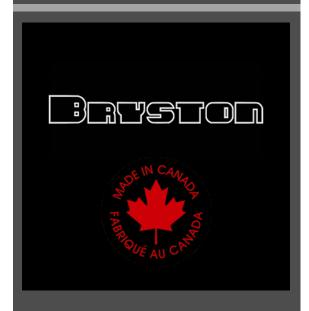
BRYSTON OWNERS MANUAL



BRYSTON BP-19 ANALOG STEREO PREAMPLIFIER

MUSIC WITH EMOTION



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.

COMPLETELY DISCONNECT THIS EQUIPMENT FROM THE AC MAINS.

DISCONNECT THE POWER SUPPLY CORD FROM THE AC RECEPTACLE

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.

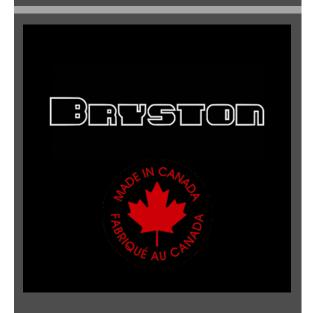
5. Do not use this apparatus near water.

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. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 13. 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.

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WARNING:

The XLR and RCA outputs labeled 'FIXED Left and Right' are 'FIXED' so they output a 'FULL LEVEL SIGNAL.'

So it is important not to use these outputs unless you are feeding a unit that allows volume control independent of the Bryston BP-19 Preamplifier.

IMPORTANT SAFETY INSTRUCTIONS



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.

WARNING:

There are four (4) audio OUTPUTS on the Bryston BP-19 Preamplifier.

Two (2) Single Ended RCA and Two (2) Balanced XLR



The XLR and RCA outputs labeled 'MAIN' Left and Right are 'VARIABLE' outputs so they are controlled by the volume control on the BP-19 front panel or the hand held Remote.

The XLR and RCA outputs labeled 'FIXED' Left and Right have a fixed volume so they output a 'FULL LEVEL SIGNAL'. So it is important NOT to use these outputs unless you are feeding a unit that allows volume control independent of the Bryston BP-19 Preamplifier.

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Features:

2 pair balanced female XLR inputs

2 pair balanced male XLR outputs (Number 1 Variable - 2 Fixed)

2 pair single ended outputs (Number 1 Variable - 2 Fixed)

4 pair RCA inputs (Input 1 Option Phono BP-19P & BP-19MC only)

Options:

Standard Silver or Black Faceplates
Available in 17 or 19 Inch

Pro 19 Inch Rackmount

Custom Colour Faceplates Available

Moving magnet RIAA phono equalization module

Moving Coil Transformer phono module 20/26 dB

GENERAL SPECIFICATIONS

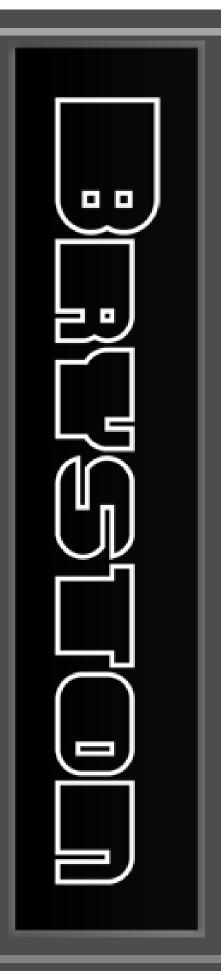
FREQUENCY RESPONSE	20HZ – 20KHZ	+/ <u>- 0</u> .05DB
SIGNAL TO NOISE	BALANCED OUT SINGLE ENDED OUT	-110dBr -110dBr
IMD	LESS THAN	0.0003%
THD + NOISE	20Hz-20kHz	0.0006%
WEIGHT	KG/LBS	5.5 / 12
DIMENSIONS	INCHES Cm	17 OR 19W X 4.6H X 13D 43 OR 48.3W X 11.6H X 33D
POWER CONSUMPTION @120V/60Hz	STANDBY IDLE PLAYING	0.5W 18W 18W

ADDITIONAL SPECIFICATIONS FOR BP-19 Phono MM/MC Stages

Moving Magnet: is a 41dB @1kHz gain preamp with RIAA playback equalization for moving magnet cartridges.

Moving Coil: selectable 20dB or 26dB of gain transformers inserted before the MM stage for moving coil cartridges with output levels around .3 to .5mV.

