

Please read before using this equipment.

OWNER'S MANUAL



REALISTIC[®] HIGH FIDELITY

Catalog No.
31-2048

MODEL STA-18

Solid State 25 Watt AM/FM Stereo Receiver



Sold, serviced and
guaranteed from
coast-to-coast

Engineered by RADIO SHACK[®], A TANDY CORPORATION COMPANY

REALISTIC®

THE BRAND WITH OVER 1,000,000 CUSTOMERS

In choosing this fine Realistic product you have demonstrated a rather acute awareness of the good old American custom called "getting the most for your money". With Realistic this is not an idle boast.

The "line" was born in Boston, long famous for Yankee ingenuity — and thrift. Its original intent was to bridge a gap between \$100 equipment and \$25 equipment where, at the time, there was a real void in hi-fi merchandise.

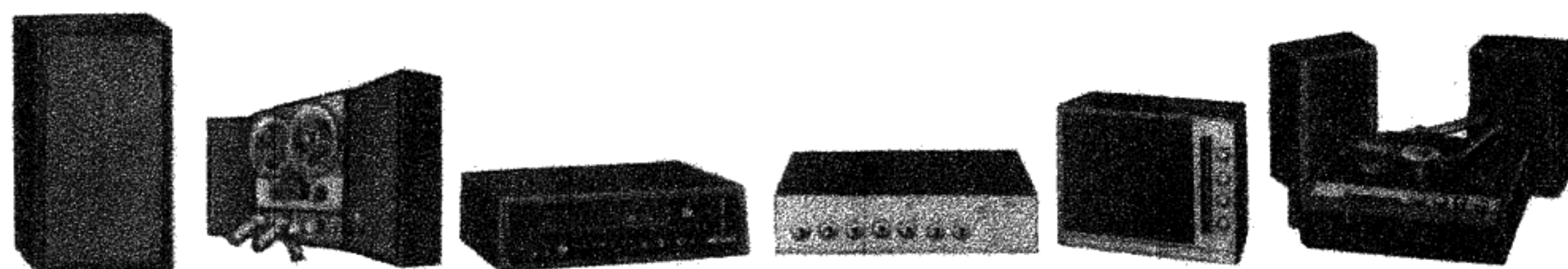
Early products were a \$39.95 FM tuner, a \$29.95 preamp/amplifier, a \$19.95 speaker. Soon we found ourselves a unique niche as manufacturing retailers.

Capacity and ability grew simultaneously. Our Realistic Electrostat-3® electrostatic tweeter — now used in the Electrostat-2A speaker — was called a "best buy" by the country's leading product-review magazine. Our 10TRF radio out-performed practically anything then available. And dealers from all over the world began requesting a Realistic franchise.

Recent "firsts" include: the first medium cost DC/AC communications receiver totally engineered in solid state — the Realistic DX-150A; the first properly designed low-cost police band radio — the Realistic Patrolman; the Realistic Optimus-1 loudspeaker, bringing "over \$120 sound" down 33%; the first lifetime-guaranteed vacuum tube; and the Realistic STA-120B stereo receiver which combined massive power, modern styling, and a veritable host of new ideas — at a cost fully \$100-\$200 below its value under traditional marketing practices.

But of course! — Realistic marketing practices are NOT traditional. First: the line is restricted in distribution. Second: we do not have sales representatives and other normal "trade" costs, nor do we waste money and tools on frequent model changes to attract new dealers — a new model is a NEW model, a current model is one that gets a steady stream of improvements at no cost to you and without a lot of wild (and expensive) claims of novelty.

We do not "sell" watts of power or speakers by the number; or rely on the usual confusing array of "Manufacturer's Specifications", most of which are, sad to say, quite irresponsible. We sell three things only: sound with minimum distortion, value without hidden extras, and ingenuity. Realistic's market share has grown satisfactorily on this basis. We think it's the way YOU want us to be.



