

**OPERATING
INSTRUCTIONS**

Custom Electra



THE
FISHER

HIGH FIDELITY
Radio-Phonograph

FISHER RADIO CORPORATION • NEW YORK



Welcome

TO THE FAMILY OF FISHER OWNERS

AVERY FISHER, pioneer maker of high quality instruments, introduced America's first high fidelity phonograph and radio-phonograph twenty years ago. In 1946, his work in this field became a subject of articles in leading magazines, including FORTUNE, TIME and PAGEANT. The article entitled *Music in the Home*, which appeared in the October 1946 issue of Fortune, is generally accredited as the first to bring to the attention of a wider public the availability of equipment of FISHER calibre for home use. "Best in price and performance is THE FISHER. It is, in fact, perhaps the only one that would completely satisfy a golden ear." "The Rolls Royce of radio"—these are typical comments appearing in various national magazines.

Such recognition has been a regular occurrence and reached its culmination in Constitution Hall on November 13, 1954 when the National Symphony Orchestra gave a high fidelity concert. A portion of the program was recorded on the spot and immediately played back through FISHER amplifiers. One news magazine noted: "Listeners could hardly tell the difference between real and electronic."

Another high fidelity concert was held on February 13, 1956 with the Philadelphia Orchestra playing at the Academy of Music. This program was recorded and played back on FISHER equipment, in monaural and stereophonic techniques. "A fascinating evening, acoustically and musically. The reproduction had remarkable fidelity."—The Philadelphia Inquirer. "Preserved the balance and natural resonance of the orchestra in marvelous fashion."—The Evening Bulletin. "The audience was fascinated by the demonstrations of the progress and innovations in sound reproduction."—The New York Times.

Outstanding Features

OF THE FISHER CUSTOM ELECTRA DELUXE RADIO-PHONOGRAPH

THE FISHER CUSTOM ELECTRA Deluxe Radio-Phonograph is a superb reproducing instrument that will provide superlative performance from phonograph records and FM-AM radio broadcasts. The CUSTOM ELECTRA contains a 15 tube precision-built chassis which incorporates all of the finest technological advances. Despite the complete design of the CUSTOM ELECTRA, it is relatively simple to operate.

THE AMPLIFIER

At the heart of the CUSTOM ELECTRA is an efficient push-pull amplifier capable of auditorium volume without a trace of distortion. Conservatively rated at 30 watts, it easily handles power peaks up to 60 watts. Uniform frequency response from 20 to 20,000 cycles, with an overall response from 16 to 32,000 cycles—is a direct index of its quality. High quality components are used throughout and its heavy-duty, rugged transformers are normally found only in professional equipment.

THE PREAMPLIFIER-EQUALIZER

THE FISHER CUSTOM ELECTRA employs the famous FISHER phonograph preamplifier circuit which, even under extremely quiet listening conditions, has an inaudible hum level. Professional, infinitely variable BASS and TREBLE tone controls provide precise adjustment to suit individual listening requirements. Record equalization for magnetic cartridge, compensates for newest recording characteristics. THE FISHER exclusive LOUDNESS CONTOUR control permits listening at low volume levels with full fidelity, at the touch of a switch. This control automatically compensates for the inefficiencies of the ear at such low levels.

THE FM-AM RECEIVER

With extreme sensitivity and selectivity, THE FISHER FM-AM Receiver surpasses any instrument in its class. FM programs may be received from stations up to 150 miles, depending upon terrain. Features include: Separate tuning circuits for FM and AM, an easy to read illuminated dial, and smooth flywheel tuning facilitates complete ease of station selection. Magic eye tuning indicator for precise tuning of FM and AM stations. Exclusive channel indicator lights.

THE RECORD CHANGER

The imported Garrard four speed automatic record changer features a heavy-duty 4-pole motor and weighted turntable for smooth operation. Lightweight professional type magnetic cartridge with diamond for LP records. Exclusive automatic FONOLITE for convenience when playing phonograph records.

THE SPEAKER SYSTEM

Efficient three speaker PANORAMIC SYSTEM, with heavy-duty fifteen inch low frequency (bass) speaker, mid-range speaker and high frequency (treble) speaker. All are electrically meshed to the amplifier through a crossover network equipped with BRILLIANCE and PRESENCE controls to adjust to room acoustics. These controls may be used to achieve the most pleasing musical balance.

THE CABINET

Your FISHER reflects custom-quality throughout. The CUSTOM ELECTRA cabinet is fashioned from the finest furniture woods by master craftsmen and is finished in the highest tradition of the furniture-maker's art.

