



ACOUSTICS

E120

USER GUIDE

For models QI0120 & QI0122

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Important safety information and warnings

1 Notices

1.1 FCC Statement (for US Customers)

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 to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into 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.

This device 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.

1.2 FCC Radiation Exposure

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

CAUTION! Any Changes or modifications not expressly approved by Q Acoustics could void the user's authority to operate the equipment.

1.3 Industry Canada Statement (for Canadian Customers)

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.

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.

AVIS RELATIFS À L'EXPOSITION RF

Cet équipement est conforme aux limites d'exposition au rayonnement ISED établies 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.

1.4 **Bluetooth**

This unit contains a Class 2 *Bluetooth* transmitter working at 2.4GHz.

2 Safety Information and Warnings

2.1 Moisture

- To reduce the risk of fire or electric shock, this apparatus should not be exposed to rain, moisture, dripping or splashing.
- Do not use this apparatus near water.

2.2 Remote Control Batteries

The remote control supplied with this unit contains a battery. To prevent battery leakage which may result in bodily injury, property damage, or damage to the unit:

- Install the battery correctly, + and - as marked on the unit.
- Remove the battery when the unit is not used for a long time.
- Do not expose the battery or remote control to excessive heat, including sunshine.
- **CAUTION:** Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
- **WARNING - DO NOT INGEST BATTERY - CHEMICAL BURN HAZARD.**
- If the battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death. Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep it away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention

Disposal of Batteries

The battery supplied contains perchlorate material and in many areas batteries may not be disposed of with your household waste. Please ensure you dispose of batteries according to local regulations.

The battery supplied does not contain the heavy metals mercury or cadmium.

2.5 Servicing

Servicing is required when the unit or mains cord has been damaged in any way, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, it does not operate normally, or has been dropped.

Refer all servicing to qualified service personnel.

3.0 Symbols used on this product



High Voltage Hazard Symbol

This symbol indicates uninsulated material within your unit may cause an electrical shock. For the safety of everyone in your household, please do not remove the product covering.



Hazard Warning Symbol

The 'exclamation mark' calls attention to features for which you should read this manual closely to prevent operation and maintenance problems. **WARNING:** To reduce the risk of fire or electric shock, this apparatus should not be exposed to rain or moisture and object filled with liquids, such as vases, should not be placed on this apparatus. **CAUTION:** To prevent electric shock, match wide blade of plug to wide slot, fully insert.



Waste Electrical and Electronic Equipment Symbol

This symbol indicates that when the unit is to be discarded, it must be separated from other household-type waste and sent to separate collection facilities for recovery and recycling of electrical and electronic equipment.

Please make sure you are familiar with your local rules on the separate collection of electrical and electronic products.

Introduction

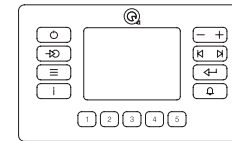
Thank you for purchasing this Q Acoustics E120 installed audio system.

This manual is intended to take you through the operation of the system once it has been installed into the room. Please refer to 'E120 Installation Manual' for details on wiring and fitting the system.

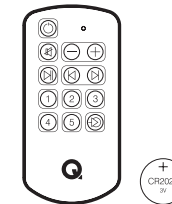
Please read the instructions, important safety information and warnings carefully before installation and use, to ensure the safe and satisfactory operation of this product.

The Q Acoustics E120 system is unique in being very easy to install but then providing a stylish and easy to use audio system completely integrated into the fabric of the home.

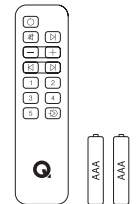
Package contents



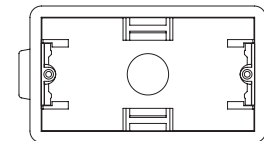
1 x In-wall audio system keypad



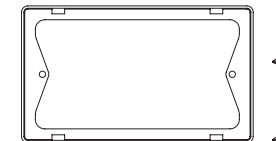
1 x Waterproof remote control + cell battery



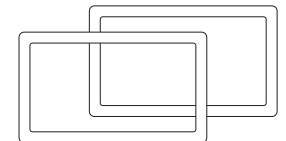
1 x Premium remote control + 2 x AAA batteries



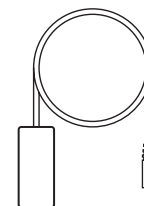
1 x Plastic stud wall installation box



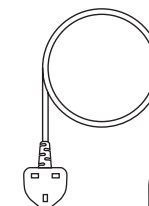
1 x Wall unit mounting frame + 2 x M3.5mm x40mm screws



