

THE FISHER

Stereo FM-AM Receivers



EVERYTHING YOU NEED on ONE beautifully-integrated, compact chassis—everything for the foundation of a stereophonic home music system of matchless quality and limitless flexibility. The FISHER 800 and 500-S Receivers offer greater benefits in compact dimensions and superlative performance than ever before possible: stereophonic FM-AM tuners, Master Audio Control Center, stereophonic dual amplifiers—three superb FISHER units joined to create the keystone of your home music system. The FISHER 800—*twice* as sensitive as any competitive-make receiver, and far more powerful—is universally acknowledged as the standard of excellence in complete stereophonic receivers. Its counterpart, the 500-S, is designed to bring FISHER quality and FISHER features within the reach of the widest possible audience. Each requires only a pair of speakers and a turntable to complete a stereophonic high fidelity system of superb quality. The simple, logical arrangement of the controls makes each a joy to operate, *even for the most unskilled user*. And each will fit in only *seventeen inches* of shelf width. ILLUSTRATED: THE FISHER 800 AT THE LEFT, THE FISHER 500-S AND THE FISHER XP-1 THREE-WAY SPEAKER SYSTEM.

FISHER 800

70-Watt Stereo FM-AM Receiver

THE FISHER 800 is the most sensitive and most powerful stereophonic receiver in existence—twice as sensitive as any competitive make, and far more powerful. Nothing has been spared to incorporate the *best* of everything—tuners, controls, and amplifiers—on one, beautifully compact chassis. Its Wide-Band tuners—both FM and AM—assure the finest quality monophonic or stereophonic radio reception. The flexibility and versatility of the 800 make it the ideal choice as the heart of a professional-quality home music system that will provide long-lasting enjoyment.

THE FM TUNER

CIRCUIT Golden Cascode FM front end, the fabulous circuit that established FISHER FM tuners as the best in the world. Low-noise triode mixer, with separate oscillator for maximum stability. Wide-Band, high-gain IF amplifier.

SENSITIVITY 0.7 microvolt for 20 db of quieting with 72-ohm antenna; 1.2 microvolts with 300-ohm antenna. (IHFM standard, 1.9 microvolts.)

HUM AND NOISE Completely inaudible. 70 db below 100% modulation at 100 μ v input.

DISTORTION Less than 0.5% at 400 cps for 100% modulation.

FREQUENCY RESPONSE 20-20,000 cps \pm 1 db with standard de-emphasis.

THE AM TUNER

CIRCUIT High-gain RF stage for low-noise signal amplification. 10 Kc filter to suppress adjacent-channel interference and hiss. High-gain IF stages with three-position bandwidth to assure *high fidelity* FM-AM stereophonic reception.

SENSITIVITY 5 microvolts for 2-watt output.

ANTENNA Highly sensitive, *rotatable* Ferrite loopstick, plus connection for external antenna.

THE STEREO MASTER AUDIO CONTROL AND STEREO POWER AMPLIFIER

CIRCUIT Two high-gain preamplifier-equalizers, tone control stages and balanced phase-inverters, plus two power amplifiers using the high-efficiency 7591-type pentode.

MUSIC POWER 70 watts (35 watts per channel.)

HARMONIC DISTORTION Completely inaudible. (Only 0.8% at 1 Kc for full rated output.)

FREQUENCY RESPONSE 19-32,000 cps.

SPEAKER TERMINALS 4, 8, and 16 ohms each channel.

HUM AND NOISE Absolutely inaudible. Below full power output on AUX: -80 db at 400 mv reference level; on PHONO: -66 db at 6 mv reference level.

tone CONTROL RANGE Bass: Up to 15 db boost or cut at 50 cps. Treble: up to 15 db boost or 16 db cut at 10 Kc.

INPUT AND OUTPUT CONNECTIONS Total of fifteen, for every stereo and mono program source and application, including Center Channel, tape monitoring, and multiplex stereo operation.

CONTROLS

Total of twenty-four controls. Volume control (including AC On-Off) simultaneously adjusts both channels. Two Selector switches (ten positions) for all Phono, Tape, and FM-AM sources. Separate FM and AM Tuning controls with two separate MicroRay Tuning indicators for easy, precise tuning. Loudness Contour switch automatically maintains full, properly balanced bass and treble at the lowest volume settings. Three-position AM Bandwidth switch for sharp tuning (to eliminate interference) or two degrees of broad tuning (for high fidelity reception.) Separate Bass and Treble controls for each channel. Tape Monitor switch. Scratch and Rumble Filter switches. Channel Reverse switch, to correct for inverted channel orientation found on some records and programs. Balance control, to equalize volume on each channel. Center Channel Volume control, to adjust the strength of the composite dual-channel signal and also to permit operation of a third amplifier and speaker without an extra preamplifier. Five level sets on rear apron.

