

Integrated Amplifier

User's manual

2

ENGLISH

**minX<sup>xi</sup>**

**Cambridge Audio**

Your music + our passion

**Important!**

The Minx Xi is largely a software based product and new features and updates will be made available from time to time. See the Upgrade Firmware section of this manual for how to check for and then automatically update your unit via the internet. The process takes only a few minutes.

We would encourage you to check for any updates before using your Minx Xi for the first time and then from time to time afterwards.

Also please do check the support page for the Minx Xi at <http://support.cambridgeaudio.com> for details of any new features, advice on compatibility with other products and audio formats and the most recent copy of this manual.

**Make sure you register your purchase.**

Visit: [www.cambridge-audio.com/sts](http://www.cambridge-audio.com/sts)

**By registering, you'll be the first to know about:**

- Future product releases
- Software upgrades
- News, events and exclusive offers plus competitions!

This guide is designed to make installing and using this product as easy as possible. Information in this document has been carefully checked for accuracy at the time of printing; however, Cambridge Audio's policy is one of continuous improvement, therefore design and specifications are subject to change without prior notice.

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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.
7. 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. Use with only the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over. 
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as the power-supply 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 unit to rain or moisture.
- Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as sunshine, fire or the like.

The unit is of Class 1 construction and must be connected to a mains socket outlet with a protective earthing connection.

The unit must be installed in a manner that makes disconnection of the mains plug from the mains socket outlet (or appliance connector from the rear of the unit) possible. Where the mains plug is used as the disconnect device, the disconnect device shall remain readily operable.

Only use the mains cord supplied with this unit. Please ensure there is ample ventilation. We recommend that you do not place the unit in an enclosed space; if you wish to place the unit on a shelf, use the top shelf to allow maximum ventilation. 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.

This unit must not be used near water or exposed to dripping or splashing water or other liquids. No objects filled with liquid, such as vases, shall be placed on the unit.



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.

### 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 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 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.



### C-Tick mark

This product meets the Australian Communications Authority's Radio communications and EMC requirements.



### Gost-R Mark

This product meets Russian electronic safety approvals.

## Important safety instructions cont.

### 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.

### 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

Batteries may contain substances harmful to the environment. Please dispose of any discharged batteries with due consideration and in accordance with local environmental/electronic recycling guidelines.

### 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,

Minx Xi 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)

This Class B digital apparatus complies with Canadian ICES-003

This device complies with Industry Canada licence-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.

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This radio transmitter 9095A-MXI01 has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

C059-510137-A; Antenna+RG-178 Cable+SMA Plug Reverse, 3.0dBi, 50Ω

This equipment complies with RSS-102 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.

Cet appareil numérique de Classe B est conforme à la norme Canadienne ICES-003. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

Le présent émetteur radio 9095A-MX101 a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

C059-510137-A; Antenna+RG-178 Cable+SMA Plug Reverse, 3.0dBi, 50Ω

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

## IMPORTANT NOTE:

### IC Radiation Exposure Statement:

This equipment complies with Canada radiation exposure limits set forth for uncontrolled environments. 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.

Cet appareil numérique de la classe B conforme à la norme NMB-003 du Canada.

## Europe-European Union Notice

Radio products with the CE 0889 or 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.

To determine the type of transmitter, check the identification label on your Cambridge Audio product.

Products with the CE marking comply with European Low Voltage (2006/95/EC), Electromagnetic Compatibility (2004/108/EC) and Environmentally-friendly design of Energy-related Products (2009/125/EC) Directives issued by the Commission of the European Community. Compliance with these directives implies conformity to the following European Norms.

- EN 55022 – Electromagnetic Interference.
- EN 55024 – Electromagnetic Immunity.
- EN 61000-3-2 – Power Line Harmonics.
- EN 61000-3-3 – Power Line Flicker.
- EN 60950-1 – Product Safety Products that contain the radio transmitter are labeled with CE 0889 or CE alert marking and may also carry the CE logo.
- EN 62301:2005 - Household electrical appliances. Measurement of standby power.
- 1275/2008 - Implementing EuP Directive for Standby Power Consumption.

## 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 defective parts in this product. Warranty periods may vary from country to country. In if 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.

## Plug Fitting Instructions (UK only)

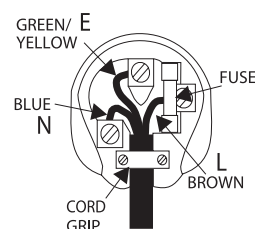
The cord supplied with this appliance is factory-fitted with a UK mains plug fitted with a 5-amp fuse inside. If it is necessary to change the fuse, it is important that a 5-amp fuse is used. If the plug needs to be changed because it is not suitable for your socket, or becomes damaged, it should be cut off and an appropriate plug fitted following the wiring instructions below. The plug must then be disposed of safely, as insertion into a mains socket is likely to cause an electrical hazard. Should it be necessary to fit a 3-pin BS mains plug to the power cord, the wires should be fitted as shown in this diagram. The colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug. Connect them as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter 'N' or coloured BLACK.

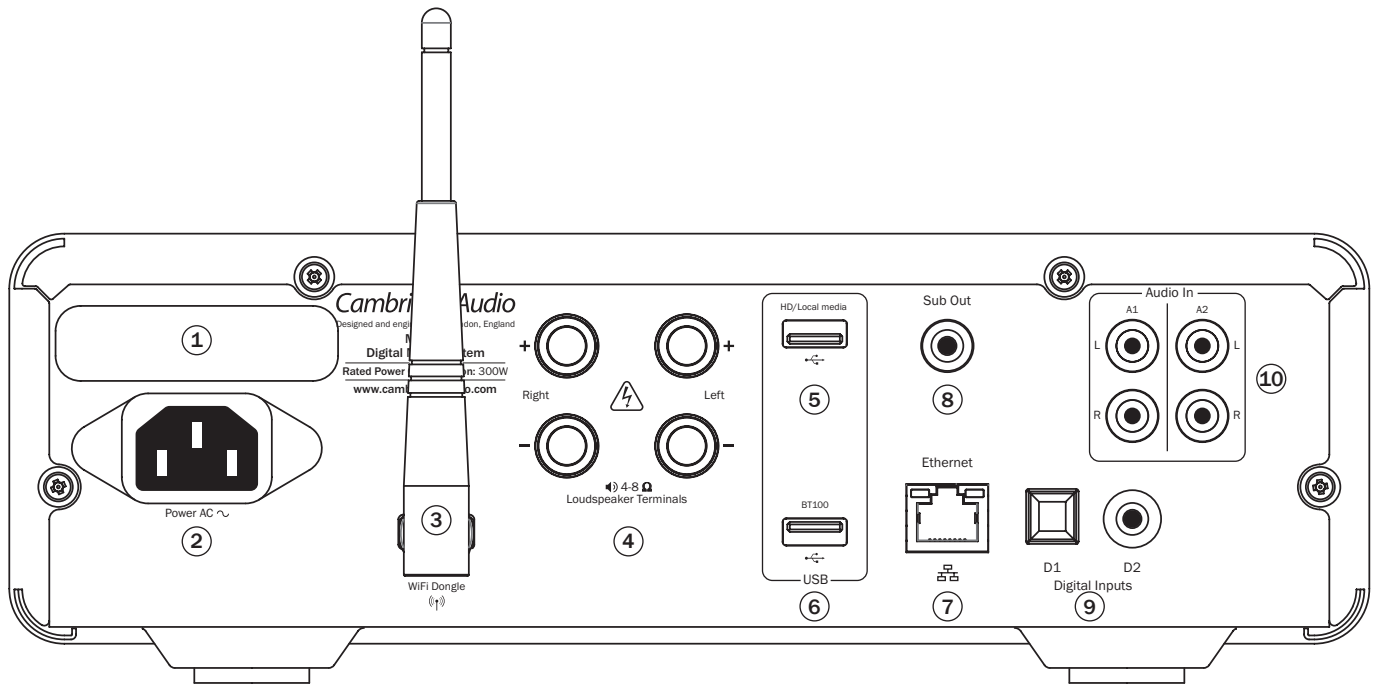
The wire which is coloured BROWN must be connected to the terminal which is marked with the letter 'L' or coloured RED.

The wire which is coloured GREEN/YELLOW must be connected to the terminal which is marked with the letter 'E' or coloured GREEN.

If a standard 13-amp (BS 1363) plug is used, a 5-amp fuse must be fitted or, if any other type of plug is used, a 5-amp fuse must be fitted, either in the plug or adaptor, or on the distribution board.



## Rear panel connections



### ① Mains Voltage Selector Switch

Switches the mains voltage between 220–230V and 100–120V use.

**Note:** Intended for use by a professional installer or Cambridge Audio retailer only.

### ② AC power socket

Once you have completed all connections to the amplifier, plug the AC power cable into an appropriate mains socket then switch on. Your Minx Xi is now ready for use.

### ③ Wireless antenna

Should be in the upright position as shown. Allows connection to 802.11b/g or n networks (2.4 GHz will only be used for n networks).

### ④ Speaker terminals

Connect the wires from your left channel loudspeaker to the Left + & - terminals, and the wires from the right channel loudspeaker to the Right + & - terminals.

Care should be taken to ensure no stray strands of wire short the speaker outputs together. Please ensure that your speaker wires are properly inserted to provide a good electrical connection. It is possible for the sound quality to be affected if the connections are loose.

### ⑤ HD/Local media

Use to connect a USB storage device or another portable device that is USB HD/flashdisk compatible containing music files. Current limited to 1A.

### ⑥ BT100

The supplied Cambridge Audio BT100 Bluetooth adaptor should be plugged in here adding wireless streaming bluetooth (A2DP/AVRCP) audio capability directly from most phones, tablets and laptops. See later section for details.

### ⑦ Ethernet

Ethernet port for connecting to a 10/100BASE-T local area network (LAN) if required.

### ⑧ Sub out

For optional connection to a powered subwoofer.

### ⑨ Digital D1 and D2 Inputs

Toslink and S/P DIF co-axial digital inputs.

