

MB 81se

100 Watts from one Valve!

designed by David Shaw



Limited Edition Special order

Prototype Model (Not the final design)

The sonic qualities of the magnificent GU81 valve make it the ideal candidate for those seeking a high power Single Ended Triode amplifier. Its 100 watts of power make it ideal for low to medium efficiency speakers in medium to very large rooms and will give outstanding results.

This venerable 1950s GU81 transmitting valve has superb audio qualities and is tremendously robust. Our worldwide acclaim and awards for our MB81PP gave us the impetus to make a Single Ended design.

It may be of interest to note that whilst the GU81 is a superb valve, very versatile in application and massively powerful, only very basic information is available from the manufacturers and virtually nothing from other sources therefore Icon Audio have devoted a considerable amount of resources in gaining expertise in circuit and transformer design to get the best performance from this valve.

An essential quality for any Single Ended amplifier is high dissipation of the output valve, in Pure Class A the efficiency is low and the power not used by the speaker is dissipated by the anode which gets very hot, a limiting factor for all audio valves in Class A. Here the GU81 is dissipating 350 watts glowing cherry

red, yet at only half of its maximum capability. This quality is partly why it has such an easy relaxed sound as well as a stable very long life.

The GU81 is capable of sublime audio performance but only if the quality of power and signal from the driving circuit is also of the highest quality. Our design of the power supply and transformers is totally uncompromised supplying the GU81 with the highest quality smoothed and conditioned power from our in-house designed hand wound transformers. Also the GU81 demands the finest driving circuit, two 6SN7s and a KT150/KT120 which is choke loaded using our own wide bandwidth design. Not only does this need to be technically perfect but have a "balanced synergy" to recreate the desired sound stage and macro detail. This involved 100s of listening hours and several redesigns of the circuit and transformers in order to get that elusive sonic perfection we were seeking.

Like our PP version the MB 81se has seemingly unlimited vigour and drive and is capable of reproducing large orchestral works and rock music in a vivid 3D soundstage but being a simpler SE design has a quality more akin to using ELEVEN 300Bs in parallel. (and uses no more power).

An audition is highly recommended!

Summary:

For the true valve enthusiast who wants ultimate in SET power and quality. Our 100w power amplifiers offer the finest combination of listening qualities and power for larger rooms. An incomparable experience.

Specifications and Features

- 100w (28.3v) 8Ω @ clipping point 1 kHz
 - THD 0.2% @8w 0.5% @50w 1% @96w all @8Ω
 - Pure Class A, pure all Triode front end
 - All hand wired point to point
 - No printed circuit board, easy to service
 - Built in "Easy Bias" Meter
 - 2x 6SN7 first stage valves
 - 1x KT150 output driver valve
 - Signal to noise level -90db
 - Damping factor of 5
 - Frequency response 20hz-20kHz -1dB @8v (8w)
 - 8Ω and 4Ω loudspeaker output taps
 - Suitable loudspeakers 3Ω to 16Ω
 - "Low Distortion Tertiary" wound output transformers
 - Solen/SCR Hi Fi quality audio capacitors
 - Mundorf silver/gold in oil caps upgrade option
 - Silver plated pure copper PTFE audio cable
 - Gold plated Input & speaker terminals
 - Valve cover supplied
 - Sensitivity: 400mv (0dB FB) 800mv (-6dB) 1.2v (-9.5dB)
 - Input impedance 47 kΩ
 - 235/117 volts 450watts typical
 - W31.5, D66, H38.5cm (40 inc cover), 50kg
 - Packed 2 of 49x81x45cm. 1 of 85x43x46mm Total 136 kg
- Provisional specifications subject to change. Typical Figures @ 235v
(Overall dimensions excluding cables, allow for good ventilation)