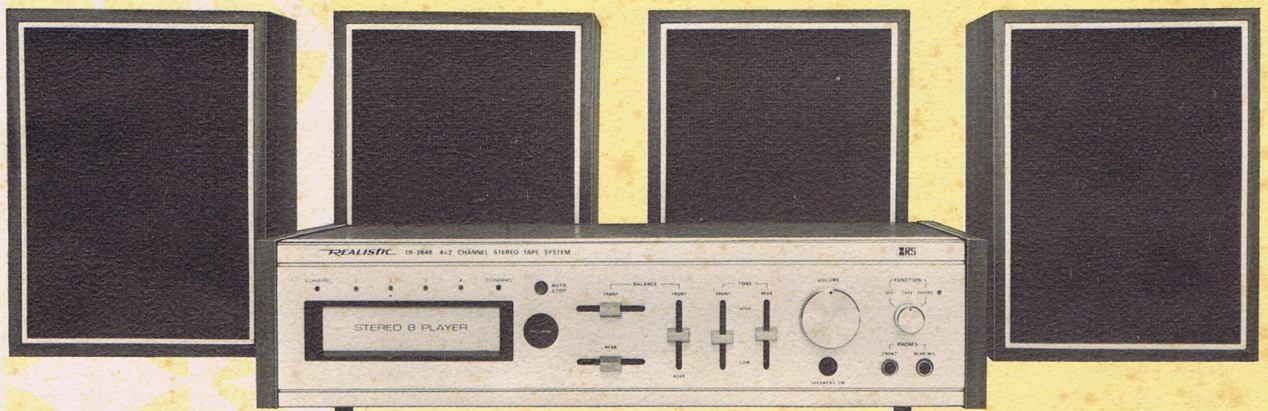



REALISTIC[®]

4-CHANNEL/2-CHANNEL STEREO TAPE SYSTEM

Model TR-284B



**Sold, Serviced and
Guaranteed from
coast-to-coast**

CUSTOM MANUFACTURED FOR
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 "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.

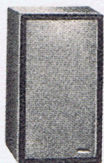
Capacity and ability grew simultaneously. Our Realistic Electrostat-3® electrostatic tweeter — now used in the Electrostat-2a speaker — was called a "best buy" by the country's leading product-review magazine. Our 10TRF radio out-performed practically anything then available. And dealers from all over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

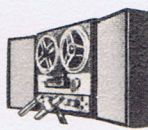
But of course! — Realistic marketing practices are NOT traditional. First: the line is restricted in distribution. Second: we do not have sales representatives and other normal "trade" costs, nor do we waste money and tools on frequent model changes to attract new dealers — a new model is a NEW model, 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.

REALISTIC AUDIO PRODUCTS are the proud result of Radio Shack engineering, research and development and over 50 years of experience in electronics. Laboratories and major testing facilities are maintained in Fort Worth, Los Angeles, Chicago, Boston, Philadelphia, Columbus Ohio, Burlington Iowa, Toronto and Tokyo. 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.



Speakers



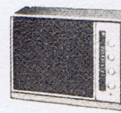
Recorders



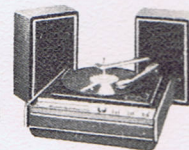
Components



P.A. Products



Radios



Phonographs

GENERAL DESCRIPTION

Your TR-284B is a compatible 2/4-Channel Stereo Tape Cartridge system with four acoustic suspension speaker systems. All five pieces are housed in pressed-wood, oiled-walnut styled cabinets. The tape mechanism automatically senses 2 or 4 channel cartridges and provides visual indication of the type of cartridge and the program/track being played. The amplifier circuitry provides more than adequate power for room-filling 4-channel or 2-channel stereo sound.

GUARANTEE: The REALISTIC guarantee is stated on the Fact Tag packed with the unit. It is in effect from coast-to-coast and in Alaska. At any time, REALISTIC equipment can be restored to new condition with original parts, with minimum delay anywhere in the USA -- usually right in your own neighborhood.

INSTALLING THE TR-284B

Do not operate this unit until you have the speakers connected.