These inputs can be renamed when displayed on the front panel, see later section of the manual.

**Note:** To obtain the best results from your system we recommend using only high quality Cambridge Audio interconnects. This will ensure that you hear your system as we designed it. Please ask your dealer for details.

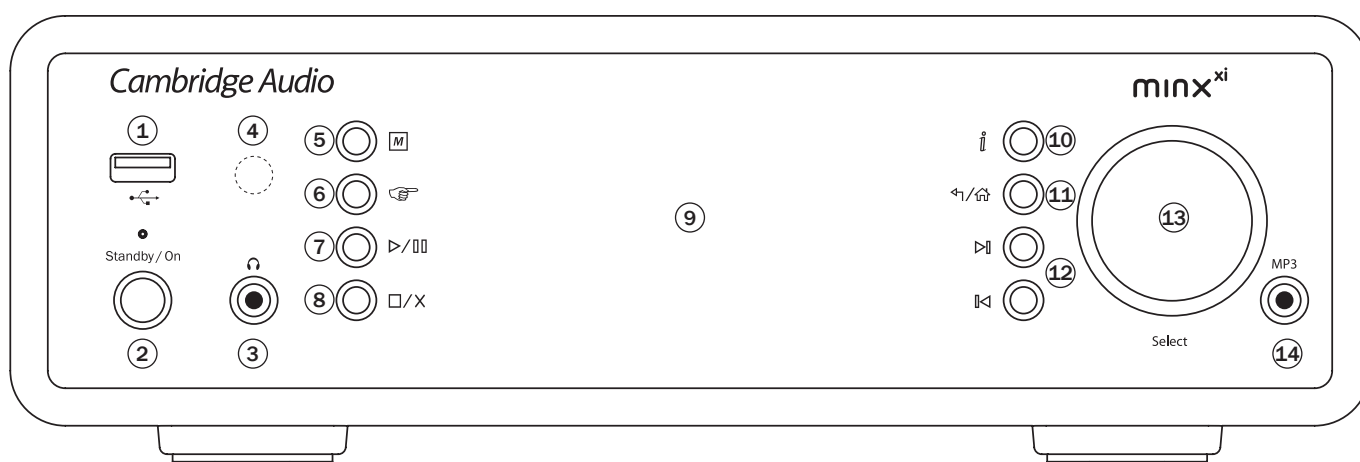
### ⑩ Analogue A1 and A2 inputs

These inputs are suitable for any 'line level' source equipment such as CD players, DAB or FM/AM tuners etc.

These inputs can also be renamed, see later section of the manual.

**Note:** These inputs are for analogue audio signals only. They should not be connected to the digital output of a CD player or any other digital device.

## Front panel controls



### ① USB

Use to connect a USB storage device or another portable device containing music files. 500mA maximum current consumption.

### ② Standby/On

When powering up from standby the Standby/On LED will flash approximately once a second as the unit boots up, the display will initially be blank before 'Starting...' appears.

**Note:** The startup sequence can take approximately 30 seconds to complete.

### Idle mode

To enable Idle mode, it must first be activated within the setup menu. Go to "Settings -> Idle Mode" and set to "On".

Idle mode, when enabled, allows Minx Xi to enter a lower power suspended state using the Standby/On button. The display is turned off and many of the internal processes and circuits are disabled to reduce power consumption. However the difference between Idle and Standby is that in Idle mode, power remains connected to the main controller, Ethernet and Wi-Fi sections.

In Idle mode, networking functionality remains alive in the background. This means that Minx Xi can be quickly woken up out of the suspended state into an operational state using not only the front panel, the infra-red remote and the control bus, but also the iOS app running on the iPhone or iPad. This is not possible when the unit is in full Standby mode.

Short presses of the Standby/On button then toggle the Minx Xi between On and Idle.

**Note:** after putting the unit into Idle mode, you will not be able to wake the unit into full On mode until 5 seconds have elapsed.

Full standby can still be activated by keeping the Standby/On button pressed for more than two seconds. A subsequent press of Standby/On turns the unit fully on, but remember that this can not be done over the network (i.e. from the iOS app) and that it takes longer to reach the full operational state.

### ③ Phones

Allows for the connection of stereo headphones with a 3.5mm jack plug. Headphones with an impedance of between 32 and 600 ohms are recommended.

**Note:** Plugging in headphones will automatically mute the loudspeaker output.

### ④ Infrared sensor

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

### ⑤ M (Memory)

Press to access the Memory features for preset recall and storage.

The Minx Xi can store up to 20 Presets which can be Internet Radio stations, Streams from Streaming Services or your own choice of Internet Radio URL. See later section.

### ⑥ (Reply)

This is the reply/interactive button. Press when listening to an Internet Radio station or Streaming Service that has some form of interaction with the user. This function will bring up an interactive menu (where available). This feature is commonly used allow indication that you like or don't like the current stream so the service can tailor the music served to your personal taste.

For Media playback (UPnP or Local) this button will toggle between the 'Now Playing' display and the current media browsing display.

### ⑦ Play/Pause

Plays and pauses playback.

### ⑧ Stop/Delete

Press during playback to stop or press in various menus to delete the present item.

### ⑨ Display

Displays the status of the unit.

### ⑩ (info)

Toggles between the 'Now Playing' and current media browsing display.

### ⑪ Return/Home

Press to return to the previous menu. Press and hold to go directly to the top Home menu.

### ⑫ Skip

Press once to skip forwards or backwards one track.

### ⑬ Volume Control / Menu navigation and select

Rotate whilst the now playing display is active to adjust volume.

Pressing Home, Back or Info will switch to menu navigation. In menu navigation rotate the control to move between various items and press the control in to select the highlighted item.

### ⑭ MP3 Input

This source input allows you to connect a portable audio device such as an MP3 player directly into the front of the unit using the 3.5mm stereo-jack (labelled 'MP3'). Select the MP3 input source through the main menu 'Audio Inputs' or direct MP3 button on the remote to listen to your portable audio device.

## Remote control

The Minx Xi is supplied with a remote control handset that duplicates the front panel control and functions. The supplied AAA batteries must be fitted before the remote control can be used.

### (Memory)

Press to access the Memory features for preset recall and storage.

The Minx Xi can store up to 20 Presets which can be Internet Radio stations, Streams from Streaming Services or your own choice of Internet Radio URL. See later section.

### Standby/On

Switches the Minx Xi between On and low power eco-friendly Standby mode.

**Note:** The Minx Xi takes approximately 30 seconds to come out of Standby, during this time the front panel Standby/On LED will flash but nothing will be shown on the display.

### Brightness display

Alters the brightness of the Minx Xi display backlights. There are two brightness levels and an option to switch off the backlight.

When the display is set to Off, nothing will be displayed onscreen until a selection is made via the front panel or remote control. The display will then re-activate allowing you to browse the menu and make your selection. The display will then automatically switch back off after a few seconds if no further selections are made.

### Main menu

Press to access the four basic media type menus directly.

### (Reply)

This is the reply/interactive button. Press when listening to an Internet Radio station or Streaming Service that has some form of interaction with the user. This function will bring up an interactive menu (where available). This feature is commonly used allow indication that you like or don't like the current stream so the service can tailor the music served to your personal taste.

For Media Play back (UPnP or Local) this button will toggle between the 'Now Playing' display and the current media browsing display.

### Shuffle

Press to turn the random/shuffle playback function on and off.

### Repeat

Press to turn repeat playback function (media play back only) on and off.

### (info)

Changes the display to show 'Now Playing' information about the currently playing track. Pressing whilst 'Now Playing' is active returns the display to the media browsing menus.

### Tone/Balance

Press to bring up the Tone/Balance menu.

### Mute

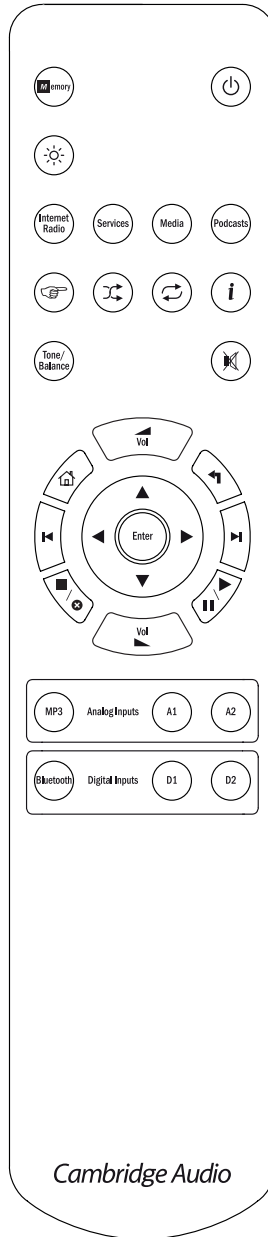
Press to mute/unmute the speaker outputs.

### Volume Up/Down

Volume adjustment.

### Home

Go directly to the top Home Menu.



### Return

Press to return to the previous menu.

### Navigation

Press to navigate around the Minx Xi's menus.

### Enter

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

### Skip

Press once to skip forwards or backwards one track.

### Stop/Delete

Press once to stop media playback. Also used to delete items where appropriate.

### Play/Pause

Press once to start media playback. Press again to pause media playback (press and hold).

### Analogue audio sources

Used to select analogue source inputs.

### Digital audio sources

Used to select digital source inputs.



## Overview

The Minx Xi is powered by our Stream Magic platform and is able to receive and play back media from several distinct types of source. Here we have attempted to give an overview of the various types of service available and the terminology you may encounter.

### Internet Radio

These are 'radio' stations broadcast over the internet. Currently the Stream Magic range can access about 20,000 internet radio stations all sorted by us into Location, Language and Genre. The list of available stations is constantly maintained and automatically updated to your unit via the internet. If you register on the Stream Magic website ([www.stream-magic.com](http://www.stream-magic.com)) you will also be able to browse the stations and set presets on your units from your PC.

