AudioControl®

THE BIJOU SERIES 2100, 3100, 5100D

REDEFINING POWER PERFORMANCE IN MODERN AUDIO INSTALLATIONS

The culmination of 45 years of American audio engineering innovation, AudioControl Bijou Series amplifiers are built and coded from the ground up to deliver robust power, superior audio quality, and HDMI eARC connectivity in a sleek, space-saving footprint.

Engineered for professional AV installers, these compact, high-performance GaN-based integrated amplifiers are available in three models: THE BIJOU 2100 2.1-CHANNEL AMPLIFIER, THE BIJOU 3100 3.1-CHANNEL AMPLIFIER, AND THE BIJOU 5100 5.1-CHANNEL AMPLIFIER WITH DANTE NETWORKING.

Making Good Sound Great™

BIJOU 2100

Compact 2.1 Channel High-Power Integrated Amplifier with eARC and GaN Technology

ACP-BIJOU-2100

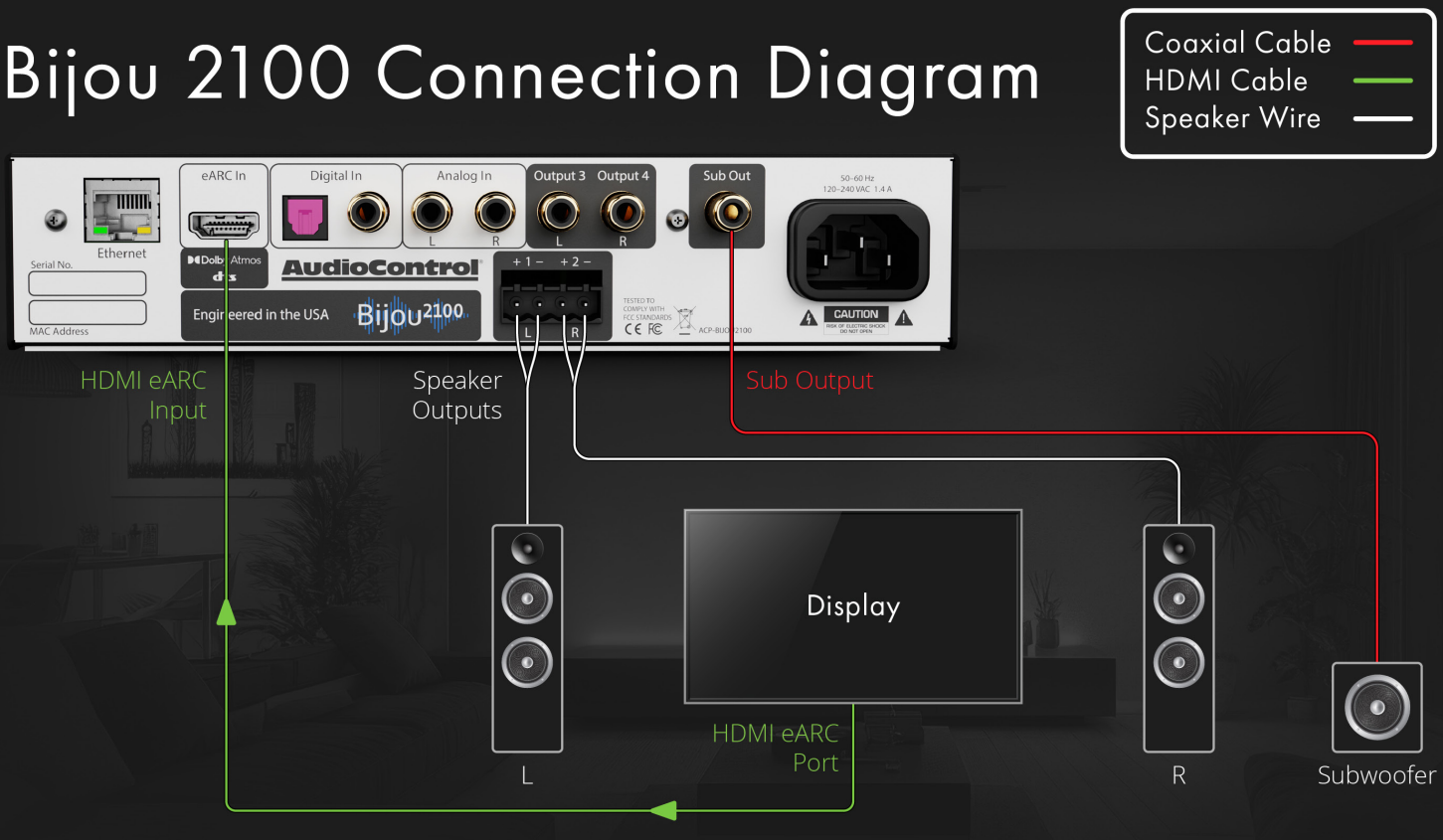
AudioControl's Bijou 2100 stereo-integrated amplifier presents new approaches to localized A/V scenarios. Incorporating advantages gained by using energy-efficient GaN semiconductor technology, clever internal parts layout that facilitates cool-running thermal convection, an RCA single-ended subwoofer output, plus video interface features including an HDMI eARC input for immersive codec audio playback of video content, the Bijou 2100 offers endless application opportunities. A signal-sensing TOSLINK/Coaxial digital input is complemented by an analog stereo RCA single-ended input and corresponding Preamp analog output. A 4-pin Euroblock connector provides loudspeaker connectivity.

