

Boulder 1110 Preamplifier and 1160 Power Amplifier

Remarkably Good by [Anthony Cordesman](#) | Nov 28th, 2018

There are a number of top high-end electronics manufacturers that you can trust to put out an excellent new preamplifier and amplifier even before you audition them. If you have listened to such manufacturers' products over time, you also find that real improvements in the new series are always there but generally subtle. You also detect that the company's equipment tends to be consistently



“voiced” in ways that prioritize a given mix of sound qualities. The best manufacturers keep this voicing as limited as possible, but it is always there.

Boulder is definitely one of these top manufacturers. I've never heard one of its components that wasn't excellent within its price range. Boulder also does not change product lines quickly or without reason. Even though its earlier models are always good enough to make improvements in the new-generation matters of nuance, those improvements are always significant in long-term listening. The new Boulder 1110 preamplifier and 1160 power amplifier reviewed here are excellent examples. They are products that approach the state of the art in sound quality, even though they are two steps down from Boulder's top of the line. At \$21,000 and \$28,000

respectively, the Boulder 1110 and 1160 are scarcely cheap, but Boulder also has the more expensive 2100 series and the cost-no-object 3000 line.

The Challenges of Excellence

As I've just noted, the 1100 and 1160 have the general “voicing” I've heard in other Boulder products. Both the preamp and amplifier have exceptional detail and transparency, exceptional air and “live” dynamics, tight but powerful and realistic bass, a broad soundstage with excellent width, and depth that is just slightly forward compared to much of the competition.

Having said this, it is here that I come to some of the major challenges in reviewing products this good. There is a tendency to think of “voicing” in terms of coloration. Well, coloration relative to what? There is scarcely one truth in sound quality. This is something that becomes dramatically clear when you listen to the differences in the sonic nuances in live performances by the same orchestra or group playing the same music in different halls or venues, or even change your seating position in the same venue. It is something that becomes even clearer in audiophile terms when you start switching really good amps and preamps in your own system. If the pieces of equipment are good, all will be musically convincing but sound at least somewhat different. In most cases, the sonic nuances from various mixes of really good equipment will be as different as changing seating positions in the same venue. Pontius Pilate is not famous for his role as an audio reviewer, but his question “What is truth?” does apply all too well to making audio judgements about amps and preamps that are really good, broadly neutral, and have subtle sonic nuances.

Reviewing is easier with front ends: Cartridges, phono preamps, and DAC/streamers, and units with any form of digital processing generally have distinctive sonic differences and “voicing” with audible

colorations. Speakers always differ significantly in sound quality. Really good preamps and amplifiers like the Boulder 1110 and 1160, however, present two major challenges.

First, while it is true that no two preamps and/or amplifiers sound exactly alike, the colorations of the best preamps and amplifiers are limited. The better the components are, the more they reveal the higher levels of coloration in the musical source material, every other element in your audio system, the effects of your listening room, and the impact of your listening position. Sticking with a consistent reference system over an extended period helps you hear differences in electronics *in that system*, but no one with a different system in a different position in a different listening room is going to hear those same differences. In other words, one of the ironies of really good preamps and amps is that they help reveal the colorations in the rest of your system.

Second, after decades of observing audiophile, dealer, and reviewer behavior, I'm all too aware that reactions to a really good new preamp and/or amplifier tend to fall into two predictable alternatives. If the listener has a strong preference for one mix of nuances or "voicing" over another, he will praise or criticize depending on whether the units suit his particular taste. If he has more neutral taste in listening to such nuances, he will listen and hear some new aspects of the music—sometimes because the new equipment is actually superior, but sometimes because part of the addictive nature of being an audiophile is constantly listening for such differences. I've met more than a few audiophiles who fall in love (often briefly and expensively) with anything new. I suppose this is better than falling in hate with anything different, but...

