

# BROTHERS GLIM(M)



**With the HP 700 SE preamp and the MRE 220 mono blocks Octave has designed a fairy tale tube combi. But it's not the magic work of a good fairy – common sense and understanding prevail.**

■ By Lothar Brandt

**W**hen talking about tubes in high fidelity, we occasionally consider ourselves being in a fairy tale. Along comes some Brother Lustig proclaiming that only the glowing glass bulbs can awake a sound system from its sleeping beauty slumber. The scene overgrown by a lot of legends sometimes reminds the author of the household tale "The Little Old Man Made Young by Fire" which the Brothers Grimm had swiped from early-modern shoemaker, meistersinger and lyric poet Hans Sachs: Jesus rejuvenates, i.e. smartens up a beggar by putting him into the fire at a blacksmith's workshop. The presumptuous blacksmith tries the trick on his mother-in-law which miserably fails. Moral: any kind of art needs to be mastered.

Only very few people master the art of tube amp building so well like Andreas Hofmann. However, for decades the boss of the Baden mid-sized company Octave has been fighting against fairy tales, myths and exorbitances of the industry. His HP 700 SE/MRE 220 pre-/power amp trio are also creatures of a knowledgeable mind, based on solid ex-

pertise down to the last winding of mains or output transformers, resting on an earthquake-proof mountain of experience and relying on an armada of measurements. Other pillars which Octave's success story – not a fairy tale – banks on: operational safety and durability.

## POWER GALORE

Numerous features such as the "soft start" logic or the rigorous electronic monitoring of all parameters serve this value preservation. But also the courage to challenge dog-mas and to bite the bullet characterize Hof-mann's amplifiers. For instance, those transistors demonized by other developers have

also been used in his circuits from the very beginning. Not in the signal path, but e.g. where operating voltages need to be regulated, controlled and stabilized. After pentodes had been used in Octave power amps for decades ("Kleine Röhrenkunde/Little Tube Lore", see AUDIO 7/20, page 28) to deliver the output power in push-pull mode, with the V 16 (5/18) and the Jubilee 300 B he created amp gems with the 300 B triode in single-ended mode. And in the V 70 class-A integrated amplifier (11/20) he successfully integrated, against all doctrines, the class-A mode into the push-pull operation.

On the other hand, in the mono tube power amp – abridged MRE 220 – now prevails a powerful push-pull mode again. The generous output – the measuring lab ascertained 234 watts into 4 ohms – is provided by four pentodes from Russian maker Tung Sol, meanwhile Hofmann's almost exclusive purveyor by appointment. As standard we see four KT120s glow. Those who want to experiment with the equal-base KT88, KT90, KT100, 6550 or even EL34



– the author is still and remains very sceptical as to Octave’s “tube rolling” – can toggle between “High” for the KT120 and “Low” with a switch on the rear panel. A stability doping for the MRE 220, which cost a little under 20,000 euros per pair, is also quite legally available: via the Black Box (1,090 euros) or the Super Black Box (2,750 euros), the capacity of the power supply can be beefed up substantially.

The signal processing is done by good old friends: two ECC802 double triodes

(which correspond to ECC 82 and 12AU7). The 6SN7GT driver tube also combines two triode systems in one little vacuum glass tube. The steadily refined circuit dates back to the year 1994 when Hof-mann launched his first pentodes with the MRE 120.

