

Juke+

Multi-room streaming amplifier

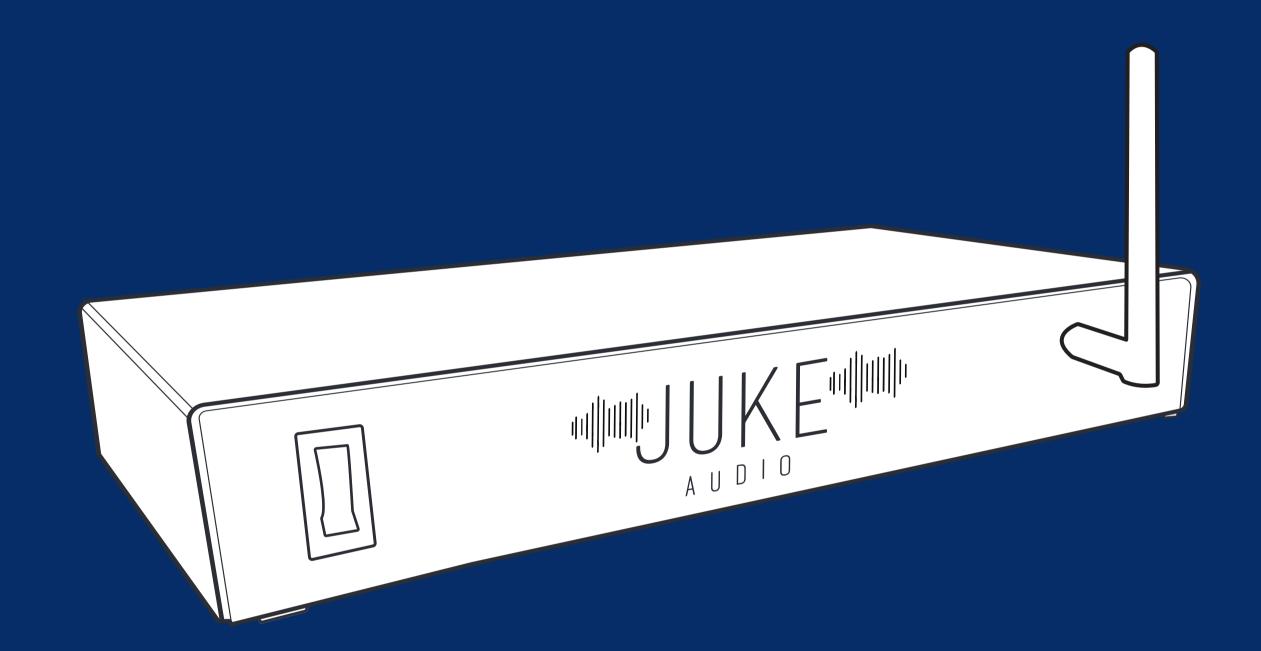






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Product Overview

The Juke+ is a high powered 6-zone audio amplifier with multi-source capabilities via both wireless and wired connections. Through this guide, we will detail out the product specs, how to install it, and the utilization of the dedicated control app.



Specs



Zones	6 zones of stereo output (12 speaker channels) + RCA output (7th zone) & Optical output (8th zone)
Output	100 watts per channel at 8 ohm speaker impedance (stable down to 2 ohms)
Dimensions	17.13" wide by 8.38" deep by 1.75" high (1U rack mount)
Wireless Inputs	Airplay 2, Spotify Connect, Bluetooth 5, DLNA
Wired Inputs	(1) RCA, (1) Optical, (2) USB Ports* <u>adapter required</u>

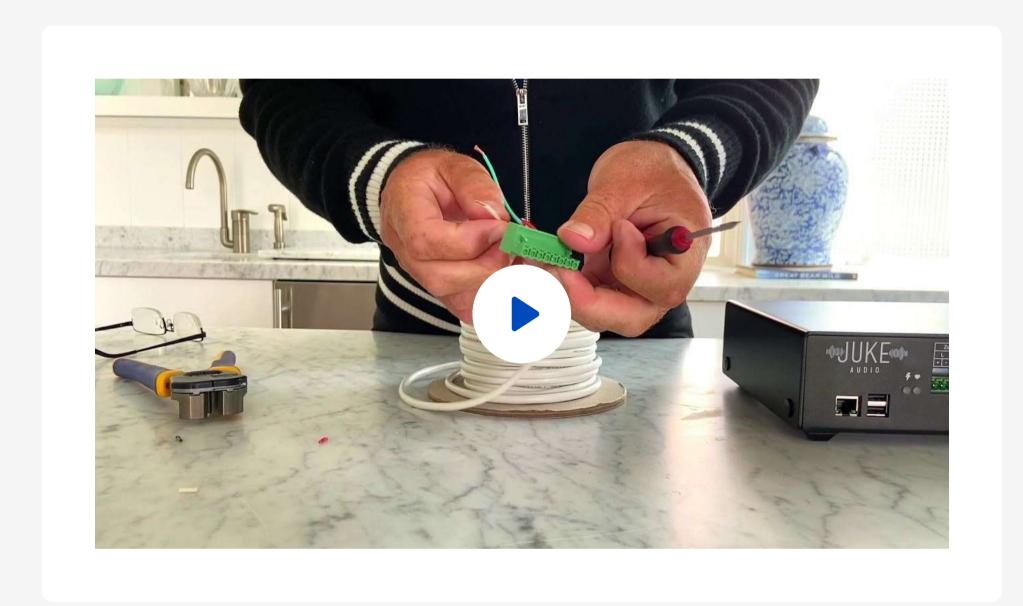


The Juke can be installed in one of two locations

Rack or Table-Top

- 1. Placed onto a shelf or a flat surface. For best performance, do not rest any other equipment on top of it or place the unit in a location that might cause the unit to run hot
- 2. Mounted into a 19" equipment rack using the optional rack ears that come with the shipment. There are two aluminum plates that attach to the Juke with the 4 screws provided and are used to screw the unit into the rack.

Wiring



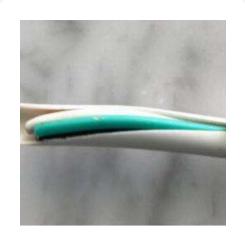
What you see in this example is a single 4 conductor wire run from a pair of speakers (L + R), however it is also fine to have just a 2 conductor wire from each individual speaker in which case it would just be red and black.