You can also add stations to your units that are currently not in the Stream Magic's Radio database, suggest new stations to us and more. There are also links and help for setting up third-party Streaming Services from a wide variety of other suppliers. Other Stream Magic features will be launched in the future, check the website from time to time to see the latest developments.

### Streaming Services

Streaming Services are similar to Internet Radio but come from other suppliers and often have an element of interaction with the user. Because Streaming Services generally allow the user some choice over the content they listen to, they are also licensed differently to iRadio by the music companies and often each service only has arrangements in certain countries and may also charge a subscription for membership.

Examples of such services are Aupeol!, Pandora, Rhapsody, SIRIUS/XM, Live365 and others. All allow some control of the content from 'play me something that sounds like U2' to the ability to select and play whole albums of your choice. Some also offer the ability to download content for use off-line as well.

The Minx Xi supports many of these services, navigate to Streaming Services on the unit for a list or even better check out our website at [www.stream-magic.com](http://www.stream-magic.com) for more details of which services are available in your area, what they do and how to sign up. These services come from third parties and although we support connections to them they do not come from us and we are not responsible for their service in any way. Your account will be with the service, we are merely acting as a website to make the connection simpler and more convenient plus we support the correct software on our unit to allow playback and browsing of their content.

### Network Media

The Minx Xi supports a wide range of compressed formats; MP3, AAC, WMA and Ogg Vorbis file types are all supported, plus for true audiophile use, the Minx Xi also supports either uncompressed PCM (in a WAV container) or losslessly compressed FLAC, both can contain from 16-bits/44.1kHz from CDs right up to 24-bit/96kHz for "better than CD quality" from suitable download sites.

**Note:** For this to work your server will also need to support the CODEC you wish to play as some have limitations and may not serve FLAC for instance. Always check that the server you wish to use also supports your favoured CODECs.

Also for lossless/uncompressed formats both the server and network connection will need to sustain the high bitrate necessary.

**Note:** It is not recommended to use Wi-Fi connections for content above 16-bits/44.1kHz/48kHz if lossless/uncompressed.

### USB Media

The Minx Xi also supports local media from USB Flash-disks or USB hard-drives and has two USB1.1 ports for this purpose; one on the front and one on the back. Here the Minx Xi simply browses the folders present on the media attached and displays them. This feature is provided for convenient access to temporary storage devices.

It is however highly recommended that UPnP is used for continued use of stored media as the UPnP system is able to support album art, sophisticated content browsing and filtering and other features not possible with simple folder browsing.

### Podcasts

Podcasts are archived audio recordings downloadable over the internet. Often podcasts are recordings of previous live broadcasts or episodic content.

The Minx Xi supports various third party podcast services, navigate to Podcasts on the unit for the list available in your area. In addition the Minx Xi supports your own personal choice of podcasts where you know its URL (weblink) via the Stream Magic portal, see later section.

### Bluetooth

The Minx Xi is supplied with our BT100 Bluetooth adaptor which allows direct wireless streaming of audio from many phones, tablets and laptop PCs.

Bluetooth audio not only allows playback from the native music playback features of those devices but also from any streaming service Apps that you have downloaded to them.

In this way you can simply download and use Apps such as Spotify, Napster, Pandora, Rhapsody or others on your Bluetooth device and direct playback to your Minx Xi for the best possible sound quality.

## Getting connected

**IMPORTANT! Make sure that the unit is off before making any connections. And also when plugging and unplugging devices to the Minx Xi.**

### Network connections

Before you can use your Minx Xi for iRadio/Streaming you must have the following:

- A broadband internet connection (such as ADSL) to a suitable internet service provider (ISP).
- A network connection either wirelessly via 802.11b/g or n Wi-Fi or wired Ethernet connection (10 or 100 M bits/sec via an RJ45 connection).

**Note:** If you wish to play 24/48 or 24/96 content from a UPnP server, a wired Ethernet connection will be required as the high data rate of these files is beyond most Wi-Fi networks capability.

In many cases the broadband modem, router and wireless access point will be a single combined unit supplied by your Internet Service Provider or bought from a computer store.

If your wireless network is configured to use Wired Equivalent Privacy (WEP) or Wi-Fi Protected Access (WPA) data encryption then you will need to know your WEP or WPA key so you can get the Minx Xi to communicate with the network.

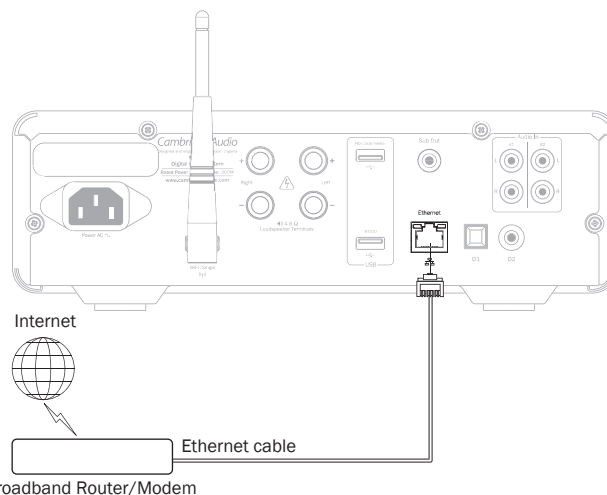
#### IMPORTANT:

**Before you continue, make sure that your wireless access point or router is powered up and working with your broadband internet service (use your computer to verify this). To get this part of the system working you must read the instructions supplied with the wireless access point or router.**

The Minx Xi can be configured to connect to a Wired or Wireless network or has a (default) Auto setting. In Auto the Minx Xi looks for a each connection type and selects whichever is present. You can also force the unit to one or the other connection type, see later Settings section.

### Connecting to a wired network

Plug one end of a network cable (Category 5/5E straight through Ethernet cable) into the LAN port on the back of the unit.



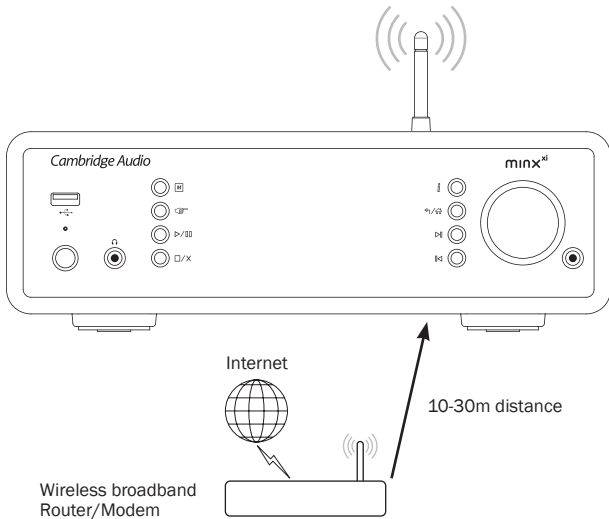
**Note:** Only connect the LAN port of the player to an Ethernet port that supports 10BASE-T or 100BASE-TX. Connecting to any other ports or jacks, such as a phone jack, can damage the unit

The Minx Xi should automatically connect to your network as below via DHCP; this means it will be given an IP address by your router automatically.

**Connecting to a wireless network**

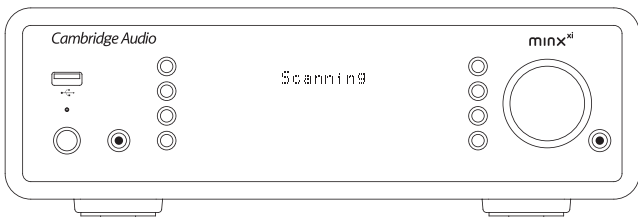
**IMPORTANT: Do not plug/unplug the Wi-Fi aerial dongle when the unit is on.**

Place the Minx Xi in range of your wireless network (usually 10-30m of a suitable wireless transmitter, although this is affected by walls and the construction of your building) and turn it on, via the front panel switch.



The Minx Xi will automatically connect and obtain an IP address from your wireless network. For advanced users, if you would like to give your Minx Xi a static IP address, then see the 'Network config' section of the manual.

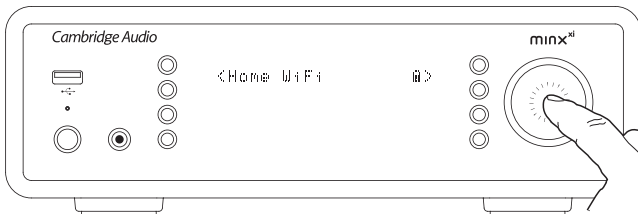
**Note:** If you make a mistake at any point, you can always press the ↵ button to go back to the previous screen.



The unit will now scan for all available wireless networks and will display "Scanning". If it can't find one then the display will say: "No Wireless Networks Found". If this happens then you need to either move the Minx Xi nearer your wireless access point or investigate if there is an issue with your wireless network.

When the Minx Xi finds your wireless network, it displays the broadcast name (ESSID) for the access point - this is a name allocated to the access point by whoever set up the network, it may either be a default name for your router/wireless or may be a more familiar name such as "Johns Wi-Fi" etc. If your Minx Xi finds more than one wireless network you can simply choose which one you want to connect to. Turn the rotary dial to see the ESSID for each wireless network.

When the ESSID for the wireless network you want to connect to is displayed on the screen, press the SELECT button. If your network is not configured with an encryption code, the screen should say "Connecting to network" then "Network OK".



If the screen displays either "Enter WEP key" or "Enter WPA key", then the network is using one of the supported encryption systems: Wired Equivalent Privacy (WEP) or Wi-Fi Protected Access (WPA). You now need to enter your correct WEP or WPA code. The person who set up the wireless network in the first place will know what this code is (or be able to reset it to a new known code); if that person is not you, then you need to find out what it is.

After 3 seconds, the display goes into the code entry mode. To enter the code, use the rotary dial to select each character of the code in turn, pressing the SELECT button after entering each character.

