AudioControl®

Making Good Sound Great™

Bijou⁶⁰⁰™

HIGH POWER AUDIOPHILE AMPLIFIER
WITH DAC AND PREAMP VOLUME CONTROL

Installation Manual

Bijou⁶ᵒᵒ™

Important Safety Instructions

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 a 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, stoves or any other apparatus (including amplifiers) that produce heat.

9. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

10. Only use attachments/accessories specified by the manufacturer.

11. Do not 'Hot Plug'. When changing inputs or outputs, switch the Bijou 600 off before making changes. Once changes have been made, then switch the Bijou 600 back on.

12. Unplug this product during lightning storms or when unused for long periods of time which we hope will be rarely!

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.

14. This apparatus shall not be exposed to dripping or splashing, and no object filled with liquids, such as vases or glasses, shall be placed on the apparatus.

15. Exposure to high sound pressure levels may lead to permanent hearing loss. Take every precaution to protect your hearing.

16. The remote control comes with a non-rechargable Lithium battery installed. Take every precaution when handling and installing new Lithium batteries, and follow all local and state guidelines for safe disposal of old batteries. Keep all batteries away from children.

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 of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Caution: to reduce the risk of electric shock, do not disassemble the apparatus. There are no user-serviceable parts inside. Refer servicing to qualified personnel.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

WARNING: SHOCK HAZARD - DO NOT OPEN.
ATTENTION: RISQUE DE CHOC, NE PAS OUVRIR.

Recycling notice: If the time comes and this apparatus has fulfilled its destiny, do not throw it out into the trash. It has to be carefully recycled for the good of mankind, by a facility specially equipped for the safe recycling of electronic apparatii. Please contact your local or state recycling leaders for assistance in locating a suitable nearby recycling facility. Or, contact us and we might be able to repair it for you.

Table of Contents

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Bijou 600™

Introduction

Thank you and congratulations for purchasing your AudioControl Bijou 600. This installation manual is your guide to installing and using the Bijou 600 Amplifier and DAC, including information on its more advanced features. The table of contents will help you navigate to the area of the manual you are looking for. It is a good idea to read the whole manual in order to acclimatize yourself with the full workings and features of the Bijou 600, and to keep the technical writer's Mom happy!

Established in Seattle nearly four decades ago, we have always been dedicated to designing, engineering and building world-class audio products from the ground up. In the process, we've earned a reputation worldwide for operating at the highest levels of reliability and performance with a mission of 'Making Good Sound Great'.

We trust that you will get many years of satisfying and trouble-free operation from your Bijou 600. If you require more information about this or any of our AudioControl products, please visit our website at www.audiocontrol.com or contact us at sound.great@audiocontrol.com. In addition, do not hesitate to talk to our dealers worldwide, or contact us directly at our Seattle base in the misty rainforests of the Pacific Northwest, USA. The days can be rainy and cold but there is always a warm welcome and a hot cup of coffee available all year round.

Contents

- Bijou 600
- RTR-1 Remote Control
- AC Power Cord
- Optical Cable
- RCA to 1/8" adapter
- 4 stick-on feet
- 4-pin and 3-pin connectors (attached to unit)
- This installation manual
- A shipping box full of fresh air from the wooded slopes of Mountlake Terrace, WA

Ready to Rumble! - A Quick Look at the Bijou 600

AudioControl's Bijou 600 is in a new class of compact, high-powered amplifiers with a built-in audiophile-grade DAC designed specifically to provide greater performance and higher sound quality for all analog and digital systems, including streaming audio components like Sonos® home entertainment.

The Bijou 600's powerful amplifier delivers 100 Watts of power per channel into 8 Ohms and 200 Watts per channel into 4 Ohms. Additionally, the Bijou 600 can be bridged to perform as a 400 Watt mono-block amplifier.

The state of the art Bijou 600 features a built-in high-performance Wolfson® DAC (digital to analog converter) that dramatically improves audio quality and performance.

Digital and analog audio-systems can now reach their full potential across the whole house whether the speakers are free-standing, in-wall, in-ceiling, invisible, desktop, gaming, in the garden shed etc.

Equipped with AudioControl's unique patent-pending AccuBASS™ circuitry, the Bijou 600 also rejuvenates the bass response lost in most digital compression schemes. This results in a richer and fuller audio performance with better bass and mid-bass response.

In addition, the Bijou 600 acts as a pre-amplifier allowing for volume control, AccuBASS™ and input selection to be effortlessly controlled from its own RTR-1 Remote Control, from a third-party control system or another Remote Control.

The net effect is that you will enjoy a more complete listening experience and hear music with a richness and vibrancy much closer to the way the artist intended their music to be enjoyed.

We thought that you might be interested to know that the Bijou 600 won a Consumer Electronics Association Mark of Excellence Award! It was chosen by a panel of industry experts for excellence in custom integration and installed technology as Audio Product of the Year.

Quick View
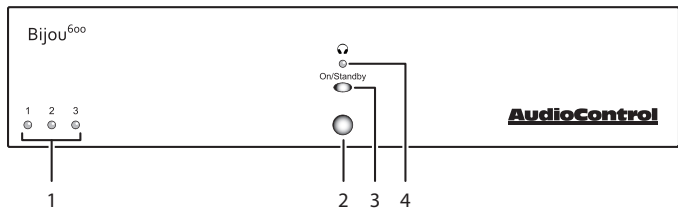
1. **Input Selection LEDs**
2. **IR Remote Control Window**
3. **On/Standby LED**
4. **Headphone On/Off LED**
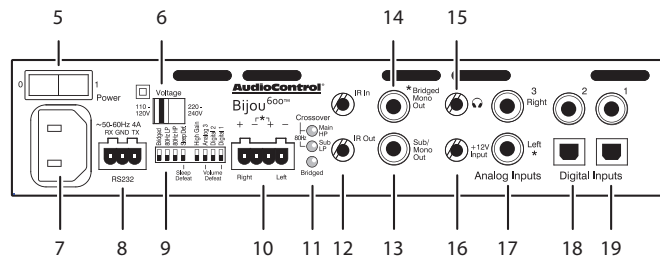
5. **Power On/Off Switch**
6. **AC Voltage Selector**
7. **AC Input**
8. **RS232 Remote Control**
9. **Control Switches**
10. **Speaker Outputs**
11. **Crossover/ Bridged LEDs**
12. **IR Input and Output**
13. **Sub/Mono Out**
14. **Bridged Mono Out**
15. **Headphone Out**
16. **+12V Trigger Input**
17. **Analog Input 3 L/R**
18. **Digital In 2 Coax/Optical**
19. **Digital In 1 Coax/Optical**
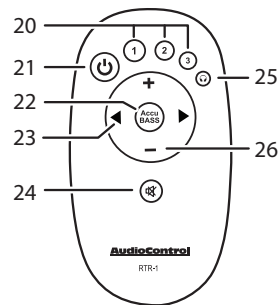
20. **Input Selection 1,2,3**
21. **Power On/Standby**
22. **AccuBASS On/Off**
23. **AccuBASS Up/Down**
24. **Mute**
25. **Headphones On/Off**
26. **Volume Up/Down**

Quick Start

It takes just a few steps to get your AudioControl Bijou 600 up and running. The steps below are explained in more detail throughout this manual. This example shows a typical single-source digital setup. (The numbers in the illustration correspond to the numbers in the procedure steps.)

1. Connect one source component (i.e. digital music player, SONOS™ CONNECT, television, receiver, CD player, Xbox, toaster etc.) to one of the analog or digital inputs of the Bijou 600.

2. Connect a pair of your favorite speakers to the Bijou 600, ensuring that the polarity matches.

3. Turn on the Bijou 600 power switch (Note: whenever connecting inputs, switch the Bijou 600 off first, make changes and then switch it back on).

4. Using the RTR-1 remote control, select the input you have connected to the Bijou 600.

5. Using the RTR-1, adjust the volume of the input to the desired level of goodness.

6. Using the RTR-1, adjust the AccuBASS™ to the desired amount of bass response to add bass and richness back to your music.