Speakers Recorders Components P.A. Products Radios Phonographs

REALISTIC AUDIO PRODUCTS are the proud result of Radio Shack engineering, research development, and over 50 years of experience in electronics. Laboratories are maintained in Boston, Ft. Worth, Los Angeles, and abroad. In every sense a national brand, the Realistic label is worn with equal distinction by our highly original Communications and Citizens Band (two-way radio) products, and numerous other items including: tape, headphones, antennas, intercoms, and tubes.

Model STA-18 General Description

Your new Realistic STA-18 AM/FM Stereo Receiver features an all silicon transistor solid-state circuit for superb high-fidelity performance and long-lasting reliability.

The FM tuner section has two FET's in the front end for high sensitivity, and an integrated circuit in the IF to provide high selectivity. An Automatic Frequency Control circuit locks in stations, preventing drift.

The tuning meter indicates center channel on FM, and signal strength on AM. Reception of a stereo broadcast is indicated by the illuminated dial pointer which turns from yellow (mono) to red (stereo).

Wide band AM circuit design assures you of full fidelity AM reception. The receiver has a built-in ferrite AM antenna, and FM line cord antenna, as well as terminals for use with an external FM antenna.

The STA-18 has a magnetic cartridge stereo phono input, and may also be used with crystal or ceramic phono cartridges through the AUX. input. Provision is made for tape monitoring when recording with a three-head tape deck.

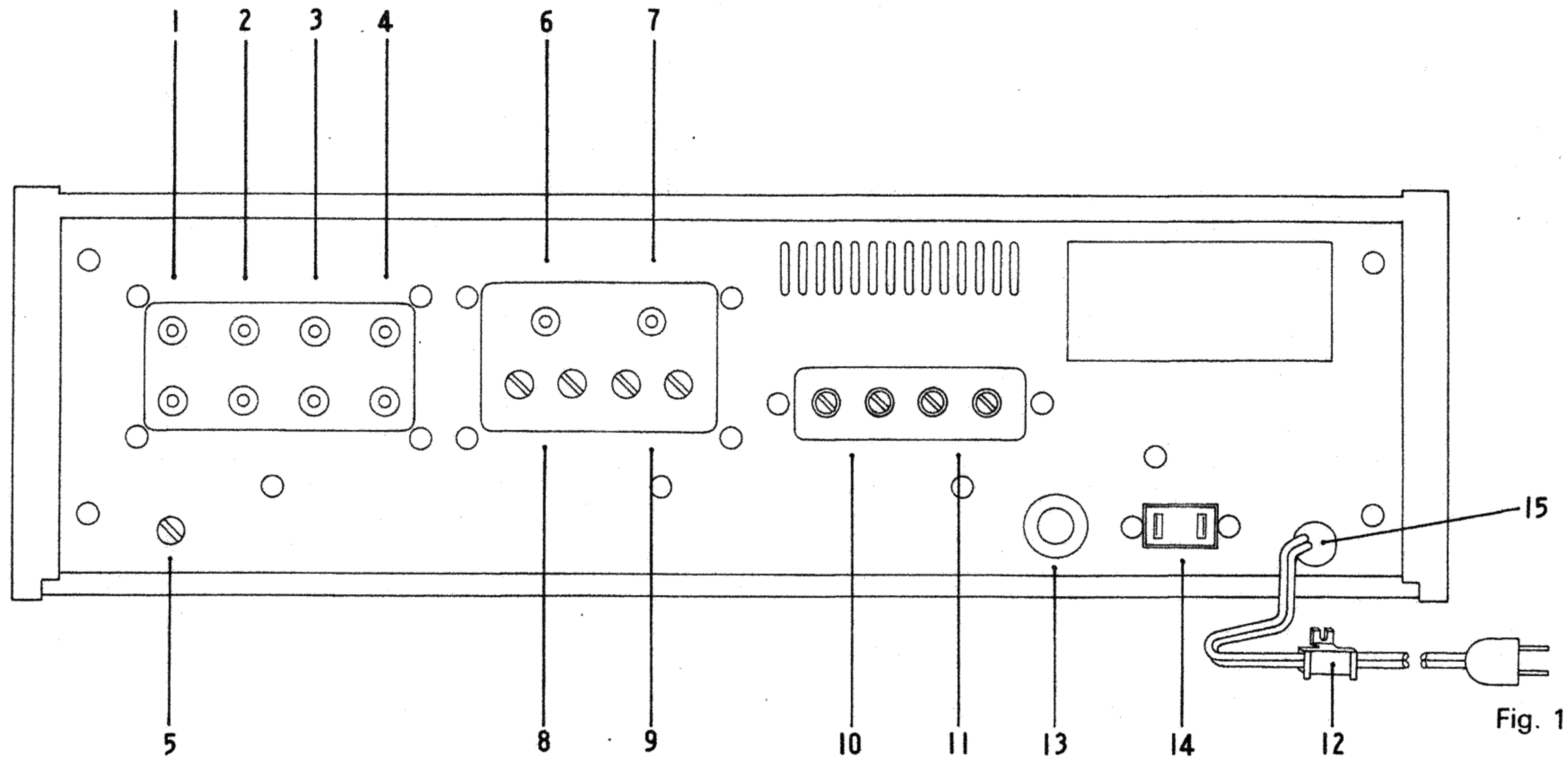
GUARANTEE:

The Realistic guarantee is stated on the Fact Tag packed with the equipment. It is in effect from coast to coast. At any time, Realistic equipment may be restored to new condition with original parts with MINIMUM delay anywhere in the U.S.A., usually in your own neighborhood. It is NOT necessary to return Realistic equipment to our Laboratories in 98% of the cases.

Model STA-18 General Specifications

Audio output at 8 ohms	: 25 watts \pm 1 dB 20 watts IHF 14 watts RMS
Harmonic distortion	: Under 1 %
Frequency Response	: \pm 2 dB 20–30,000 Hz
Power Band width	: 30–20,000 Hz
Sensitivity	: Magnetic phono 2.5 mV Auxiliary 250 mV
Tone controls	: Bass \pm 10 dB at 100 Hz Treble \pm 10 dB at 10,000 Hz
Hum in phono mode	: – 60 dB
FM sensitivity	: 2 μ V IHF
FM stereo separation	: 40 dB at 1,000 Hz
FM image rejection	: 57 dB
FM signal to noise ratio	: 67 dB
FM capture ratio	: 2 dB
FM two signal selectivity	: 55 dB or better
AM sensitivity	: 40 μ V/m
AM image rejection ratio	: 45 dB
AM signal to noise ratio	: 50 dB
Antenna	: Built-in AM and FM, plus external facilities
Power	: 120V AC 60 Hz 50W

Rear Panel Inputs And Outputs: Identity And Location



(1, 2, 3, 4, 5) Phono Aux Tape in And Tape Out Connections

- 1—Phono input jacks, magnetic pickup.
- 2—Auxiliary input jacks.
- 3—Tape input jacks.
- 4—Tape output jacks.
- 5—Grounding screw for record changer.

(6, 7, 8, 9) Speaker Connections

- 6—RCA-type jack for right channel speaker.
- 7—RCA-type jack for left channel speaker.
- 8—Screw terminals for right channel speaker.
- 9—Screw terminals for left channel speaker.

(10, 11, 12) AM And FM External Antennas

- 10—AM antenna screw terminals.
- 11—FM antenna screw terminals. Use one for single 48" wire, both for 300-ohm dipoles and outdoor types.
(NOTE: FM Line cord antenna must be disconnected when both terminals are used.)
- 12—FM line antenna.

NOTE: STA-18 has built-in AM ferrite antenna, plus built-in FM line antenna suitable for strong signal area.

(13, 14, 15) Power And Protection

- 13—Main Fuse (1A "Fast").
- 14—Spare AC receptacle (unswitched) for phono or tape deck.
- 15—AC line cord for 120 Volt 60 cycle AC current, 50W.