The GaN semiconductor output stage generates a minimum of 100 watts into 8 ohms, doubling output to 200 watts into 4 ohms, both channels driven. With inherently faster switching speeds, GaN devices maintain linearity, accurately tracking the input audio waveform and regulating output voltage with a level of precision that is simply impossible by traditional Class-D silicon MOSFET designs, ensuring unparalleled fidelity to the source. The Bijou 2100 is compatible with any loudspeaker system matching its power/impedance ratings.

The Bijou 2100 can elegantly function as a three-source, two-channel, standalone integrated stereo amplifier with line-level subwoofer output. It is an ideal centerpiece for a small, audio-centric music system with eARC available for occasional video soundtrack playback. The RCA single-ended outputs are GUI-configurable and can be assigned to playback downmixed eARC audio while the powered outputs continue reproducing the original surround format. This is perfect for private listening through a wireless headphone interface, a Bluetooth adapter, or house-wide distribution when connected to an additional multi-zone amplifier.

The superb onboard DAC is perfect for decoding digital sources, such as streaming music players. Analog sources, like a newly acquired turntable equipped with an internal phono preamp, shine as well. Audio fidelity produced by the Bijou 2100's GaN-based amplifier stage rivals that of integrated amplifiers priced substantially higher. Its cool-to-the-touch compact footprint enables the Bijou 2100 to be concealed behind flat-panel video displays when operation in stealth mode is desired.

Bijou 2100 Connection Diagram



FEATURES

- **Next-generation GaN Semiconductor Amplification Technology**
  Bijou 2100's Class-D GaN amplification runs cool to the touch, enabling installation otherwise limited by traditional amplifier designs. GaN-based amplifier topologies achieve power conversion efficiencies in the 95% to 99% range through higher frequency fast switching speeds and lower on-resistance, which reduces conduction loss and lowers thermal temperatures, allowing for higher output power.

- **Compact Size**
  GaN implementation requires less circuit board real estate and no ancillary device components to govern thermal convection, resulting in cool-running smaller chassis dimensions with more placement options.

- **HDMI eARC Input**
  Video soundtracks from connected devices or internal streaming services feature immersive codecs like Dolby Atmos, or DTS surround audio. Before HDMI 2.1b, playback of these dynamic audio formats was often riddled with discerning lip sync issues as the display was last to receive the signal. eARC simplifies this process with a single HDMI cable. Automatic lip sync is mandatory for all eARC-equipped devices. It uses a dedicated audio channel via the HDMI cable for discovery, control functions, and precise audio and video alignment. A unique eARC implementation for the Bijou Series enables GUI-assignable downmixing at the RCA outputs, enabling wireless headphone interfaces or Bluetooth adapters to provide private playback options.

