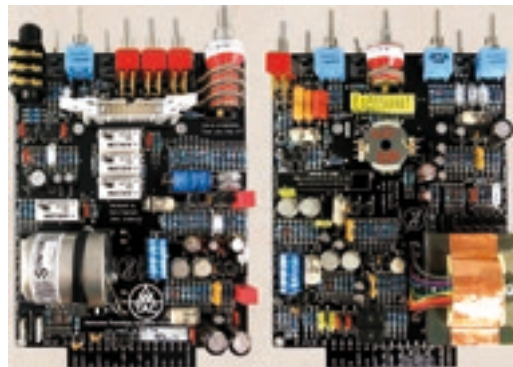


AwTAC Awesome Channel Amplifier

Most gear with amplifier stages fall into either of two main camps in their search for purity or character. **GEORGE SHILLING** encounters a box aimed squarely at the latter.



Forget everything you have learnt about signal paths. Forget all that purist stuff about achieving the shortest path, and eliminating unnecessary amplifier stages. Forget going straight from the preamp into the recorder. Why? Because the alternative is, to quote the makers' description, first and foremost, 'Awesome!' AwTAC's thinking is that all those early 1970s records that we know and love were recorded through consoles with typically six amplifier stages, two transformers and an inductor in each channel. So that is precisely what we have here in the Awesome Channel Amplifier (UK£1100 + VAT). Each stage is carefully tuned to complement the amp before and after it, so that everything comes out 'bigger, rounder and better'. And despite having everything crammed into a small space, this is done by painstakingly hand-assembling discrete transistor topology, exactly like those designs from around 1970. Furthermore, all of this happens using the finest home-grown USA suppliers and assembly. Parts include a custom spec Sowter AW27 input transformer, a Cinemag inductor, a custom-wound Crimson Audio transformer, Clarostat sealed conductive plastic pots (all measured and hand matched for stereo pairs), and a variety of capacitors tuned by ear to sound good. Every single switch, contact and connector pin is gold plated, including the Grayhill rotary switches, the Neutrik jack, the sealed relays, the pin headers, the toggle switches and the PCB edge connector.



And the ACA isn't just a recording channel, but a building block (unusual among 500 Series modules) where multiple units can be joined up to become an 'Awesome Console' (although I only had a single Channel Amplifier for review). The double width module includes a passive mix bus, with an LCR toggle selector (just like a vintage console, although a separate Panner/Mute module is in the works). As modules are double width, the right channel's connectors on the rack rear comprise the mix bus input and output connections. This effectively means that you can bus channels together to combine them for recording while retaining separate direct outputs (from the left module output). The LCR Passive Mix Bus Switch assigns a secondary winding of the output transformer (identical to the main output) to the appropriate pan position on the bus, set at 150ohms and Mic level.

After chaining units using standard XLR cables and 500 Series rack connections, AwTAC will supply a breakout cable for the end of the chain that includes the necessary resistors before you plug it into mic preamps to bring the level back up to line level (and possibly add some further colour). Of course, using the breakout cable you could bus into another pair of ACA channels' mic preamps — AwTAC boasts that multiple passes through the circuitry can further enhance things. With the recommended Purple Audio Sweet Ten rack host you can also access insert points and add external faders, although the ACA should happily work with any 500 Series host; I used an official API Lunchbox for the review.

The largest knob is the Input Selector Switch which is the global input sensitivity control. Although panel legending is tiny (this is a 500 Series unit after all), there can be no doubt where this knob is pointing, thanks to its size and its unusual sculpted shape. However, it points at (mostly) uncalibrated dots. The first five positions (within a white line) constitute Line amp settings with as full a bandwidth as is possible, from -6dB through 0dB at 12 o'clock (marked with an 'o') up to +15dB. From the 4 o'clock to 10 o'clock positions, a different more characterful 'bandwidth limited' amp is used for the microphone preamp settings. These range up to a maximum 65dB gain.

Right below the selector is a toggle for Phantom Power. This is accompanied by the only indicator light on the unit, helpfully warning of active 48V power.

Inserting a plug into the front panel Instrument input jack overrides the rear input and similarly feeds into the input transformer before hitting the gain selector.

There is a High Pass filter toggle that is 12dB per octave at 130Hz. This is located in circuit after the EQ section to enable creative gain staging — saturating the low frequency by boosting, then cutting some of it out with this. The Polarity Reverse toggle operates after the Line Level Output so that any nonlinear distortion is flipped as well.

The Fader knob is relatively undamped and will only attenuate signal — all the way to off at fully anti-clockwise. Cranking the gain switch and lowering this introduces friendly distortion. An Output Transformer Loading Switch is a three-position toggle with 1200 or 600ohm settings, and also a 'no-load' position. By varying this you can make the unit work harder for more of a classic tone. It's really a suck-it-and-see button; when connecting to a modern convertor sometimes 600 will sound a bit squashed while the no load position frees things up a bit. Having the gain selector one notch hotter than you think it should be also warms things up nicely. This limits transients slightly, and adds richness and a touch of distortion (but beware temptation!)

The EQ section includes a bypass switch (which passes audio; there's no relay), but for maximum 'character' the tone is mildly enhanced by having the EQ engaged, with the knobs centred. This just subtly and pleasantly enhances the tone for more presence. The three-band EQ provides High and Low Baxandall Shelving, each with three selectable frequencies, plus a Mid band with eight frequencies (from 300 to 8kHz) of inductor-based boost and cut. The 1kHz and 3kHz each have two settings for narrow or wide (normal) bandwidth. All three bands are joyous — plenty of fairly broad power, and a possible hint of crunch at full tilt (especially in the bass). The HF frequencies are 6kHz for general brightening, 11kHz for sparkle, and the sheen of super-highs boosted or cut with the 17kHz setting. At the low end it is 35, 60 or 130Hz which all have their uses, the last of these sounding particularly large, never boomy, and nicely tempered with the High Pass filter as necessary.

The Forward/Back switch is a bit of a mystery control that alters the coupling of the EQ to the output stage. I could barely tell any difference — perhaps Forward was slightly pokier in the midrange and Back a little warmer and open in the low-mids, but really the difference was so small that I may have completely imagined it. I suspect that with multiple channels the cumulative effect is more noticeable; AwTAC suggests assigning mix groups and experimenting.

Comparing the AwTAC to other mic preamps, you'd think its six amplifiers would make things sound clogged up and closed-in. But the reality is quite the opposite — it's bigger on vocals than a Universal 610, which by comparison sounded lacklustre. A subtly driven bass drum mic sounded huge. It's crisper, freer and richer sounding on guitars and drums than an API, and on all sources sounded simply bigger, silkier and more gorgeous than anything else I had to hand. ■

PROS Yes, it does sound pretty awesome; enriches already-recorded sounds beautifully; exceptional build and component quality.

CONS Colouration not for purists; you'll want two (or more).

Contact

AWTAC, US
Web: www.awtac.com
UK, KMR Audio: +44 208 445 2446