



Classic subwoofer design from Australia's Krix, shown here in black vinyl but also available in premium finishes including custom colours to match your décor.

Krix Seismix 3 v6.0

From South Australia comes this latest edition of the Krix Seismix 3 subwoofer. Version 5 won one of our 2010 awards — does the latest iteration deliver similar depths?

SUMMARY

Krix Seismix 3 v.6.0
subwoofer
Price: \$1095

+ Good musical performance
+ Solid LFE performance
+ Good value for money

- No effective output at 20Hz

In our introduction to this group test, we noted how 'conventional' designs are generally called so for a reason — namely that they work. For subwoofers, that's a large driver and bass reflex port on the front, connections on the back, plenty of power, and preferably the largest enclosure possible — the larger the enclosure and driver, the easier time it has of producing the sweet deep tones, and consequently the lower the distortion.

South Australian loudspeaker maker Krix has done just that with the Seismix 3 (officially in its version 6.0), one of the lowest-cost units in this round-up. The enclosure is a solidly-built and good-sized box weighing

over 15kg. The built-in amplifier packs 300W of power.

The 275mm driver — an unusual 11 inches — is located towards the bottom right of the baffle. That makes room at the top left for a very large bass reflex port. So no worries with placement here, especially as the Class-D amplifier generates relatively little heat. There are no heatsinks at the rear needing airflow.

The review unit was finished in black ash-look vinyl, as pictured, which is what you get for \$1095. If it will be tucked away, largely invisible, in a room corner then that makes for great value. But if you need it to be prettier you can choose from a real Black Ash, Cola or Ironwood veneer for \$1245, Atlantic Jarrah or Blackwood for \$1365, or a custom finish for \$1545.

A fairly basic set of connections were provided on the rear: left and right inputs (you use the right one for the LFE output of a home theatre receiver) and left and right outputs. These last are labelled 'Loop Through', and they are just as the name implies: they pass on the input signal without any filtering.

A switch allows you to choose between auto on/off (via signal detection) and always on. There's a level control of course, plus a low-pass filter control, with markings from 50 to 200Hz. The top setting is also labelled 'Bypass', but this doesn't actually take the crossover out of circuit, it simply marks the best spot to set the control when connected to an LFE output. The phase adjustment switch provides, unusually, a continuously variable adjustment from 0 to 180 degrees, rather than just switching between the two. Since a phase adjustment in degrees is necessarily frequency dependent, this marking is a convention — it actually acts as a group delay, and by its continuous nature provides increased flexibility in matching the subwoofer with the main speakers.

“It went very loud, very cleanly, particularly above around 30Hz...”

Performance

First things first — after plugging the subwoofer in, switching it on, running it for a while and balancing it up with the rest of the system, I stuck my head into the corner right above it while nothing was playing. And was greeted by perfect silence. There was no hum at all, which is what you’d expect from a Krix subwoofer, designed by people who live in a 50Hz nation. Other subwoofers in this group weren’t so quiet.

Then it was on to music. Playing my favourite recording of Bach’s ‘Passacaglia and Fugue in C minor’ (a recording by Telarc of a massive pipe organ in which the bottom C pedal has a fundamental of 16Hz), I was impressed by the ability of the Seismix 3 to excite the room when that pedal was hit at the end of each phrase. Which reinforces the fact that in the real world, acoustic instruments also have trouble really plumbing the depths. What the subwoofer was reproducing — what all of them do, really — was the second harmonic of this pedal’s pipes, and above, and it’s that 32Hz that does most of the room shaking.



Measurements



The rapid drop-off of a bass-reflex design is clear below 30Hz, but response was solid and extended above that.

In our listening room, in subwoofer corner, measured close, the Krix Seismix 3 v.6 delivered an honest 29Hz to 153Hz. As is typical with bass reflex designs, once the limit of bass extension is reached, the drop-off is precipitous. In this case the output was down by 30dB at 20Hz (that is, making no

practical contribution to the sound). At 30Hz and 90dB SPL at one metre, the second harmonic distortion was a reasonable 3%, while the potentially more objectionable third harmonic was just over 0.5%. Higher-order components were much lower.

But not all. As the Passacaglia section came to its climax, the missing 16Hz did reduce the sense of spacious awe that my usual subwoofer generates. But, then, no subwoofer in

this price category can go that low.

The bass guitar on Jeff Beck’s ‘Beck-Ola’ was full, clear and tuneful. Likewise on Oregon’s ‘Leather Cats’, although on this one there was some variability in level, tied to the notes being played. The kick drum was delivered with good clean slam, and no sense of harmonic distortion being added by the unit. This is a tuneful sub.

The unit did do a nice job with movie explosions. It went very loud, very cleanly, particularly above around 30Hz. But there were no infrasonics of note, and no real sense of pulsating air. Nor would you expect them at this price.

