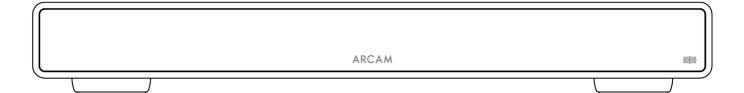


ST5



Owner's Manual Download the setup app:





IMPORTANT SAFETY INSTRUCTIONS

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Clean only with a dry cloth.
- Do not block any ventilation openings. Install this apparatus in accordance with the manufacturer's instructions.
- Do not install this apparatus near any heat sources such as radiators, heat registers, stoves or other apparatus that produce heat.
- 8. 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 is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles and the point where they exit from the apparatus.
- Use only attachments/accessories specified by the manufacturer.

- 11. This equipment is designed for use in moderate climates with a maximum temperature of 35°C.
- 12. Use only with 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 when the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, or the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.
- To disconnect this apparatus from the AC mains completely, disconnect the power-supply cord plug from the AC receptacle.
- 16. The mains plug of the power-supply cord shall remain readily operable.
- This apparatus is intended to be used only with the power supply and/or charging cable provided by the manufacturer.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

- Do not use this apparatus near water.
- Do not expose this apparatus to dripping or splashing, and ensure that no objects filled with liquids, such as vases, are placed on the apparatus.

CAUTION		
RISK	OF ELECTRIC SHOCK. DO NOT OPEN.	
A	THIS SYMBOL ON THE PRODUCT MEANS THERE IS UNINSULATED, DANGEROUS VOLTAGE WITHIN THE PRODUCT ENCLOSURE THAT MAY PRESENT A RISK OF ELECTRICAL SHOCK.	
	THIS SYMBOL ON THE PRODUCT MEANS THERE ARE IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS IN THIS GUIDE.	

Visit the product page at ARCAM.co.uk and download the Safety Sheet for a full list of safety instructions.

Class II Product

This equipment is a Class II or double insulated electrical appliance. It has been designed in such a way that it does not require a safety connection to electrical earth ("ground" in the U.S.).

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Thank you for choosing ARCAM

ARCAM has been producing specialist Hi-Fi and home cinema products offering state of the art sound quality for over 45 years. The ARCAM ST5 is the latest in a long line of award-winning digital audio products extending back to our first CD player that we created, the ARCAM Delta 70 in 1986, and the world's first separate DAC, the Delta Black Box in 1988.

The ARCAM ST5 provides an inclusive feature set supporting most smart phones and tablets, as well as popular streaming services. Connect the ST5 to your home network with Wi-Fi or Ethernet to enjoy instant playback using Apple Airplay2 or Google Chromecast. The ST5 will playback music directly from Spotify Connect and Tidal Connect; and for power users the ST5 is Roon Ready.

In the unlikely event of any fault, or you require technical assistance, please contact our dedicated support teams by email using luxurysupport@harman.com, or by telephone using +44 (0) 1707 668012 or +1 888 691 4171. Or, if you simply require further information about ARCAM products, our network of dealers will be happy to help you. Further information can also be found on the ARCAM website at ARCAM.co.uk.

Package Contents

O ,	ARCAM	ST5	streaming	music	play	/er
-----	-------	-----	-----------	-------	------	-----

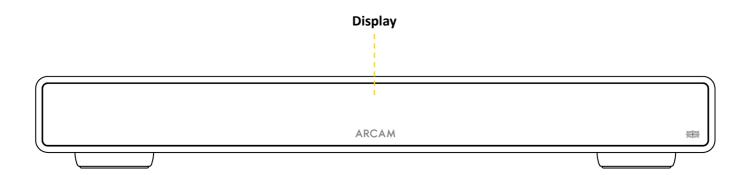
- IR remote
- 2x AAA batteries for the remote control
- Region specific power cords
- RJ11 control cable
- Quick start guide
- Safety and compliance document