A Typical System: STA-18, Record Player, Speakers, Tape Deck

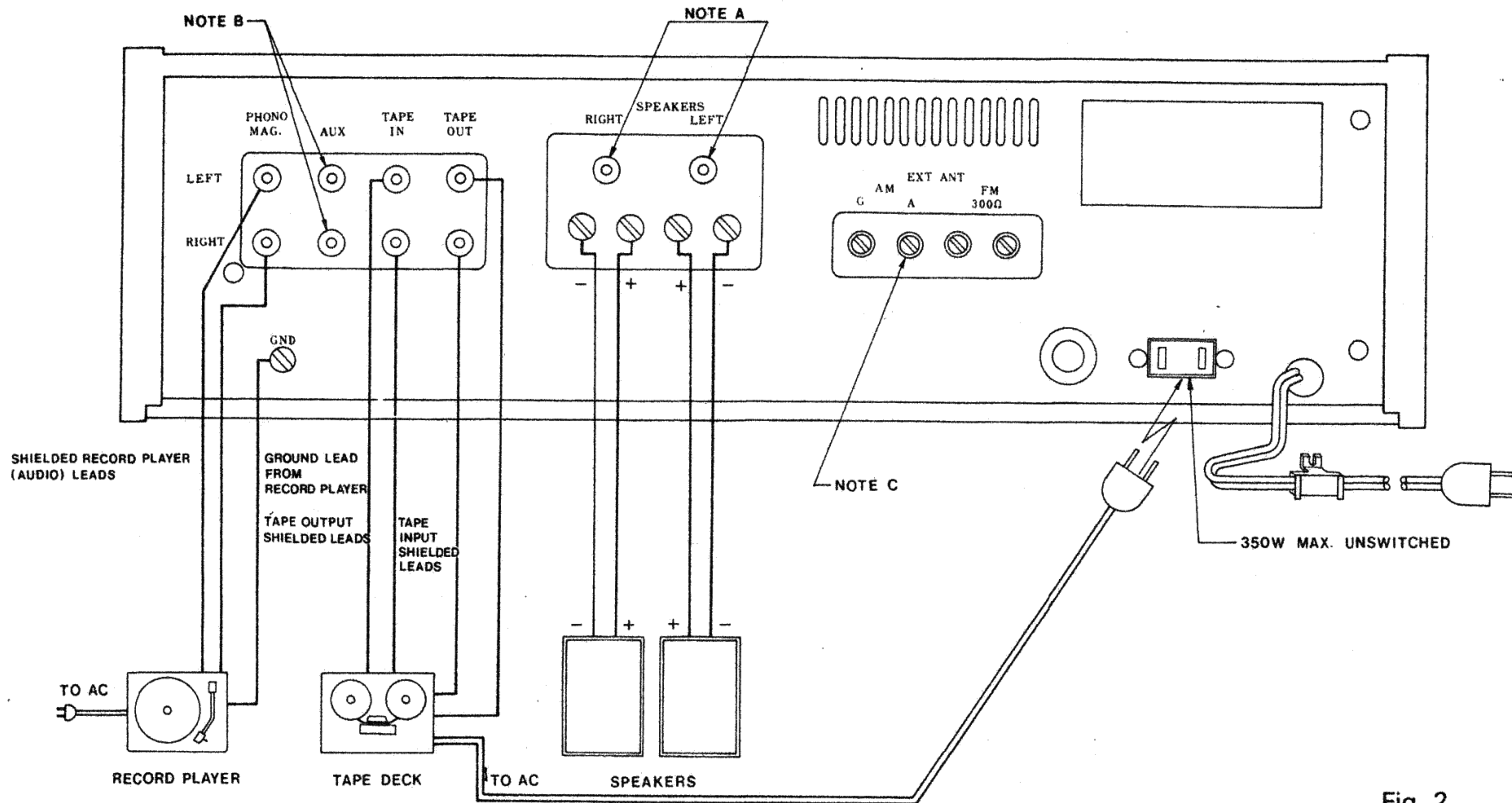


Fig. 2

Note A : for speaker pair if leads have RCA-type phono plugs only.

Note B : Aux inputs for second cartridge (non-magnetic), or 2nd recorder, TV set, ham receiver, etc, High level.

Note C : for external AM antenna if required.

