

JERROLD

MODEL DSA 132

INSTRUCTION SHEET

INSTALLATION INSTRUCTIONS

Before proceeding with the installation of the De-Snower Preamplifier, thought should be given to the particular reception problem you face.

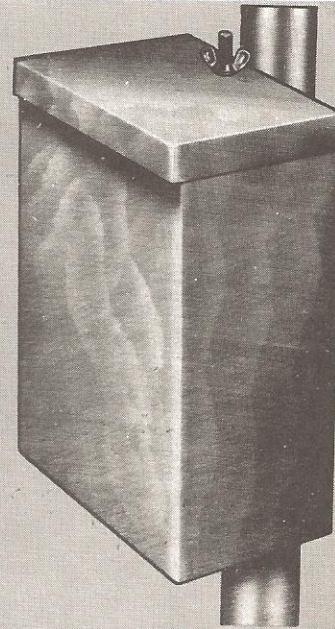
De-Snower preamplifiers derive their maximum usefulness through their ability to utilize coaxial cable with all of its noise and interference shielding properties.

Many service-installation technicians have avoided the use of coaxial cable in fringe installations because of the comparatively high loss encountered. However, Jerrold systems in communities receiving consistent signals from as far away as 125 miles utilize coaxial cable entirely. **AS LONG AS YOUR PREAMPLIFIER IS CAPABLE OF OVERCOMING THE CABLE LOSS** the advantages of coaxial cable are tremendous and in many cases clear pictures could be obtained in no other way.

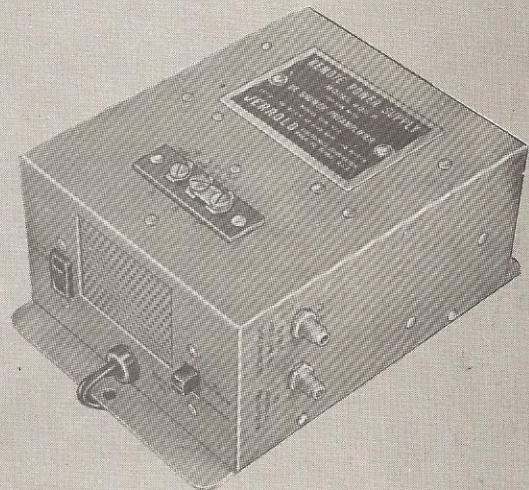
The JERROLD DSA-132 has a gain of 25 db over the signal picked up at the antenna. This means that you can deliver all signals from 2 to 13 through 400 feet of 59/U cable. If 11/U cable is used, you can run signals through 800 feet of cable. **NOTE: The power supply must be no further than 150 ft. (59/U) or 1000 ft. (11/U) in order to provide sufficient operating voltage for the preamp head.**

Installations of longer distances for 59/U can be accomplished by running AC to the supply at the 150 ft. location and the output signal continued through coax.

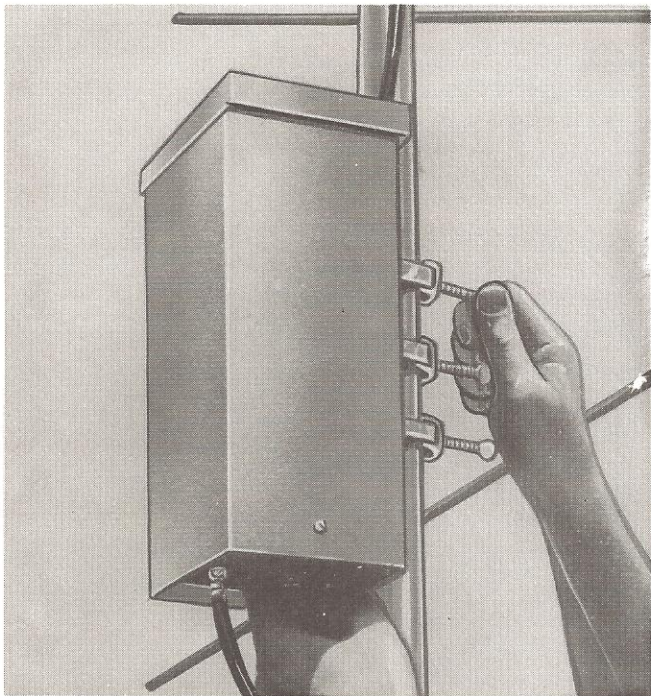
It is entirely possible in country locations where noise is no problem to continue from the power supply on open wire line for far greater distances.



