

BRYSTON

BR-20 Fully Balanced Preamplifier

Owner's Manual

Important Safety Instructions



The lightning flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated “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 (servicing) instructions in the literature accompanying the product.

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 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 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 power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



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

DO NOT EXPOSE THIS EQUIPMENT TO DRIPPING OR SPLASHING AND ENSURE THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, ARE PLACED ON THE EQUIPMENT.

TO COMPLETELY DISCONNECT THIS EQUIPMENT FROM THE AC MAINS, DISCONNECT THE POWER SUPPLY CORD PLUG FROM THE AC RECEPTACLE.

THE MAINS PLUG OF THE POWER SUPPLY CORD SHALL REMAIN READILY OPERABLE.

BRYSTON LIMITED WARRANTY

Bryston analog audio products are warranted to be free from manufacturing defects for twenty (20) years from the original date of manufacture. The warranty includes parts and labour. Bryston digital products and cables are warranted for five years from the original date of manufacture. The warranty includes parts and labour.

Bryston products having motorized moving parts, excluding motorized volume controls, are warranted for three years from the original date of manufacture. The warranty includes parts and labour.

Bryston will remedy the problem by repair or replacement, as we deem necessary, to restore the product to full performance. Bryston will pay return shipping only for the full length of the specific product’s warranty.

In the event of a defect or malfunction, contact Bryston’s repair centers for return authorization. Products must be returned using original packaging material only. Packing material may be purchased from Bryston if necessary. This warranty is considered void if the defect, malfunction or failure of the product or any component part was caused by damage (not resulting from a defect or malfunction) or abuse while in the possession of the customer. Tampering by persons other than factory authorized service personnel or failure to fully comply with Bryston operating instructions voids the warranty. This warranty gives you specific legal rights and you may also have other rights which may vary from province to province and country to country. As of 2006-02-22 Bryston will only warranty Bryston products purchased through authorized Bryston dealers. Bryston products with a date code of 0608 or higher (date code format is “yyww”, where “yy” is the two least significant digits of the year and “ww” is the week of the year) must be accompanied by a copy of the bill-of-sale from a Bryston authorized dealer to qualify for warranty service. The warranty is transferable from the original owner to a subsequent owner as long as a copy of the bill-of-sale from the original authorized Bryston dealer accompanies the re-sale. The copy of the bill of sale to any subsequent owner need ONLY include the Name of the Bryston Authorized Dealer and the Model and Serial number of the Bryston product. The warranty will only be honored in the country of the original purchase unless otherwise pre-authorized by Bryston.

BRYSTON SERVICE in CANADA/USA:

POSTAL ADDRESS: Bryston/Axiom
2885 ON-60
Dwight,
Ontario
Canada
POA 1H0

PHONE: 1-800-632-8217

BRYSTON SERVICE outside Canada and the USA:

* Contact your local distributor first, or

CHECK OUR WEB SITE:

<https://bryston.com/dealer-locator/>

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General

Welcome & Description

Thank you for your purchase of a Bryston BR-20 Stereo Preamplifier! This new component features not only our most advanced analog circuitry ever, but also our best DAC technology plus our BDP digital player making the BR-20 a perfect centerpiece for your high performance stereo system.

Features

Bryston BR-20 includes the following features:

- 2 RCA single-ended analog stereo input pairs and 2 XLR fully balanced stereo input pairs.
- 6 high resolution digital audio inputs with balanced digital to analog decoding.
- Supports up to PCM 384 kHz / 32 bit and DSD 256 (x4) audio data
- 2 XLR balanced stereo output pairs.
- Built-in streaming and digital audio file playback
- Control using webUI, included IR remote, or RS232.
- Low Z high output dedicated headphone amplifier.
- Available in either 17 inch or 19 inch wide C-Series dress panel in silver-toned (clear anodized) or black anodized aluminum.

Shipping Box and Packing Material

Please keep the original shipping box and all packing material. This will ensure the BR-20 is protected in future transport. In the unlikely event you have a problem and must return it for service, you must use the proper packing material. Ship the BR-20 only in the original packing material as the unit is not insurable by carriers otherwise. Replacement packing materials consisting of a shipping carton with plastic foam inserts is available from Bryston for a small fee.

Ventilation

The BR-20 is a cool-running line level component. It generates far less heat than amplifiers and many other components. It can be safely placed inside

furniture or an equipment rack. However, it should not be tightly enclosed. Some airflow is desired. Maintain a minimum of 0.5" to each side and 1.5" space above the unit to ensure proper airflow.

Connecting to A/C Power

Please check the Data Plate on the rear of the unit to verify power requirements agree with your location. Plug the IEC-320 C14 end of the power cord into the BR-20, then plug the other end into an approved and grounded A/C receptacle.

Connecting Amplification

The BR-20 features two pairs of XLR balanced outputs. Bryston's innovative noise reduction circuitry provides the highest resolution and lowest noise when operating in full balanced mode and the best performance will be obtained when connected via XLR cables to audio amplifiers with balanced inputs. If you must connect the BR-20 to amplifiers with only single ended RCA inputs, contact Bryston for advice on a suitable adapter or to order custom cables.

Do not use traditional XLR to RCA adapters that short pins 1 and 3!

Connecting Analog Source Components

Up to four analog source components may be connected to the BR-20. When both balanced and single ended are available, balanced is preferred. When fitted with an optional MM Phono Module, Single Ended 1 no longer functions as a normal line-level input and must be connected to low-level output of a turntable only.

Connecting Digital Source Components

All BR-20s feature an excellent quality internal DAC that can accept PCM and DSD audio data from a wide variety of digital source components. Each of the available inputs can decode a subset of all available audio formats. Further, a source component may have multiple interconnect

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options that can be used with the BR-20. Choose first by compatibility with desired audio formats, then by order of sound quality. Source component permitting, multiple digital connections can be made between the source component and BR-20.

	PCM			DSD	
	96 / 24	192 / 24	384 / 32	DSD-64	DSD-256
Toslink	•				
RCA	•	•			
XLR	•	•			
HDMI	•	•		•	
USB	•	•	•	•	•
Int. Player	•	•	•	•	≤ DSD 128

When the BR-20 is receiving valid digital audio, the LOCK LED will light green on the front panel.