Refer to Figure 1.

Connecting the Speakers. Determine the best listening position for 4-channel stereo. It should be in a location where the 4 speakers can be positioned in the corners of the listening room. Position the speakers and connect them to the Speaker jacks on the rear of the unit.

Connecting a Record Changer/Turntable. The record changer/turntable must have a ceramic cartridge to operate properly with this system. Your local Radio Shack store has a complete selection of record

SPECIFICATIONS

Amplifier Section:

Power Output: 10 watts @ 8 ohms
Frequency Response: 40-12,000 Hz
Distortion: 0.6 % or less

Tape Section:

System: 8-track cartridge, 2 or 4 channel (automatic sensing)
Tape Speed: 3-3/4 ips
Signal/Noise: 45 dB or better
Separation: 40 dB or better

Phono Section:

Input Sensitivity: 150 mv
Signal/Noise: 45 dB or better

changers and cartridges. Connect the shielded cables to the CERAMIC PHONO jacks as shown. If your record changer has a green ground wire, connect it to the GND screw on the back of the unit. Plug the line cord of the changer into the AC accessory socket of the TR-284B.

Connecting a Tuner or Other Accessory Unit. You can connect a Tuner, Tape Recorder or any other medium to high-level output accessory to your TR-284B for normal 2-channel stereo use. Such accessories would have to be connected to the Ceramic Phono input jacks in place of the record changer/turntable. The output of the Tuner, etc., should be about 1/2-volt for proper operation.

Plug the line cord of the TR-284B into a source of 120 volts, 60 Hz AC power.

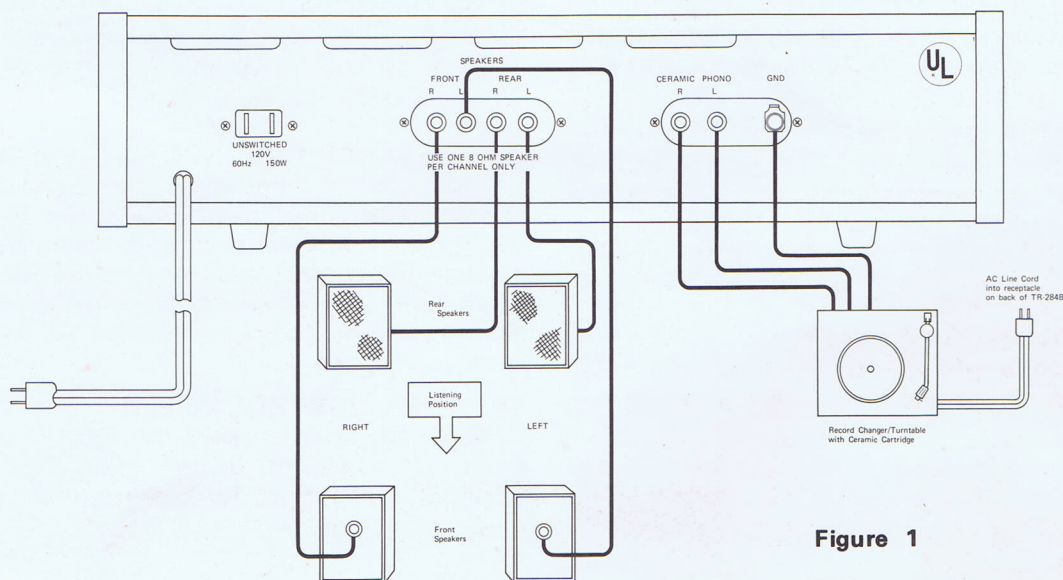
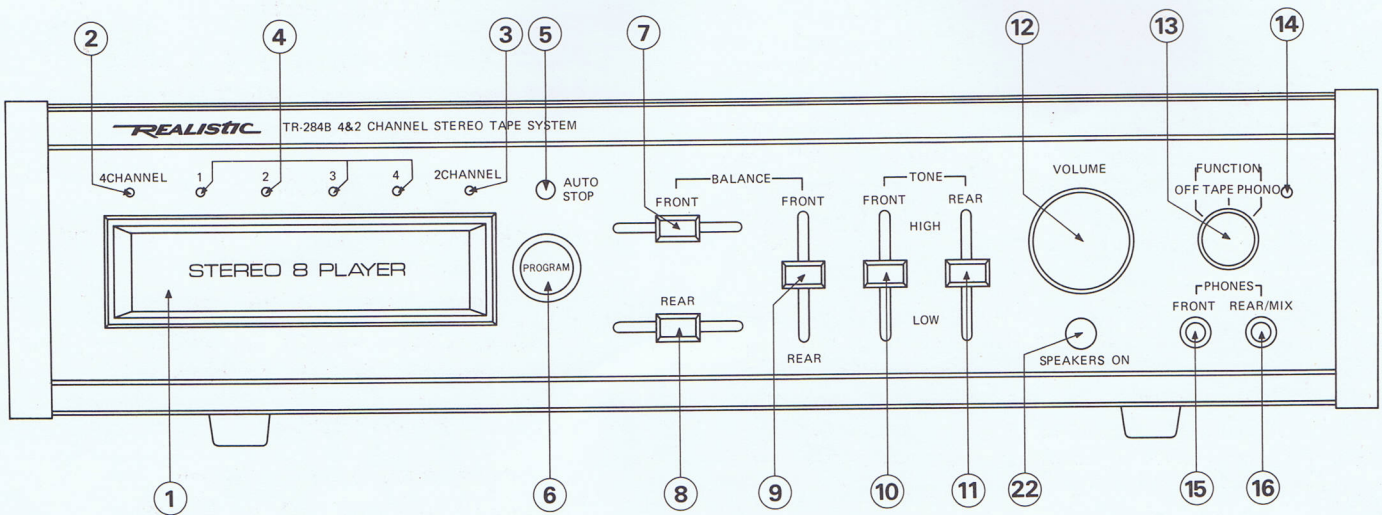