The DSA-132 is a wide band VHF television preamplifier, designed to improve reception in TV fringe areas where signals are very weak. It is adaptable to either 72 ohm or 300 ohm antennas. It features extremely low noise cascode input circuits driving high gain RF amplifier stages. Housed in a weather-proof cabinet, it is designed and built for most mounting, thus providing an excellent signal to noise ratio.



The remote power supply, Model 405P, is mounted on the back of the TV receiver and furnishes power to the preamp through the same coaxial cable that carries the signal down from the DSA-132. The 405P provides both 72 ohm and 300 ohm outputs to the receiver.

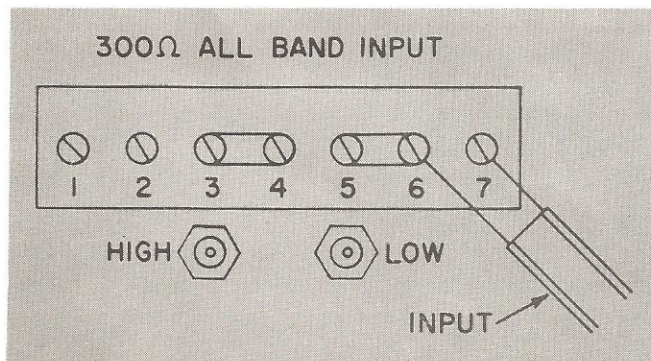


The DSA-132 is designed for mast mounting and comes complete with bracket and straps. It should be mounted as near the antenna as possible to obtain the best signal to noise ratio. It may be connected to the antenna with either 72 ohm coax or 300 ohm twin lead, whichever best matches the antenna.

INPUT CONNECTIONS:

The DSA-132 has been designed to permit utilization of virtually any type of television antenna.

For example, if a single 300 ohm antenna is used, the lead-in is connected to terminals 6 & 7. Connecting links are placed from 3 to 4 and from 5 to 6. The 72 ohm coaxial connectors are not used.



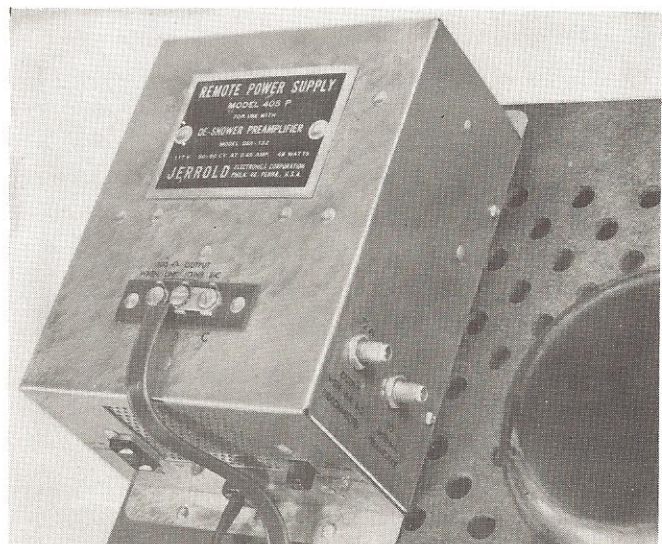
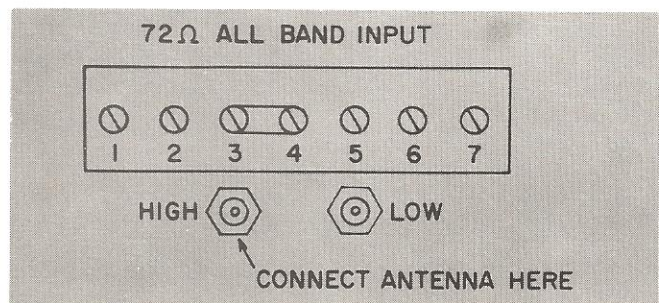
This type of installation is most economical and can be utilized when all TV stations are in the same general direction.

We possibly might find it more desirable to use separate high and low band 300 ohm antennas. In this case the low band antenna is fed to terminals 6 and 7. The high band is fed to terminals 1 and 2. Connecting links are placed from 2 to 3 and 5 to 6. Again the coax connectors are not used.