Placing The Unit

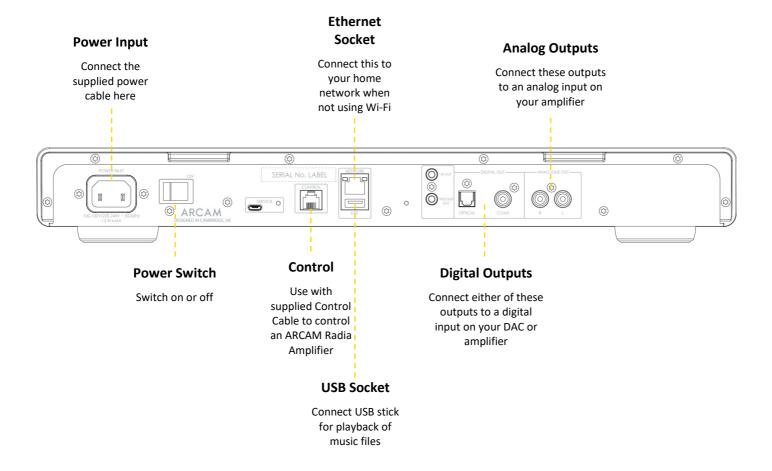
- Place the streamer on a level, firm surface, avoiding direct sunlight and sources of heat or damp.
- O Do not place the ST5 on top of an amplifier or other source of heat.
- Make sure the remote-control receiver to the left of the front panel display is unobstructed, otherwise this
 will impair the use of the remote-control.
- On not place your record deck on top of this unit. Record decks are very sensitive to the noise generated by mains power supplies which will be heard as a background 'hum' if the record deck is too close.
- The normal function of the unit may be disturbed by strong electromagnetic interference. If this occurs, simply reset the unit with the power button, or move the unit to another location.

This product offers the user the option to deactivate power management functions. Note that doing this this will increase energy consumption of the product.

ARCAM Front Panel



Rear Panel



Remote Control



Ů	Toggle Standby Operation	
	Menu Navigation Center button to select	
+	Volume Control (for ARCAM amps only)	
(*X)	Mute On or Off (for ARCAM amps only)	
*	Display Brightness	
	Transport Keys (Play/Pause, Skip back/forward)	
•••	Menu button	
1	Music info button	

Note: Incorrect use of batteries can have hazardous results. Do not mix old and new batteries together. Do not use non-identical batteries together. Although they may look similar, different batteries may have different voltages. Ensure the batteries are inserted in the correct direction.

Remove batteries from equipment that is not going to be used for a month or more. When disposing of used batteries, please comply with governmental or local regulations that apply in your country or area.

Display Control

Press the 🏵 button on the remote control to turn the display on or off.

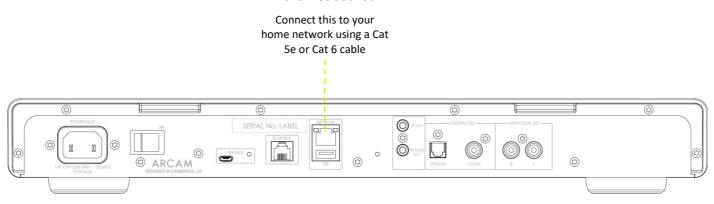
Preset Selection

To select **a preset radio station**, press the left \leftarrow or right \rightarrow navigation buttons. Press the select button when you see the preset you wish to play.

Connecting the Streamer

Wired Network Connection:

Ethernet Socket



Wi-Fi Connection:

To make a Wi-Fi connection, download the <u>ARCAM Radia</u> app to your smartphone or tablet. Links are on the front page of this manual.

Power on the ARCAM ST5 streamer and open the app to discover it after the ST5 is **Ready**. Select it and follow the prompts to connect it to your Wi-Fi network.

Alternatively, you can connect the ARCAM ST5 to your Wi-Fi network using **Apple Airplay speaker setup** in the Wi-Fi settings of your Apple device, or the **Google Home app** in both Android and Apple devices.

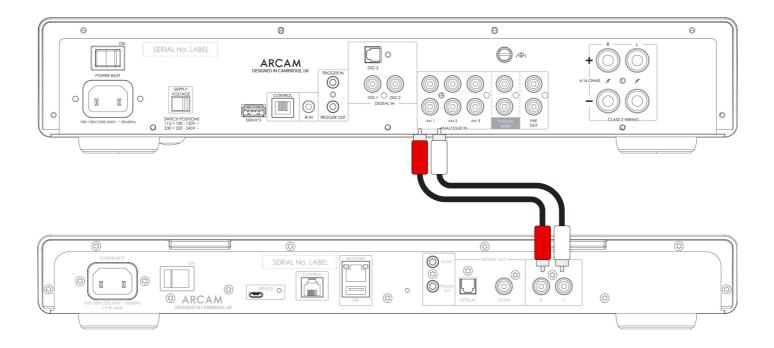


Analog Audio Connection

Step 1, ensure power is disconnected from the Streamer and Amplifier.