Optional Modules

The BR-20 may be optionally equipped with a moving magnet phono input and/or an HDMI input / output module . These may be fitted at the time of ordering or retrofit at a later time.

Moving Magnet Phono

The optional MM Phono input occupies RCA 1, so RCA 1 can no longer be used for line level source components such as tuners, CD players, etc. This high quality phono stage is the same circuit found in our stand alone BP-2 MM.

HDMI

The HDMI module features 4 inputs and 1 output. Each input is 18 gbps capable and can therefore pass 4K video and HDR. The HDMI input can also receive SACD DSD64 audio from a suitably equipped universal disc player which will be natively decoded by the DAC portion of the BR-20. **The HDMI output does NOT have support for ARC/eARC.**

Remote Control

The BR-20 can be controlled and monitored through IP, RS232 and IR.

Serial Protocol

The BR-20 can receive commands, send acknowledgment of commands received, and can be queried for certain statuses.

Using the mini TRS female connector at the rear of the unit, the BR-20 can receive commands via a null modem cable at 9600 baud, 8 data bits, no parity and 1 stop bit (9600,8,N,1). Valid commands will be echoed back to the console. Invalid commands will return ??.

Each valid BR-20 serial command must begin with the three characters #10 and end with the carriage return (ASCII code 13).

For example #10HELP<cr>

A list of valid commands can be retrieved by issuing the #10HELP command from the terminal. , in addition each command can display its own help describing the list of available options by putting the ? as the command option at the end of the command string. For example #10LIST? will list all available options xx for the #10LISTxx command.

The same commands are available from the Web User Interface (WebUI) with the slightly different format: the start character # must be replaced with %23 and each command must be ended by a dot (instead of carriage return). For example:

%2310HELP.

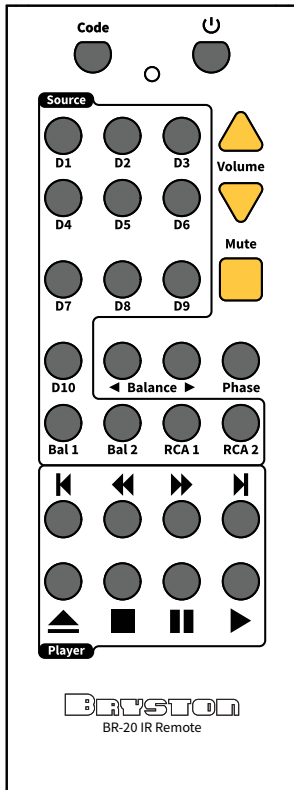
IR Control

You may control many functions the BR-20 with a traditional infrared remote control such as Bryston's included Remote 20.

Each of the ten buttons in the INPUT area of the remote can be assigned to your choice of digital input using the basic web UI or the front panel menu. The four analog inputs have four buttons on

the front panel and remote permanently assigned.

HEX codes for use with universal remote controls are available from Bryston upon request.



Trigger Control

The BR-20 can control the power state of other attached devices as well as have its power state controlled. Two DC trigger outputs and one trigger input are provided. Each is a tip/sleeve (mono mini plug) and is wired with the tip at V_{DC} and sleeve ground.

Triggers will commonly be used to trigger the attached equipment on or into standby. When the BR-20 is powered on, voltage is present at the tip of this connector and is removed when the unit is placed into standby.

Front Panel

1. Power / Standby

Press this button to toggle the BR-20 on or into standby mode.

Unlit	BR-20 is not receiving power. Plug unit into AC mains power.
Red	Plugged into AC Mains but in standby mode.
Green or Blue	BR-20 is on and operational.
Yellow	Receiving valid IR or RS232 data
Blinking Red/Green	Fault indicated. Contact customer service

2. Volume Control

Rotate this knob clockwise to increase the output volume or counterclockwise to decrease the volume. As volume increases, successive LEDs around the knob will light indicating relative loudness. Pressing the knob in will activate the setup menu and act as an 'Enter' button within the menu.

3. Mute

Pressing this button or the Mute button on the remote or muting the unit through the web user interface will disconnect the main outputs. When the unit is muted, the LED will illuminate red. Mute does not affect the headphone or record outputs. When navigating the setup menu, press mute to go back a level without saving changes.

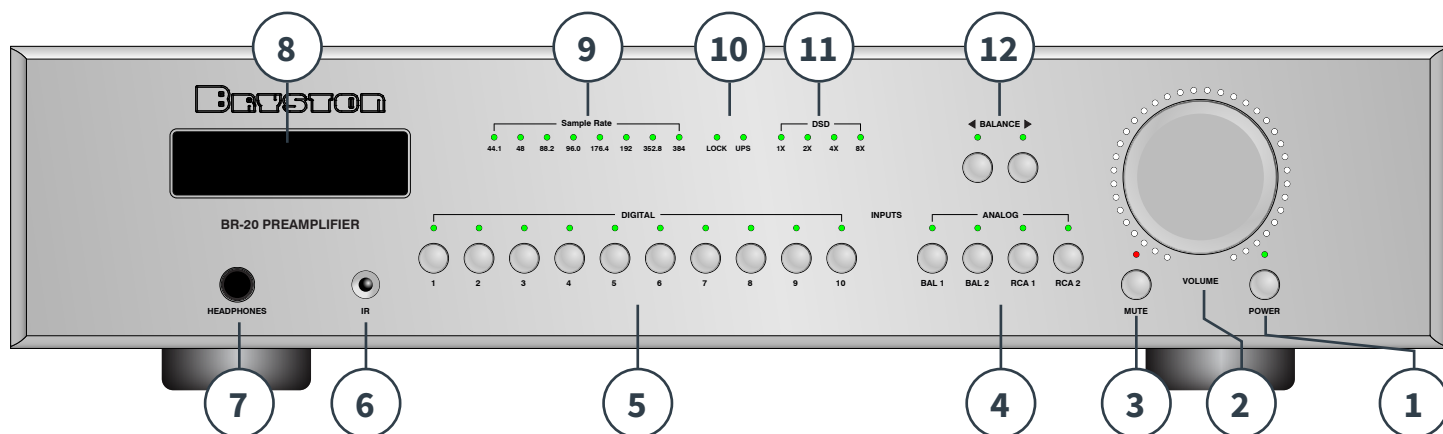
4. Analog Input Selectors

The BR-20 features 4 analog inputs into which you can connect analog source components. Press the input button corresponding to the rear panel input of your choice to listen to that source component.

