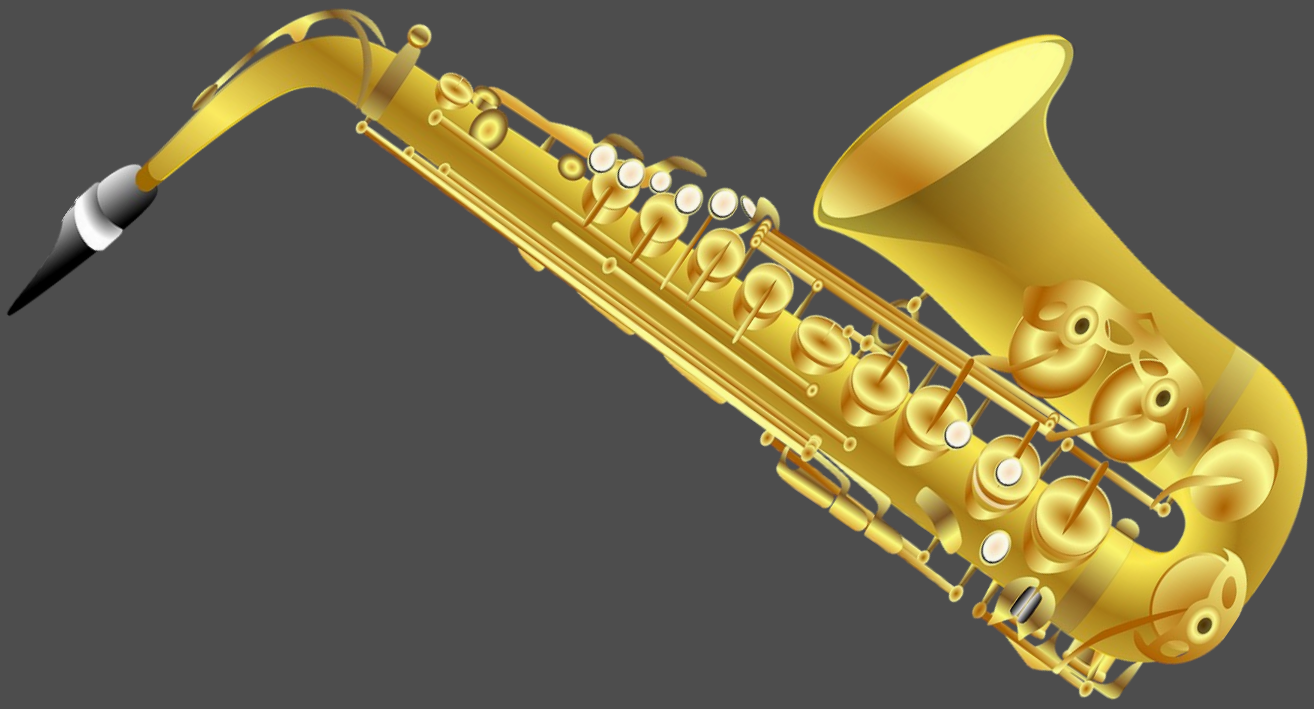
BRYSTON



BRYSTON

LOUDSPEAKER OWNERS MANUAL

MUSIC WITH EMOTION

Features:

All speakers available in Active or Passive versions.

Custom colors available.

Three (3) sets of five-way binding posts allow for Bi-Amping or Tri-Amping or Active.

ALL BRYSTON SPEAKERS COME WITH FOUR EASILY CHANGEABLE MODULES TO SWITCH BETWEEN :

SINGLE-AMP

BI-AMP

TRI-AMP

ACTIVE

GENERAL SPECIFICATIONS

RULE NUMBER ONE

Unless you live in an open field the way your speaker will perform is a function of the ROOM/SPEAKER interface. The standing waves, the nearby surface reflections, the tonal balance and the soundstage are all greatly affected by placement of the speaker within the confines of the listening room.

Bryston speakers are designed to consider that all speakers are listened to in real rooms and the interaction of the room with the speaker with specific designs can be made to enhance the listening experience. This is accomplished by designing speakers which have the widest 'smooth and even' on and off axis frequency response over the widest angle possible both vertically and horizontally as much as current technology will permit.

