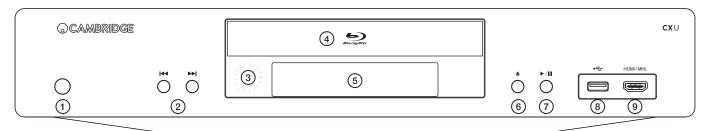
Permanent stereo outputs for use with Stereo material.

# 13. AC power socket

Once you have made all audio and video connections, plug the IEC type AC power cable into the rear of the unit and an appropriate mains socket then switch on. Your CXU is now ready for use.



# Front panel controls



# 1. Standby/On

Switches the unit between Standby mode (indicated by a dim power LED) and On (indicated by a bright power LED). Standby is a low power mode where the power consumption is <0.5W. The unit should be left in Standby mode when not in use.

# 2. Skip

Press once to skip between tracks/chapters.

#### 3. IR sensor

Receives IR commands from the supplied Navigator remote control. A clear unobstructed line of sight between the remote control and the sensor is required.

# 4. Disc tray

Use the Stop/Eject button to activate.

# 5. Display

Used to display the CXU's functions and playback state, etc. Please refer to the front panel display section below for more information.

# 6. Eject

Press to eject the disc.

# 7. Play/Pause

Plays the disc and pauses playback.

# 8. USB port

Port for interfacing to a flash/memory card or Mass Storage Devices (such as a portable hard-drive).

# Notes

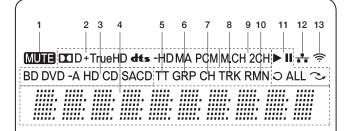
- Only USB 2.0 certified products with the USB 2.0 logo on them are supported by the CXU. Please either consult the manufacturer of the USB 2.0 product to make sure it is properly certified, or go to www.usb.org for a list of approved products. We cannot be held responsible for any incompatibility issues.
- This unit supports "USB Mass Storage Class Bulk-Only Transport" devices only. Most USB thumb drives, portable hard disk drives and card readers conform to this device class. Other USB devices such as MP3 players, digital cameras, and mobile phones may not be compatible.
- See USB port section for file system compatibility.

# 9. MHL/HDMI input

This input is used to connect to a mobile source device such as a mobile phone or a digital camcorder.

The combined socket allows either a standard HDMI source to be connected to the CXU or alternatively an MHL device (such as some new phones) in which case the device can also be charged whilst sending digital audio/video to the CXU.

Note: To utilise the MHL capability, the source device needs to be MHL enabled and a MHL cable/adaptor is required.



# Front panel display

- 1. Mute icon Indicates that the audio is muted.
- 2. Audio type indication Indicates the type of audio tracks being played.
- 3. Disc type indication Indicates the currently playing disc type.
- 4. Main display Text messages and numeric display.
- 5. Title When illuminated, the displayed time applies to a title.
- 6. Group When illuminated, the displayed time applies to a group.
- 7. Chapter When illuminated, the displayed time applies to a chapter.
- 8. Track When illuminated, the displayed time applies to a track.
- 9. Audio channel indication Indicates whether the audio being played is 2ch stereo or multi-channel surround.
- 10. Remaining When illuminated, the displayed time is the remaining play time.
- Playback status Indicates playback status such as Play, Pause, Repeat, Repeat all, and Random mode.
- 12. Ethernet Indicates that an active Ethernet cable is attached.
- 13. Wireless Indicates that the player is connected to a wireless network.

# Remote control

The CXU is supplied with a remote control. Insert the supplied AAA batteries to activate.

# 1. Backlight button

Illuminates the buttons.

# 2. Open/Close

Press to Open or Close the disc loading drawer.

**Note:** Pressing Play when the drawer is open will also close the drawer.

# 3. Standby/On

Switches the unit between Standby mode (indicated by dim power LED) and On (indicated by bright power LED). Standby mode is a low power mode where the power consumption is less than 0.5 Watts. The unit should be left in Standby mode when not in use.

This product has APD (Auto Power Down) enabled as default. After inactivity of 30 minutes, the product will automatically switch to Standby. See later section for further details.

# 4. Info

Press to show/hide the on screen information display.

# 5. Page ▲/ Page ▼

Show previous/next page.

#### 6. Numerical buttons

Used to enter numeric values such as the number of a desired chapter or track to go to.

# Mute

Press to mute/un-mute the player. (Analogue outputs only).

# 8. Clear

Press to remove current track programs.

# 9. Go To

Press once to bring up an OSD bar showing (from left to right) Playing Status, Title, Chapter, Time Counter, Progress Indicator, and Total Time. After pressing the Go To button for the first time, the cursor will be positioned at the Time Counter. This is the "Time Search" mode. Each subsequent press of the Go To button moves the cursor from Time to Chapter to Title and back round. Use the Numerical or Navigation button to enter the hours, minutes and seconds for your specified search and press the Enter button.

# 10. Volume

Increases and decreases the volume of the player. (Analogue outputs only)

# 11. Skip

Right Skip – Press once to skip forward by one track/chapter on the disc.

**Left Skip** – Press once to skip backward by one track/ chapter on the disc.

# 12. Stop

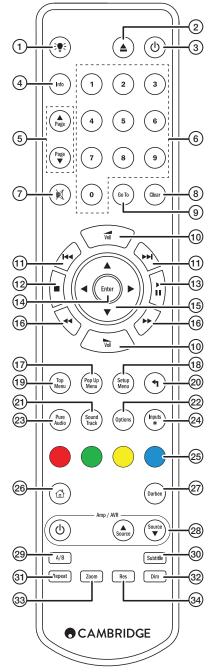
Press to stop current playback.

# 13. Play/Pause

Press to play or pause playback.

# 14. Enter

Press to accept the item/function highlighted in the menu.



# 15. Navigation

Press the directional arrows to move around menus.

#### 16. Scan

Scan forwards and backwards

#### 17. Pop up menu

Show BD pop-up menu or DVD menu.

# 18. Setup menu

Press to enter the Setup menu. Please refer to the "Blu-ray player setup" section of this manual for more information.

# 19. Top menu

Show BD top menu or DVD title menu.

#### 20. Back

Press to return to the previous menu.

# 21. Sound track

Press to change soundtrack where available.

# 22. Options

For Blue-ray/DVD disc, Press to access Subtitle Adj, 3D, Zoom, Angle, PIP, SAP.

For CD disc, press to access Shuffle/Random, Repeat. This button varies by disc type.

# 23. Pure audio

Turn off the video outputs and Front panel display.

# 24. Inputs

Press to cycle between Playback from the BD player itself and the different digital inputs.

# 25. Colour buttons

These button functions varies See later section of the manual.

# 26. Home

Press to go to the Home menu. The home menu allows access to Playback from disc, connected hard-drives, network or the internet.

# 27. Darbee

Press to access Darbee adjustment menu.

# 28. Amp/AVR control buttons

The CXU remote volume up down buttons can be made to control a Cambridge Audio amplifier or AV receiver.

Note: These buttons are by default set to transmit the codes for the CXU itself.

For AV receiver mode, remove the batteries and leave for 5 minutes before re-inserting the batteries while holding down the 'Red' button.

For Amplifier mode, remove the batteries and leave for 5 minutes before re-inserting the batteries while holding down the 'Green' button.

Once you have done this the Volume buttons will control your Cambridge Audio AV receiver or Amplifier instead. The buttons below will also be available as follows:

Press to switch the amplifier/AV receiver between Standby mode and On.

▲ Source Press to scroll through the amplifier/AV source inputs one by one.



# Remote control cont.

# 29. A/B

Press to mark a segment between A and B for repeated playback. The first press marks point A, the second press marks point B.

#### 30. Subtitle

Press to access subtitles where available.

# 31. Repeat

Press to access Repeat function. Each press will cycle as follows:

DVD / DVD-Audio: Repeat Chapter, Repeat Title, Repeat All, Repeat Off.

Blu-ray Disc: Repeat Chapter, Repeat Title, Repeat Off.

CD / SACD: Repeat One, Repeat All, Repeat Off.

#### 32. Dim

Adjusts the brightness of the front panel display.

# 33. Zoom

Press to cycle through the various zoom magnifications (and back to normal display).

Note: Zoom features may not be available with certain DVD or Blu-ray discs.

# 34. Res

Press to switch the output resolution to the TV.

# Connecting to a wired network

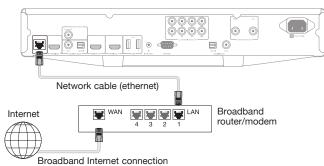
The CXU supports the BD-Live feature offered on some Blu-ray Disc titles. BD-Live offers extra downloadable content and additional online interactive programs. The available BD-Live content varies by disc and studios, and may include additional subtitles, commentaries, movie trailers, games, and/

Connecting the player to the Internet will also allow the player to obtain firmware updates via the Internet.

If the network storage drives or servers conforming to the UPnP A/V or DNLA standards are connected to the network, these can also be accessed.

In order to utilize the BD-Live feature or update firmware via the Internet, the player needs to be connected to a broadband Internet connection. It is not necessary to connect to the Internet if you do not intend to use the BD-Live and online firmware updating functionality and only wish to use UPnP/DNLA.

# Ethernet connection

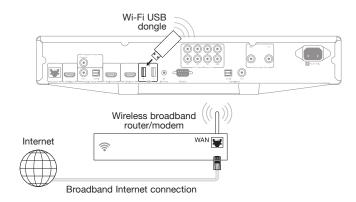


- Plug one end of a network cable (Category 5/5E straight through Ethernet cable) into the LAN port on the back of the unit.
- Plug the other end of the network cable into a LAN port on your broadband router or modem.
- If you do not use DHCP (Auto IP), some network configuration may be required. Please refer to the Network Setup section of the manual for more details.

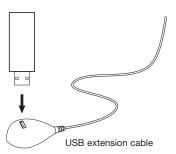
 Refer to the operating instructions supplied with the broadband router or modem, or contact the Internet service provider for questions related to setting up of a router or modem.

**Note:** Only connect the LAN port of the player to an Ethernet port that supports 10BASE-T or 100BASE-TX. Connecting to any other ports or jacks, such as a phone jack, can damage the player.

# Using the wireless adaptor



The wireless adaptor included with the CXU has been pre-configured to work with your player. Other wireless adaptors will not work.



A USB extension cable is provided with your CXU. This can be used if desired to move the wireless dongle to a more convenient location.

# Note

- Make sure the broadband Internet connection is available and the Wi-Fi function on your wireless router or access point has been turned on, and plug the adaptor into the rear USB 2.0 port of your CXU.
- After connecting the adaptor, some network configuration is required. Please refer to the 'Network Setup' section of this manual.



# **Audio output connections**

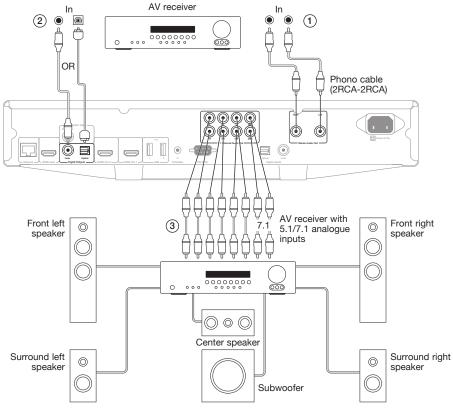
Do not plug in the mains power lead or turn the unit on until all connections have been made.

Three types of audio only connection can be made between the CXU and vour stereo/AV system:

- 1 Separate Analogue Stereo
- 2 Digital Audio
- (3) Analogue 2 ch/5.1/7.1

Note: It is also possible to make an HDMI audio/video connection which carries both audio and video in the same cable. See later section.

However, when making an HDMI connection i.e. to an AV receiver, it is also often preferable to make an additional audio connection as well for CD and/ or SACD/DVD-A playback.



Speaker diagram shown for 5.1 channel setup. For 7.1 add two rear speakers.

# 1 Separate analogue stereo

The analogue stereo outputs should be used for play back of CDs, DVDs etc in stereo through a conventional amplifier or AV receiver with analogue stereo inputs.

Analogue stereo is also usually the best connection method for listening to CDs and other stereo discs for best possible sound quality. It is often a good idea to connect both the analogue stereo outputs (for CD playback) and digital audio outputs or HDMI (for surround sound decoding) at the same time.

To connect an analogue stereo system to the CXU, use stereo phono cables (stereo 2RCA-2RCA).

# 2 Digital audio

The digital audio outputs should be used to decode the surround-sound soundtracks of BD/DVDs with an external AV Receiver (Note: Digital output must be set to "RAW" in the Audio setup page). The CXU sends an undecoded audio bitstream to the AV Receiver for decoding into 5.1/7.1 etc.

Note: The latest HD audio types, SACD and DVD-A cannot be output over SPDIF/TOSlink and an HDMI connection must be used for these.

Either a 75ohm coaxial cable designed for digital audio or a TOSlink fibre optic cable should be used (only one at a time).

**Note:** It is also possible to output stereo digital audio from the Digital Outputs for recording on conventional CD-R/MD etc. machines, see section on CXU setup.

# ③ Analogue 2 ch/5.1/7.1

The CXU is also capable of decoding Surround-Sound soundtracks itself and outputting these as analogue Stereo, 5.1 or 7.1 depending on the settings in the Speaker setup page in the CXU setup menu.

For 5.1, connect to an AV receiver or amplified speaker system, use 6  $\ensuremath{\text{x}}$  phono/RCA cables.

For 7.1, connect to an AV receiver or amplified speaker system, use 8 x phono/RCA cables.

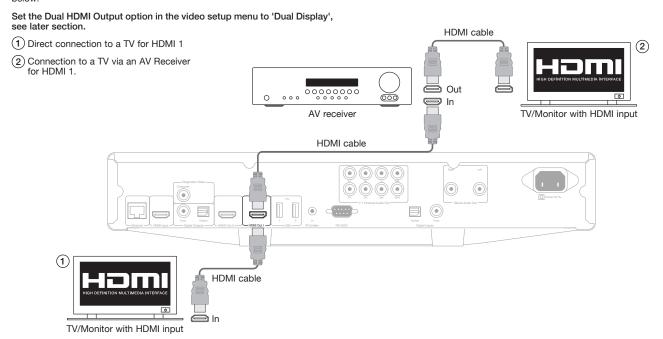
# CAMBRIDGE

# **HDMI** connections

HDMI (High-Definition Multimedia Interface) is a digital connection that can carry both audio and video in one cable. Direct digital transfer of video and support for various types of high definition video content make this the best connection type for picture quality.

The CXU supports two HDMI outputs, both are 3D TV and ARC compatible. For normal use with a single TV or TV and AV Receiver use HDMI output 1 (Primary Output) as this benefits from the Darbee Video processor, as shown Note: The Dolby Digital Plus, Dolby True HD, DTS HD High Resolution and DTS HD Master Audio can only be passed by the CXU over HDMI.

As HDMI can carry both digital audio and video, HDMI can be used to connect to AV receivers that support this function for external decoding.



HDMI 2, the secondary HDMI output of the CXU can be used either to allow connection of two display devices or to allow separate HDMI audio and video outputs as shown in the two examples below.

# Connecting to two displays using dual HDMI

The CXU features two HDMI outputs.