Conclusion

The Krix Seismix 3 v.6.0 subwoofer offers a larger driver than is usual in this price category, while maintaining this model’s heritage of providing a rock solid design providing good midrange performance — and at a very reasonable price. *SD*

SPECS

Krix Seismix 3 v.6.0 \$1095

Drivers: 1 x 275mm, forwards firing

Enclosure: Bass reflex

Inputs: 1 x stereo line level

Outputs: 1 x stereo line level

Low-pass crossover: 50-200Hz

Quoted power: 300 watts

Measured room response (pink noise -6dB): 29-153Hz

Level at 20Hz: -30dB

Dimensions: 450 x 360 x 410mm

Weight: 15.65kg

Warranty: 5 years (1 year for amplifier)

Contact: Krix Loudspeakers

Telephone: 1300 005 749

Web: www.krix.com.au



1 Continuous phase control

A continuously variable phase adjustment (from 0 to 180 degrees, rather than just switching between the two) acts as a group delay, providing increased flexibility in matching the subwoofer with your main speakers.

2 Ins and outs

The basic connections are left and right line-level inputs (you use the right one for an LFE input) looped through unfiltered to the outputs.

group test **subwoofers**



| Brand | Sumiko | Krix | Dynaudio | M&K Sound | Krix | Velodyne |
|---|--|---|--|--|--|---|
| Model | S.5 | Seismix 3 v.6.0 | SUB 250 II | V8 | Volcanix Slim | SPL1200U |
| Price | \$999 | \$1095 | \$1399 | \$1499 | \$1995 | \$2899 |
| <div style="text-align: center;"> + - </div> | <ul style="list-style-type: none"> Very good value for money Fine musical performance Useful connectivity options | <ul style="list-style-type: none"> Good musical performance Solid LFE performance Good value for money | <ul style="list-style-type: none"> Wonderfully compact Good musical performance even when very loud Respectable LFE performance | <ul style="list-style-type: none"> Pleasing musical performance Good levels with LFE operation Compact design | <ul style="list-style-type: none"> Very high levels available Good musical performance Good fit for certain installations | <ul style="list-style-type: none"> Enormous levels available Very low distortion Solid LFE performance |
| | <ul style="list-style-type: none"> High 3rd harmonic distortion Not effective for deep bass | <ul style="list-style-type: none"> No effective output at 20 hertz | <ul style="list-style-type: none"> Fairly high 3rd harmonic distortion No effective output at 20 hertz | <ul style="list-style-type: none"> High distortion levels Not effective at 20 hertz | <ul style="list-style-type: none"> No effective output at 20 hertz | <ul style="list-style-type: none"> No, nothing negative to report |
| Description | | | | | | |
| Driver/s | 1 x 210mm | 1 x 275mm | 1 x 240mm | 1 x 203mm | 1 x 305mm | 1 x 305mm |
| Driver description | Very long throw, treated paper cone, wide rubber surround | Paper cone, 50mm long throw voice coil | Long throw, 100mm voice coil, Magnesium Silicate Polymer cone | Pulp cone, aluminium voice coil former, extended pole piece, aluminium shorting ring | Paper cone, 50mm long throw voice coil | Kevlar reinforced resin cone, diecast aluminium basket, in/outside wound 'Dual Tandem' voice coil |