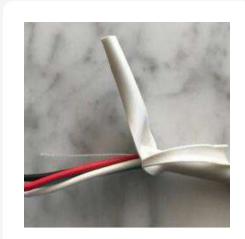
Tools required (not included): wire strippers, scissors and small blade screwdriver



Cut a small amount of the insulation covering the speaker wires



Peal back the insulation to expose 2 or 3 inches of wire



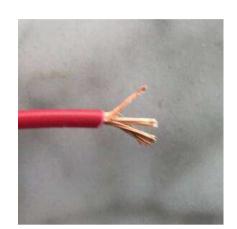
Peal it like a banana



Cut off the excess insulation



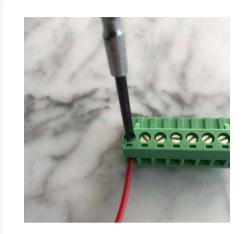
Strip about 1/4 inch of insulation from each wire



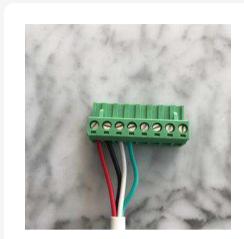
Fan out the wire strands



Twist the wire strands and make sure none are sticking out



Insert each wire in the terminal block and tighten the screw



Repeat the steps for the remaining wires



Repeat the steps for the remaining wires

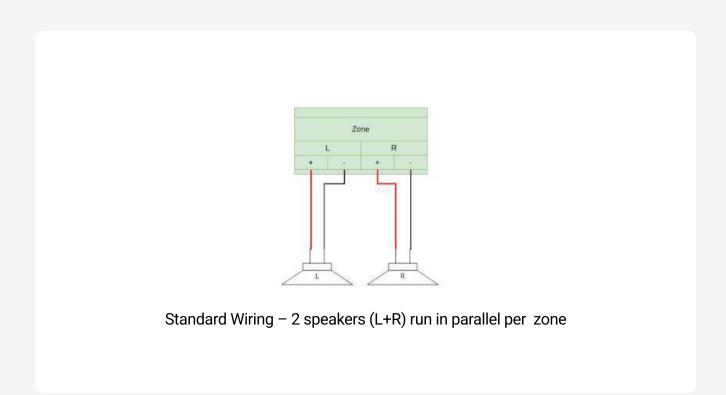


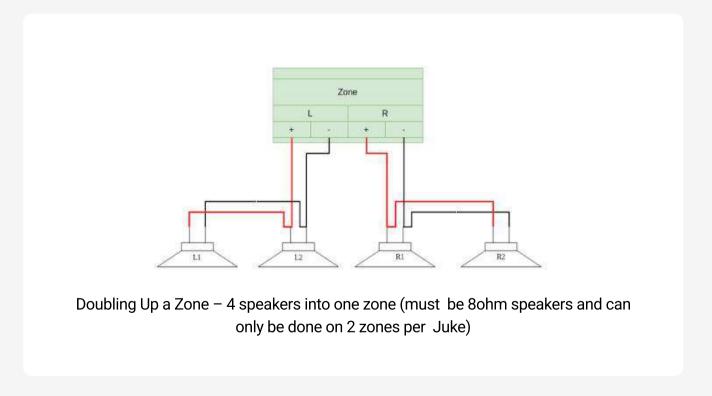
Plug each connector firmly into the Juke until it locks in place



Repeat these steps for all of the zones

Each of Juke's zone outputs has a positive and negative connector for a left speaker, and the same for a right speaker (4 connectors in total: left positive, left negative, right positive and right negative). In typical applications, a single speaker is connected to each terminal pair such that each zone has a left and right speaker. However, up to two of Juke's eight zones can power four speakers: two left, and two right, as long as each speaker connected in that zone is 8 Ohms.



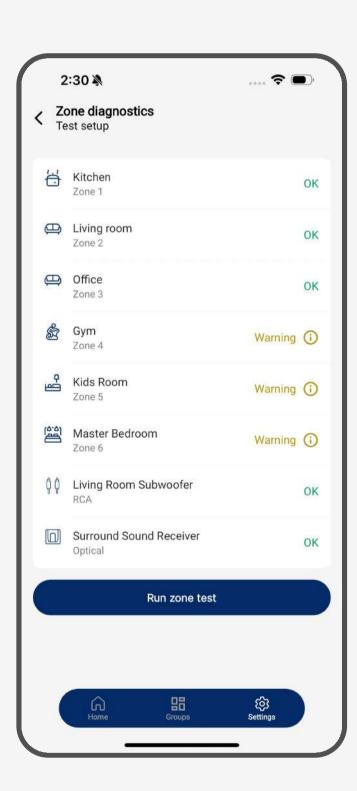


Mono Output: If you only have one speaker in a zone like a bathroom or closet for example, you can wire in just one speaker on a zone and leave the other channel empty. Then you can set that zone to mono output from within the zone settings portion of the Juke app to ensure that speaker gets full sound coverage.

Checking speaker connections

In the diagnostics portion of the Juke app, you can do a self scan of all the speaker connections. If you see "Okay" then you know the speaker is connected properly. If you get a warning, it can be related to any of the following

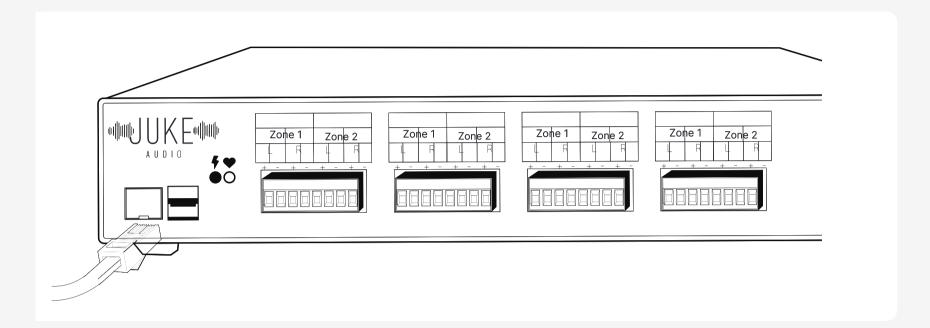
- 1. No Connection Detected This is the most common warning and comes as a result of either the polarity of the speaker not being connected in the correct order of + + or the speaker's impedance not being low enough (8 to 2 ohms) for the Juke to see.
- 2. Overcurrent This typically means that the speaker is drawing more power from the Juke that it can support which can be the case if the playing the audio at high volume and speaker has a very high wattage rating (150 watts>) or if you have tried to connect too many speakers with an impedance that is at or lower than 2 ohms.
- 3. Short to ground This means that there is metal touching somewhere between the connection of the speaker to the Juke. This can be a single strand from the end of the speaker wire touching the juke or the other wire, or potentially at the connection of the wire to the speaker itself



Getting on the Network ?

Juke can be connected to your network either through a hard-wired ethernet connection or wirelessly over Wi-Fi as well. Whenever possible, we recommend a hard-wired connection for most stable performance.

Hard-Wired Ethernet Connection

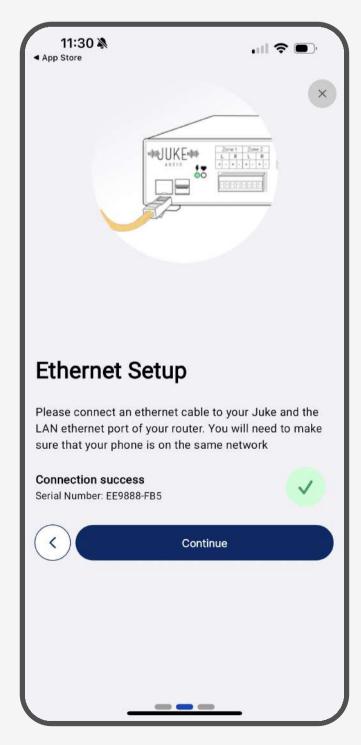


If available, it is preferable to connect Juke to your network via Ethernet. Note: make sure to connect Juke to the LAN port on your main router. Juke must be on the same network as the devices (e.g. your phone or tablet) you wish to control it with. If you plug Juke into a port on your cable modem, but your home network is provided by a different router, you won't be able to access Juke. If connected via Ethernet, please skip the next section since there is no need to configure a wireless connection.