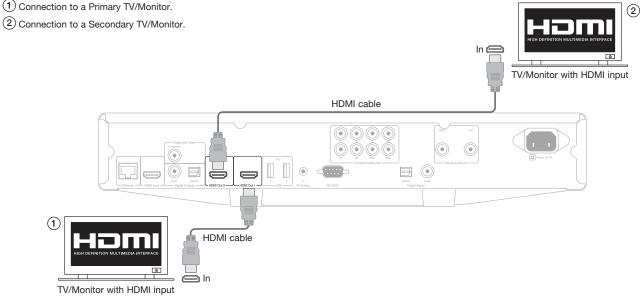
If is therefore possible to connect two TVs or a TV and Projector etc. you should treat output 1 as the Primary highest quality output as it benefits from the in-built Darbee scaler.

- (1) Connection to a Primary TV/Monitor.

Both outputs can pass 3D TV signals and both can receive ARC.

Set the Dual HDMI Output option in the video setup menu to 'Dual Display', see later section.

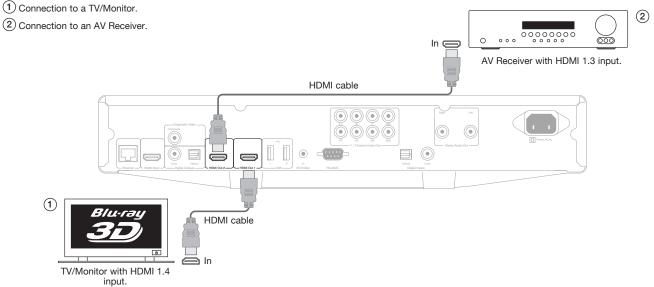
This is necessary to allow HDMI 2 to output high resolution audio.



# Connecting separately to a display and audio system using dual HDMI

If your AV Receiver cannot pass 3D TV HDMI signals it is possible to configure the CXU to output Video (inc 3D TV) via HDMI 1 directly to a 3D compatible display and Audio via HDMI 2 directly to the AV Receiver.

Set the Dual HDMI Output option in the video setup menu to 'Split AV',



# MHL/HDMI inputs

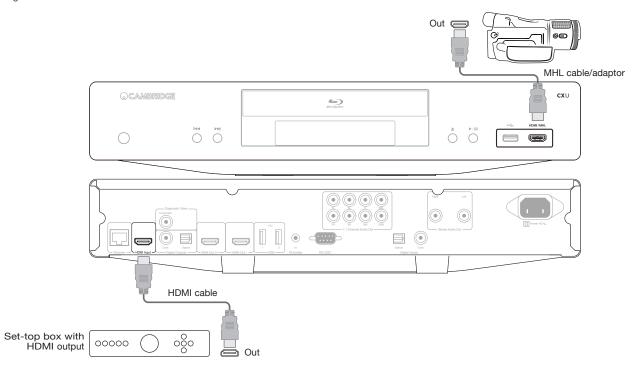
The CXU has two HDMI inputs. One on the front panel which also features MHL and one on the rear panel. Both can accept up to 1080p video and

The front panel HDMI is combined with an MHL input, either type of connection can be used with portable devices such as digital camcorders.

For HDMI devices the CXU can received audio and video in the normal way. For MHL devices the CXU receives audio and video and also powers or charges the device.

The CXU is pre-configured from the factory for the best settings for most modern TVs and AV Receivers.

However to ensure you have the basic settings right please read the following sections on setting the best output resolution, display aspect ratio and audio settings. Many more advanced options are also covered later in the manual.

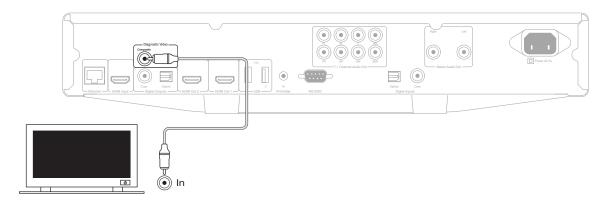




# Diagnostic video output

The CXU features a composite (CVBS) diagnostic video output. Optionally you can connect this to your TV as well as making a HDMl connection. This output can be useful if you lose the HDMl output (perhaps by selecting an output type your TV cannot display).

The diagnostic video output will still work and can be used to display the OSD and change settings. Only the OSD is shown via the diagnostic video output it is not used for video playback.



# Setting up the player

Selecting the best output resolution

For the latest generation of 1080p, "Full HD" or "True HD" TV displays, the best output resolution will naturally be 1080p. For earlier "HD Ready" digital televisions this might be 720p or 1080i. It is usually best to set the output of the CXU to the native resolution of the TV, consult the TVs manual for details of the actual resolution of its panel. Large TVs are often 1080p (1920 x 1080) but smaller TVs are sometimes 720p (1280 x 720). These are general recommendations that work for most users, but there can be exceptions. Advanced users may want to try all supported resolutions and choose the one that provides the best visual result.

The CXU also supports a special "Source Direct" output mode via its HDMI output. This mode is recommended for use with external video processors or high-end TVs with high quality scalers. In "Source Direct" mode, the player works as a "transport". It decodes video from the discs and then sends the raw video signal in its native resolution and format, without extra processing, to the external video processor or TV. The actual output resolution thus varies by content:

For both HDMI outputs, the following output resolutions are available: 4Kx2K, Auto, 1080p, 1080i, 720p, 480p/576p, 480i/576i, and Source Direct.

If 'Auto' is selected, the player will determine the output resolution based on the best signal resolution that the TV can display. It does this by reading the EDID of the TV via the HDMI connection, if all is well the TV will tell the CXU the range of video outputs it can support and the CXU will pick the highest one. The CXU will then always scale the output to this resolution.

If any of the other resolutions is selected the CXU will always scale the output to the resolution you select.

Note: 4Kx2K is a new standard and only a handful of TVs currently support this. For most TV selecting this option will cause the picture to be lost.

To change the output resolution, press the Res button on the remote to bring up the 'Resolution' menu, then press the ▲ or ▼ buttons on the remote to highlight the desired output, press the Enter button to confirm and return. If your TV does not support the selected resolution, you may see a black screen or an error message. In this case, try a different resolution that your TV can support.

Note: In case you are not able to get a picture using the HDMI outputs, please connect the player to the TV using the diagnostic composite video output, and then use the Setup menu to adjust the player settings.

# Operating instructions

# Getting started

Turn on the power of the CXU, TV, amplifier/AV receiver and any other components which are connected to the CXU. Make sure the TV and the audio receiver are set to the correct input channel.

- 1. Press the Open/Close button to open the disc tray.
- 2. Place the disc on the tray, label side facing up.
- 3. The player will read the disc information and start playback.
- Depending on the content of the disc, a menu or navigation screen may appear. Please use the Navigation ▲ ▼ ◆ ▶ and Enter button to select the content to play.
- 5. To stop playback, press the button.
- 6. To turn off the player, press the Standby/On button.

# Note:

- During DVD and some Blu-ray Disc playback, pressing the button for the first time brings the player to a pre-stop mode. You can resume playback from the stopped point by pressing the ►/II button. This pre-stop mode allows you to change the player settings and then resume playback. To completely stop playback, press the button twice.
- Certain Blu-ray Discs with BD-Java technology do not support the pre-stop mode. Pressing the ■ button during playback of such discs will completely stop the disc. Pressing the ▶ / II button once the disc is stopped will restart it from the very beginning.
- This unit featured an environmentally friendly low power (<0.5W) standby circuit. If it is not to be used for a long time, unplug it from the household AC outlet.
- Do not put anything except a BD/DVD/CD sized disc into the tray, foreign objects may damage the mechanism.
- · Do not force the tray by hand during the opening and closing operations.
- To avoid dirt and dust entering the mechanism, keep the disc tray closed when not in use.
- If the disc is seriously scratched or too dirty, the player may not be able to read it or play it.
- · Never load more than one disc into the disc tray at one time.

Disc info – Searches the Gracenote online database and display the available disc information (an active internet connection is required).



# Options menu

Pressing the Options button on the remote during playback opens up a menu bar at the bottom of the screen for various settings and playback features.

Use the  ${\bf 4}$  or  ${\bf \flat}$  buttons on the remote to highlight an item, then press the Enter button to confirm.

The Options menu selections differ depending on content type.

# Within music file playback

 ${\bf Music}$  info: As with "Disc info", searches and displays available music information from Gracenote.

Shuffle/Random: Activate Shuffle or Random mode.

Repeat: Repeat the track or all tracks.

Add to playlist: Add the highlighted music file to the Playlist. This function is only available when accessing external USB storage.

Goto playlist: Access the music files added to the Playlist.

Song location: Return to the MUSIC interface and highlight the music file that is now playing.

**Gapless play:** Enable Gapless Playback mode. This is an experimental feature and only supports APE , WAV and FLAC files stored on external USB storage.

# Within video discs (DVD, BD) and video file playback

Subtitle Adjustment: Set the subtitle display options.

Colour - Set subtitle text colour (only available on external subtitle files).

Outline colour - Set the outline colour for subtitle text (only available on external subtitle files).

Size - Set subtitle text size (only available on external subtitle file).

Position - Set subtitle display position.

Sync. – Adjust the timing of the subtitles (only available on external subtitle files).

Defaults - Reset all subtitle options to their default values.

3D: Enable 2D->3D conversion or bring the 3D adjustment menu.

Zoom: Opens the image zoom level menu.

Angle: Changes the viewing angle. This function is only available when the DVD/BD is recorded with multiple angles.

# Within photo file playback

Zoom: Displays the image at different zoom levels.

Rotate: Left / Right / Mirror / Flip: Rotates the image on the screen.

3D: Enable 2D->3D conversion or open the 3D adjustment menu.

# Within HDMI input playback

3D: Enable 2D->3D conversion or bring the 3D adjustment menu.

# Fast forward/rewind search

Press to toggle between 1X, 2X, 3X, 4X and 5X playback speed. Press the  $\clubsuit$  button for backward or the  $\blacktriangleright$  button for forward playback.

Note: Certain Blu-ray discs utilising the BD-Java technology may have their own fast forwarding and reversing control. The actual speed varies by disc, and a progress scale may be displayed by the disc.

# Skip playback

- 1. Press ▶ to skip forward by track/chapter on the disc.
- 2. Press 📢 to skip backward by track/chapter on the disc.

# Go to

Press the Go To button on the remote once to access Time Search and enter the required time from the start of the disc as H:MM:SS (Hours, Minutes, Seconds) using the numerical keys or the ( $\blacktriangle \lor + \flat$ ) navigational buttons. Press twice to access Chapter Time Selection and enter the required time from the start of the chapter. Press three times to access the Display information.

#### Slow

When playing a BD/DVD, press the II button to pause playback and then press the  $\blacktriangleleft$  or  $\Rightarrow$  button to cycle round the various speeds of slow motion (1/16, 1/8, 1/4 and 1/2), forwards and backwards and back to normal speed. To exit playback, press the  $\blacktriangleright$ /II button.

Note: Certain Blu-ray discs utilising the BD-Java technology may not support slow playback.

# Pause and frame by frame

- During playback, press the ►/II button to temporarily pause the program. In this mode, a Pause icon will appear on the TV screen.
- 2. While a DVD or Blu-ray Disc is paused, press the ⋈ or ⋈ button to reverse or advance the video frame-by-frame.
- 3. Press the ▶/II button to resume normal playback.

# Repeat

Note: The Repeat function is available only during playback.

Press the Repeat button to access Repeat function. When pressed repeatedly the Repeat function will cycle as follows:

DVD and DVD-Audio - Repeat Chapter, Repeat Title, Repeat All, Repeat Off.

Blu-ray Disc - Repeat Chapter, Repeat Title, Repeat Off.

CD and SACD - Repeat One, Repeat All, Repeat Off.

Note: The repeat chapter/title setting will be cleared when moving to other chapter or title. Certain Blu-ray discs may not allow the Repeat function.

# A-B repeat

- 1. Press the A-B button at your desired starting point. "A" appears briefly on the TV screen.
- 2. Press the A-B button at your desired end point. "A-B" appears briefly on the TV screen, and the repeat sequence begins.
- 3. To exit the sequence, press the A-B button.

# Note

- The A-B repeat section can only be set within the current title (for BD/DVD video) or current track (for BD/DVD audio, Video CD and Audio CD).
- · A-B repeat playback is not available with some scenes on BD/DVD.
- A-B repeat playback does not function during title, chapter, track or all repeat playback.

# On-screen display

- During the playback of a BD/DVD disc, press the Info button on the remote control to show status information; For CD and SACD, the status information is shown automatically.
- 2. While the status information is shown, press the A v buttons to scroll through several display formats. The playback time information displayed on the front panel changes together with the on-screen display.
- Press the Info button again to hide the on-screen display. The playback time information display on the front panel will remain in the selected format.

In addition to the playback time, the on-screen display may also contain the following information about the content currently playing:

Playback status - an icon indicating play, pause, and fast forward/reverse status.

Bit rate meter – an indication of the bit rate of the audio and video stream.

Current and total title numbers (DVD and Blu-ray Discs), title chapters (DVD and Blu-ray Discs) and total tracks (CD and SACD).

Audio information – current and totally available number of audio tracks, language, format, and channels.

Video format information – encoding type, frame rate and original aspect ratio.



# Audio language (soundtrack) selection

- To select the audio language, press the Soundtrack button on the remote control during playback.
- 2. Repeatedly pressing the Soundtrack button cycles through all available audio soundtracks on the disc.

**Note:** The availability of languages and audio soundtracks varies by disc. Some BD/DVD-Audio discs allow audio track selection with the soundtrack button, while others require the user to select from the audio setup menu of the disc. When playing a SACD with both multi-channel and stereo contents, the soundtrack button can be used to switch between the two formats.

#### Subtitle selection

- When playing a DVD, Blu-ray disc or other video programs recorded with subtitles, press the Subtitle button on the remote control to select the desired subtitle.
- Repeatedly pressing the Subtitle button will cycle through all available subtitles.
- 3. To turn off subtitles, press the Subtitle button until the subtitle is turned off.

# Subtitle shift

Sometimes such as when using a 2.35:1 "Constant Image Height" video projection system, subtitles may get cut off because they are positioned outside of the active video area.

The Subtitle Shift feature can be used to shift subtitles up or down so they are displayed within the active video area.

To shift the display position of subtitles, follow these steps:

- When playing a DVD, Blu-ray Disc or other video programs recorded with subtitles, select the desired subtitle from the disc menu or by using the remote.
- Press and hold the Subtitle button on the remote control until the Shift Subtitle Position prompt appears on the screen.
- Wait until some subtitle text is visible on the screen, and then use the ▲/▼ buttons to move the subtitle text to a desired new position.
- 4. Press the Enter button to set the subtitle display position. Once the Subtitle Shift position is set, it is saved by the player in the Video Setup > Display Options > Subtitle Shift setup menu option. The setting will be applied to subtitles of all future DVD and Blu-ray Discs. You can also change the setup menu item directly. Refer to the Video Setup for more information.

# Angle selection

- Press the Option button on the remote control to select the desired playing angle.
- 2. Use the Navigation buttons and select Angle from the available options.

