

Microtech Gefell AP1

Discrete Transistor Mic Preamp

HUGH
ROBJOHN'S

Microtech Gefell are very well known for their wide range of high-quality microphones, many of which have been reviewed in SOS, but at the ProLight & Sound exhibition in April last year the company announced their first mic preamp, which was apparently designed to partner the company's low-noise, high-headroom, large-diaphragm mics. In brief, this single-channel, transformerless microphone preamp boasts dual (paralleled) outputs, relay-switched gain adjustment with a Trim control, adjustable low-cut filter, standard 48V phantom power, and polarity-inversion facilities. The mains input voltage can be switched between 115 and 230V from the rear panel.

Overview

The AP1 is quite a big beast for a single-channel preamp. Housed in a standard 1U, 19-inch, rackmounting steel case, it extends a considerable 325mm behind the rack ears and weighs slightly over 5kg. This gives the impression that there must be a lot going on inside the box, but upon removing the (eight Torx-screw fastened) lid my illusions were promptly shattered: the box is mostly open space! The internal 'gubbins' is of high quality, both in the components and construction, but I was anticipating more from the size and weight... and cost! Since Microtech Gefell describe the AP1

German manufacturers Microtech Gefell share origins with Neumann and make some of the best mics currently available. Does that pedigree come through in their first preamp?

as a 'discrete transistor amplifier' I was also expecting to find a lot of discrete transistor gain stages, but this isn't the case. There's an anonymous transistor 'can' at the very front end (its identifying markings appear to have been scratched off), but it's probably some form of matched-pair transistor array. The rest of the audio path involves a number of standard NE5532 single and NE5534 dual op-amp ICs (all socketed). This isn't a problem *per se* — it's perfectly possible to create a high-quality signal path using these — but it does make the 'discrete' tag seem a little misleading.

The rear panel only carries the IEC mains inlet (with integral voltage selector and fuse holder), two line-output XLRs and a microphone-input XLR. The front panel isn't much busier either, with four controls on the left-hand side of the large central MG logo, and two more plus a crude bar-graph meter on the right.

A rocker switch on the left of the front panel turns the unit on and off, and three illuminated push-buttons select phantom power, polarity inversion and the low-cut filter. This last control has an associated rotary knob to adjust

the filter cutoff frequency, although the scale only notes the range extremes (18Hz and 180Hz). Confusingly, the published technical specifications claim a range of 18 to 220Hz, but it seems that there are several errors in the tech specs, and the panel markings are much closer to reality!

Microtech Gefell AP1 £1943

PROS

- Solid Germanic industrial design.
- Fine technical performance.
- Very clean, neutral and low-noise sonics.
- Dual line outputs.

CONS

- Uncompetitive pricing.
- Not discrete transistor circuit path.
- Bunched high-pass frequency control.
- Crude, unscaled output-level meter.

SUMMARY

Microtech Gefell's first foray into hardware preamps has delivered a simple but very competent performer, let down only by its current list price, which makes it rather uncompetitive.



The front panel carries a 12-position rotary gain switch and variable Trim control, the latter with a positive centre detent. The published specifications state that the switched gain increments in 3dB steps and the Trim spans a ± 6 dB range, the combination giving an overall gain range of 11 to 62 dB. The review model performed rather differently, with 5dB switch increments between 3 and 58 dB, and an asymmetrical Trim range of -3 to +5 dB — both as marked on the front panel.

Output level metering is provided by a 10-LED bar-graph meter, which has no

going to win any awards for style, perhaps, but it is extremely practical and simple to use, and that's

what really matters

for most of us. Everything works as would be expected, although the first half of the low-cut filter control doesn't change the turnover frequency very much. In fact, most of the audible effect occurs across the central and right half of the control range. The ability to switch the filter out altogether is most welcome, though.

The gain control's 5dB steps and variable Trim allow fast and repeatable gain setting, although how good the gain matching is across a pair of AP1s I can't say, as they only sent one unit for the review. The metering, although pretty crude by modern standards, is quite usable in practice, and I found myself working with only the bottom five LEDs flashing regularly, to ensure a sensible headroom margin into the converter.

Alternatives

The single-channel mic preamps that come to mind in a similar price range to the AP1 are the **Neve 1073DPD**, **Millennia HV3C** and **Manley Single Mic Pre** — but I don't feel the AP1 is really competing against those classics. Instead, I'd say it was competing sonically with clean transformerless designs from the likes of **GML** and **AEA**, but the **GML 8302** and **AEA RPO** are both two-channel preamps and both cost less than the single-channel AP1. Further two-channel alternatives for similar money include the **Universal Audio 2-610S**, the **Presonus ADL600** high-voltage Class-A discrete transistor preamp, and the amazingly versatile **Cranesong Flamingo**.