This type of installation is especially useful when low band channels are in one general direction and high band channels are in another. It is also useful when yagi type antennas are used.

Additional gain may be realized by using a separate low band yagi type and a high band yagi type even though stations are in the same general direction.

If a 72 ohm cable is used, run the lead to the high band coax connector and place the jumper across terminals 3 and 4. If 72 ohm high and low antennas are used, leads are run to the high and low coax inputs and NO JUMPER IS NEEDED.



The remote power supply, Model 405P, may be mounted on the back of the television receiver or at a convenient location nearby.

72 ohm coaxial cable must be used between the preamp and the power supply as it carries both the RF signal and the 24V AC for the preamp.

This lead should be fitted at each end with a Jerrold Solderless Coaxial Connector. (Two connectors packed with preamp).

The length of this line will, of course, vary with each individual installation. In order to assure sufficient power being delivered to the preamp, observe the following instructions: **The secondary of the step-down transformer in the 405P has five taps, furnishing from 24V AC to 32V AC in two volt steps. The proper tap to be used will depend on the length of cable to be run. Consult the following table to determine which tap to use:**

| Length of RG-59/U | Tap No. |
|-------------------|---------|
| 0' - 20' | 1 |
| 21' - 50' | 2 |
| 51' - 80' | 3 |
| 81' - 110' | 4 |
| 111' - 150' | 5 |

(Unit shipped with 24 volt tap connected).

Care should be taken when connecting this line at each end that the power is turned off. This will avoid accidental blowing of the fuse in the 405P. Connect at preamp to connector marked "Output". Connect at power supply to connector marked "To Antenna Preamp". **CAUTION: This terminal carries 24V AC. Connecting to the receiver might result in tuner damage.**

The receiver is connected to the remote power supply at the connector marked "Output", or at the 300 ohm terminals, depending on whether coax or twin lead is being run to the receiver.

The receiver should be plugged into the AC outlet on the 405P, which in turn is plugged into a convenient wall outlet. The switch on the bottom of the 405P may be set to either "Set Controlled" or "Continuous", whichever is desired. In "Set Controlled" position, turning the receiver on or off automatically actuates a thermal switch in the remote power supply, thus delivering power to the preamplifier. In the "Continuous" position the preamplifier is powered at all times. This is advantageous in conditions of extreme cold or humidity.

The DSA-132 may be serviced by any qualified technician or TV serviceman by carefully following

these instructions.

1. If preamp is inoperative:
 - a. Check voltages at AC output terminals of Model 405P.
 - b. If proper AC voltage is measured, disconnect coaxial line from "Antenna Preamp" connector on Model 405P and check resistance between center conductor and braid of cable; for RG-59/U, this reading is about 6 ohms per 100 feet, for RG-11/U, about 0.6 ohms per 100 feet. In addition, a 1½ ohm resistance is present in the output stage of the preamp. If high resistance or open circuit is read, check connection at preamplifier output.
 - c. If all connections are ok, remove preamplifier from housing and check tubes.
2. If preamplifier is operative, but poor or weak output signals are observed on receiver:
 - a. Check pictures or signal strength directly off antenna with Jerrold Model 704A, or equivalent, Field Strength Meter.
 - b. If antenna signals are ok, try replacing tubes one at a time returning to original tube if no improvement is observed.
 - c. Check voltages with 20,000 ohm per volt meter. All readings given are DC, except where indicated, and are measured from the point indicated to ground.

| PIN | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|-----|-----|-----|-------|-------|-------|-----|-----|-----|---|
| V1 | 119 | 0 | 1.08 | 6.3AC | 6.3AC | 119 | 0 | .93 | 0 |
| V2 | 0 | 1.4 | 6.3AC | 6.3AC | 120 | 120 | 0 | — | — |
| V3 | 113 | 0 | .92 | 6.3AC | 6.3AC | 113 | 0 | .8 | 0 |
| V4 | 114 | 0 | .9 | 6.3AC | 6.3AC | 114 | 0 | .76 | 0 |
| V5 | 0 | 2.2 | 6.3AC | 6.3AC | 115 | 115 | 2.2 | — | — |