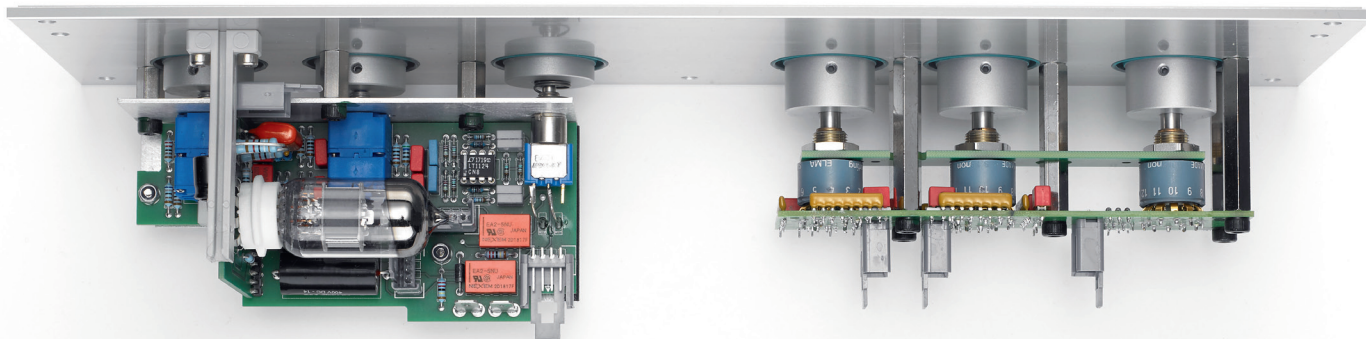
#### PLENTY OF FLEXIBILITY

Now as before his company winds the transformers inhouse. That way he has full control over the soundwise crucial output transformers as well, which are

still insulated using paper-based material and not polyester. Unlike many competitors Octave doesn’t offer discrete taps for speakers with an impedance of say 4, 8 or 16 ohms. Why is this? First because these values fluctuate over the frequency anyway, and second because Octave pentodes should be able to cope with the majority of the world’s loudspeakers no matter what.

Clearly more flexibility is demonstrated by the connection panel of the HP 700 SE preamplifier. For the line level

**OPTION:** The “Control Module” for the HP 700 SE is optionally available. It serves to switch the outputs, dial in the balance via pre-level control (right) as well as lows and highs with the ECC 88 double triode (left). The unit which is operated from above sits in the front part of the cover lid then.





**PORTRAIT PREAMP**

|                      |  |
|----------------------|--|
|                      | <b>OCTAVE</b><br>HP 700 SE                                 |
| Distributor          | Octave<br>Tel. 0+49 (0)7248 3278                           |
| www.                 | octave.de  |
| List price           | from 13200 Euro  |
| Warranty period      | 2 years (3 years w. registr.)                              |
| Dimensions W x H x D | 47 x 13 x 48 cm / 18.5 x 5.1 x 18.9 in. (w/o power supply) |
| Weight               | 10.0 kg / 22.1 lbs; 3.8 kg / 8.4 lbs (power supply)        |

**CONNECTIONS**

|                        |                            |
|------------------------|----------------------------|
| Phono MM/MC            | optional/optional          |
| Line level RCA / XLR   | 3/2 (plus 2 optional each) |
| Digital USB/opt./koax  | —/—/—                      |
| Tape/Pre-Out RCA / XLR | •/2/2                      |

**FUNCTIONS**

|                          |                                     |
|--------------------------|-------------------------------------|
| Output selector          | optional                            |
| Tone controls/defeatable | optional                            |
| Bypass for multi-channel | •                                   |
| Special features         | Stepped level attenuator (optional) |

**AUDIOGRAM**

AUDIO 10/2021

|  |   |
|--|---|
| <ul style="list-style-type: none"> <li>super flexible; open, fast and dynamic; sensational MC stage</li> </ul> | <ul style="list-style-type: none"> <li>fully equipped not cheap, only volume remote-controllable</li> </ul> |
| Sound Line/MC  | 138/135 (step-up)   |
| Features   | depending on option   |
| Operation  | very good   |
| Verarbeitung   | überragend  |

**AUDIO SOUND VERDICT 138 POINTS****PRICE/PERFORMANCE HIGHENDIG SUPERB**

preamp at 13,200 euros in its basic configuration with a separate power supply, Octave offers a cornucopia of options. In line with customer demands, the owner can compile – bit by bit or at one go – compile his or her desired preamp. This flexibility, which can be found only with very few competitors in high-end, deserves an extra fanfare.

