Operating Guidelines

The **AAE 18-1 SUPER REVERB** is a single-ended Class-A valve amplifier head that delivers approximately 18W RMS into an 8-ohm load. Despite output rated at 18W, the amp's output at higher-gain settings typically peaks at nearer 50W. Depending on the sensitivity of the speaker matched with the head, volume levels can be quite high, if desired, and more than adequate in club-sized venues without the need for sound reinforcement.

We would not describe the amp as a 'plug-and-play' amp. The sounds achievable are in the range from clean to mid-gain. However, this would be to greatly over simplify what it is capable of.

The range of tonal characteristics available within the design range is considerable and will typically appeal to a player seeking maximum control over their sound. Tone is, of course, a very subjective area, however, in our experience, most musicians find the amplifier is particularly good at adding richness and subtlety to the natural tones of their chosen instrument. It also features a unique ability to shape the tonal characteristics of the gain settings available. This makes the amp extremely adaptable, and rewarding, across a variety of playing styles from rock to blues, jazz, soul, funk, country etc. We also strongly recommend matching the amp to a speaker cabinet designed to complement the style of music being played.

The controls are quite interactive; that is to say, adjusting one control may prompt adjustment to another in order to fine-tune the desired tonal characteristics. More explanation can be found in the descriptions under each section that follows.

FRONT PANEL

The control panel is designed broadly in line with the signal path through the amplifier. That is to say that, starting at the left and moving to the right, the controls are presented roughly in the sequence that they follow in the internal circuitry of the amplifier.

INPUT

The single mono 1/4" jack input is at lower left.

INPUT GAIN

Immediately above the input jack is the INPUT GAIN switch. In the UP position the sound is normal. In the DOWN position, the signal path is altered in order to add gain at the input stage.

TIP: We have found this input gain particularly useful for adding a little 'edge' when using passive instruments fitted with lower output single-coil pickups.

REVERB

There is a very high quality reverb circuit built into the amplifier. The player has independent control over the signal that is SENT to the spring reverb unit as well as the signal that is

Operating Guidelines

RETURNED. Unlike most built-in units, the reverb is useable across the entire range of adjustment available.

TIP: Note that a higher setting on the GAIN TWO control has the effect of further enhancing the reverb-affected part of the signal (and vice versa).

<u>EQ</u>

BASS, MID and TREBLE equalisation controls feature, in that order, as we move across the panel from left to right. Additionally there is a mid-boost switch positioned above the MID eq control. EQ settings can have an affect on the overall level of signal for that particular frequency (i.e. affect volume).

With the MID-BOOST switch in the UP (marked FULL) position, the range of frequencies affecting the tone is, well, fuller! This setting suits the player desiring a sound that incorporates greater use of low and high frequencies in their tonal output.

With the MID-BOOST switch in the DOWN (marked MID-BOOST) position, the sound is more concentrated in the mid-frequencies and use of the MID EQ control has the greatest affect on tone.

TIP: With MID-BOOST switched to DOWN, we have found lower settings for the BASS and TREBLE controls better suited to a satisfying output tone.

GAIN & MASTER CONTROLS and OUTPUT MODES

GAIN ONE and GAIN TWO controls both affect pre-amp gain. The settings of each are infinitely variable so that the player can mix, or blend, their sounds to achieve the desired result (TIP: if either gain control is set to zero, the pre-amp signal is attenuated completely). It is important to note that the characteristics of each gain control are different, as explained below.

The MASTER control affects overall volume at the output stage and, at higher settings of this control particularly, the overall tonal character of the amplifier is affected by the OUTPUT MODES.

GAIN ONE

This control affects the level of pre-amp gain provided by a 12AX7 valve. It gives a fairly familiar 'full' sounding pre-amp gain. Settings past the 12-o'clock position bring the characteristics of this valve particularly to the fore, especially when GAIN TWO is not advanced beyond 12-o'clock.

TIP: Use of the BRIGHT switch may be desirable when GAIN ONE is the dominant pre-amp sound and especially when used in conjunction with lower settings (12-o'clock or less) on the GAIN TWO control.

Operating Guidelines

GAIN TWO

This control affects the level of pre-amp gain provided by a 6SN7 valve. It gives a distinctively bright pre-amp gain, 'edgier' and brighter in the higher settings. Settings past the 12-o'clock position bring the characteristics of this valve particularly to the fore, especially when GAIN ONE is not advanced beyond 12-o'clock.

TIP: Setting the BRIGHT switch to NORMAL may be desirable when GAIN TWO is the dominant pre-amp sound and especially when used in conjunction with lower settings (12-o'clock or less) on the GAIN ONE control.

TIP: Higher settings on the GAIN TWO control also have the affect of enhancing the signal that has been channelled via the reverb unit. If this is not desirable, simply adjust the reverb controls to taste.

MASTER

The MASTER control affects the output stage of the amplifier.

Care should be taken if all three of the controls GAIN ONE, GAIN TWO and MASTER are set to near maximum, as this will cause the output valves to operate at very high AC voltages and this could induce output valve failure. To be 'kinder' to the output valves, we therefore strongly recommend adjusting at least one of these three controls back from maximum to a reasonable degree. Output valves are expensive - you have been warned!

There are three MODES at which the output valves can operate (as described below). The difference between these modes, and the effect they have on the sound characteristics, will become more noticeable at higher output (MASTER) settings.

S'BY / ON SWITCH

The amplifier should always be in standby mode when turning the power on. A period of a minute or two should be allowed before switching to the ON position.

WARNING: A load matching the output impedance (8 OHMS) must be connected to the output socket (rear panel) when turning the amplifier on. If this is not observed there is a serious risk of permanent damage to the amplifier, which is not covered by warranty.

WARNING: We strongly recommend switching 'through' standby mode when altering the OUTPUT MODES on the amplifier (i.e. briefly switch from ON to S'BY, change mode, and then switch back to ON).

OUTPUT MODES

Operating Guidelines

There are three OUTPUT MODES available to the musician on this amplifier. In each case, the DOWN position of these switches represents a higher gain sound output from the amp.

NOTE: the same logic applies to the INPUT MODE switch i.e. DOWN = higher gain.

PENTODE

With the PENTODE switch in the DOWN position, the output valves operate in 'pentode' mode, which gives the highest output gain sound available from this amplifier.

NOTE: When the PENTODE switch is in the UP position (marked NORMAL), the amplifier is in either ULTRA-LINEAR or TRIODE mode, depending on the position of the other mode switch (see below).

ULTRA-LINEAR / TRIODE

NOTE: When the PENTODE switch is in the UP, or NORMAL, position, the ULTRA-LINEAR/TRIODE switch determines the output mode; otherwise this switch has no effect.

When in ULTRA-LINEAR mode (the UP position), the amplifier operates in its cleanest mode.

In TRIODE mode (the DOWN position), the amplifier operates in triode mode which gives gain at a level intermediate to ultra-linear and pentode.

TIP: We recommend experimenting with higher MASTER control settings, and lower pre-amp gain settings (12-o'clock or less) whilst comparing the sound of the different output modes. Subtle amounts of output stage gain, which is different in character to pre-amp gain, are achievable even in ULTRA-LINEAR mode – and progressively through TRIODE and PENTODE modes respectively. Conversely, it is possible to achieve a relatively clean sound at the output stage with use of modes and MASTER control attenuation, whilst then dialling in the amount of pre-amp gain desired. Different use of EQ settings can also have a significant affect on the gain/tone results.

TIP: Whilst experimenting with pre-amp and output stage controls to achieve the desired gain/tone balance, don't forget you can boost the gain overall by use of the INPUT GAIN switch.