



Since 1984

Boulder

866

Integrated

*An introduction to the technology within the
Boulder 866 Integrated.*

Welcome

Modern technology is defined by capability. The more a product can do with today's media delivery and do it well, the better. But what if your system is made up of traditional components that still satisfy?

The obvious answer is the 866 Integrated. Built on a platform that allows two different versions—an all-analog version for traditional systems and an analog+digital version for today's streaming systems—the 866 will excel in any high-performance audio system.

Efficient Design

When the engineers at Boulder contemplated designing and building the successor to one of its most iconic products ever, the big question was how to increase the abilities of the integrated amplifier without significantly increasing the price.

Over a period of nearly two years, every aspect of 866's build and manufacturing was analyzed. From the number of operations necessary to cut and finish the metalwork down to the very color of the circuit board masking, any detail that could reduce costs *without* reducing performance was sought out. As a result, the equivalent all-analog version of the 866 is actually less expensive than the 865 Integrated Amplifier that it replaces! In fact, a fully-loaded 866 with touch screen control, three pairs of analog inputs, a full array of wireless, streaming, networked, and traditional digital inputs costs just a fraction more than the original 865 Integrated Amplifier from 2007!

Eventually, when all was said-and-done, the 866 didn't just equal the performance of its predecessor, it exceeded it: the 866 provides peak power of 250 watts into any loudspeaker, an increase of 100W over the 865 and a big reason why the 866 Integrated sounds as good as it does. That step up in power equals a step up in control and clarity, and that means you can hear more of the message in the music that your favorite artists wanted you to hear.

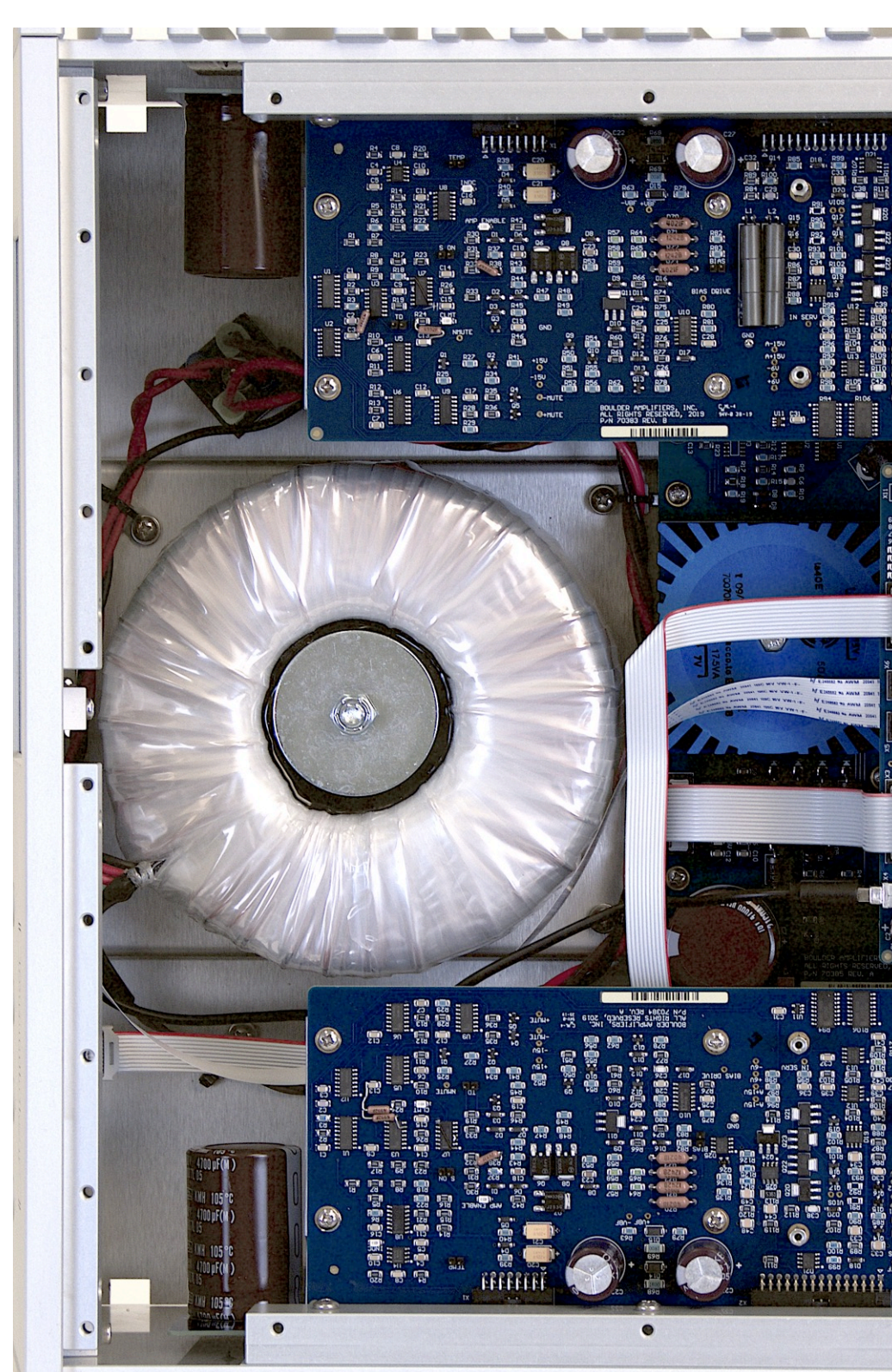
Touch Panel Controls and Full-function Display

The first thing you notice when you see the 866 is the large, full-color touch screen that dominates the faceplate. This screen allowed the Boulder team to reduce the number of buttons on the front panel and simplify the use of the product overall. Need to select an input? Swipe left or right over the inputs until the source you'd like to listen to is displayed and then touch that input. In fact, if you'd like to go a little further and identify your sources by photo, your own custom images can be loaded from a smart phone or tablet.