**Note:** This function is available only when the discs are recorded with multiple angles. The Angle mark display shows when an alternative angle is available. The Angle mark display on the screen can be turned off using the Setup menu of the player.

# Zoom

To change the zoom level, press the Zoom button on the remote control repeatedly pressing the Zoom button will switch the zoom level in the following sequence: 1:1 (No zoom), Stretch/Compress, Full Screen, Under Scan, 1.2X, 1.3X, 1.5X, 2X, 1/2X.

The zoom level is reset to 1:1 when the disc is ejected, or when the player is turned off.

**Note:** The Zoom feature may not be available when certain DVD or Blu-ray Discs are played because the disc author chooses to disable Zoom.

# Blu-ray disc menu

- 1. Blu-ray discs usually contain a top menu and a pop-up menu. The top menu normally appears at the beginning of the playback, after the previews and copyright messages and allows access to different film presentations or extras etc. The Pop-up menu can be accessed during playback without interruption and usually allows access to different chapters with in a film.
- 2. During playback, press the Pop-up menu button to access the pop-up menu. Press the Top menu button to access the top menu.
- Navigate the menu using the (▲ ▼ ◀ ▶) Navigation buttons, and then press the Enter button to make the selection.
- Some menus make use of the colour buttons. You can select menu functions by pressing the corresponding Colour button on the remote control.

#### DVD disc menu

- 1. Some DVD discs also contain title menu or chapter menu functions.
- During playback, press the Top menu button to return to the disc title menu. Press the Pop-Up menu button to display the chapter menu. Depending on the disc, one or both menus may not exist.
- 3. Navigate the menu using the ( • ) Navigation buttons, and then press the Enter button to make the selection.
- Press the Return button to return to the previous menu. The return location varies by disc.

# Memory and automatic resume

The player automatically remembers the current position for a disc when playback is interrupted. Operations such as Open/Eject or turning Power off will cause the player to save the current playing position for that disc.

The position is memorised even after turning off the unit or changing the disc.

When the next time the same disc is played back, the player will recognize the saved playing position. Playback will automatically resume from this saved position. However if you wish to cancel the automatic resume and start playback from the beginning, you may press the button when prompted.

The player can remember playback position for up to five discs. When the sixth disc is memorised, the oldest one is replaced.

Note: Some Blu-ray discs do not support resuming and will always play from the beginning.

# HDMI / MHL input selection

- Press the Inputs button on the remote to bring up the "Input" source menu.
- 2. Use the ▲/▼ buttons to choose the required digital input from the list.
- 3. You can always select the Blu-ray player to return to home menu for disc or file playback.

Note: The front HDMI In port is MHL (Mobile High-definition Link) compatible. A dedicated MHL cable or adapter is required (not included) and some configuration may be required on the mobile device.

Input
1. BLU-RAY PLAYER
• 2. HDMI/MHL IN-FRONT
3. HDMI IN-BACK
4. ARC: HDMI OUT 1
5. ARC: HDMI OUT 2
6. OPTICAL IN
7. COAXIAL IN

# Audio Return Channel (ARC) selection

- The ARC sources are also available in the Inputs menu. Press the Inputs button on the remote to bring up the Input Source menu.
- Use the ▲/▼ buttons to choose the required ARC channel.
- You can always select Blu-ray Player to return to the CXU home menu for disc or file Playback.

)	Input
	1. BLU-RAY PLAYER
,	2. HDMI/MHL IN-FRONT
	3. HDMI IN-BACK
I	• 4. ARC: HDMI OUT 1
	5. ARC: HDMI OUT 2
)	6. OPTICAL IN
	7. COAXIAL IN
	L

# Note:

- Audio Return Channel (ARC) is a feature introduced in HDMI V1.4, which allows you to send digital audio signals from the television back to the player or receiver. Instead of listening through TV speakers, ARC allows the sound to be processed and produced by the home theatre audio system.
- A HDMI 1.4 cable is required and you need to make sure the HDMI input port on the TV is ARC capable. Usually, ARC also has to be enabled in the TV's settings.

The volume control buttons on the remote handset only affect the analogue audio outputs. Volume control does not apply to the digital audio/video outputs (HDMI, Coaxial and Optical). The remote can alternatively be made to control the volume (plus source change, mute, on/off and zone 2 where available) of most CX range AV Receivers and amplifiers See the previous section on the remote control for full details.

# Playback by chapter or track number

During the playback of a disc, you can use the numerical buttons on the remote control to directly jump to a specified chapter or track number. For example:

- To select the seventh track, press the [7] button.
- To select the 16th track, press [1] followed by [6] in quick succession.

Note: Certain DVD-Audio and Blu-ray Discs may not allow for direct chapter selection.



# Playback from a specific location on DVD and Bluray discs

During the playback of a DVD or Blu-ray Disc, you may specify a location to start playback by entering the title, chapter or time directly. Press the GoTo button to bring up the on-screen display.

At the top of the video screen, an on-screen display status banner will appear with the following components (from left to right): Playing Status, Title (for instance 1/2 meaning 1st of 2 titles currently playing), Chapter (for instance 3/12 meaning the 3rd of 12 chapters is currently playing), the Time Counter, a Progress Indicator bar, and the Total Time.

After pressing the Go To button for the first time, the cursor will be positioned at the Time Counter. This is the Time Search mode.

Each subsequent press of the Go To button will switch the search mode in the following sequence: Chapter Search, Title Search and back to Time Search. The back and forward arrows can also be used to switch between the different modes.

- Time search. Searches for a specific time within the currently playing title.
  Use the Number or Arrow buttons to enter the hours, minutes and seconds
  for your specific search and press the Enter button to go there.
- Chapter search. Allows you to search for a particular chapter. Use the Number or Arrow buttons to enter or select the chapter number and press the Enter button to go there.
- Title search. Allows you to search for a particular title. Use the Number or Arrow buttons to enter or select the title number and press the Enter button to go there.

#### Notes:

- Some discs may prohibit the search operation. You will not be able to select
  a search location, or you may get an "invalid operation" icon after specifying
  a search location.
- · Some Blu-ray Discs feature their own search.

# BONUS *VIEW* ™

# Picture-in-Picture and secondary audio

Certain Blu-ray discs contain secondary video (Picture-in-Picture/PIP) and secondary audio. This feature is often called BONUSVIEW. When such a disc is played, a Picture-in-Picture mark (PIP Mark) and a Secondary Audio Program Mark (SAP Mark) may be displayed on the screen to alert you to the availability of the secondary audio/video content.

The disc menu usually features interactive controls to turn on/off the Picture-in-Picture video and Secondary Audio Program. Please use those controls to select the desired secondary audio/video content.

Both PIP and SAP functions can be access via the Option button on the remote. Please use this button to turn the function on/off or select from multiple secondary audio tracks. Secondary Audio Programs are generally only available when Picture-in-Picture is shown.

# Note:

- This function is available only when the discs are recorded with secondary video and audio programs.
- The PIP and SAP Marks on the screen (which alert the user to the presence of these functions on the disc) can be turned off using the Setup menu of the player.



Some Blu-ray disc titles are released with the BD-Live feature. BD-Live offers extra downloadable contents and additional online interactive programs. The available BD-Live content varies by disc and studio, and may include additional subtitles, commentaries, preview trailers, games, and online chat. The player needs to be connected to the Internet in order to play BD-Live contents.

Depending on how the studios organise their BD-Live contents, some Blu-ray discs may start downloading BD-Live content when playback starts; some have a BD-Live selection on its main menu; some may show a prompt to ask whether you would like to start downloading; and some may ask you to sign up for a membership or account. Please follow the instructions that come with the disc to enjoy BD-Live contents.

Your Internet connection speed, the overall Internet traffic situation and the capacity of the BD-Live content servers can all affect how fast BD-Live content can be downloaded. If you encounter slow downloading or intermittent playback, please play the disc without accessing the BD-Live features, or try again at a different time.

When you use the BD-Live feature, the player or disc ID and your IP (Internet Protocol) address may be sent to the content provider via the Internet. Generally, no personally identifiable information is sent. However technologies exist to match your IP address to a certain geographical area or service provider. Your Internet service provider also has the knowledge of who is using which IP address. If the BD-Live content provider requires you to login using a membership or account, the content provider will have access to your membership or account information. Please check with your Internet service provider and the BD-Live content providers for their privacy policy.

You can also choose to restrict BD-Live access using the player's Setup

# Output resolution

If you would like to change the output resolution, you may do so by pressing the Res button on the remote control:

- 1. Make sure the video cable is properly connected.
- 2. Turn on the TV. Make sure the correct input is selected.
- 3. Make sure that the player is turned on. Although the output resolution can be changed "on the fly", it is recommended that you stop playback and take out the disc before changing the output resolution. Press the Res button. A "Resolution Setting" menu appears on the TV screen. In case the TV does not support the current resolution and you cannot see the "Resolution Setting" menu, the current resolution is also displayed on the front panel to the unit.
- 4. Use the ▲ /▼ buttons to select the new output resolution. Pressing the Res button cycles through the available output resolutions. The new resolution is displayed on the front panel just in case you cannot see the "Resolution Setting" menu (if it is incompatible with your TV).
- 5. Press the Enter button to apply the selected output resolution, or if you do not want to change the output resolution, press the 4 button.

The following output resolutions are available:

PAL output via HDMI 1 or 2 – 4Kx2K, Auto, 1080p, 1080i, 720p, 576p, 576i, Source Direct.

NTSC output via HDMI 1 or 2 – 4Kx2K, Auto, 1080p, 1080i, 720p, 480p, 480i, Source Direct.

# Note:

- Some TV sets do not support some output resolutions (4K x 2K is currently rarely supported). If an incompatible output resolution is selected, you will get a blank screen or an error message. In this case please select an output resolution that is supported by the TV. You will still be able to see the resolution selected on the front panel display.
- In case you are still not able to get a picture using the HDMI outputs, please connect the player to the TV using the composite video output, then use the Setup menu to adjust the player settings.

# TV system selection

The CXU can be set to output all video as PAL or NTSC or output the video in the same format it was recorded in (Multi). Some TVs only support PAL or NTSC and not both so forcing the output type to one or the other can be useful. The output system selection is done by setting the "TV System" item in the "Video Setup" section of the player's Setup menu.

Some points to keep in mind:

- When the video output is set to PAL or NTSC, the player will convert the disc content if different to the selected system.
- When the video output is set to "Multi", the player will not perform system conversion and will output the video in its native format on the disc. The "Multi" mode should only be used if your TV supports both NTSC and PAL systems.
- Some TV sets only support one of the PAL or NTSC systems. If the wrong output is selected, the TV may not display a picture. In this case keep pressing the TV Type button until a supported system is selected.



# Viewing pictures on DVD-Audio discs

Some DVD-Audio discs contain static pictures, such as photos of the band or narration of the album. When a DVD-Audio track is playing, you may use the Page ▲ and Page ▼ buttons to select the picture.

Note: Availability of static pictures depends on the DVD-Audio disc.

#### Pure audio mode

You can enjoy higher quality audio by turning off the video processing and front panel display. The Pure Audio mode reduces any potential interference between the video and audio signals.

- Press the Pure Audio button on the remote control to turn off video and enter Pure Audio mode. Video output will be turned off.
- Press the Pure Audio button again to resume video and cancel Pure Audio mode.

#### Note:

- Pure Audio mode is automatically cancelled when the unit is switched off or when playback is stopped.
- Since HDMI carries audio together with video, the HDMI output cannot be completely turned off. A black screen (inactive video but sync is still present) is transmitted instead to minimize any potential interference.

#### Shuffle

When playing a CD or SACD, press the Blue button on the remote control to activate the Shuffle and Random modes. Each press of the Blue button switches the playback mode in the following sequence: Shuffle, Random and Normal

# Media playback from USB Devices

As well as normal CD's, SACD's, DVD's and BD's the CXU can play some music, movies and photo files either from optical data discs (such as CD-R, DVD-R etc.) or external memory such as USB flash-drives/thumb-drives or hard-drives.

# Connecting a USB Drive

The CXU is equipped with three USB 2.0 ports, one on the front of the unit and two on the back. You may use any USB port to plug in a USB drive loaded with digital music, movies and photo files.

The USB ports are rated to provide a maximum of 5V, 1A power to the attached device. This is usually sufficient to bus power (i.e. self power) USB flash drives and flash memory card readers, but may not be sufficient for all USB hard disks.

# Note

- This unit supports Mass Storage Class Bulk Transport devices only. Most USB thumbs drives, portable hard disk drives and card readers conform to this device class. Other devices such as MP3 players, digital cameras, and mobile phones that include their own memory management may not be compatible.
- Supported USB drives must be formatted with the FAT (File Allocation Table), FAT32 or NTFS (New Technology File System) file system.
- In some cases, an incompatible device may cause the player to stop responding. If this occurs simply turn off the power, remove the device, and turn the player back on.
- The player accesses the USB drive in read-only mode. In order to minimize the risk of data corruption, it is recommended that you only unplug the USB device when playback has completely stopped.

# Network media playback

The CXU can remotely Playback music, photos, and video files stored on media devices that are connected to the same home net work. Set the My Network selection to On in the Setup menu. Press the 🗂 button on the remote to bring up the Home menu, select the Network icon and press Enter button to show the list of available servers and shared folders. In some cases, you might need to disable your firewall to allow the CXU to see your devices.

The CXU can perform Network Playback in one of the following three ways:

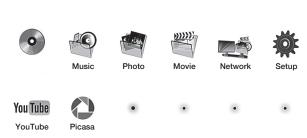
- As a digital media player (DMP): the CXU can actively search, access and pull content from media servers on you network.
- As a digital media renderer (DMR): the CXU plays content received ('pushed') from a digital media controller (DMC). A DMC-capable UPNP/ DNLA media server is required. Plus the control APP you wish to use which must be connected to the same network as the server and CXU. Refer to the server and APPs respective user instructions for correct configuration and operation.
- Accessing a SMB/CIFS client: the player can directly access files shared by computers through SMB/CIFS clients over the network, as if accessing a local USB hard drive. Most computers especially those installed with Windows, already have an SMB client embedded. Please refer to your respective OS instructions to set up the SMB/CIFS shared file/folder.

#### Note

- A NAS is a network attached storage device that provides file-based data storage services to other devices on the network. Commercial products are available that often incorporate a UPnP/DNLA Server.
- SMB (Server Message Block) or Cifs (Common Internet File System) is mostly known as the folder sharing method of Microsoft Windows. It does not require an extra media server or perform any media format transcoding.
- Compatibility with local network sharing hardware/software is on a best effort basis with no guarantee, due to variations in NAS devices, media servers and their configurations

# Using the home menu

● CAMBRIDGE



When a drive or an optical disc stored with media files is inserted, the player presents a "Home menu" to assist you in navigating and playing the files. You can also bring up the Home menu with the a button on the remote control. The Home menu is the starting point for accessing media files.

Depending on what type of media files that you intend to play, you can choose from BD or DVD (i.e. a BD or DVD disc loaded in the CXU) or three files types that automatically only display the relevant file types from any attached USB Drives or computer discs (i.e. a CD-ROM or DVD-ROM with MP3 or other files loaded in the CXU).