RULE NUMBER TWO

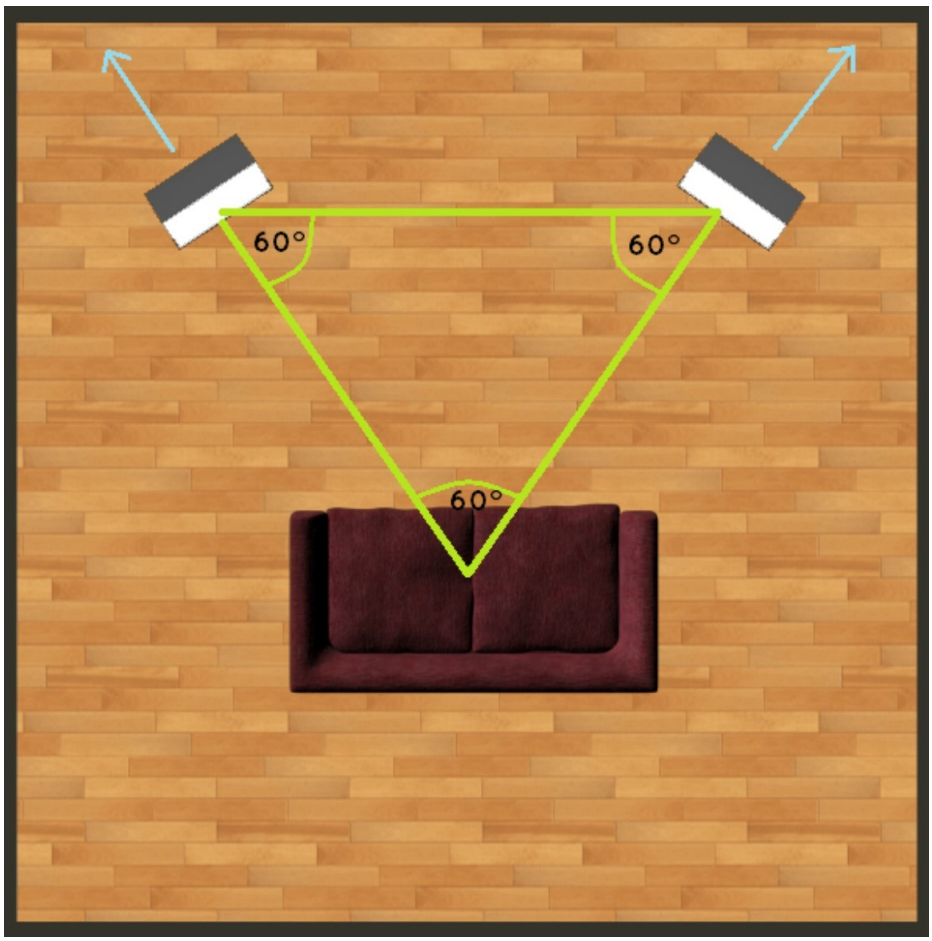
It's very important to choose the correct size speaker for your listening room. A small speaker in a large room will not pressurize the room properly and a large speaker in a small room will typically over drive your room. There is some flexibility with this rule when you take into account the polar response of a given speaker – Point Source vs Vertical Array, vs Planar etc.

PLACEMENT

The location of your new speakers will significantly affect the sound quality you experience in your particular room so take care to position them correctly. Avoid trying to "hide" them inside an entertainment center or other enclosed cabinets or behind furniture.

Bryston speakers sound their best in free space, unencumbered by surrounding cabinetry, with a clear line towards your seating area. Large upholstered chairs blocking the tweeters may result in reduced treble detail and

clarity. For a wide and spacious stereo or home theater soundstage, separate the front left and right speakers by 6 feet or more, up to 12 feet apart, or by at least half the distance you sit from the speakers, (e.g. if you sit 15 feet away from the speakers, separate them by at least 8 feet).



Ideally you should try and set up your system in a triangle—so you are sitting the same distance from the speakers that they are apart.

You can experiment with slightly angling the speakers in toward the listening area or having them face straight out into the room. Each room is different, and toeing in the speakers toward your seating may improve the stereo soundstage.

If you are using our speakers as your main speakers in a home theater, place them to each side of the video display or screen equidistant from the screen so the stereo sound will be integrated with the TV image. Keep your speakers out of corner locations by 1 foot or more, as corners may result in exaggerated “boomy” bass and colored sound. Leave at least 2 or 3 inches between the rear of the speakers and the wall behind for “breathing” room for the bass ports.

