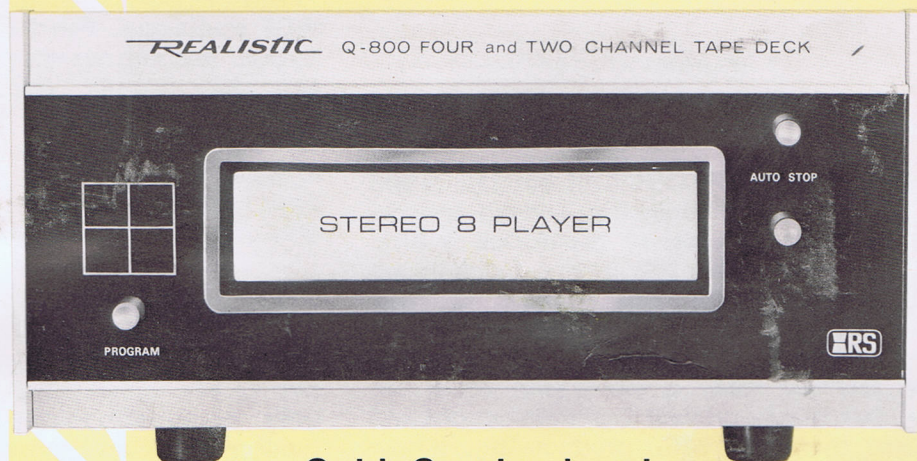


REALISTIC®

4-CHANNEL/2-CHANNEL CARTRIDGE TAPE DECK

Model Q-800



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

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:

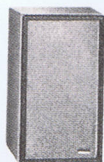
Capacity and ability grew simultaneously. Our Realistic Electrostat-3® electrostatic tweeter — now used in the Electrostat-2a speaker — was called a "best buy" by the country's leading product-review magazine. Our 10TRF radio out-performed practically anything then available. And dealers from all over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

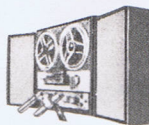
But of course! — Realistic marketing practices are NOT traditional. First: the line is restricted in distribution. Second: we do not have sales representatives and other normal "trade" costs, nor do we waste money and tools on frequent model changes to attract new dealers — a new model is a NEW model,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



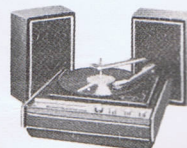
Components



P.A. Products



Radios



Phonographs

INSTALLATION AND CONNECTIONS

Since the Realistic Q-800 is a Tape Deck, it does not have a built-in power amplifier. Thus, it must be connected to an external amplifier or receiver. The Q-800 can be used for playing either 2-channel or 4-channel tapes. For 2-channel tape playing, you need a 2-channel stereo amplifier or receiver. For 4-channel tape playing, you need a discrete 4-channel amplifier or receiver or two complete 2-channel stereo amplifiers. We have briefly outlined the procedure for connecting cables and equipment in either case.

Connections When Using Two Stereo Amplifiers

To obtain complete 4-channel amplification, you can use two stereo amplifiers, or two stereo receivers, or one stereo amplifier and one stereo receiver. In any case, you need 4 completely separate amplifying channels, each with its own speaker. The speakers should be suitably matched.

Refer to Figure 1.