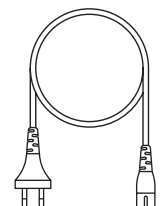
1 x 1.0mm wall gasket + 2.5mm wall gasket



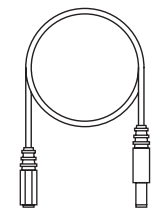
1 x Power supply



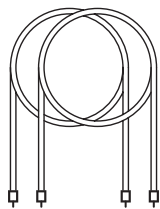
1 x UK power cable



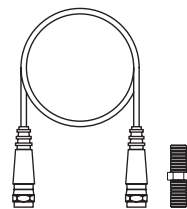
1 x EU power cable



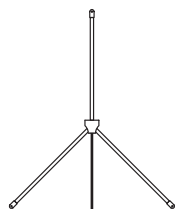
1 x Power supply extension cable



2 x 7m speaker cable



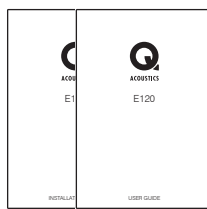
1 x Antenna extension cable + adaptor



1 x Indoor DAB antenna



6 x Rubber grommets + 1 x extraction tool



1 x User guide + installation guide

Feature summary

Wired Connectivity:

DAB / FM – F-connector socket, allows a connection to a DAB / FM antenna (indoor antenna supplied).

Analogue audio input – 3.5mm stereo jack (on same connector as optical digital) allows a connection to an external analogue audio source such as a CD player.

Optical digital input – mini TOSLINK (on same connector as analogue) allows connection to an external digital audio source such as a TV.

Speaker output – lmo sockets, allowing connection to a pair of passive speakers.

Analogue line output – 3.5mm stereo jack, allows a connection to an external sub-woofer, amplifier or the input of a another E120.

Wireless Connectivity:

Bluetooth® – An international wireless connection used for streaming audio from all compatible devices.

Control:

AVRCP – A Bluetooth control protocol that synchronises your device control of Volume and Mute for easy integration of our Q Acoustics speaker.

Infra-red – A waterproof remote control for easy line of sight basic congrol .

Acoustic:

Stereo / mono switch – Sets the speaker output as either separate left and right, or combined mono outputs.

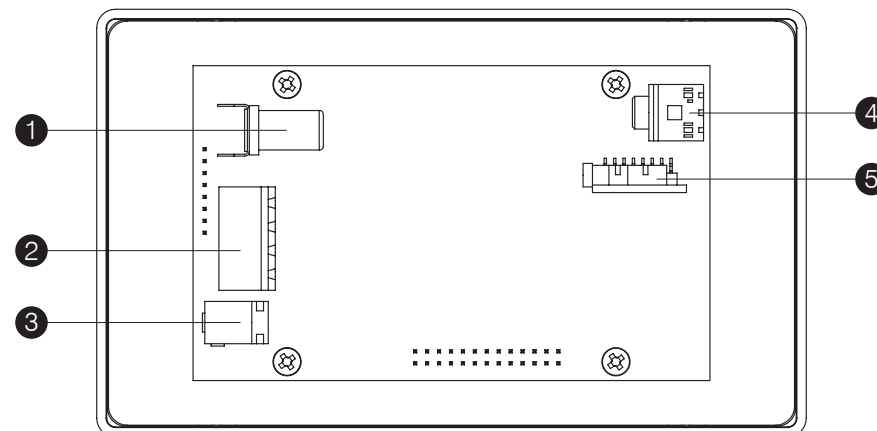
Fixed / variable line out switch – Sets the line output as either variable (adjusts with speaker volume) or fixed.

Connecting the system and powering on

E120 is supplied with all the cables and wall box to fully install the system. Please refer to the 'E120 installation manual' which provides all details on the positioning and cable requirements of the system.

Physical connectivity:

1. DAB / FM ANTENNA – Connect a suitable DAB / FM antenna using the supplied connecting cable.
2. SPEAKER OUTPUTS – Connect the left and right speakers here using the supplied connectors.
3. DC POWER – Only use the supplied power supply and adapting extension cable to power the unit.
4. LINE OUTPUT – A separate amplifier or sub-woofer can connect using a 3.5mm stereo jack socket.
5. AUX INPUT – Connect an external input here such as TV, use analogue 3.5mm stereo jack or mini TOSLINK optical digital.



Configurable Switches:

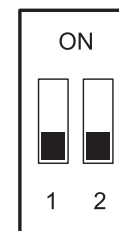
There are two small switches mounted on the lower PCB that adjust the audio mode outputs. After making a switch position change you will need to power down the E120.