Figure 1

CONTROL FUNCTION AND LOCATION



FRONT VIEW

1. CARTRIDGE DOOR:

Insert the tape cartridge into the CARTRIDGE DOOR open-end first with label side facing up.

2. 4-CHANNEL LAMP:

Will automatically light up when a 4 channel tape is inserted.

3. 2-CHANNEL LAMP:

Will automatically light up when a 2 channel tape is inserted.

Four channel cartridges incorporate a special slot which automatically activates the 4-channel function; whereas 2 channel cartridges do not. This feature automatically actuates the correct function.

4. PROGRAM INDICATOR:

"1" or "2" will light up when a 4 channel cartridge is being played, and "1", "2", "3" or "4" will light up when a 2 channel cartridge is being played. This indicates the program/track being played.

5. AUTO STOP BUTTON:

Press to lock-in the AUTO STOP button and the cartridge tape will automatically stop playing and AUTO STOP LAMP will light up when the last program/track of a 4 or 2 channel cartridge tape has been played.

6. PROGRAM CHANGE BUTTON:

To change the program/track, press the PROGRAM button. Press once for each change of program/track.

7. FRONT BALANCE CONTROL: (Front Left-to-Right)

For normal operation, set this control to the center position (you will feel a slight "click" at the center position). This controls the balance of sound between Right and Left Front speakers. Moving this control to the left will decrease the level of sound from the right speaker and maintain the left sound at a constant level. Moving it to the right gives the opposite effect (sound from left decreases - - sound from right remains the same). Settings other than mid-range depend entirely upon speaker matching, location, room acoustics and personal preference.