- **Web Configurable and IP-, IR-Controllable**
  AudioControl provides a programmer-friendly API to integrate the Bijou 2100 into any popular automation ecosystem. Setup configuration is intuitive and fast via the web interface. An included remote enables stand-alone IR control.

SPECIFICATIONS BIJOU 2100

INPUTS	
eARC Inputs	1 Audio-Only HDMI Input
Digital Inputs	1 Optical TOSLINK 1 Coax S/PDIF
Analog Inputs	Stereo L/R RCA single-ended
Analog Input Impedance	47 kOhms
Analog Input Sensitivity	2 Vrms
OUTPUTS	
Preamp Outputs	2 RCA single-ended
Sub Output	1 RCA single-ended
Speaker Level Outputs	2 outputs 4-pin Euroblock connector
Power Output	100W at 8 ohms 200W at 4 ohms
AUDIO	
Minimum Speaker Load	4 ohms
Frequency Range	20Hz to 20kHz
Total Harmonic Distortion	0.15%
DAC	48 kHz/24-bit
POWER	
Input Voltage	110 - 240 VAC
Power Consumption	
Standby	3 W
Typical loud listening (1/8th power)	125 W
Maximum	700 W
BTU/hr	
Standby	10 BTU/hr
Typical loud listening (1/8th power)	340 BTU/hr
Maximum	2046 BTU/hr
DIMENSIONS	
Height	1.7 in (43.9 mm)
Width	8.3 in (211.3 mm)
Depth	11.9 in (302.2 mm)
Weight	6 lbs. (2.7 kg)
Rack Space	0.5 RU

BIJOU 3100

Compact 3.1 Channel High-Power Integrated Amplifier with eARC and GaN Technology

ACP-BIJOU-3100

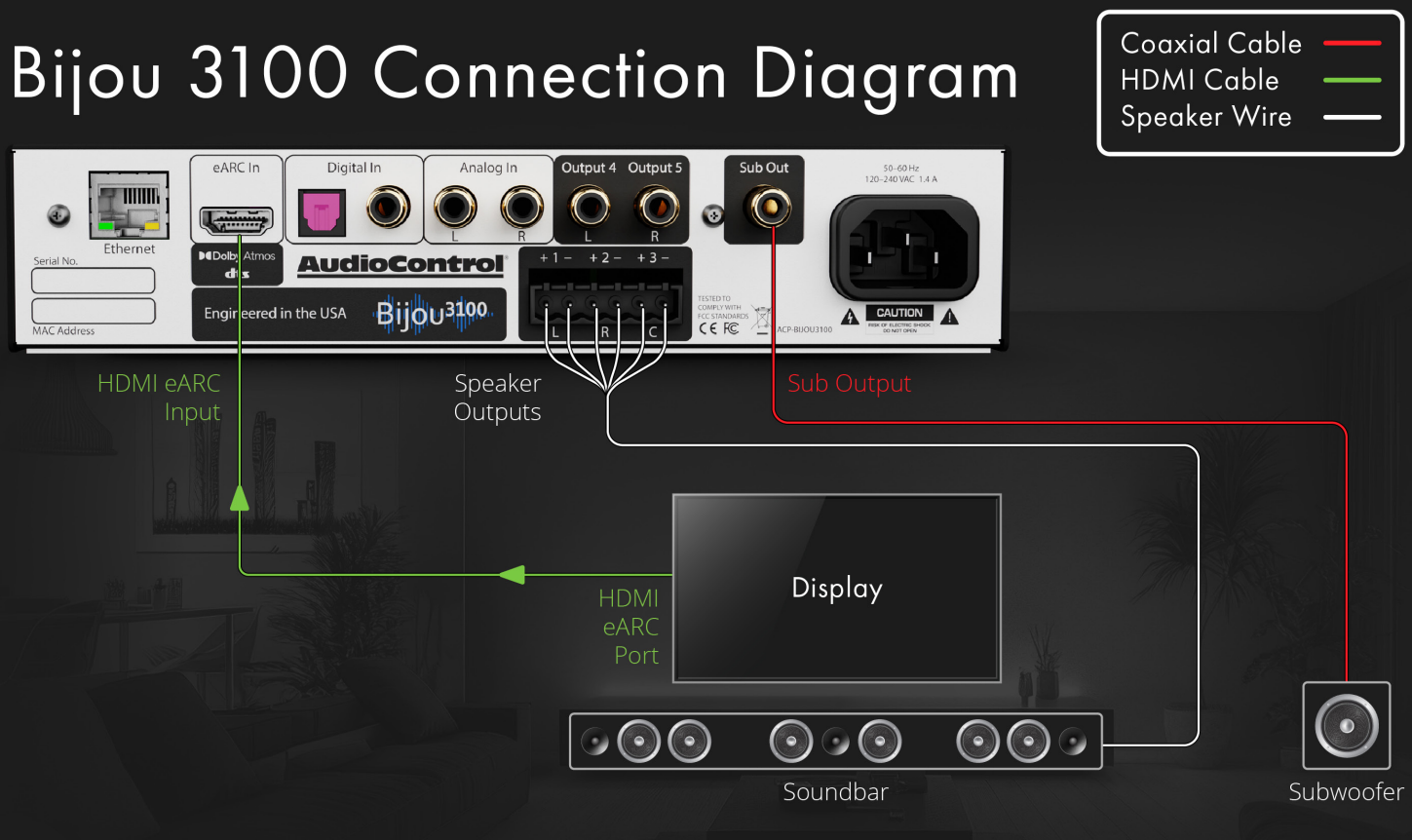
Bijou 3100 is a compact, 3.1-channel, high-powered integrated amplifier for professional installations, delivering 100W per channel at 8 ohms. Featuring eARC decoding and GaN technology, it ensures the highest-quality audio and supports Dolby Atmos and DTS surround. Versatile connectivity options and IP control let installers deliver exceptional AV experiences in residential and light commercial settings.