7. Enjoy Making Good Sound Great from the Bijou 600 and do the Cha-cha!

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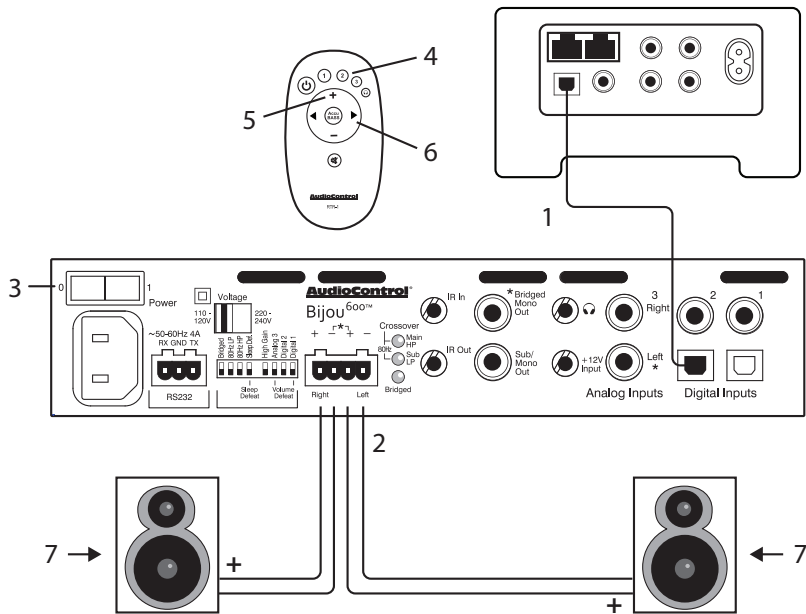
Typical Three-Source Setup

The Bijou 600 allows multiple sources to be connected to the various analog and digital inputs. Each source is selected using the RTR-1 remote control. Additional adjustments to the audio performance can be made using all features of the Bijou 600. The Bijou 600 will conveniently remember all volume and AccuBASS™ settings for each input.

1. Connect a digital source to the Bijou 600 using one of the digital coaxial or optical inputs.

2. Connect a second digital source to the Bijou 600 using one of the digital coax or optical inputs.

3. Connect an analog source to the Bijou 600 using the right (R) and left (L) analog RCA jacks. (Note: AudioControl has taken the liberty of including in the box an RCA to 1/8" adapter.)

4. Connect a pair of your favorite speakers to the right and left speaker outputs of the Bijou 600, ensuring that polarity matches.

5. Turn on the Bijou 600 power switch. (Note: whenever connecting inputs, switch the Bijou 600 off first, make changes and then switch it back on.)

6. Use the RTR-1 remote control to select the required input: 1 Digital; 2 Digital; 3 Analog.

7. Use the RTR-1 (+ or –) buttons to adjust the volume to the desired level.

8. Engage AccuBass™ by pressing the middle button of the RTR-1. (Note that when AccuBass™ is engaged, the blue LED input on the front panel will shine brighter like a bright star in the night sky). Make a wish and the Blue Fairy may come.

9. Adjust the amount of bass response using the RTR-1 < or > buttons to add bass and richness back into your music.

10. Enjoy Making Good Sound Great with the Bijou 600!
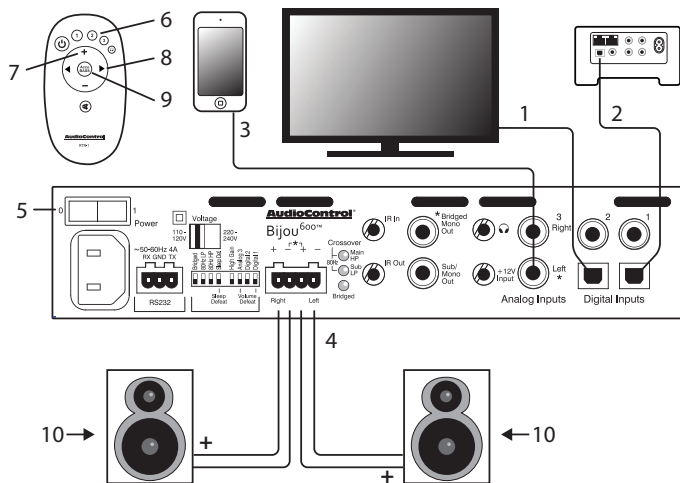
Typical Single-Source Setup

1. Connect one analog or digital source to the Bijou 600 using the right (R) and left (L) analog RCA jacks (analog) or one of the digital coax or optical inputs.

2. Connect a pair of your favorite speakers to the right and left speaker outputs of the Bijou 600, ensuring that polarity matches.

3. Turn on the Bijou 600 power switch. (Note: whenever connecting inputs, switch the Bijou 600 off first, make changes and then switch it back on).

4. Use the RTR-1 remote control to select the required input: 1 Digital; 2 Digital; 3 Analog.

5. With the RTR-1, adjust the volume to the desired level using the + or – controls.

6. Engage AccuBass™ by pressing the middle button of the RTR-1 (note that when AccuBass™ is engaged the blue LED input on the front panel will shine, like a bright star in the night sky).

7. Adjust the amount of bass response using the RTR-1 < or > AccuBASS™ buttons to add bass and richness back into your music.

8. Enjoy Making Good Sound Great with the Bijou 600.
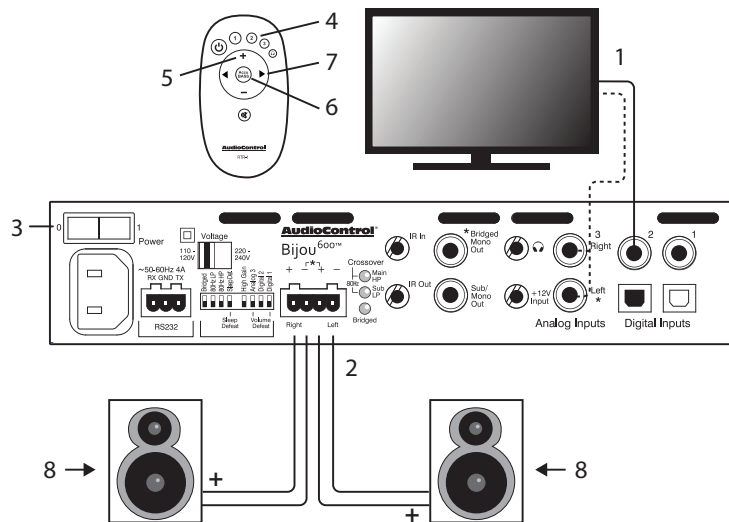
2.1 Speaker Setup and 4.1 Parallel Speaker Setup

The Bijou 600 has been designed to equalize and improve the performance of all speaker set-ups. The power of the amplifier combined with the audio performance and quality of AudioControl's Wolfson-engineered, digital to analog converter (DAC) results in a dramatic improvement in the performance of all speaker set-ups throughout the house.

Shown on the right are just two of the many types of speaker configurations that the Bijou 600 can work with. The 4.1 speaker set-up takes advantage of the Bijou 600 amplifier's stability at 4 Ohms powering four speakers. In addition, the Bijou 600 can be used as an incredible Mono amplifier with power ratings up to 400 Watts (see next page).

In both systems shown, the 80 Hz HP filter allows the main speakers to play the range above 80 Hz, and the 80 Hz LP filter sends the frequency range below 80 Hz to a powered subwoofer. This takes the strain off your main speakers if they can't reproduce the low frequency range, and it conserves amplifier power.

