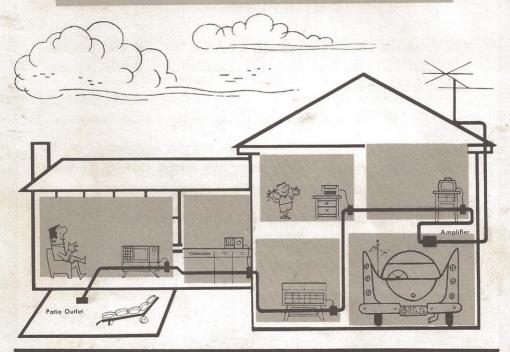
OPERATING MANUAL NO. HSK-3000

Jerrold's Amplified... TV-FM HOME SYSTEM



SETS NO LONGER "TIED DOWN"... CAN BE MOVED ANYWHERE IN THE HOME.

The 1st Completely Engineered, Amplified System For The Home. Produces...Plug-In...High Fidelity TV And FM Reception...Anywhere In The Home.

INSTALLATION INSTRUCTIONS FOR JERROLD HOME-TV-FM SYSTEM

Save This Booklet. It Is Valuable in the Installation and Maintenance of the Jerrold Home System.



INTRODUCTION

You have purchased the finest amplified home system available. Each component has been engineered and designed to function in an integrated system that will produce unexcelled quality home reception and distribution.

This system is designed to furnish amplified TV and FM reception. AM radio reception can also be significantly improved by connection to the system.

Read the following instructions before starting installation of the system. Follow the step-by-step procedure taking care at all times to observe wiring precautions.

- Wiring of VHF television is unlike common electrical wiring in that the twin lead should not come in contact or close proximity with metal objects.
- Use your existing antenna or choose one suitable for your reception area and mount it in accordance with manufacturer's and local specifications. Lightning arrestors are recommended.
- Observing the following instructions closely will give you an end result that will make you justifiably proud of your efforts.



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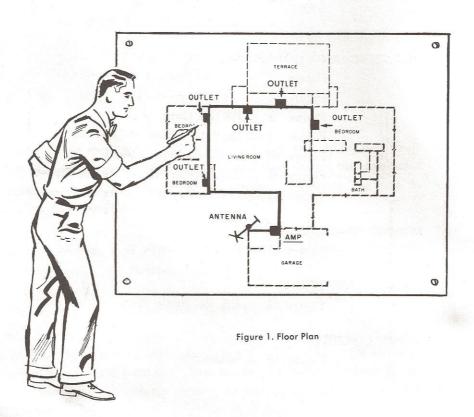
SERVICE NOTES

Figure 15 — Schematic

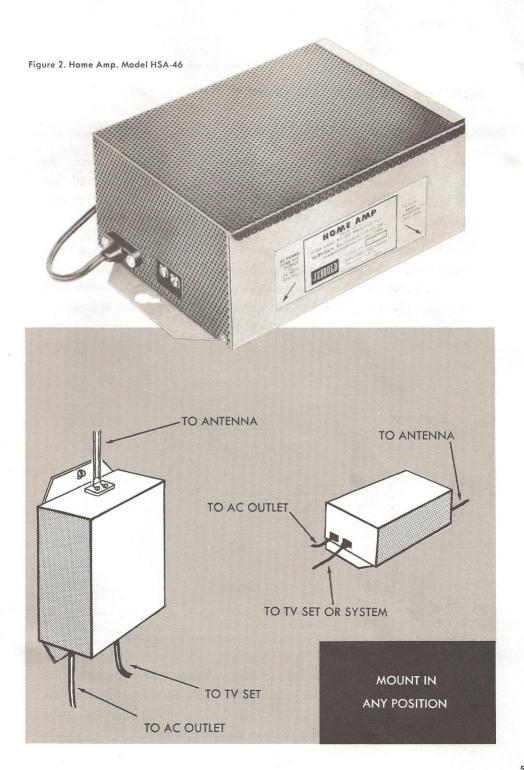
STEP 1

CHOOSING OUTLET AND HOME AMP LOCATION

Decide where the outlets are going to be mounted. Check to see that the wiring can be installed without undue difficulty, then make a floor plan sketch, spotting in the outlets. Choose a spot for mounting the Home Amp, Model HSA-46. If you are in a fringe area, remember this rule — the shorter the lead between antenna and Home-Amp, the better the pictures. Applying this rule can mean the difference between snowy and clear pictures.