8. REAR BALANCE CONTROL: (Rear Left-to-Right)

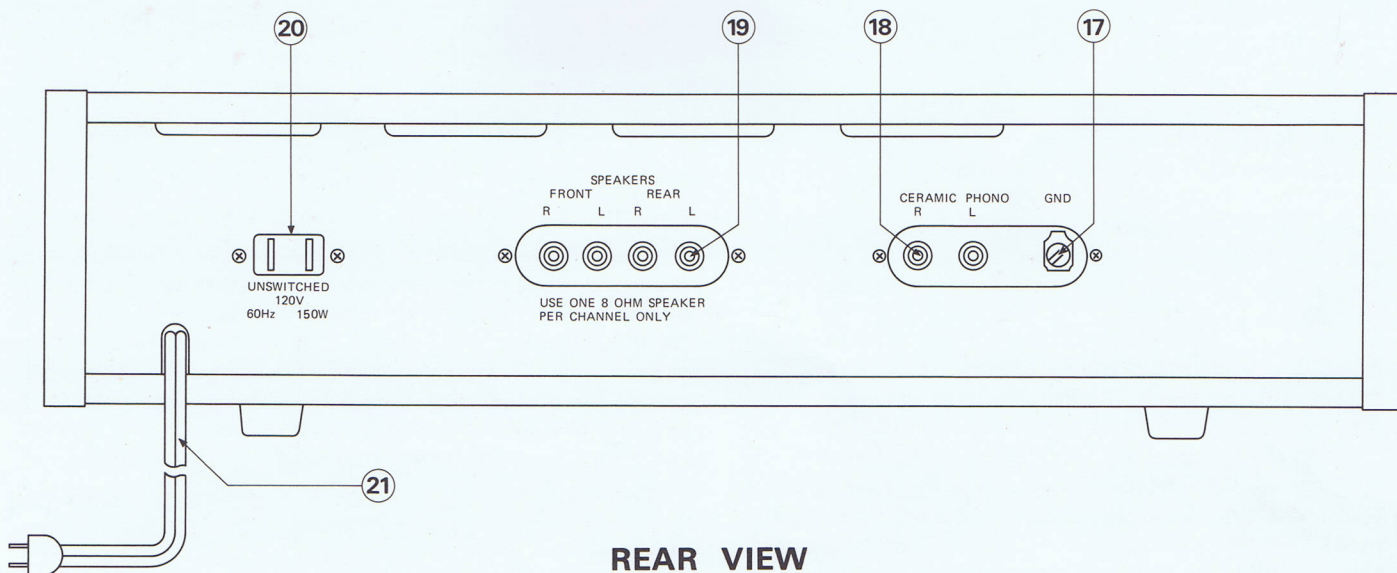
This control functions in exactly the same manner as the FRONT Balance control; it controls the balance of sound between the Right and Left Rear speakers. Adjust it for the desired balance of sound from the Rear speakers.

9. BALANCE CONTROL:(Front-to-Rear)

This control determines the balance of sound between the Front speakers and the Rear speakers. For normal operation, leave it set at the midpoint. Moving the control "up" will reduce the sound level from both rear speakers; moving the control down will reduce the sound level from both front speakers.

10. TONE CONTROL:(Front)

This control determines the tonal response of the front left and right output. Move "up" for treble response; move down for bass response.



REAR VIEW

11. TONE CONTROL:(Rear)

This controls the tonal response of the rear left and right output. Move up for treble response; move down for bass response.

12. VOLUME CONTROL:

This determines the overall volume of sound from all four channels at once. Rotate clockwise for more sound volume.

13. FUNCTION SWITCH:

Set this switch to the appropriate position for the desired mode of operation.

In the OFF position, power is turned off and the unit is non-operative.

In the TAPE position, play either 2 or 4-channel tapes.

In the PHONO position, use a record changer/turntable with a ceramic cartridge. In this position, the lamp next to "Phono" will light up.

14. PHONO POWER LAMP:

When the FUNCTION switch is in the "Phono" position, this lamp will light, permitting use of the record changer/turntable.

15. FRONT HEADPHONE JACK:

Plug stereo headphones into this jack for stereo headphone listening of the front 2 channels.

16. REAR HEADPHONE JACK:

Plug stereo headphones into this to listen to a mix of Front and Rear sounds.

If you have a set of 4-channel headphones, insert the plugs into both jacks (15 & 16) - - front to front and rear to rear.

NOTE: The speakers will still operate when headphones are inserted into these jacks.