4 or 8 Ohms   4 or 8 Ohms   Powered Subwoofer

Parallel   Parallel

8 Ohms   8 Ohms   8 Ohms   8 Ohms   Powered Subwoofer
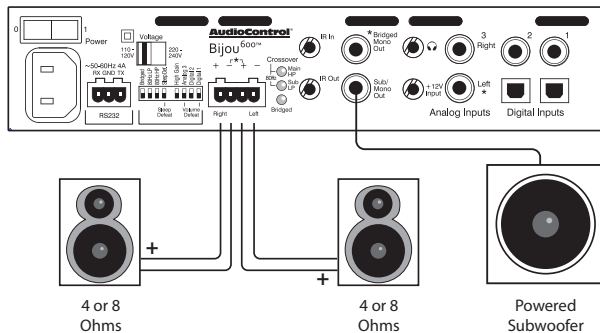
2.1 Speaker Set-up

The standard set-up for a 2.1 speaker system with two 4 or 8 Ohm speakers plus a powered subwoofer.
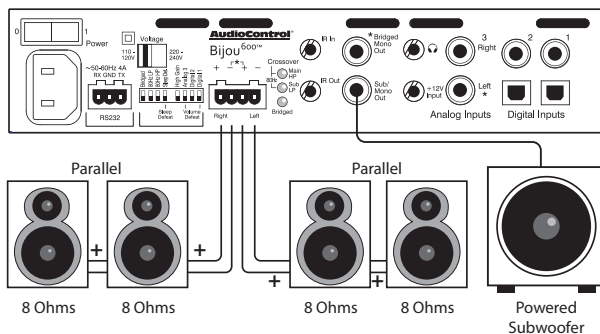
4.1 Speaker Set Up

The standard set-up where four 8 Ohm speakers are connected in parallel to form a 4 Ohm load per channel. (The minimum speaker impedance for this configuration is 8 Ohms.)

Bridged Mono and Powered Subwoofer Speaker Setup

This system shows two Bijou 600 amplifiers used in bridged mono mode to produce 400 Watts per speaker into 8 Ohms. A powered subwoofer is also shown. The Bijou 600 crossover is used to reduce the bass playing in the main speakers (80 Hz HP) and let it play in the powered subwoofer instead (80 Hz LP).

The first Bijou 600 is the **Master** unit where all source connections and volume adjustments are made. The second Bijou 600 is the **Link** unit, and receives the right channel analog line-level signals from the Master unit.

Right channel, line-level, 80 Hz HP

Line Level

LINK Bijou 600
in Bridged Mono

MASTER Bijou 600
in Bridged Mono

Mono line-level 80 Hz LP

Switches ON:
Bridged
Volume Defeat 1,2, and 3
Note: This switch combination also turns off the IR remote control of this unit (except On/Standby)

ON

Sleep Defeat   Volume Defeat

ON

Sleep Defeat   Volume Defeat

Switches ON:
Bridged
80 Hz LP
80 Hz HP

8 Ohms
Minimum

8 Ohms
Minimum

Powered Subwoofer

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Stereo and Mono Passive Subwoofer Speaker Setup

This system shows the first (**Master**) Bijou 600 being used in stereo mode, and the second (**Link**) Bijou 600 being used in bridged mono to power a passive subwoofer. The **Master** Bijou 600 crossover is used to reduce the bass playing in the main speakers and let it play in the subwoofer instead. Adjust the level of the subwoofer by using the AccuBASS control on the **Master** Bijou 600. (The remote will not affect the **Link** Bijou 600.)

Line Level

80 Hz LP

LINK Bijou 600
in Bridged Mono

MASTER Bijou 600
in Stereo

Switches ON:
Bridged
Volume Defeat 1,2, and 3
Note: This switch combination also turns off the IR remote control of this unit (except On/Standby)

8 Ohms

Passive
Subwoofer

Switches ON:
80 Hz LP
80 Hz HP

4 or 8 Ohms

Installation

The Bijou 600 is a compact yet high performance amplifier and audio-phile DAC. As such, it delivers incredible sound performance.

- Care should be taken in finding the best location to place the unit for optimal performance.

- The Bijou 600 loves speakers and can be situated to fit in with any speaker set up from the most powerful free-standing speakers to the smallest desktop configuration.

- As with all products made in the USA by AudioControl, the Bijou 600 should not be deep fried or sautéed!

Placement

This may be as good a time as any to have "the talk" about ventilation. The Bijou 600 features cool-running efficient switch mode power supplies and Class D amplifiers. It is still an amplifier, and therefore requires good ventilation to cool.

- Place the Bijou 600 on a level, firm surface, avoiding direct sun-light and sources of heat and damp.

- Do not place the Bijou 600 on top of another power amplifier or other source of heat.

- Do not place the Bijou 600 in an enclosed space such as a book-case or closed cabinet unless there is good provision for ventila-tion. The Bijou 600 will run warm during normal operation.

- Do not obstruct the ventilation vents on the top panel, back, or sides of the unit. "It likes to breathe."

- Do not place the unit on carpeting, a large sleeping dog or any thick material that could block the vents.

Optional Accessories

The Bijou 600 has various optional accessories available that allow it to be installed in a standard 1U rack, surface mounted, in a wall-box, or on the back of a TV. See page 34 for more details.

RM-209 single rack mount kit - allows one Bijou 600 to be rack mounted (1U, 19 inches wide).

RM-210 dual rack mount kit - allows two Bijou 600s to be rack mounted (1U, 19 inches wide).

RM-211 mounting brackets - two L-brackets allow a Bijou 600 to be wall or surface mounted, or used with the RM212 in-wall box, or RM213 component mount plate.

RM-212 in-wall back box - allows a Bijou 600 to be in-wall mounted. It also requires an RM211 mounting bracket kit.

RM-213 component mount plate - allows a Bijou 600 to be mounted vertically to the back of a TV monitor. It also requires an RM211 mounting bracket kit.

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Cables

We recommend the use of high-quality analog and/or digital cables. All cables should be kept as short as practically possible. Power cabling should be kept as far away as possible from audio cables.

Speakers

The Bijou 600 is designed to work with all 8 Ohm and 4 Ohm speaker setups. The Bijou 600 is versatile and flexible and works with the following speaker installations and more!

- Free-standing speakers

- Invisible speakers – in-wall and in-ceiling

- Extra zone speakers including outdoor

- Televisions and sound bars

- Desktop speakers and gaming speakers

And more……. The Bijou 600 loves speakers and speakers love the Bijou 600! See the next page for more speaker details.

Note: Do not use the Bijou 600 in systems that are "common-grounded," where the negative left and negative right speaker terminals are joined together.

Speaker Connections

Establish a standard connection color code and stick with it. One conductor of the speaker wire is normally marked by a different color (silver versus copper) or there is ribbing on one side. Typically this marked conductor is used for the positive (+) speaker leads. Really good wire has Positive and Negative printed right onto the wire jacket.

Match the polarity markings on the unit with the polarity markings on your speakers.

Speaker and Wiring Impedance

Speakers, like other resistors, if wired in parallel "show" lower values than the individual components. The important thing is to make sure your speakers are 4 Ohms or greater per channel in stereo or 8 Ohms or greater when connected in bridged mono mode.

Hereis an example for calculating speakers wired in parallel:

Calculating Impedance

For two 8 Ohm speakers wired in parallel (pluses connected to pluses) the impedance is $1/8 + 1/8 = 2/8$
Then take the inverse or $8/2 =$ **4 Ω**

Often the real world is more complicated than theory, and for speakers this is the case. An 8 Ohm speaker is not 8 Ohms at all frequencies. Plus passive crossover networks add their own changing conditions. Be aware of speakers that have significant dips from "nominal" values in portions of their frequency range, and speakers that are rated at unusual impedances, for example 3.5 Ohms. The Bijou 600 is tolerant of impedance loads down to 4 Ohms, however, all good designs use some margin of error.

Your choice of speaker wire gauge and the length of the runs, also affects the speaker impedance load presented to the amplifiers. Even fairly short speaker runs can have significant resistance if you use a smaller wire gauge. The downside of this wire resistance is that you waste some part of the total power available to the speakers.

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Front Panel Features
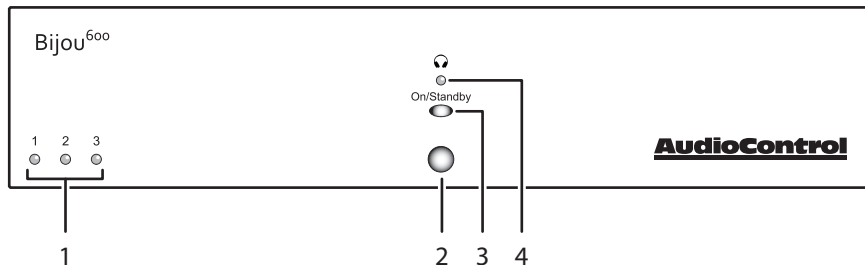
1. **Active Input Indicator** –
   Blue LED 1 – Digital Input 1 is selected
   Blue LED 2 – Digital Input 2 is selected
   Blue LED 3 – Analog Input 3 is selected

   Notes:
   The inputs are selected using the RTR-1 remote control or RS232.
   When the Bijou 600 receives a command from the RTR-1 remote
   control or RS232, the input LED will flash.
   When the Bijou 600 is muted, all the input LEDs will be off.
   When AccuBASS is selected, the input LED will be a brighter blue.