The Bijou 3100 is comfortable as the centerpiece in a local, stand-alone three-source system comprising, for example, an eARC-capable video display, an analog onboard phono preamp-equipped turntable, and a digital source such as a streaming music player. Digital conversion is accomplished by a high-quality internal 384 kHz/ 32-bit DAC with a 106 dB signal-to-noise ratio and a remarkable Total Harmonic Distortion + Noise (THD+N) rating of 0.0025%. Add a pair of loudspeakers, a center channel, and a powered subwoofer for an easy-to-operate, ultra-dynamic music or video audio playback system. The RCA single-ended outputs are GUI-configurable and can be assigned to playback downmixed eARC audio while the powered outputs continue reproducing the original surround format. This is perfect for private listening through a wireless headphone interface, a Bluetooth adapter, or even multizone house-wide distribution.

The Bijou 3100 may feel most at home conveniently mounted unseen behind flat panel TVs, now stretching to a massive 115 inches, or micro-LED walls, which are gaining popularity in select luxe residences. Behemoth TVs beckon the senses by their sheer daunting size, only to underwhelm with lackluster audio. Augment a big image with a bigger sound, courtesy of the high-performance Bijou 3100. An intuitive, programmer-friendly Web-based GUI enables fast and easy customization to interface the Bijou 3100 with all popular third-party over-control systems.

The Bijou 3100 ups the channel ante to perfectly complement high-end, power-hungry passive soundbars. Left, Center, and Right game-changing GaN-fueled channels each punch well above their weight class, delivering 100 uncompressed pristine watts or more to launch the latest box office action soundtrack directly through to the living room's back wall. A line-level subwoofer output enhances TV viewing, while the automaton-friendly and web-configurable Bijou 3100 integrates seamlessly into any popular automation ecosystem.

Bijou 3100 Connection Diagram



FEATURES

- **Next-generation GaN Semiconductor Amplification Technology**
  The Bijou 3100 Class-D GaN amplification runs cool to the touch, enabling installation otherwise limited by traditional amplifier designs. GaN-based amplifier topologies achieve power conversion efficiencies in the 95% to 99% range, allowing higher output power in a more compact chassis size.

- **Compact Size**
  GaN implementation requires less circuit board real estate and no ancillary device components to govern thermal convection, resulting in cool-running smaller chassis dimensions with more placement options.