| Driver orientation | Downwards firing | Forwards firing | Forwards firing | Forwards firing | Forwards firing | Forwards firing |
| Enclosure type | Sealed | Bass reflex | Sealed | Sealed | Bass reflex | Sealed |
| Port orientation | N/A | Forwards firing | N/A | N/A | Twin, downwards firing | N/A |
| Inputs | 1 x mono line input, 1 x LFE, 1 x mono speaker level input (SpeakOn) | 1 x stereo line level | 1 x stereo line level, 1 x LFE | 1 x stereo line level | 1 x stereo line level, 1 x stereo speaker level (4 x binding posts) | 1 x stereo line level, 1 x stereo speaker level (4 posts) |
| Outputs | Nil | 1 x stereo line level | 1 x stereo high pass, 1 x LFE pass through | 1 x stereo line level | Nil | 1 x stereo high pass |
| Low pass crossover | 30-120Hz | 50-200Hz | 50-150Hz | 60-150Hz | 50-195Hz | 40-135Hz |
| Filter bypass | Yes | Yes | Yes | Yes | Yes | Yes |
| Auto on/off | Yes | Yes | Yes | Yes | Yes | Yes |
| Phase control | 0/180 degrees switch | 0-180 degrees continuous | 0/180 degrees switch | 0-180 degrees continuous | 0/180 degrees switch in software | 0/90/180/270 degrees |
| Other features | Separate level controls for LFE and other inputs | - | Choice of high pass filter for line out | - | Trigger in, Slimline design | DSP, auto calibration, trigger, IR input, remote |
| Dimensions (hwd) | 335 x 285 x 315mm | 450 x 360 x 410mm | 271 x 266 x 308mm | 340 x 260 x 290mm | 630 x 500 x 295mm | 394 x 380 x 470mm |
| Weight | 14kg | 15.65kg | 7.2kg | 10.3kg | 24.3kg | 20.7kg |
| Manufacturer's specifications | | | | | | |
| Amplifier (watts) | 150 watts (RMS) | 300 watts (RMS) | 200 watts | 150 watts | 450 watts (RMS) | 1200 watts (RMS) |
| Specified frequency response | -3dB @ 40 hertz, -6dB @ 30 hertz | 22-200 hertz -6dB | 29-250 hertz ±3dB | 30-200 hertz ±2dB | 16-200 hertz -6dB | 21-135 ±3dB, 13-240 hertz overall |
| Measurements | | | | | | |
| Cone diameter (not counting roll surround) | 143mm | 191mm | 154mm | 150mm | 225mm | 221mm |
| Total cone area | 161cm ² | 287cm ² | 186cm ² | 177cm ² | 398cm ² | 384cm ² |
| Room frequency response (Pink Noise ±6dB) | 33-146Hz | 29-153Hz | 27-158Hz | 25.6-158Hz | 24-163Hz | 18.5-167Hz |
| Level at 20 hertz (ref average level) | -28dB | -30dB | -16dB | -11dB | -15dB | -2.5dB |
| Distortion 30Hz 90dB SPL** 2nd/3rd... harmonic % | 1.82/10.6/0.84/0.50 | 3.0/0.53/.02/0.12 | 3.35/5.01/0.16/0.28 | 10.6/6.3/0.33/0.27 | 1.12/0.28/0.05/0.08 | 1.50/0.35/0.05/0.12 |
| Warranty | 2 years | 5 years (1 year for amplifier) | 3 years | 3 years | 5 years (1 year for amplifier) | 2 years |
| Contacts | | | | | | |
| Distributor | Synergy Audio Visual | Krix Loudspeakers | BusiSoft AV | Qualifi | Krix Loudspeakers | Revolution Technologies |
| Telephone | (03) 9459 7474 | 1300 005 749 | 03 9810 2900 | 1800 24 24 26 | 1300 005 749 | 07 3902 8051 |
| Web | www.synergyaudio.com | krix.com.au | www.busisoft.com.au | www.qualifi.com.au | krix.com.au | www.revolutiontechnologies.com.au |

