

# SINCLAIR X-20

INTEGRATED 20 WATT P.W.M. AMPLIFIER & PRE-AMP

## A REVOLUTIONARY ADVANCE IN DESIGN & PERFORMANCE

For its size and weight, this is the most powerful amplifier in the world! By using Pulse Width Modulation in circuitry developed exclusively by Sinclair Radionics, the X-20 achieves standards never before reached by any audio amplifier. From the input of the integrated pre-amp through to the power output stage with its special silicone epitaxial planars, this amazing twelve transistor amplifier gives power and quality far ahead of anything in its class, making it the most original and interesting design for years. When built, you use your X-20 in the same way as any other conventional quality instrument. Its better transient response is instantly apparent, and it has a flat frequency response extending from 20 to 20,000 c/s. With its great reserve of power, the X-20 will

give you all you will ever want from a high fidelity amplifier, yet it occupies fantastically little space, costs less and behaves perfectly. Because heat and space no longer present problems in housing the amplifier when you use an X-20, you can build to the very latest trends in modern design and be assured of unsurpassed quality. The X-20 can easily be assembled in a single evening by anyone with the help of the instructions included with every kit.

Complete kit of parts including X-20 Manual and instructions.

**£7.19.6**

Ready built and tested

**£9.19.6**

X-20 power supply unit to drive up to two X-20s

**£4.19.6**

### X-20 MANUAL

This details in full a variety of tone and volume control systems by which ancillary equipment can be correctly matched to the X-20. It includes circuitry for stereo and input switching so that more than one source of input can remain permanently connected. Included with all X-20 amplifiers, the manual is available separately for 2/- post free.

IN KIT FORM OR READY BUILT

**20 WATTS R.M.S. OUTPUT FROM A UNIT ONLY  $8\frac{1}{4}'' \times 3\frac{1}{4}'' \times 1''$**

#### This is a Sinclair Guaranteed Product

Should you not be completely satisfied with your purchase when you receive it from us, your money will be refunded in full and at once without question.

- ★ 12 Transistors including silicone epitaxial planars in output stage.
- ★ Constant square wave amplitude.
- ★ 95% conversion efficiency factor at output stage.
- ★ Frequency response—from 20 to 20,000 c/s  $\pm 1$  dB.
- ★ Total harmonic distortion—0.1% at 10 watts R.M.S.
- ★ Input sensitivity—1 mV into 5k $\Omega$ .
- ★ Signal to noise ratio—better than 70 dB.
- ★ Output into 7.5 ohms—  
20 watts R.M.S. music power.  
15 watts R.M.S. continuous.

- ★ Output into 15 ohms—  
15 watts R.M.S. music power.  
10 watts R.M.S. continuous.
- ★ Will also make an ideal guitar or P.A. amplifier.
- ★ Built-in low-pass filter ensures wide tolerance to load at output.
- ★ Power requirements—36V d.c. at 700 mA.
- ★ Add tone and volume control systems to choice, mono or stereo, as described in the X-20 manual.
- ★ Power supply unit available.

FULL SERVICE FACILITIES ALWAYS AVAILABLE TO SINCLAIR CUSTOMERS

**sinclair**

**SINCLAIR RADIONICS LTD.**  
COMBERTON, CAMBRIDGE

COMBERTON 682