STEP 2

SELECTING THE WIRING PATTERN

Most homes can be wired by the straight line, five outlet system. As many additional outlets may be used in the system as desired, but no more than six receivers should be connected to outlets at any one time.

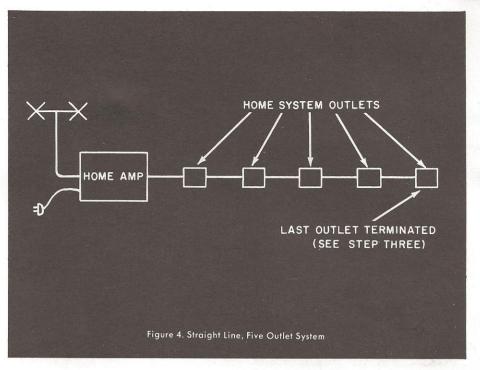
In a few cases, it may be more convenient to use a two split system. This requires the use of a Jerrold MF-2, TWO SET COUPLER, which may be purchased from your supplier. The use of the Jerrold MF-2 coupler is necessary to maintain impedance match in the system . . . do not substitute any other coupler, since the Jerrold couplers are designed to show "source match" and low loss, which are essential to distribution systems.

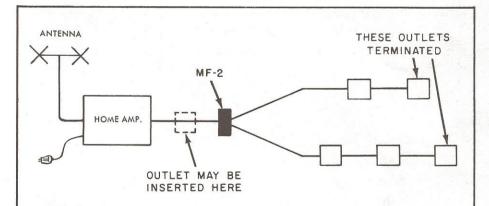


Figure 3. MF-2, Two Set Coupler

Two general patterns of wiring are illustrated. Choose the one which fits your situation, using the least amount of twin-lead wire. Do not depart from these schematics — and above all — do not attempt to splice "tee" connections into twin lead. In technical terms, this is a mismatch of 2 to 1 resulting in loss of one-half the power in the line, and producing ghosts in the picture.







When it is desirable to use the Jerrold Model MF-2, TWO-SET COUPLER, to split a line, it is necessary that both end outlets be terminated. Only one terminating resistor is supplied with the kit. A 390 ohm carbon resistor rated at $\frac{1}{2}$ watt should be purchased with the MF-2 to terminate the other outlet.

Figure 5. Two Split, Five Outlet System

STEP 3

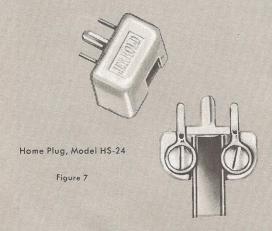
MOUNTING AND CONNECTING HOME OUTLETS

The Jerrold Home System outlets are of an unusual nature. They make it possible to use twin lead distribution and still retain the advantages of the elaborate coaxial outlets employed in large systems. They provide isolation between sets, preventing set interaction. They are "quick-connect" — it is not necessary to cut or peel the wire insulation. They may be mounted either flush (flat with the wall, as in a duplex power outlet) or surface, for exposed wiring.

The male plug connector is also quickconnect, and the wire is almost impossible to break out, since the fastening holds to the insulation of the wire, not the copper leads. They cannot be plugged into the house power outlets by mistake.



Home Tap, Model HS-21 Figure 6





Cover Plate, Model HS-23 Figure 8



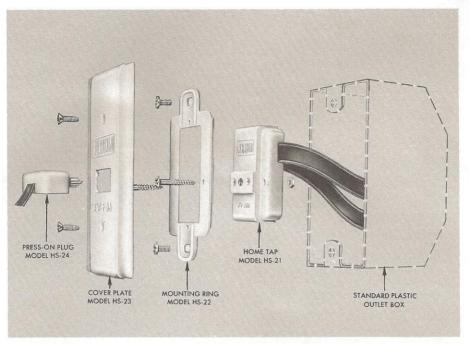


Figure 9. Exploded View of Model HS-140

The complete Home System Outlet contains the outlet body, Model HS-21, Fig. 9, which is the surface mount unit. To use in the flush mount application, the adapter ring, Model HS-22, Fig. 9, is screwed to the outlet. The adapter ring allows the outlet to be mounted in a standard plastic outlet box or a standard plaster ring, although the boxes and rings are not necessary; a simple aperture in the wall is sufficient. A template for cutting the aperture to permit mounting the outlet as a flush wall mount is enclosed with the adapter ring. Standard plastic outlet boxes and rings may be purchased from "Graybar", "Sears Roebuck" or other supply houses. Metal boxes are not recommended, they can cause loss of picture detail.