- **HDMI eARC Input**
  Video soundtracks from connected devices or internal streaming services feature immersive codecs like Dolby Atmos, or DTS surround audio. A unique eARC implementation for the Bijou Series enables GUI-assignable downmixing at the RCA outputs, enabling wireless headphone interfaces or Bluetooth adapters to provide private playback options. At the same time, original surround decoding continues at the powered speaker and subwoofer outputs.

- **Web Configurable and IP-, IR-Controllable**
  AudioControl provides a programmer-friendly API to integrate the Bijou 3100 into any popular automation ecosystem. Setup configuration is intuitive and fast via the web interface. An included remote enables stand-alone IR control.

SPECIFICATIONS BIJOU 3100

INPUTS	
eARC Inputs	1 Audio-Only HDMI Input
Digital Inputs	1 Optical TOSLINK 1 Coax S/PDIF
Analog Inputs	Stereo L/R RCA single-ended
Analog Input Impedance	47 kOhms
Analog Input Sensitivity	2 Vrms
OUTPUTS	
Preamp Outputs	2 RCA single-ended
Sub Output	1 RCA single-ended
Speaker Level Outputs	3 outputs 6-pin Euroblock connector
Power Output	100W at 8 ohms 200W at 4 ohms
AUDIO	
Minimum Speaker Load	4 ohms
Frequency Range	20Hz to 20kHz
Total Harmonic Distortion	0.15%
DAC	48 kHz/24-bit
POWER	
Input Voltage	110 - 240 VAC
Power Consumption	
Standby	3 W
Typical loud listening (1/8th power)	125 W
Maximum	700 W
BTU/hr	
Standby	10 BTU/hr
Typical loud listening (1/8th power)	340 BTU/hr
Maximum	2046 BTU/hr
DIMENSIONS	
Height	1.7 in (43.9 mm)
Width	8.3 in (211.3 mm)
Depth	11.9 in (302.2 mm)
Weight	6 lbs. (2.7 kg)
Rack Space	0.5 RU

BIJOU 5100D

Compact 5.1 Channel High-Power Integrated Amplifier with eARC, GaN Technology, and Dante Audio