Note, too, that the closer you place tower speakers to any adjacent walls, including the wall behind the speakers, the greater the deep bass output will be. The farther out you move them from nearby wall surfaces, the less bass you'll hear. Experiment with the placement so bass is smooth and deep, free from "boomy" bass effects.

QUICK-START SPEAKER SETUP

Bryston speakers arrive pre-assembled with large non-marring adjustable feet. Optionally you may install the included spike feet by removing the large feet using the provided Allen wrench. Install the spike feet and tighten securely in the inserts provided at the bottom of the speaker. Speaker leveling, the height of both types of feet can be adjusted by turning the foot up or down on the thread.

The Bryston tower speakers come with 'OUTRIGGERS' which can replace the feet if desired. We recommend the outriggers for greater structural rigidly and decoupling.

Turn the speakers around and look at the back panel. You'll see 3 sets of (LINKED) gold-plated 5-way binding posts, to which you are going to connect the speaker cables from your receiver or amplifier. Each gold binding post has a colored ring around it -- BLACK is NEGATIVE. Most receiver and amplifier manufacturers use this color code and you should use it as well - it makes things a lot easier to hook up your speaker cables. You will also see a positive (+) sign engraved in the plastic beneath one of the other coloured binding post, and a negative (-) sign beneath the BLACK post. Your amplifier may or may not have these positive and negative symbols. If you wish, you can use these symbols along with the color coding to guide you.

The Cables

Examine your speaker cables. On the ends, there may be spade lugs or banana plugs, each one color-coded red or black like your speaker binding posts to help you identify the red and black (positive and negative) wires on each end of the cable. If the cable ends are bare wires and lack color coding, check the wires: one may be copper-colored, the other silver. Some generic cables may simply have a colored thread or a ribbed pattern on the plastic insulation to indicate the positive wire. Alternatively, some speaker cables may have writing on one side or the other (perhaps the brand name, for example) or even a positive sign or negative sign on each of the conductors. Whichever you have, just follow the Red-To-Red, Black-to-Black connection rule or use the + to + or - to - connection scheme for each cable pair.

THE RECIEVER OR AMPLIFIER

Look at the speaker connectors on the rear panel of your receiver or amplifier. These will usually be red and black binding posts, like those on your speakers, or red and black spring-loaded push connectors. The Red (+) terminal on your receiver's Right speaker output connects to the Red (+) binding post of the Right speaker. The Black (-) terminal on your receiver output connects to the Black (-) binding post on the Right speaker. Follow the same pattern to connect the receiver's Left speaker outputs to the Left speaker's binding posts, then the left surround (the speaker to your left from your listening seat), and right surround speakers, the center-channel speaker, and additional rear speakers required by 7.1-channel systems. If your A/V receiver or amplifier has the new Consumer Electronics Association color coding for each speaker channel, the negative terminal (-) will always be black, however, the positive terminal (+) will have a different color corresponding to each channel of the surround system. If you find this color coding confusing, note the positive (+) and negative (-) polarity for each speaker and the speaker cable.

BIWIRING OR TRIWIRING - PASSIVE VERSIONS

Remove the rear panel module linking the Two or Three pairs of binding posts for the separate woofer and midrange and tweeter sections of the crossover for each speaker. Connect Two or Three speaker cables (depending on the module chosen) one cable to the tweeter pair of binding posts and one cable to the midrange pair and one pair to the woofer - for each speaker (two twin cables for bi-wiring and 3 twin cables for tri-wiring per speaker).

At your receiver or amplifier, connect the two cables to one pair of red and black output terminals for the left channel, and two or three speaker cables to the other pair(s) of output terminals for the right channel. Always maintain the (+ to +) and black-to black (- to -) connection scheme for each channel's speaker connections.

BI-AMPING: To power your speaker with two amplifiers, remove and replace the rear panel module linking the two pairs of binding posts for the separate woofer and midrange/ tweeter sections of the crossover for each speaker. Connect one stereo amp to the lower set of binding posts on each speaker (the woofers), and the second stereo amp to the upper pair of binding posts (the mid range/tweeters) on each. Adjust the level (gain) of each amp for equal output,

TRI-AMPING: To power your speaker with three amplifiers, remove and replace the rear panel module linking the pairs of binding posts for the separate woofer and midrange and tweeter sections of the crossover for each speaker. Connect one stereo amp to the lower set of binding posts on each speaker (the woofers), and the second stereo amp to the midrange pair of binding posts and one set to the tweeter pair on each.