1. Using a pair of shielded cables, connect the L and R PREAMP OUTPUT "Front" jacks to the Aux Inputs of one stereo amplifier (or receiver). This will function as the Front channels amplifying system. Connect the speaker outputs from this amplifier to the Left and Right speakers and position at the front of your listening position.
2. Using a pair of shielded cables, connect the L and R PRE-AMP OUTPUT "Rear" jacks to the Aux Inputs of the other stereo amplifier. This will function as the Rear channels amplifying system. Connect the speaker outputs from this amplifier to the Left and Right speakers and position them at the rear of your listening position.
3. Plug the line cord from the Q-800 into the AC receptacle on the back of the "Front" stereo amplifier. Plug the line cord from the "Front" stereo amplifier into a source of 120 Volts, 60 Hz AC power. The line cord from the "Rear" stereo amplifier can be connected to an extra AC receptacle on the "Front" stereo amplifier, if there is one; otherwise, connect it to a source of 120 volts, 60 Hz AC power.
4. Set up the stereo amplifiers for Aux function and turn on power. Insert a 4-channel cartridge into the cartridge door of the Q-800 (open end in and label side up). Adjust volume, tone and balance controls as required on both stereo amplifiers to achieve best 4-channel sound.
5. When using a 2-channel tape, the "Rear" stereo amplifier can be turned off, since the signals which are processed to the "Rear" amplifier are identical to the "Front" channel. Standard 2-channel stereo will be heard from both the "Front" and "Rear" speakers. Thus, Left channel sound is heard from both the Left Front and Left Rear speakers; Right channel sound is heard from both the Right Front and Right Rear speakers.

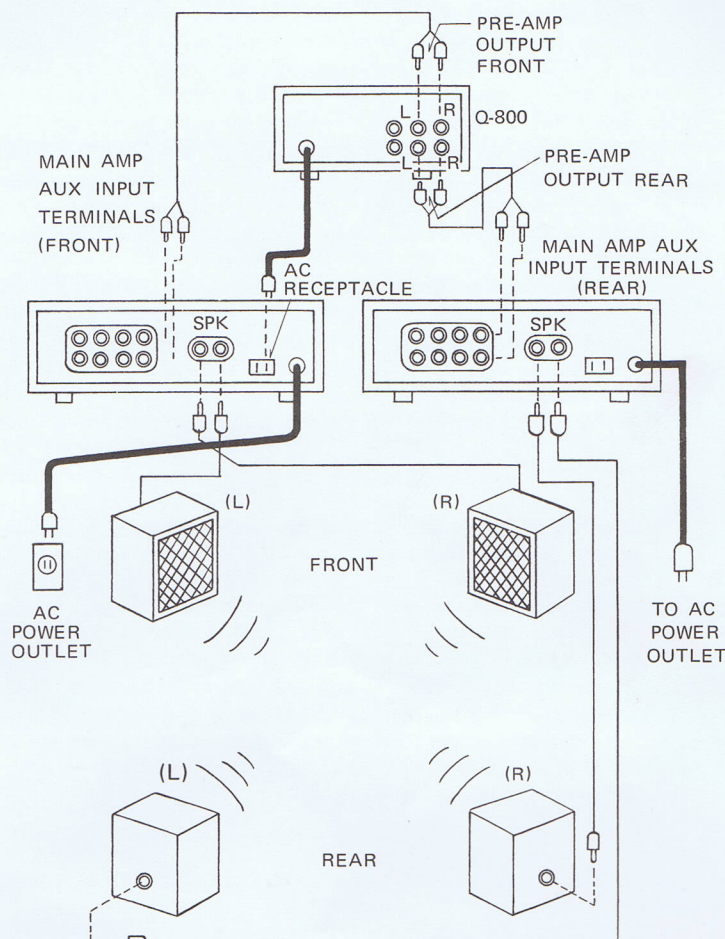


FIGURE 1.

Connections When Using A 4-Channel Amplifier or Receiver

If you are going to connect your Q-800 to a discrete 4-channel amplifier or receiver, refer to Figure 2.