5. Digital Input Selectors

The BR-20 features 7 digital inputs into which you can connect digital source components plus a built in digital player source component. Optionally, the BR-20 can be fitted with an HDMI interface which adds 4 more inputs for a total of 12 possible digital source components. Each of these buttons can be programmed to correspond with the digital input of your

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choosing. Press the input button corresponding to the rear panel input of your choice to listen to that source component.

6. IR Receiver

The BR-20 can be controlled using Bryston's included remote or another remote control. "IR Control" on page 5.

7. Headphone Output

Connect headphones to this output. The output is a 1/4" (6.35mm) TRS connector where the Tip=Left, Ring=Right, and Sleeve=Ground. Output impedance is <5Ω. Main outputs are muted when headphones are connected.

8. Display

The OLED display features adjustable brightness white text and will display, depending on condition:

- Metadata for currently playing track when using the internal streamer
- Name of currently selected source
- Current volume level
- Digital sample rate of incoming audio

It is also used along with the volume knob and mute button to navigate the setup menu.

9. Sample Rate

When receiving PCM audio through the internal digital player or an external source connected to a digital input, the sample rate of that data is indicated by a green LED.

10. Lock / UPS

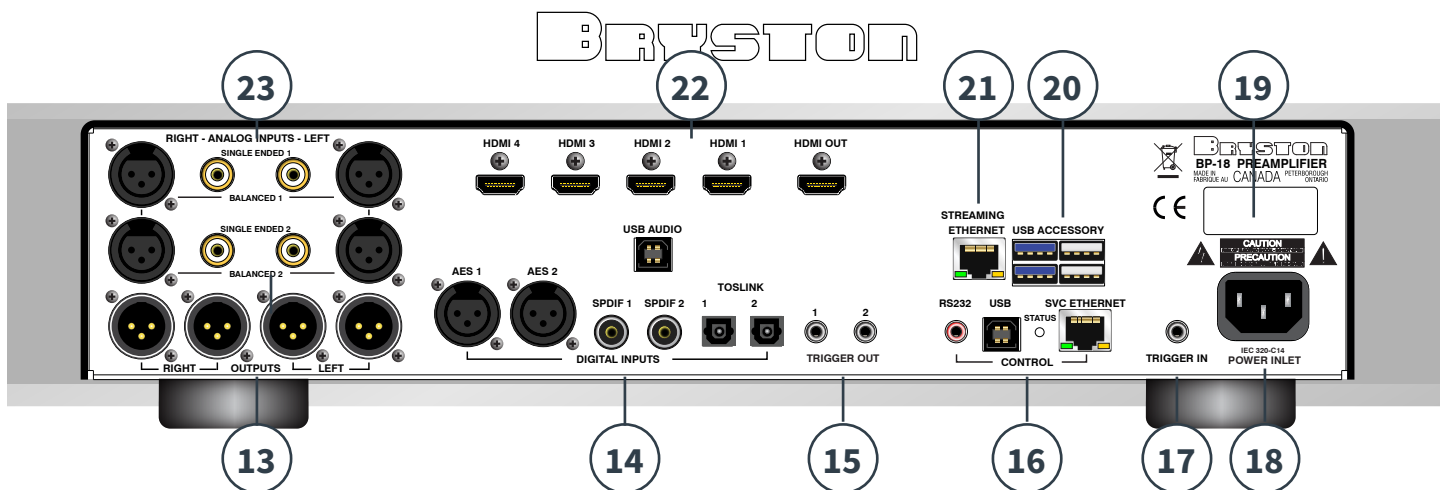
When the internal DAC is receiving valid audio signal, the LOCK LED will light green. When optional upsampling is engaged (AES/EBU, TOSLINK, and S/PDIF inputs only) the Upsampling indicator will light yellow for integer multiples of 44.1kHz and green for integer multiples of 48kHz.

11. DSD

When receiving native DSD, the corresponding sample rate will light yellow. DSD over PCM will light green.

12. Balance Control

Adjust the left / right balance of audio output by pressing the corresponding buttons on the front panel. Each button press will attenuate that channel by 0.5dB and increase the opposite channel by 0.5dB (creating a 1dB differential. When either channel is attenuated, the LED above the affected channel will illuminate green. When balance is adjusted fully to one side, the opposite channel will fully mute and the LED above that channel will illuminate red.



Rear Panel

13. Analog Balanced Output

Connect the right and left outputs to the corresponding inputs of an amplifier. The 2nd set of outputs can be used simultaneously. The amplifier performs at its best when used with amplifiers that have balanced inputs. If you must use downstream amplifiers with only single ended inputs, note that standard XLR to RCA connectors are not compatible. Contact Bryston to purchase appropriate interconnects with XLR Pin 3 unconnected.

14. Digital Inputs

Connect digital source components to these jacks. When using USB with Microsoft Windows source components, you may need to download device drivers at <http://support.bryston.com/downloads/USB%20Drivers/>

15. Trigger Out

These outputs can be connected to DC trigger inputs of other equipment to modulate the power state of connected equipment. For example, you can automatically power on an amplifier when the BR-20 is powered on. Trigger 2 can optionally be activated when a specific source is selected.

16. Control Section

Most aspects of the BR-20 can be controlled by remotely using RS232 or IP when connected through the RS232 or SVC Ethernet ports. A full command set is available by entering ? in the

terminal or from Bryston. Control for the built in Media Player is available when the Streaming Ethernet port is connected to the local area network.

17. Trigger Input

The BR-20 can be remotely turned on or placed into standby when receiving DC voltage into this port.

18. A/C Power Input:

An IEC-320 C14 power inlet provides for connection of an IEC-320 C13 equipped power cord. Before connecting the power cord to the amplifier, check that the voltage rating on the data plate or ratings label conforms with your locality.

19. Data Plate

Unit specific information is printed here including model number, operating voltage, frequency, and serial number.