** For stated output at one metre

|  |  |  |  |  |  |  |
|--|--|---|---|---|--|---|
| Sunfire | Yamaha | Dynaudio | Revel | M&K Sound | B&W | REL |
| XTEQ10 | NS-SW1000 | SUB 600 | Performa 3 B110 | X12 | DB1 | 212/SE |
| \$2999 | \$2999 | \$3299 | \$3845 | \$4999 | \$5500 | \$6499 |
| <ul style="list-style-type: none"> • Very high levels available • Excellent auto-calibration system • Extremely compact | <ul style="list-style-type: none"> • Fine musical performance • Extremely powerful performance above 25 hertz • Solid LFE performance | <ul style="list-style-type: none"> • Excellent bass extension • Very high levels available • Compact enclosure | <ul style="list-style-type: none"> • Extremely powerful performance above 25 hertz • Tuneful and fast delivery with music • Superb tuning facilities | <ul style="list-style-type: none"> • Enormous levels available • Extremely low distortion • Excellent performance with music | <ul style="list-style-type: none"> • Massively extended bass • Enormous levels available • Excellent performance with music | <ul style="list-style-type: none"> • Astonishing volume levels available • Very low distortion • Wireless option |
| <ul style="list-style-type: none"> • Not effective at 20 hertz • 2nd harmonic distortion a bit high | <ul style="list-style-type: none"> • No effective output at 20 hertz | <ul style="list-style-type: none"> • No, nothing to report | <ul style="list-style-type: none"> • No effective output at 20 hertz • Fairly high 2nd harmonic distortion | <ul style="list-style-type: none"> • Small amount of 50 hertz hum | <ul style="list-style-type: none"> • Third harmonic distortion higher than expected | <ul style="list-style-type: none"> • Not effective at 20 hertz |
| 1 x 254mm | 1 x 300mm | 1 x 300mm | 1 x 254mm | 2 x 300mm | 2 x 300mm | 2 x 300mm |
| Long throw, high back-EMF | Semi-pressed paper cone with Kevlar fibres, double layer ferrite magnets, diecast aluminium frame | Magnesium Silicate Polymer cone, double magnet, diecast aluminium basket | Coated Paper/Pulp cone, 50mm two layer copper voice coil, vented triple stacked ceramic 5 magnet assembly, vented diecast aluminium frame | Pulp cone, cast open baskets, aluminium pole spacers, aluminium shorting ring | Rohacell cone, long throw | Cast alloy cone, 50mm linear stroke, die cast aluminium chassis |
| Sideways firing | Forwards firing | Forwards firing | Forwards firing | Forwards & downwards firing | 2 x sideways firing | Forwards firing |
| Passive 254mm radiator | Bass reflex | Sealed | Sealed | Sealed | Sealed | 2 x 300mm passive radiator |
| Sideways firing | Sideways firing (right) | N/A | N/A | N/A | N/A | Rear & downwards firing |
| 1 x stereo line level, 1 x XLR LFE, 1 x Slave | 1 x stereo line level, 1 x LFE, 1 x stereo speaker level (4 x binding posts) | 1 x stereo line level, 1 x LFE | 1 x stereo line level, 2 x balanced XLR | 1 x stereo line level, 1 x stereo XLR | 1 x stereo line level, 1 x LFE, 1 x XLR LFE | 1 x stereo line input, 1 x LFE, 1 x mono speaker level input (SpeakOn) |
| 1 x stereo high pass, 1 x Slave | 1 x stereo speaker level (4 x binding posts) | 1 x stereo high pass, 1 x LFE pass through | 1 x stereo high pass, 2 x balanced XLR high pass, 1 x LFE, 1 x XLR LFE | 1 x stereo line level, 1 x stereo XLR | Nil | Nil |
| 30-100Hz | 40-140Hz | 50-150Hz | 50-200Hz | 50-125Hz | 25-120Hz | 30-120Hz |
| Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| 0-180 degrees continuous | 0/180 degrees switch | 0/180 degrees switch | 0/180 degrees switch in software | 0-180 degrees continuous | 0/90/180/270 degrees in software | 0/180 degrees switch |
| DSP, auto calibration, trigger | Yamaha system remote connection, active servo | Choice of high pass filter for line out | Trigger in/out, Extensive DSP processing | THX Ultra 2 certified, Distortion cancelling driver placement | DSP, Calibration equipment and software, RS-232C, triggers | Separate level controls for LFE and other inputs, wireless capability |
| 290 x 315 x 290mm | 463 x 443 x 522mm | 420 x 350 x 370mm | 428 x 364 x 342mm | 660 x 440 x 460mm | 500 x 460 x 410mm | 816 x 436 x 507mm |
| 24.8kg | 42.6kg | 21kg | 25.4kg | 36kg | 44kg | 55.3kg |
| 2700 watts | 1000 watts | 300 watts | 1000 watts (RMS), 2000 watts (peak) | 400 watts | 1000 (continuous) | 1000 watts (RMS) |
| 18-100 hertz | 18-160 hertz | 18-250 hertz ±3dB | Not stated | 20-200 ±2dB | 17-145 hertz ±3dB, 15 hertz @ -6dB | -6dB @ 21 hertz |
| 165mm | Grille not removable | 212mm | 185mm | 223mm (x 2) | 217mm (x 2) | 221mm (x 2) |
| 214cm ² | Grille not removable | 353cm ² | 269cm ² | 781cm ² | 740cm ² | 767cm ² |
| 25.6-119Hz | 26-174Hz (music) 25-175Hz (movie) | 18-205Hz | 26-158Hz (no EQ) 23-150Hz (EQ) | 21.7-184Hz (M&K EQ) 18.6-186Hz (THX EQ) | 14.2-120Hz | 22-127Hz |
| -17dB | -23dB (music) -18dB (movie) | -4dB | -18dB (No EQ) -17dB (EQ) | -9dB (M&K EQ) -3dB (THX EQ) | 0dB | -12dB |
| 3.98/0.40/0.03/0.05 | 1.33/0.32/0.11/0.11 | 2.11/0.60/0.10/0.06 | 4.5/0.40/0.06/0.22 | 0.89/0.45/0.008/0.06 | 1.25/1.41/0.1/0.32 | 0.78/0.33/0.14/0.20 |
| 3 years | 2 years | 3 years | 5 years (1 year for amplifier) | 3 years | 2 years | 2 years |
| Qualifi | Yamaha Music Australia | BusiSoft AV | Advance Audio Australia | Qualifi | Convoy International | Synergy Audio Visual |
| 1800 24 24 26 | 1300 739 411 | 03 9810 2900 | 02 9561 0799 | 1800 24 24 26 | 02 9700 0111 | 03 9459 7474 |
| www.qualifi.com.au | www.yamahamusic.com.au | www.busisoft.com.au | advanceaudio.com.au | www.qualifi.com.au | www.convoy.com.au | www.synergyaudio.com |