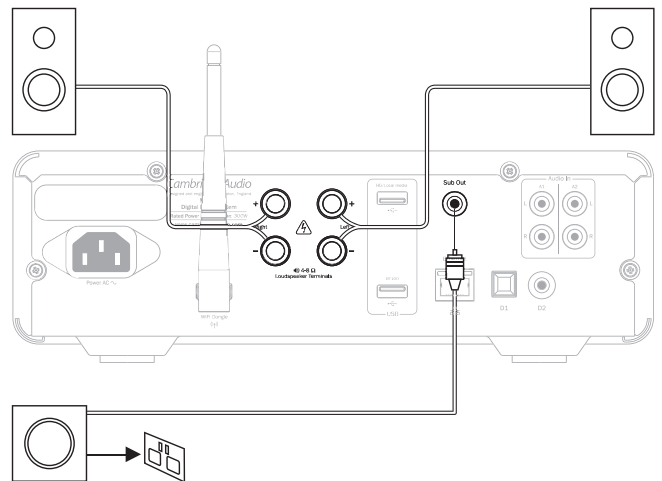
**Note:** The WEP and WPA codes are case sensitive, so you must enter them exactly.

After entering the final character, use the rotary dial to select the ↵ character and press the SELECT button. It's a little fiddly but you will only need to do this once. The Minx Xi will remember this code and use it automatically from now on.

The unit should now be able to connect to the network.

**Speaker connections**

Check the impedance of your speakers. Speakers with an impedance of between 4 and 8 Ohms are recommended.



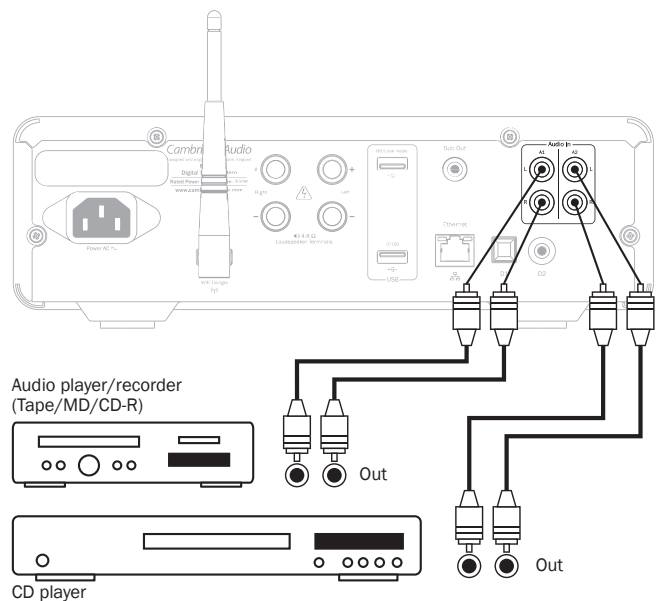
The red coloured speaker terminals are positive (+) and the black speaker terminals are negative (-). Make sure correct polarity is maintained at each speaker connector or the sound can become weak and "phasey" with little bass.

Prepare the speaker cords for connection by stripping off approximately 10mm (3/8") or less of the outer insulation. More than 10mm could cause a short circuit. Twist the wires tightly together so there are no loose ends. Push in the terminal, insert the speaker cable through the hole in the side of the terminal and release the terminal so it clamps down on the wire.

**Note:** All connections are made using standard loudspeaker cable. If an active subwoofer is used, connect via a standard single RCA/phono cable (often referred to as a 'Sub-Link').

**Analogue audio connections**

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

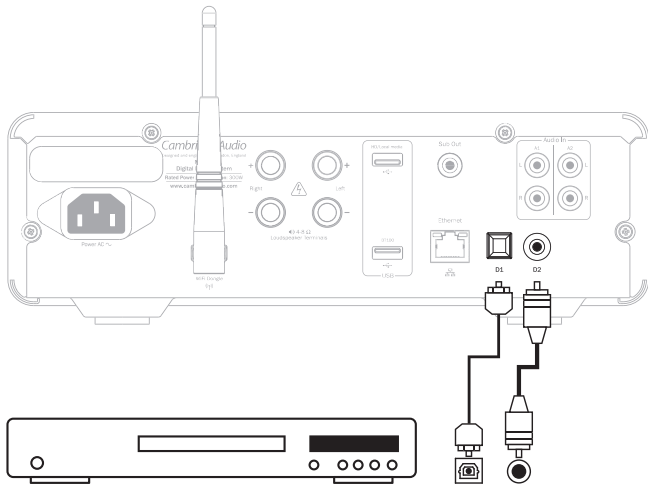


Connect to source equipment using stereo phono/RCA cables (stereo 2RCA- 2RCA). Tape/MD/CDR recorder/players require two sets of stereo phono/ RCA cables, one for recording, one for listening.

## Digital audio connection

There are two types of digital audio connections can be made to the Minx Xi:

- D1 (Toslink)
- D2 (S/P DIF)



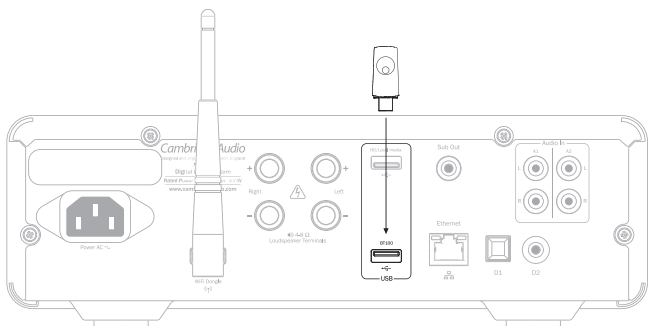
Both connections can be used at the same time as they are selectable as separate sources.

For S/PDIF connection, always use a 75ohm RCA/Phono to RCA/Phono lead designed specifically for digital audio.

The TOSlink connection requires a special TOSlink optical fibre lead. See your dealer for details.

## Adding the BT100 for bluetooth audio streaming

The Minx Xi is supplied with our BT100 Bluetooth adaptor. This should be inserted in the USB socket marked BT100 (as shown below) on the rear panel whilst the Minx Xi is off. You can now turn the Minx Xi on and it will automatically know that a BT100 has been installed.



When a BT100 is plugged into the rear BT100 USB socket, an extra menu item called 'Bluetooth' appears in the main menu.

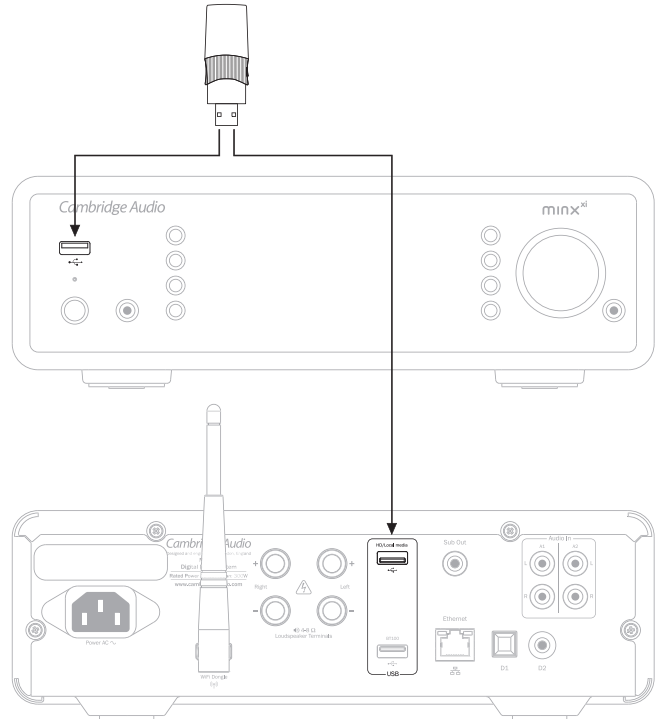


Selecting this allows the Minx Xi to receive wireless Bluetooth audio from most phones/tablets and laptops.

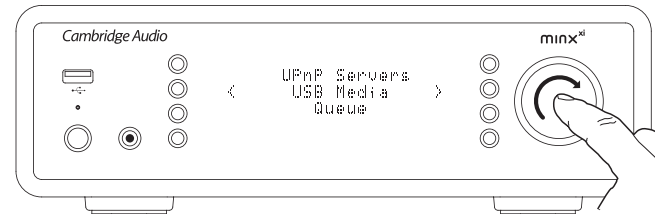
Both the standard SBC CODEC and newer high quality AptX CODEC are supported (if the sending device supports it). See later section for full operational details.

## USB media

The Minx Xi can also playback audio content from standard USB hard-drives and thumb drives. Simply copy your media files onto a USB drive and then connect it to the front or back USB sockets of the unit.



Press and hold the button (or by pressing the **M** button on the remote) to get to the top menu. Select the 'Media' menu and then the 'USB Media' item.



You can now browse through the USB media using the rotary dial or the buttons on the remote.

**Note:** The Minx Xi will only display media files that it recognises.

## Operating instructions

The Minx Xi home menu consists of 7 items:

- Internet Radio
- Streaming Services
- Media
- Bluetooth (Only available when a BT100 is plugged into the rear USB)
- Podcasts
- Audio Inputs
- Settings

These allow access to the five basic types of media choice plus the Analogue/Digital inputs and a settings menu for the unit.

You can return to this menu at any time by pressing and holding the button.

Simply scroll through the items with the scroll wheel or navigator buttons on the remote control and press in the scroll wheel or use the select button on the remote to select the item you want.

### Internet Radio

The Stream Magic based Internet Radio service brings thousands of internet radio stations to you. The sheer choice available on the internet allows you to find new music, listen to stations in your native language (or perhaps if you are learning another one), from your home town or by your Genre of choice.

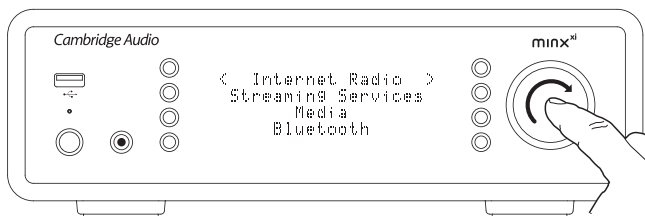
It has to be said that the audio quality of internet radio varies greatly dependant on the bitrate and compression technology used by the broadcaster, but the choice more than makes up for this. Internet Radio allows you to explore and find new music from all over the world.