20. Internal Streamer USB Accessory

The internal streamer can accept USB accessories such as USB disks containing music or a Bryston provided USB Wifi Adapter. The blue ports operate at USB3.0 speeds and are best for devices that can utilize that speed such as SSD storage. The black ports operate at USB2.0 speeds.

21. Streaming Ethernet

In order to control the internal digital player, your network must be connected to this port unless you have fitted a Bryston WiFi adapter.

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22. Optional HDMI I/O Module

When fitted with the optional HDMI module, these ports will be available. Each input is 18gbps capable and will pass 4K video and HDR. No internal video processing is applied. Any video data received is passed unaltered to the HDMI output. For further HDMI information, "HDMI" on page 5.

23. Analog Inputs

Two each balanced and unbalanced inputs are available for connecting analog source components. When fitted with an optional MM Phono Card, Single Ended 1 (RCA 1) cannot be used for regular line level equipment.

Front Panel Menu

Various options can be configured for the BR-20 including system defaults, input assignment, custom names and more. While many users find it more intuitive to configure these using the web based user interface, users can also configure many of these options using the front panel menu as well. The menu tree is diagrammed below. Enter the menu by briefly pressing the volume knob, rotate the knob while in the menu to select the option.

1. Input Settings

These settings are configured on a per-input basis. Before you enter the menu, use the front panel source buttons to select the input you wish to edit.

- Name: Rotate the volume control to select the letter you wish to enter. Push the volume control in to accept the letter and move to the next space. A-Z, 0-9, _ are accepted characters. Use ← for backspace. and exit when completed.
- Rear Input: Choose the rear input jack you wish to associate with your chosen front panel button.
- IR Input Number: Press the IR input number you wish to assign. Rotate the volume knob until you land on your desired rear panel input. Then press the volume knob and it will save thereby associating the IR number with the rear panel input.
- Default Display: Choose the display state to which the source will default.

2. Global Settings

These settings apply regardless of which input is selected.

- Display Brightness: Select 0 (off) to 10 (full brightness). Default is 5
- Front LEDs: 0 (off)-254 (max brightness). Default is 128
- Network Reset: If your BCON web user interface is not accessible or your BR-20 will not get an IP address, you may need to reinitialize the network settings. Note this does not affect the internal streamer.
- Factory Reset: Resets unit back to factory defaults.

3. System Info

- BCON Controller: reports the current firmware version and IP address of the internal microprocessor.
- Linux Streamer: reports the current firmware version

and IP address of the internal streaming music player.

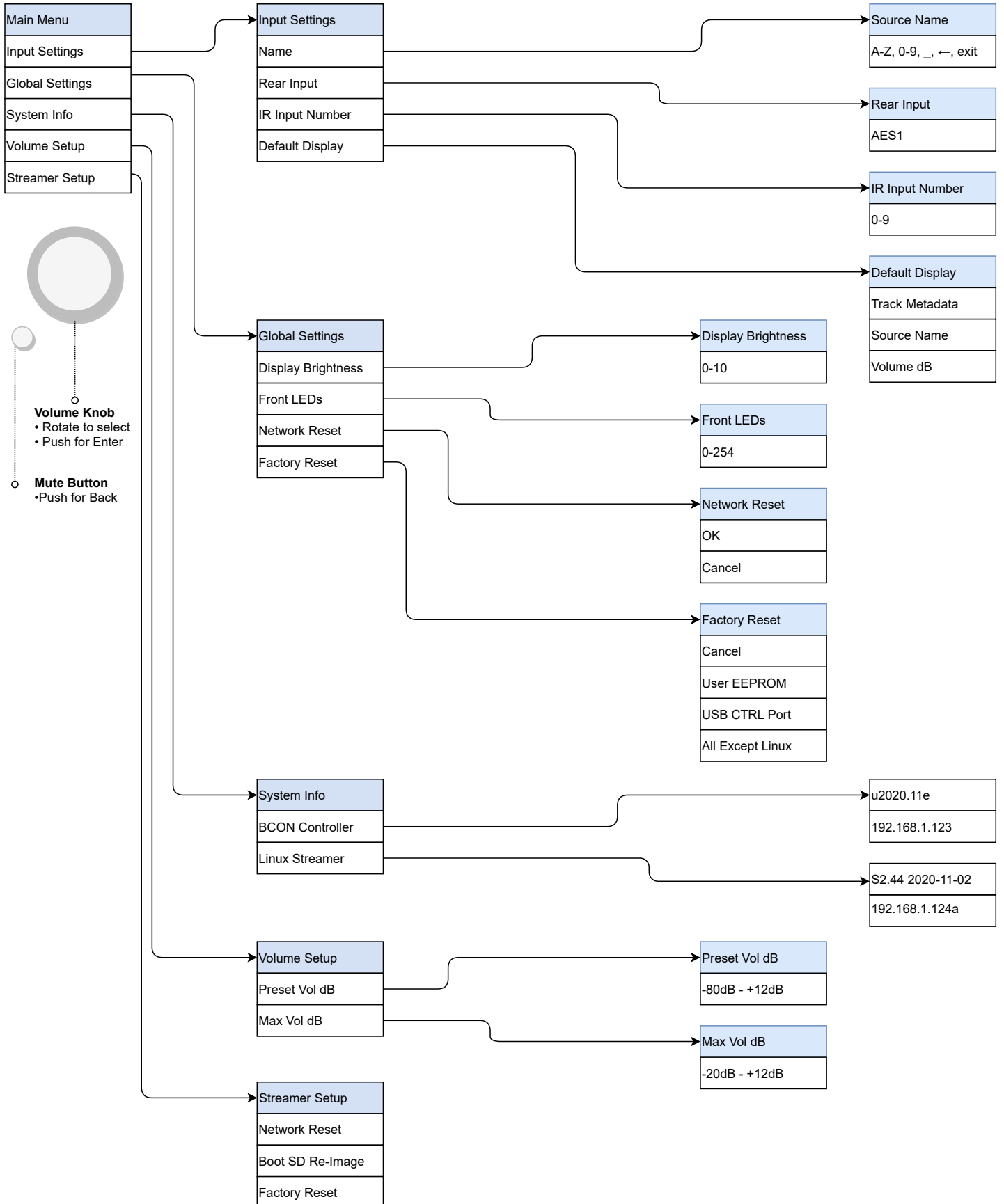
4. Volume Setup

- Preset Vol dB: Select the default turn-on volume. Default is -60dB
- Max Vol dB: Set a safe maximum volume to prevent playing your system louder than desired. Default is +12dB.