Model STA-18 Front Panel Controls: Identity And Location

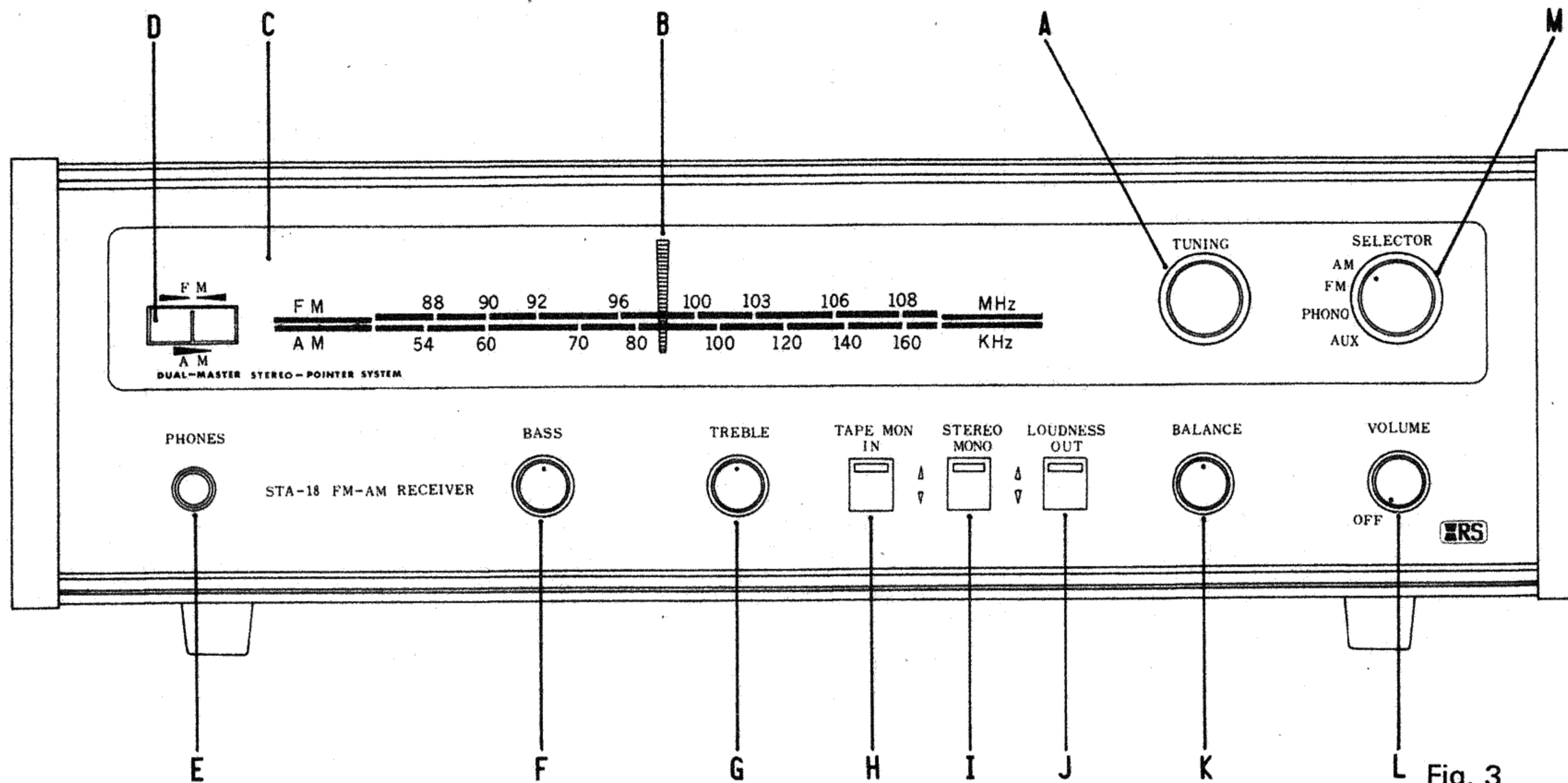


Fig. 3

(A, B, C, D) Radio Tuning Controls

- A—Tuning Knob.
- B—Pointer, Illuminated FM Mono-Yellow, FM Stereo-Red.
- C—Illuminated Slide-rule dial.
- D—Illuminated AM signal strength meter and FM center tuning meter.