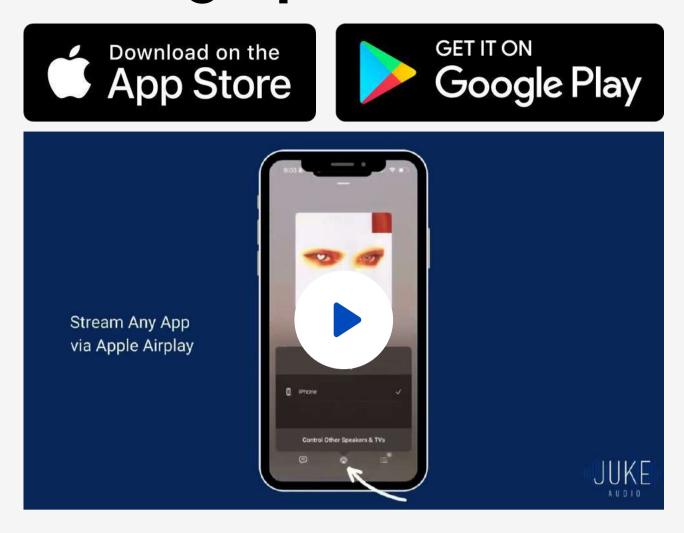
Wireless connection

If your Juke+ is within approximately 50ft of your router or nearest Wi-Fi access point, you should be able to establish a wireless connection as long as the antenna is screwed onto the unit. If you have a mesh Wi-Fi system with extenders around your house, bringing one of them directly next to the Juke will greatly boost stability. If you can not do this and/or the distance is greater than 50ft, we recommend either connecting Juke to a <u>TP-Link N300</u>. Follow the steps in the Wi-Fi onboarding flow from the next section for detailed instructions.





Setting Up the Juke Audio device from the App



Onboarding setup instructions

- 1. Download the Juke Audio app from the Apple App Store or Google Play Store
- 2. Ethernet Setup: Connect the Juke into the LAN port of your router, at which point the Juke app will discover the amplifier on the network. Note: If you are not finding the Juke it is likely because your device is on a different network than the Juke. Please referencing our networking support tips for details on resolving
- 3. Wi-Fi Setup: Find your Wi-Fi network from the list of networks in the dropdown menu and type in your credentials.

 After about fifteen seconds, you should see two green check marks appear to indicate the Juke has been successfully merged onto your local network. Note: If you are not seeing your network as an available option or unable to get it to connect then please see our networking troubleshooting steps for details on resolving
- 4. Name Your Zones: You will be presented with the option to name each of your zones and give it an icon of choice. If you wired in the speakers from the living room into zone 1 of unit then you would name that zone Living Room. If you have not wired the speakers in yet, you can skip these steps for now and rename the zones later from the zone settings screen in the administrator portion of the app

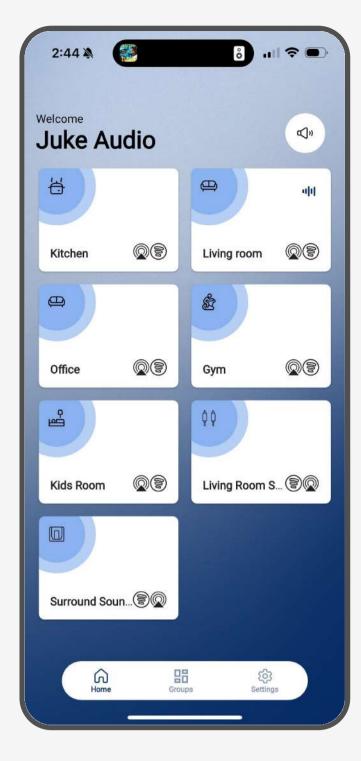


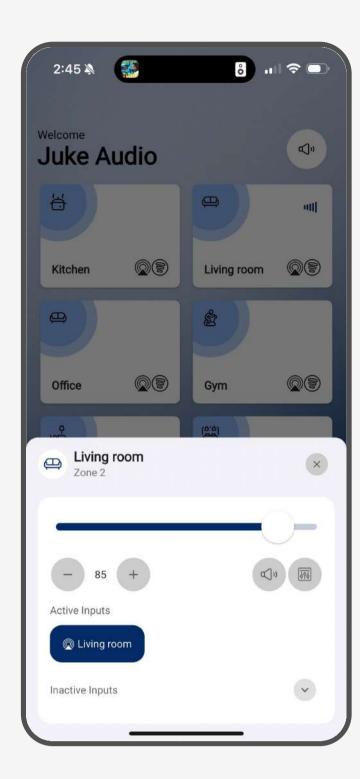
Understanding the Juke overview Screen

The homepage of the Juke app gives you an overview of all of your connected speaker zones. If there is an active audio input being played in that zone, you will see a blue soundwave in the corner of that zone. If you click into that zone, you will be able to see what active audio inputs are being played in that area, and if there are two audio streams / sources attempting to play to that one zone at a time, you can switch back and forth between them by clicking on your desired audio source.

You'll also see a volume slider for each of your zones from within that zone card as well.

Note: A stream will not become "active" until it is in use. For example, if you want there to be an active audio stream via Airplay, you'll need to leave the Juke app and connect to that room via Airplay for it to become active. Please see the streaming portion of the manual for further details.





Utilizing the RCA & Optical outputs

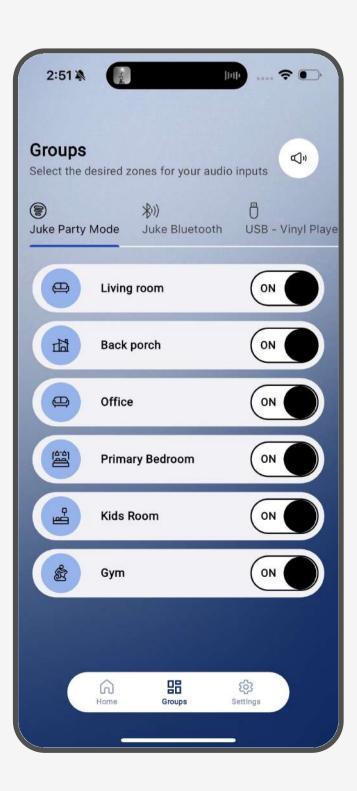
The Juke+ has one analog output (RCA) and one digital output (Optical) that you can essentially think of as the 7th and 8th zone. These outputs will appear in the homescreen of the app (unless disabled in zone settings) alongside your speakers outputs and give you the ability to play any of your audio sources out to them alongside the speakers or separately.

Common use cases for these might be using the RCA output to connect a subwoofer or third party amplifier, or using the Optical output to connect to an audio video receiver in order to tie together a home theater / surround sound room in with the Juke when you want to have the same music playing in that area as the rest of the house.

Utilizing the groups tab

The groups tab of the app is the location where you can set your desired rooms for any of the supported audio input types. On initial installation, you'll be prompted to go to the group inputs tab of the app to select your desired inputs and give them a name, at which point you can return to this groups tab to turn off/on any of your zones for that input. This allows you to achieve multi-room audio for any of your audio sources and also establish convenient presets as well. You can adjust these in real time as needed.