5. Streamer Setup

- Network Reset erases current settings for the built in ethernet interface as well as optional wifi module if connected
- Boot SD Re-Image. If power is removed from the unit unexpectedly, or some other event corrupts the internal streamer's memory card, it will cause the streamer to not boot. This feature can rescue the internal card. Only use if instructed to do so by Bryston Support. This will reformat and reinstall the factory firmware for the built in streamer.
- Factory Reset erases current user settings for the internal streamer and resets them to default without re-flashing the internal memory.

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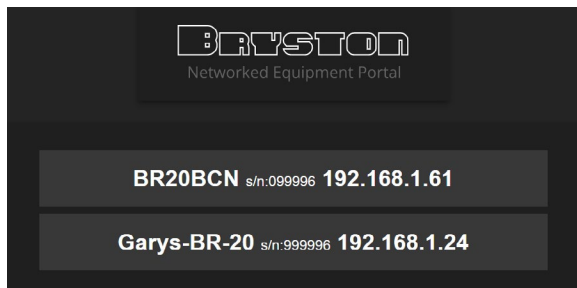


BCON Web User Interface

Bryston BR-20 includes a scaled down web user interface designed to facilitate the following functions when the SVC ETHERNET port is connected to your local network:

1. Changing the active input
2. Configuring input parameters
3. Adjusting volume and balance
4. Applying firmware updates to the internal microprocessor (not the built-in media player)
5. Access to a text command terminal

To access the BCON webUI, connect the SVC ETHERNET port to your local network. Use a web browser to go to **<http://my.bryston.com>**



You will see an button for an entry called BR20BCN followed by an IP address. Click the button to enter the BCON WebUI.

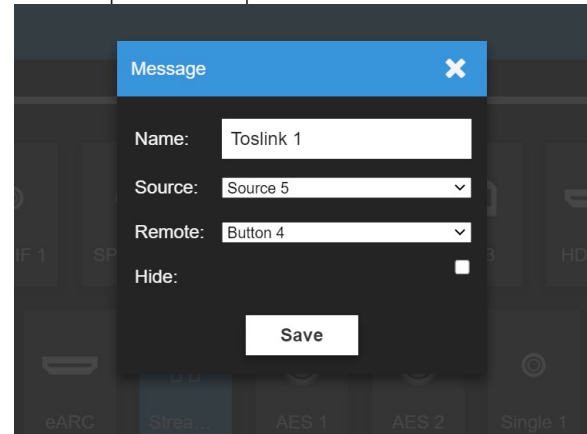


Changing Active Inputs

Simply click the button that corresponds to the input you wish to listen to.

Configuring Input Parameters

Click-and-hold or tap-and-hold on a touch screen device on any input button to view configuration options for that input. The BR-20 can be used without any customization, but these options are provided for convenience.



1. Rename the input to something easier to remember - perhaps the name of the source connected to it (e.g. CD, Tape, etc.)
2. Source: Associate the input with a button on the front panel.
3. Remote: Associate a button on the remote control with the input
4. Hide: Check this box to hide unused inputs to keep your webUI free of unoccupied inputs.

Note that if you assign an already occupied front panel source button or remote button to an input, the newly assigned input will take priority, and the previous input will no longer have a button assigned.

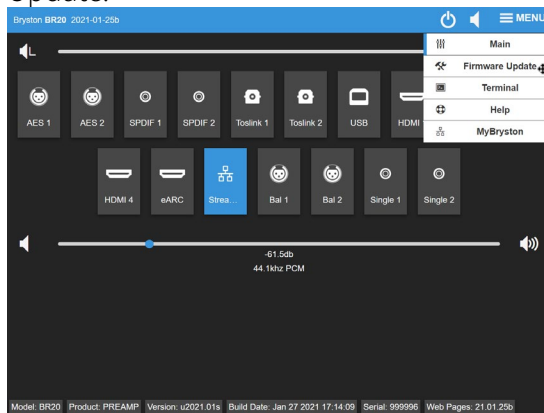
The four analog inputs are always accessible on the front panel using their permanently linked buttons. Therefore, they do not have fields for selecting front panel source buttons on the webUI or front panel menu.

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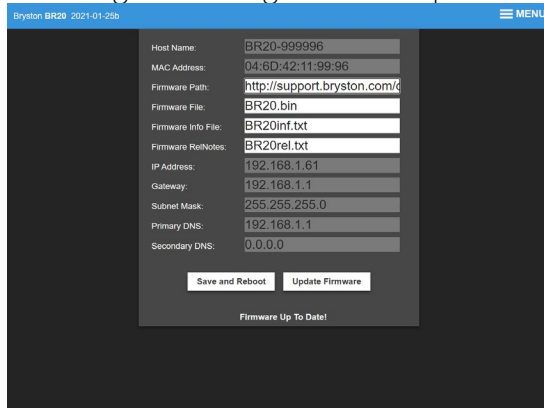
Firmware Update

From time to time, Bryston will issue firmware updates that fix bugs or add features. Typically, it is not necessary to update the firmware of your BR-20 unless you are instructed to do so by Bryston support or a bug that you are experiencing is being specifically addressed. To update the BCON firmware (not internal digital player firmware), follow the instructions below.

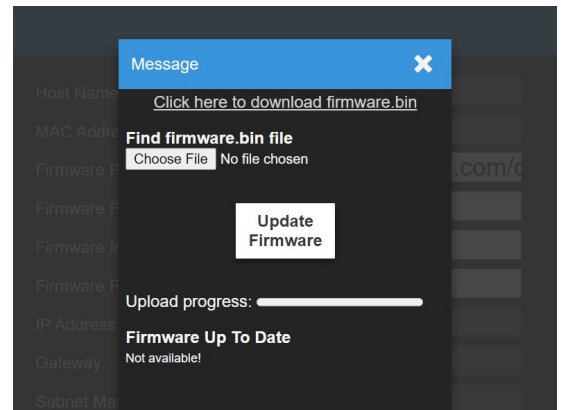
1. Click the Menu and choose Firmware Update.



