



BAT REX II AMPLIFIER



PLUG-AND-PLAY SIMPLICITY IN A NO-COMPROMISE DESIGN

The all-triode REX II represents a tour de force of modern engineering. From plug-and-play simplicity to recreating the original musical event in your home, it combines high-power output, beautiful texture, and great extension.

A TRULY DIFFERENT APPROACH

Think of REX II as two single-ended amplifiers per channel, with their waveforms summed at the output transformer. No direct current flows through the latter, allowing the output transformer to be a true wide-bandwidth design.

INTELLIGENT AUTO BIAS AND ELECTRONIC PROTECTION

REX II eliminates the constant need to set and readjust the proper bias of the output tubes. An intelligent automatic bias circuit adjusts for changing line voltage and aging tubes. No tubes to bias. No tube fuses to replace.

SPECIFICATIONS

Output Per Channel (8Ω/4Ω)	80W / 80W	Conversion to Mono	Factory or Wire Kit
Output in Mono Configuration (8Ω/4Ω)	160W / 160W	Frequency Response	5Hz to 200kHz
THD (Full Power)	3.0%	Gain (Nominal into 8Ω)	26dB
Input Impedance (Mono)	108 kΩ	Number of Power Cords	1
Input Impedance (Stereo)	215 kΩ	Power Consumption (Idle / Full)	500W / 1000W
Tube Complement	4x 6H30, 6x 6SN7, 2x 6V6, 4x 6C33C-B	Dimensions	17" x 9" x 24"
Remote Control	No	Weight	100 lbs

BAT REX II AMPLIFIER

The REX II Power amplifier represents a technological tour de force of modern engineering applied to vacuum tube power amplifier design. From the plug and play simplicity provided by its auto-biasing and electronic protection circuits, to the palpable illusion of recreating the original musical event in your home, the REX II Power amplifier is the ultimate expression of Balanced Audio Technology's purist approach to creating a statement vacuum tube amplifier.

FULLY SYMMETRICAL ALL TRIODE CIRCUIT

In the world of vacuum-tube amplifier design, the vast majority of amplifiers are either of a push-pull or single-ended circuit topology. You'll find the typical push-pull vacuum tube amplifier to be most commonly based upon a pentode tube – the 6550 or one of its variants being one popular choice. These push-pull amplifiers can provide high power output, but at the expense of ultimate transparency. The single-ended tube amplifier, on the other hand, often provides wonderful midrange transparency, but with the severe drawback of low power output and less than stellar reproduction of the frequency extremes.

The REX II Power amplifier is a different beast altogether. Its design is fully symmetrical from beginning to end. You can think of it as two single-ended amplifiers per channel, with their waveforms summed at the output transformer. The beauty of this design is that no direct current flows through the output transformer. Why is this critically important? This fact allows the output transformer to be a truly wide bandwidth design, while reducing low frequency distortion.

When you combine this fully symmetrical circuit with a high-current, all-triode, zero-feedback, fully balanced design, the drawbacks of push-pull and single-ended designs are banished. The REX II Power amplifier combines high-power output, beautiful midrange texture, and great extension at the frequency extremes. It is a design without compromise.

VACUUM-TUBE CURRENT SOURCES

Compared to the previous generation of REX products, the REX II Power amplifier substantially improves its gain stage architecture by extending the benefits of vacuum-tube current sources to include both the first and second gain stages of the circuit design. The current source is an integral, albeit extremely important, part of a differential circuit. Its quality to a large degree determines the ultimate performance of a gain stage. As opposed to a more common resistive solution, the vacuum-tube current source is

much closer to an ideal model. The benefits of implementing dual current-sources within the REX II Power amplifier are several-fold:

- The linearity of the gain stage improves.
- The adjustments for the first and second gain stages become independent and therefore more easily optimized.
- The tube current source components operate at much lower stress level, thus improving reliability.

In addition, more than one type of vacuum tube can be used in the second-stage current-source. This allows each user to fine tune the REX II Power amplifier's sound to best meet their individual needs. No matter which choice the user selects, this dual current source implementation extends the performance of the REX II Power amplifier to another level. The final result is an impressive improvement in the palpability of the phantom musical event.

80 WATTS PER CHANNEL (STEREO) 160 WATTS PER CHANNEL (MONO)

The REX II Power amplifier is a high-current all-triode design that offers a robust 80 watts per channel in the stereo version or a compelling 160 watts per channel as a mono block. The 6C33C-B triode output tube used in the REX II Power amplifier offers many times the current delivery of the more common 6550 tube used in more traditional push-pull designs. High impedance vacuum tubes like the 6550 require far more complicated output transformers than the low impedance 6C33C-B vacuum tube. Consequently, the REX II Power amplifier is quite comfortable driving low impedance loads. You can simply choose the stereo or monoblock version based upon your choice of speaker and room size. The high-current delivery of the REX II Power amplifier will give you the assurance of driving a difficult load with ease.

INTELLIGENT AUTO-BIAS & ELECTRONIC PROTECTION

The advanced design of the REX II Power amplifier eliminates the traditional headache associated with most vacuum-tube power amplifiers; the constant need to set and readjust the proper bias of the output tubes. The REX II Power amplifier features an intelligent automatic bias circuit that adjusts for changing line voltage and aging tubes. For convenience, the intelligent automatic bias circuit contains LED indicators that show the status of each individual output tube. This auto-bias circuit also ensures that your

REX II Power amplifier sounds wonderful within the first few minutes of listening. This is indeed very different from manually biased designs that must be adjusted for their thermally warm set point - and thus sound too cold and clinical before their tubes are fully warmed up.

Balanced Audio Technology extends the plug and play nature of the REX II Power amplifier further with a novel "fuse-less" protection circuit. This electronic protection circuit eliminates the power supply rail fuses to provide both a more refined sonic performance, as well as a very user-friendly experience. All the user has to do in the event of an output tube being over-stressed is to flip the power switch; it doesn't get any easier than that!

No tubes to bias. No tube fuses to replace. This is the best of modern engineering applied to vacuum-tube amplifier design.

INTELLIGENT POWER UPGRADE

The REX II Power amplifier is easily upgraded from the stereo version to monoblock configuration. Unlike competing designs, there is no need for the user to trade their amplifier in to obtain more power. With the REX II Power amplifier, the user can simply convert their existing REX II to a monoblock, and then order a second REX II monoblock to match. Technically, the stereo to monoblock conversion is accomplished by simply paralleling the inputs and outputs. This means that "the sound" only gets better as monoblock current delivery goes up by a factor of two and the monoblock noise floor drops appreciably as well.

A little known fact is that you can even parallel the REX II monoblocks by daisy-chaining them together. Do you want 320 watts per channel of high current, zero feedback, fully balanced power? Just use two REX II monoblocks per side!

SUMMARY

The REX II Power amplifier from Balanced Audio Technology is the culmination of nearly two decades of research into what constitutes the ultimate vacuum-tube power amplifier. Right out of the box, it is unlike most vacuum tube power amplifiers in being a fully balanced symmetrical design. This balanced symmetry, when combined with a high current, zero-feedback, all triode, dual vacuum-tube current source topology makes the REX II Power amplifier special indeed. Add the plug and play nature of automatic biasing and automatic protection to the list, and you have a thoroughly modern vacuum-tube amplifier that, by design, performs well above the rest.