Example: If I want to create a multi-room endpoint for streaming via Spotify Connect, then you'll set one of the inputs as Spotify, name it something like "Juke Spotify Party Mode" and then turn on my desired zones for that input like you see in the photo here. Then when I connect to that input from within Spotify, the audio will play out to whatever zones I have turned on in the Juke app for that input.



Configuring the admin section

The administrator portion of the app gives you the ability to configure and oversee the detailed settings of your Juke and can be accessed with a standard password of Admin with a capital A. You can change the password from within the settings to anything of your preference. Once logged in, you'll see the following

Zone Settings

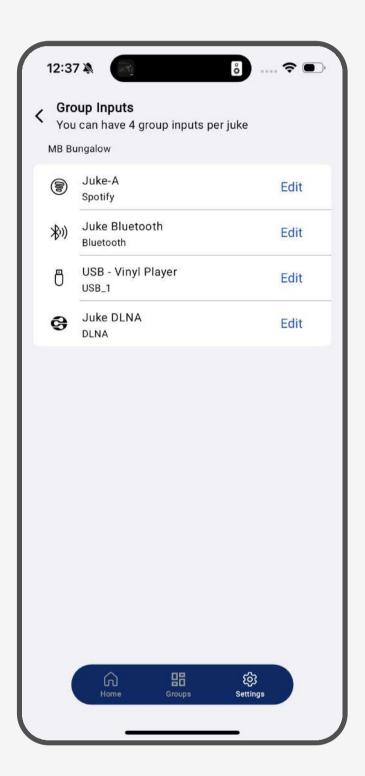
Here is where you can rename your zones and give it a desired icon. If the zone is not being utilized, you can toggle no for "Show zoner for users" and then that zone will disappear from the app. If you toggle no for "Enable in Airplay & Spotify" then that zone will now display in the Airplay or Spotify Connect menu which is recommended if the Juke is connected via Wi-Fi with a marginal connection then we recommend you disable the zones from showing independently in those places and just using the group inputs for Airplay and Spotify as this is a lot less strenuous on the network.

Group Input

Here is where you can establish any of your inputs for wireless (Airplay, Spotify, Bluetooth, DLNA) or wired (<u>USB to RCA converter</u>) and then give it your desired name. You have the ability to set up to 4 group inputs per Juke and can disable any ones that you do not need.

A common example for this might be naming one input "Juke Party Mode" with the input type set as Spotify as this will allow you to select multi-rooms from the Juke app when wanting to stream via Spotify Connect.

Note: Every zone on the Juke is also given it's own Airplay & Spotify Connect source automatically in addition to these 4 group inputs. For instructions on how to stream via Airplay or Spotify please reference the Playing Audio portion of the manual.



Juke Information

This is where you can check for potential software updates for your unit and initiate them. Additionally, you can check the device information such as serial number, signal strength, temperature, and more. If you are noticing spotty connectivity when connected via Wi-Fi, you'll likely see a signal strength of -65db or lower and will want to get your networking equipment closer to the Juke to resolve this issue.

Juke Diagnostics

Here you can use the zone tests feature to do a scan of your speaker connections and see if there are any warnings. Reference the speaker connection section from earlier in the manual for full details. If you hit "upload logs", you'll be able to submit a live diagnostics to the Juke Audio support team to review the happenings of your unit. Please be sure to include a detailed note of what is happening and also send an email to email@jukeaudio.com after uploading for increased visibility.

Accessing the Juke Web App ...

If you'd like to access your juke from a web browser on your computer or other connected devices as an alternative to the mobile app, you can do so in one of the following ways:

- On Apple product: type in Juke.local into the web browser of Safari
- On Android / PC: type in the IP address assigned to Juke by your router into your web browser. (Note: the IP address will no longer be 10.0.0.5 after you've connected your Juke to your network.) The assigned IP can be located by going to jukeaudio.com/lookup/ and typing in the serial number which can be found on the underside of the unit. If it fails to find

Networking Tips

All communication between your devices and Juke will be done over the network, and it is therefore very important to ensure a stable connection between the Juke, the router, and any device looking to stream to Juke. Most networks should work normally as is but if you are experiencing problems, here are a few criteria that need to be enabled within your network settings to ensure proper communication.

- 1. Select IPV4, not IPV6
- 2. Disable 5 GHz
- 3. Make sure security is WPA2, not WPA3
- 4. Make sure things like IGMP snooping disable

If you have a router / modem from your internet service provider in addition to extenders across the house, commonly referred to a mesh system, then you need to ensure to put your mesh system into "bridge mode" in order to unify the network so your device can remain consistently connected to the Juke. This can be done from the settings of your networking equipment.

Playing Audio

You can play audio to your Juke 6/8 in a number of ways including wireless streaming from phones / tablets as well as wired audio sources such as vinyl players. See details below on each of the various options



Apple Airplay

Stream any content or app of your choosing that you can access on an Apple product, e.g, iPhone, iPad, AppleTV, etc. directly to Juke. This provides unlimited options from the apps you can choose – AppleMusic, Pandora, Amazon Music, Spotify, etc.

Note: Android users can stream via Airplay to Juke via a third party app called AirMusic. Please see the add-ons section of the user manual for details



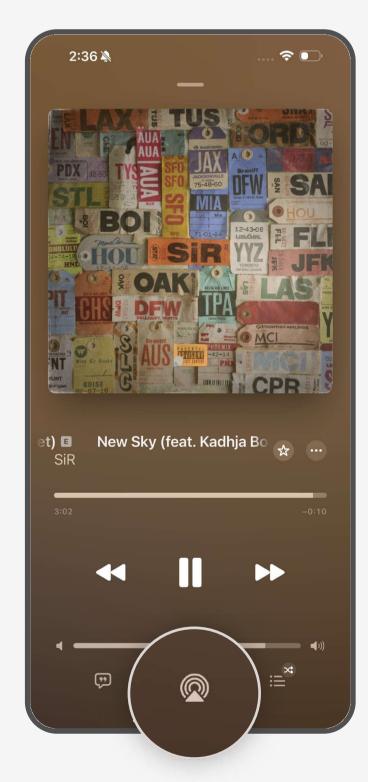
How to access

You can connect to Airplay from the Control Center of your Apple device, or launch the Airplay menu directly from within any streaming app like Apple music. The icon is typically a triangle with the 3 circles forming around it but can also look a little different depending on the music app you are using.

Once you launch the Airplay menu, you will see a list of all of your room names and have the ability to select any combination of them that you would like with an independent volume slider for each zone. This is very convenient as it allows you to choose your desired rooms without needing to visit the Juke app to dictate that. It also allows multiple users to connect in this way at the same time for when you want to play different things in different areas.

Note: You can still create a group input for Airplay from within the Juke app and label it something "Whole House" with all the zones turned on for that input if you don't want to click on all the room names individually.