Who needs more than the three RCA and two XLR inputs can have appropriate modules (about 600 euros) screwed into the corresponding slots. Owners of several power amps who like to switch between these can select the two RCA and two XLR outputs via the “Control Module” (2,500 euros, see previous page). The control unit also contains a sophisticated tone control. Ultra high-enders who want to make no more compromises at all in terms regarding the volume control issue, may want to choose the 47-position step switch option. But with the precise, finely graded resistor network the standard remote

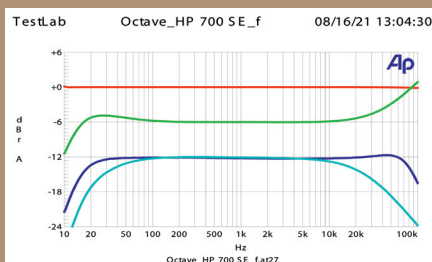
control, at Octave only in charge for the level from time immemorial, won't work any more. Of course, we were already very happy with the “normal” motorized pot. How much pre-gain will be delivered by the line stage with its ECC 82 and two of the notoriously low-hum, low-distortion Telefunken EF 800, is switchable in three (Low, Med, and High) gain levels.

But the phono options are truly awesome. Those who want to run one or two turntables or pickups respectively, will first have the basic phono board for 1,500 euro installed which is equipped with one ECC83 (12 AX 7), ECC81 (12 AT 7) and ECC88 (6922, 6 DJ 8) each and takes care of the RIAA equalization as well as the adaptation to line level. However, if you want to connect a moving magnet, a moving iron (MI) or a high-output moving coil (HOMC) pickup system, you'll need to shell out another 435 euros for the corresponding MM input module with

**OPTION 2:** For the review Octave sent the HP 700 SE with no less than two – retrofittable – phono stages (left) for MCs. The one with the transformer (“step-up transformer”) proved to be a real high flyer

**MEASURING LAB**

The very broadband (frequency diagram left, red graph: line) and low-distortion (THD: 0.001 %, right graph) HP 700 SE delights with excellent S/N ratios: the 76 dBs for Phono MC are great for tube amps, the 108 dBs for line RCA absolute world class. The output impedance of 150 ohms with line and XLR also allows to use long cables to power amps.



RCA sockets. The MC module with active voltage gain delivered by carefully selected OP amps costs 599 euros, both with RCA and XLR sockets, another RIAA board is not required. The balanced XLR input does make sense if the turntable has appropriate signal cables – an MC system is the only true balanced source in high fidelity.

### PRECISE FULFILLMENT

For particularly soft and/or low-impedance representatives of this kind Octave offers a tidbit: the MC step-up transformer – optionally with RCA or XLR inputs – doesn't actively amplify the tiny voltages of the moving coils, but lifts them up to MM level by transforming the impedance from a few ohms to 47 kilohms. Perhaps trivial reading, but already the very fine art of phono culture. Octave has managed to design the converters with three switchable gain stages also metrologically in an exemplary manner (see lab box). Of course, the Karlsbaders

wind their low-noise, low-distortion gourmet transformers themselves using a special soft-annealed copper.

Physically these converters act both as amp- and speaker-saving high-pass filters which block subsonic noise from bumpy records or unwanted tonearm/pickup resonances. This topic is pretty complex which is why AUDIO will dedicate a „knowledge“ page to it in the next issue.

Since Octave's CEO Andreas Hofmann and his bustling sales and marketing manager Thomas Brieger knew about the author's passion for vinyl, they brought the HP 700 SE adequately loaded to the editorial offices. Fortunately the Thorens TD 124 DD (9/21) was still on the site whose SPU 124 pickup was modeled on the legendary Ortofon SPU and, despite an incre-

**OPTION 3:** The MRE 220 can boost its power supply via (Super)Black Box (center connection). The ground lift between XLR and RCA In can remedy hum troubles.