This removable module comes in 4 versions:

1. **Single amplifier**
2. **Bi-wire version**
3. **Tri-wire version**
4. **Active (Pg. 9)**

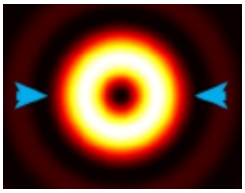
BRYSTON MODEL T[10] POINT SOURCE SPEAKER

In physics, a point source is an energy source with negligible dimensions – a tiny, singular point in space where the energy emanates.

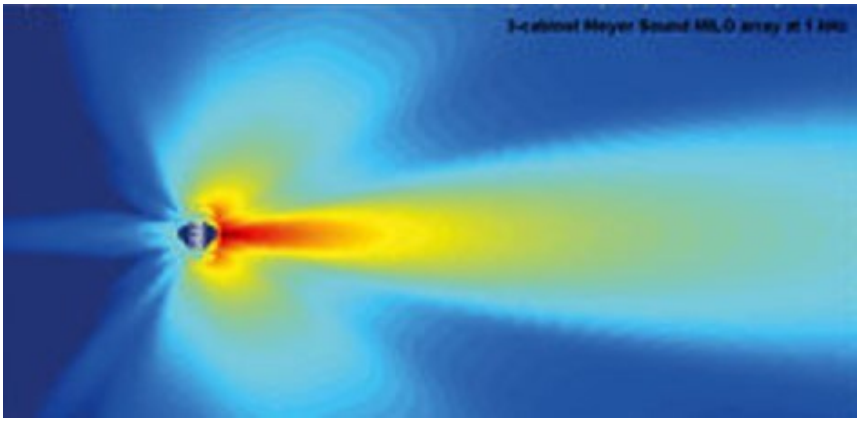
In physics terms, a true point source speaker would be impossible as it would be infinitely small with the ability to produce frequencies from 20Hz to 20kHz equally in all directions.

Most speakers approximate this performance by using single drivers or coax drivers or in most cases 2 or 3-way drivers clustered together as close as physically possible.

A true point source speakers, sound expands away from the speaker as an ever-enlarging sphere.



Unlike the line array system or a line source or a dipole or bi-pole, a point source speaker radiates sound in a spherical pattern.



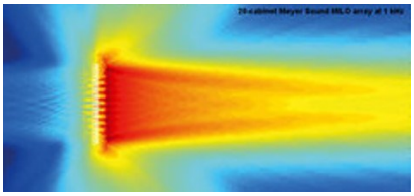
Bryston T[10] Point Source Speakers

- The Point Source T-10 speakers consist of the Tiny T[10], The Compact T[10] and the Mini T[10]
- All crossovers utilize high power air core inductors everywhere.
- Manufactured and finished as 3 separate cabinets.
- All models easily changeable by the user to Passive or Active.
- Tri-Wire or Bi-Wire available on all models.
- Aluminum front baffle diffraction plates.
- More substantial Outriggers now included in price with Towers.
- Shipping including and towers must ship on skid.
- Specialized packing due to height (towers).

BRYSTON MODEL T[10] LINE ARRAY SPEAKER

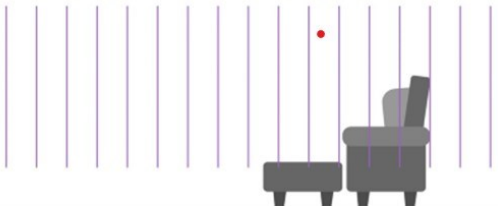
Bryston tower speakers are partial Line Arrays and different from point source speakers in the way they radiate energy into the room.

