Audio Space Galaxy 34

This pleasant little tube amplifier is not the first product from this Hong Kong manufacturer that we have reviewed. We first ran across the brand in *UHF* No. 78, in which we listened to the AS-3i, also an integrated with EL34 output tubes. It pleased us, and we were even more impressed by the gigantic Audio Space Reference 3.1, reviewed in *UHF* No. 82.

This amplifier is compact, but pick it up (carefully, remembering to bend your knees!) and you'll realize it's more than an empty box. The back end, with its three transformers, is particularly heavy, which is as it should be. It is common for tube amplifiers to have too little iron in their output transformers, with disastrous performance at low frequencies.

The "34" in the name refers to the EL34 output tubes. It's not the most powerful tube in the extended 6L6 tube family, but it is possibly the sweetest-sounding. For those who need more than this amp's 32 watt maximum, there is also a Galaxy 88, which uses (you guessed it) KT88 tubes.

Like many other tube amplifiers, the Galaxy 34 offers a choice of operational mode: a switch on the front panel — duplicated right on the remote control — lets you switch between triode and Ultra-linear mode. This involves a tradeoff between power and quality, but as we shall see it is not the same tradeoff we have seen on amplifiers from other manufacturers.

The EL34, like the other members of its family, is a pentode, which is to say it has five elements. A triode, as the name suggests, has only three. One of the two added elements to the pentode is what is called the *screen grid*, which is positively charged and accelerates electrons flowing from the cathode. In so doing it increases the flow, and therefore the level of amplification. The increased flow is also accompanied by non-linear changes in the tube's characteristics. Is a triode therefore better? Many audiophiles believe it is. You can make an EL34, or any other pentode or tetrode, into a triode by tying its screen grid to the other positive element, the plate. Of course its power output then goes down.

A compromise was developed some decades ago, known as Ultralinear operation. Invented by Alan Blumlein, the same British engineer who defined the classic microphone configuration for stereo recording, it calls for a trans-former with extra screen taps, so that the screen grid is neither tied entirely to the plate nor to the high voltage supply. It is not uncommon for modern tube amplifiers to be switchable between Ultralinear and full pentode mode. Audio Space, on the other hand, lets you choose between Ultralinear and *triode* operation.

Anyone searching for raw power should look elsewhere. A pair of EL34's can develop some 50 watts if driven hard enough, but these are rated at 32 watts in Ultralinear…and just half of that in triode mode.

It goes without saying that you'll want to use this amplifier with rather efficient speakers, but fortunately such speakers have become common today. You could, the reasoning goes, choose triode mode for chamber music or ballads, but switch to Ultralinear for rock or large orchestras. To make this simple, you can switch from one mode to another with the remote control.

Which is what we did initially, but comparisons are difficult, because the volume drops in triode mode, and the volume knob has no calibrations. Worse, it has an index dot only on its front face, and the mirrored panel is pretty much unreadable anyway. Based on initial listening comparisons, we opted to do most of our listening in triode mode.

The front panel is attractive, though we found the shiny chrome knobs and insert more flashy than informative. Note the presence of a headphone jack on the front panel. Such a jack is a mixed blessing, because the main output shuts down when you plug phones into it, and that means the presence of a switch at the output. The middle knob controls the meter display, which can be set to read the bias setting on each of the four output tubes. It can then be easily adjusted with a small screwdriver.

The rear panel, shown on the next page, is simple but perfectly adequate. There are just three inputs, rather fewer than we would have liked. There is, however, a "direct" input, which lets you bypass the preamp section and use