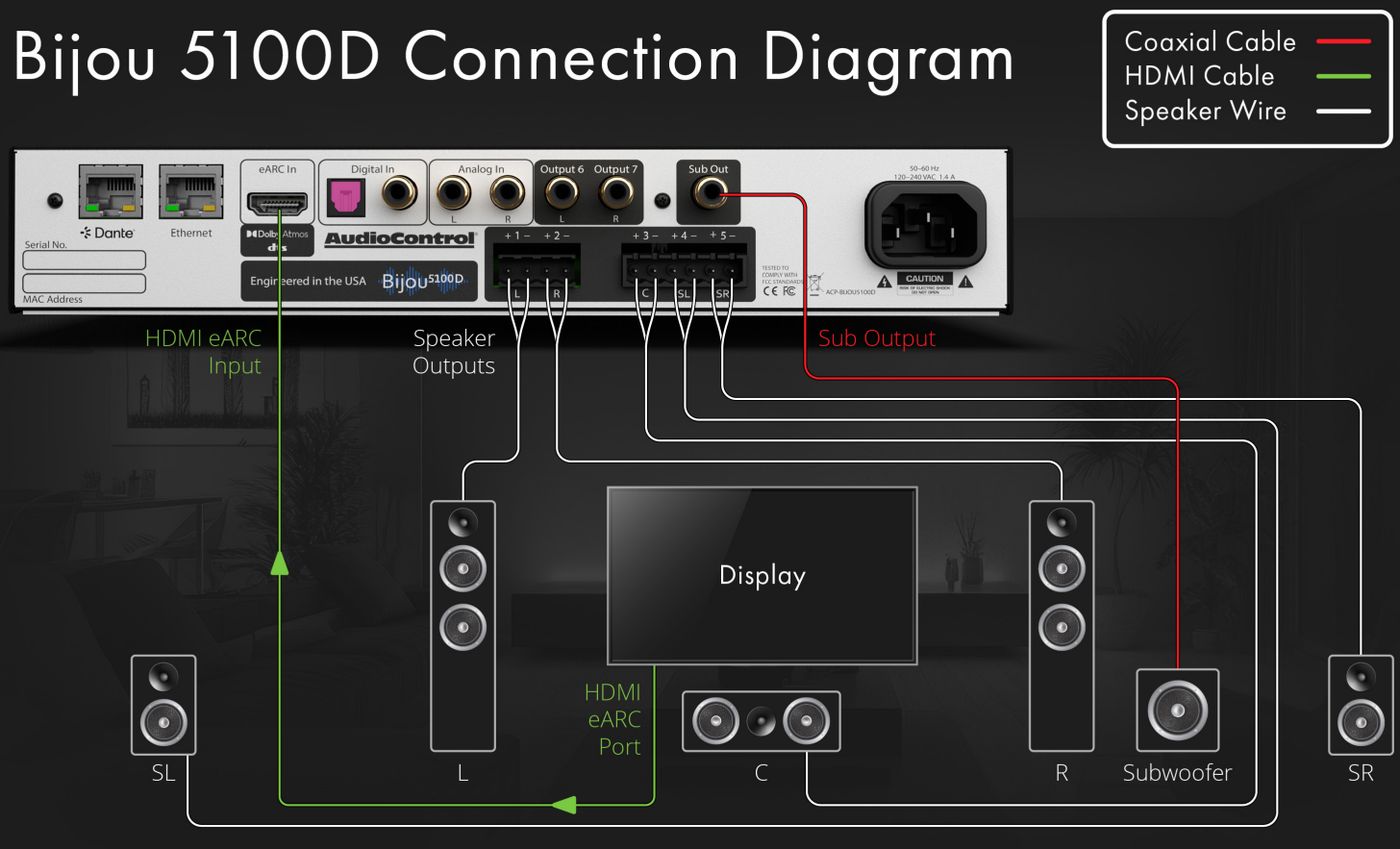
ACP-BIJOU-5100D

The Bijou 5100D leads the Bijou Series range and features Dante audio support as its cherry on top. Five GaN semiconductor channels turbocharge the 5100D into a mini home theater powerhouse. All Bijou Series models decode Dolby Atmos and DTS 5.1 surround modes through the HDMI eARC input, with the 5100D having onboard power for surround channels. Dante audio creates a fourth input, fetching any audio source from a Dante network, providing the Bijou 5100D with uncompressed, near-zero latency multi-room capabilities. Unlike traditional AVRs, the Bijou 5100D can be discretely installed behind large flat-panel displays.

The Bijou 5100D is comfortable as a light-duty, powered five-channel home theater surround controller in a local, stand-alone four-source system comprising, for example, an eARC-capable video display, an analog onboard phono preamp-equipped turntable, a digital source such as a streaming music player, and streamed sources available from a connected Dante network. Digital conversion is accomplished by a high-quality internal 384 kHz/ 32-bit DAC with a 106 dB signal-to-noise ratio and a remarkable Total Harmonic Distortion + Noise (THD+N) rating of 0.0025%. Add main and surround loudspeakers, a center channel, and a powered subwoofer connected to the line-level Sub Out for an easy-to-operate, ultra-dynamic music or powerful home theater audio playback system. The RCA single-ended outputs are GUI-configurable and can be assigned to playback downmixed eARC audio while the powered outputs continue reproducing the original surround format. This is perfect for private listening through a wireless headphone interface, a Bluetooth adapter, or even multizone house-wide distribution. The eARC stereo downmix can also be simultaneously encoded and assigned as a Dante output for transmission to any Dante decoder on the network.

Combining advanced features like GaN semiconductor technology for energy efficiency and precise audio fidelity, the 5100D's 65-watt output per channel (doubling to 130 watts into 4 ohms) and innovative design ensure high-quality performance. The amplifier's superior GaN-based design offers unmatched linearity and fidelity, distinguishing it from traditional Class-D silicon MOSFET amplifiers.

Bijou 5100D Connection Diagram



FEATURES

- **Next-generation GaN Semiconductor Amplification Technology**
  Bijou 5100D's Class-D GaN amplification runs cool to the touch, enabling installation otherwise limited by traditional amplifier designs. GaN-based amplifier topologies achieve power conversion efficiencies in the 95% to 99% range, allowing higher output power in a more compact chassis size.