To finish the installation of a flush mounting, the flush cover plate, Model HS-23, Fig. 9, is screwed to the adapter ring. Connections are made in the same way, regardless of style of mounting.

Surface Mounted Outlet HS-135

USE OF HOME TAP AS A TAP-OFF UNIT

Reference to the wiring diagrams of STEP TWO shows that in some cases, the wiring goes through the outlet and proceeds to the next outlet. In all these cases, use the outlet as is — make no internal changes, since the outlet is now functioning as a tap-off unit. Connect as shown in Fig. 11, loosening screws A and B, placing the twin lead below the saw-tooth edges of the cup washers. Tighten down, and the connection is made. If the unit is to be used as a surface mount outlet, break out the thin sections of the side of the case, to allow the wire to pass out each side, or the bottom, as the installation may require.





USE OF HOME TAP AS A TERMINATING UNIT

The other case of use of the outlet is as a terminating unit. When the line ends at a unit, that is, does not continue on to another unit, it must serve two functions. It must act as a tap-off unit and also properly terminate the line to prevent mismatch and ghosting. The change is a simple addition of a small resistor, $\frac{1}{2}$ watt, 390 ohms. Fig. 12 shows how this addition is made. Connect the resistor between screws A and B. Tighten down all screws, and the change is complete. Failure to make this change wherever the line does not continue through the outlet will result in ghosts and set interaction.



WIRING PRECAUTIONS

Let us reiterate that the attention you give to following wiring instructions can make a great difference in the performance of the system. No particular skill is required — just avoid the following actions:

- DO NOT allow the twin-lead wire to lie in contact with metal such as plumbing or heating pipes, ventilation ducts, metal flashing or house wiring.
- DO NOT use metallic fasteners such as nails, straps, staples, thumbtacks or plumber's strap. Plastic fasteners are available, the Jerrold Clips, Model HS-36.
- DO NOT coil up excess wire cut it to proper length.
- DO NOT allow the wire leading away from the amplifier to the system to approach nearer than one foot of wire coming from antenna to amplifier.
- 5. DO NOT run twin lead in metallic conduit or pipe. Plastic conduit is permissible.

See Fig. 13 for illustrations of DO'S and DON'T'S.



WIRING DO'S AND DONT'S

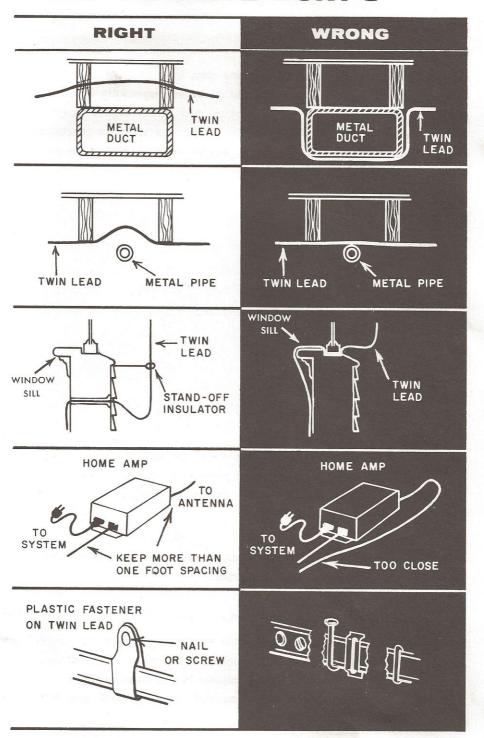
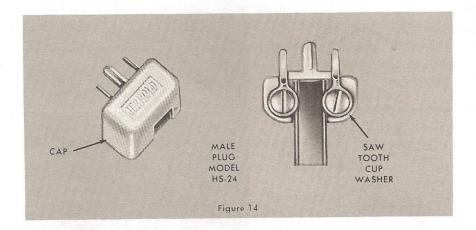


Figure 13

FINAL CONNECTIONS

When the system is complete, the next step is to connect the plugs to the sets. Certain precautions should be taken, especially in metropolitan areas. To reduce noise pickup and direct signal pickup, the lead from set to outlet plug should be kept as short as practical consideration will allow. A six foot length of twin lead is recommended for connection to the receiver.



To mount the male plug, HS-24, remove the cap from the plug, insert the end of the 6 foot length of twin lead under the saw-tooth cup washers and tighten down the screws. Replace the cap to complete plug assembly.

It will be necessary to bare the wires at the other end of the lead to connect to the set antenna terminals.