1. Using a pair of shielded cables, connect the L and R PREAMP OUTPUT "Front" jacks to the Front Aux Input jacks on your 4-channel amplifier/receiver. Connect cables from the Front Speakers terminals on your amplifier/receiver to the Front speakers. Position these speakers in front of your listening position.
2. Use a pair of shielded cables between the L and R PRE-AMP OUTPUT "Rear" jacks on your Q-800 to the Rear Aux Input jacks on your 4-channel amplifier/receiver. Connect cables from the Rear Speakers terminals on your amplifier/receiver to the Rear speakers. Position these speakers to the rear of your listening position.
3. Plug the line cord from the Q-800 into the AC receptacle on the rear of your amplifier/receiver. Plug the line cord from your amplifier/receiver into a source of 120 volt, 60 Hz AC power.
4. Set up the amplifier/receiver for 4-channel operation (using Aux 4-channel input) and turn the power on. Insert a 4-channel cartridge into the cartridge door of the Q-800 (open end in and label side up). Adjust volume, tone and balance controls as required for best 4-channel sound.
5. When using a 2-channel tape, the "rear" sound will be identical to the "front" sound. Therefore, you may set your amplifier/receiver for 2-channel stereo operation or 4-channel operation. With 4-channel operation, Left channel sound will come from both Left speakers (Front and Rear), Right channel sound will come from both Right speakers (Front and Rear). If your Amplifier/Receiver incorporates some form of 4-channel enhancement, switch in that mode and you will obtain 4-channel enhancement of your 2-channel tape.

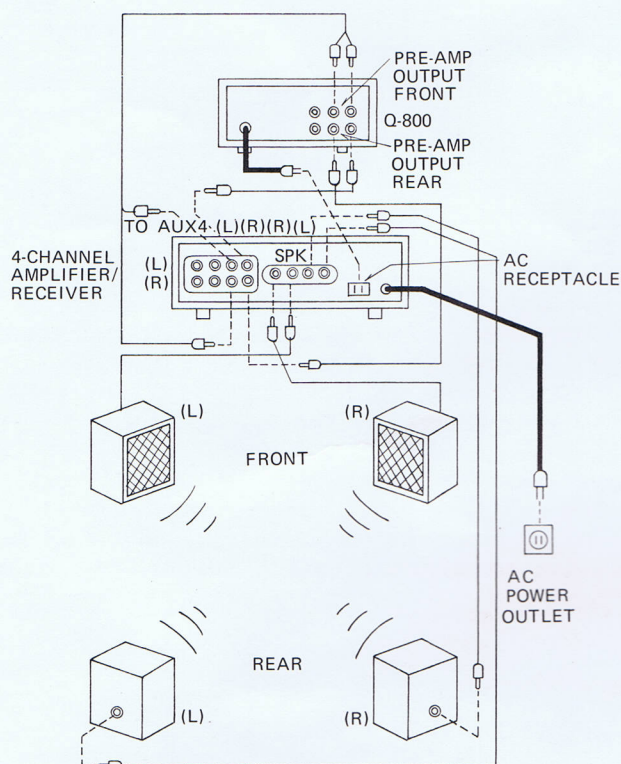


FIGURE 2.

CONTROLS AND FUNCTIONS

Refer to Figure 3.

1. **Cartridge Door.**
Insert tape cartridge into the Cartridge Door, open end first and label side facing up.
2. **Program Lamp.**
When playing 4-channel tapes, either 1 or 2 will light. When playing 2-channel tapes, 1, 2, 3 or 4 will light. The number will indicate the program being played.
3. **Channel Lamp**
Automatically indicates the type of tape being played. 2 CH will light when a 2-channel tape is inserted. 4 CH will light when a 4-channel tape is inserted.
4. **Program Button**
Press to advance to the desired program. The program selector will advance one number for each time this button is pressed.
5. **Auto Stop Button**
Press this button if you want the tape to stop automatically when the last program has been played and Auto Stop Lamp will light. This is a lock-in type button. When left in the "out" position, the tape will automatically switch from program to program and play continuously until the tape cartridge is withdrawn.
6. **A.C. Line Cord**
Plug into a source of 120 volts, 60 Hz AC power.
- 7 & 8. **PREAMP OUTPUT FRONT Jacks.**
Connect these two jacks to the amplifying system for Front speaker sound. For a 2-channel system, this will be for the main stereo amplifier/receiver. Connect R for Right channel and L for Left channel.
- 9 & 10. **PRE-AMP OUT REAR Jacks.**
Connect these two jacks to the amplifying system for Rear speaker sound. If you only have a 2-channel system, no connections are made to these jacks.
11. **OUTPUT LEVEL Controls.**
These controls are used to adjust the level of the output signal to match the input requirements of your amplifier/receiver. The L control adjusts the level of the Left output (both Front and Rear); the R control adjusts the level of the Right output (both Front and Rear). Output level is variable from 1 volt down to 0.05 volts (it comes preset to maximum output - 1 volt).

