



30  
WATTS!

*march 18<sup>th</sup> 1957*

# THE FISHER

**AUDIO AMPLIFIER**



MODEL

80 - A Z

FISHER RADIO CORPORATION • NEW YORK

# THE FISHER 30-WATT AUDIO AMPLIFIER

THE FISHER AUDIO AMPLIFIER, Model 80-AZ, is our great new 30-watt amplifier with *PowerScope*, a Peak Power Indicator calibrated in watts to show instantly the peak load on your speaker system. The model 80-AZ will meet the requirements of the most exacting user. Complete fidelity of reproduction and absence of listener fatigue are a direct result of the extremely low harmonic and intermodulation distortion at all power levels, as well as excellent transient response, wide frequency range, and good linearity. Hum and noise are virtually non-measurable, thus allowing operation at all listening levels without the distraction of extraneous noise. The great reserve power handling capacity of the model 80-AZ makes it capable of reproducing the complete dynamic range of a full symphony orchestra! All components in this compact unit have been selected for long life, and installed with maximum accessibility in mind, for easy servicing.

The Model 80-AZ has three separate feedback loops, resulting in low internal impedance, extremely low distortion and excellent transient response. Two type EL-37 tubes, connected as tetrodes, are employed in the power stage. The unique cathode feedback circuit offers all the advantages of triode performance, together with the efficiency of tetrodes. The carefully designed output transformer consists of fifteen interleaved windings, in conjunction with a grain-oriented steel core.

THE FISHER Model 80-AZ may be used directly with a tuner, such as THE FISHER Models 80-T, 80-R or FM-80, a crystal phonograph cartridge or any other device capable of producing a one-volt signal. Where magnetic phonograph cartridges, microphones or similar low-level devices are employed, pre-amplification is necessary. Especially suited to these latter applications is THE FISHER MASTER AUDIO CONTROL, Series 80-C, and THE FISHER Audio Control, Model 50-PRC.

## Technical Specifications

### POWER OUTPUT

### INTERMODULATION DISTORTION

### FREQUENCY RESPONSE

### HUM AND NOISE LEVEL

### INTERNAL IMPEDANCE

### PHASE SHIFT

### CONTROLS

### TUBE COMPLEMENT

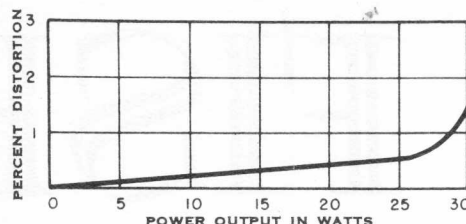
### OUTPUT IMPEDANCES

### PHYSICAL DATA

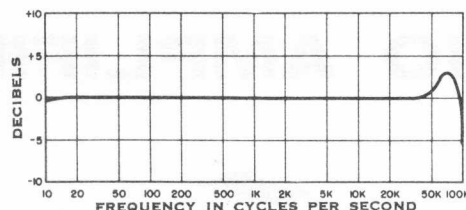
- Constant within 1 db at 30 watts from 15 to 30,000 cycles.
- Less than 1/2% distortion at 30 watts; less than 0.15% at 25 watts; less than 0.05% at 10 watts.
- Less than 1/2% at 25 watts and less than 0.2% at 10 watts.
- Uniform within 0.1 db from 20 to 20,000 cycles and within 1 db from 10 to 100,000 cycles.
- Better than 95 db below full output.
- With Z-MATIC Control counterclockwise, 0.61 ohms for 16-ohm operation, giving a damping factor of 26.
- Less than 15° at 20 cycles and less than 18° at 20,000 cycles.
- Total of three: PowerScope, Z-MATIC, and Input Level.
- 1—12AT7, 1—12AU7, 2—EL-37, 1—5V4G.
- 8 or 16 ohms.
- SIZE: 4 1/4" deep, 15 1/2" wide, 6 7/8" wide.
- SHIPPING WEIGHT: 22 pounds.

## Performance Characteristics

### INTERMODULATION DISTORTION (MEASURED AT 60/3000 CYCLES, AT 4 TO 1)



### FREQUENCY RESPONSE



### POWER RESPONSE (MEASURED AT 25 AND 30 WATTS OUTPUT)