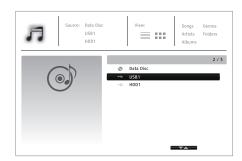
The Network item shows any UPnP AV or DNLA servers the CXU can find on your local Network. The "Setup" selection will bring you to the player's setup menu just like pressing the Setup menu button on the remote control.

The items on the second line are streaming audio/video services that are supported by the CXU. Currently YouTube and Picasa are supported, more may be added over time. See the CXU support page at www.cambridgeaudio.com for the latest details on these menus and any software updates available from Cambridge Audio.

Note: Streaming services are usually regional so any services that may be made available will usually vary from country to country.

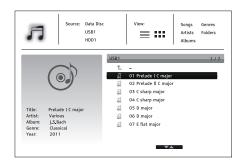


# Playing music files



To play digital music files stored on an optical disc or USB drive, select "Music" from the Home menu. A file browser will appear to assist you in navigating the files and folders.

The first step is to select the "Data Disc" or USB device that contains the music files. The player will take a moment to read the disc and list the folders and music files.



In the music browser, you can perform the following operations:

Press the ▲/▼ button to move the cursor and select music files.

Press the Options button to gain access to features such as music information and sort order. For more details, see later section of the manual.

Press the Top menu button to move the cursor to the category menu in the top of the screen. This menu contains the following choices:

Source - Allows you to switch between different connected storage devices.

View - Allows you to switch between list and folder view modes.

Sort - Lists music files/folders by different categories, such as song name, artist, album and genre.

When a music file is highlighted by the cursor, press the Enter or  $\,\blacktriangleright\,$  button to start playback.

# Note:

 When a data disc or USB drive is inserted, the player automatically starts indexing files and build a database in the background. Depending on the number and size of files, this process could take up to several minutes. Customers can only access the Category list (Artist, Album and Genre) when the database has been built, otherwise, a warning message will appear.

If a music file starts playing and there is no other user operation, the Now Playing screen will appear after a few seconds. You can also get to this screen by pressing the Options button and then selecting Now Playing. This screen provides the following information:

Shows playback status –  $\,\blacktriangleright\,$ ,  $\,\blacksquare\,$ ,  $\,$ II , Track and Time.

Display and change playback mode – Shuffle/Random, Repeat One and Repeat All.

Music information - Displays information like album art and tags.

The following operations are available while the Now Playing screen is shown:



Normal playback control - ▶, ■, II, ₩/≯, ∢, and ≯.

Special playback modes – Repeat and Shuffle/Random (Blue colour button).

Press the Options button to access the Option menu. For more details, see later section of the manual.

Return to the browser without stopping the music: Press the Return button.

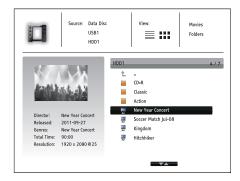
Stop playback and return to the browser: Press the ■ button once.

# Playing movie files

To play movie files stored on an optical disc or USB drive, select Movie from the Home menu. A file browser will appear to assist you in navigating through the files and folders.



The first step is to select the Data Disc or USB device that contains the movie files. The player will take a moment to read the media and list the folders and movie files.



In the movie browser, you can perform the following operations:

- 1. Press the ▲/▼ buttons to move the cursor and select the movie file.
- Press the Options button to access features like video information. For more details, see later section of the manual.
- 3. Press the Top menu button to move the cursor to the category menu in the top of the screen. This menu function is the same as the one discussed in "Playing music files" on the previous section.
- When a movie file is highlighted by the cursor, press the Enter or ▶ buttons to start playback.



Once a movie file starts playing, the normal playback control functions are available:

- To stop the movie and return to the file browser, press the button. You can also press the Home button at any time to stop the playback and return to the Home menu.
- Press the Options button to access features such as Subtitle Adj, 3D, Zoom, Angle, PIP and SAP. For more details, see later section of the manual.

# Viewing photo files



To view digital photo files stored on an optical disc or USB drive, select Photo from the Home menu. A file browser will appear to assist you in navigate the files and folders

The first step is to select the Data Disc or USB device that contains the photo files. The player will take a moment to read the media and list the folders and photo files.



In the photo browser, you can perform the following operations:

- 1. Press the ▲/▼ button to move the cursor and select photo files.
- 2. Press the Options button to access features like sort order
- 3. Press the Top menu button to move the cursor to the category menu in the top of the screen.
- 4. When a photo file is highlighted by the cursor, press the Enter or ▶ button to play back the photos as a full screen slideshow.

The following operations are available during the photo slideshow:

Display the help screen - Info button.

Normal playback controls - ▶, ■, II, III/>> buttons.

Adjust slideshow speed - ← and ▶ buttons

Reflect (flips the photo horizontally to make it upside-down) – ▲ button.

Mirror (flips the photo vertically to make it a mirror image) - ▼ button.

Rotate left (counterclockwise) - ◀ button.

Rotate right (clockwise) - ▶ button.

Repeat - Repeat button.

Show photos in Digest mode – Red colour button. The Digest mode shows the photo thumbnails on the screen to make visual navigation easy.

Show EXIF information - Green colour button

Play in random sequence - Blue colour button

Change slideshow transition effect - Yellow colour button.

Press the Options button to access the features like Image Zooming and Image Rotation. For more details, see later section of the manual.

# Adding background music

You can also add background music to the photo slideshow. To do so, you will need to prepare digital music files. The music files can be stored on the same disk as the photos, or on a different USB drive. Start music playback first by selecting Music from the Home menu. Once the music is playing, press the Home button to get back to the Home menu, and start the photo slideshow by selecting Photo in the usual manner.

# Setup menu

To access the player's setup menu simply press the Setup menu button on the remote control. Since some Setup menu options can become inaccessible when the player is playing a disc, it is recommended that you operate the Setup menu when playback is fully stopped or when there is no disc in the player.

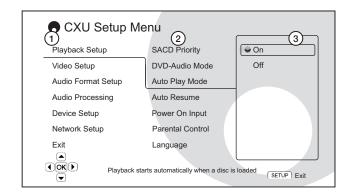
The Setup menu presents many setup and configuration options. For most users, the default configuration will be sufficient and will often not require changes to the settings.

However if you wish to configure the player to perfectly match your home theatre settings and viewing preferences, please refer to the following sections for details about each configuration option.

# Using the setup menu system

When performing menu adjustments, we will use the following terminology to indicate the location of the desired function:

Setup menu section > menu Item > Selection

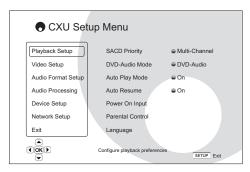


- 1. Setup menu section is the uppermost menu level. With the CXU there are six Setup menu sections listed in the left column of the Setup menu screen. These are: Playback Setup, Video Setup, Audio Format Setup, Audio Processing, Device Setup, and Network Setup.
- 2. Menu item is the parameter to be adjusted which appears in the Center column of the Setup menu. Once you enter a Setup menu Section, the list of menu items and their current value are displayed in a box.
- 3. Selection is the actual numeric or descriptive element that represents the change being made to the selected parameter. It is the item located to the right of its corresponding menu item.

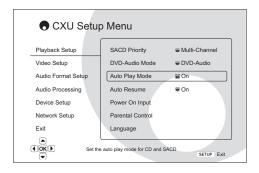
A scroll icon appears at the top or bottom of the menu when there are more menu items or Selections than what can fit in a screen. You may use the  $\blacktriangle$  and  $\blacktriangledown$  buttons to scroll the display in order to access additional items.

Note: It is possible that some setup items are greyed-out and inaccessible. This can be caused by a disc still being played back or interlocking with mutually exclusive setup items. Please stop playback or eject the disc before trying to change these setup items. If you still cannot access the setup item, please check for configuration conflicts and consistency. For example, if "Video Setup > 1080p24 Output" is set to "Off", the "DVD 24p conversion" menu items "Auto" and "Source Direct" will be grayed-out. Setting "1080p24 Output" to "On" will enable the "DVD 24p conversion" menu items "Auto" and "Source Direct" to be set.

1. Press the Setup menu button on the remote control, and the TV screen displays the following:



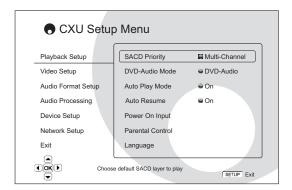
- Press the ▲/▼ buttons to select the section. There are six sections: Playback Setup, Video Setup, Audio Format Setup, Audio Processing, Device Setup, and Network Setup. Press the Enter button or the ▶ button to enter the selected section.
- 3. Press the ▲/▼ buttons to select the setup item to be changed, and press the Enter or ▶ button to change the setting. When the scroll icon is shown at the top or bottom of the Setup menu, it indicates that there are more menu items that can be accessed by scrolling with the ▲/▼ buttons.
- 4. To select a value from the list of available settings, press the △/▼ buttons and then press the Enter button to confirm. For example, to select "On" for "Auto Play Mode", use the △/▼ buttons to highlight the "On" selection and press the Enter button.



5. To exit the Setup menu at any time, press the Setup menu button on the remote control or select Exit from the Setup menu sections.

The settings are permanently saved when the player is turned off using either the front panel Standby/On button or the same button on the remote control. If the AC power is interrupted before the player enters standby status, the settings will not be saved.

# Playback setup



The "Playback Setup" section is designed to configure playback preferences for various contents.

# 1. SACD priority

To select which audio layer to play by default for SACD (Super Audio CD) discs which often have multiple soundtracks.

Multi-Channel (default) - Play the DSD multi-channel surround audio layer.

Stereo - Play the 2-channel DSD stereo audio layer.

CD Mode - Play the 2 channel PCM CD layer of a hybrid SACD disc.

# 2. DVD-Audio mode

To select which portion of a DVD-Audio disc to play.

DVD-Audio (default) - Play the DVD-Audio portion of the disc with high-resolution audio.

DVD-Video - Play the DVD-Video portion of the disc with Dolby Digital or DTS audio.

# 3. Auto play mode (on/off)

To select whether the player will start playing an audio CD or SACD automatically. When auto play mode is turned on (default), discs will start playing upon insertion into the player. When auto play mode is turned off, the player will wait for the user to start playback by pressing the Play button.

# 4. Auto resume (on/off)

To select whether the disc playback shall start from the previously saved point or not. This setting applies to CD, SACD, DVD and certain Blu-ray disc. When auto resume is turned on (default), the playback automatically starts from the previously saved point. When auto resume is turned off, the playback starts from the beginning.

# 5. Power on input

Allows you to set the initial input source after power on. It is recommended that you set this option only if you plan to use the player as a dedicated processor or pre-amplifier.

Blu-ray (default) – Power on with the regular Blu-ray Home Menu. This choice is recommended for regular use.

Last Input – Power on with the last input source. Depending on the availability of the input device, you may experience a blank screen on the display or "No signal" warning message.

# 6. Parental control

This is used to set parental control ratings in order to prevent minors from watching inappropriate content. This function does depend on the disc being properly rated and encoded.

Press the Enter button to bring up the rating selection menu.

To adjust the parental control settings, you must enter the current parental control password. If you have not set a parental control password yet, the default password is "0000".

The parental control menu contains the following sub-items:

BD Ratings - Use the Nagivation buttons to select the rating allowed for Bluray Discs. "Off" means no ratings control and all discs are allowed to play. Numbers 1 to 21 corresponds to the age limit. Discs encoded with an age limit that is equal to or above the selected age will be blocked, and any rating below the selected age will be allowed.

**DVD Ratings** - Use the Navigation buttons to select the rating to allow for DVD. The available ratings are Kid, G, PG, PG-13, PGR, R, NC17, Adult and Off. The selected rating and below will be allowed, and any rating above will be blocked. If "Off" is selected, all discs are allowed to play.

Area Code – Some Blu-ray Discs may have different parental control ratings for different geographical areas. At this time the player only supports the parental control ratings used in the United Kingdom.

Change Password – To change the parental control password, enter a 4-digit number as the new password. Enter the new password again to confirm. If the two entries are matching, the new password replaces the old parental control password.



# 7. Language

This is used to configure language preferences:

Player Language – To choose the display language for the player's Setup Menu and on-screen display.

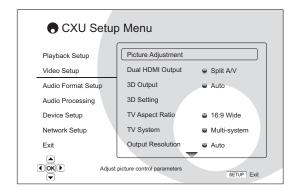
Disc Menu Language – To choose the preferred language for displaying DVD and Blu-ray Disc menus. If a disc menu of the selected language is available, that menu will be shown instead of the default disc menu.

Audio Language – To choose the preferred audio language for DVD and Bluray Discs. If an audio track of the selected language is available on the disc, the Audio track will be played back.

Subtitle Language – To choose the preferred subtitle language for DVD. If a subtitle of the selected language is available on the disc, it will be displayed. When "Auto" is selected, the subtitle display is decided by the disc.

Note: If your preferred language is not listed in the Disc, Audio or Subtitle menu options, select "Other" and enter the Language Code found on the later section of this manual.

# Video setup



The "Video Setup" section of the Setup Menu system allows you to configure various video output options.

# 1. Picture adjustment

To fine tune picture control parameters in order to achieve the optimal picture quality and visual result. To use Picture adjustment, press the Setup menu button on the remote control to enter the player's Setup Menu, and then choose "Video Setup > Picture adjustment", then select the video output to be adjusted.



Depending on the selected video output, the Picture Adjustment menu may be slightly different.

Menu for HDMI 1

		HDMI 1			
	Picture Mode	4		Mode 1	-
	Brightness	0	-16 _		+16
	Contrast	0	-16 -		<del>+16</del>
	Hue	0	-16 -		— +16
	Saturation	0	-16 =		— +16
	Noise Reduction	0	0 _		+3
	Darbee Mode	4		Off	<b>•</b>
<b>⊕ DARBEE</b>	Darbee Level	0%	0 _		120%
	Demo Mode	4		Off	<b>•</b>
	Detail Enhancement	0	-16 =		<del>+16</del>
VRSCheer-Verv	Edge Enhancement	0	-16 =		<u>+16</u>
	Video Smoothing	0	0 _	!	+4
	Demo Mode	4		Off	<b>•</b>

#### Menu for HDMI 2

HDMI 2					
Picture Mode	4		Mode 1	•	
Brightness	0	-16		+16	
Contrast	0	-16		+16	
Hue	0	-16		+16	
Saturation	0	-16		+16	
Sharpness	0	0		+16	
Noise Reduction	0	0 ,		+3	
Exit					

To change a picture adjustment parameter, use the Navigation A V ( ) buttons to highlight the parameter and to change its value. Darbee settings can be adjusted separately for the Blu-ray player, HDMI front and HDMI back inputs. The individual Darbee settings will be saved to each of these inputs.

To aid in the adjustment of picture control parameters, the picture adjustment menu will be reduced to only show the parameter being adjusted once you press the ◀/▶ buttons (except the Picture Mode, which you will directly see the mode name switches between Mode 1, 2 and 3, and all the other parameters are adjusted automatically). The reduced menu will be positioned near the bottom of the screen.



Adjust the parameters using the Navigation ▲ ▼ ◀ ▶ buttons. Press the Enter button to return to the large Picture Adjustment menu.