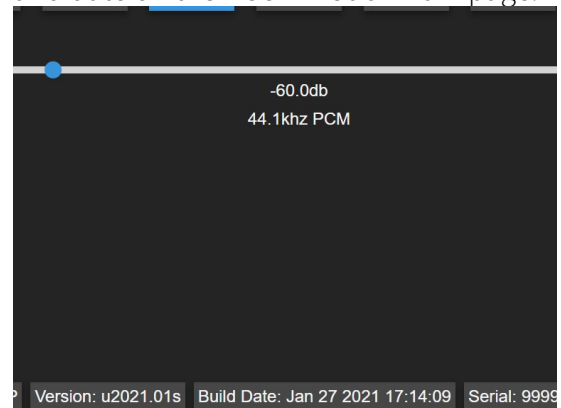
2. If firmware newer than your current installation is available, you will see a button titled Download Firmware. If not, you will see a message indicating Firmware Up To Date!



3. Click "Update Firmware" button.
4. Click link to download latest version of firmware. Save the BR20.bin file to your computer's downloads folder.



5. Click the Choose File button. Select the BR20.bin file you just downloaded. Then click Update Firmware.
6. You will see the Upload Progress bar progressively fill blue. The power LED on your BR-20 will also blink amber during the upload process. Do not disrupt this process by removing power from the unit or by pressing front panel buttons or buttons on the remote!
7. Once the upload is finished, all the front panel LEDs will light green, then the unit will reboot. You can verify the firmware update by checking the version number and date on the BCON webUI main page.



Terminal

This is provided as a tool to be used in troubleshooting in conjunction with our technical support team and not for regular use by consumers without guidance.

Integrated Digital Player

Connection Digital Player to Network

The BR-20 features an integrated digital player capable of playing back music files stored locally and through select digital streaming services available online. Unlike Bryston BDP series products which feature a front panel display and menu navigation system, The BR-20 internal streaming system must be operated by its web based graphical user interface. As such, the BR-20 needs to be connected to the network via ethernet or with an optional wireless adapter available separately from Bryston or authorized dealer.

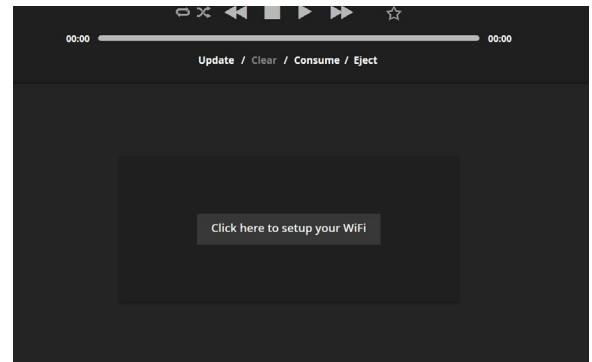
The BR-20 has two ethernet jacks on the back. Connect the one labeled “ETHERNET” to your network router. The LEDs on the jack should light up and flash occasionally indicating activity.

Connection to Wireless Network

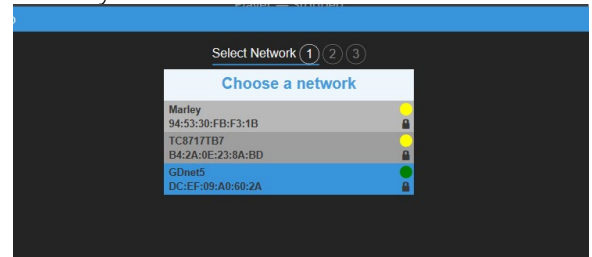
When a wired connection is not practical, a wireless adapter can be used by inserting it into one of the 4 “USB ACCESSORY” ports.

Upon first boot with the wireless adapter connected, the BR-20 will create its own wireless network called Bryston Digital Player.

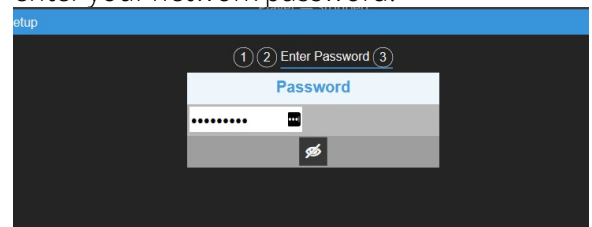
1. Connect your controller (laptop, smartphone, tablet) to this network using the password ‘bryston1’.
2. Point your web browser to <http://192.168.57.1> if not automatically redirected. The Dashboard section of the webUI will appear.
3. Click or tap the button “Click here to set up your wifi”



4. Select your WiFi network and click Continue.



5. Choose the correct security type for your network. Continue and enter your network password.



6. Click Save. Unit will reboot and connect to your network. Bryston Digital Player network will no longer be available and your control device (phone, tablet, etc.) will most likely automatically reconnect to your home network.

Software Introduction

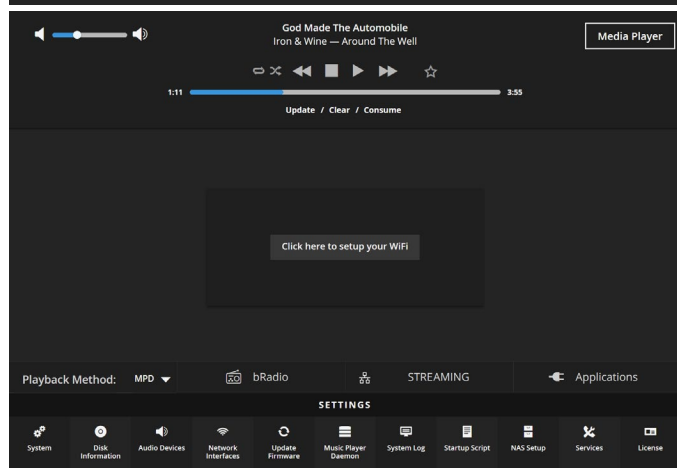
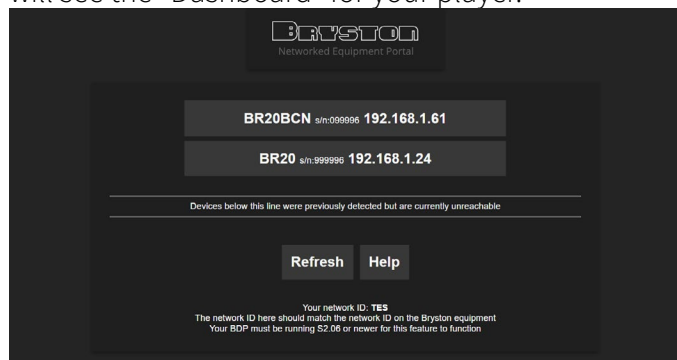
At the time of writing, the current firmware on your BR-20 is a version we call Manic Moose. Manic Moose describes the Bryston engineered firmware including our user interface. Unlike many other products, the BDP can be operated entirely within the web browser of a portable controller such as an iPhone, iPad, Android device, desktop or laptop