(E) Phones

- E—Stereo headphone jack.

(F, G) Tone Controls

- F—Bass tone control knob.
- G—Treble tone control knob.

(H, I, J) Tape Monitor/Mode/Loudness Controls

- H—Flip-lever tape monitor switch.
- I—Flip-lever stereo-mono switch.
- J—Flip-lever loudness switch.

(K, L, M) Balance/Power on-off/Volume/Selector Controls

- K—Balance control knob.
- L—Power on-off switch and volume control knob.
- M—Function selector knob.

Operation

NOTE: Before connecting your STA-18 receiver to an AC power outlet, connect a pair of 8 ohm speakers to the speaker terminals as shown in Figure 2.

AM Reception

Set Selector knob (M) to AM position.
Use tuning knob (A) to select desired station, and tune for best signal as indicated by greatest meter deflection to the right.
Adjust volume, bass and treble as desired.

FM Reception

Set selector knob (M) to FM position.
Use tuning knob (A) to select desired station, and tune for best signal as indicated by center channel indication on the tuning meter.
Adjust volume, bass and treble as desired.

Reception of a stereo FM broadcast is indicated by the dial pointer turning red (stereo). The pointer will be yellow on AM and FM mono broadcasts.

STEREO/MONO Switch

The STEREO/MONO switch should normally be left in the "up" or STEREO position. If you wish to hear a stereo program monophonically, operate the switch "down" to the MONO position. The MONO position should also be used when you wish to adjust the balance between the left and right channel speakers to suit any particular listening area.

BASS and TREBLE Controls

Separate bass and treble controls are provided on the STA-18 to allow you to tailor the sound to perfectly suit your own listening preferences.

Adjusting the BASS control (F) clockwise increases bass response, counter-clockwise decreases bass response.

Adjusting the TREBLE control (G) clockwise increases treble response, counter-clockwise decreases treble response.

TAPE MON Switch

The TAPE MON/IN switch (H) must be operated to the "down" or IN position when playing tapes through your STA-18. This can be done regardless of what position the SELECTOR switch is in. The switch may also be operated to the IN position when recording with a three head tape deck to allow monitoring.

LOUDNESS Control

The LOUDNESS switch (J) enhances the frequency response of the receiver for full-fidelity listening at low volume levels. The switch is normally left operated in the "up" position.

PHONES Jack

Front panel stereo headphone jack (E) allows you to listen privately. When headphone plug is inserted into PHONES jack, speakers are automatically cut off.

BALANCE Control

Allows you to adjust the volume balance between the left and right channel speaker. This may be done more easily with the STEREO/MONO switch in the MONO position.

ON-OFF/VOLUME Control

Turn knob (L) clockwise past click to turn receiver power on. Rotating the knob clockwise increases the volume level. To decrease volume, rotate knob counter-clockwise. Turning counter-clockwise past click turns power off.

SELECTOR Switch

- AM : For reception of standard AM broadcast stations
- FM : For reception of stereo FM and mono FM broadcasts
- PHONO : For use with phonos having magnetic stereo cartridges
- AUX : May be used with ceramic or crystal cartridge phonos, or for additional tape decks: open reel, cassette or 8-track cartridge.

Connecting a Phono

Magnetic Cartridge—Connect the left and right channel phono leads to PHONO MAG. LEFT and RIGHT input jacks on rear of STA-18 (Figure 2). If a ground wire is used, connect to GND screw on STA-18.

Ceramic or Crystal Cartridge—Connect the left and right channel phono leads to AUX LEFT and RIGHT input jacks on rear of STA-18 (Figure 2). If a ground wire is used, connect to GND screw on STA-18.

Connecting a Tape Deck

For Playback—Connect line output jacks of tape deck to TAPE IN LEFT and RIGHT jacks on rear of STA-18 using shielded audio cable (Figure 2). To play, operate TAPE MON/IN flip lever switch to IN position.

For Recording—Connect line input jacks of tape deck to TAPE OUT LEFT and RIGHT jacks on rear of STA-18 using shielded audio cable (Figure 2). When a 3-head deck is used, the tape may be monitored while recording.