In short, you need to keep the comments that follow in careful perspective. I think as reviewers we too often fall into one of these two categories, or dodge around how hard it is to choose between the best amps and preamps, the irony being that the better the amp and preamp, the more the colorations of the other aspects of your system will matter.

Boulder 1110 Preamplifier

Like the 1160 power amplifier, the 1110 preamp is a classic case of "form follows function" design. Its appearance includes clean and lightly sculptured metal work, minimal front panel controls, and a clean and highly readable front panel display. For all its technical advances, the Boulder 1110 is also very straightforward in function. It only has XLR inputs and outputs, and basic control features on the front panel and remote. (The 1110's manual remote is a small attractive unit with input, volume, balance, and polarity controls.)

This apparent simplicity, however, is more than a bit misleading. The Boulder 1110 is one product where you really should pay attention to that famous secret Masonic acronym "RTFM" ("read the effing manual"). This mystery will show you how the back panel allows you to link the 1160 to the Internet for automatic diagnostics, updating, and remote control. Reading through the "M," which is available on Boulder's website, also gives you instructions for connecting to an unbalanced component and using "option" and "component" commands that can assign a name to each input, trim the gain by input (so all inputs have the same level), experiment with polarity, and alter the range of the volume, balance, and mute controls.

Boulder 1110



This ability to tailor the 1110 to your own system is a real strength, but does require use of the manual. If this sounds too complex or challenging, consult any

relative or neighbor under 15 years of age.

As for the 1110's inner design features and circuitry, I asked Rich Maez of Boulder to summarize the design advances in the Boulder 1110, and he provided the following overview: "Sonically, we wanted to do the same things we had done with the 3000 series and 2100 series revisions. Resolution, clarity, and dynamic and transient speed were much better in those new products, and we wanted to bring these improvements to the new 1000-level pieces. Circuit and layout changes were based on those other series, and we were able to actually go beyond what we expected. One thing we didn't anticipate: the size of the soundstage was much, much larger than with the previous generation.

"We did *not* want to introduce a certain 'type' of sound. We go out of our way not to build gear that has any kind of sonic character to it, if we can help it, so we wanted to simply remove any artifacts that we could find and leave the music alone. Recordings all have their own personalities, good, bad, ugly—that's part of the recording world. If we remove our colorations, bad or ugly recordings will still sound bad or ugly because that's what they are. Introducing colorations or artifacts that pretty them up or blur their ugliness simply means that everything you listen to with that piece of gear, even good recordings, will have that same character to it and sound the same to some extent. We didn't want to do this because in our view it's not our job to determine what your music sounds like, but rather to let you hear this for yourself."

As for sound quality, Rich Maez's comments may explain why I emphasized the word "voicing" over "neutrality" at the start of this review. I said earlier that the Boulder 1110 preamp and 1160 power amplifier have exceptional detail and transparency, exceptional air and "live" dynamics, tight but powerful and lifelike bass, and a broad soundstage with equally excellent width and depth. These words were not chosen casually in regard to either unit. Both preamp and amp produce an exceptionally open and detailed sound, and not by emphasizing the upper midrange or treble. You hear detail in the lower midrange and upper bass as well, and there is no hardening of the presentation—which is often the case in units that initially seem to have lots of detail but later prove to have too much upper-octave energy.

Transients and dynamics are also exceptionally revealing, and imaging is as well defined and natural in size and depth as the recording permits. It is the power, definition, and control provided by the 1160 power amp that does most to keep even truly high-level dynamics and transients so well defined—both in massive orchestral works and really demanding electronic music and rock—but the 1110 preamplifier is also a key enabler, and its resolution of really low-level information and dynamics is a pleasure to hear. It also provides an exceptional sense of musical life and reveals the character of the venue on good, natural, live stereo recordings. This combination of features may help explain why the soundstage manages to be both wide and lifelike, rather than wide at a slight cost in musical energy and life. It also, however, helps highlight the contrast between a good recording and an overmixed, over-processed one.