GENERAL SPECIFICATIONS

Tube complement: 20 tubes, plus 4 diodes and selenium bridge rectifier. Two auxiliary power receptacles on rear for associated components, capacity 375 watts. Power requirements, 105-120 VAC, 50-60 cycles, 230 watts. Dimensions, 17" wide, 13 $\frac{3}{8}$ " deep, 4 $\frac{3}{16}$ " high. Shipping weight, 43 pounds.

FISHER 500-S

45-Watt Stereo FM-AM Receiver

BUILT ON THE SAME advanced design, principles as the famous 800, the FISHER 500-S combines independent FM and AM tuners, a Stereo Master Audio Control Center, and a massive 45-watt dual-channel power amplifier totally free of audible hum or distortion. There are 13 inputs and 5 outputs, including a center-channel output to produce a composite stereo signal. The 500-S is built to the renowned FISHER standards of quality throughout—the highest quality standards in the world.

THE FM TUNER

CIRCUIT High-gain triode RF-amplifier and mixer-oscillator stages, followed by three IF stages, thus assuring high sensitivity and selectivity. Its Wide-Band design produces extremely effective limiting. Wide-Band Ratio Detector, with two matched germanium diodes, assures maximum AM suppression combined with minimum distortion. Automatic Gain Control will maintain desired volume level at all times, whether tuning for weak or strong signals.

SENSITIVITY 0.9 microvolt for 20 db of quieting with 72-ohm antenna; 1.6 microvolts for 20 db of quieting with 300-ohm antenna. (IHFM standard, 2.4 microvolts.)

HUM AND NOISE 66 db below 100% modulation at 100 μ v input.

DISTORTION Less than 0.7% at 400 cps for 100% modulation.

FREQUENCY RESPONSE 20-20,000 cps \pm 1 db with standard de-emphasis.

THE AM TUNER

CIRCUIT High-gain RF stage and Wide-Band IF-filter design provide a signal of virtually FM calibre. This is of prime importance in matching quality in FM-AM stereophonic reception. Two-position bandwidth switch: SHARP and BROAD positions permit either highly selective tuning to overcome interference from adjacent stations, or wide-band reception for full AM range and best tonal quality. Automatic Volume Control (AVC) eliminates change in volume when tuning from one station to another station and minimizes fading on weak stations.

SENSITIVITY 5 microvolts for 2-watt output.

SELECTIVITY 42 db (in sharp position.)

ANTENNA Ferrite loop plus connection for external antenna.

THE STEREO MASTER AUDIO CONTROL AND STEREO POWER AMPLIFIER

CIRCUIT Each channel incorporates phono and tape preamplifiers, tone control sections for bass and treble, full 45 watts of music power using matched premium quality 7189 tubes. Logical grouping of controls provides utmost flexibility plus ease and simplicity of operation.

MUSIC POWER 45 watts (22 $\frac{1}{2}$ watts each channel.)

HARMONIC DISTORTION Inaudible; less than 1% at full-rated output.

FREQUENCY RESPONSE 20-20,000 cps.

SPEAKER TERMINALS 4, 8, and 16 ohms each channel.

HUM AND NOISE Absolutely inaudible. Measured below full-power output, AUX: -80 db at 400 mv reference level; PHONO: -63 db at 6 mv reference level.

tone CONTROL RANGE Bass: Boost 15 db or cut 14 db at 50 cps. Treble: Boost 16 db or cut 16 db at 10 Kc.

CONTROLS

Total of twenty, sixteen on front panel. Volume control (including AC On-Off) simultaneously adjusts volume on both channels. Seven-position Selector switch. Separate Bass and Treble controls for each channel. FM and AM tuning controls, each with its own MicroRay tuning indicator for ease in precise tuning. Loudness Control switch maintains the proper tonal balance even at the lowest volume settings. AM Bandwidth switch. Tape-Phono switch. Scratch and Rumble Filter switches. Channel Reverse switch, will correct for inverted channel orientation on some records and program sources. Balance control, to equalize volume on each channel. On the rear panel are the Tape Monitor switch and Phono level sets to permit perfect balancing of the output voltages from a stereo cartridge. The Bias Adjust is conveniently placed on the top of the chassis.

GENERAL SPECIFICATIONS

Tube complement: 19 tubes, plus 3 diodes and 2 silicon rectifiers. Auxiliary power receptacle on rear. Power requirements, 105-120 VAC, 50-60 cycles, 140 watts. Dimensions, 17" wide, 13 $\frac{3}{8}$ " deep, 4 $\frac{3}{16}$ " high. Shipping weight, 36 $\frac{1}{2}$ pounds.