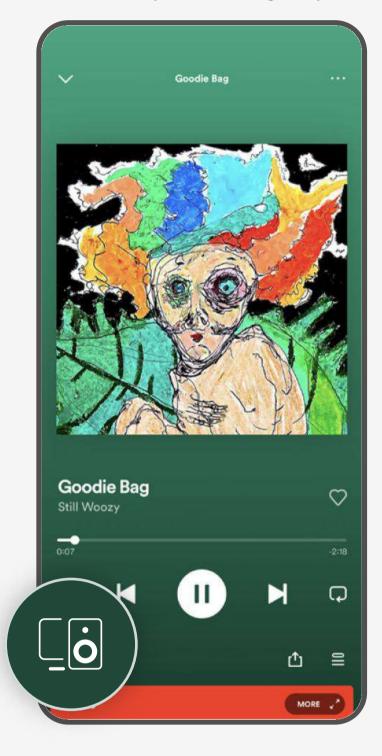


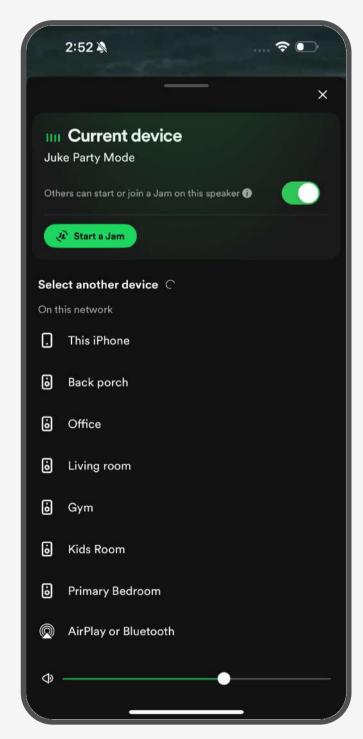
Spotify Connect

Stream directly from your premium Spotify account to Juke. This serves as a terrific option for users looking to stream from their Android and computers, and has an added benefit of the music not stopping when a phone call comes in.

How to access

- 1. Launch the Spotify app on your device, choose a song, and then hit the speaker icon in the top left corner of the speaker which will then bring up your available devices.
- 2. You will see all of your room names and be able to select one a time. If you want to do multi-room with Spotify Connect, you'll need to create a group input in the Juke app for Spotify and then turn on your desired audio zones for that input in the groups tab.





Note: Apple users can also Airplay their Spotify stream by scrolling to the Airplay button at the bottom of the "available devices" screen mentioned above. This has the added benefit of being able to do multi-room streaming without needing to create a group input in the Juke app.

Bluetooth

In addition to the Wi-Fi based streaming methods, Juke also offers the flexibility to stream via Bluetooth which is especially valuable if you don't want to be reliant on the Wi-Fi network and/or you are an Android user looking to stream content pieces outside of Spotify. In order to do this, you need to go to the group inputs section of the app and set one of your inputs as Bluetooth and give it your desired name. You will then see this name in your device's bluetooth settings.

RCA Input

Connect a digital audio source into the Optical input of the Juke+ with a standard Toslink cable. The most common device type for this would be connecting a television to get the audio from it to play through the connected speakers on the Juke. This is configured from within the app in the same way the RCA input is configured as mentioned above. You can preset whatever rooms you want to come on for this input from the groups tab of the app as well as adjust the volume slider that appears at the top of the screen for Optical.

Make sure when hooking up your television, you set its output mode to PCM at 48,000 kHz.

Optical Input

Connect a wired audio source into the RCA input of the Juke+ with a standard RCA cable. Common device types for this might be things such as a vinyl player, microphone, audio streamer, etc. Anything that has an RCA output will be able to connect into the Juke in this way. Once connected, you'll go to the group inputs section of the app and assign one input as RCA and then be able to turn on whatever zones you'd like for that input from the groups tab of the app.

If you are hearing a humming sound over the audio, we recommend that you turn the volume on your audio source down and use the volume slider from within the groups tab of the Juke app to control the volume. If that still does not remove the humming, then please get a ground loop isolator and insert it in between the connection of the Juke's RCA and the source you are connecting.

USB

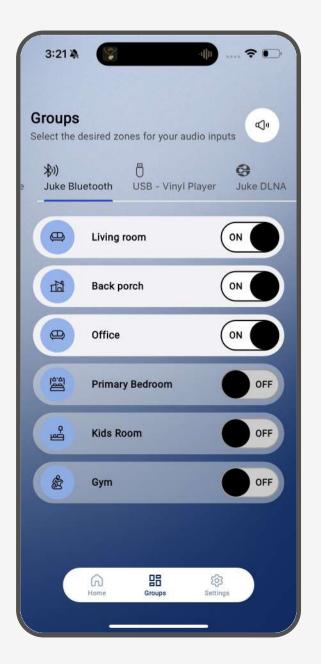
If you have an analog device connected to Juke via the <u>USB to RCA Digitnow adapter</u>, then you'll be able to edit one of the four groups inputs to be a USB input.

Once that has been configured, you'll go to to the USB input in the groups tab of the app to turn on your desired zones for that input. The volume output can be controlled with the slider at the top of the screen. However, keep in mind that the output level set on the connected device will also impact the volume as well.

Example of USB inputs

AudioCast for Android: This is a separate dongle piece that gives Android users great flexibility to stream from inputs such as Pandora, iHeartRadio, and TuneIn. See information on how to purchase and use the product <u>here</u>

Surround Sound Receiver: If you have a main media room / theater that you'd like to power with a separate surround sound receiver, you can do so, and then connect the receiver to the Juke USB as an input when you want to play audio from that receiver to other areas of the house.



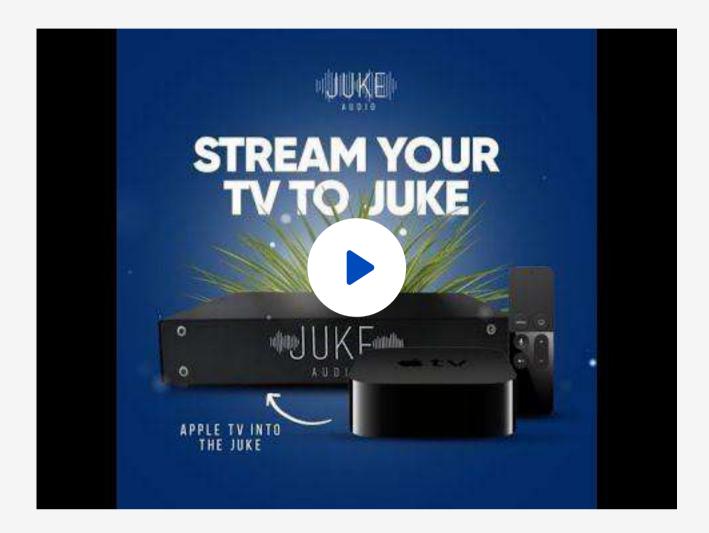


Getting Audio From TV to Juke

Apple TV

To do so you must connect your AppleTV to Airplay. This can be done by holding down the TV icon on your AppleTV remote and selecting the Airplay input that you have your selected zones turned on for.

Note: YouTube TV does not yet support this feature



Run a connection from the optical output of your television back to the optical input of the Juke via a <u>Toslink cable</u> of an appropriate length to reach the distance. You can then set whatever audio zones you want that TV audio to play out to on the Juke from the groups tab of the Juke app.