SWITCH 1 OFF – Line output is variable, adjusts with amplifier volume.

SWITCH 1 ON – Line output is fixed at 100%

SWITCH 2 OFF – Amplifier speaker outputs are in stereo mode with separate left and right channels.

SWITCH 2 ON – Amplifier speaker outputs are in mono mode with both left and right channels combined on both speaker outputs.



Switching on:

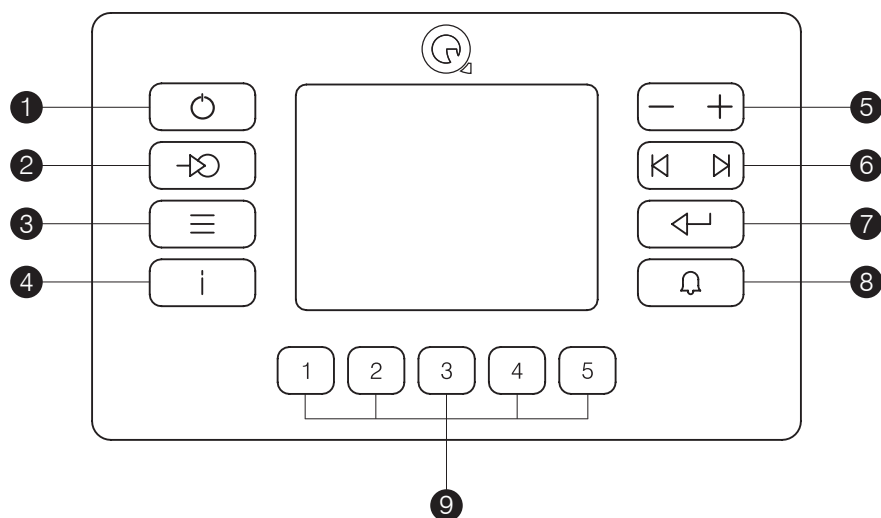
The first time E120 is powered on it will automatically perform a 'BestTune scan' which will take a couple of minutes. If a suitable DAB / FM antenna is connected, E120 will scan and store all available DAB and FM stations, providing one combined list with the best band option for each station.

If a scan has already been performed, E120 will power up into its last state.

The exact number of DAB stations available will vary from area to area.

If you experience poor reception, it may be that you are in a weak signal area and require an external DAB antenna (recommended), or a higher gain amplified antenna.

Operating E120 using the front panel

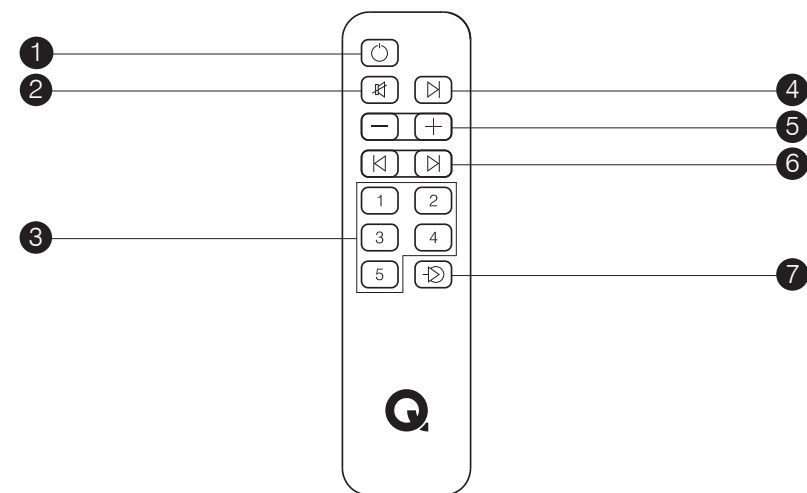


1. STANDBY – Press to enter standby, or turn on E120 to the last selected source.
2. INPUTS – Press to select a different source.
3. MENU – Press to enter the menu.
4. INFO – Press to display information on a selected radio station.
5. VOLUME – Press + or – to adjust volume up or down.
6. PREVIOUS / NEXT – Press to scroll through menu items, radio stations or skip tracks when playing Bluetooth.

7. ENTER – Press to select a menu item, selected radio station, scan to the next FM station or play / pause Bluetooth audio.
8. ALARM – Press to enter the alarm setup.
9. PRESETS – Press and hold down to store a radio station, press to recall a saved preset radio station.

