

## SECTION 1 INTRODUCTION

### 1.1 Product Description

The Amp Supply LK 400/500 series linear power amplifiers are compact 160-15 meter MF/HF amplifiers of modern design. The series provides the amateur operator with a choice of power output levels and features consistent with their specific operating requirements. Each LK 400/500 series amplifier uses the powerful 3-500Z triode tube(s) in a grounded grid configuration Class AB<sub>2</sub>. The LK 400/500 series amplifiers are high performance pieces of equipment and are engineered conservatively with American components and ingenuity.

Every LK 400/500 series MF/HF linear amplifier is field tested at its specified power input level and duty cycle and should require a minimum of maintenance through years of operation. Additionally, each LK 400/500 series amplifier will operate many MARS frequencies without modification (see MARS expanded coverage chart). A quiet, efficient cooling system maintains the RF deck and power supply chamber temperature ensuring long service life. All LK 500 series linear amplifiers feature the new ALO (Automatic Lock Out) circuit which senses unacceptable plate/grid currents and voltages or improper amplifier tuning and stops amplifier operation.

Tuning the amplifier is a simple procedure, since each unit is designed for long-term stability in virtually any operating situation. Tuned input and standard relay switching circuitry makes the LK 400/500 series compatible with any available solid state or tube transceiver or transmitter. Despite their straight-forward design and minimal user required adjustment, the LK 400/500 series linear amplifiers are sophisticated electronic instruments. Therefore, if the unit is operated outside the parameters outlined in this owner's manual, damage may result. Please read this manual carefully before putting your new Amp Supply LK 400/500 series linear amplifier on the air.