17. GROUND SCREW:

Connect the green grounding wire from a record changer/turntable to this screw.

18. CERAMIC PHONO INPUT JACKS:

Plug the shielded cables from a record changer/turntable into these jacks. THE TURNTABLE MUST INCORPORATE A CERAMIC CARTRIDGE.

19. SPEAKER JACKS:

Plug the cables from the speakers into these jacks. Be sure to position the speakers according to the labels on these jacks (FRONT Right and Left and REAR Right and Left).

20. A.C. OUTLET ACCESSORY SOCKET :

This convenience AC outlet is incorporated for connecting the line cord from a record changer/turntable or other accessory unit. Power to this socket is not controlled by the FUNCTION switch.

21. POWER CORD:

Connect this power cord to a source of 120 volts, 60 Hz AC power. As long as this power cord is connected to an AC outlet, the AC Accessory Socket (20) will have power.

OPERATION

Be sure the speakers are properly connected (refer to Figure 1).

Presetting the Controls

Before actually operating your Tape System, set controls as follows:

Set BALANCE controls to midpoint.

Set TONE controls to midpoint.

Set VOLUME control about 1/4-turn (approximately 9 O'clock).

PLAYING TAPES

Set the Function switch to TAPE.

Insert an 8 track cartridge into the Cartridge Door - - open end in and label side up. The tape will start automatically and either the "4 CHANNEL" or "2 CHANNEL" lamp will light (indicating either a 4-channel cartridge or a 2-channel cartridge). One of the Program Lights will come on, indicating the program/track being played.

If a 2-channel cartridge is being played, the Program Lights "1", "2", "3" or "4" will light and the program will change automatically as the tape moves through the mechanism.

If a 4-channel cartridge is being played, the Program Lights "1" or "2" will light.

Adjust VOLUME, TONE and BALANCE controls for the best sound. With 2-channel tapes, left channel sound will be heard from both front and rear left speakers - - right channel sound will be heard from both front and rear right speakers.

To change programs, press the PROGRAM change button. This automatically advances the program/track by one number for each time you press the button. The Program Lights will indicate the program/track being played.

To automatically stop the tape at the end of the last program/track (number "4" for 2-channel tapes - - number "2" for 4-channel tapes) press in Auto Stop button. Now, when a tape comes to the end of the last program, it will automatically stop (rather than recycling back to program/track 1 and playing all over again) and the AUTO STOP button will light up. To release this function (and start tape movement once again), press AUTO STOP button once more.

USING A RECORD CHANGER/TURNTABLE

Set the FUNCTION switch to the PHONO position; the Phono Power Lamp will light.

Operate your Record Changer/Turntable in a normal manner and adjust VOLUME, TONE and BALANCE for the best sound.

USING OTHER ACCESSORY SOUND SOURCES

If you have a Tape Recorder, Tuner or other sound source with medium to high-level output (about 1/2-volt) and have connected it to the Ceramic Phono input jacks, set the FUNCTION switch to the PHONO position. Operate the accessory sound source as you normally would and adjust VOLUME, TONE and BALANCE controls for best sound.

LISTENING WITH STEREO HEADPHONE

For private listening, plug your stereo headphones into the PHONES jack(s). If you have 4-channel phones, plug into both jacks. If you have 2-channel stereo phones, plug into the "Front" jack when listening to 2-channel tapes; to listen to 4-channel tapes, plug into the "Rear" jack (you will hear a mix of the left front & rear channels and a mix of the right front & rear channels).

Your Radio Shack store has a fine selection of both 2-channel and 4-channel headphones. Stereo headphone listening provides a unique presence and realism - - try it, its a great experience!

CAUTION: Never leave a cartridge pressed all the way into the cartridge door when not in use. After playing, always remove the cartridge. Never turn power off and leave the cartridge inserted.