Add-Ons

Additional Volume

If you're seeking more volume from your Juke there are few different options. The most seamless option is to utilize 4 ohm speakers when possible as that will give twice the loudness of an 8 ohm speaker. Some outdoor speakers even have a switch that takes them from 8 ohm to 4 ohm speakers.

An alternative is to utilize a third party amplifier to drive additional power, essentially making Juke a pre-amp in a specific zone. This can be done in two different ways

1. Installation if Speakers are Connected in Parallel

If Juke is powering speakers in a zone, and you also want the line-level device to play concurrently, the following part is required

Part Description	Amazon ASIN	Amazon Link	Approximate Price
PAC SNI-35 Variable LOC Line Out Converter	B001EAWS3W	<u>Link</u>	\$9.77

Connect the 4 wires of the PAC in parallel with the speaker wires connected to Juke's green connector (the correct order from left to right is: white, white with a black stripe, grey, grey with a black stripe) for that zone and connect the RCA jacks to the line-inputs on the third-party device. You can adjust the volume of the PAC with the rotary dials on the end, but mostly likely the default setting will work well and there is no need to make an adjustment. That's it!

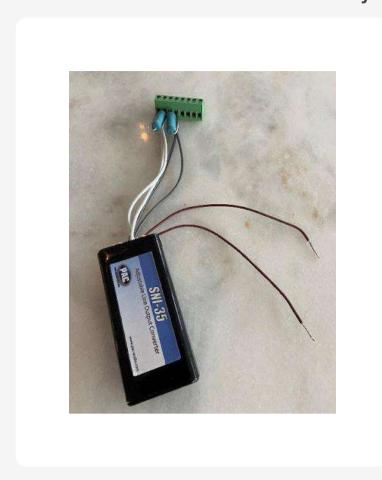
2. Installation if Speakers are Not Connected in Parallel

If you wish to stream via Juke to a third-party device but you want the option of playing that device without also playing to speakers connected directly to Juke for that zone, another step is required. In addition to the Pac part listed above, you need to add a resistor across the positive and negative terminals of Juke's left and right outputs for that zone. (This makes Juke think that speakers are connected to that zone, otherwise it won't play.) This requires the following part:

Part Description	Amazon ASIN	Amazon Link	Approximate Price
MULTICOMP MC14709 RESISTOR, WIREWOUND, 50 OHM, 5W, 1%	B005T86UNY	<u>Link</u>	\$9.88



To do this, insert the wires for a resistor to the positive (+) and negative (-) terminals for Juke's left output terminal (i.e. in parallel with the wires going to the PAC part). Do the same for the right output terminals using a second resistor. Tighten the 4 screws to secure the wires and resistors. Here is what the resistors looks like the default setting will work well and there is no need to make an adjustment. That's it!



Adding on Zones

The Juke-6 can be upgraded via a premium software upgrade available on our website to enable the 7th and 8th zone of the unit. In situations where more than 8 zones are required, you can combine our units together to reach more zones. As long as the Jukes are connected to the same network, they will recognize each other and pair wirelessly, allowing you to stream across the zones together. (12 zones, 16 zones, etc.)

Adding a Subwoofer to Juke

Unlike the Juke 6/8, the Juke+ model has an RCA output on the device that can be used for connecting out to a powered subwoofer. This can be done by running a wired RCA connection into what is commonly referred to as the "line level in" on the subwoofer. This sub will appear as a 7th zone in the Juke app and give you the ability to play any of your audio sources out to it along with any of the connected speakers.

If you need more than one subwoofer connection, you can do so in one of the following ways:

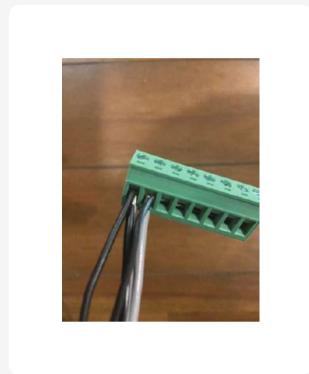
Instructions

- 1. 1. Buy two inexpensive items on Amazon or elsewhere (the Rockford Fosgate part converts the speaker-level signal to line-level, and the Boss part ensures that there is no ground-loop noise):
 - a. Rockford Fosgate RFI2SW High Level RCA Input Plug. The Amazon ASIN number is B009B8EJYU, and the price is about \$9.77. Here is the Amazon link: Speaker-level to line-level converter
 - b. BOSS Audio Systems Ground Loop Isolator B25N noise Filter for Car Audio Systems. The Amazon ASIN number is B000LP4RMG, and the price is about \$7.80. Here is the Amazon link: Ground loop isolator
- 2. Connect two of the four bare wires of the Rockford Fosgate part to two of Juke's speaker terminals for the zone where the powered subwoofer is located (you can use the left channel, but either should be fine). Please note that this adapter must be connected in parallel with a speaker. If no speaker is connected, Juke senses this and will not provide an output.
- 3. Plug the corresponding RCA connector of the Rockford Fosgate part into a connector on the Boss part, then connect the same color RCA connector to the RCA input on the powered subwoofer.

Here is what the Rockford Fosgate and Boss parts look like when connected together (this shows both the left and right channels being connected, but only one is necessary):



Here is what the wires from the Rockford Fosgate part look like when they are connected in parallel with the left speaker for a zone:



Apple HomeKit - Control Your Juke with Voice Commands and Automation

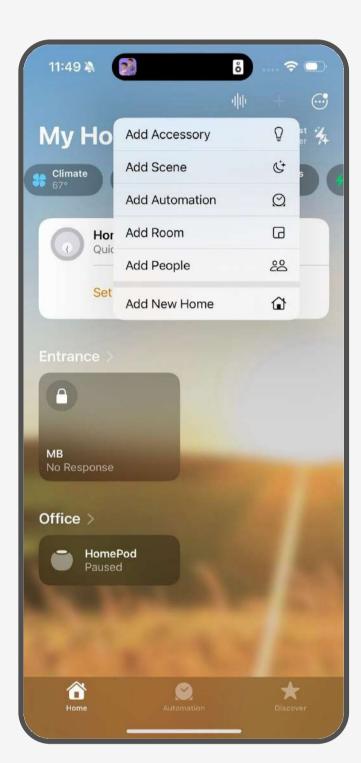


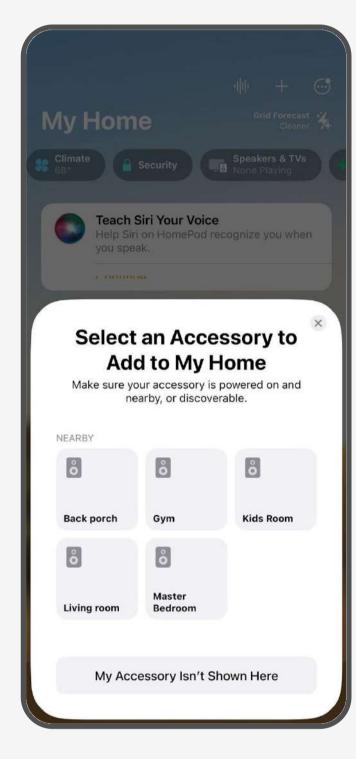
Now compatible with Apple HomeKit, Juke can be controlled via voice activation from any Apple product ranging from iPhone to Apple HomePod. Whether you want to start an audio stream in various rooms, adjust volume level, or pause audio, the process is made simple through seamless voice commands. In addition to voice control, you can also set up automations to have music played in your desired rooms whenever an action is performed such as arriving home or it reaching a certain point in the day for a use case like a dinner time playlist coming on at 5pm.