## PORTRAIT POWER AMP

| OCTAVE<br>MRE 220          |   |
|----------------------------|---|
| Distributor                | Octave<br>Tel. +49 (0)7248 3278                 |
| www.                       | octave.de                                       |
| List price                 | 19,995 EUR / pair                               |
| Warranty period            | 2 years (3 years w. registr.)                   |
| Maße B x H x T             | 49 x 23 x 42 cm<br>(19.3 x 9.1 x 16.5 in.) each |
| Weight                     | 29.8 kg (65.8 lbs) / pc.                        |
| CONNECTIONS                |   |
| Inputs RCA / XLR           | •/•   |
| Level control              | –   |
| Speaker outputs            | 1   |
| Selectable impedance       | –   |
| Bias control / Ground Lift | •/•   |
| Special features           | Connection for Super Black Box                  |

## AUDIOGRAM AUDIO 10/2021

|                 |                                     |   |
|-----------------|-------------------------------------|---|
| +               | punchy, transparent, fast, reliable | – |
| Sound RCA / XLR | 140/140 (w. Super Black Box)        |   |
| Features        | satisfactory                        |   |
| Operation       | superb                              |   |
| Workmanship     | superb                              |   |

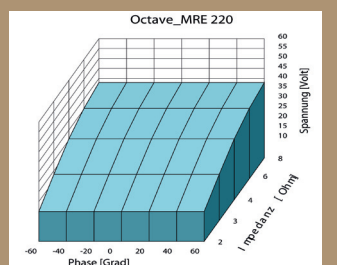
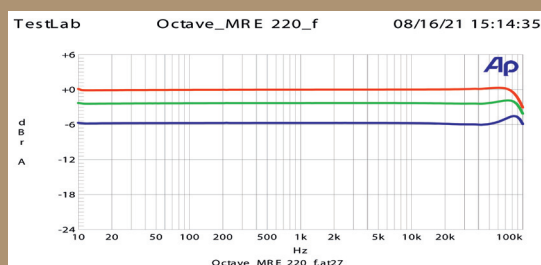
AUDIO **SOUND VERDICT 140 POINTS**  
**PRICE/PERFORMANCE HIGH-END, SUPERB**

**AUDIO** 10/21  
**HIGHLIGHT**

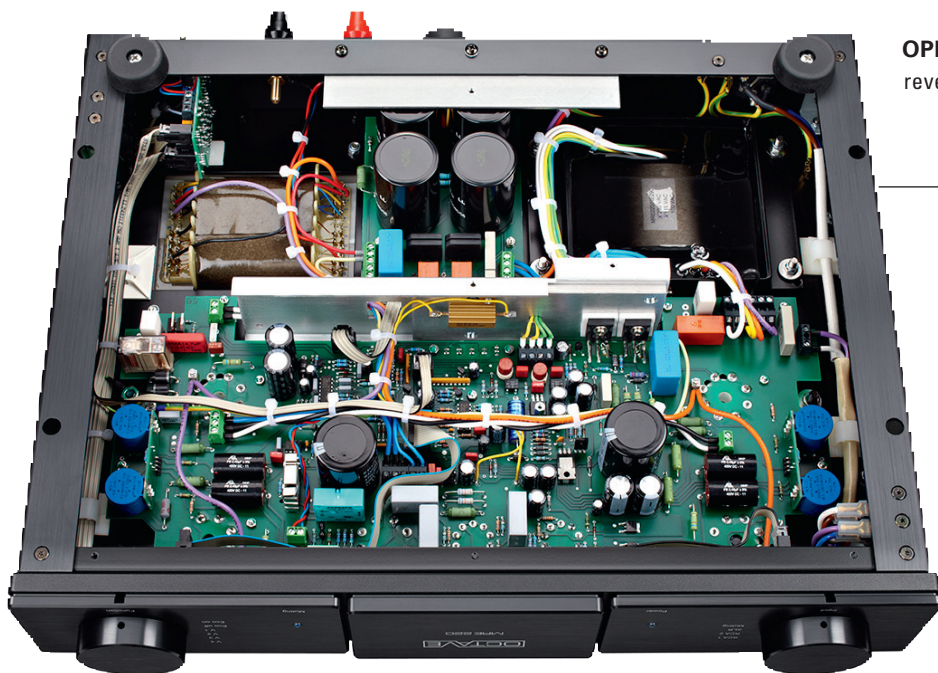


## MEASURING LAB

The MRE 220 is also very broadband (left diagram) and low-noise (104 dBs at RCA 2V < 10V, 8 ohms). Equally impressive for a tube power amp is the high stability (right). 150 watts RMS into 8 ohms and 153 W RMS (PMPO 180/234 W) into 4 ohms give a clear statement, into 2 ohms we still have 112 W of PMPO. With the (Super)Black Box the specs remain the same which indicates a good serial power supply.