**Note:** As an 'aggregator' service we are simply organising the browsing and connection process for these stations so that you don't have to manually search for them or type in any URLs (web links) etc to access them. Whilst we regularly check the stations to make sure they are still transmitting reliably and in reasonable quality we are not responsible for their content in any way.

As well as the thousands of stations we offer if you want to listen to a particular station that is not included in our service you can add it via the Stream Magic website at [www.stream-magic.com](http://www.stream-magic.com), see later section. You can also visit the [www.stream-magic.com](http://www.stream-magic.com) website and put in a request suggesting new stations for us to add to the service. We welcome your feedback.

It is not necessary to register your Minx Xi to use the free Stream Magic Internet Radio service but by registering you will be able to edit settings on your Minx Xi via the website, manage your presets, set up new 3rd party Streaming Services and more.

#### How to use Internet Radio



Press and hold the button to return to the top-level menu.

Select Internet Radio from the list using the rotary dial then press the rotary dial to select it. The Minx Xi displays the following submenus.

#### Internet Radio

- Location
- Genre
- Search

You can now turn the rotary dial to choose from Location, Genre or Search.

**Location** – Enables you to choose from the stations in any of the countries which you choose from a list.

**Genre** – Enables you to choose radio stations according to their declared content, for example Classic Rock, Sport, News, etc.

**Search** – Enables you to search for a station you know the name of. Enter the full name or first part of the name for your desired station. The Minx Xi will bring up a list of all stations that contain a word that starts with your search term.

**Note:** Although we check the stations for continuity of service, some radio stations do not broadcast 24 hours per day, and some stations may not always be on-line.

### Registering your Minx Xi with the Stream Magic website

To access extra features on your Minx Xi such as linking premium streaming services to your Minx Xi, adding non-Stream Magic internet radio stations or simply editing, copying, re-ordering or deleting presets first you will need to set up a free account with Stream Magic.

Open [www.stream-magic.com](http://www.stream-magic.com) from an Internet browser. Click on the 'Register' link and follow the on-screen instructions to set up an account and to link your Minx Xi to this new account by entering your Minx Xi's seven digit registration code, which can be found in the 'Settings > Register' menu of the Minx Xi itself.

This is a unique key code generated by the unit during the registration process.

**Note:** The key lasts for about 10 minutes, if you don't use it in that time you will need to exit and re-enter this menu to get a new key.

Your Minx Xi is now registered and you can use the website to manage your presets, Podcasts and more. You can also suggest new stations to us, setup 3rd party Streaming Services and view information from us on new products.

After creating and logging into your new account, you can now add, remove or re-order presets on your Minx Xi from the 'Presets' tab.

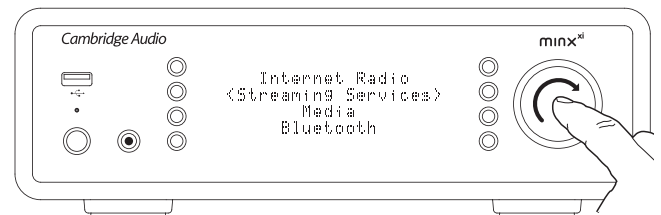
There is also an enhanced internet radio station search facility, allowing you to search for stations by minimum bit rate, etc and also the facility to add non-Stream Magic internet radio stations as presets if you know the station's URL.

To add further Stream Magic products to your existing Stream Magic account (perhaps you want a second or third Stream Magic in a different room) then this can be done by accessing the 'Players' tab in Stream Magic and clicking on the 'Add a player' link.

You can then choose to copy all or some of the existing presets from your current Stream Magic to the new one.

**Note:** You can register as many products as you like and manage the presets etc. across several products which could be in different parts of the world all seamlessly from your Stream Magic website.

### Streaming Services



The Minx Xi supports a range of streaming services from other suppliers that often have an element of interaction with the user. The Minx Xi displays the following submenus.

#### Streaming Services

- BBC iPlayer Radio
- Etc.

**Note:** The services available vary depending on your geographical location.

Because Streaming Services generally allow the user some choice over the content they listen to they are licensed differently to iRadio by the music companies and often each service only has arrangements in certain countries.

A subscription fee service might be applicable.

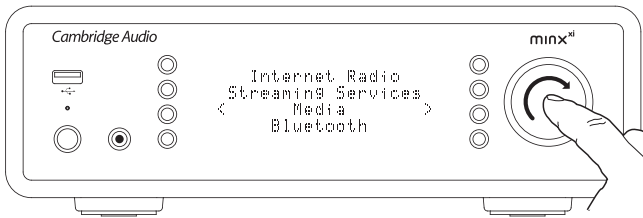
Examples of such services are Pandora, Rhapsody, Live365, SIRIUS/XM, Mp3Tunes and others.

When you enter this menu the ones that are available to you in your country will be shown. Those that are free to use or have a free to use version will work 'straight out of the box' Others will guide you to the relevant sign up page, should you so wish.

For more details on what these services offer, please go to our [www.stream-magic.com](http://www.stream-magic.com) website, links to each service can also be found here.

Also via the website you can prevent services appearing in this menu that you do not wish to sign up to.

## Media



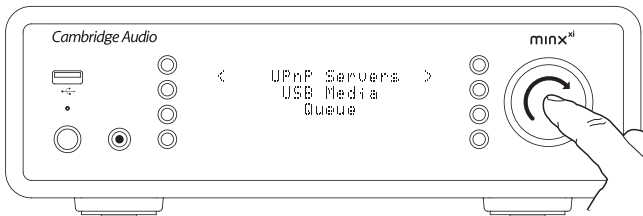
The Minx Xi can access media from UPnP/DNLA Servers or USB Media connected via USB. The Minx Xi displays the following submenus:

### Media

- └ UPnP Servers
- └ USB Media
- └ Queue

UPnP is by far the preferred method as it allows for browsing by artist, album and other methods, has support for control from Wi-Fi controller and the media can be shared amongst several devices.

### UPnP servers



Your Minx Xi can connect with Computers or Network Attached Storage devices that feature a Universal Plug and Play (UPnP) AV Server.

When using a UPnP server to share your media, the search and selection criteria are determined by the server and not the Minx Xi, but typically include Album, Artist and additional options such as Genre.

As long as the Minx Xi is correctly configured for your Network it will automatically discover and connect to UPnP servers it finds when you go into the UPnP playback menu. It will then allow navigation of the menu structure coming from that server.

There are many suitable UPnP server software packages available for PC and Mac. Stand-alone servers and Network Attached Storage (NAS) devices with built in UPnP server capabilities are also available. Please see the set-up guides on our website at <http://support.cambridgeaudio.com/>.

Once you have setup a suitable server, navigate to the Media/UPnP Servers menu within the Minx Xi and press Select.

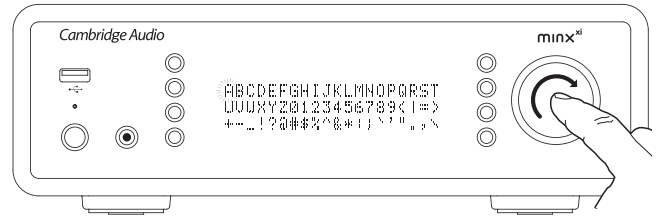
The Minx Xi will perform a scan of your network and report any UPnP Servers it finds. If none are found it will display "No Servers Found" on the display. If a server or servers are found their names will be displayed and you can select which one you'd like to get content from.

Select the server you want and the Minx Xi will then load the appropriate menu structure from that server. These typically allow you browse your content by Album, Artist, Genre etc. It is important to understand that the menu structure here is coming from the Server not the Minx Xi.

You can now browse and select any music content in a format the Minx Xi supports (currently AAC, MP3, WMA, AIFF, FLAC, WAV and Ogg Vorbis).

**Note:** Not all servers support serving of all these formats. Always make sure the server you choose also supports your formats of choice. For example, Windows Media Server does not currently serve FLAC format.

## Alphanumeric Search



This is a search function menu inserted by the Minx Xi into the browse tree of the UPnP servers that support an external search function.

Where available you can select alphanumeric search and then enter the name or partial name of an album or track you wish to find.

Simply select each character in order using the Navigation/Select dial, rotate to each character and then press in to select. You can also use the Skip buttons to move forward/back a character, >/00 to enter a character and □/X to delete a character.

Once finished either press the <1 button or navigate to the <4 symbol and press the Enter button on the remote or press the Navigation/Select dial.

The Minx Xi then displays all album names or track names it can find that matches your chosen text.

You can then simply select your chosen item and press the Enter or >/00 button on the remote to start it playing.

## The 'Now Playing' screen



Selecting a new Station, Stream or Media item will start playback and display the 'Now Playing' screen.

The current Artist/Album and Track or Station name will be shown with the relevant CODEC details (i.e. audio file type and bitrate/samplerate.)

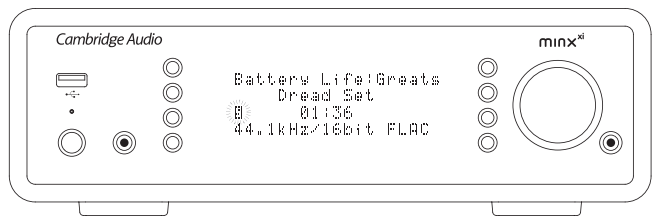
For Media files the Minx Xi also shows the incremental track playback time.

You can also display the now playing screen at any time by pressing **i** on the remote control.

## Shuffle

Accessed via the remote only. Press the **⌘** button to toggle Shuffle On or Off.

The Minx Xi displays a **⌘** in the 'Now Playing' screen when Shuffle is On.



If the currently selected media item/folder contains fewer than 1000 tracks the Minx Xi generates a true random shuffle of those tracks and starts playback such that all are played once in a random order and then playback stops.

