

# Cinematic Bass

With the V+ series subwoofers, M&K Sound introduces fundamentally overhauled versions of the successful V series. Besides the 10" and 12" variants, there's now also a 15" version available. We have a close look at the medium-sized model V12+.

Loudspeakers from Miller & Kreisel, or M&K for short, enjoy great popularity in the professional sector. Thus, they are not only found in countless movie palaces around the world but are also used in renowned film mixing studios as reference monitoring. It is no surprise that, besides the large V15+, the V12+ already meets the criteria of THX certification. The V12+ is THX-certified for rooms up to 56 cubic meters, and the V15+ even up to 84 cubic meters.

# Construction type

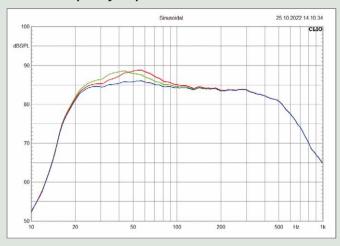
The V+ series subwoofers have a cubic enclosure, so the V12+ is also cube-shaped with an edge length of just under 40 cm. This makes it exceptionally room-friendly for a full-fledged twelve-inch subwoofer. The compact design is possible due to a sealed box. A high-performance long-throw driver with a 30-cm cone is at work inside. Its powerful

drive is powered by the improved Class D module, which now produces 400 watts in continuous operation and up to 800 watts at peak power.

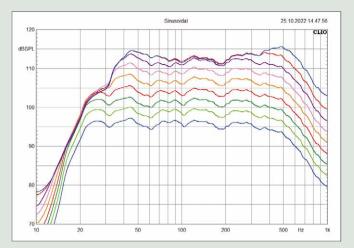
## M&K App

Not much can be adjusted on the V12+ subwoofer itself - it has level controls, and that's it. But that doesn't matter because there is the M&K app for Android and iOS. Connected via Bluetooth, it can access the DSP's settings from a smartphone or tablet. In normal mode, only essential functions are available to prevent accidental setting booboos, but in installer mode, just about every conceivable setting is available. Volume, phase from 0 to 360°, low pass filter from 43 to 300 Hz, delay, and a fully parametric 4-band equalizer give you control. What more could the heart of an ambitious sound tinkerer want? And it gets even better: If you want to save yourself the manual adjustment work, you can fall back on the automatic room calibration.

#### **Technic:** frequency responses



The frequency responses with EQ presets 'normal" (blue), 'movie' (red), and 'music' (green) look exemplary already from 20Hz.



Level increase in 3-dB steps: The V12+ plays almost linearly up to 115dB/m. Only then the limiter kicks in.

## Lab

The M&K Sound V12+ does not show any weakness in front of the measuring microphone. The low bass thunderstorm starts at 20Hz, so there is plenty of structure-borne sound if needed. Above that, the frequency response is exemplary linear up to beyond 300Hz, where the other speakers usually take over for a long time. It gets interesting when testing the level stability. Starting at 96dB/m sound pressure, we gradually increase the input signal by 3dB. Up to a not-so-quiet 105dB, the output sound pressure increases linearly by 3dB in the entire frequency range. With a further boost, the extremely low bass below 30Hz is capped and kept constant at 105dB. Above 30Hz, it continues effortlessly up to just under 115dB before the limiter strikes and saves the driver's life. This shows how intelligent the DSP is and ensures that, on the one hand, clean, (very) loud bass performance is provided and, on the other hand, the driver and power amp are not pushed beyond their physical limits.

# Operation

After this terrific lab performance, the Miller & Kreisel has to prove itself in our test cinema. The expectations are high - and they are not disappointed. As we all know, a home theater subwoofer must let it rumble properly, not only in the ear but in the whole body—no problem with the V12+. But an excellent subwoofer has to be able to do more. Low bass and SPL are essential, but they're not everything. It should also be clean and contoured, faithful to impulses, and dynamic. And this is where the M&K Sound V12+ shows all its strength. It always remains under the control of the DSP and amp up to the level limit, and follows the (low) frequency track almost perfectly. That's how it should be!

## Conclusion

Professional cinema bass from a compact, living room-friendly box: The V12+ from M&K Sound is an excellent subwoofer and ideally suited for cinematic experiences in your living room. It masters powerful action movie soundtracks and high-quality music reproduction in equal measure.

Dipl.-Phys. Guido Randerath



Price	2,150 Euro
Distributor	Audio Reference, Hamburg
Phone	+49 40 53320359
Internet	www.audio-reference.de

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• Equipment

Finishes black, white
Dimensions (Wx H x D in mm) 395 x 395 x 395

Weight 21.2kg
Crossover frequency 43 – 300Hz
Settings Volume, Phase, Crossover, Delay,
parametrical 4-Band EQ via app
Driver 1 x 30 cm

Active module 400W RMS, 800W max.

Connections Line-in, line-out
Box sealed

• Sound	<b>70</b> %	1,0	
Precision	20 %	0,8	
Level stability	20 %	1,1	
Dynamics	15 %	1,1	
Physical impact	15 %	1,1	
• Lab	10 %	1,1	
Frequency response	5 %	1,0	
Distortion	5 %	1,1	
Operation	20 %	1,0	
Build quality	15 %	1,0	
Features	5 %	1,0	

### Rating:

- uery precise and dynamic
- THX certification
- app with auto-calibration