NOTE: AUX input jacks may be used for playing a second tape deck through your STA-18. This gives you the added versatility of playing 8-track cartridges or cassettes in addition to reel-to-reel tapes.

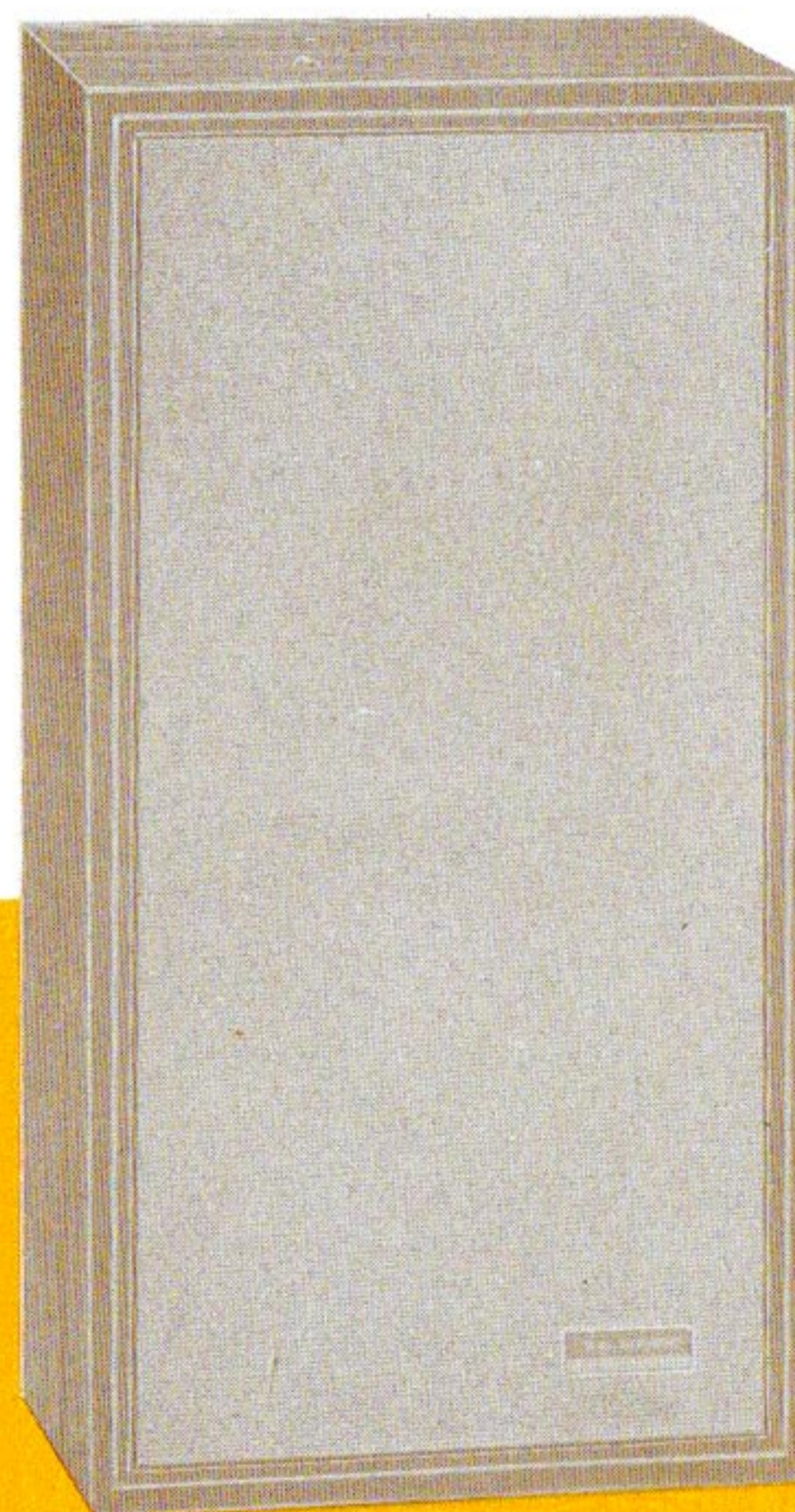
Guaranteed Quality from the builders of the famous ELECTROSTAT-3® TWEETER