Installation Instructions

FOR THE FISHER CUSTOM ELECTRA DELUXE RADIO-PHONOGRAPH

ELECTRICAL INSTALLATION

THE FISHER CUSTOM ELECTRA is designed to operate on 105-125 volts, 60 cycles AC only, and consumes a total of 200 watts.

ANTENNAS

The CUSTOM ELECTRA is equipped with built-in FM and AM antennas. The FM antenna is a *folded dipole* fabricated from high quality 300 ohm flat polyethylene twin-line cable. The antenna is adequate for use in average urban locations. In some areas, or where there is a high noise level, the antenna should be oriented for maximum signal reception. To do this, remove the folded dipole from the cabinet back and rotate the horizontal section until you reach a position which receives maximum signal. The antenna may then be concealed under an adjacent carpet or rug. If necessary, the lead-in portion of the antenna may be lengthened with the same type of cable. In *extreme fringe* or remote areas, it may be necessary to use an external antenna. The antenna input is designed for 300 ohm antenna systems.

A specially designed Ferrite Bar antenna for AM reception is mounted on the chassis. This antenna bar will effectively bring in all local or regional broadcasts. Where the installation is in a remote location, the use of a suitable external AM antenna is recommended. Connection is made to the antenna terminal strip located on top of the power transformer in the rear of the chassis. Use the terminal on the right for the AM antenna, and the center terminal for a ground connection.

MECHANICAL INSTALLATION

Before attempting to operate the automatic record changer, remove the two shipping screws on the base of the unit. This frees the record changer from the motor board and allows it to float freely on the shock-absorbing springs to cushion the mechanism from undesired vibrations from the speaker system.

Operating Instructions

FOR THE FISHER CUSTOM ELECTRA DELUXE RADIO-PHONOGRAPH

THE FISHER CUSTOM ELECTRA Radio-Phonograph has 9 operating controls. These are:

TUNING CONTROL: This knob moves the pointer across the dial-face to select the desired station for FM or AM reception. The flywheel action has an anti-backlash feature for positive setting and smooth operation.

BASS AND TREBLE: These controls are concentrically mounted for ease of operation. The BASS control, marked with a gold dot, is the large outer knob. The TREBLE control is the small inner knob and is marked with a gold triangle. Both controls operate independently of one another and are continuously variable. The normal or "flat" position is when the gold markers of the knobs are at the top (mid-way position) and the bass and treble ranges are neither emphasized nor attenuated. With the mid-way position as a reference, *clockwise* rotation effects boost and *counter-clockwise* effects cut. Under ordinary conditions, the controls should be left in the normal or mid-way position. If coloration of the tone is desired, the controls may be used to achieve the most pleasing musical balance.

PRESENCE: Located on the top left of the front panel. PRESENCE involves the mid-frequency range of music. By proper regulation, it is possible to achieve a quality which gives the feeling of being in the midst of live music. To set this control, turn on the instrument and play the radio or phonograph. Turn the control full *counter-clockwise*, you will notice that the music will lose mid-range and predominate in bass and treble. Turn the control *clockwise* until the tonal quality is restored to a point which provides the most natural musical balance.

BRILLIANCE: Located on the top right of the front panel. BRILLIANCE is the natural clarity with which the high treble range of the sound spectrum is reproduced. Room acoustics may very well affect the brilliance of musical instruments such as the violin, oboe, flute, etc. The BRILLIANCE control enables you to adjust for varying room acoustics. To set this control, turn the instrument on and play the radio or phonograph. Turn the control full *counter-clockwise*, you will notice an absence of brightness and a predominance of bass and mid-range. Turn the control *clockwise* until the brightness is restored and the most natural treble sound quality is realized.

Important! It is recommended that the PRESENCE and BRILLIANCE control be set *once* when the instrument is installed and left alone. Any further adjustments required may be necessitated only if the acoustic conditions change (addition, omission or rearrangement of upholstered furniture, drapes, carpets, etc.)

VOLUME AND LOUDNESS CONTOUR: This dual control serves two functions. Mounted concentrically for ease of operation, the LOUDNESS CONTOUR control is the large outer knob and is marked with a gold dot. The small inner knob marked with a gold triangle is the VOLUME CONTROL. At low volume levels, the human ear does not readily respond to the upper and lower frequency limits, while it does efficiently receive the middle register. Thus it is necessary to compensate for these deficiencies in order to achieve a natural balance when the VOLUME control is set for low level. In the extreme counter-clockwise position, the LOUDNESS CONTOUR control is OFF and not in operation. The three positions of the control provide a choice of three degrees of bass and treble boost, depending upon the low volume setting. *Important!* Use the LOUDNESS CONTOUR control only for low volume settings. If used at average or loud levels, the program will be too boomy because of excessive bass.

