

Collins Transmitters

Bulletin 100

Sheet 6

600AX POWER SUPPLY

The 600AX Power Supply is designed as a heavy duty unit for use when maximum power output is desired from a 10A Crystal Unit for C.W. transmission, or when Class B Modulation is used. Heavy duty transformers are used throughout.

Tubes Employed — One UX 280, one UX 245, two UX 866's.

Circuit — A choke input filter is employed and the transformers are so designed that less than 10% regulation is obtained over the rated range of load currents, making possible high quality phone transmission when using Class B Modulation. Separate transformers are used for filaments, crystal oscillator, plate voltage and amplifier plate voltage.

Chassis — 10" x 17 $\frac{7}{8}$ " x 9" high. Black duco finish, suitable for relay rack mounting. Output cable connections are made to dual plug-in sockets on the surface of the chassis and the keying and control cable is plugged into the rear edge of the chassis.

Plug-in receptacles are provided on the rear edge of the chassis to receive 110 volt power cable, dual switch control, cable, C battery cable and 110 volt line fuse.

Power Output —
Modulated Class C Amplifier,
Class B Modulators and

	Voltage	Current
Buffer Amplifier	600 V. D.C.	350 ma.
Crystal Oscillator and Speech Amplifier	300 V. D.C.	100 ma.
Keying Bias	-500 V. D.C.	5 ma.
Filament Supply	7.5 V. A.C.	2.5 A.
Filament Supply	7.5 V. A.C.	2.5 A.
Filament Supply	2.5 V. A.C.	8 A.

Price — Less tubes-----\$49.90

1200A POWER SUPPLY

1200A Power Supply is similar in design to the 600AX Unit. It delivers 1200 volts at high load current with good regulation and is intended to be used with a 203A output amplifier and in addition has sufficient current capacity to drive two 203A tubes as Class B Modulators.

Tubes Employed — Two UX 866 tubes.

Circuit — A choke input filter is employed together with a heavy duty 900 watt plate transformer. Less than 10% regulation is obtained.

Chassis — 10" x 17 $\frac{7}{8}$ " x 9 $\frac{3}{4}$ " high, bright finish black duco, suitable for relay rack mounting. Power cable and other connections are made as in the 600AX Unit.

Power Output —

	Voltage	Current
203A Class C Modulated Amplifier and Class B Modulators	1200 V. D.C.	600 ma.
Filament Supply	10 V. A.C.	13 A.

Price — Less tubes-----\$65.20

30B CLASS B MODULATOR

The 30B Modulator is intended to be used in connection with a 3A or 33A Power Amplifier. It employs two 203A matched tubes and a special modulation transformer. It will deliver as high as 200 watts of audio power when used with a suitable power supply. When used in connection with 1200A Power Supply and the 3A Amplifier, it will deliver 100 watts of undistorted audio power which is sufficient to modulate 200 watts input to the 3A Amplifier.

Input Impedance — 1000 ohms. The 30B Unit is to be driven with a speech amplifier having two 245's in push-pull as an output stage when a power output of 100 watts is desired. (250's must be substituted for the 245's when 200 watt output is desired.) A special transformer is used with this amplifier matching the 245's to a 1000 ohm line with a neutral center wire. Since this line is of low impedance and matches

the input impedance of the 203A tubes, no input transformer is provided on the modulator unit.*

Output Impedance — 2500 or 10000 ohms.

Chassis — 10" x 17 $\frac{7}{8}$ " x 9" high; steel, black duco finish, suitable for relay rack mounting. Plug-in connections are provided on the surface for power supply, input and output connections.

Price — Complete (less tubes)-----\$47.68

* Write for Bulletin 105 on COLLINS Speech Input Equipment and Condenser Microphones.