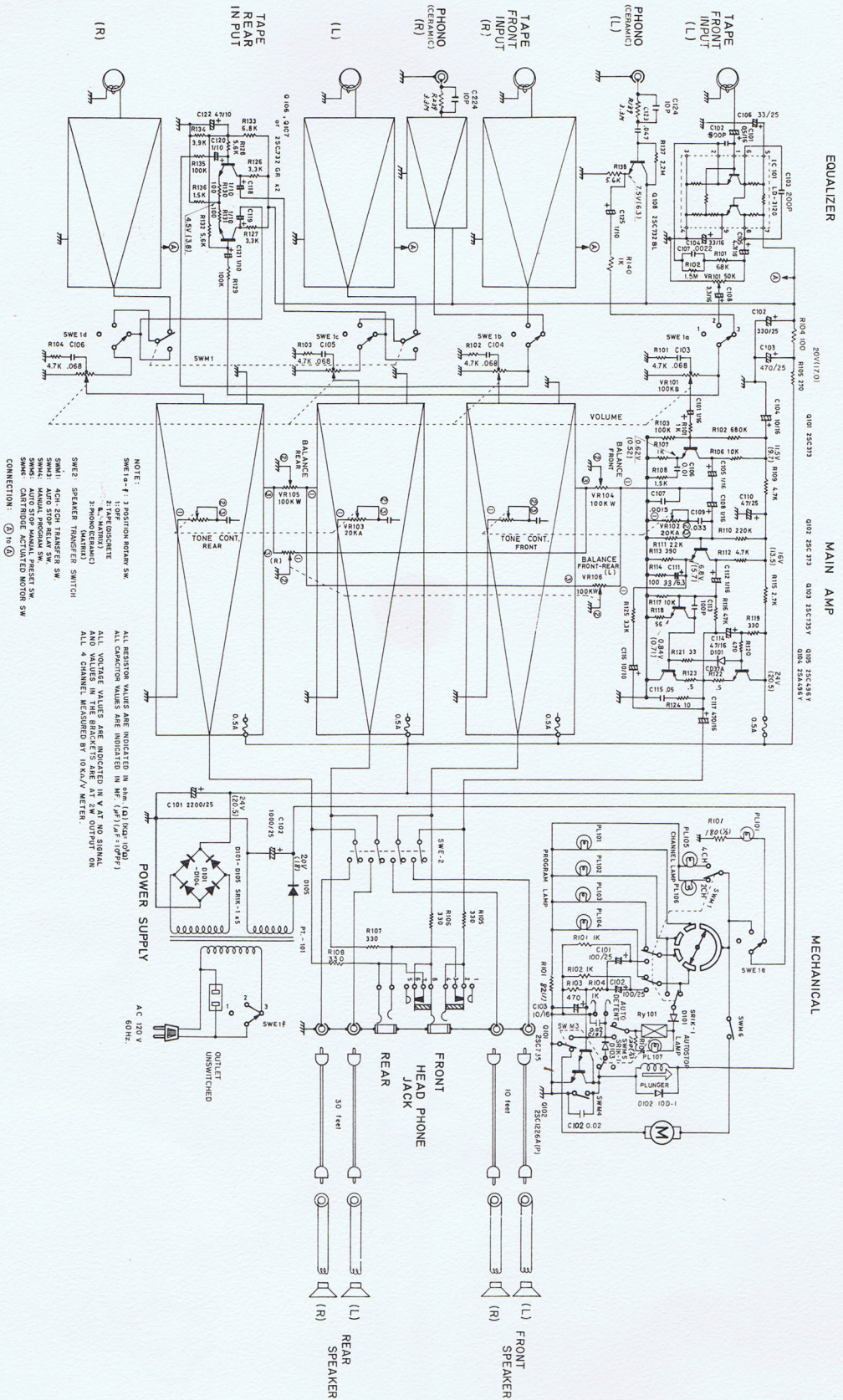
Periodically you should clean the tape head and moving parts by using a tape head cleaner such as Radio Shack Cat. No. 44-1161. Never touch the tape head with a metallic or magnetic object.

Store cartridges away from high heat and humidity. Avoid exposure to magnetic fields (transformers, etc.).