2. **IR Remote Control Window** – This receives IR signals from the
   RTR-1 remote control. Note: Do not block this port, or else the
   remote control will not work. If the unit is hidden out of the line
   of sight, you can use external IR equipment such as receivers and
   transmitters, or use the rear panel IR in and IR out connections.

3. **On/Standby LED** –
   Blue –   Normal Operation
   Dim Red –   Standby Mode
   Bright Red –   Channel Mute on Power Up
   Bright Red 2 -   Amplifier in Protection Mode
   Flashing Red –   Speaker Fault
   Green –   Coffee brewed

4. **Headphone On/Off LED** – This LED indicates when the head-
   phone amplifier is on. The left and right amplifier channels will
   be muted, as will the mono/sub and bridged mono outputs. The
   headphone output is selected using the RTR-1 remote control.

Rear Panel Features
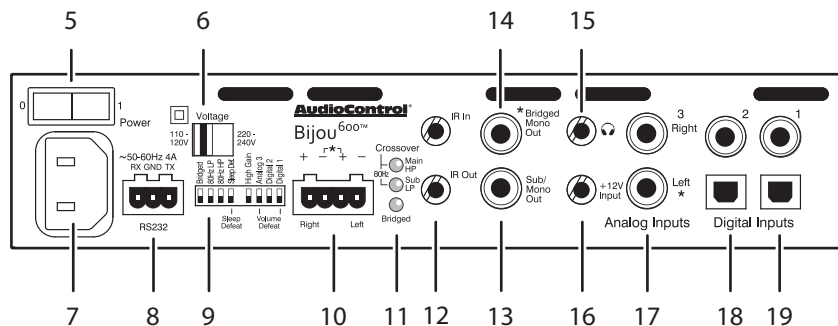
**5.** ⚠ **Power Switch** – In the OFF position, the AC line voltage is disconnected from all internal circuits, and no amount of remote control pressing, input signals playing, RS232 communications, telepathy, or loud yelling will turn it back on. Turn off the power switch when you are not using the amplifier for long periods of time, such as a nice two-week vacation to a golden sandy beach somewhere (sigh), or during lightning storms, electrical power outages, or zombie apocalypse. Keep the amplifier turned off when making connections or when disconnecting. The Bijou 600 can also be used in the ON position, where it will be a lot more useful and fun. Do not turn it on until all connections have been made, and you are sure the voltage selection switch is set to the correct local AC voltage.

6. ⚠ **Voltage Selection Switch** – This slide switch allows you to set the amplifier to your local AC voltage. Always make sure it is in the correct position before connecting the AC power cord, as the incorrect setting will damage the amplifier.

7. ⚠ **AC Input** – This is where you connect the supplied AC power cord. First make sure that the power switch is off, and the voltage selection switch is in the correct position, and then push in the power connector firmly to make a secure connection.

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8. **RS232 Connector** – This 3-pin connection allows for computer control of the amplifier using RS232 communications. The pins are as follows:

> Pin1: RX (RS232 receive)
> Pin 2: Ground
> Pin 3: TX (RS232 transmit)

Further details of this rather splendid and useful feature can be found on our website.

9. **Control Switches of Destiny** – These 8 DIP switches allow you to set up the amplifier just the way you like it. Well, it is not going to put the kettle on, make your morning tea, and then wake you up with soothing waking-up music. That would be your mom.
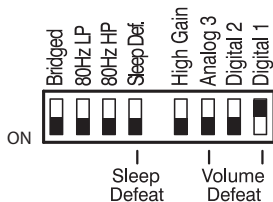
Notes:
Up is OFF, and Down is ON.
Turn OFF the power switch before changing the switches.
Turn down your source's volume before setting Volume Defeat.
Any number of switches can be ON at the same time.
More details are shown on the next page.

Bridged	The amplifier's bridged-mono speaker output will play the left channel, and the bridged-mono RCA connector will send the right channel line-level signal to a second amplifier in bridged mono.
80Hz LP	The RCA sub mono line-level output will play the frequency range 80 Hz and below.
80 Hz HP	The speaker-level outputs will play the frequency range 80 Hz and above.
Sleep Defeat	The amplifier will not automatically go to sleep, even when the input signal drops off to nothing-ness or silent snoozietude.
High Gain	This gives a 10dB boost in the level of the incoming analog signal, useful for quiet or shy sources.
Analog 3	Volume control of analog input 3 is defeated*
Digital 2	Volume control of digital input 2 is defeated*
Digital 1	Volume control of digital input 1 is defeated*

*The volume defeat is useful when you are controlling the volume with another device, such as an MP3 player. In this way, the volume of the amplifier is set to maximum, and you have complete control with just one device.

Turn down your source volume before setting Volume Defeat.

DIP Switch Configuration Note: Switch 'UP' is OFF; Switch 'Down' is ON

DIGITAL 1 VOLUME DEFEAT - This switch should be engaged when it is desirable to control the volume of channel 1 from an external source only, such as the volume control on an iPod, tablet etc. Only the volume control is defeated.

✳ See note in BRIDGED

SLEEP DEFEAT - This prevents the Bijou 600 from automatically going into standby mode, and defeats signal-sensing. Obeys IR and RS232 commands, and the front panel blue LED will remain blue constantly indicating normal operation. For optimal energy savings, this switch should be left in the up (Off) position and the Bijou 600 will detect signal on any of the three inputs and turn on automatically. If no signal is present, the unit will go into standby after 8 minutes.

DIGITAL 2 VOLUME DEFEAT - This switch should be engaged when it is desirable to control the volume of channel 2 from an external source only, such as the volume control on an iPod, tablet etc. Only the volume control is defeated.

✳ See note in BRIDGED

80Hz HP – Internally applies a 80 Hz high pass signal to the left and right speaker-level outputs. Normally used when employing a separate subwoofer where the Bijou 600 plays just the 80 Hz high-pass frequency range in the main speakers. Ideal for sound-bars and subwoofers. The green high pass LED on the rear panel will light when this switch is engaged.

ANALOG 3 VOLUME DEFEAT – This switch should be engaged when it is desirable to control the volume of channel 3 from an external source only, such as the volume control on an iPod, tablet etc. Only the volume control is defeated.

✳ See note in BRIDGED

80Hz LP – Changes the sub/mono output from a full-range summed mono left/right signal to a summed mono 80 Hz, 18 dB per octave, low pass signal. Normally used if a subwoofer does not have a built in crossover. The green low pass LED on the rear panel will light when this switch is engaged.

HIGH GAIN – When this is engaged, the Bijou 600 provides an additional 10dB of gain for use with Analog input 3. This helps analog sources with very low signal output to operate optimally when playing back music with quiet passages. This switch should not be engaged when the Bijou 600 is being used as a 'Link Amplifier'.

BRIDGED – Internally routes the left signal of the selected channel to the speaker outputs, and the right signal of the selected channel to the bridged mono output. The green bridged LED on the rear panel will light when this switch is engaged.

✳ **Note**: For a Bijou 600 to be used as a Link unit, set the 3 volume defeat switches and the bridged switch all ON. In this way, the Link unit is not affected by the remote control. It will only affect the Master unit.