**OPEN:** Upon taking off the base cover the MRE 220 reveals an opulent interior where also semiconductors ensure operational safety and constant conditions for the tubes.

ased output voltage, is an ideal supplier for transformers. The likewise already perfectly broken in MRE 220s got their Super Black Boxes connected – and after an unbitchily short warm-up phase things were really taking off.

### MUSICAL VERITY

In the listening test the Brothers Glim(m) from Karlsbad were playing with an energy that would have resuscitated every Snow White abruptly. The sometimes hard strokes by Hélène Grimaud (see vinyl section) turned out to be pithy attacks of a too often pampered Mozart. Chuck Loeb's brisk fu-sion came bubbling out with such a feisty liveliness from the Bowers & Wilkins 802 D3 speakers that you were almost tempted to grab the air guitar. The truly unwieldy art of the musicians suddenly became so very accessible – demonstrating en passant how superbly this music had been recorded.

The symphonic "Emotional Storm" by Avishai Cohen, swirling in the jazz piano trio, let loose a heartfelt force as it can only be produced by really great hi-fi gear. Totally enraptured audition test notes by the author certified the chain of Octave's step-up transformer, HP 700 SE and MRE 220 a „musical sincerity and truthfulness" unheard so far in this price range. And which lies well

apart from distortion factors, bandwidths and S/N ratios.

Did anybody still want to go "back" to the "normal" MC stage? Not really, but in its own right this phono twig also bears quite wonderful, ripe fruit. The beautiful thing about the HP 700 SE is that you can upgrade later and don't need to take an instant decision forever.

On the other hand, the author was able to take an instant decision that also the line-level section belongs into the league of excellence: beside several LPs he brought along the single-layer SACDs presented in the music column as well as the hybrid SACDs from Ars chosen for the magazine CD "Der Perfekte Klang" ("The Perfect Sound", see article on the mag CD). All of them were played in a flawless manner by the T+A MP 3100 HV reference player (page 12) into the line inputs of the Octave preamp.

Which here again showed a temper that would have perfectly suited any Valiant Little Taylor. But the HP 700 SE would probably seize much more than Seven At One Blow – it also organized an 100-piece orchestra with utmost care. The spatial imaging in both width and depth gradation was impeccably ordered – and the Octave combi distinguished itself once more with incredibly fast transients and crystal-clear transpa-

rency. Owing to the just not uncontrollable, but very disciplined force of the power amps, down-to-earth rockers got pant legs flapping. At the same time the lows showed no trace of flapping boominess, they rather sounded pithy and solid – the Octaves unleashed the churning sound orgies with almost mind-boggling effortlessness.

On the technical side this transparency, together with an immense velocity, demonstrated the benefits of broadband, low-noise circuits as cultivated by Octave. Musically it revealed the fascination of sound panoramas as if conjured out of nowhere in the most natural way. And already we're once again brushing the sphere of fairy tales of which an Octave review should stay clear by all means. After all, no good fairy was performing a figment of phantasy here – instead truly existing technology to create genuine sonic magnificence was at work. Sounds like a fairy tale, but it isn't.

### BOTTOM LINE



**Lothar Brandt**  
AUDIO editor

**No fairy tale or wishful thinking, but the result of ingenious designer gumption and decades of experience: together with the two enormously high-torque MRE 220 mono blocks, Octave's amazingly flexible HP 700 SE preamp makes a tube trio which has no equal in its price class. Incorruptly transparent, super precise and lightning-fast it reveals musical verities. Although in fairy tale beauty.**