The sound radiates outward in an expanding cylinder, as though



There are some significate advantages to this type of sound propagation:

- More uniform SPL throughout the listening space
- Arrays effectively reduce floor and ceiling reflections
- The perceived volume is quite uniform throughout the listening area.
- Having the woofers pressurizing the room a four different locations also assist in reducing the huge dips and peeks in the frequency response all to common in most listening rooms.
- Allows you to hear more of the speaker in your room
- Superior Intelligibility
- A better Sense of Realism



Bryston T[10] Line Array Speakers

- T[10] Series consist ot the Model T[10], The Middle T[10] and the Slim T[10]
- All crossovers utilize high power air core inductors everywhere.
- Manufactured and finished as 3 separate cabinets.
- All models easily changeable by the user to Passive or Active.
- Tri-Wire or Bi-Wire available on all models.
- Aluminum front baffle diffraction plates.
- More substantial Outriggers now included in price with Towers.
- Shipping included and Towers must ship on skid.
- Specialized packing due to height of the Towers.

TYPICAL BRYSTON ACTIVE SYSTEM SETUP

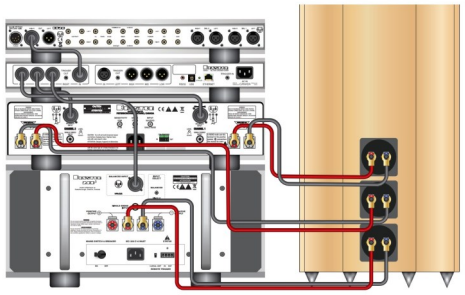
The Bryston BAX-1 Digital Electronic Crossover is really a very specialized and unique crossover. Unless designed as a dedicated crossover all active crossovers I am aware of just provide the customer with a 'generic' approach to adjustments. By that I mean you can choose the slope and the crossover point and sometimes the Q but they do not take into account the SOUND POWER or total radiated energy of the speaker (which is what you hear in a room)

The Bryston BAX-1 on the other hand is designed with a specific Bryston speaker in mind. The Active Model T has different software then the Middle T and the Mini T has different software again.

The reason for that is we put each version of the Model T's in our factory anechoic camber and we make over 300 measurements but vertically and horizontally around the speaker and adjust the software to provide as accurate as possible the best SOUND POWER for the specific Model T speaker.

Additionally, Most fully active systems restrict your choice of preamplifier and amplifiers by building in internal chip type amplifiers and preamplifiers which save space but can limit performance.

Bryston's system includes a high resolution external digital crossover model BAX-1 that accepts input from your favorite stereo analog preamplifier and outputs analog signal to your choice of amplifiers. The BAX-1 makes it easy to choose the amplifiers that work best for your listening preferences. Each loudspeaker needs 3 (preferably Bryston) amplifier channels with equal gain.



Most listeners will choose a high powered mono amp for the bass section and a medium powered two channel amp for the midrange and tweeter sections. The BAX-1 high quality DSP crossover improves performance by directly powering drivers without intermediate passive components in the crossover. Also, much finer adjustments can be made to compensate for response non-linearities. Because we are no longer confined to traditional crossover geometry, we can tailor the on and off axis response independently for incredibly natural tone and spatial resolution.

ACTIVE FEATURES INCLUDE:

- **XLR analog input from your line-level preamp.**
- **3 pairs (low, mid, high) of XLR analog out to feed your choice of amplifier complement**
- **96/24 analog to digital to analog conversion**
- **Factory programmed crossover settings**
- **Controllable via web-based user interface**
- **6 channels of amplification required (3 channels per loudspeaker)**
- **Firmware upgradeable**
- **Bass EQ**

Personalized Faceplates

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

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

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

ADDITIONAL CUSTOM COLOURS

AVAILABLE UPON REQUEST

Source buttons only available in Black or Silver

You can even order your Bryston speakers in a matching color to your electronics if desired.

BryFi

BRYSTON WIRELESS LOUDSPEAKERS

Our Bryston Wireless loudspeakers are based on Bryston's passive speakers using the high quality internal passive crossovers and drivers but the Wireless speaker series models incorporate an internal state of the art amplifier in each speaker.

All Wireless models ship with a Wireless 'four-in-one transmitter' that permits streaming over Wi-Fi via Apple AirPlay or UPnP.

On the rear of the transmitter are a line-level analog input, digital optical in, four USB ports for connecting external storage devices, and an Ethernet port.

It also incorporates a Pi Linux-based computer, which makes possible network playback from NAS drives and supported streaming services, under control of a Web-based interface that can run on iOS and Android devices.

MUSIC WITH EMOTION

Bryston Ltd

677 Neal Dr
Peterborough On
Canada
www.bryston.com