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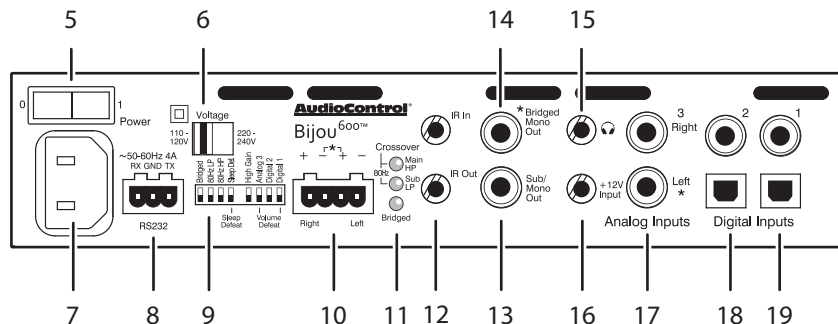
10. Speaker Connector – This is where joy meets world: the speaker-level output of the amplifier connects to the wiring of your speakers. The connection is made using the supplied push-on 4-pin Euroblock connector. Make a note of the polarity markings and make sure they match those of your speakers (positive to positive or red speaker terminal, negative to negative or black speaker terminal). If wired incorrectly, then there will be phase cancellation and disappointing bass performance.

11. Crossover and Bridged LEDs – These three LEDs are on whenever the relevant DIP switches are ON (down). They will help remind you whenever the HP or LP crossover are on, or that the amplifier is in bridged mono operation. They can all be on at the same time. In the night, they secretly communicate your recent playlist with the Altair star system (marketing research department).

12. IR In and IR Out – These 1/8" connectors allow the use of wired Infrared (IR) remote control systems, such as external IR transmitters, controllers, repeaters and receivers. These external systems are useful in situations where the Bijou 600 is mounted out of the RTR-1 remote control's line-of-sight.

13. Sub/Mono Out – This RCA line-level output is most often used to send a mono output to feed either a powered subwoofer or a subwoofer amplifier/passive subwoofer combination. The output is a line-level gently-mono mix of the left and right currently-selected input, and it is affected by the volume level, AccuBass level, and the 80 Hz LP crossover. This output is off when headphones are used.

14. **Bridged Mono Out** – This RCA line-level output is used to send the right channel output to feed the analog input of another Bijou 600 amplifier that is also set in bridged mono mode and is powering your right speaker. The output is a copy of the right channel of the currently-selected input, and it is affected by the volume level, AccuBass level, and the 80 Hz LP crossover. This output is off when headphones are used.

15. **Headphone Out** – This 1/8" TRS stereo connector is used to connect your most excellent pair of headphones. Use the RTR-1 remote control to select the headphone output, and then the headphones will play, the speakers and subwoofer will be muted, and the little blue headphone LED on the front panel will turn on. Before putting on your headphones, make sure that the volume level is adjusted to a low level at first, to protect your hearing.

The headphone output is not affected by the HP or LP crossover switches, it always plays full frequency range.

16. **12V Input** – This 1/8" TS 12 Volt input allows the Bijou 600 to be remotely turned on by a 12 VDC trigger voltage from external equipment. For example, a source unit may have a 12 Volt DC trigger output that will conveniently turn on the Bijou 600 when the source unit is turned on. The unit will stay on as long as 12 VDC is applied.

17. **Analog Inputs 3** – These RCA line-level inputs accept the left and right analog inputs from your source equipment, such as a CD player, DVD player, or MP3 player. If the amplifier is used in bridged mono mode, then just use the Left input only (marked with an asterisk * as a memo of mono mindedness). Use the RTR-1 remote control to select input 3 and adjust its volume etc.

Make sure that you use high-quality connection cables, but not those that need a three-ton press to get on or off. Some need a little twisting action to get on or off, so you might put on some old records and practice swinging them hips.

18. **Digital Input 2** – The RCA input accepts coaxial S/PDIF digital signals from the digital output of your source equipment. Alternatively, you can use the optical input, if you have that option and an optical cable long enough. Do not connect both at the same time. Use the RTR-1 remote control to select input 2 and adjust its volume etc.

The Bijou 600's high-quality digital to analog converter (DAC) converts the incoming stream of digital data into a fine pair of wondrous left and right analog audio signals.

19. **Digital Input 1** – The details, quality, and operation of this input are the same as for Digital Input 2, so use whichever one you like, or use both if you have the source gear. Use the RTR-1 remote control to select input 1 and adjust its volume etc.

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Chapter 5: Features

RTR-1 Remote Control Features
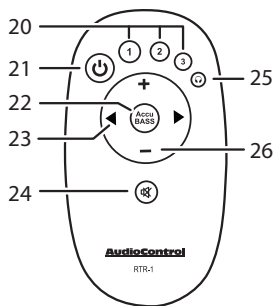
Bijou 600™

20. Input Selection 1, 2, 3 – Press these buttons to select the desired input, either digital inputs 1 or 2, or analog input 3. The Bijou 600 front panel LED will light for the selected input.

21. Power On/Standby – Press this to awake the Bijou 600 from its standby slumbers or (if it is already on), to put it into standby.

In standby, the Bijou 600 is in a low power mode to conserve electrons. In normal operation, it will go into standby if no input signal is sensed for about 8 minutes. If the rear panel sleep defeat switch is on (down) then the Bijou 600 won't go to sleep this way.

If the power switch is off, then the Bijou 600 will not turn on with the remote control.

22. AccuBASS On/Off – Press this to turn the AccuBass splendidness on or off. The front panel input LED of the currently selected input will glow a brighter blue when AccuBASS is engaged.

23. AccuBASS Up/Down – Press these arrows to increase or decrease the level of the AccuBASS effect. Listen for a deeper magic in your bass response and/or subwoofer.

24. Mute – Press this button to mute (or unmute) the output when the mother-in-law phones.

25. Headphones On/Off – Press this to turn on the rear panel headphone output and mute the speakers and any subwoofers. The headphones will not play otherwise. The front panel headphone LED will light when the headphone output is engaged.

26. Volume Up/Down – Press the plus button to turn the volume up, and (hope you see where we are going with this..) press the minus button to turn it down. Use this control wisely for the good of mankind, the neighbors, domestic harmony and bliss.

Battery Compartment – The battery compartment on the back is opened by pressing and sliding off the small cover. Remove a small insulating strip from below the battery before the first use. Always replace the battery with the exact same type (3V Lithium, CR2032), and with the positive side (+) facing outwards.

Note – The remote control is an important part of your audio system, and without it, well, what we mean is...take good care of it. Glue it to a gold-painted brick on top of the coffee table.

Additional Features and Support

Additional information on the features below, as well as great support and hints and tips on the Bijou 600 can be found on our website: www.audiocontrol.com (navigate to the download section of the Bijou 600 product page).

Alternatively, email our team at sound.great@audiocontrol.com for further information or to have a chat over a cup of coffee!

RS232

AudioControl has created a full set of RS232 codes for use by installers and programmers, and these are available on our website.

IR Codes for Remote Control

AudioControl has also created a full set of IR codes for use by installers and programmers, and these are available on our website. These codes are ideal for use with a programmable IR Remote Control.

IR Out / IR In

The rear panel IR Out & IR In connectors allow the Bijou 600 to be integrated with a 3rd party control system, or to be installed out of the line of sight.

Sleep Mode

The unit will go into standby if an audio signal is not detected after approximately 8 minutes. It will come back on when an audio signal is detected. Additional information on the sleep mode and the variety of options this allows can be found on our website.

12V Trigger Input

The rear panel 12V Trigger input allows the Bijou 600 to be turned on with a +12V DC signal. It will remain on as long as the 12V signal is present.

Crossover

The crossover feature allows for independent selection of 80 Hz High Pass for the main speaker outputs and 80 Hz Low Pass for the Mono/Sub output. The crossover sections are 3rd order 18 dB/octave Butterworth (those are the crossovers that taste most like maple syrup). Both are 80 Hz, one LP and one HP, meant to complement each other well with a seamless join, and never forget their crossover anniversary.

Headphones

The Bijou 600 includes a handy headphone output on the rear panel. When the headphone input is selected with the RTR-1 remote control, the front panel headphone LED will light; the main speaker outputs and the bridged mono and sub/mono outputs will all be muted.

Please note that the headphone jack does not sense the headphones being plugged in, allowing you to keep your headphones or wire-less headphone transmitter connected at all times. Whenever the headphones are needed, select them using the remote control or via a command from third party control systems etc.