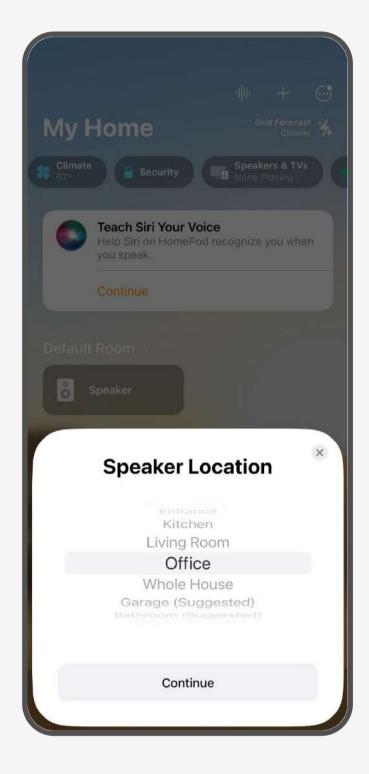
Set Up

In order to begin utilizing these functions there is an initial setup process that can be completed.

- 1. Download the Apple HomeApp, hit the plus button in the top right corner, and select "Add Accessory"
- 2. Select more options and then you will see a list of all your Juke zones that have been enabled in Airplay 2, which will be every zone on your Juke unless disabled in the zone settings of the Juke app
- 3. Pick your zone name and then tell the Apple Home app the location of that speaker which essentially then pairs that zone of the juke with that room you've established in the Apple Home app. Example: If one of your Juke zones is named "living room" then you'd select "living room" as the speaker location.
- 4. Repeat this process for all of the zones on your Juke







Voice Control

Now that you have aligned your Juke's speakers with the various rooms in the Home app, you can now use Siri to pick and choose where you want your audio to play. Various commands might be something like "Hey Siri, play audio to the living room and kitchen.." or "Hey Siri, increase the volume in the living room by 50%"

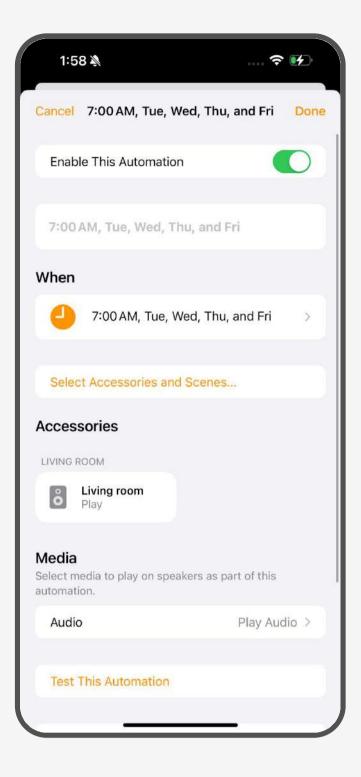
You can select one room at a time or pick multiple in your initial request. You can also add or remove rooms from the audio being played in real time as well.

Automations

In the middle portion of the home app, you will see the automation section. Once selected, you can establish events that occur when triggered by certain actions. In the screenshots provided, you can see an automation is set up to trigger music in my living room at 7am on Tuesday, Wednesday, Thursday, and Friday.

You have full control over which audio is played, what volume it comes on at it, as well as the events that trigger the automation to occur. For example, if instead of the trigger for the music to come on being the clock hitting 7am, you could instead make it when your house detects that your phone is in proximity of the house to have music triggered when arriving home

This new functionality offers the ability to integrate Juke into your home with an immersive "smart home" experience. With less reliance on manual control, you can establish presets catered to all of your preferences in a way that at times can feel like the system controls itself.



Amazon Alexa Voice Commands with Juke

Summary

This brief guide explains the steps of how to pair Amazon Echo devices with the Juke Audio amplifier in order to send audio content via voice commands to Juke's connected speakers. The wired connection

The first step will be to run a hard-wired connection between Juke and an Amazon Echo device in the same way that is required with other analog inputs into Juke. This requires the USB Digitnow Converter which will plug into the USB port on the Juke and the audio jack on the other side of the converter will plug into the Echo.

The wired connection

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Configuring in the Juke web App

Once you've connected the device to the USB port on the Juke, you must then configure one of the inputs in the administrator settings of the Juke Web App to be USB. Note: The USB option will only appear once you have the adapter connected into the Juke







Configuring your Alexa Devices

First download the Amazon Alexa App in Apple's App store or the Google Play store Once in the app, hit the "more" tab seen in the bottom right. Then hit add device at the top of the screen to set up your connected devices. Within the setup ensure that all your Alexa devices are on the same Wi-Fi so they can communicate with each other. Each device can be given a specific room name, and in the case of the echo that you connected to Juke, it would make sense to be called "Juke" "Juke Room" "Closet" or any other name of your choosing

Sending Voice Commands

Once you have your devices configured, you can then issue a voice command to any of the Alexa devices across your house and have it send audio to the Alexa device hard-wired to the Juke which in turn will then send it to the connected speakers.

The voice command you'll say is "Play music in the (name of the room

you assigned to the device wired to the Juke" In my picture for example, it would be "Play music in the Juke"

Volume and Zone Control

Within side of the Juke web app, you'll need to make sure you have the zones turned on for the USB input. In the picture below, you'll see that I have the Fireplace, Dining, and Deck turned on for the USB input, and therefore those will be the zones that start playing audio when I send a voice command to that connected Alexa Device. You'll also be able to control the volume with the slider listed at the top of the screen.

However, keep in mind that the volume buttons on the echo connected to the Juke will also greatly impact the volume as well.

Streaming to Juke from Android via AirMusic

Summary

This brief guide explains the steps of how to steam to Juke from an Android device via an app called AirMusic that mimics the same functionality of streaming via Airplay on an Apple Product. This can be used to stream nearly all major streaming services.