To exit the Picture Adjustment menu and return to the Setup Menu, either select "Exit" or press the Return button.

Picture Mode – The CXU allows you to save up to three (3) customized video modes

Press the • / > buttons to switch the mode and all parameters will be automatically adjusted to their stored values. Changes to the current parameter values will be stored automatically when you exit the Picture Adjustment screen or, switch to another Picture Mode.

Brightness - To adjust the brightness (black level) of the video output.

Contrast - To adjust the contrast (white level) of the video output.

Note: Proper brightness and contrast settings are necessary for a quality video output. If you do not have the correct black and white levels, your images can appear washed out or can lose detail in shadows when watching darker scenes. Televisions have brightness (black level) and contrast (white level) controls; however it may require a combination of tweaking both the player and your television to get the optimal result. First adjust the television's picture controls for the best possible picture. Once that is done, try changing the player's settings to further refine the picture to the optimal result.

Hue - Adjusts the hue (tint) of the video output.

Saturation – Adjusts the saturation (colour intensity level) of the video output.

Noise Reduction – To select whether the player shall apply video noise reduction processing. Noise reduction is handled by the video decoder, and this setting applies to both HDMI outputs.

Darbee Mode: Allows you to select the appropriate Darbee Visual Presence Viewing Modes. Depending on the video content,

Hi-Def – This mode works with Blu-ray and other high quality video sources (720p, 1080i, or 1080p). It preserves the original look of the video while imparting startling clarity and depth, providing the video with an elegant and refined feeling of enhanced realism.

Gaming – This mode works with video games, Computer-Generated Imagery (CGI) for movies and other clean video sources. It imparts a stronger degree of depth, separation and clarity that video game enthusiasts appreciate. This mode is recommended when you connect a video game console via the HDMI input of the player.

Full Pop – This mode works with low-resolution or low-quality video sources. It imparts the strongest sense of depth and realism, but you may notice some possible visible artifacts with text.

Off (default) – The Darbee Visual Presence is completely bypassed and the input video is not processed. In this mode, the Darbee Level and Demo Mode (Darbee) cannot be adjusted.

Darbee Level: Adjusts the level of Darbee Visual Presence processing to whichever level is best for your TV and viewing conditions, according to your personal preference. You may use the ◀/▶ buttons on the remote to decrease/increase the level. The level can be adjusted in 1% steps and within the range of 0 to 120%. A level of 0 is bypassed, the same as having Darbee Mode "Off".

Demo Mode (Darbee Visual Presence): Allows you to enable a special split-screen mode for the demonstration of Darbee Visual Presence video processing technology. It can also be used as an aid for setting picture adjustments for Darbee Mode and Darbee Level. It should NOT be used for normal movie watching.

Split Screen – The video screen will be split in half. The left side demonstrates the result of the Darbee Visual Presence video processing, and the right side shows video without the help of Darbee Visual Presence processing.

Swipe Screen - This mode is similar to Split Screen mode, except the divider bar will move continuously from left to right indicating which portion of the video is being processed.

Off (default) - Normal viewing mode.

Note: The Darbee button on the remote control provides direct access to the Darbee Adjustment Menu. Use the Navigation ▲ ▼ ∢ ▶ buttons to select the Darbee Mode and to adjust the Darbee Level, and the Colour buttons (Red, Green, Blue) to switch to different Darbee Demo modes.

Detail Enhancement – Use to set the sharpness level for video output. The enhancement level can be set between –16 and +16, with the default level being 0. Level 0 turns off detail enhancement. The negative levels may be used to reduce or eliminate overly sharpened video, though the picture may become soft. The positive levels increase fine detail. The higher the level, the sharper the video details are. However, too high of a sharpness level may cause white line etching around objects. Detail Enhancement can be used together with Edge Enhancement to achieve an optimal result.

Edge Enhancement – Use to set the sharpness of object edges in the video. The enhancement level can be set between -16 and +16, with the default level being 0. Level 0 turns off edge enhancement. The negative levels reduce or eliminate overly enhanced edges. The positive levels sharpen object edges. Edge Enhancement can be used together with Detail Enhancement to achieve an optimal result.

Note: Detail and Edge Enhancement produce similar results, but there are subtle differences. Detail Enhancement works best when the source material is "clean" and free from noise. Edge Enhancement works well from less pristine sources. It produces a sharpening effect without making noise more visible.

Video Smoothing – Use to remove the rough edges in an image, such as the staircase appearance of a diagonal line drawn on the screen (called the "stair stepped effect"). This smoothing technology provided by the VRS ClearView video processor creates the effect of a high-resolution image without softening the entire image. The video smoothing level can be set between 0 and +4. The default is level 0, which turns off video smoothing.

Demo Mode (VRS ClearView) – Enables a special split-screen mode for the demonstration of VRS ClearView video processing technology. It can also be used as an aid for setting picture adjustments for Detail Enhancement, Edge Enhancement, Video Smoothing and Noise Reduction. It should NOT be used for normal movie watching.

 $\it On-The\ video\ screen\ will\ be\ split\ in\ half.$  The left side demonstrates the result of the VRS Clear View video processing, and the right side shows video without the help of VRS ClearView processing.

Off (default) - Normal viewing mode.

Sharpness – Allows you to set the sharpness level for video output. Sharpness is a video processing function that can control the image sharpness but at the same time may cause unwanted artifacts. For HDMI 2 output, the sharpness level can be set between 0 and +16, with the default level being 0. The higher the level, the sharper the video details are. However, too high a sharpness level may cause white lines or halo-like effects to appear around objects.

# 2. Dual HDMI output

Selects the output mode when both HDMI Output ports are in use. If only one HDMI Output is active, this selection will not apply.

Split A/V (Recommended) – Use HDMI 1 Out as the dedicated video output port and HDMI 2 Out as the dedicated audio output port. This setting will ensure the best possible picture quality and the highest possible audio resolution.

Dual Display – Send digital audio and video signals to both HDMI Outputs simultaneously. This setting is only recommended when two HDMI displays are required, since the surround sound audio signal may be down-mixed to stereo and the original audio quality may be lost.

#### Note:

- The player can automatically adjust the resolution of digital audio and video signals depending on the capabilities of the connected television and receivers.
- For HDMI 1 OUT, the dedicated Darbee Visual Presence and Silicon Image VRS ClearView video processors will be used unless Source Direct is selected, in which case the Darbee and Silicon Image video processors are bypassed.
- In Split A/V mode, HDMI 1 OUT has video only with no audio, but HDMI 2 OUT will have audio and possibly video. This is because HDMI embeds audio into video data so there must always be a video signal, even if it's only a blank screen, to carry audio through.

# 3. 3D output

Chooses the video output mode for available 3D content at the HDMI output ports.

Auto (default) – Output 3D if supported both by the disc content and the display. The player automatically checks for the existence of 3D content on the disc and the 3D compatibility of the TV or projector. If both are qualified, the player sends 3D video from its HDMI output terminals, otherwise only 2D video is sent out. 3D-compatible glasses are required compatible with your TV.

Off – Always output 2D video format, even when 3D video exists on the disc. This can guarantee the video quality in case that your TV is not 3D compatible, or some necessary part (such as the 3D glasses) is missing.

Forced – Always output 3D video format for 3D Blu-ray discs. You might experience a black screen (no video output) if your TV is not 3D compatible.

# 4. 3D setting

Adjusts the playback settings for better 3D visual quality.

Blank HDMI 2 (Yes/No) – This allows the CXU to force HDMI 2 to output a 2D blank screen when HDMI 1 outputs 3D video. If HDMI 2 is connected to a receiver that is not 3D compatible, you may encounter audio issues from the receiver. Setting this option to "Yes" can resolve this issue. The default is 'No'.

2D->3D Depth – Adjusts the 3D depth perception when performing 2D-to-3D conversion (also called "simulated 3D"). The default value is 8.

3D TV Size - To enter the diagonal screen size of your HDTV. This option applies to 3D mode only, to facilitate the player adjusts the 3D image for better visual quality. The diagonal size of your TV screen, by default it is 46 inches.

# 5. TV aspect ratio

Sets the aspect ratio of the player's output image.

**16:9 Wide** – Choose this when the display is widescreen 16:9. 16:9 materials will be displayed in its native aspect ratio, and 4:3 materials will be stretched horizontally.

**16:9 Wide/Auto** (default) – Choose this when the display is widescreen 16:9. 16:9 materials will be displayed in its native aspect ratio, and 4:3 materials will be displayed with black borders on both sides in order to maintain the original 4:3 aspect ratio.

# 6. TV system

Chooses the output video standard (PAL/NTSC) to match your TV.

PAL – When playing PAL-encoded discs, no system conversion is performed. NTSC-encoded contents are converted to PAL output. Blu-ray discs encoded with 24Hz frame rate are converted to 50Hz frame rate if neither 1080p24 Output nor Source Direct output resolution is enabled.

NTSC - When playing NTSC-encoded discs, no system conversion is performed. PAL encoded contents are converted to NTSC output. Blu-ray discs encoded with 24Hz frame rate are converted to 60Hz frame rate if neither 1080p24 Output nor Source Direct output resolution is enabled.

Multi-system – No system conversion is performed. The output video system is the same as that encoded on the disc. Blu-ray discs encoded with 24Hz frame rate are converted to 60Hz frame rate if neither 1080p24 Output nor Source Direct output resolution is enabled. This mode requires a TV that supports both NTSC and PAL systems.

Note: Do not select "Multi-system" if your TV does not support both PAL and NTSC systems. The TV display may become a black screen upon inserting a disc encoded in a different system than your TV supports. Should this happen, you can press the Eject button to eject the disc tray, and then use the Setup Menu to correct the "TV System" setting.



# 7. Output resolution

Chooses the output resolution that best matches your television's native resolution. For a detailed description on how to choose a proper output resolution, please refer to the previous section "Selecting the best output resolution" of this manual.

# 8. 1080p24 output

This option only applies to the HDMI output at 1080p resolution. Many Blu-ray discs that originated from theatrical movies are encoded using 24Hz frame rate, the same number of frames per second as the original theatrical film. If your TV properly supports 1080p 24Hz, smoother motion can be achieved by enabling 1080p24 output for such discs.

Auto (default)– Video encoded in 24Hz frame rate will be output as 1080p 24Hz if the TV informs the player that it can support the 1080p24 signal.

Forced – Video encoded in 24Hz frame rate will be output as 1080p 24Hz without regard to whether the TV can support the 1080p24 signal or not. This is useful if the TV can actually support 1080p24 but does not properly state its capability. Please note that if the TV cannot support 1080p24, selecting this option will result in no video.

 ${\sf Off}$  - Video encoded in 24Hz frame rate will be converted to 50Hz (PAL) or 60Hz (NTSC)

# 9. DVD 24p conversion

Enables 24Hz frame rate conversion for DVD. This option is only available when 1080p24 Output is enabled (set to On). Many DVDs that originate from theatrical movies are encoded with a technique called "3:2 telecine" in order to convert the 24 frames per second film to 60Hz video signal. The player can convert the 60Hz video signal back to 24 frames per second film and output as 1080p/24Hz. Smoother motion may be achieved by enabling this option, if both the TV and the DVD disc meet the conversion conditions.

On – Converts DVD to 24Hz frame rate when possible. Remember that motion errors may be observed if the DVD is not suitable for such conversion.

Off (default) - Does not convert DVD to 24Hz frame rate.

# 10. 4Kx2K output

Sets the 4Kx2K resolution options. This option only applies to the HDMI output at 4Kx2K resolution.

Auto – Output 4Kx2K if the resolution is supported by the display and the content is suitable for 4K up-scaling. The player automatically checks for 4K compatibility of the TV or projector. If the display is compatible and the content being played has a 24Hz (or 23.976Hz) frame rate, the player sends 4Kx2K video from its HDMI output terminal; otherwise, the HDMI video is sent out at 1080p resolution or less depending on the display's capability.

Forced – Always output 4Kx2K video format regardless of whether the TV or projector supports it, or whether the content being played is suitable for 4K up-scaling. You may experience a black screen (no video output) if the display is not 4K compatible. For content that has a 50Hz or 60Hz (59.95Hz) frame rate, the output will be 4Kx2K at 25Hz or 30Hz (29.97Hz), and video quality may not be optimal due to frame rate conversion.

Auto (50/60Hz) (default) – This option is similar to "Auto", except that if the video frame rate is 50Hz or 60Hz and the TV or projector supports the video format of 4Kx2K at 50Hz or 60Hz with 4:2:0 colour space, then the video content will be up-converted to this format through the HDMI 1 out.

Forced (50/60Hz) – This option is similar to "Forced", except that if the source video frame rate is 50 or 60 Hz, then it will always be up-converted to 4Kx2K at 50 or 60 Hz with YCbCr 4:2:0 colour space through the HDMI 1 OUT.

# 11. HDMI options

Configures video options that apply only to the HDMI outputs. To enter this sub-menu, select "HDMI Options" from the Video Setup menu. The following HDMI options are available:

Colour Space (HDMI 1) - To select the colour space for the HDMI 1 output.

Auto (recommended) – The player checks with the display device to automatically determine what colour space to use. If the display device supports YCbCr 4:4:4, then it will be used to avoid extra colour space conversion

 $\it RGB\ Video\ Level$  – The HDMI output uses RGB colour space and normal signal range suitable for video displays.

RGB PC Level – The HDMI output uses RGB colour space and expands the signal range. The expanded signal range is suitable for personal computer (PC) displays. Some TVs are designed to be used as a PC monitor, and expect signal in expanded RGB range when the DVI input is selected. For these displays if the video signal uses the normal RGB range, the black-white contrast will be reduced. You can set the player to use the RGB PC Level output and restore proper contrast.

YCbCr 4:4:4 - The HDMI output uses YCbCr 4:4:4 colour space.

YCbCr 4:2:2 - The HDMI output uses YCbCr 4:2:2 colour space. Generally this is the colour space that is closest to the colour space encoded on the discs. (All discs are encoded in YCbCr 4:2:0 colour space, and the video decoder decodes it into YCbCr 4:2:2.)

Colour Space (HDMI 2) – To select the colour space for the HDMI 2 output. The available options are the same as those for Colour Space (HDMI 1).

Deep Colour (HDMI 1) – To select the Deep Colour mode for the HDMI 1 output. Deep Colour is an option for some TVs or projectors that feature HDMI v1.3 or higher input. Normally, each pixel of the video image is transmitted using 24-bit data (8-bit per channel for R, G, B or Y, Cb, Cr). If Deep Colour is supported, each pixel of the video image can be transmitted using 30-bit (10-bit per channel) or 36-bit (12-bit per channel) data. The increased bit depth should result in smoother colour transitions and better gradients.

36 Bits - Uses the 36-bit per pixel Deep Colour mode.

30 Bits (Dithered) – Uses the 30-bit per pixel Deep Colour mode with dithering technique. 30 Bits – Uses the 30-bit per pixel Deep Colour mode.

Off (Dithered) - Does not use Deep Colour, but applies the dithering technique.

Off (default) - Does not use Deep Colour.

Deep Colour (HDMI 2) – Allows you to select the Deep Colour mode for the HDMI 2 output . The available options are the same as those for HDMI Deep Colour (HDMI 1).

