



# THE FISHER

DYNAMIC

# SPACEEXPANDER

TRADEMARK



MODEL *K-10*



World's Finest  
Reverberation Unit  
For Home and Professional Use

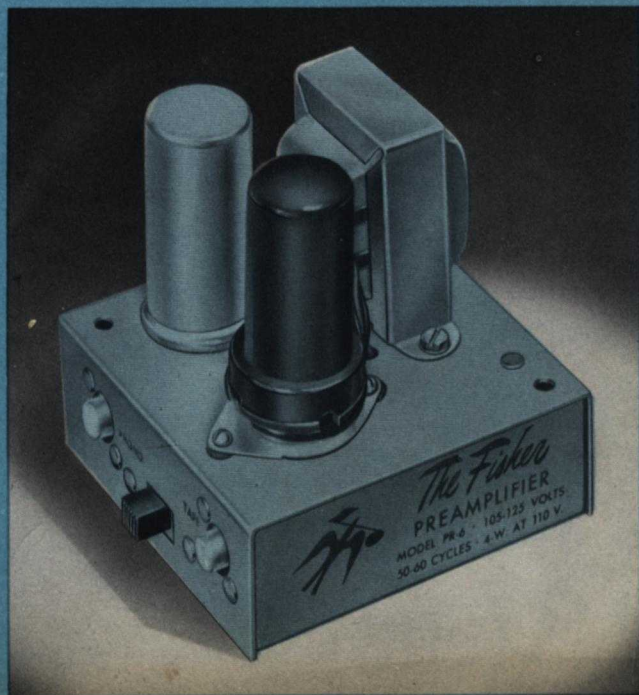
# THE FISHER

MODEL *PR-6*

# PREAMPLIFIER

FOR PHONO, MICROPHONE, TAPE

[www.SteamPoweredRadio.Com](http://www.SteamPoweredRadio.Com)



# THE FISHER DYNAMIC SPACEEXPANDER

MODEL **K-10**

## WHAT IT DOES

■ Now, with the FISHER K-10 Dynamic Space Expander, the owner of a home music system can add a new dimension to listening—the dimension of reverberation, with one simple control. Natural reverberation is created by the reflection of sound from the walls and ceiling of an auditorium—sound which reaches the listener's ear a tiny fraction of a second later than the sound from the original source. For example, a single hand-clap is heard several times—first, as a direct sound impulse, and then (with much less intensity) as reflected sound which rapidly diminishes, or “decays.” The time of this decay is a function of the size and characteristics of the auditorium. So important is reverberation as a psychological stimulus that it is the way we instinctively estimate the size of a room.

The FISHER K-10 Dynamic Space Expander now makes it possible for every home listener to control, to a degree never before possible, the actual character of sound reproduced from any source—records, tape, home recordings, or radio broadcasts. The FISHER K-10 is remarkably simple to operate (there is only *one* control) and easy to install.

**CAN BE EASILY INSTALLED IN MOST HIGH FIDELITY SYSTEMS**

## HOW IT WORKS

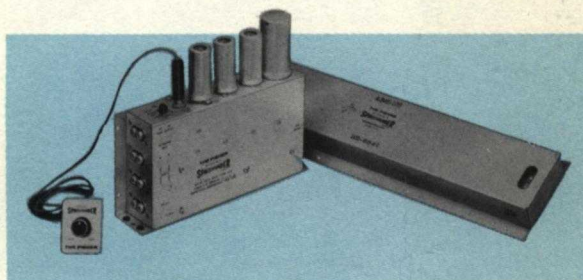
■ A portion of the input signal is fed into the electronic unit of the FISHER K-10, sent to the reverberation unit, then recombined with the original program signal. The reverberation unit is a slender metal enclosure containing a pair of coil springs connecting two transducers. The input transducer converts the electrical signal to a turning movement which travels down the springs to the output transducer, where it is converted back to electrical energy, and fed to the power amplifier. This reverberated signal is delayed a nominal 33 milliseconds, thereby simulating the natural reverberation of a well-designed auditorium.

## REVERBERATION UNIT

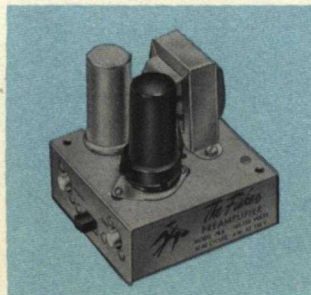
■ There are two rotating transducers, interconnected by coil springs. The tension of one spring differs from that of the other, to eliminate the harmful effects of standing waves and to provide a smooth frequency response. Nominal delay, 33 milliseconds.

## ELECTRONIC UNIT AND CONTROL

■ Self-powered, 105-120 V.A.C. 3 dual-purpose tubes: 1 – 7247, 2 – 7025/ECC83/12AX7. Selenium rectifier. DECAY TIME: variable, maximum 2 seconds at 300 cps. MINIMUM INPUT VOLTAGE REQUIRED, 0.2 volt; MAXIMUM ALLOWABLE INPUT VOLTAGE, 5 volts. INPUT IMPEDANCE, 250,000 ohms; OUTPUT IMPEDANCE, 2000 ohms. OUTPUT VOLTAGE, 0.2-5 volts. GAIN, unity. HUM LEVEL, 80 db below 2.5 volts. Power consumption, 10 watts.



# THE FISHER MODEL **PR-6** PREAMPLIFIER



■ The FISHER Preamplifier, Model PR-6, was specifically designed to meet the need for a high-quality, self-powered unit that would function equally well with phonograph, microphone, or tape. Though moderate in cost, it is built to uncompromising FISHER standards. PR-6 provides a sparkling clean, undistorted signal to a power amplifier from any standard source—record changer, professional turntable, tape heads, or microphone.

■ Two stages of triode amplification (6SC7). GAIN: on phono, 1 volt output for 10 millivolts input; on microphone, 1 volt output for 1 millivolt input; on tape, 1 volt output for 5 millivolts input. FREQUENCY RESPONSE: uniform within 2 db from 30 to 20,000 cycles. HUM LEVEL: better than 60 db below 1 volt on phono and tape; better than 70 db below 1 volt on microphone. LOW FREQUENCY EQUALIZATION: RIAA for phono, NARTB for tape. High frequencies equalized by resistive loading. Self-powered (105-120 V.A.C.), and completely shielded.

■ SIZE: 3¾" x 3½" x 3½" high. WEIGHT: 1½ pounds.

*The Most Versatile of All*