NATURAL SOUND *REALISTIC*® SPEAKER SYSTEMS

Solo® Series

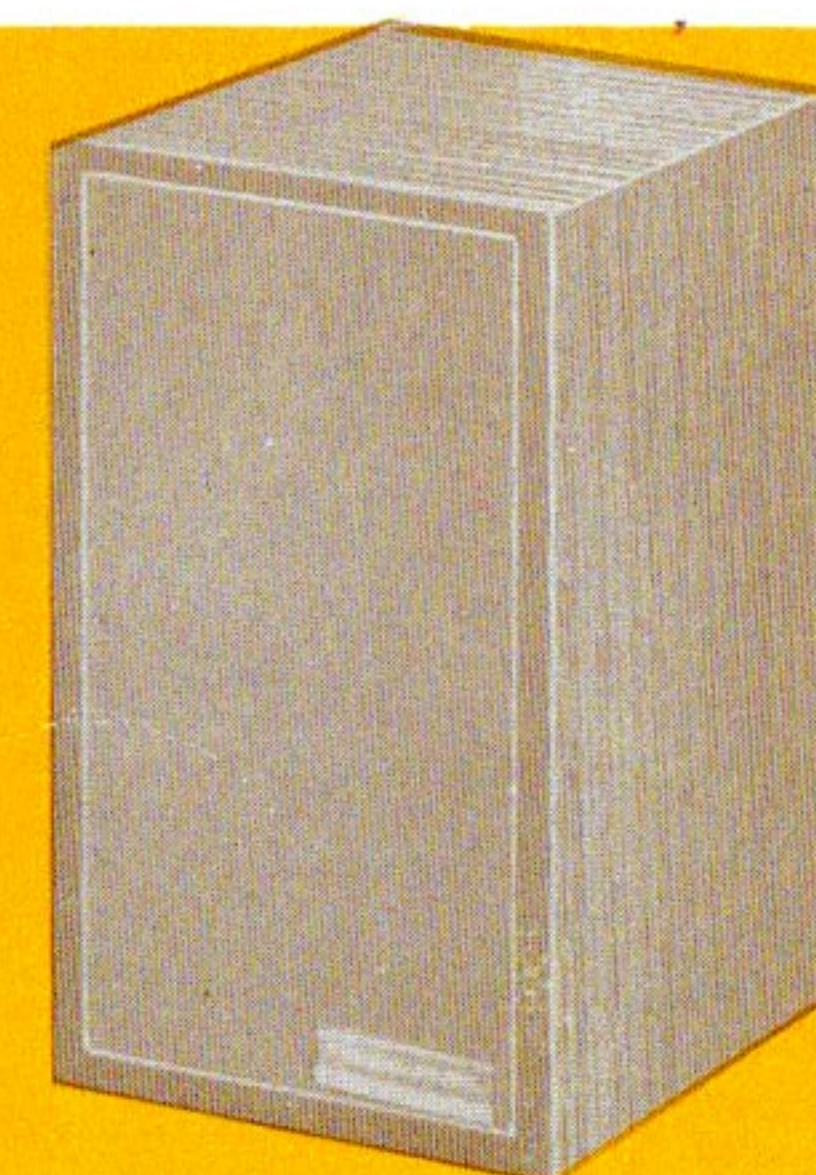


Optimus™ Series



About 500,000 Realistic loudspeakers have been sold in recent years by some of the nation's most estimable stores including those in the Radio Shack chain. Since the development of its widely acclaimed electrostatic tweeter — now used in our Electrostat-2A system, Realistic has had an enviable reputation for building good speakers at lower than usual prices. Our Solo series has a 5-year guarantee. Our Optimus, Electrostat and Minimus series have lifetime guarantees. Every speaker is engineered by us, not "just a box with a label". And even though speakers are meant to be heard and not seen, every Realistic speaker is born as beautiful as it sounds. Choose from 10 different models!

Minimus™ Series



RADIO SHACK  A TANDY CORPORATION COMPANY

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