- **Dante Audio Networking**
  Dante audio support enables input/output interfacing with Dante-enabled devices such as AudioControl Director M Series Models M6800D, M4800D, and CM series 70-Volt Amplifiers. These devices share uncompressed audio sources up to 328 ft (100 m) away with near-zero latency. Optional fiber optic solutions offer longer-distance solutions into the kilometers.

- **HDMI eARC Input**
  Video soundtracks from connected devices or internal streaming services feature immersive codecs like Dolby Atmos, or DTS surround audio. A unique eARC implementation for the Bijou Series enables GUI-assignable downmixing at the RCA outputs, enabling wireless headphone interfaces or Bluetooth adapters to provide private playback options. At the same time, original surround decoding continues at the powered speaker and subwoofer outputs. The 5100D can also be configured to encode the audio downmix into Dante for availability to all decoding devices on the same Dante Network.

- **Web Configurable and IP-, IR-Controllable**
  AudioControl provides a programmer-friendly API to easily integrate the Bijou 5100D into any popular automation ecosystem. Setup configuration is intuitive and fast via the web interface. An included remote enables stand-alone IR control.

SPECIFICATIONS BIJOU 5100D

INPUTS	
eARC Inputs	1 Audio-Only HDMI Input
Digital Inputs	1 Optical TOSLINK 1 Coax S/PDIF
Analog Inputs	Stereo L/R RCA single-ended
Analog Input Impedance	47 kOhms
Analog Input Sensitivity	2 Vrms
Dante Inputs	1 RJ45 Two-channel
OUTPUTS	
Preamp Outputs	2 RCA single-ended
Sub Output	1 RCA single-ended
Speaker Level Outputs	5 outputs, 1 x 6-pin, 1 x 4-pin Euroblock connectors
Power Output	65W at 8 ohms 130W at 4 ohms
Dante Outputs	1 x Two-channel
AUDIO	
Minimum Speaker Load	4 ohms
Frequency Range	20Hz to 20kHz
Total Harmonic Distortion	0.15%
DAC	48 kHz/24-bit
POWER	
Input Voltage	110 - 240 VAC
Power Consumption	
Standby	3 W
Typical loud listening (1/8th power)	150 W
Maximum	1000 W
BTU/hr	
Standby	10 BTU/hr
Typical loud listening (1/8th power)	425 BTU/hr
Maximum	2800 BTU/hr
DIMENSIONS	
Height	1.7 in (43.9 mm)
Width	10.3 in (261.6 mm)
Depth	11.5 in (292.75 mm)
Weight	7.4 lbs. (3.35 kg)
Rack Space	0.75 RU

GaN Amplification: The Future of High-Performance Audio

GaN (Gallium Nitride) amplification uses a cutting-edge semiconductor material known for its high efficiency and superior performance. Originally developed for demanding applications like aerospace and telecommunications, GaN technology allows amplifiers to deliver potent power in a compact, thermally stable design, ensuring exceptional audio performance and reliability. In the 1990s, GaN played a crucial role in making Blu-ray technology possible by enabling the development of blue laser diodes that produced 405 nm light directly without the aid of other optical mechanisms, a significant technological achievement.

Applications

Residential Market (Home)	Bring immersive entertainment experiences into traditionally overlooked areas in the home, including bedrooms, the den, the office, and outdoor spaces.
Hospitality & Retail	Give your client's property an edge with premium sound that matches high-definition visuals in lobbies, office space, and showrooms.
Workplace Enterprise	Provide seamless, high-quality audio for effective collaboration in technology-driven office environments.
K-12 Education	Power agile, easy-to-operate audio solutions for classrooms and meeting spaces.
Government Agencies	Support crystal-clear sound for mission-critical communications in meeting and conference rooms.
Houses of Worship	Ensure clarity of message for educational programs and intimate worship experiences in meeting rooms and conference spaces.
Medical	Equip meeting rooms with superior sound for critical medical discussions and presentations, supporting clear, efficient communication.