Step 2, using analog interconnect cables, connect the right (R), red terminal of the analog output on the streamer to the right (R), usually red terminal of an analog input on your amplifier.

Step 3, connect the left (L), white terminal of the analog output on the streamer to the left (L), usually white terminal of an analog input on your amplifier.



Top Tips

- O After making connections: switch the amplifier on with no input and reduce the volume to minimum. Select the input that corresponds to your connection, and then slowly increase the volume to a suitable listening level to avoid loud sounds or product damage in the event of incorrect connection.
- O If you are unsure as to how your system should be connected, please contact your JBL dealer who will be happy to help you.

Digital Audio Connection

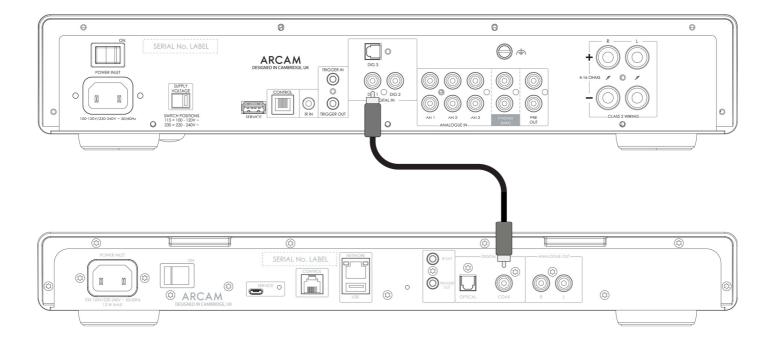
Step 1, ensure power is disconnected from the streamer and amplifier.

Step 2, using a digital coax interconnect cable, connect the digital coaxial output on the streamer to a digital coaxial input on your amplifier.

Alternatively, using an optical Toslink interconnect cable, connect the digital optical output to a digital optical input on your amplifier.

Note 1: Digital outputs are disabled by default. To use a Digital output, change the **Output Type** in the settings menu. To use the menu, see Page 12

Note 2: Variable output is not available when Digital output is enabled. When Digital output is selected, **Output Volume** will default to **Fixed**.



Top Tips

- O After making connections: switch the amplifier on with no input and reduce the volume to minimum. Select the input that corresponds to your connection, and then slowly increase the volume to a suitable listening level to avoid loud sounds or product damage in the event of incorrect connection.
- O If you are unsure as to how your system should be connected, please contact your JBL dealer who will be happy to help you.

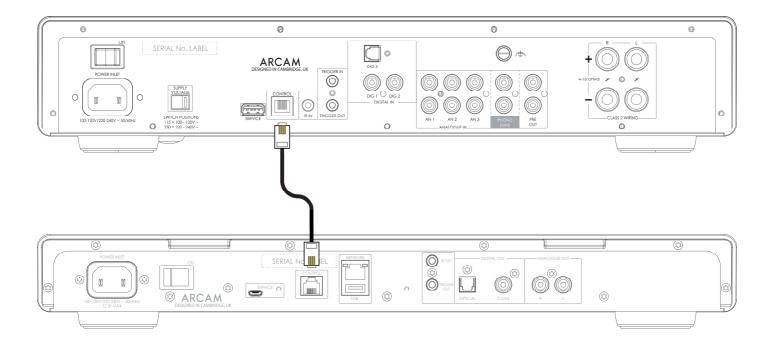
Control Connection

The Control connection allows for the ARCAM ST5 to synchronise with, and control an ARCAM Radia series amplifier. When streaming, it allows for the combination of streamer and amplifier to act as one, whilst enjoying the benefits of component devices with separate chassis and power supplies.

The control cable is supplied in the box with the ARCAM ST5.