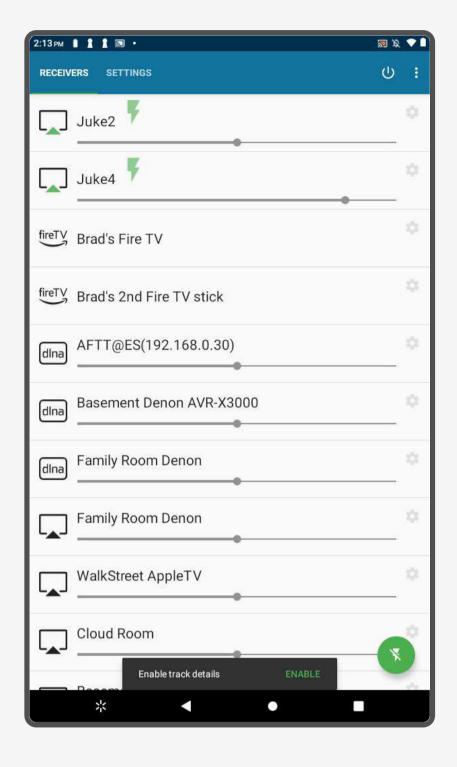
Download the App

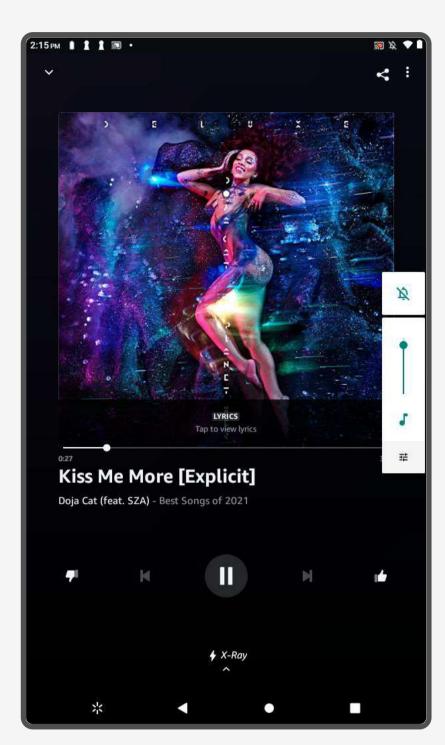
In the Google Play, you can download the AirMusic app. Note there is a free version that works temporarily, but the full time version required is \$5.



Using AirMusic

Once in the app, you will see all of your available zones enabled in Airplay and be able to pick which rooms you want to play to. Once selected, you'll then leave the AirMusic app and navigate to your desired music app and begin playing. The volume will come out of your phone as well (unless you turn the volume on your phone down) and the volume control for the Juke will be done from the AirMusic app which an independent slider for each of the Airplay sources as well as each of the zones in the Juke app.





Troubleshooting

If you are experiencing any issues with your unit, the first step is to check the two indicator lights on the Juke. When the unit is in working condition, the heartbeat light should be blinking, and when the unit is connected to the network, the lighting bolt light should be firmly on. If you are experiencing any issues with your unit, the first step is to try cycling the power on the Juke as well as restarting your device. If the problems persist, then please follow the below sections for troubleshooting and/or file a support ticket with us at jukeaudio.com/support

Networking Requirements

Not able to access the Juke web app and/or see the wireless inputs during installation

- 1. Check to make sure your device is on the same network that you have the Juke connected to. Note: Different subnets and guest networks can be an issue in this scenario
- 2. If hard wired Juke must be plugged into the ethernet port on your router directly, not the LAN of your cable modem
- 3. Router must have multicasting enabled
- 4. Router must have mdns enabled
- 5. Router must not block known multi-cast addresses
- 6. Network switches should have IGMP snooping disabled
- 7. The 2.4 and 5 GHz wi-fi should have the same SSID

All these configurations can be done within your network settings. Most networking equipment companies will have tech support lines you can call to help enable ensure these settings are enabled for your network.

The power went off and now the Juke web app is not accessible via the IP address

power to the unit shuts off, the IP address assigned to the Juke by your router can change. If using a non-Apple product, this will mean you'll need to relocate the new IP address in order to access the Juke web app. You can do so by go to jukeaudio.com/lookup/ and typing in your serial number.

If you'd like to reserve an IP address for Juke so it does not change, see the next section

How to Reserve an IP address for Juke

The exact approach depends on your router so you will need to check its manual. Once you've logged into your router, address reservation is usually in a tab called LAN Setup (or something similar). Within that, there should be a function called "Address Reservation" (or something similar). From there, select ADD, and it should show a list of all the devices on your network (usually this is called the "Address Reservation Table" or something like that). Find Juke in the list, select it, and then click Add. Note the IP address (e.g. the 4 numbers separated by three periods, such as 192.168.1.7). Now you don't need to worry about it getting changed by the router in the future.

Back on your Android, type that address into the browser (e.g. Chrome). The interface should come right up. However, so that you don't have to enter this each time, you'll want to create a shortcut on the Android home screen. How to do that depends on what browser you use. For

Chrome, you do this by hitting the three dots near the top right and selecting "Add to Home Screen" from the list of options. Just name it "Juke" and hit Add.

Connection Dropping Out Intermittently

If Juke is connected wirelessly over Wi-Fi and you are experiencing intermittent dropouts in your audio when trying to stream, it is likely a cause of poor signal strength. To help alleviate this we recommend either connecting Juke to a TP-Link N300 with an ethernet cord, or connecting this Wi-Fi USB adapter directly into one of Juke's USB ports.

Speaker Wire Connections

Not Getting Output in a Zone

The order that the speaker wiring goes into Juke must be +-+-, which can be different from other systems. If you are not experiencing audio in a specific zone, it's important to check your wiring and make sure that is the order you have it in. While it can be wired differently in certain

scenarios, the common color coordination is red (+), black (-), white (+), green (-). Refer back to install portion of this guide for detailed information on how to connect the wire to the green terminals on Juke.

Indicator Lights



The Juke has three indicator lights behind it. The lightning bolt light indicates whether or not the Juke is getting power or not. The globe light indicates whether or not the Juke is connected to a network. If it is blinking, then it is currently attempting to connect to a network. If it is steady on, then it is successfully connected to a network. The heartbeat light indicates how the system is behaving and will blink different patterns to indicate the different states it could be in. Those states are as follows:

Four fast blinks - The Juke has its first-stage initialization and is currently on the second-stage. It should not spend more than 30 seconds in this state.

Two slow blinks - This light indicates that the Juke has completed initialization, and is ready for operation.

One slow blink - The Juke has completed initialization, and is behaving as a client in a multi-juke system.

No blink - The Juke has not completed its 1st stage initialization yet or has failed to do so. It should not be in this state for more than a minute. If it is there may be hardware damage and you'll need to contact Juke to investigate further and likely have the unit repaired

Filing a Support Request

If you have reviewed this guide and are still experiencing issues, then we recommend you to file a support ticket for our team to review. You can do so by going to https://jukeaudio.com/support/ Please make your ticket as detailed as possible to ensure our team has all the information necessary to diagnose the issue and determine a resolution

Safety Instructions

To avoid bodily harm, understand and follow these safety precautions before operating the Juke Audio 6/8 Zone Amplifier:

- 1. To reduce the risk of fire or electrical shock: Do not use this device near water.
- 2. Do not expose the device to dripping or splashing of any liquids.
- 3. Do not place objects filled with liquids near the device.
- 4. Do not expose this device to rain or moisture.
- 5. Clean only with dry cloth.
- 6. Install in accordance with the manufacturer's instructions.
- 7. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including other amplifiers) that produce heat.
- 8. Do not bypass 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
- 9. This device 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.
- 10. Do not modify the plug provided under any circumstances. Its design is intended for your safety and should not be modified to accommodate an outlet. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 11. Do not place this product on an unstable card, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product.
- 12. Equipment must be connected to a Mains socket outlet with a protective earthing connection.
- 13. Only use attachments/accessories specified by the manufacturer.
- 14. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 15. 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
- 16. Unplug this apparatus during lightning storms or when unused for long periods of time.