Set the OUTPUT LEVEL controls as follows. Set up the 4-channel amplifying system for operation with another source of 4-channel sound (F.M. Stereo, SQ record, etc). Adjust volume, tone and balance controls for best 4-channel sound. Now, set the amplifying system for operation with the Q-800 and (using a 4-channel tape) if necessary, adjust both OUTPUT LEVEL controls (Left and Right) to obtain a similar output level from both Left and Right speakers. Switch back and forth between the two 4-channel functions to balance output levels. Once you have set these controls, they should require no further attention.

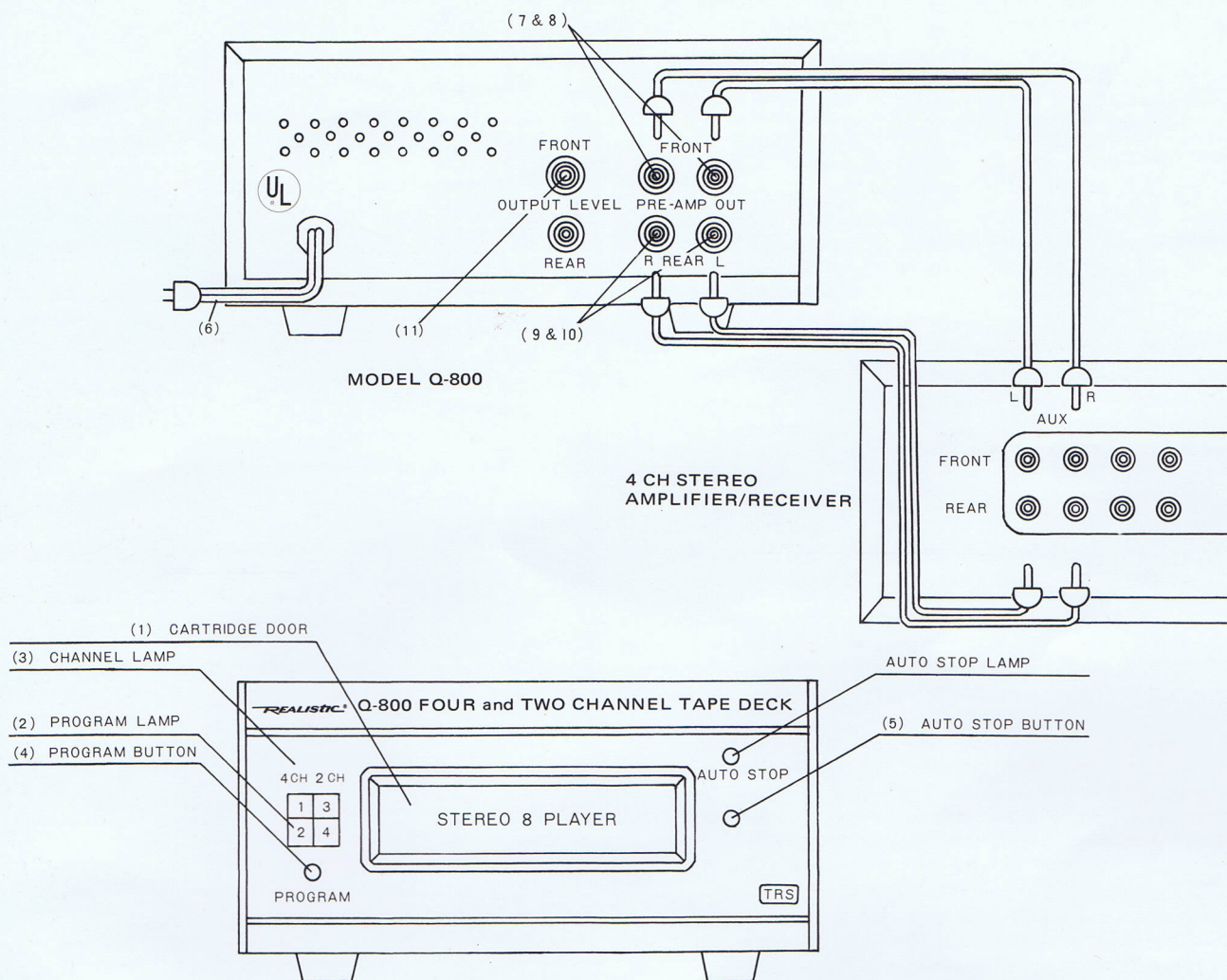


FIGURE 3

OPERATING INSTRUCTIONS

When you have connected the Q-800 as instructed previously, use it to play back either 4-channel or 2-channel tape cartridges as follows:

To Play Quad-8 4-Channel Tapes

1. Insert the 4-channel cartridge into the cartridge door opening, open end first and label side up. Press all the way in. The Q-800 will start automatically and will automatically sense that it is a 4-channel tape. The 4 CH Channel Lamp will come on and Program Lamp 1 or 2 will come on.
2. A 4-channel tape has two program-tracks recorded on it: program-track 1 and program-track 2. To change the program, press the PROGRAM button.

To Play 2-Channel Tapes

1. Insert the 2-channel cartridge into the cartridge door opening, open end first and label side up. Press all the way in. The Q-800 will start automatically and will automatically sense that it is a 2-channel tape. The 2 CH Channel Lamp will come on and Program Lamp 1, 2, 3 or 4 will come on.