AM Radios May Also Be Connected to the System

AM receivers may be connected to the system by running a length of single conductor wire from one terminal of the plug to the antenna terminal of the AM receiver. This allows the system wiring to act as an AM antenna, greatly increasing the pickup of AM sets with built-in antennas.



SERVICE NOTES

Make sure that amplifier has adequate ventilation, since vacuum tubes develop heat which must escape.

Make sure that antenna has been properly installed according to local codes.

The amplifier is probably not operating if:

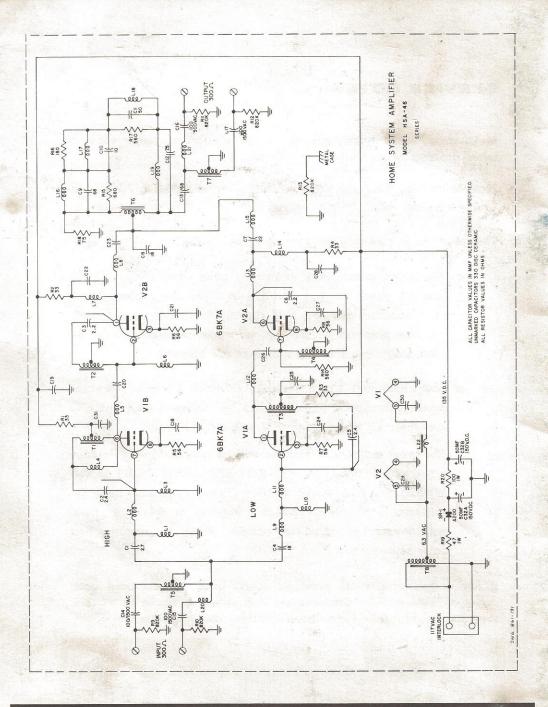
- All channels are very snowy or gone completely. Check that the power cord is plugged in. Test for system defect by connecting antenna lead directly to system lead (jumping the amplifier). Snowy or weak pictures should be seen, indicating that the wiring is not broken.
- Low channels (2 to 6) or high channels (7 to 13) are not coming through. Same checks as above paragraph. If low channels are missing, FM will also be weak.

The great majority of failures will be tube failures. Replace tubes with 6BK7A type. DO NOT STRAIGHTEN OUT COILS WHICH MAY APPEAR BENT. These coils are bent for adjustment of the amplifier. Moving or bending them will detune the amplifier, causing weak stations or bad color reproduction.

If one or two outlets are poor, all others good, try set from good outlet on poor one to eliminate set difficulties as cause of trouble, then inspect wiring for break, short or close contact to metal.

Warranty

The Home System components are warranted against defective material or workmanship for a period of 90 days from the date of sale. Should any defect arise from the above causes during the warranty period, we will promptly repair or replace the unit upon our inspection of it. To protect your warranty, fill out the enclosed warranty card immediately.



Model HSA-46

Figure 15

Dwg. No. 861-191



ELECTRONICS CORPORATION

DISTRIBUTOR SALES DIVISION

THE JERROLD BUILDING, 15th AND LEHIGH, PHILADELPHIA 32, PA

JERROLD

Model HSK-300

MASTER TV-FM HOME SYSTEM KIT



CONTENTS

- 1-Home System Amplifier, Model HSA-46
- 5-Home Outlets, Model HS-21
- 5-Mounting Rings, Model HS-22
- 5—Cover Plates, Model HS-23
- 5—Perma-Grip Plugs, Model HS-24
- 12—Twin-Lead Insulators
 - 1—Reel of twin-lead, 100 ft.
 - 1-Instruction Booklet, HSK-3000
 - 1—Resistor, ½ watt, 390 ohms
- 10-#6-32 x 3/4", screw
- 10—#6-7/8", Type A, screws
- 10-#6-32 x ½", screws
- 10-#6B32-4, nuts
- 12-#6-1/2", R.H., wood screws
- 3-#8-3/4", R.H., wood screws

JERROLD ELECTRONICS CORPORATION

The JERROLD Building
15th and Lehigh • Philadelphia 32, Pa.

INSTRUCTIONS

THIS TEMPLATE IS INCLUDED FOR CUTTING THE DESIRED HOLE WHEN THE MODEL HS-140 IS TO BE MOUNTED DIRECTLY TO THE WALL. CUT OUT THIS SECTION AND TRACE THE CUTOUT OUTLINE ON THE WALL AND MOUNT THE TAP ASSEMBLY WITH MOUNTING RING, MODEL HS-22 USING #6 OR 1/8" TOGGLE BOLTS.