If more than 1000 tracks are contained the Minx Xi will instead pick a track at random for playback then pick another one randomly (and without reference to what has gone before) once the current one has finished.

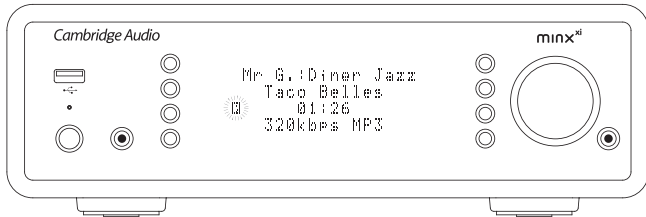
This continues until Shuffle is turned Off. Thus for >1000 tracks the playback of any track may be repeated randomly.

**Repeat**

Accessed via the remote only. Press the button to toggle Repeat On or Off.

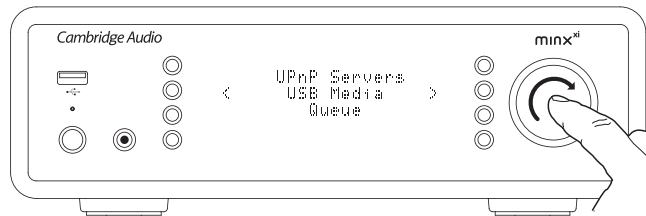
If the currently selected media item is a track the Minx Xi will repeat that track, if it is an album or artist etc. The Minx Xi will repeat all tracks in that item.

The Minx Xi displays a in the 'Now Playing' screen when Repeat is On.



**USB Media**

The Minx Xi can also playback audio content from standard USB hard-drives and thumb drives. Simply copy your media files onto your USB drive and then connect it to the front or back USB socket of the unit.



Press and hold the button to get to the top menu. Select the 'Media' menu and then the 'USB Media' item.

The Minx Xi will now scan the thumb drive for media files. Once the scan is completed, you will then be able to browse the files by selecting 'By Album' or 'By Artist'.

**Queue**

The Minx Xi features a queue function that allows you to select multiple albums and/or tracks you'd like to be played in order.

When in the UPNP or Local Media selection menus, if you highlight a track/artist or album name etc and press and hold the Navigation/Select dial (or Enter on the remote handset), the Minx Xi will add the current item to the Queue. If it is the first item to be queued playback will start. If it is an additional item 'Added to queue' will be displayed and that item will be appended to the queue.



All component parts of that media item will be added, if the item is a track then only that track will be added but if the item is an album or an artist then all that albums or artists tracks will be added.

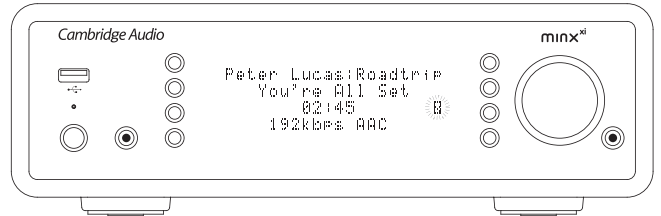
To view the Queue simply navigate back to Queue item in the Media menu or press the Reply button whilst a queue is playing. Tracks that are a component part of a media item will be shown indented by a # below their parent media item as below.



The displayed menu shows the queued content for playback, you can navigate to any item and select it (via Enter or ) to jump to playing that item. can also be used to delete items from the Queue. The currently playing item will have a next to it.

At the bottom of the Queue a Clear Queue command is available for deleting the whole queue.

During Queue play back the Minx Xi displays a in the 'Now Playing' screen.



Pressing stop will stop the Queue playing but not delete it. Putting the Minx Xi into standby will delete the Queue.

To view the Queue at any time simply navigate back to Queue item in the Media menu or press the button whilst a queue is playing.

**Podcasts**



The podcast services in your area will be shown.

These typically allow you to choose different types of podcast by subject, date or perhaps popularity etc. It is important to understand that the menu structure here is coming from that service and is controlled by them. It may therefore change as the service updates its features etc. The Minx Xi displays the following submenus.

**Podcasts**

- BBC Podcasts
- BlogTalkRadio
- Personal Podcasts

**Note: The services available vary depending on your geographical location.**

There is also a menu item for your own choice of podcasts called Personal Podcasts. This allows access to podcast links that can input via the [www.stream-magic.com](http://www.stream-magic.com) website.

To use Personal Podcasts sign up at [www.stream-magic.com](http://www.stream-magic.com) and enter the URLs of podcasts you'd like the Minx Xi to automatically sync to.

**My Podcasts**

This feature allows you to access podcast on the Minx Xi that are not available in the Podcasts services we support.

This is done by entering the URL for the podcast you want via the Stream Magic portal. To do this you need to be registered as per the section under Stream Magic.

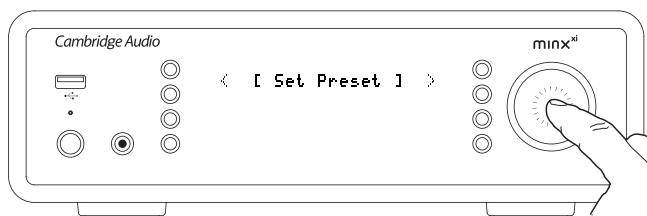
Simply login to your account and then click on the 'My Podcasts' link. From your 'My Podcasts' section, you can add your chosen podcast by entering in the podcast's name and its URL as prompted by the website. Please note, the podcast URL will have to be a direct RSS feed which will end with the '.xml' extension e.g. <http://someurl.com/podcast.xml>. Once you have podcasts available in your 'My Podcasts' list, you may access these feeds from your Minx Xi. These podcasts will be available from the menu item: 'Podcasts > My Podcasts'.

Please note, the podcasts are pushed to your Minx Xi at turn on when the unit updates stations list and at intervals thereafter.

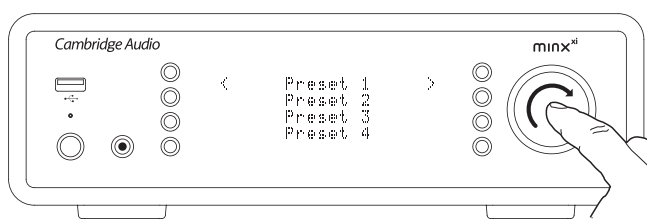
To cause the radio to download Podcasts and new stations list immediately, turn on and off your Minx Xi from the front panel.

## Presets

The Minx Xi supports 20 presets. These can be Internet Radio stations or streams from most Streaming Services. UPnP/Local media cannot be set as a preset.. To add a station/stream to a preset first select that stream for playback in the normal way. Now press and hold the **M** button this will bring up the presets menu.



Select 'Set Preset' and the preset location you require. Press in the Navigation/Select dial to save the current station/stream to that preset.



Recalling presets is done simply by pressing the **M** button and selecting the preset you want with a brief push of the Navigation/Select dial.

**Note:** The Minx Xi loads the presets for display from our Stream Magic servers over the internet, thus they can take a few seconds to appear.

## Bluetooth

When connected to your Minx Xi the supplied BT100 adaptor allows the Minx Xi to receive bluetooth audio (known as Bluetooth Advanced Audio Distribution Profile or A2DP).

The BT100 supports Bluetooth A2DP using either the original SBC encoded form or the latest higher quality aptX encoded form.

SBC and aptX refer to the encoding used over the wireless Bluetooth interface only and not the format your music may be in, which can be any type that your phone/laptop or other playing device supports.

Your playing device plays your files then re-encodes the playback before streaming it to the BT100 in one of these two formats.

Many phones and laptops now feature Bluetooth with A2DP. SBC should be supported by all such devices (it is the mandatory format for A2DP).

aptX is optional, so check if your sending device supports it, if you wish to achieve the highest quality audio transfer.

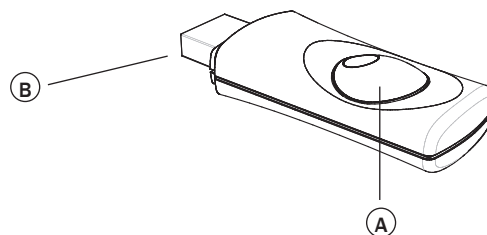
**Note:** The BT100 declares that it can handle both SBC and aptX to the sending device which will then use whichever version it supports.

### What is aptX?

aptX is a high quality CODEC (CODer/DECoder) i.e. a way of compressing audio data so it can be sent over a link such as Bluetooth then decompressed on the other side (if both devices support it).

If your Bluetooth audio source does not support aptX, the BT100 will fall back to using the standard SBC CODEC that is supported by all Bluetooth audio devices.

## BT100 controls and connections



### A. Pairing button/Status LED

Button performs pairing and related functionality. Integrated LED indicates BT100 status.

### B. USB plug

Streams high quality USB audio into your Minx Xi via the rear dedicated BT100 USB socket.

## Pairing

To begin streaming high quality music from your chosen media source it will first need to be paired with the BT100.

- Double click the button on the BT100 to enter pairing mode, the BT100 indicates it is in the pairing state by flashing rapidly.
- Put your Bluetooth compliant audio device into pairing mode. Please consult your manufacturer's user manual on how to do this.

Pairing your BT100 and source establishes an authorised audio link that can then be used again in the future without having to go through this stage again.

After pairing you can just select the Bluetooth from the menu and play at any time as long as your Bluetooth A2DP compatible source (phone/laptop etc.) is within approx. 10m of the BT100.

Normally on your source you will need to select Bluetooth Pairing and then the BT100 should appear as 'Cambridge Audio BT100' in a list of locally found Bluetooth devices.

Select that item in the list to finish pairing.

- On successful pairing, the BT100s LED goes off for a second or two, then triple flashes quickly. The LED then goes off and only lights up in the future when you are playing audio via Bluetooth.
- To play back via a paired Bluetooth device, simply select the BT100 on that device and start playing, then select Bluetooth in the Minx Xi menu. The BT100 LED lights up constantly when streaming SBC or on and flicks off every 2 seconds when streaming aptX.