The one caution I have is that far too many otherwise good recent recordings are miked too closely, or in ways that emphasize upper-octave energy to increase the level of detail at the expense of natural timbre and sonic perspective. I also find that the audio circuitry in some digital equipment seems designed to emphasize detail by tweaking the highs (as some speakers do, particularly those with aggressive dome tweeters).

There is nothing warm, fuzzy, or forgiving about either the Boulder 1110 or 1160, and—as I noted earlier—the added detail means the sonic perspective is just slightly forward compared to much of the competition. Voicing for neutrality and detail come at a price with poor recordings, especially if you insist on nearfield listening to further highlight detail. And yes, the Boulder 1110 and the 1160 did

present the problem of revealing more of the coloration in my front ends, wires, and speakers. I've chosen these as best as I can, and I've long learned to listen through the recording's quality (including tape hiss), and put the performance before sound quality. If you have balanced the rest of your system around a warm or forgiving amp and preamp, however, you may need to make some changes in other components.

Boulder 1160 Amplifier

As I've already noted, the sound quality, nuances, and "voicing" of the Boulder 1110 and 1160 are largely identical. Once again, however, Rich Maez provided a list of useful insights into Boulder's design process, and intentions in the accompanying sidebar. What Rich does not mention is that this amp is a bit of a beast. It is relatively compact, but it weighs 135 pounds, and can take advantage of a dedicated AC line with a special plug and a 240-volt connection. I did not have one to try, but I do have a dedicated 120-volt AC line for my power amps and it did make a slight improvement.

The 1160 delivers a massive amount of clean power and does so in ways that have advantages over much of the competition. It can drive almost any speaker to its limits without changing sound quality, and it can handle even the most demanding transients in an almost effortless fashion. I've reviewed a number of power amps in the past—some with higher power ratings—that could not provide the same lifelike musical dynamics or control speakers as well in the deepest bass.

Boulder 1160

At the same time, the "voicing" of the 1160 had one characteristic that I did not hear with the 1110. The 1160's bass is very tight and "fast," and this is particularly apparent with organ music and major bass and kettle drum strokes. Many other amps seem slightly "warmer," and provide more apparent bass energy, albeit at the cost of definition. This is particularly true of many of the Class A amplifiers I've reviewed, and is worth



listening for if you audition the 1160. I can't tell you which nuance is "right," as my own preferences varied by recording, but again, it is worth listening for.

Summing Up

The Boulder 1110 preamplifier and 1160 power amplifier are truly superb pieces of gear. They do have their own sound character, and this is audible even using a wide variety of front ends, interconnects, cables, and speakers. If you are building or improving a great system, you still need to listen carefully to the Boulders' nuances and give them the same attention you do in auditioning every other component. You also need to be aware that you will hear the different mix of nuances imposed by your other components once you insert them into your particular system.

The Boulders' great strength, however, is that they provide outstanding performance in every dimension, and have very little sound character of their own. Their "voicing" reveals the music rather than colors it, and this makes them remarkably good core components for building a truly excellent system.

Specs & Pricing

1110 linestage preamplifier

Balanced inputs: Five on XLR jacks

Balanced outputs: Two on XLR jacks

AUX balanced outputs: One on XLR jacks

Maximum input level: 7Vrms

Maximum output level: 28Vrms

THD+N: 0.0008% (-102 dB)

Maximum voltage gain: 20dB

Frequency response: 20Hz–50kHz

Input impedance: 333k ohms balanced

Output impedance: 100 ohms balanced

Dimensions: 19" x 9.25" x 18"

Weight: 78 lbs.

Price: \$21,000

1160 stereo amplifier

Power output: 300Wpc into 8 ohms

Peak power output: 300Wpc into 8 ohms, 600Wpc into 4 ohms, 1200Wpc into 2 ohms

THD+N: 0.0009% 20Hz–2kHz

Dimensions: 27" x 26" x 33"

Weight: 135 lbs.

Price: \$28,000