Complete the following steps to enable this feature:

- 1. Ensure power is disconnected from the Streamer and Amplifier.
- 2. Connect either an analogue or digital audio connection from the output of the ST5 to an input of the ARCAM amplifier.
- 3. Connect the control cable from the ST5 CONTROL socket to the CONTROL socket on the ARCAM amplifier.



- 4. Power on both ST5 and ARCAM amplifier.
- 5. In the ST5 settings menu, change the Volume Output option to EXTERNAL.
- 6. In the ST5 settings menu, change the **Output Type** to Analogue or Digital (DIG CORE) to match the audio connection type used.
- 7. In the <u>ARCAM amplifier</u>, change the **Streamer Input** option in the System Settings menu to match the input that you have connected the ST5 into.

Top Tips

There is a Maxmium Output Volume when connected to an external amplifier to prevent accidental
excessive volume jumps. The default maximum is 40. This value can be changed in the menu of the ST5. To
use the menu, see page 12.

Operation

Power

The power switch on the rear panel switches the amplifier on or off. When you have finished making connections, switch the amplifier on.

Auto Standby

The ST5 is designed to enter standby automatically after 20 minutes with no audio playing, and no user interaction. This is to meet international power consumption regulations. This can be turned off in the menu. To use the menu, see page 12.

Playback

The ARCAM ST5 can be connected to, and play music from the following apps and services:

- Spotify Connect
- Tidal Connect
- Apple Airplay 2
- Chromecast (requires acceptance of Google terms in the JBL Premium App or additional setup steps in the Google Home app)
- Roon (requires additional setup in Roon app)

From the ARCAM Radia app, you can access setup favorites and access other services including but not limited to:

- Internet Radio
- Podcasts
- Connected USB media
- Local network storage (UPnP)

USB

Insert the USB storage device into the USB socket on the rear panel. Do not use a USB extension cable.

The ARCAM ST5 can play music files stored on a USB flash drive. Music files contained within the USB storage can be browsed using the **ARCAM Radia** app.

Please refer to **Supported File Formats** on page 12.

Menu

To access the setting menu, press the MENU button on the remote control.

To navigate the menu use the navigation buttons on the remote control.

Menu Tree

	Selects which output to use, Analog or Digital with full or partial MQA decoding (where MQA
Output Type	encoded content is being played).
	Default is Analogue.
Valuma Outnut	Selects whether the audio output volume is Variable, Fixed or External.
Volume Output	Default is Variable .
Max External Vol	Defines maximum volume sent to external amplifier.
IVIAX EXCEITIAI VOI	Default is 40 .
Network Standby	Selects whether the Network Connection is maintained in standby.
Network Standby	Default is On .
	When enabled, the ST5 will enter standby after 20 minutes with no user interaction or
Eco Timer	playback.
	Default is On .
DAC Filter	Select a digital filter for the analogue outputs.
DACTILLEI	Default is Fast .
System Reset	Press Select/OK to initiate a reset of all settings to default.
USB Update	Press Select/OK to initiate a software update from a USB stick present in the USB socket on
ОЗВ Ориате	the rear panel.
NET Version	Displays the current NET software version in operation on the ST5.
Host Version	Displays the current HOST software version in operation on the ST5.
IP Address	Displays the current IP address of the ST5 on your network.
UNIT ID	Displays the NETWORK ID of the ST5 as identified to other devices on the network.

Supported File Formats

File Type	Bit Depths	Sample Rates
AAC	16 or 24 bit	44.1, 48, 88.2 or 96 kHz
AIFF	16 or 24 bit	44.1, 48, 88.2, 96, 176.4 or 192 kHz
ALAC	16 or 24 bit	44.1, 48, 88.2, 96, 176.4 or 192 kHz
FLAC	16 or 24 bit	44.1, 48, 88.2, 96, 176.4 or 192 kHz
MP3	16 bit	44.1 or 48 kHz
OGG	16 bit	44.1 or 48 kHz
WAV	16 or 24 bit	44.1, 48, 88.2, 96, 176.4 or 192 kHz
WMA	16 bit	44.1 or 48 kHz