### Notes:

- You can pair to more than one source up to a maximum of 8 sources at any time. Pairing to a 9th device will cause the first one to be forgotten and so on. However as you would expect the BT100 can only play back from one of these sources at a time.
- When you have finished playback many sources keep the Bluetooth link active for a time unless you actively tell them to stop by deselecting playback via the BT100 (do not unpair as this is not necessary).

This can prevent another source to be able to access the BT100.

To immediately use another source, simply deselect the BT100 for playback on your first source device before starting up on a second.

- Some devices stream empty data all the time even when paused or stopped. These devices will cause the BT100s LED to be on even if playback is currently stopped or paused.

## Audio Inputs menu

Press and hold the **←/→** button to get to the top menu. Select the 'Audio Inputs' from the main menu and then the audio input source that you wish to listen to. For more information, refer to Analogue and Digital audio connections.

### Audio Inputs

- └ A1
- └ A2
- └ D1
- └ D2
- └ Front MP3 In

Choose Front MP3 In, A1 or A2 for analogue audio inputs or choose D1 or D2 for digital audio inputs.

## Settings menu

This menu contains various setup / configuration menus as shown below.

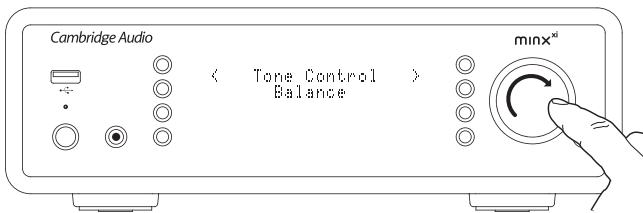
### Settings

- Audio Settings
- Network Config
- Version
- Upgrade Firmware
- Language
- Factory Reset
- Register
- Device Name
- Idle Mode
- Auto Power-down
- Edit Audio Input Names

### Audio Settings

Adjustments to the bass, treble and balance level can be made as follows:

Press and hold the button to get to the top menu. Go to 'Settings -> Audio Settings' and then press Select to bring up the Tone Control and Balance menu items.



Select 'Tone Control' to adjust bass and treble output level. Select the desired output level using the rotary dial and then press the Minx Xi's button to go back to the previous menu items.

Select 'Balance' to adjust the Left and Right balance output level. Select the desired balance level using the rotary dial and then press the Minx Xi's button to go back to the Audio Settings menu.

### Network Config

This menu enables you to set your Minx Xi's network settings, scan again for a connection to another wireless network, or to manually configure the network parameters. This is useful if you move your Minx Xi to a new location for instance.

By default the Minx Xi will be set for Automatic wired/wireless detection and automatic IP addressing (DHCP) which will work without setup in most circumstances (for Wi-Fi you will need to enter your WEP/WPA key if you have one).

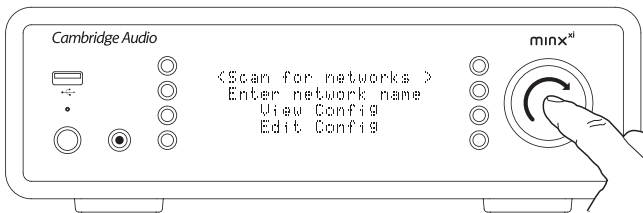
In Auto mode the Minx Xi will look for a wired connection first and then scan for wireless connections if it doesn't find one. It will also try to obtain an IP address automatically from your router/DHCP server.

If you wish to make changes to your setup the Minx Xi displays the following submenus.

### Network Config

- Scan for networks
- Enter network name
- View Config
- Edit Config
- Signal Warning
- WiFi Region
- Wired/Wireless

### Scan for networks

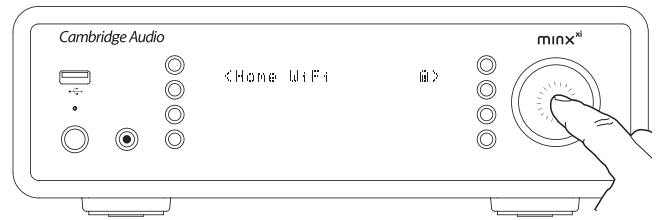


This option scans all available Wi-Fi frequencies for wireless networks and allows you to connect to them.

The Minx Xi can connect to 802.11b/g or n networks (2.4GHz frequency range only for n networks).

A list of available networks will be presented. If a particular network requires an encryption key, a symbol will be seen at the end of the network name.

Select your local network using the Navigation/Select dial and press it in for enter.



The Minx Xi will then connect to the network using a saved key (if you have previously set one) or present you with an alphanumeric entry menu. Here you can enter the network key you set up when setting up your wireless network.

Select each character in turn using the Navigation/Select dial and then press or navigate to the symbol and press Navigation/Select dial to enter that key. If you make a mistake, press to go back one character.

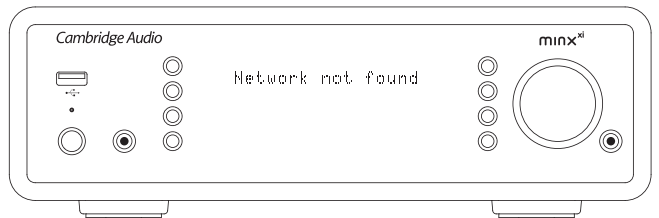
The Minx Xi can handle keys in WEP, WPA and WPA2 formats (the choice of format is made by appropriate settings on your router) and automatically generates the right format from your text according to the router request.

### Enter the network name

This option allows the Minx Xi to search for and connect to a particular network name only.

Type your network name in using the alphanumeric entry screen.

If no matching network is found 'Network not found' will be displayed.



### View Config

This menu firstly displays the IP mode (static or dynamic). This will be Auto/DHCP (i.e. dynamic, this is the default) or alternatively Static IP.

For either mode by turning the Navigation/Select dial the Minx Xi will scroll through the various current IP parameters, for instance the ESSID of the current wireless network, Wired and Wireless MAC addresses, current IP address, (Sub)Netmask, Gateway address etc.

### Edit Config

This menu allows the selection of IP mode between static or dynamic (Auto/DHCP). Auto/DHCP is recommended for most people in most circumstances. Static IP requires quite a bit of knowledge about IP networks, and is for advanced users only.

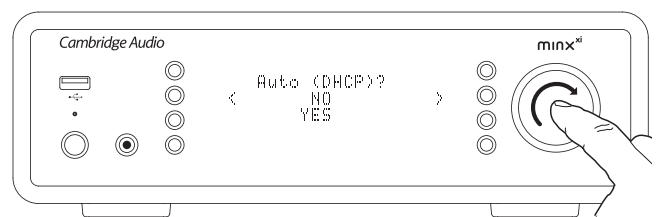
The default setting is thus Auto/DHCP, here the Minx Xi obtains its IP address each time you switch in on by a process called DHCP which means it is different each time it is acquired. This process is completely automatic and much simpler than implementing Static IP.

However sometimes it is useful (especially in large networks) to know the exact IP address of each device, this can only be done by using static IP.

When using Static IP you will also need to enter the network mask you wish to use and the addresses of your gateway and DNS service, note there is no way for Cambridge Audio to know what these are in your network. Only select static IP if you know exactly what you are doing!

To set static IP, select the 'Settings > Network config > Edit Config' menu and then press SELECT.

The Minx Xi will now display 'Auto (DHCP)? YES / NO'. Turn the Minx Xi's rotary dial to select 'NO' and then press SELECT.





You will now be able to enter the fixed IP address you wish to give your Minx Xi by using the rotary dial to select the desired numbers followed by pressing Navigation/Select dial to end inputting the address.

The Minx Xi will now prompt you to enter the required network mask for the network. You will be able to enter this in the same way as before for entering the IP address.

You will now need to enter the default gateway's IP address used by the Minx Xi on the network.

Finally, you will need to enter the DNS IP address for the Minx Xi. On some networks, you may need to enter your ISP's DNS IP address, which should be available on your ISP's support page on their website.

After entering the above information, the Minx Xi will now try to connect to your network. If you wish to use DHCP again simply select 'Settings > Network config > Edit Config' and then set 'Auto (DHCP)? YES / NO' to 'YES'.

### Signal warning

The Minx Xi can display a warning if the Wi-Fi signal strength is low enough to be causing reduced throughput. The options for the Signal Warning are simply Yes or No.

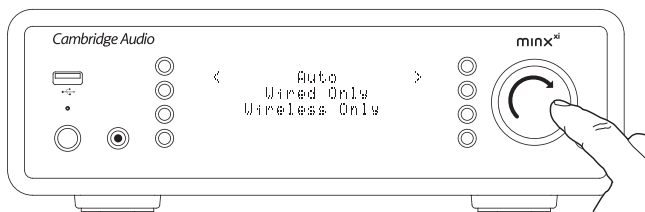
### Wi-Fi Region

Different parts of the world use slightly different frequencies for Wi-Fi. For best performance you should set the Minx Xi to the region you live in, the current options are US, Spain, Europe (i.e. other than Spain), Japan.

### Wired/Wireless connection

It is possible to connect your Minx Xi to your network via an available Ethernet connection (RJ45) or via a Wi-Fi router. By default the unit is in AUTO mode, each time you turn the unit it looks for the presence of a wired connection, and tries to use this, if none is present or it cannot connect it then tries to use the wireless connection and so on. In Auto mode once the Minx Xi has established a certain type of connection to the network, then this type of connection will remain in use while the Minx Xi is on.

You can alternatively configure the Minx Xi to permanently only use the wired or wireless connection. From the Minx Xi's 'Network config' menu, select 'Wired/Wireless'. This menu will present you with three options: 'Auto', 'Wired Only' and 'Wireless Only'.



Selecting 'Wired Only' will cause the Minx Xi to reboot and then only use its Ethernet connection to communicate with the network. Selecting the 'Wireless Only' will cause the Minx Xi to reboot and only use its Wi-Fi connection. Selecting the 'Auto' option means the Minx Xi will try both and settle on the one it can make work as described above.