2. A 2-channel tape has four program-tracks recorded on it. The Program Lamp indicates which program-track is being played. To change programs, press the PROGRAM button. If you have a 4-channel Amplifier/Receiver which incorporates some form of 4-channel enhancement, you can obtain 4-channel enhancement of your 2-channel tapes as follows: Set your 4-channel Amplifier/Receiver Mode/Function switch for 4-channel enhancement. Your 2-channel tapes will be enhanced for 4-channel sound. If you leave the Mode/Function switch in the 2 Channel Stereo position, you will hear normal 2-channel stereo (or "stereo all").

To Stop The Tape

When a tape cartridge has been inserted into the Q-800, it will automatically play each program consecutively and return to program-track 1 and automatically continue. Play will be continuous, since the Q-800 automatically switches to the next program-track when one track is complete.

To stop the tape, pull it back out of the cartridge door opening. Or, you can use the AUTO STOP button. When it is pressed in, the tape will automatically stop when it comes to the end of the last program-track. To start the tape again, release AUTO STOP by pressing the button once again.

CAUTION: When you have finished using the Q-800, remove the tape from the unit. Never leave a tape in place when not in use, or when power is off.

NOTES

Do not store cartridges in excessively hot or humid places. Do not let them be exposed to magnetic fields (radio, TV, transformers, etc.).

Do not use the Q-800 in areas of high temperature, humidity, dust or dirt.

For best results, the tape head should be cleaned periodically - after every 25 hours of use. Special cartridge-type head cleaners are available to clean the tape head (Catalog Number 44-1161). Treat the tape head with great care; it is delicate and sensitive. Do not bring a metallic object near the head and do not use magnetic tools near it (screw driver, etc.).