INPUT VOLTAGE CONFIGURATION			
INPUT VOLTAGE	JUMPERS	VALUE OF FUSE	
	INSTALLED	F201	
120VAC	JP202, JP203,	TD 1.0A	
	JP205		
220VAC	JP204, JP206	TD 0.5A	
240VAC	JP205, JP206	TD 0.5A	



INTRODUCTION:

Thank you for choosing a Bryston Preamplifier. Bryston welcomes any suggestions you may have, or comments regarding the operation of your amplifier. We consider you, our customer, to be Bryston's most important resource, and your opinion is very much appreciated.

SETUP:

The Bryston BP-19 preamp, with remote-control, should be placed where there is a direct line-of-sight between the hand-held remote and the remote infra-red sensor eye located on the left side of the pre-amplifier's front panel. If you purchased the BP-19P or BP-19MC, both of which include a Phono section, avoid placing the preamplifier directly on top of your power amplifier. Power amplifiers usually employ large power supplies and the transformers in the power supplies can cause interference (hum) with the sensitive phono section inside the preamp.

WHITE OLED DISPLAY:

- Currently selected source.
- Current volume level.
- Brightness level adjust.
- Auto Turn Off



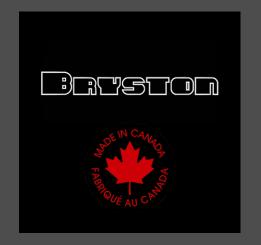
FULLY DISCRETE FULLY BALANCED CLASS 'A' ANALOG CIRCUITS:

The BP-19 analog preamplifier is a byproduct of years of R&D that resulted in the development of an optimized fully discrete opamp buffer amplifier capable of delivering a staggeringly low THD+N measurement at or below 0.0006%. The analog signal path is a FULLY BALANCED DESIGN from input to output, using an array of very tightly matched components and a compact circuit design to achieve the lowest possible noise and superior common mode rejection.

Connect the pre-amplifier's left and right outputs from either the RCA or Balanced XLR connectors to the appropriate left and right input jacks on your power amplifier. Balanced cables are an advantage if you are using long runs of cable, (greater than 10 feet), between your preamplifier and power amplifier. Connect your CD player, tuner, tape deck, video recorder, or laser disc, etc. to the specific left/right preamplifier inputs. With phono stage equipped models, (BP-19P & BP-19MC) connect your phono cables to the phono input jacks. If your turntable leads have a separate ground wire, it may be connected to the ground post adjacent to the phono inputs on the rear panel.







The Bryston BP-19 preamp also features two pairs of balanced XLR input jacks. Many signal sources, including CD-players and separate D/A converters are now available with Balanced outputs for minimum noise pickup on the cables.



HEADPHONE OUTPUT:

The main outputs, both balanced and single-ended, will be muted when a phone plug is inserted into the headphone jack. The front panel indicator LED will not turn red, however, as is does when the outputs are muted via the MUTE toggle switch or the hand held remote control. The output is a 1/4" (6.35mm) TRS connector where the Tip=Left, Ring=Right, and Sleeve=Ground. Output impedance is $<5\Omega$.

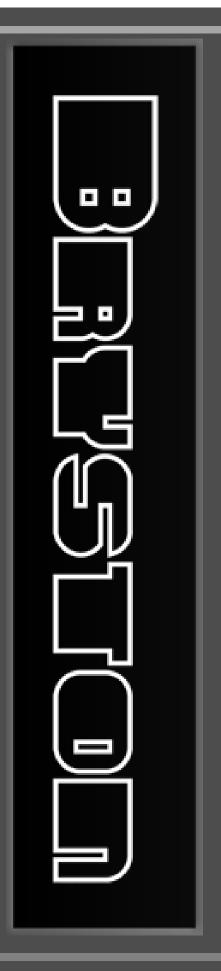
ANALOG AUDIO INPUTS:

BP-19 preamplifiers are equipped with four pairs of RCA input connectors: two pairs of balanced XLR input connectors. Balanced inputs use 3 pin XLR female connectors with pin 1 being ground, pin 2 as positive signal, and pin 3 as negative signal. Input sensitivity is 1 volt and input impedance is 15K ohms. Single-ended (or unbalanced) inputs employ gold plated RCA (Phono) jacks. Line input sensitivity is 500mV and input impedance is 50K ohms. See also PHONO EQUALIZATION MODULES for Phono input details.

