

AUDIO TEST

STEREO | STREAMING | HIGH-END

"... They're impressive individually, but together the Quantum Signatures and RV3 are a real powerhouse that draws the attention of both the eyes and ears ..."

Magnat RV3 & QUANTUM SIGNATURE



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Lise-Meitner-Str. 9 · 50259 Pulheim · Germany · www.magnat.de

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Perfect combination

In 2013, Magnat celebrated its 40th anniversary. As a gift to the company and its customers, they intended to write audiophile history. Read here if they were successful.

The RV3 is Magnat's third generation of its beloved tube amplifier. While the tubes are still built into in the preamplifier and amplifier for the first two models, the manufacturer now draws on a hybrid technology. In other words: That means with tubes in the preamplifier and transistors in the amplifier, the change has no impact on the weight. At 19 kg, the RV3 is still quite the heavyweight. Rubberized support feet effectively cushion the system to lightly isolate the system from the ground.

Compared to its predecessor RV2, its appearance is less classic and has a more futuristic design specification. Heavy aluminum components and brushed front and end parts make an elegant, yet rugged impression. A motorized ALPS volume potentiometer and two chrome-colored source and balance controls round out the overall package. The remote control also continues the corporate design with its brushed aluminum look. The selected input signal is displayed on the OLED display on the front of the system. No less impressive are the two massive heat sinks, the encapsulated toroidal transformer and the covered battery on buffer capacitors that bring functionality and design into harmony. At the forefront is the tube section with two representatives from the Elektro Harmonie ECC82 category. The tubes manufactured in Russia are selected in pairs and burned in for an entire 60 hours before installation. True to the SRPP principle, Magnat uses a push-pull circuit for the RV3 that relies on a high degree of symmetry. For this reason, selecting the double triodes in pairs is particularly important. The technical configuration is accompanied by a clean frequency response, low distortion and low-noise level. At the other end of the circuit, there is a discrete power amplifier with Toshiba transistors. The most important connections are found on the back of the tube amplifier for CD, tuner, aux and tape. Turntables are offered Moving Coil and Moving Magnat inputs. Two recorder preamplifier outputs make the RV3 compatible with recording devices and separate power output stages. Unlike the RV2, the new hybrid model dispensed with different terminals for speakers with an impedance of 4 ohm and 8 ohm. The new version uses a bi-wiring terminal instead that provides two separate paths to the speakers.

Finding the right speaker is not difficult. We opted for the Quantum Signatures that together with the RV3 appeared as the anniversary model in the past year. The class of the speakers far outweighs their size, although the nearly 75 kg per box should not go unnoticed here. Together with the tube amplifier and product range, the total package adds up to a considerable weight of 225 kg. Of course, this is no accident, so that after unpacking two 1.40 m double-walled speakers rise up before our eyes. To be precise, the inner core consists of an MDF cabinet that is 25 mm thick and is fortified on the sides with curved 22 mm layers. This design adds enormous stiffness to the cabinet, stable reproduction and astonished faces on all testers. So that the cost is not excessive for the pure material, the cabinet has a multi-layer high-gloss finish. Form and design go together seamlessly here. It is clear that such a cabinet offers a ton of space for its chassis. So it's no wonder that Magnat has equipped the Quantum Signatures with three 20 cm basses per box. Each model also contains two ports that press the frequency response with their particularly large openings to a respectable 16 hertz. The six woofers consists of aluminum oxide ceramic cones with superior rigidity. For additional stabilization, the cones are placed on inverted dust caps as with both 17 cm midrange drivers. These are in a D`Appolito arrangement above and below the tweeter, which already gives one a glimpse of a broad sound pattern.

With a Kapton voice coil mount and Magnat system with dual inductance control rings, distortion should be kept to a minimum. To keep pace with the three bass and midrange drivers per speaker, Magnat uses a particularly light tweeter cone made of lightweight semi-crystalline polymer. Their bead is particularly wide, which makes for a good overtone structure. Magnat indicates a frequency range up to 75 kilohertz. The crossover filter is divided into two circuit boards on the inside, which should optimize bi-wiring operation. With a slope of 24 decibels per octave, the individual driver sections are separated at 200 Hz and 2.9 kHz. All internal wiring is provided by distribution partner Oehlbach. To stabilize the housing, large reinforcing elements are used. As expected, the Quantum Signatures not only appear large, but also sound good in our listening space.

We tried out various speaker/amplifier combinations and it can be said that the Magnat composition harmonizes very well. In other words, the Quantum Signatures are the young guns in the chain while the RV3 is a somewhat quiet contemporary. The tube amplifier is impressive with its rather warm coloring that unfolds in the lower midrange in particular. In combination with the speakers, the presence seems much stronger. The Quantum Signatures really show off in the upper and lower end of the frequency range, which the integrated amplifier again lightly moderates. When combined, electric guitars have a meaty sound, snare drums sound lively and bright.

The speaker duo delivers a decent base range and very dry base drum beats. When selecting the amplifier, one should pay close attention that it's not too bass heavy. Otherwise, this can lead to an exaggeration and concealment very quiet details that require extra attention. Precisely for this reason, the RV3 is the ideal companion as proven on a double bass, whose fundamental tone it cleanly reproduces without overdoing it. The same applies to the resolution of S sounds and the formation of consonants. While the intentions of the Quantum Signatures is very good per se, the Magnat amplifier knows to slightly brake the exuberance. The warmth of the hybrid also helps harpsichords and piano recordings. Both components master the spatial sound pattern of complex structures. Orchestra recordings reach their full width and play as if released to beyond the sides of the speaker. Next, we used a sound sample from a bass computer to test the oscillatory characteristics of the speakers. The immense use of materials really paid off here. Under a significant sound pressure level at low frequencies, the housing remains absolutely stable.

Conclusion:

In conclusion, we can state that Magnat's anniversary edition is a perfectly tuned system. They're impressive individually, but together the Quantum Signatures and RV3 are a real powerhouse that draws the attention of both the eyes and ears ..."

THE RESULT:

RV3: VERY GOOD

PRICE/PERFORMANCE: VERY GOOD

Quantum Signatures: EXCELLENT
Price/performance: VERY GOOD