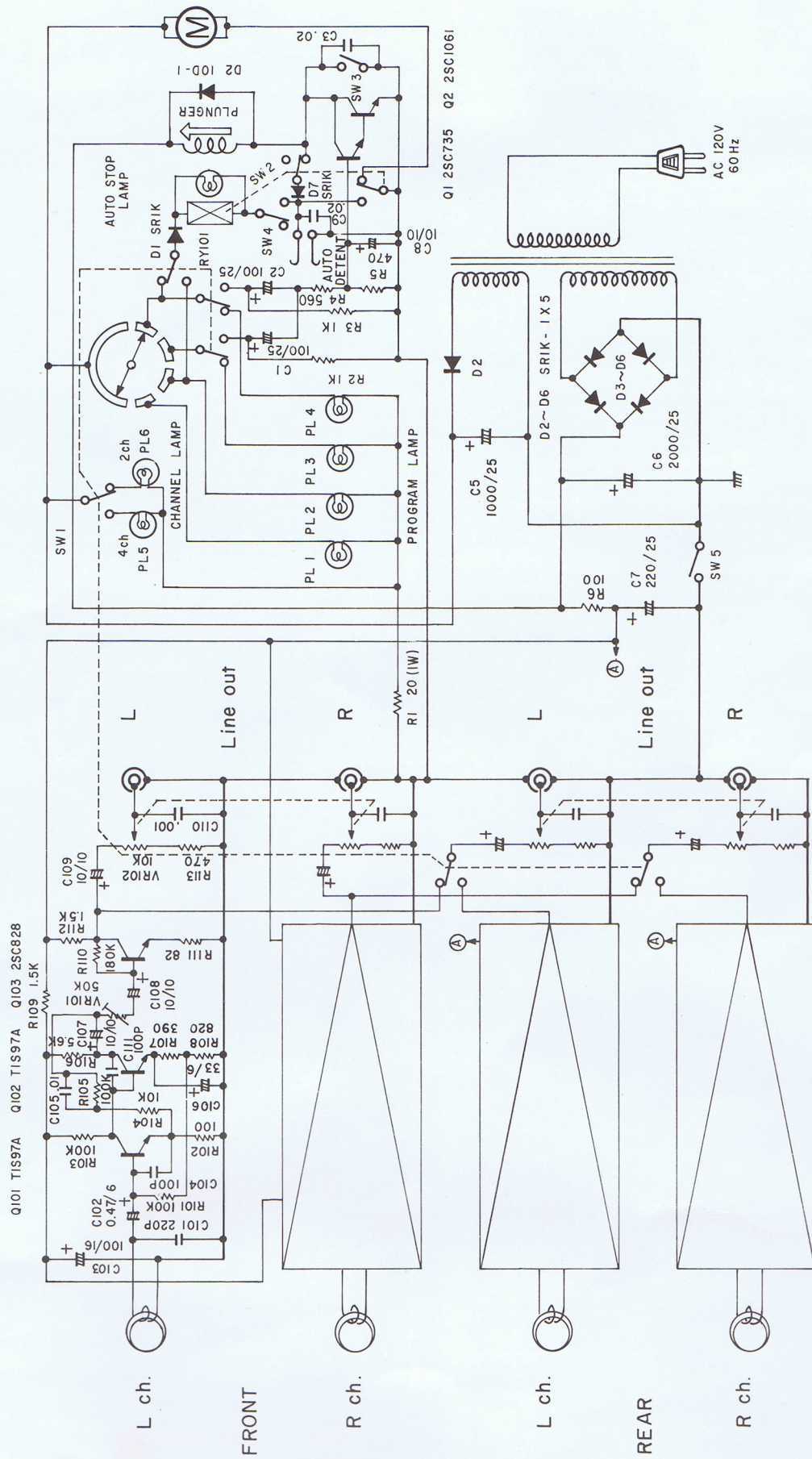
SPECIFICATIONS

Tape System:	8-track cartridge 2 or 4 channels
Tape Speed:	3-3/4 ips
Output Voltage:	0.050 to 1 volt (variable)
Separation:	40 dB
Signal-to-Noise:	-45 dB
Distortion:	1.5% or less
Power Requirements:	120 Volts, 60 Hz AC (40 watts)
Dimensions:	4.1" x 7.9" x 10.2" (hwd)
Weight:	7.3 lbs.