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computer. As such, there is no need to download an app. On all devices, simply open the web browser on your device and enter the following address:

<http://my.bryston.com>

Then click the link that corresponds to your BR-20. It will be called BR20. You will see the “Dashboard” for your player.



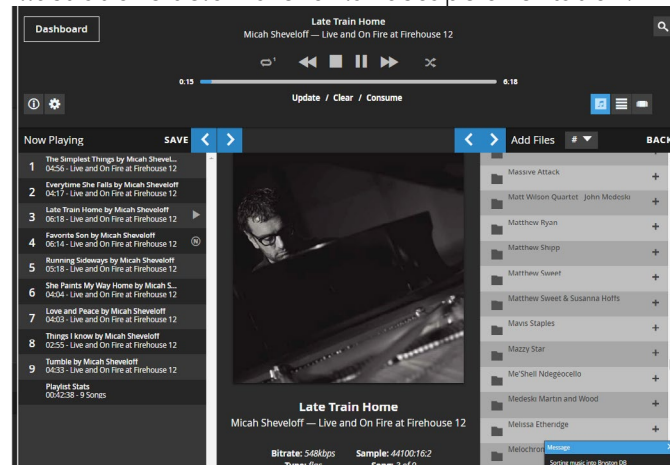
The Dashboard provides access to a variety of settings, BR-20 input selection, technical player information, system notifications, and most importantly, media. Media Player is used to access your personal music library stored on an NAS or USB attached drive. bRadio is an internet radio directory. Tidal, Qobuz, and Radio Paradise are also available.

Within the scope of this brief introduction, we shall explore Media Player.

Media Player

Clicking or tapping Media Player from the Dashboard takes you to the Media Player where you will spend the most time enjoying your music.

Note that our web application is fully responsive and re-oriens itself depending on landscape or portrait orientation of your device. For brevity, illustrations below are for landscape orientation.



The Media Player can be understood by recognizing four distinct areas: Transport Control (the horizontal header), and the three vertical columns beneath it. Left to right, they are the Now Playing area which is your current queue, Current Track which shows album art, artist, song title, album name, and resolution for the currently playing song, and Add Files which provides hierarchical access to your music library.

Now Playing

To play music, add music from your library to the queue. You can browse your music sorted into folders just like it is organized on your drive, or by select metadata tags such as artist name or album name.

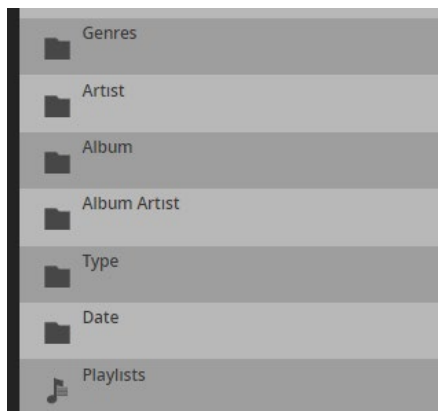
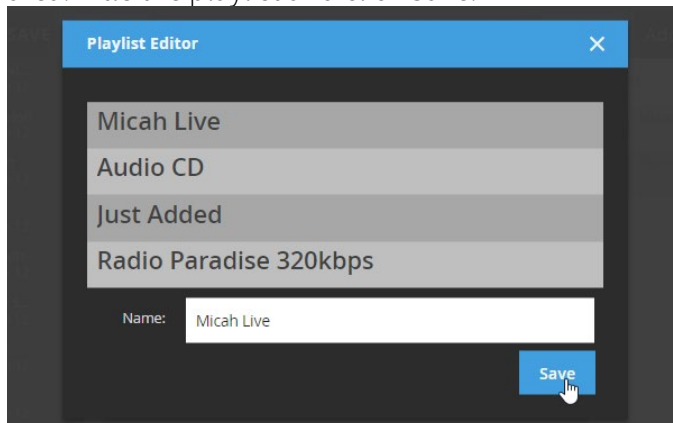
You can add entire artist collections, single albums, single tracks or a combination thereof to the cue to form a playlist. Simply click or tap the + icon beside any field, folder, or track name to add that item and all music contained beneath it to the queue. The illustration above shows 9 tracks from an album in the queue.

Once tracks are placed into the Now Playing queue, they can be reordered or removed from the queue entirely. Click or tap-and-hold the track number then drag it into the desired position in the

queue to reorder or onto the Now Playing area to remove. To clear the entire playlist, click or tap the Clear instruction beneath the track timeline in the Transport Control area.

Stored Playlists

Store any Now Playing queue for future recall by clicking SAVE in the Now Playing area. Title the playlist and click Save.



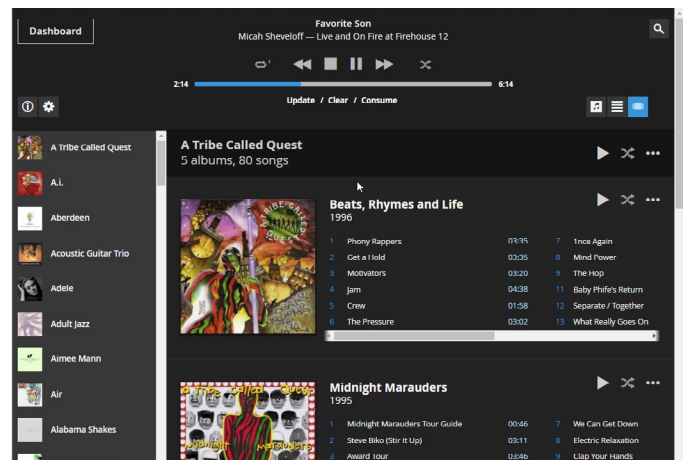
Recall saved playlists by clicking Playlists in the Add Files area.