RETURNING THE UNIT FOR SERVICE

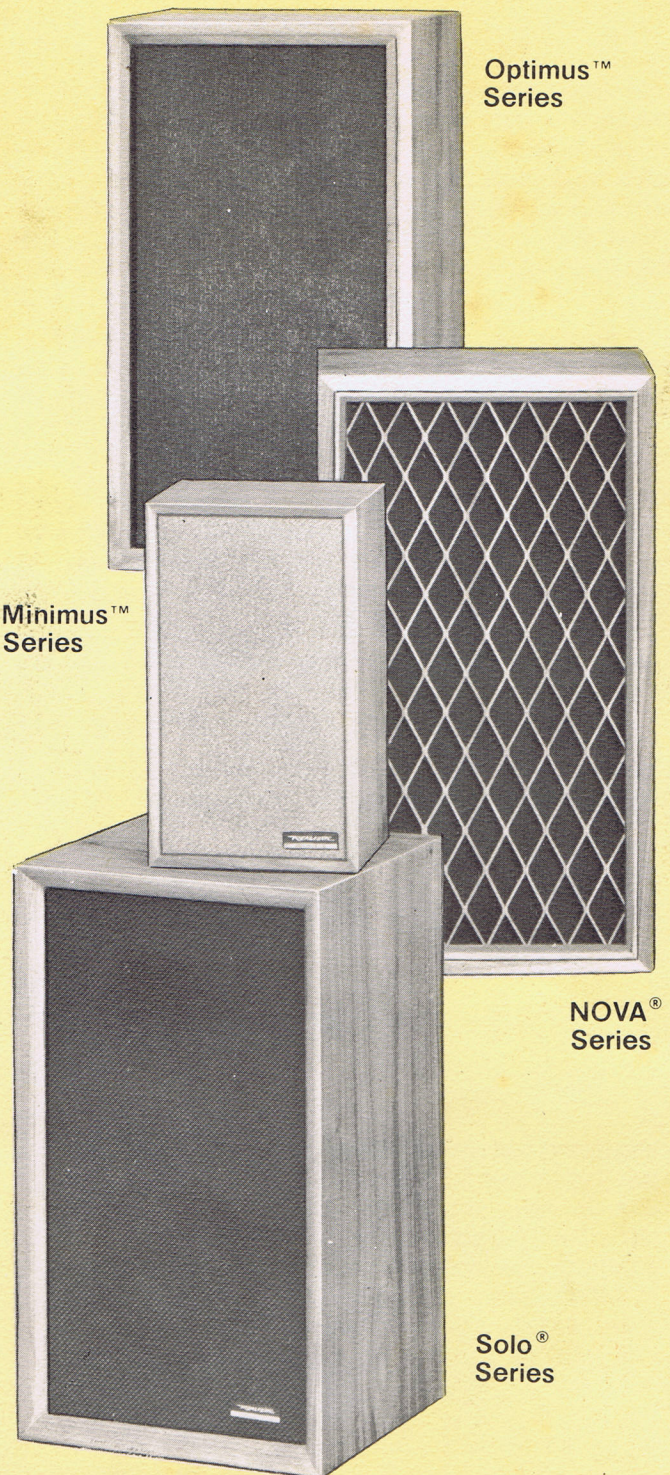
In the event that repair becomes necessary (whether the unit is in or out of warranty), we recommend that you return the unit to the store from which it was purchased. This is the fastest and most efficient means of obtaining service performed by qualified technicians. In the event a repair cannot be made on the premises, the store manager will advise an alternate handling.

SCHEMATIC DIAGRAM



REALISTIC GUARANTEED QUALITY HIGH-FIDELITY SPEAKERS

Over 1,000,000 Realistic loudspeakers have been sold in recent years through the nationwide 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 five-year guarantee. Our Optimus, Electrostat, Nova and Minimus Series have lifetime guarantees. Every speaker is engineered by us, not just "a box with a label!" And though speakers are meant to be heard and not seen, Every Realistic speaker is born as beautiful as it sounds. Choose from over 20 different models.



RADIO SHACK  A TANDY CORPORATION COMPANY

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