ANALOG AUDIO OUTPUTS:

There are two pairs of RCA main outputs one pair fixed and one pair variable. Two pair of balanced outputs, using 3 pin male XLR jacks. One pair fixed one pair variable.

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BALANCED OUTPUTS:

As with the input XLR jacks, pin 1 is ground, pin 2 is positive and pin 3 is negative. These outputs are capable of driving 12 volts into any load of 1K ohms or greater.



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

SINGLE ENDED OUTPUTS (RCA):

As with unbalanced inputs, these connectors are gold plated RCA (phono) jacks. They are capable of driving 12 volts into any load of 1K ohms or greater.



BRYSTON BR-4 REMOTE:

You may control many functions of the BP-19 with Bryston's included Remote utilizing the Preamp button. The six analog inputs have six buttons on the front panel and Volume, Mute, and Power are also available.

The Mute button mutes the main outputs (both balanced and unbalanced) of the preamplifier.

PHONO EQUALIZATION MODULES (OPTIONAL):

Bryston's optional phono equalizer circuitry features highly accurate equalization, extremely low noise and distortion and provides headroom margins sufficient to prevent overload from any known phono source. If your turntable provides a separate ground lead system noise may be minimized by connecting it to the ground post adjacent to the phono inputs on the rear panel.

Moving Magnet Phono Cartridge Input (MM): This is Bryston's standard RIAA phono equalization stage. It is found in both the "-P" and "-MC" versions of the BP-19 preamp. Input impedance is 47K ohms and sensitivity is 5mV.

Moving Coil Phono Cartridge Input (MC): Moving coil phono cartridges require much more gain than the more common moving magnet types. To accommodate moving coil cartridges Bryston offers the BP-19MC pre-amp which include specially designed, custom-made step-up transformers in addition to Bryston's standard RIAA phono equalization stage found in the "-P" versions of the BP-19 pre-amp.

Which phono equalization stages are engaged is determined by the front panel display menu "MC Phono / MM Phono". Please note that it is important that your phono cartridge is connected to the correct inputs (INPUT 1) in order to achieve proper performance. Input impedance is 180 ohms and sensitivity is 350uV

VISUAL INDICATORS:

The LED on the front panel of the BP-19 lights GREEN when power is on. RED in standby. Display is white.







FRONT PANEL CONTROLS: MUTE/NORMAL BUTTON:

Mutes or releases mute at the main outputs, without changing the volume control setting, each time pushed.

VOLUME CONTROL: Rotary control varies the output level to the 'MAIN OUT-PUTS'. The volume control is a digitally controlled attenuated analog step-ladder design, ensuring long-lasting quiet linear performance. Resolution is 1/2dB and left/right channel accuracy of .1dB.

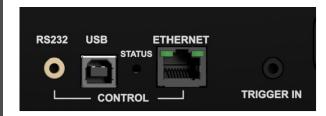
BALANCE CONTROL:

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.

LINEAR POWER SUPPLY:

The BP-19 preamplifier utilizes a toroidal power transformer.

CONTROL SECTION:



The BP-19 preamplifier can be controlled by remotely using RS232 or IP when connected through the RS232 or SVC Ethernet ports.

TRIGGER INPUT:

The BP-19 can be remotely turned on or placed into standby when receiving DC voltage into this port.

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 BP-19 is powered on.







FRONT PANEL CONTROLS: ADDITIONAL MENUS

You can access additional controls by 'Pushing In' the front panel Volume control and releasing.









Then turn the volume control 'Counter Clockwise' to enter a menu.

Push the Volume knob a second time and the menu will open.

Rotate the volume control counter clockwise to EXIT the push.

These menus will allow you to set the:

- 'Display Timeout'
- 'Brightness of the LED's
- Colour of LED's
- 'IP Address' for software updates.

There are Menus for 'Settings', 'Front Panel' and 'Advanced'

You can exit the menus quickly by pushing the MUTE button.

Personalized Faceplates

Bryston is pleased to introduce the availability of personalized faceplate colours, available now for Bryston amplifiers, preamplifiers, CD players, digital players, phono stages and DAC's.

Our new colour choices, plus the option to create custom colours, enable Bryston electronics to blend seamlessly or contrast elegantly within any décor or equipment rack.

Enjoy bespoke colour choices as an added touch to any entertainment space.

ADDITIONAL CUSTOM COLOURS AVAILABLE UPON REQUEST

Source buttons only available in Black or Silver



Bryston Ltd

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