Additional options for input control, setup, and network connectivity can be accessed through the front panel or from Boulder's own control app for Apple and Android devices.

Analog Design

Boulder has built a reputation as the manufacturer of the world's finest





audio electronics. For over 35 years, Boulders have been chosen to monitor some of the most important recordings ever made because of our unequalled transparency and reliability. The 866 follows suit, mating a balanced instrumentation-style input circuit to a gain and output section that incorporate our latest thinking in peak power delivery and protection circuitry. These circuits enable the 866 to deliver a higher peak output power into a loudspeaker without increasing distortion while at the same time improving protection response time to better protect the investment you've made in the rest of your system.

Digital Design

Modern music delivery is now taking place via network storage and Internet connections, while at the same time there are more traditionally connected sources than ever before. Because of this, the 866 features a full array of available digital inputs that allow every type of connection, from satellite receivers to USB memory sticks to wireless subscription streaming and everything in between, to sound their absolute best. Digital audio data is received and asynchronously converted if necessary, before being processed and converted using Boulder's own proprietary software and DSP to optimize the data and conversion process.

Throughout the entire digital process, the data is up-and-oversampled to maximize the data rate to the DAC chips and reduce distortion to the lowest possible levels.

Even further, Boulder has equipped the 866 to be a Roon® endpoint, making media browsing and sorting easier and simpler than ever before. Artists, albums, songs, even production teams are cataloged and presented in a way that makes finding your music absolutely effortless.

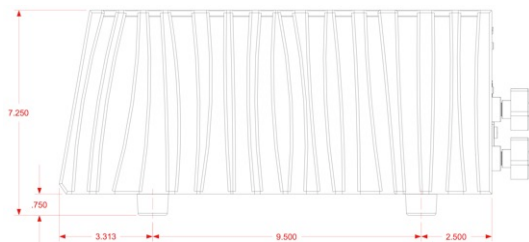
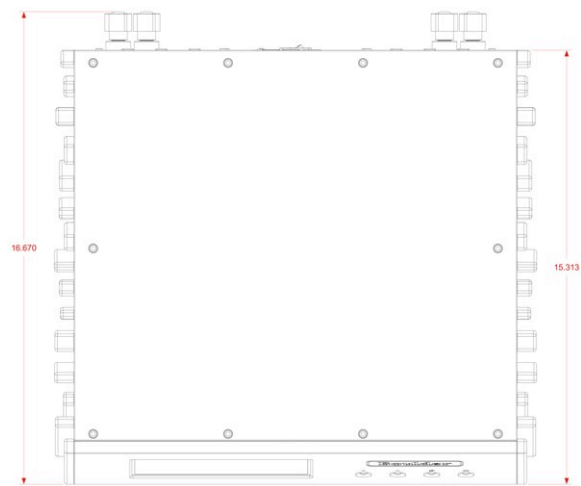
Mechanical Design

The design of the 866's electronics and casework were optimized for manufacturing efficiency. Circuit board costs have been reduced wherever possible while not affecting performance and all metalwork has been engineered to require as little manual labor as possible in order to bring the cost of the fully loaded 866 as close as possible to the price of its predecessor. Still, every visible panel of the 866's casework is carved from a solid plate of aluminum on Boulder's own CNC machining centers before being hand-sanded and bead blasted. All text on the 866 is engraved rather than printed, and all circuit boards are manufactured in-house to exacting tolerances before all parts of the amplifier—the metalwork, circuit boards, display, and connections—are assembled and tested by Boulder's team of dedicated craftsmen and technicians.

Boulder remains one of the last high-performance electronics companies to keep every aspect of manufacturing under our own roof and the proof is in what you hear. But don't take our word for it.

Listen for yourself.

Dimensions



Technical Specifications

Balanced Analog Inputs	3, via 3-pin XLR
Digital Inputs	Ethernet, 4 x USB, AES3, Toslink (Optical), wireless, WiFi (network)
Loudspeaker Outputs	0.25" (6 mm) binding posts
Continuous Power, 8 ohms	200W
Peak Power, 8 ohms	250W
Continuous Power, 4 ohms	400W
Peak Power, 4 ohms	400W
Peak Power, 2 ohms	700W
Distortion, THD	0.01%
Equivalent Input Noise (EIN), 20 kHz	2 µV
Input Impedance	100kΩ, Balanced
Maximum Analog Gain	40.4 dB
Frequency Response, 20 Hz – 20 kHz	0.00, -0.04 dB
Frequency Response, -3 dB	0.015, 150 kHz
Power Requirements	100, 120, 240 VAC, 50-60Hz
Power Consumption	1000W Maximum
Preamplifier Chassis Dimensions	17" W x 15.4" D x 7.25" H 45 cm W x 39 cm D x 19 cm H
Amplifier Chassis Weight	54 lbs. (24.5 kg)
Shipping Dimensions	24" W x 23" D x 16" H 61 cm W x 59 cm D x 41 cm H
Shipping Weight	64 lbs. (29 kg)

All specifications measured at 120VAC mains power

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