#### Note:

- Since the Deep Colour feature is optional and may not be supported by all TVs, enabling Deep Colour while connected to a TV without this feature may result in no effect or no video.
- At this time, no disc is encoded with Deep Colour. Enabling Deep Colour will not magically make colours richer, but will help preserve the maximum precision as a result of video processing and picture control adjustment.
- Dithering is a technique to improve the image colour depth with limited colour quantization.

De-interlacing Mode – To select the algorithm that the player should use to convert interlaced video on a DVD or Blu-ray Disc to progressive output. Selecting the proper de-interlacing mode will ensure the output video matches the original content and is free of de-interlacing artifacts. The available options are:

Auto (default) – Automatically selects the de-interlacing mode depending on the video type. This is the recommended setting as it sets the player to optimally process a variety of signal types.

 $\it Film$  – De-interlaces video originally shot with a film camera. The mode may improve film mode detection in some cases.

*Video* – De-interlaces video originally shot with a video camera. Use this setting only if you are certain the disc is not made from footage originally shot with a film camera.

# Display options

Configures the options for displaying on-screen information. The following display options are available:

Subtitle Shift – To set the display position for subtitles. When the "Subtitle Shift" is set at 0 (default), subtitles are displayed at the original position as specified on the disc. When it is set at a value between 1 and 10, subtitles are shifted up. When it is set at a value between -1 and -10, subtitles are shifted down. This feature is helpful for instance to customers using a 2.35:1 "Constant Image Height" video projection system. Subtitles can be shifted to the active video area so they do not get cut off.

OSD Position – To set the display position for on-screen display (OSD). When the "OSD Position" is set at 0, OSD is shown at the top and bottom of the video screen. When it is set at a value between 1 and 5, OSD is shifted towards the vertical center line of the video screen. Similar to the subtitle shift setting above, the "OSD Position" feature is helpful to customers using a 2.35:1 "Constant Image Height" video projection system.

OSD Mode – To select how long the on-screen display information, such as elapsed or remaining time, stays on the TV screen.

Normal – On-screen display information stays on the TV screen until the user cancels it.

 ${\it Minimal}$  – On-screen display information shows on the TV screen for a few seconds and then disappears. The front panel display still maintains the selected display information.

 ${\it Remaining-} \ {\it On-screen display information stays on the TV screen until the user cancels it. By default display remaining time instead of elapsed time.}$ 

Off – No OSD information shows on the TV screen unless the user presses the Into (i) button. This mode is not recommended for daily use.

Angle Mark (on/off) – To turn on/off the display of an angle mark when a DVD or Blu-ray Disc with multiple available angles is played. Keeping the angle mark off avoids distraction from normal movie watching.

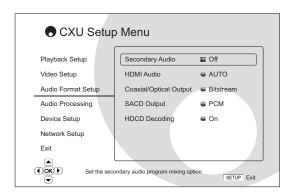
Screen Saver – To turn on/off the screen saver function. The screen saver is designed to minimize burn-in concerns for plasma and CRT display devices.

On (default) – After about 3 minutes of inactivity, the player will show an animated Cambridge Audio logo moving on a black background. This allows most areas of the screen to rest and gives all areas an equal opportunity to refresh.

Off – The screen saver will not be activated. Use this option if your TV does not have a burn-in issue.

Energy Saver – Video output will be turned off after 3 minutes of inactivity. Many projectors and LCD TVs will go into a standby or sleep mode and turn off their projection lamp or LCD backlight lamp, thus saving energy and prolonging the lamp life. When you press any button on the remote control or the player's front panel, the screen saver will be cancelled and video output will be restored. If your TV is already in standby or sleep mode, you may need to wake up the TV by pressing a button on its remote or control panel.

# Audio format setup



The "Audio Format Setup" section of the Setup Menu system allows you to configure preferences for audio output formats.

# 1. Secondary audio

Sets the secondary audio program mixing option. Some Blu-ray discs contain a secondary audio and video program, such as a director's commentary. Some Blu-ray Discs have a sound effect when you make menu choices. This setup menu item allows you to decide whether to mix the secondary audio program and menu sound into the primary audio.

 ${
m On}$  – The secondary audio program and menu sound are mixed into the primary audio. Usually this will cause the primary audio volume to be slightly reduced. High resolution primary audio will be converted to a normal resolution in order to mix with the secondary audio.

Off (default) – The secondary audio program and menu sound are not mixed into the primary audio and you cannot hear the secondary audio or menu clicking sound. This setting preserves the highest possible audio quality for the primary audio.

# 2. HDMI audio

Selects the digital audio output format from the HDMI output.

Auto (default) – The player checks with the device connecting to HDMI output to automatically determine which audio format to use.

LPCM – Digital audio output via HDMI will be multi-channel Linear PCM format. When this option is selected, compressed audio bit streams will be decoded by the player and then sent as multi-channel PCM. This setting is recommended when connecting the HDMI output directly to a TV or to a receiver without advanced audio decoding capabilities.

Bitstream – Digital audio output via HDMI will be in bitstream format. This option is recommended when connecting the HDMI output to an A/V receiver or processor that supports advanced audio decoding of Dolby TrueHD and DTS-HD Master Audio etc.

Off - No digital audio output via HDMI.

Note: If you use HDMI to connect audio to an HDMI A/V receiver or audio processor, it is important that you choose 720p or higher HDMI output resolution when playing high resolution audio content (DVD-Audio, SACD, Dolby TrueHD and DTS-HD Master Audio). According to the HDMI specification, the bandwidth available for audio is proportional to the total bandwidth used by video. At 480p/576p resolution, the HDMI specification can only support 2 channels of audio with high sample rate (up to 192kHz), or 8 channels of audio with standard sample rate (up to 48kHz). If you play high resolution audio content at the 480p/576p resolution, you may get reduced audio resolution, incomplete audio channels, or even no audio/video output at all. Choosing a higher output resolution such as 720p or above allows enough bandwidth for all high sample rate audio channels.

# 3. Coaxial/Optical output

Sets the maximum Linear PCM output frequency for the coaxial/optical digital output. This menu item is intended to ensure that the audio output is compatible with equipment that cannot support high sample rates. It sets an upper limit to decide whether the player shall down-sample audio.

Note: When using the Stereo or 7.1 Analog Audio outputs the LPCM rate limit should always be set to 192kHz to allow the internal playback engine to feed the up-sampler with the maximum sample-rate the content supports.

 ${\bf 48kHz\ LPCM}$  – Supported by most equipment. Higher sample rate material will be downsampled to  ${\bf 48kHz}.$ 

96kHz LPCM – Allows a higher sampling rate and frequency response. If using an externally connected AV receiver or DAC via coaxial or optical, ensure that the receiver/amplifier can support it. Higher sample rate material will be downsampled to 96kHz.

192kHz LPCM – Allows the highest sampling rate and frequency response. If using an externally connected AV receiver or DAC via coaxial or optical, ensure that the receiver/amplifier can support it.

Bitstream (default) – Passes audio as compressed bitstream format to the receiver/amplifier. Choose this setting if your receiver/amplifier is capable of decoding Dolby Digital and/or DTS etc.

Note: Due to copyright restrictions and bandwidth limitations, SACD audio cannot be sent through the coaxial/optical audio output, and the high resolution audio on DVD-Audio and Blu-ray discs will be sent out at reduced resolution.

# 4. SACD output

Selects the audio output format for SACD.

Auto – The player checks with the device connected to the HDMI output to automatically determine which audio format (DSD or PCM) to use for SACD playback.

PCM (default) – SACD Direct Stream Digital (DSD) data is decoded by the player and converted into multi-channel, high resolution PCM data. The HDMI output can be sent to an external AV receiver capable of receiving multi channel PCM (HDMI 1.1 or higher inputs are required). The CXU's own audio outputs are also active and playback of SACD material is possible by the CXU itself.

DSD – SACD DSD data is sent out via HDMI without any conversion. For decoding by an external AV receiver capable of receiving DSD (HDMI 1.2a or higher inputs are required and the receiver must actually include support for DSD as it is not a mandatory requirement of the HDMI spec).

# 5. HDCD decoding

Sets the audio decoding option for HDCD (High Definition Compatible Digital) discs

 $\mbox{On}-\mbox{HDCD}$  is decoded by the CXU. For HDCD discs, this gives expanded dynamic range and improved audio resolution.

Off (default) – HDCD is treated as regular CD and output as a native bitstream preserving the hidden encoding. This is useful when the CXU is connected to an HDCD-capable AVV receiver via a digital audio output link (Coaxial, Optical, or HDMI) the output is unprocessed so the AVV receiver can perform HDCD decoding instead.

Note: If your receiver is capable of HDCD decoding, it is recommended that you set the HDCD Decoding setting to Off on the CXU in order to avoid decoding HDCD twice. This will prevent the occasional pop or crackle sounds that occur when HDCD is decoded twice.



# Audio signal reference chart

Blu-ray Discs may contain many types of audio signal formats, some of which are high resolution types such as Dolby TrueHD and DTS-HD Master Audio. Blu-ray Discs also have many optional audio components such as the Secondary Audio Program and menu clicking sound. The player's Audio Format setup menu allows you to configure the audio output to meet your specific preference. The following chart provides a reference to what type of audio signal can be expected.

When "Secondary Audio" is set to "Off":

Output Type ⇒	HDMI Output		Coaxial/Optical Outputs		
Setting	Bitstream	LPCM	Bitstream	LPCM	Analog Multi- Channel Output
Source format					
LPCM 2ch	LPCM 2ch	LPCM 2ch	LPCM 2ch	LPCM 2ch	2ch
LPCM 5.1ch	LPCM 5.1ch	LPCM 5.1ch	LPCM 5.1ch	LPCM 2ch	5.1ch
LPCM 7.1ch	LPCM 7.1ch	LPCM 7.1ch	LPCM 5.1ch	LPCM 2ch	7.1ch
Dolby Digital	Dolby Digital	LPCM 5.1ch	Dolby Digital	LPCM 2ch	5.1ch
Dolby Digital Plus	Dolby Digital Plus	LPCM up to 7.1ch	Dolby Digital	LPCM 2ch	Up to 7.1ch
Dolby True HD	Dolby True HD	LPCM up to 192kHz 24-bit 7.1ch	Dolby Digital	LPCM 2ch	Up to 7.1ch
DTS	DTS	LPCM up to 7.1ch	DTS	LPCM 2ch	Up to 7.1ch
DTS-HD High Resolution	DTS-HD High Resolution	LPCM up to 7.1ch	DTS (core)	LPCM 2ch	Up to 7.1ch
DTS-HD Master Audio	DTS-HD Master Audio	LPCM up to 96kHz 24-bit 7.1ch or 192kHz 24-bit 2ch	DTS (core)	LPCM 2ch	Up to 7.1ch

When "Secondary Audio" is set to "On" and the player encounters a disc with secondary audio track or menu sounds:

Output Type ⇒	HDMI Output		Coaxial/Opt		
Setting	Bitstream	LPCM	Bitstream	LPCM	Analog Multi- Channel Output
Source format					
LPCM 2ch	LPCM 2ch	LPCM 2ch	LPCM 2ch	LPCM 2ch	2ch
LPCM 5.1ch	LPCM 5.1ch	LPCM 5.1ch	DTS 5.1ch	LPCM 2ch	5.1ch
LPCM 7.1ch	LPCM 7.1ch	LPCM 7.1ch	DTS 5.1ch	LPCM 2ch	7.1ch
Dolby Digital	Dolby Digital*	LPCM up to 5.1ch	Dolby Digital*	LPCM 2ch	5.1ch
Dolby Digital Plus	Dolby Digital*	LPCM up to 7.1ch	Dolby Digital*	LPCM 2ch	Up to 7.1ch
Dolby True HD	Dolby Digital*	LPCM up to 192kHz 24-bit 7.1ch	Dolby Digital*	LPCM 2ch	Up to 7.1ch
DTS	DTS*	LPCM up to 7.1ch	DTS*	LPCM 2ch	Up to 7.1ch
DTS-HD High Resolution	DTS*	LPCM up to 7.1ch	DTS*	LPCM 2ch	Up to 7.1ch
DTS-HD Master Audio	DTS*	LPCM up to 7.1ch	DTS*	LPCM 2ch	Up to 7.1ch

Note: All audio output signals are mixed with primary, second audio and menu sounds.

<sup>\*</sup> Denotes mixed audio re-encoded into Dolby Digital and DTS bitstream format



# Recommended audio format options

Depending on your specific audio/video connection method, the audio format options of the CXU may need to be adjusted to match your configuration. Please refer to the video and audio connection methods described previously in this guide and the following audio setup guidelines.

# Audio connection directly to TV

If the player is connected directly to the TV through HDMI and analogue L/R audio cables, it is recommended that you use the following audio format

Secondary Audio: HDMI Audio: SACD Output: LPCM PCM HDCD Output:

Coaxial/Optical Output: (any - not in use)

# Multi-channel digital audio to receiver through HDMI

If your receiver supports HDMI v1.3 with decoding capability for high resolution lossless audio formats such as Dolby TrueHD and DTS-HD Master Audio, please set these audio format options:

Secondary Audio: Off (or On if you need secondary audio)

HDMI Audio: Bitstream

SACD Output: PCM (or DSD if the receiver supports DSD over HDMI)

On

HDCD Decoding: Coaxial/Optical Output: (any - not in use)

If your receiver supports HDMI v1.1/1.2 Multi-Channel PCM audio, but not high resolution lossless audio formats such as Dolby TrueHD and DTS-HD Master Audio, please set these audio format options:

Secondary Audio: Off (or On if you need secondary audio) I PCM

HDMI Audio: SACD Output:

PCM (or DSD if the receiver supports

DSD over HDMI)

HDCD Decoding: Coaxial/Optical Output:

(any - not in use)

# Multi-channel analogue audio to receiver

If the player is connected to an A/V receiver through the 7.1ch or 5.1ch analogue audio jacks using 8 or 6 RCA/Phono cables, you can play all supported audio formats and let the CXU decode the audio, and listen to the audio with your A/V receiver and surround sound system. The following audio format setup options are recommended:

Secondary Audio: HDMI Audio: Off (or On if you need secondary audio)

SACD Output: PCM or DSD (depending on your listening

preference) On

HDCD Decoding:

Coaxial/Optical Output: (any - not in use)

Also set Speaker Configuration in the "Audio Processing" menu:

Set Down Mix to "7.1Ch" or "5.1Ch".

Set the speaker size and subwoofer properly according to your actual audio hardware as detailed on the following pages.

Enable or select the multi-channel analogue inputs on your receiver.

# Coaxial or optical digital audio to receiver

If your receiver only supports Coaxial/Optical, Dolby Digital and DTS decoding, the following audio format setup options are recommended:

Secondary Audio: Off (or On if you need secondary audio)

HDMI Audio: SACD Output: (any - SACD is not available through the optical/coaxial output)

HDCD Decoding: On (or Off if the receiver can decode

HDCD)

Coaxial/Optical Output: Bitstream

# Stereo analogue audio to receiver

If your receiver/amp only offers stereo audio connections, you will need to use analogue RCA-style cables to connect to it. The following audio format options are recommended:

Off (or On if you need secondary audio) Secondary Audio:

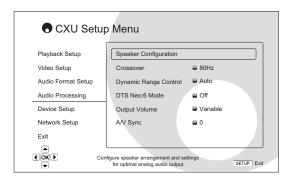
Off
PCM (the internal DACs need to use
PCM created from the SACDs DSD HDMI Audio: SACD Output:

stream to achieve SACD playback)

HDCD Decoding: Coaxial/Optical Output: (any - not in use)



# Audio processing setup



The "Audio Processing" section of the Setup Menu system allows you to configure how the player will process audio signals before sending them to the analogue outputs. The DRC control also affects the HDMI outputs.