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

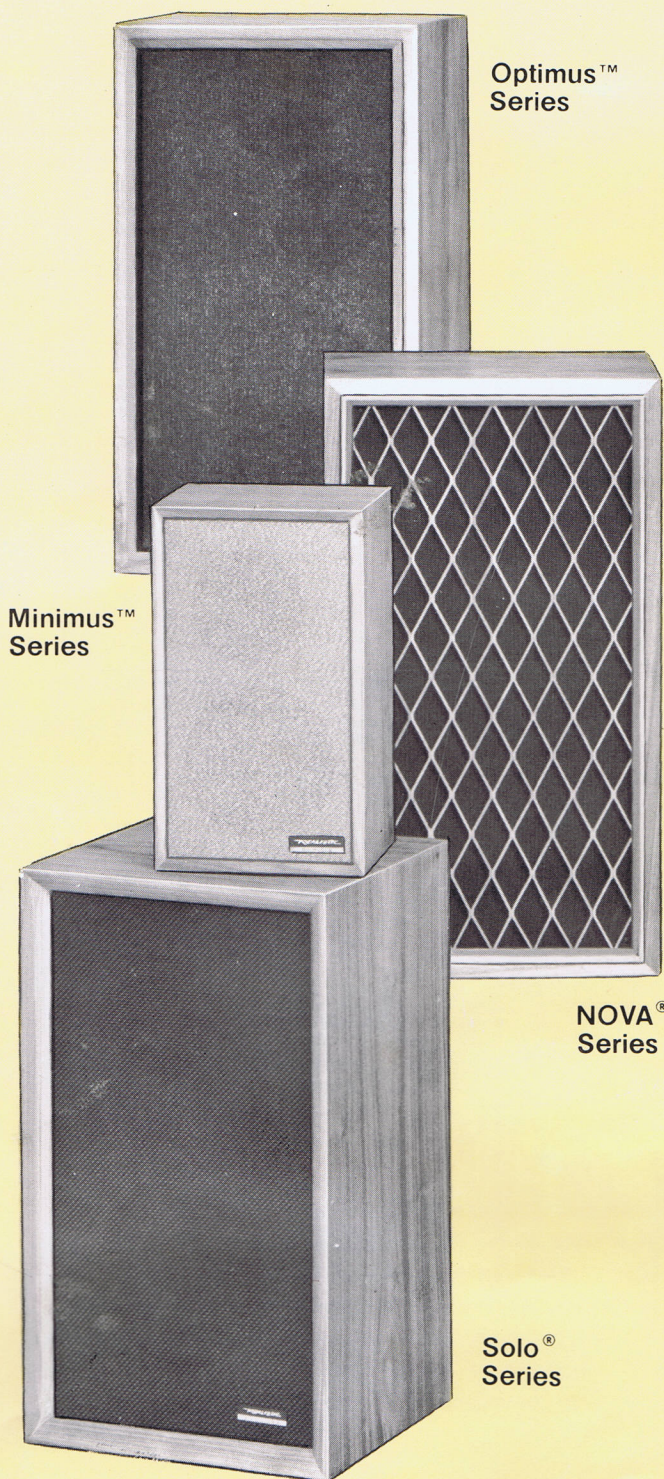



NOTE:
 SW1: 4ch. - 2ch. TRANSFER SW. by TAPE CARTRIDGE
 SW2: AUTO STOP RELAY SW.
 SW3: MANUAL PROGRAM SW.
 SW4: AUTO STOP MANUAL PRESET SW.
 SW5: SOURCE SW. by TAPE CARTRIDGE CONNECTION (A) to (B)

Note:
 All resistance values are indicated in ohm (K=1000).
 All capacitance values are indicated in μF ($P=\mu F$).

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 seen and not heard, Every Realistic speaker is born as beautiful as it sounds. Choose from over 20 different models.



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