Operating E120 using either remote controls

E120 is supplied with a waterproof remote control (ideal for use in bathrooms) as well as a premium remote control (ideal for bedrooms or kitchens). You must point either remote at the E120 wall unit to operate the system. The premium remote control is shown below, but the waterproof remote has identical button functions.



1. STANDBY – Press to enter standby, or turn on E120 to the last selected source.
2. MUTE – Press to mute / unmute the speakers.
3. PRESETS 1-5 – Press and hold down to store a radio station, press to recall a saved preset radio station.
4. PLAY / PAUSE – Press to play / pause Bluetooth audio or select a new radio station.
5. VOLUME +/- – Press to adjust the speaker volume.
6. SKIP I< / I> – Press to skip tracks on Bluetooth audio or scroll through available radio stations.
7. INPUT – Press to manually select an audio input or radio band.

Radio

E120 includes a DAB+ and FM band tuner. It uses a feature called 'BestTune' which combines a list of scanned DAB and FM stations together, giving a very easy and convenient method for the user to simply select the desired station, without the need to make any manual tuning. This feature can be switched off in the settings menu, which will then present a separate DAB and FM tuner source.

The colour screen will show radio text information, and also slide show images for any DAB+ stations which are broadcasting them.

Listening to BestTune Radio

E120 combines DAB and FM radio stations in to one list, always selecting the best possible service for each station.

1. Switch on E120, press INPUT button to select BestTune.
2. Press I< or >I to scroll through all available scanned stations.
3. Press ENTER to select a station.
4. Adjust the volume.

Storing and selecting BestTune Presets

You can store up to 5 BestTune presets, which can then be recalled from the front panel or remote control.

1. Select the desired radio station.
2. Press and hold a preset number button using the front panel or remote control buttons.
3. E120 will confirm the preset has been saved.

Simply press the desired preset number to play a stored radio station.

Turning off BestTune for separate DAB and FM bands

You can switch off BestTune if you wish to select separate DAB and FM bands, and also store presets in these bands separately.

1. Switch on E120.
2. Press MENU then press >I to select 'System Settings'.
3. Select BestTune, then select Off.

Once BestTune is switched off, you can select DAB or FM separately using the input button. Presets 1-5 are also stored separately for DAB and FM bands when BestTune is switched off.

Bluetooth audio

You can play audio wirelessly from a smart phone, tablet or PC by pairing and then connecting it to E120 using Bluetooth. Once connected, anything you play on the device will sound through E120.

Once a device is paired, you can use it to connect and play music through E120 at any time. E120 will automatically switch to the Bluetooth input when the device connects and then plays music. You must manually connect to E120.

Pairing a Bluetooth device and playing music

You must 'pair' a Bluetooth device first before you can use it to play music or radio.

1. Switch on E120.
2. Press INPUT to select the Bluetooth source – you now have 60s to pair a device.
3. Search for E120-xxxx in your device Bluetooth list, press to pair with E120.

Once a device is paired, you can use it to connect and play music through E120 at any time. E120 will automatically switch to the Bluetooth input when the device connects and then plays music. You must manually connect to E120.

Bluetooth control:

You can use the ENTER button to play and pause the Bluetooth audio.

You can use I< and >I to skip tracks in the music playlist.

You can use the Bluetooth device to control the volume, as well as the front panel and remote control buttons.

Disconnecting:

Putting E120 into standby will disconnect a Bluetooth device, otherwise disconnect from the device itself.

AUX input

E120 has an auxiliary input socket on the back, this is a combined 3.5mm stereo analogue socket and mini TOSLINK optical digital input, ideal for plugging TV sound or any other external audio source.

Once you have made the audio connection, simply press INPUT until Auxiliary Input is selected and adjust the volume.

It is only possible to plug in either analogue or optical, not both.

Setting an alarm

You can set two independent alarms on E120. Each alarm can be set to occur only once, weekdays, weekends or all days. You can set the sound to a radio station or alarm, as well as set the duration and volume.

1. Press ALARM.
2. Use >I to select Alarm 1 or Alarm 2 then press ENTER.
3. Press ENTER to turn alarm ON.
4. Use >I and ENTER to set all other settings such as the time, sound, volume etc.

Once an alarm is set and ON, you will see the status change on the standby screen.

The alarm will switch off after the duration period set, or simply put E120 into standby to switch off.

Time / Date

E120 will automatically set the time and date from the DAB or FM signal, but it can be adjusted manually from the main menu:

1. Switch on E120.
2. Press MENU.
3. Select 'System Settings'.
4. Select 'Time/Date'.
5. Select 'Set Time/Date' to set.
6. Select 'Auto Update' to set auto updates from DAB, FM or none.
7. Select '12/24 Hour' to select either 12 or 24 hour time format.
8. Select 'Set Date Format' to adjust the day, month and year order.