I feel a little uncomfortable about the bold claim of it being a 'discrete transistor preamp', given the large number of standard op-amps it contains. In discussion with the company, it seems that their understanding of this phrase is at odds with mine and, I think, the common usage, and I believe they are considering changing the wording. More significantly, though, the price feels rather steep to me. Its UK list price of just under £2000 makes the AP1 roughly £150 more expensive than some highly respected two-channel preamps like the GML 8302 and the AEA RPO — both being directly comparable as ultra-clean, low-noise, transformerless



scale markings at all. However, the eight green segments illuminate at roughly 2dB increments, with the bottom light coming on when the output level exceeds about +4dBu. An output of +18dBu is sufficient to light the penultimate yellow LED, and +22dBu for the red at the top.

As you can no doubt deduce from the above, I made the effort to take a number of technical measurements during the review period, and if you want to read about this in more detail, you can find the results on the SOS web site at www.soundonsound.com/sos/articles/mar13/mg-ap1-media.htm.

In Use

The AP1 looks and feels very solid and Germanic, with a simple, spacious and clearly labelled control panel. It's not

In terms of sound quality, the AP1 sounded very similar to my transformerless SSL X-Logic preamps, although it seemed slightly quieter at high gain settings, and a little cleaner and more transparent overall. If I had to be picky, I could say that the bottom end wasn't quite as satisfying as that provided by my GML 8304 preamps, but I couldn't really put my finger on exactly why. It just didn't seem to be as 'solid' — but we're talking here about extreme subtleties. Wide dynamic range sources were handled in an effortless way, and overall the AP1 behaved like the proverbial 'wire with gain' — clean, transparent, quiet and without any noticeable character.

From a performance point of view, then, the AP1 is a very proficient preamp — both technically and sonically. However,

The efficiently styled rear panel hosts dual line outputs on XLR sockets.

designs with impressive technical and sonic performance.

Overall then, the Microtech Gefell AP1 is certainly a very good first preamp, achieving fine technical specifications and delivering good clean sonics. However, at its current list price I feel unable to recommend it, as the GML and AEA preamps mentioned above both offer significantly better value for money without any loss in quality. **///**

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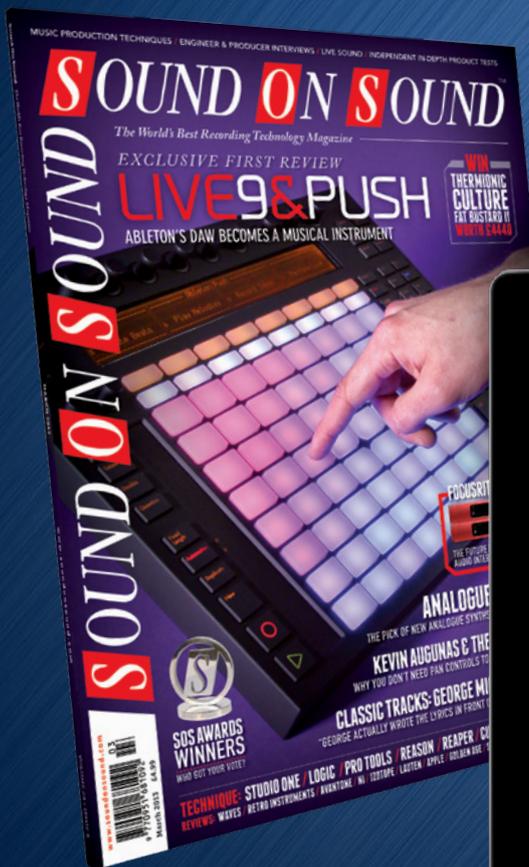


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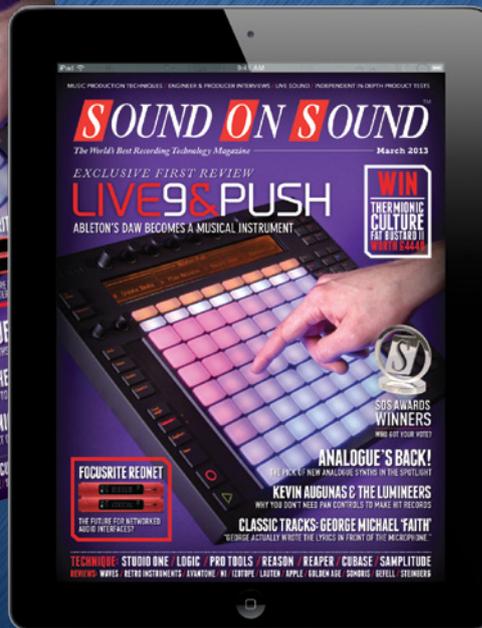
Jack Joseph Puig, mixer, producer, Grammy Award winner (Rolling Stones, U2, Mary J Blige, Black Eyed Peas)

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This article was originally published in Sound On Sound magazine, **March 2013 edition**



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