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Adjusting the AccuBASS

AccuBASS Bass Level Adjustment

AudioControl's AccuBASS circuit is designed to help recover the bass that goes missing in compressed music files, or when volume is increased and the bass frequencies roll away. The AccuBASS is adjusted using the RTR-1 remote control to give your system great bass at all volume levels, and add back in an incredible-sounding richness to your music.

1. Engage AccuBASS by pressing the AccuBASS button on the RTR-1 remote control. The currently selected input LED on the Bijou 600 front panel will glow brighter when AccuBASS is engaged for that input.

2. Start playing some dynamic bass-rich music, and adjust the amount of AccuBASS using the left and right arrow symbols to adjust and maintain bass dynamics in your music.

3. You will hear bass and richness being restored to the music as you increase the level of AccuBASS, as well as hearing and experiencing the richness of the audio steadily improve as bass frequencies are restored.

4. Continue to fine tune the AccuBASS level to adjust to your personal preferences.

5. As you adjust the AccuBASS level for each input 1, 2, and 3, the level will be memorized, and automatically recalled each time that input is selected.

6. You're done! You will have smooth, seamless bass and richness to your music and you can even adjust the AccuBass level to give a little (or a lot!) of extra boost to the bass if you like more bass in your music. It's your music your way and the way the artist intended it to be heard!

Troubleshooting

Many problems can be eliminated by re-checking the wiring and settings of the unit. If a problem cannot be solved using the guide below, please call the AudioControl team for further assistance, or e-mail us at sound.great@audiocontrol.com

1. **No Sound**

   a. Check the unit is plugged in and the front panel On/Standby LED is blue. When it is dim red, the unit is in standby mode, and if it is bright red, it is in protection mode.

   b. Check all cables are securely connected.

   c. Check the source unit is on and playing.

   d. Check the speaker connections are secure, and not shorted together by loose wire strands or a puddle the cat left behind.

   e. Check the correct source input has been selected (1,2,3 LED).

   f. Check that the front panel headphone LED is off. (If it is on, then the amplifier is muted, and only the headphones will play.)

2. **In Protection**

   The amplifier in the Bijou 600 will protect itself if it experiences an unusually large power surge, overheats, or experiences a short in the speaker wires or the speakers. The protection circuit helps prevent damage to the Bijou 600 and speakers. Turn down the volume and the unit will normally resume playing after a short period of time to cool down. A flashing red LED on the front of the unit indicates that the unit is operating at its 'current limit' and in danger of going into protection. In this situation you may have too many speakers attached, you are driving the amplifier too hard, or the speaker impedance is below 4 Ohms and you may need to reduce the load. Check the speaker wiring and speakers for any short circuits. Make sure that there is plenty of ventilation available.

3. **Signal Sensing**

   If the unit does not sense an input signal, it will switch to standby mode after approximately 8 minutes of silence. It will turn back on again as soon as an input signal is detected.

   During quiet passages, or lengthy silent spaces in music or a TV program, the Bijou 600 may believe that the audio signal has stopped and may go into standby mode.

More Troubleshooting

   For additional troubleshooting, support and technical advice, please visit our website at www.audiocontrol.com and navigate to the Bijou 600 product page

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Specifications

As technology advances, AudioControl reserves the right to continuously change our specifications, like our Pacific Northwest weather, although we are working on changing that as well.

Digital Inputs . . . . 2 x Optical Toslink and 2 x Coax SPDIF
Analog Inputs. . . . . Stereo L/R RCA unbalanced
Speaker Level Outputs . . . . 4-Pin Euroblock connector
RS232 . . . . 3-Pin Euroblock connector
Sub/Mono Output . . . . Single RCA unbalanced
Bridged Mono Output . . . . Single RCA unbalanced
Headphone Output . . . . 1/8"TRS stereo
Power Output. . . . . 100 Watts per channel into 8 Ohms
. . . . 200 Watts per channel into 4 Ohms
. . . . 400 Watts into 8 Ohms (mono)
Minimum Speaker Load . . . . 4 Ohms (stereo), 8 Ohms (mono)
Power Consumption, Typical Listening. . . . . .40 Watts
Power Consumption, Maximum . . . . 520 Watts
AC Line Voltage . . . . 100-120 VAC/200-240 VAC Switchable
Signal to Noise Ratio . . . . <95dB
Total Harmonic Distortion 0.09%
Minimum Voltage to Drive Max Power
RCA Analog inputs: . . . . 310 mV (Hi Gain)
. . . . 1 Volt (Lo Gain)
Signal Sense Trigger Minimum
RCA Analog Inputs . . . . 5 mV
Digital Inputs . . . . Audio

Bass Adjustment . . . . .AudioControl AccuBASS™
Digital Analog Converter (DAC). . . . . Wolfson High Performance
. . . . 32-192 kHz, 16/24 Bit
Weight . . . . 5 lbs
Dimensions . . . . 8.5"W x 7.51"D x 1.73"H
Remote Control Battery . . . . 3V Lithium CR2032
AudioControl Power Rating . . . . .Awesome!
Country of Origin . . . . USA Engineered and Assembled
. . . . in the great Pacific Northwest Rainforest
Limited Warranty . . . . 5 Years

For additional specifications, technical details, and downloads, please visit **www.audiocontrol.com**
This manual was written, designed, printed and carefully placed right side up into the box in the USA on a wet and rainy day by a team of music lovers dedicated to making good sound great.

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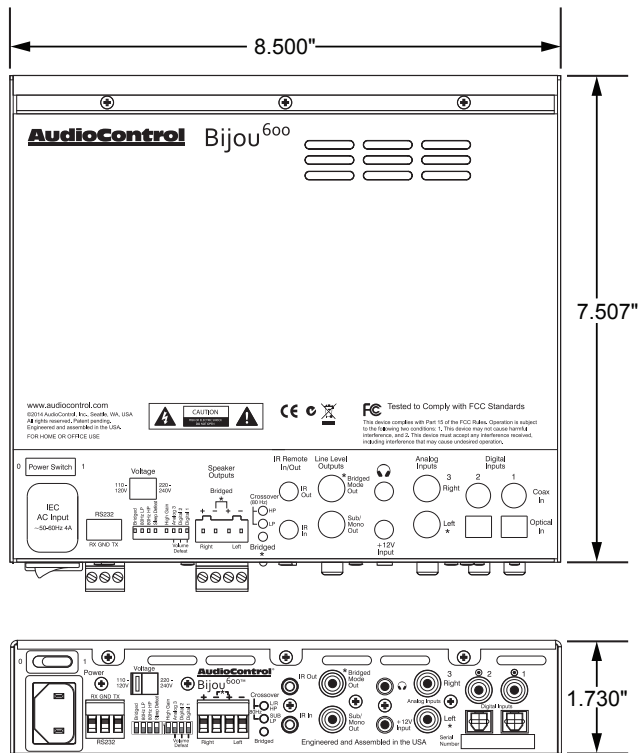
Additional copies of this installation manual are available on our website, or by contacting AudioControl.