Troubleshooting

Problem	Check the following
No sound	Is the streamer correctly plugged in and switched on? Is the streamer correctly connected to the amplifier, with the correct input selected? Is the amplifier muted? Is the correct output mode selected (Analog or Digital)? (See menu on page 11)
The streamer does not respond to the remote control	Are there fresh batteries in the remote control? Are you pointing the remote control towards the amplifier window without obstruction?
The front panel display is blank	Is the streamer correctly plugged in and switched on? Is the streamer in standby? Is the display dimmed to "Off"? Press the button on the remote control.
Cannot control the volume	Is Fixed volume enabled? (See menu on page 12) Is Digital output selected? (See menu on page 12)
Cannot discover the streamer in an app	Is the streamer correctly plugged in and switched on? Does the streamer have a network connection, wired by Ethernet or Wi-Fi? For Wi-Fi connections, has setup been completed using the JBL Premium Audio app? Is your smartphone or tablet connected to the same local network?

Specifications

Interfaces	
USB	USB 2.0 High Speed (480Mbps)
Ethernet	10/100Mbps
Wi-Fi	802.11b/g/n
Analog Outputs	
Digital to Analog Converter	ESS ES9018K2M
Signal/Noise Ratio (Awtd)	115dB
Harmonic Distortion (1kHz)	< 0.007%
Frequency response	10 Hz – 20 kHz ± 0.05dB
Output level (fixed)	2.0V rms
Output Impedance	47Ω unbalanced
Jitter RMS	< 20 psec
General	
Mains voltage	100–240V, 50/60Hz
Maximum power consumption	12W
Dimensions in mm (including feet, control knob and	431 W x 57 H x 328 D
connectors)	451 W X 57 11 X 520 D
Weight (net)	3.5kg
Weight (gross)	5.6kg

The 5150 to 5350 MHz frequency range is restricted to indoor use. This equipment should be installed and operated with a minimum distance of 20cm between the product and your body.

Restrictions in the 5 GHz band:

According to Article 10 (10) of Directive 2014/53/EU, the packaging shows that this radio equipment will be subject to some restrictions when placed on the market in Belgium (BE), Bulgaria (BG), the Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain(ES), France (FR), Croatia (HR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania(LT), Luxembourg (LU), Hungary (HU), Malta (MT), Netherlands (NL), Austria(AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE), the Turkey (TR), Norway(NO), Switzerland (CH), Iceland (IS), and Liechtenstein (LI), the United Kingdom in respect of Northern Ireland (UK(NI)).

Technology	Operating frequency band	Max. Transmit power
Bluetooth LE	2400-2483.5MHz	9.37 dBm
2.4GHz Wi-Fi	2400-2483.5 MHz	19.79 dBm
5GHz Wi-Fi band 1	5150-5250 MHz	22.33 dBm
5GHz Wi-Fi band 2	5250-5350 MHz	19.97 dBm
5GHz Wi-Fi band 3	5470-5725 MHz	19.95 dBm
5GHz Wi-Fi band 4	5725-5850 MHz	13.99 dBm

Trademarks and Licenses



Apple®, AirPlay® and the AirPlay Logo™, iPod®, iPhone® and iPad® are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc.

To use AirPlay with the JBL MP350, the latest version of iOS, iPadOS, or macOS is recommended.



The Spotify software is subject to third party licenses that can be found here: https://developer.spotify.com/legal/third-party-licenses/



The Wi-Fi CERTIFIED™ logo is a registered trademark of Wi-Fi Alliance®.



Google, Google Play, Chromecast, and other related marks are trademarks of Google LLC. The Google Assistant requires an internet connection and is not available in certain countries and languages. Availability and react of certain features and services are device, service, and network-dependent and may not be available in all areas. Controlling certain devices in your home requires compatible smart devices. Subscriptions for services and applications may be required and additional terms, conditions and/or charges may apply.

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MQA (Master Quality Authenticated).

MQA is an award-winning British technology that delivers the sound of the original master recording. The master MQA file is fully authenticated and is small enough to stream or download.



Visit mga.co.uk for more information.

The JBL MP350 includes MQA technology, which enables you to play back MQA audio files and streams, delivering the sound of the original master recording.

MQA or MQA Studio indicates that the product is decoding and playing an MQA stream or file and denotes provenance to ensure that the sound is identical to that of the source material.

MQA Studio indicates it is playing an MQA Studio file, which has either been approved in the studio by the artist/producer or has been verified by the copyright owner.

MP3

MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.

FLAC Decoder Copyright © 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 Josh Coalson

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