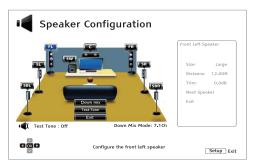
# Speaker configuration (7.1 channel analogue audio output only)

The following settings determine how the CXU's internal surround-sound decoder operates. For digital outputs, these settings should be kept at default.

In the Speaker Configuration menu you can configure speaker settings such as down-mix mode, number of speakers, their distance, size and trim level. The Speaker Configuration menu shows an illustration of the speaker placements to assist you on properly configuring the speaker parameters.

Upon entering this menu, the cursor is positioned on the front left speaker. You may use the 4/ > buttons to move the cursor. The > button moves the cursor in clockwise sequence, and the 4 button moves the cursor in counterclockwise sequence.

When the cursor is over the "Down Mix" or "Exit" options, you can also use the  $\triangle/
u$  buttons to highlight these options.

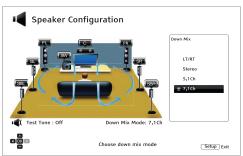


# Down mix mode

Down mix is the process of converting multi-channel audio to a lesser number of channels. For example, converting a 5.1ch source to stereo or converting a 7.1ch source to 5.1ch. Down mixing allows the audio output from the player to match the exact number of speakers available in your home theatre system.

The current down mix mode is displayed in the lower right corner of the speaker placement illustration.

To change the audio down mix setting, press the Enter button while the cursor is over the "Down Mix" option. The following down mix modes are available:



LT/RT - Left Total / Right Total. The Center and surround channels are decoded and then Matrix encoded into the two front channels. A Dolby Pro Logic receiver can then decode the two channel audio that is output back into surround audio.

Stereo - This mode down-mixes multi-channel audio to 2-channel stereo output. For original stereo content the output will not change. For original multi-channel content the surround and Center channels will be mixed with the left and right front channels. Recommended for use with TV sets or stereo receiver/amplifiers (without Pro Logic decoding).

5.1Ch – This mode enables 5.1ch decoded audio output. The number of actual output channels depends on the disc. If the source content has more channels, the surround back channels will be mixed into the surround channels.

7.1Ch - This mode enables 7.1ch decoded audio output. The number of actual output channels depends on the disc.

#### Test tone

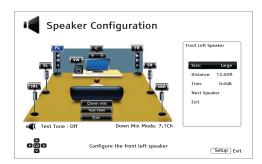
Test tones are artificially-created sounds that are used to test your audio speaker system and help to identify any wiring faults. By default the Test Tone is set to "Off", with the status is displayed in the lower left corner of the screen

To begin the test, press the  $\blacktriangle/\blacktriangledown$  buttons to highlight the "Test Tone" option, press the Enter button to change the test tone status to "On". Then use the Navigational buttons to select a speaker, you will hear the test sounds. To stop the test process, press  $\blacktriangle/\blacktriangledown$  buttons to highlight the "Test Tone" option and press the Enter button to switch the status back to "Off". Please note these test tones only apply on multi-channel audio outputs.

# Speaker settings

For each speaker in the home theatre system, you can set its size, distance and trim level. To configure a speaker, move the cursor to highlight the speaker and press the Enter button. The Speaker Settings menu on the right side of the screen will be activated. In the Speaker Settings menu, use the  $\blacktriangle/\blacktriangledown$  buttons to select a parameter, and then press the Enter button to change it. To exit the Speaker Settings menu and return to the Speaker Configuration illustration, press the  $\blacktriangleleft$  button or select the "Exit" option. You can also move on to configure the next speaker by selecting the "Next Speaker" option.

The following speaker parameters can be configured:



# 1. Size

The speaker size parameter sets bass filtering control for the speakers. The bass frequency is set in the "Crossover Frequency" option of the "Audio Processing" section of the Setup menu:

Large - Bass frequencies are passed to the speakers

Small – Bass frequencies are not passed to the speakers to reduce possible distortion. If a subwoofer is available, bass frequencies are redirected to a subwoofer.

Off – Speaker for the corresponding position does not exist. Audio for the missing speaker is redirected to other speakers or discarded if redirection is not possible.

On (for subwoofer only) - Specify that a subwoofer is available.

**Note:** The front, surround and surround back speakers are configured as pairs. Changes to the size of one speaker will automatically change the other speaker of the pair.

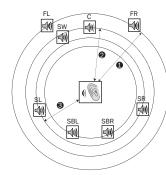


#### 2. Distance

The speaker distance parameters sets delay control for the corresponding audio channel. This delay is used to compensate for the audio propagation time difference caused by the placement of speakers of different distances from the listening position.

Speaker distance delay is only applied if the player is decoding multi-channel audio. If you use bitstream audio output to your A/V receiver, the bitstream audio is not adjusted for speaker distance delay.

Since the delay is calculated based on the distance difference from each speaker to the listener's position, it is important to set the distance for the front speakers first and then the other speakers. Anytime you change the distance of the front speakers, the distance of the other speakers will be automatically adjusted to maintain the same distance difference.



#### Distances:

- 1 Listener to Front
- 2 Listener to Center
- 3 Listener to Surround Left

#### Speaker Icons

FL - Front Left FR - Front Right

FR - Front Rign C - Center

SW - Subwoofer

SL - Surround Left SR - Surround Right

SBL - Surround Back Left

SBR - Surround Back Right

For example, in the above diagram, measure the distance (in feet) from the primary listening position to the Front Left or Front Right speaker. Your Front Right and Left speakers must be the same distance from the listener. Enter the distance of the Front speakers (1. in the above picture) into the "Speaker Configuration" menu.

Next, measure the distance (in feet) from the Center speaker (2) to the listening position. Move the cursor to highlight the Center speaker in the Channel Delay setup page, and enter the distance (as close as possible) in feet. Repeat for each speaker in the system (Center, Surround Left, Surround Right, Surround Back Left, Surround Back Right and Subwoofer) as available. The player will insert appropriate delay to the center, subwoofer and surround channels to make sure sound waves from different speakers arrive at the listener at the same time.

# Notes:

- The distance between the surround speakers and the listener must be shorter than or equal to that between the front speakers and the listener.
- The front, surround and surround back speakers are configured as pairs.
   Changes to the distance of one speaker will automatically change the other speaker of the pair.

# 3. Trim

The speaker trim level parameters sets the volume of each individual channel. For most accurate results, it is recommended that you use test tones from a calibration disc, such as Digital Video Essentials HD Basics, and a SPL (Sound Pressure Level) meter. The trim level can be set to +/- 10dB in 0.5dB increments

# Notes:

- Increasing the trim level above 0dB may result in distortion if the original audio level is already high. When this occurs the waveform becomes clipped and audible distortion can be heard. In this situation, it is necessary to reduce the trim level until the distortion is removed. When using the trim level for speakers, it is recommended that you set the least sensitive speaker's Trim Level to 0dB, and set other speakers' trim level to negative values.
- Each speaker can be set to independent trim levels and there is no linked pair limitation.

# Other audio processing settings

# 1. Crossover frequency

When the speaker size is set to "Small" in "Speaker Configuration", bass frequencies are not passed to the speakers to reduce possible distortion, bass frequencies will instead be redirected to the subwoofer.

40Hz / 50Hz / 60Hz / 70Hz / 80Hz / 90Hz / 100Hz / 110Hz / 120Hz / 130Hz / 140Hz / 150Hz / 160Hz / 200Hz / 250Hz − These are the available crossover frequencies. You can press the ♣/▼ buttons and the Enter buttons to select it. This option applies to all speakers (center, front, surround, and surround back speakers). By default the crossover frequency is 80Hz.

# 2. Dynamic range control

Sets the Dynamic Range Compression (DRC). DRC can smooth out the sonic peaks and valleys common with wide-range digital audio. Enabling DRC may make low level audio more audible during low-level listening. Turning off DRC restores the sonic energy present in the original recording.

Auto (default) - Play at the dynamic range specified by the disc. This option applies to Blu-ray Discs only. For other disc types no dynamic range compression is applied.

On - Turn on dynamic range compression.

Off - Turn off dynamic range compression.

Note: Dynamic Range Compression is applied to the analogue audio output and digital audio outputs (HDMI, Coaxial and Optical) when the audio format is set to PCM.

# 3. DTS Neo:6 mode

Enables DTS Neo:6 audio processing and select the listening mode. DTS Neo:6 is a digital signal processing that can expand the original stereo source to 7.0 (L, R, C, LS, RS, LR, RR) or 7.1 (with Bass Management) surround.

Music - Enables DTS Neo:6 audio processing for stereo music sources

Cinema – Enables DTS Neo:6 audio processing for digital TV box or stereo movie sources.

Off (default) - Turns off the DTS Neo:6 to keep the original audio quality.

# 4. Output volume

Enable or disable the analogue volume controls.

Variable (default) – Enables the analogue volume control. Use the Volume buttons on the remote to decrease/increase the analogue audio output level (the maximum is 100).

Fixed – Disables the analogue volume control. The Volume buttons on the remote will no longer affect the analogue audio output, and the volume level is fixed to 100.

# 5. A/V Sync

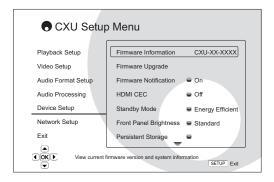
Allows you to add a slight delay to the audio so it is synchronized to the video. You may use the 4 / b buttons on the remote to decrease/increase the audio delay. The delay can be adjusted in 10ms steps and within the range of -100ms to +200ms. The delayed time will be applied to all output terminals including HDMI 1 and 2, Coaxial, Optical, and 7.1 outputs.

# Notes

- The actual audio delay effect might be different for each of the output terminals due to the different audio process algorithms and signal paths used for each output. Please adjust this setting based on the actual output terminal in use.
- The negative adjustment values are for cancelling out the audio delay that the player automatically applies. Depending on the video source and the time it takes to process the video, the main decoder chip automatically applies an audio delay in order to optimize audio video synchronization. The negative manual settings reduce the automatic audio delay, while the positive manual settings apply additional delay. Any negative value setting beyond the player's automatic delay will be treated as completely cancelling the automatic delay. For example, if the "AV Sync" value is manually set to -100ms and for the current video source the player applies a 70ms automatic audio delay, the final result is that the 70ms audio delay gets cancelled and the audio is not delayed at all. It is not possible to put audio ahead of video using this setting.
- For content sent through HDMI IN, the "A/V Sync" adjustment only works with positive values.



# **Device setup**



The "Device Setup" section of the Setup Menu system allows you to configure additional player options related to the hardware and control functions. The menu items in this section are:

# 1. Firmware information

Displays the current firmware version.

# 2. Firmware upgrade

Upgrades the player's firmware. This operation is only available when the playback is completely stopped or when there is no disc loaded.

The firmware is the system software that controls the features and functions of the player. Since the Blu-ray disc specifications are new and evolving, it is possible that a Blu-ray disc manufactured after the player was manufactured use certain new features of the Blu-ray disc specifications. We may also introduce new features from time to time. The options to upgrade the player's firmware are:

Via USB - You may download the firmware files from Cambridge Audio's web site to a USB drive and then use the USB drive to upgrade the player.

Via Network – If the player has a working Internet connection, you may upgrade the player directly over the Internet. Please follow the instructions on your TV screen.

# 3. Firmware notification

Sets whether the player should automatically check if new firmware versions are available via the Internet server and notify the user about new firmware.

On (default) - Check for new firmware version automatically and notify the user about new firmware. Requires working network connection.

Off - Do not check for new firmware version automatically.

# 4. HDMI CEC

CEC (Consumer Electronics Control) is an optional HDMI feature that can enable convenient remote control and automatic setup of consumer electronics over the HDMI connection. The remote control function allows you to use a single remote handset to operate multiple devices connected via HDMI. For example, you may use the TV remote to control playback of the Blu-ray disc player. The automatic setup function can automatically turn on the TV and change to the correct input when you start playing a disc in the Blu-ray Disc player. It can also turn off the player automatically when you turn off the TV. The implementation and compatibility of this feature varies by device manufacturer. Each may only implement part of the features or add their own proprietary functions. The manufacturer-specific implementation of the HDMI CEC function is often given a proprietary name of "...Link" or "... Sync". The CXU provides three modes for the HDMI CEC function:

HDMI 1 – HDMI CEC is enabled on HDMI 1 output. Use this mode if your other devices are compatible with the player.

HDMI 1 (Limited) – HDMI CEC is enabled on HDMI 1 output, but the CXU will only respond to playback control commands. It will not respond or issue power on/off and input selection commands. Use this mode if you do not want the automatic setup function to turn on/off your devices.

HDMI 2 - HDMI CEC is enabled on HDMI 2 output. Similar to HDMI 1.

HDMI 2 (Limited) – HDMI CEC is enabled on HDMI 2 output, but the CXU will only respond to playback control commands. Similar to HDMI 1 (Limited).

Off (default) – HDMI CEC feature is turned off on both HDMI output terminals. The player will not respond to HDMI CEC commands from other devices, nor will it setup other devices automatically.

# 5. Standby mode

Allows you to choose the unit's standby mode between Energy Efficient and Quick Start Mode.

Energy Efficient (default) - Player starts slower, but uses only 0.5W in standby.

 $\mbox{\bf Quick Start}$  - Player starts significantly faster, but uses more power on standby.

# 6. Front panel brightness

To control the display intensity of the front panel Vacuum Fluorescent Display (VFD) information window. This option allows you to dim it or turn it off.

Standard (default) - The VFD window is at full brightness.

Dim - The VFD window is at reduced brightness.

 $\mbox{Off}$  – The VFD window is turned off. In this mode the display resumes momentarily when there is any user operation.

# 7. Persistent storage

Persistent storage is a data storage area that holds additional contents for BonusView and BD-Live features. The data will be kept even if you turn off the player. The following persistent storage management options are available:

Storage Device – To select which storage device should be used as the persistent storage. The CXU is equipped with 1GB of internal flash memory. There are also two USB 2.0 ports on the player that can accept a USB drive to be used as the persistent storage. The choices are:

Internal Flash - Use the internal flash memory for persistent storage.

*USB Drive* – Use a USB drive for persistent storage. To meet the specification for BD-Live, a USB flash drive of 1GB or larger is required. A USB hard disk is not recommended.

Note: The new storage device choice becomes effective only after the player is restarted. Please make sure that you turn off the player and then turn it back on after changing the "Storage Device" option.

**Space Used** – Displays the used space of the persistent storage. If too much space is used and the available space becomes too low, some Blu-ray Discs may not play properly.

Erase Persistent Storage - To erase the data from the persistent storage.

