

# THERMIONIC CULTURE LTD

*SIMPLY THE FINEST OUTBOARD EQUIPMENT*

Powered by Thermionic Valves



## THE EARLYBIRD 2.2

### KEY FEATURES

- 2 Channels of extremely high quality push pull 'class A' type of valve pre amplification.
- 3 bands of active lift EQ with 2 mid range frequencies and switchable high pass filters.
- Clean gain, giving extremely low noise and distortion figures.
- Essential mic-preamp settings such as gain, impedance, 48v power and phase are all catered for by the front panel controls.
- Can be optimised for use with a large variety of mics, signal levels and different uses whilst remaining in an equipment rack.
- Function switch will allow the unit to take it's input from, mic. in, line, or the Pullet sockets.
- Massive clean output, but can be trimmed by output level controls, some colouration can be obtained if desired.



The Earlybird 2.2 contains 2 channels of very high quality valve pre -amplification.

The circuit design utilises a 'push pull' 'class A' type of amplification in order to provide ultimately clean gain, giving the lowest noise and distortion figures possible in a mic pre-amplifier.

The input and output transformers have been designed by working together with Sowter transformers to provide results that are optimised for this unit. This design work provides the Earlybird 2.2 with the lowest phase shift and highest headroom possible from a mic pre- amplifier.

This version of the Earlybird pre-amp design also includes extra features such as 3 bands of active lift EQ with switchable mid range frequencies and high pass filters, and a function switch to help interface the unit in different usage scenarios. The essential mic-preamp settings such as gain, impedance, 48v power and phase are all catered for by the front panel controls.

**The active EQ** uses the unique 'varislope' EQ curves for the 'bass' and 'top' lifting controls. The 'mid' lift control provides a broad, musical curve that can be centred at 800Hz or 2.8KHz by the frequency select switch. This curve interacts well with the top and bass controls to provide a wide degree of tone shaping possibilities.

As the active EQ works in the feedback part of the circuit, switching the active EQ in does not, therefore introduce any extra gain stages into the signal path. This means that the EQ can be used without fear of introducing unwanted artefacts from extra gain stages. This perhaps makes recording a little easier when a subtle amount of EQ can be added without fear of signal degradation.

**The high pass filters** are arranged so that the first two switch positions provide 12dB/octave filters to cut out unwanted low frequencies at 40Hz or 100Hz. The last position provides a filter with more of a shelving nature that can combine with the bass lift control to give a simultaneous mid cut and bass lift if desired.

**The Function switch** allows the unit to take it's input from either the 'mic in' XLR sockets, the 'Line in' sockets or the 'Pullet' sockets. So the unit can be connected for different uses whilst remaining in an equipment rack. The variable impedance and pad settings on the switch allow the input circuitry of the Earlybird 2.2 to be optimised for use with a large variety of mics and signal levels. They can also be used for creative tonal choices if so desired.

We find that the variety of functions possible with the Earlybird 2.2 make it extremely versatile and coupled with the outstanding sonic results it is a great addition to any type of studio that is used to record or mix sound.

The Pullet, is the perfect companion to the Earlybird 2.2 to complete a superb mastering equaliser.

[www.thermioniculture.com](http://www.thermioniculture.com)