Backlight

The E120 screen backlight is set to automatically adjust depending on the brightness of the room. You can adjust the backlight setting via the main menu:

1. Switch on E120.
2. Press MENU.
3. Select 'System Settings'.
4. Select 'Backlight'.
5. Select 'Timeout' to set the number seconds the screen will stay 'On'.
6. Select 'On Level' to determine automatic or a set brightness level when the screen is 'On'.
7. Select 'Dim Level' to determine automatic or a set brightness level when the screen 'Dims'.

Language

E120 supports a number of languages for the menu, you can select these from the main menu:

English, German, French, Danish, Spanish, Italian, Dutch, Norwegian, Polish, Finnish

1. Switch on E120.
2. Press MENU.
3. Select 'System Settings'.
4. Select 'Language'.
5. Select the desired menu language.

Factory reset

You can factory reset E120 from the main menu which will clear all stored presets, forget all paired Bluetooth devices and then perform a complete DAB and FM scan.

1. Switch on E120.
2. Press MENU.
3. Select 'System Settings'.
4. Select 'Factory Reset'.
5. Select 'YES' to confirm and start the factory reset.

Bluetooth pairing

If you are experiencing problems pairing a new Bluetooth device, then clearing the Bluetooth pairing list can often help. Once complete, ALL Bluetooth devices will need to pair again with E120

1. Switch on E120.
2. Press MENU.
3. Select 'System Settings'.
4. Select 'Bluetooth Pairing'.
5. Select 'YES' to confirm and start clearing the pairing list.

Software version

You can view the E120 software version from the main menu.

1. Switch on E120.
2. Press MENU.
3. Select 'System Settings'.
4. Select 'Software Version'.
5. The current software version is displayed.

Specification

Audio Sources	DAB / DAB+ / FM with RDS	F-connector	
	Bluetooth	Wireless	BT 5.0 A2DP
	AUX:		
	- Analogue	3.5mm stereo	Sensitivity: 350mV Max level: 1.5V Impedence: 10k ohm
Audio Outputs	- Optical	mini TOSLINK	Resolution: 16bit 48kHz
	Speaker outputs	Left & Right	Stereo or dual mono
Amplifier	Class D	Analogue line	Modes: Fixed or variable Max level: 670mV
		Continuous power	2 x 25W @ 6ohm
		THD	0.07% @ 1W 0.2% @ rated power
		SNR	> 75dB @ Rated power
Ratings		Frequency response	20Hz - 20kHz +/- 1dB
		E120 wall panel	IP54
Control		Splash proof remote	IP54
		Touch sensitive buttons	x 15
		IR remote control	x 13
		BT AVRCP	v1.6 (play, pause, skip, track, artist, album name)
		Menu languages	English, German, Dutch, French, Danish, Spanish Italian, Norwegian, Polish, Finnish
General	Power supply	Alarms	x2 once, daily, weekdays, weekends
		Input	100 - 240V AC 50/60 Hz
		Output	22V DC 1.5amps
	Power consumption	Dimensions (HxWxD)	30mm x 50mm x 115mm
		Typical	10W
		Standby	< 1W
		Deep standby	< 0.5W
	Wall panel	Net weight	0.251kg
		Dimensions (HxWxD)	91mm x 151mm x 33mm
		Operating ambient temperature	Max. 40 °C
Cables	Speaker cable	Gauge	19 AWG
		Lengths	2 x 7m
	DC extension	Gauge	16 AWG
		Lengths	5m
		Connectors	5.5mm x 2.5mm DC male 5.5mm x 2.5mm DC female

Warranty

Q Acoustics Media products are warranted free of defects in materials and workmanship for a period of 1 year from the date of purchase. During the warranty period Q Acoustics will, at its option, repair or replace any product found to be faulty after inspection by the company or its appointed distributor or agent.

Misuse and fair wear and tear are not covered by warranty.

Goods for repair should in the first instance be returned to the supplying dealer. If this is not possible contact Q Acoustics or their appointed distributor for your area to determine the correct warranty procedure. If possible the original packaging should be used to return the product as damage sustained during transit to the repair centre is not covered by the warranty. The warranty does not in any way affect your legal rights.

Warranty can be extended to 2 years by registering your product at www.qacoustics.co.uk/register. For service information in other countries visit: www.qacoustics.co.uk

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