### Version

This menu item displays some hardware/software version numbers for your Minx Xi. Turn the rotary dial to scroll through the various items.

The Service Pack is the currently loaded firmware software. It's a good idea to note this down if you need to contact our technical support people as they may request it.

### Upgrade Firmware

Use this option to download new firmware for the Minx Xi from Cambridge Audio over the Internet.

If you select this item the Minx Xi will contact our server and see if a newer version of software is available ('Checking for updates' will be shown in the display).

If new software is found the Minx Xi will prompt you if you want to download it or not. It is a good idea to update the firmware from time to time to take advantage of any bug fixes or new features. At this stage, you can press the Minx Xi's 'Back' button to cancel the firmware upgrade. A Firmware upgrade may take several minutes.

#### Note:

- It is very important that once the Firmware upgrade has started you do not switch off the power to the Minx Xi until the operation is complete otherwise the Minx Xi may become permanently damaged.
- Also do not interrupt the network or internet connection by removing the Ethernet lead or switching off your router etc.

### Language

Allows you to change the display language used.

A list of the currently supported languages will be shown. Select your preferred one and press enter.

**Note:** The Minx Xi will then restart in order to start again in the new language, this will take approximately 30 seconds.

### Factory Reset

Puts all the settings back to their defaults as they were when they left the factory.

The Minx Xi will ask you if you are sure you want to proceed before performing a reset.

**Note:** If you perform a factory reset, you will lose all your presets and any saved WEP/WPA keys for your wireless network connection.

### Register

This will display a key that can be used to register your Minx Xi on the Stream Magic portal at [www.stream-magic.com](http://www.stream-magic.com). First you will need to set up an account on Stream Magic. Open [www.stream-magic.com](http://www.stream-magic.com) from your Internet browser. See the section earlier on Stream Magic registration.

**Note:** The generated key lasts for about 10 minutes, if you don't use it in that time you will need to exit and re-enter this menu to get a new key.

### Device Name

This menu allows the setting of the declared UPnP Client name for your Minx Xi.

This is the name other UPnP devices (such as control points and remote Apps etc.) will display when they see the Minx Xi.

The default name will be 'Minx Xi' but can be changed to any name you can easily recall such as 'Dads Minx Xi' or 'Kitchen' etc.

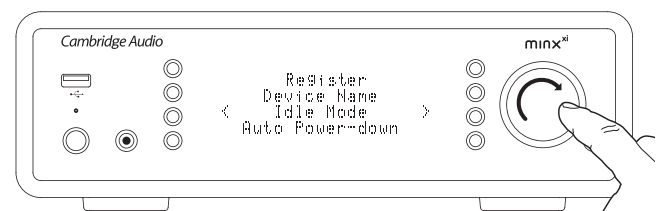
### Idle Mode

Idle mode, when enabled, allows Minx Xi to enter a lower power suspended state using the Standby/On button. The display is turned off and many of the internal processes and circuits are disabled to reduce power consumption.

However the difference between Idle and Standby is that in Idle mode, power remains connected to the main controller, Ethernet and Wi-Fi sections.

In Idle mode, networking functionality remains alive in the background. This means that Minx Xi can be quickly woken up out of the suspended state into an operational state using not only the front panel and the infra-red remote, but also the iOS app running on the iPhone or iPad. This is not possible when the unit is in full Standby mode.

To enable Idle mode using the Standby button, it must first be activated within the setup menus. Go to 'Settings -> Idle Mode' and set to 'On'.



Short presses of the Standby button will toggle between On and Idle modes.

**Note:** after putting the unit into Idle mode, you will not be able to wake the unit into full On mode until 5 seconds have elapsed.

Full low power standby can still be activated by keeping the Standby button pressed for more than two seconds. A subsequent press of Standby turns the unit fully on, but remember that this can't be done over the network (i.e. from the iOS app) and that it takes longer to reach the full operational state.



## Technical specifications

<b>Power output</b>	40 watts rms (into 8 Ohms) 47 watts rms (into 6 Ohms) 55 watts rms (into 4 Ohms)
<b>DAC</b>	Wolfson WM8728 24-bit 96kHz capable
<b>THD (unweighted)</b>	<0.01% @ 1kHz <0.09% 20Hz - 20kHz
<b>Frequency response (-1dB)</b>	5Hz - 50kHz
<b>S/N ratio (ref 1W)</b>	-85dB relative to 1W A weighted
<b>Total correlated jitter</b>	<250pS
<b>Digital inputs</b>	S/PDIF Co-axial and TosLink Optical PCM 16-24 bit, 32-96kHz
<b>Audio Formats</b>	WAV containing uncompressed PCM 16-24 bit 32-96kHz FLAC containing losslessly compressed PCM 16-24 bit 32-96kHz Apple Lossless (ALAC) 16-24 bit @ 12/16/22.05/24/32/44.1/48/88.2/96kHz AIFF containing uncompressed PCM 16-24 bit 32-96kHz Microsoft® Windows Media™ Audio (WMA 9 Standard) 32-320kbps MP3 (CBR or VBR) 16-320kbps AAC, HE AAC and AAC+ (CBR or VBR) 16-320kbps OGG Vorbis 32-320kbps
<b>Streaming Protocols</b>	RTSP (Real Time Streaming Protocol) MMS (Microsoft Media Server Protocol) HTTP (Hyper Text Transfer Protocol)
<b>Playlists</b>	ASX (Microsoft® playlist format) M3U, PLS
<b>Wi-Fi</b>	IEEE 802.11 b / g or n (2.4GHz connection used only)
<b>Wi-Fi Encryption</b>	WEP, WPA, WPA2
<b>Ethernet</b>	IEEE 802.3, 10 Base-T or 100 Base-T
<b>USB</b>	1 x USB 1.1 current limited to 500mA 1 x USB 1.1 current limited to 1A 1 x BT100 input
<b>File systems</b>	FAT32 / NTFS
<b>Mains inlet voltage</b>	100-120/220-240 VAC
<b>Standby power consumption</b>	<0.5W
<b>Max. power consumption</b>	300W
<b>Bass/Treble controls</b>	+/- 7.5dB @ 20Hz and 20kHz, shelving
<b>Dimensions (W x D x H)</b>	270 x 285 x 90mm
<b>Weight</b>	5.8Kg/12.8lbs

## Troubleshooting

If you experience any trouble with your Minx Xi, then you may find it useful to visit the help section on our webpage at <http://support.cambridgeaudio.com/>.

If you have trouble with the Stream Magic service then you may also find it useful to visit the help section at [www.stream-magic.com](http://www.stream-magic.com).

General Help guidelines:

**If you have trouble connecting the Minx Xi to your network, these steps may help to resolve the problem:**

- Confirm that a connected PC can access the Internet (i.e. can browse the web) using the same network.
- Check that a DHCP server is available, or that you have configured a static IP address on the Minx Xi. You can configure a static IP address on the Minx Xi using the menu item 'Settings -> Network Config -> Edit Config', and then select 'No' for 'Auto (DHCP)'. DHCP is however the recommended method.
- Check that your network's firewall is not blocking any outgoing ports. As a minimum, the radio needs access to UDP and TCP ports 80, 554, 1755, 5000, 6000 and 7070.
- Check your access point does not restrict connections to a particular MAC addresses. You can view the radio's MAC address using the menu item 'Settings -> Network Config -> View Config -> MAC address'.
- If you have an encrypted Wi-Fi network, check that you have entered the correct key or passphrase into the Minx Xi. Remember that text-format keys are case sensitive. If, when attempting to connect to an encrypted network, your Minx Xi displays: 'Wireless error' followed by a 5-digit number, then please ensure that you enter the correct passphrase for the network. If the problem persists, then you may need to consult your network configuration.

**If your Minx Xi can connect to the network successfully, but is unable to play particular Stream Magic stations, it may be due to one of the following causes:**

- The station is not broadcasting at this time of the day (remember it may be located in a different time zone).
- The station has reached the maximum allowed number of simultaneous listeners.
- The station is not broadcasting anymore.
- The link in our database is simply out of date.
- The Internet connection between the server (often located in a different country) and you is slow.
- Try using a PC to play back the stream via the broadcaster's web site.

If you can play back the station with a PC, you can use the form at [www.stream-magic.com](http://www.stream-magic.com) to notify us so that we can investigate.

**If you have problems with UPnP playback always check the following:**

- Ensure your chosen UPnP server software is capable of serving the file type you are trying to access. Some servers do not serve FLAC for instance.
- The Minx Xi can only play non DRM files. Files that have DRM controls cannot be played by the Minx Xi. Some servers may be able to authorise and de-cript Microsoft Playsforsure before then serving the content to the Minx Xi but this operation is not guaranteed as it is purely a function of the server.
- If attempting to play 24-bit WAV or FLAC content note a wired Ethernet connection is normally required for reliable operation due to bandwidth considerations.
- Check the Minx Xi is capable of playing back the file type you are trying to access. WMA, AAC, MP3, Vorbis, FLAC and WAV can currently be played. The Minx Xi does not support ALAC, WMA Pro, WMA lossless, RAW, AU or other file types not mentioned.

**If you have problems with Local Media playback always check the following:**

- Check the Minx Xi is capable of playing back the file type you are trying to access. WMA, AAC, MP3, Vorbis, FLAC and WAV can currently be played.
- The Minx Xi does not support WMA Pro, WMA lossless, RAW, AU or other file types not mentioned.
- For local media the Minx Xi can only play non DRM files. Files that have DRM controls cannot be played.
- Check that your device does not require more than 500mA if it is powered from the USB socket itself.
- Check your device is formatted in FAT32/NTFS format.
- The way you organise your local media affects the size of internal database the Minx Xi needs to build dynamically as you browse content. Good practice is to create folders for Artists within which you should have a sub folders for each Album which then containing the tracks for that Album. Libraries with thousands of tracks in one folder will progressively slow down the Minx Xis media browsing.

For all servicing, in or out of warranty, please contact your dealer.

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[www.cambridge-audio.com](http://www.cambridge-audio.com)