Block Diagram
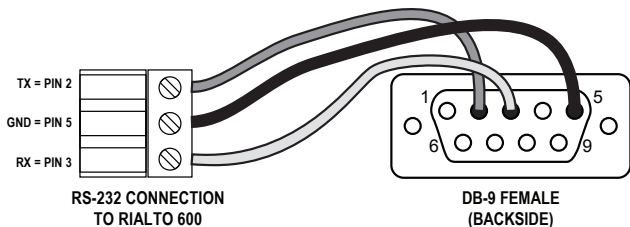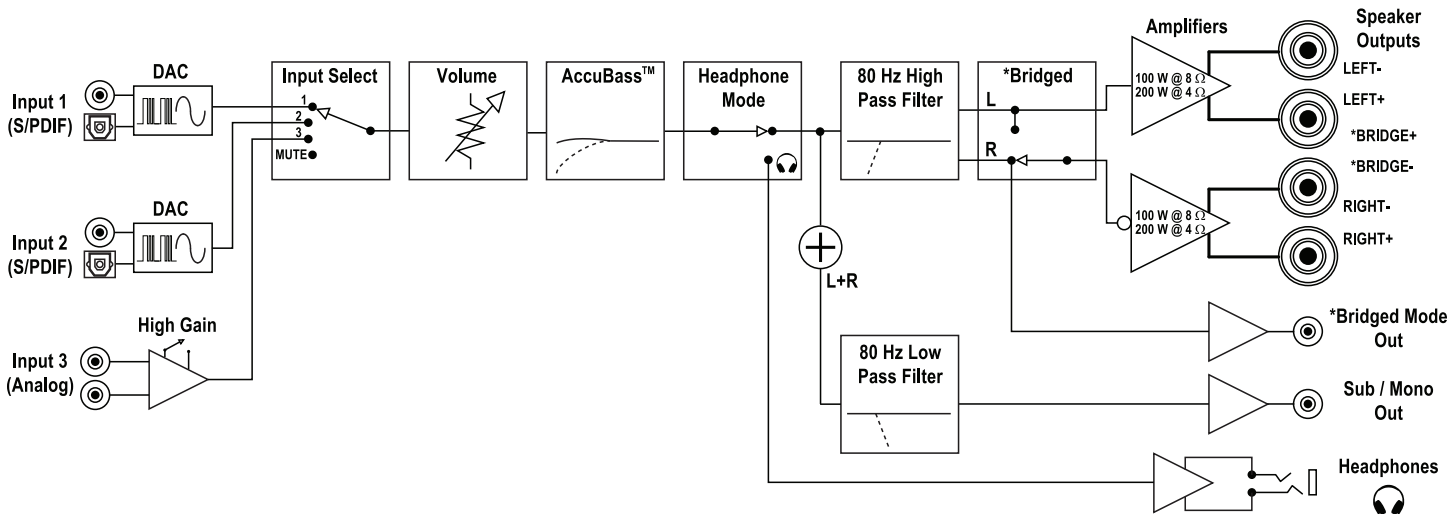
This is a handy-dandy wiring diagram of a common DB-9 connector to a 3-pin Euroblock connector for RS232 communications and control

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Dimensions

Service

AudioControl has a reputation for providing some of the best support and service in our industry. Our technical team takes pride in ensuring we respond to any customer needs, by providing support through our website and live on the phone from our base here in Seattle, USA.

If the unit needs service, first contact your local dealer or international distributor for advice. You can also contact our tech support team either by email or phone from 8am-5pm Pacific Standard Time (PST). We will verify if there is anything that you can correct yourself.

If we ask you to return the unit, please include the following items:

1. A copy of your proof of purchase. No originals please. We cannot guarantee returning them to you.

2. A brief explanation of the trouble you are having with the unit. (You'd be surprised how many people forget this.) If you can supply a really detailed description of the problem, this would be so much better, and our service technicians may add you to their Christmas Card list. Please include any notes about the system and other components you are using. Is it an intermittent problem, or all the time?

3. A return street address. (No PO Boxes, please).

4. A daytime phone number in case our technicians have a question about the problem you are having, or if they are just feeling lonely.

5. Package the unit in the original packaging if you still have it, and if the children have not used it for art supplies or an ant farm. Use great care and plenty of good packing materials to protect the unit and prevent it from moving about inside the box. Do not use loose materials like packing peanuts or real peanuts, $5 notes etc.

You are responsible for the freight charges to us, but we'll pay the return freight back as long as the unit is under warranty. We match whatever shipping method you use to send it to us, so if you return the unit overnight freight, we send it back overnight. We recommend United Parcel Service (UPS) for most shipments.

Repair service is available at:

Attention: Service Department

22410 70th Avenue West,

Mountlake Terrace,

WA 98043 USA

Phone 425-775-8461

FAX 425-778-3166

e-mail: sound.great@audiocontrol.com

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The Warranty

People are confused by warranties! Lots of fine print. Months of waiting around. Well, fear no more AudioControl is here. Our warranty is designed to make you rave about AudioControl. It's a warranty that looks out for our customers, plus helps you resist the temptation to have your friend, "who is good with electronics", try to repair your AudioControl product. So go ahead, read this warranty, then register your AudioControl product at www.audiocontrol.com/product-registration.

Our warranty has conditional conditions! "Conditional" doesn't mean anything ominous. The Federal Trade Commission tells all manufacturers to use the term to indicate that certain conditions have to be met before they'll honor the warranty. If you meet all of these conditions, AudioControl will, at its discretion, repair or replace any AudioControl products that exhibit defects in materials and/or workmanship during the warranty on your product for five (5) years from the date you bought it, and we will fix or replace it, at our option, during that time.

Here are the conditional conditions:

1. You must fully register your purchase within 15 days of the purchase date by going to the AudioControl product registration page at www.audiocontrol.com/product-registration. Failure to register your product will negate the warranty.

2. You need to hold on to your sales receipt! All warranty service requires original sales receipt documentation. The warranty only applies to the original purchaser from an authorized AudioControl dealer. Note: Products purchased from unauthorized dealers are not covered under warranty.

3. If an authorized AudioControl dealer installs your AudioControl product, the warranty is five years, otherwise the warranty is limited to one year.

4. Our warranty covers AudioControl products that have been installed according to the instructions in the owner's manual.

5. You cannot let anybody who isn't: (A) the AudioControl factory; or (B) somebody authorized in writing by AudioControl service your AudioControl product. If anyone other than (A), or (B) messes with your AudioControl product, the warranty is void.