Operating Instructions

FOR THE FISHER CUSTOM ELECTRA DELUXE RADIO-PHONOGRAPH

CHANNEL SELECTOR: This is a nine position control for selection of desired program and setting of proper record equalization. The RADIO position has a setting for FM or AM; the PHONO position has four equalization settings.

POWER ON-OFF: To turn the instrument on, rotate the POWER switch knob to the right (clockwise) until a click is heard.

TO PLAY RADIO: Turn the CHANNEL SELECTOR knob to AM or FM. Set the Volume control to the quarter position (the gold dot should face left) and tune in a station with the TUNING control. At the same time, observe the TUNING EYE in the center of the dial. Tune the station in so that the "eye" indicates maximum closure. Note that there are two sets of sectors for precision tuning. One set will close rapidly. Use the wider sectors for finest tuning. In case of a weak or distant station, use the narrower sectors.

TO PLAY THE PHONOGRAPH: The professional type magnetic cartridge is fitted with a stylus guard when the instrument is packed. When using the record player for the first time, remove this guard and discard it.

There is a triangular red button on top of the cartridge. At the pointed end of the button you will find "33/45" (for 16, 33 or 45 RPM Microgroove records.) At the broad end, you will find "78" (for Standard 78 RPM records.) Check to see whether the marking toward you is the proper one for the record to be played. If not, depress the button, give it one-half turn, then release. This will swing the proper stylus into position. Make certain that you have turned the button the correct distance so that it comes back up fully when released.

Turn the CHANNEL SELECTOR to one of the four positions for Phono operation. Refer to the enclosed Record Equalization Guide for correct SELECTOR setting for all of your records. These settings provide the correct compensation for the recording characteristic employed by record manufacturers.

TAPE OPERATION: The CUSTOM ELECTRA is equipped to reproduce directly from the tape-head of a tape transport mechanism. Connection for this is made into the TAPE input jack located on the rear chassis skirt. The CHANNEL SELECTOR should be turned to TAPE. For reproducing tape from a complete recorder containing its own amplifiers, connection from the AMPLIFIER output of the tape recorder should be made to AUX 1 or AUX 2 and the CHANNEL SELECTOR set accordingly. The TAPE input is equalized for the NARTB curve and is designed for direct tape-head playback only. *Important! Do not connect the AMPLIFIER output of a complete tape recorder to this jack. Use AUX 1 or AUX 2.*

To make a tape recording from FM, AM or Phonograph. Connect a shielded cable from the RCDR output to the RADIO or AMPLIFIER input of the tape recorder. This connection is not affected by the VOLUME or TONE controls. The RCDR output jack is located on the rear chassis skirt.

AUX 1 AND AUX 2: THE FISHER CUSTOM ELECTRA is designed to reproduce the sound channel of a conventional TV receiver of a TV tuner chassis. Plug the output of the TV chassis into the AUX 1 or AUX 2 located on the rear skirt of the CUSTOM ELECTRA chassis. To play TV through the instrument, turn the CHANNEL SELECTOR to AUX 1 or AUX 2 and operate the TV chassis in the normal manner. The VOLUME and TONE controls of the CUSTOM ELECTRA may be adjusted to set the TV sound for most pleasing musical balance. This input may also be used for tape playback of a complete tape recorder.

Auxiliary Speaker System

FOR THE FISHER CUSTOM ELECTRA DELUXE RADIO-PHONOGRAPH

The SS Speaker System is a perfect companion to THE FISHER. It is ideal for use as an auxiliary, remote system, and can be easily installed in any location in your home. The unit may be used either simultaneously with the Custom Electra (the result is a startling dimensional effect) or independently in another room. The SS Loudspeaker System consists of:

- A fifteen-inch "woofer" for true, rich bass tone, a separate high-frequency "tweeter", and an 8-inch speaker to handle the mid-range tones.
- Custom quality speaker compartment of prize winning design.
- A three-way switch for simultaneous or separate operation with the master unit.
- Twenty-five feet of connecting cable with complete instructions.



AT YOUR SERVICE

It is the constant desire of Fisher Radio Corporation to have your FISHER give you its best possible performance. Toward that objective, we solicit your correspondence on any special problems that may arise. After you have had an opportunity to familiarize yourself with THE FISHER, we would appreciate your letting us know how it is meeting your requirements.

FISHER RADIO CORPORATION

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Gateway to the World's Finest Music

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