# 8. Auto power off

Allows the player to auto-shutdown after 30 minutes of inactivity. This can help to reduce power consumption and increase player life.

On (default) - Enable the Auto Power Off.

Off - Disable the Auto Power Off.

# 9. Reset factory defaults

Resets all settings to the factory default value.

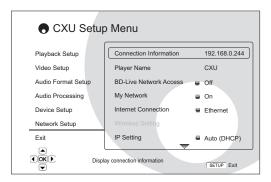
Erase accounts and settings (default) – Resets all settings to the factory default value and remove all application activations and account information, such as your YouTube accounts.

Erase settings – Resets all settings to the factory default value, but keeps the application activations and account information.



# **Network setup**

The "Network Setup" section of the Setup Menu system allows you to configure the parameters for the Internet connection of the player, test the connection and restrict BD-Live access. The menu items in this section are:



#### 1. Connection information

Display the current internet connection information, such as connection type, IP address, Ethernet MAC, Wireless MAC, etc.

# 2. Player name

Display the player's identification name as it is displayed on local network sharing products. To change it, press the Enter button to bring the soft keyboard. The name can contain maximum 12 characters including spaces.

#### 3. BD-Live network access

To restrict BD-Live content access.

On - BD-Live access is permitted.

Limited – BD-Live access is permitted only for contents that have a valid content owner certificate. Internet access is prohibited if the BD-Live contents do not have a certificate. This option ensures that you are accessing only authentic content, although it may block your access to smaller independent content providers.

Off (default) - BD-Live access is prohibited.

# 3. My network

Sets the My Network (in-home media sharing) client option. My Network option enables the player to receives streaming audio, video and photo from UPnP media servers on the home network.

On (default) – Enable the My Network client. The available media servers are listed in the "My Network" option of Home menu.

Off - Disable the My Network client. No media servers will be shown in "My Network" option, and a warning message will show after you enter "My Network" option.

# 4. Internet connection

Selects the internet connection type.

Ethernet (default) – Connect to internet through the Ethernet cable, please refer to the connection instructions of the manual. Choosing this will make the "Wireless Setting" option grey and un-selectable.

Wireless – Connect to internet through the external wireless adaptor, please refer to the connection instructions of the manual. Choosing "Wireless" will start the wireless setting procedure, and also make the "Wireless Setting" option in the next row selectable.

 $\mbox{Off}$  – Internet access is prohibited. This will make all the remaining options in Network Setup screen grey and un-selectable.

# 5. Wireless setting

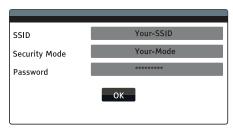
Note: The CXU includes a wireless adaptor. Other wireless adaptor will not work.

To start the wireless setting procedure. The wireless setting procedure can be started either by selecting the "Wireless Setting" option, or by selecting "Wireless" in "Connection Method" option, the procedure is described as follows:

The player first searches for the last successful wireless settings. If any exist, a message will pop up as below:



Use Previous – Uses the last successful wireless setting. A summary of the previous wireless setting will pop up showing information like SSID (Service Set Identifier), Security Mode and Security Key (in asterisk \*).



Then a connection test will be automatically performed and the test result shown on the screen.

 ${\bf Start\ New}$  –  ${\bf Starts\ a}$  new wireless configuration. The CXU supports three wireless configuration methods and



Scan – To scan for available wireless networks. The player automatically scans for any available wireless networks nearby and the search results are listed in a window. You can press the ▲/▼ buttons to highlight a network then press the Enter button to select it. If this network is secured, you need to input the security key using the remote control. Then a connection test will be automatically performed and the test result is shown on the screen.

Manual – To manually set the information for a wireless network. You need to use the remote control to input the SSID, select the Security Mode and input the Security Key. Then a connection test will be automatically performed and the test result is shown on the screen.

WPS - To start the Wi-Fi Protected Setup. CXU supports the WPS standard to provide an easy and secure establishment of a wireless home network. If you have a router/wireless access point that also support WPS.





PIN – Configures the WPS using a Personal Identification Number. The player will generate a PIN and you need to input it into the software control panel of your wireless router or access point. Please follow the on-screen instruction.

PBC - Configures the WPS using Push Button Control. You need to push a PBC button on your wireless router or access point to initiate the wireless connection. Please follow the on-screen instruction.

#### Note

- SSID is short for Service Set Identifier. It is an identifier for each wireless router or access point, and is also referred as a network name.
- WPS is short for Wi-Fi Protected Setup (WPS). It is the latest standard for easy and secure wireless home network configuration. It is also named Wi-Fi Simple Config. To use WPS, a WPS compatible router or access point is required.

# 6. IP setting

To determine how the player obtains its IP address.

Auto (DHCP) - The player automatically obtains its IP address information using DHCP (Dynamic Host Configuration Protocol). This is the default setting. In most cases, automatic IP configuration is best and requires no user intervention.

**Manual** – Manually enter the numeric IP address information. For more information on how to manually configure the Internet connection and what values to use, please consult your broadband router/modem instruction manuals or call your Internet service provider.

 $\it IP\ Address$  – The Internet Protocol address of the player. When "IP Configuration" is set to "Auto (DHCP)", the value displayed here is obtained using DHCP and cannot be changed.

Subnet Mask – Each IP address has an associated subnet mask. It is used by the player to decide whether to route network traffic through the router or directly to another device on the same network. When "IP Setting" is set to "Auto (DHCP)", the value displayed here is obtained using DHCP and cannot be changed.

Gateway – The IP address of the router. It is also called "default gateway" or "default router". When "IP Setting" is set to "Auto (DHCP)", the value displayed here is obtained using DHCP and cannot be changed.

 $DNS\ 1$  – The IP address of the first (primary) DNS (Domain Name System) server. DNS is the mechanism to translate human-readable addresses to numeric IP addresses. When "IP Setting" is set to "Auto (DHCP)", the value displayed here is obtained using DHCP and cannot be changed.

 $DNS\ 2$  – The IP address of the second (secondary) DNS server. When "IP Setting" is set to "Auto (DHCP)", the value displayed here is obtained using DHCP and cannot be changed.

# 7. Proxy setting

Configures the proxy server settings. A proxy server works as an intermediary for network communication between clients and other servers, which can provide benefits like security, anonymity, speedup or circumventing regional restrictions.

On - To access the Internet via a proxy server.

Proxy Host: To enter the proxy host name using the remote control.

Proxy Port: To enter the proxy host port number using the remote control.

Off (default) - Do not use a proxy server.

# 8. Connection test

Tests the Internet connection. It is recommended that you test the connection when you initially connect the player to the Internet, or whenever changes to "IP Setting" and other network parameters are made.

# Troubleshooting

# There is no power

Ensure the AC power cord is connected securely.

Ensure the plug is fully inserted into the wall socket and is switched on.

Check fuse in the mains plug or adaptor.

# The player will not read the disc

Check the disc is not loaded upside down.

Check that the disc is not too scratched or dirty.

The disc type is not supported by this unit.

Check its region and type.

Functions on some discs may not work on this unit. This is not a malfunction of the player.

#### There is no sound

Ensure that the amplifier is set correctly.

Check that the interconnects are inserted correctly.

Check if the output has been set incorrectly to Bitstream or LPCM.

# There is no picture

Check that the video cable is connected properly.

Check that the TV input is selected correctly.

Check that the video format is supported.

Check that the 'Pure Audio' mode is not enabled.

# The disc is skipping

Check that the disc is not too scratched or dirty.

Ensure that the CXU is on a firm surface and not subject to vibrations.

# A low hum or buzz sound can be heard

Power cords or lighting placed near this product.

Analogue inputs not connected securely.

# No sound from the rear speakers

Source being played is not recorded in surround-sound.

Unit has been put to stereo or other down-mix mode.

# No sound from the Center speaker

A stereo mode has been selected.

# Remote control is not working

The batteries are flat.

The remote is too far from the unit or out of the effective range.

# Files on a connected USB device do not play

If the USB drive is incompatible, or the player encounters errors while reading the USB drive or flash memory card, the screen displays "Device Error". In this case please verify that the USB drive is compatible, and try to unplug the device and re-insert again.

In some cases, an incompatible USB device may cause the CXU to stop responding. If this occurs simply turn off the power, remove the USB device, and turn the player back on.

The file type is incompatible. Check the supported file types.

The drive requires too much power from the USB socket.

# Problems using HDMI

Ensure that your screen supports HDCP (High-Definition Copy Protection).

Ensure your screen is capable of displaying the resolution being output by the Blu-ray player.

: Cables which run over 5m may cause sync or grounding issues.

For more frequently asked questions (FAQs), technical advice and information on getting the most out of your CXU, please visit the Support section on Cambridge Audio's website:

www.cambridgeaudio.com/support.php

# Appendix - language code list

: These affect the Audio/Subtitle/Disc menu defaults only and not the On Screen menu language.

Code	Language Name	Code	Language Name	Code	Language Name
6565	Afar	7285	Hungarian	8084	Portuguese
6566	Abkhazian	7289	Armenian	8185	Quechua
6570	Afrikaans	7365	Interlingua	8277	Rhaeto-Romance
6577	Amharic	7378	Indonesian	8279	Romanian
6582	Arabic	7383	Icelandic	8285	Russian
6583	Assamese	7384	Italian	8365	Sanskrit
6588	Aymara	7387	Hebrew	8368	Sindhi
6590	Azerbaijani	7465	Japanese	8372	Serbo-Croatian
6665	Bashkir	7473	Yiddish	8373	Singhalese
6669	Byelorussian	7487	Javanese	8375	Slovak
6671	Bulgarian	7565	Georgian	8376	Slovenian
6672	Bihari	7575	Kazakh	8377	Samoan
6678	Bengali, Bangla	7576	Greenlandic	8378	Shona
6679	Tibetan	7577	Cambodian	8379	Somali
6682	Breton	7578	Kannada	8381	Albanian
6765	Catalan	7579	Korean	8382	Serbian
6779	Corsican	7583	Kashmiri	8385	Sundanese
6783	Czech	7585	Kurdish	8386	Swedish
6789	Welsh	7589	Kirghiz	8387	Swahili
6865	Danish	7665	Latin	8465	Tamil
6869	German	7678	Lingala	8469	Telugu
6890	Bhutani	7679	Laothian	8471	Tajik
6976	Greek	7684	Lithuanian	8472	Thai
6978	English	7686	Latvian,Lettish	8473	Tigrinya
6979	Esperanto	7771	Malagasy	8475	Turkmen
6983	Spanish	7773	Maori	8476	Tagalog
6984	Estonian	7775	Macedonian	8479	Tonga
6985	Basque	7776	Malayalam	8482	Turkish
7065	Persian	7778	Mongolian	8484	Tatar
7073	Finnish	7779	Moldavian	8487	Twi
7074	Fi jian	7782	Marathi	8575	Ukrainian
7079	Faroese	7783	Malay	8582	Urdu
7082	French	7784	Maltese	8590	Uzbek
7089	Frisian	7789	Burmese	8673	Vietnamese
7165	Irish	7865	Nauru	8679	Volapuk
7168	Scots Gaelic	7869	Nepali	8779	Wolof
7176	Galician	7876	Dutch	8872	Xhosa
7178	Guarani	7879	Norwegian	8979	Yoruba
7185	Gujarati	7982	Oriya	9072	Chinese
7265	Hausa	8065	Panjabi	9085	Zulu
7273	Hindi	8076	Polish		
7282	Croatian	8083	Pashto, Pushto		



# Technical specifications

Disc types Blu-ray (BD) including BD-3D, DVD-Video,

DVD-Audio, AVCHD, SACD, CD, HDCD, Kodak Picture CD, CD-R/RW, DVD±R/RW,

DVD±R DL, BD-R/RE

**BD** Profile BD-ROM version 2.5 profile 5

(also compatible with profile 1 version 1.0

and 1.1)

Architecture

Mediatek MTK8580 Decoder

Darbee video scaler on primary output. Video Scaler

Analog devices ADSP-21261 32 bit SHARC® Upsampler DSP running Anagram Technologies™

Q5 up-sampling to 24 bit/192kHz (All 10

DACs 5 x Wolfson WM8740 24/192kHz digital to

analogue converters

Internal Storage 1GB (Actual available storage varies due to

system usage)

External Storage 3 x USB 2.0 Analogue audio outputs 7.1 RCA/Phono

Can be set for stereo, 5.1 or 7.1 output

Dedicated stereo RCA/Phono

Video Frame Rates 24Hz/50H/60Hz

MPEG2, MPEG 2 HD, MPEG4, MPEG4 Video format/file format support

HD, AVC, VC-1, DIVX, XVID, VCD, AVI, AVC, MKV (4.1), DAT, VOB, WMV, MOV, MP4, MPEG-PS, FLV, MTS, M2TS, M2T, M4V, QT

AAC, WMA, MP3, APE, Ogg Vorbis, FLAC (inc. 24 bit 32-192kHz), WAV (inc. 24 bit 32-Audio file format support

192kHz)

Picture file format support JPG, BMP, GIF, PNG

-Whilst we strive to maintain maximum file compatibility, because of inconsistencies in how some file formats are generated and a constantly changing industry we cannot guarantee the playability of all file formats above.

- BD ISO files are not supported for copyright reasons.

- Some forms of M42, WMA or APE with embedded covers are not supported.

HDMI inputs (1.4a) x 2 (MHL compatible via the front panel)

HDMI video

480i/480p/576i/576p/720p/1080i/ 1080p/1080p24/1080p25/1080p30, 3D frame-packing 720p/1080p24.

HDMI audio

Stereo, up to 5.1ch/192kHz or 7.1ch/96kHz PCM, Dolby Digital, Dolby Digital Plus, DTS.

480i/480p/576i/576p/720p/1080i/ 1080p24/1080p25/1080p30, 3D frame-packing 720p/1080p24.

Stereo, up to 5.1ch/192kHz PCM, Dolby Digital, Dolby Digital Plus, DTS.

HDMI outputs (1.4a) x 2

NTSC: 480i/p, 720p, 1080i/p, 1080p24

PAL: 576i/p, 720p, 1080i/p, 1080p24

3D and 4K are also supported

Stereo, up to 7.1ch high-resolution PCM, up to 5.1ch DSD, bitstream or decoding to PCM of Dolby Digital, Dolby Digital Plus, Dolby TrueHD, DTS, DTS-HD High Resolution Audio, and DTS-HD Master Audio.

Composite Video 1.0V p-p (75 Ω) (Diagnostic only)

Ethernet 100BASE-T

IR Emitter In 3.5mm mini jack, isolated, modulated Universal switch-mode 100 - 240V AC,

IEC inlet

35W Max power consumption <0.5W Standby consumption

(Quick Start mode off) Dimensions (H x W x D)

82 x 430 x 312mm (3.2 x 16.9 x 12.3'') with feet

Weight (unboxed) 5.0kg (11.0lbs) THD+N @ 1kHz < 0.001% THD+N 20Hz-20kHz < 0.003% IMD 19/20KHz < 0.0002% S/N Ratio < -108dB Crosstalk @ 1kHz < -100dB

Total Correlated Jitter

< 50pS Wi-Fi 802.11 b/g/n compatible via supplied

donale, 2,4Ghz.

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