Alternate Views

Clicking  brings up the Song View which displays a table

of information for songs in the current queue.

Clicking  brings up the Artist View which lists artists down the narrow left column. Clicking on any artist displays albums by that artist.



Configuring Music Library

The BR-20 integrated player can access music from an unusually broad variety of sources including USB disk and Network Attached Storage. Streaming services Tidal and Qobuz are supported (within regions in which these services are available). Internet Radio including a lossless stream from Radio Paradise, Roon, Shareport-Sync (an Airplay emulator) and other services are also supported.

USB Disk

USB thumb drives, portable and self powered hard drives, and SSDs are all compatible. Plug your drive into one of the USB Accessory ports. Note that the maximum current draw from these ports is limited. It is probably better to consolidate your library to a single drive rather than across multiple drives. This becomes especially important if you are using a wifi dongle. When using a wifi dongle, using network attached storage or a desktop model hard drive with its own power supply is considered mandatory in order to adequately power the wifi dongle..

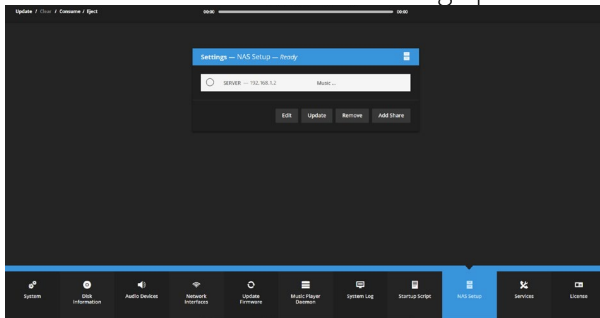
Simply connect your drive and the BR-20 will automatically scan the drive for all compatible audio files.

Network Attached Storage

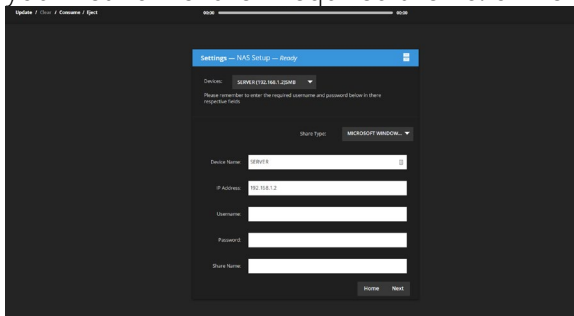
SMB or AFP shares available on the network can be connected by using the NAS Setup menu located at the bottom of the Dashboard.

BR-20 Cubed Series Preamplifier

1. Click the Add Share button to bring up the menu.



2. Select the correct device found on your network that contains your music. The fields will automatically populate based on your selection. Add user name and password for your network share if required then click Next.

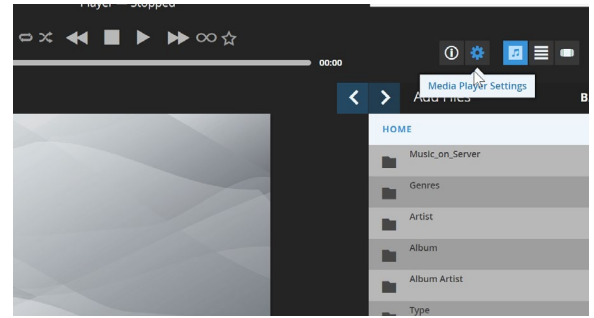


3. Choose the desired available shared folder on your selected device using the drop down menu. Click Next, and the BDP will return to the NAS Setup menu start page and the BR-20 will begin indexing the music in the share.

Note that as of this release, the streaming application only connects to SMB1.0 compliant shares. You will need to configure your NAS to be compatible with SMB1.0 in order to mount those shares.

Qobuz Login

4. Enter the Media Player area of the web UI by clicking Media Player in the top right corner.
5. Click the Media Player Settings icon.



6. Expand the Qobuz menu. Enter your login and password for the respective service and choose the sound quality level that corresponds with your subscription. Click Save.

Tidal Login

7. From the Dashboard, enter the Media Player area of the web UI by clicking Media Player.
8. Click Tidal Login in the Add Files section. This action will take you to a Tidal login page.
9. Enter the e-mail address and password associated with your account.
10. After the login, you will be automatically redirected back to the dashboard for your player.

Internet Radio

Internet Radio is accessible through Radio in Default View. Stations are sorted by genre and subgenre. Each station's streaming bitrate is indicated so you can gauge sound quality. Radio Paradise is a listener supported popular eclectic station which is available in lossless FLAC streaming. This station is accessible through Radio as well with a special link.

You may use any one, all, or any combination of these elements in your music library. They are all accessible from the Media Player Default View. In fact, you can add music to your Now Playing queue from any of these sources at once so that, for example, your playlist may contain songs from your local library, Tidal, Qobuz, and perhaps finish with

an internet radio station to keep music going after your specially selected playlist is exhausted.

Search

From Media player, you can search your library, Tidal, or Qobuz for specific tracks, albums, or artists.

If you search from the 'Home' level, any search result hits on your local drive will be returned.

To search only Qobuz or Tidal, first click one of these services from the 'Add Files' section, then enter your search term. Search results will be returned sorted into Artist, Album, Track, and Playlists.

To add search results to your queue, simply click the + beside any result. In the case of artist or albums, you can click + beside the artist or album to add everything in that album. Or click the artist/album title itself to view entries within.

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Specifications and Dimensions

Frequency Response	20Hz - 20kHz: $\pm 0.05\text{dB}$
Signal to Noise	Balanced Out: -110dB Single Ended Out: -110dB
IMD	$\leq 0.0003\%$
THD + Noise	20Hz-20kHz: $\leq 0.0006\%$
Weight	5.5kg 12 lbs
Dimensions	Inches: 17 or 19 W x 4.6 H x 13 D Cm: 43. or 48.3 W x 11.6 H x 33 D
Power Consumption at 120V/60Hz	Standby: 0.5W Idle: 45W Playing 45W

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