6. The warranty is void if the serial number is altered, defaced or removed, or if your product has been used improperly. Now that may sound like a big loophole, but here is what we mean by this: Unwarranted abuse is: (A) physical damage (don't use your product to level your dining room table); (B) improper connections (120 volts into the RCA jacks can fry the poor thing); (C) sadistic things! This is the best product we know how to build, but for example if you mount it to the front bumper of your car, drop it over the Niagara Falls or use it for Clay Pigeon shooting practice, something will go wrong.
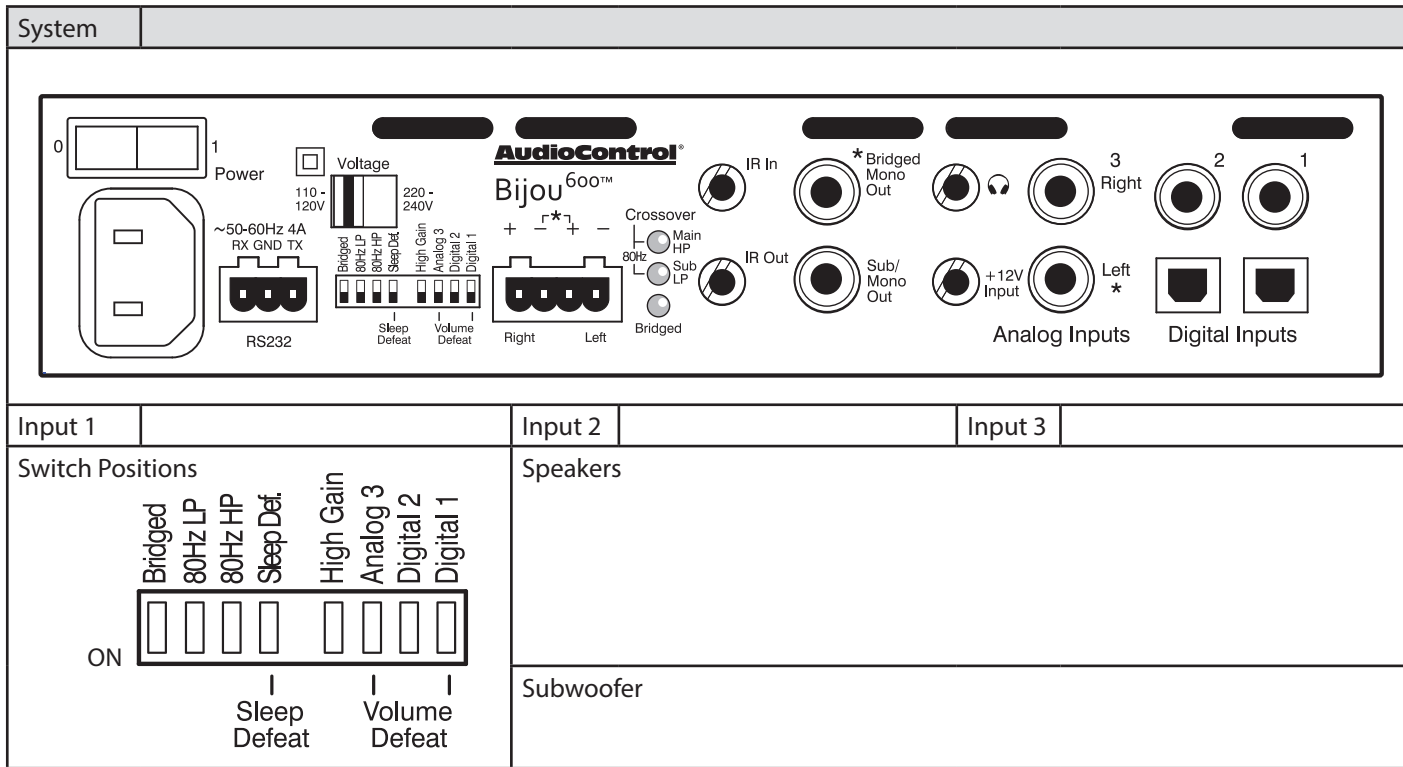
Assuming you conform to 1 through 6, and it really isn't all that hard to do, we get the option of fixing your product or replacing it with a new one at our discretion.
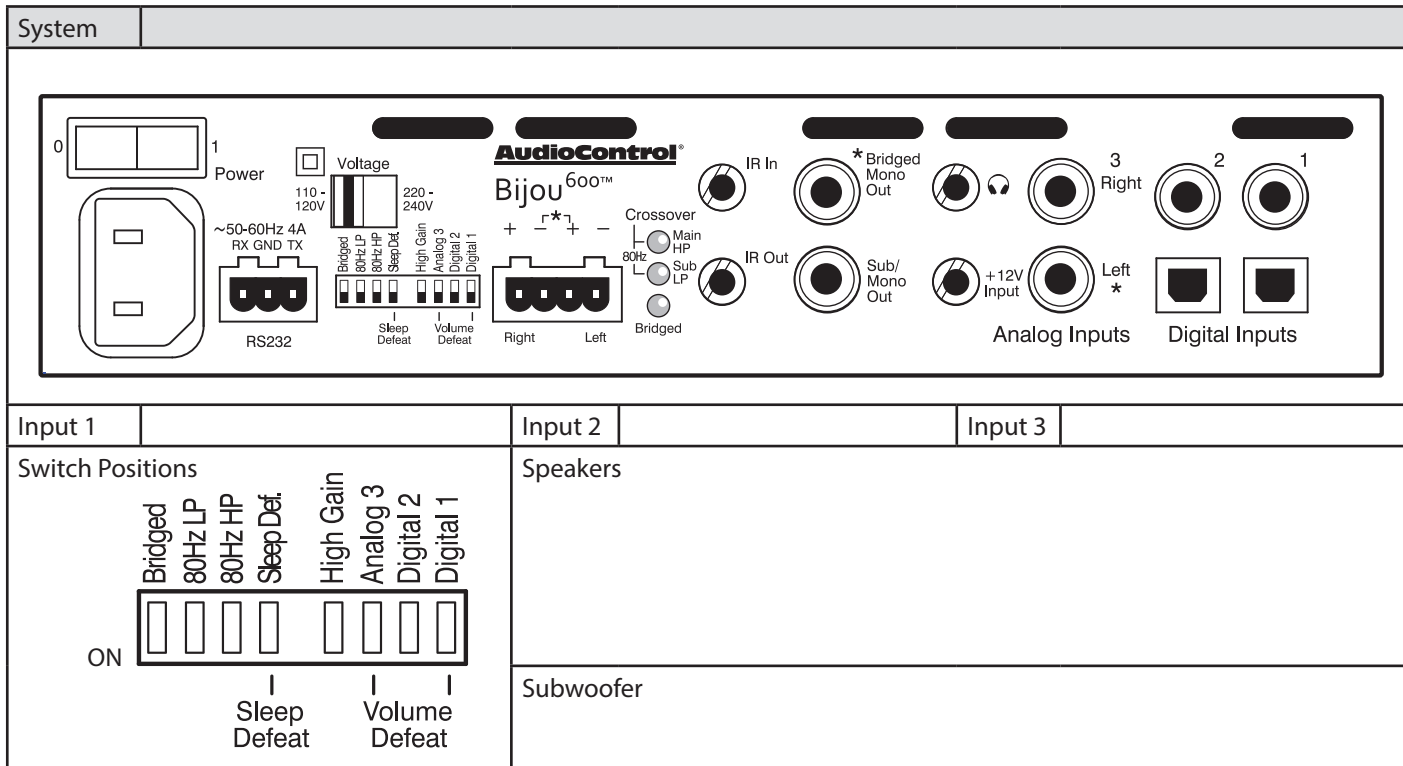
In the event that your product is out of warranty or not covered under our warranty you may request to have any damage repaired at our normal "Out of Warranty" repair cost.

Legalese Section

This is the only warranty issued by AudioControl. This warranty gives you specific legal rights, and you may also have rights that vary from state to state. Promises of how well your AudioControl product will work are not implied by this warranty. Other than what we've said we'll do in this warranty, we have no obligation, express or implied. We make no warranty of merchantability or fitness for any particular purpose. Also neither we nor anyone else who has been involved in the development or manufacture of the unit will have any liability of any incidental, consequential, special or punitive damages, including but not limited to any lost profits or damage to other parts of your system by hooking up to the unit (whether the claim is one for breach of warranty, negligence of other tort, or any other kind of claim). Some states do not allow limitations of consequential damages.
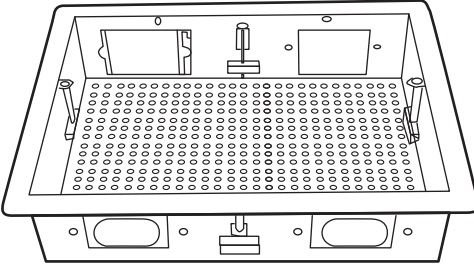
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Favorite Settings

System	

Input 1		Input 2		Input 3	
Switch Positions		Speakers			

Bridged · 80Hz LP · 80Hz HP · Sleep Def. · High Gain · Analog 3 · Digital 2 · Digital 1

ON

Sleep Defeat | Volume Defeat

Subwoofer

System

Input 1		Input 2	Input 3

Switch Positions

ON

Sleep Defeat   Volume Defeat

Speakers

Subwoofer

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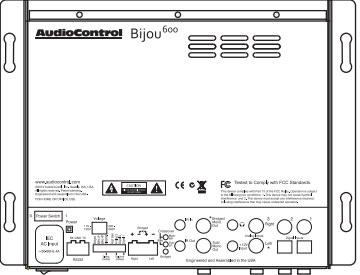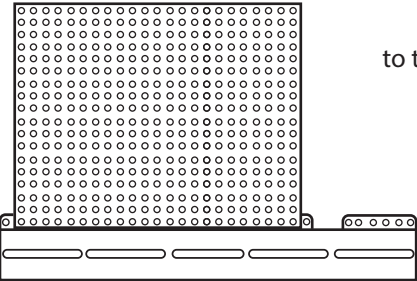
Optional Installation Accessories

These optional accessories help to mount the Bijou 600 in a wide range of installation options.
They come with all required screws, and the rack mount kits come with rack mount screws.
Please contact our website for more details, prices, and ordering instructions.

RM-209	Single Rack Mount Kit	Allows one Bijou 600 to be rack mounted (1U, 19 inches wide)

RM-210	Dual Rack Mount Kit	Allows two Bijou 600s to be rack mounted (1U, 19 inches wide)

RM-212 In-Wall Back Box		RM-211 Mounting Brackets	
	Allows a Bijou 600 to be in-wall mounted. It requires an RM-211 mounting bracket kit, sold separately.		Two L-brackets allow a Bijou 600 to be wall or surface mounted, or used with the RM-212 in-wall box, or RM-213 component mount plate
RM-213 Component Mount Plate			
	Allows a Bijou 600 to be mounted vertically to the back of a TV monitor. It requires an RM-211 mounting bracket kit, sold separately.		

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Begin the Bijou!