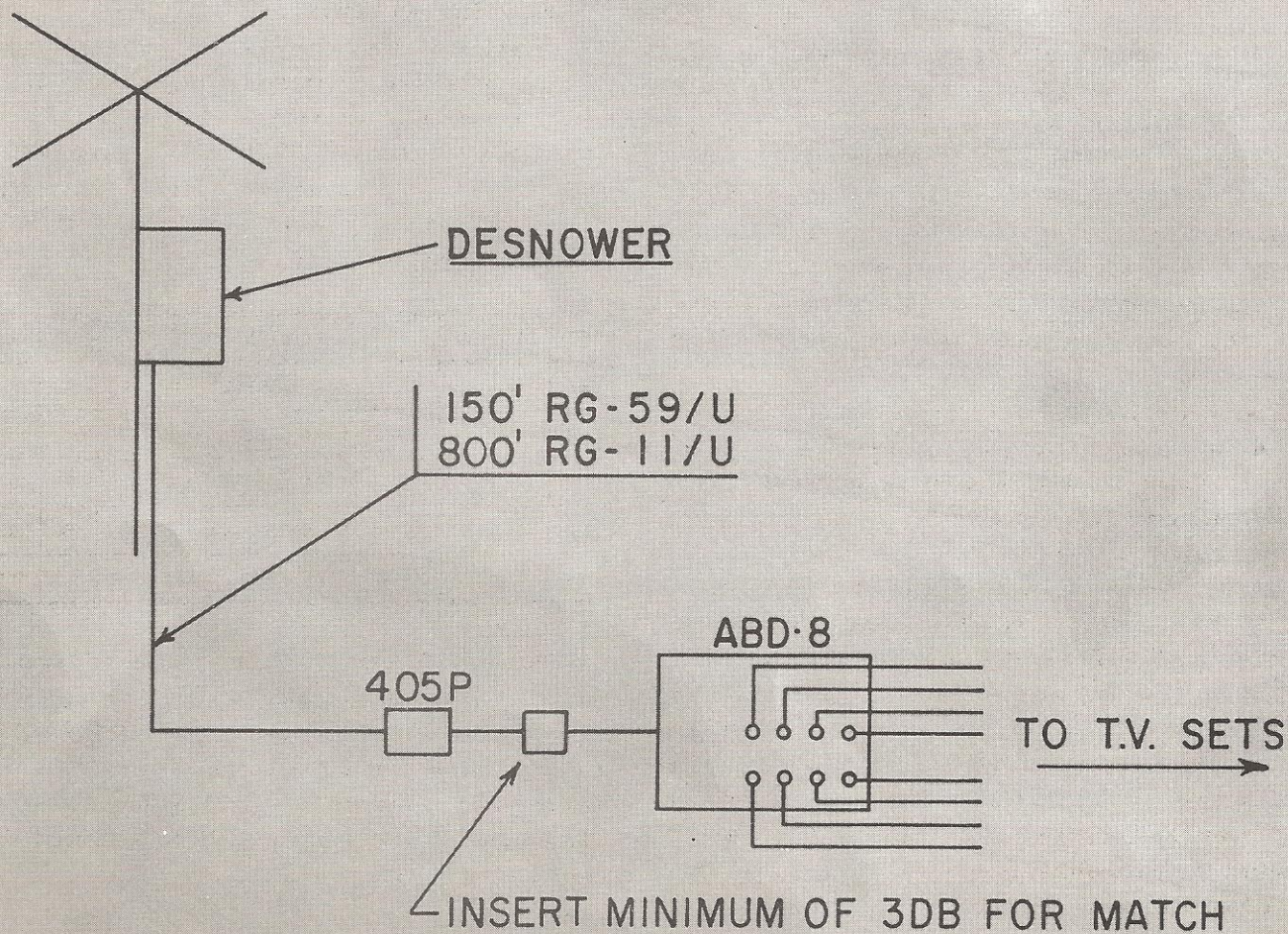
The DSA-132 and 405P are warranted against defective workmanship or material for a period of 90 days from date of sale. Should any defect arise from the above causes within the warranty period, we will promptly repair or replace the unit upon our inspection of it. To protect your warranty, fill out and mail the enclosed warranty care immediately.

If replacement parts are required for servicing, they may be ordered from Jerrold Electronics Corporation.

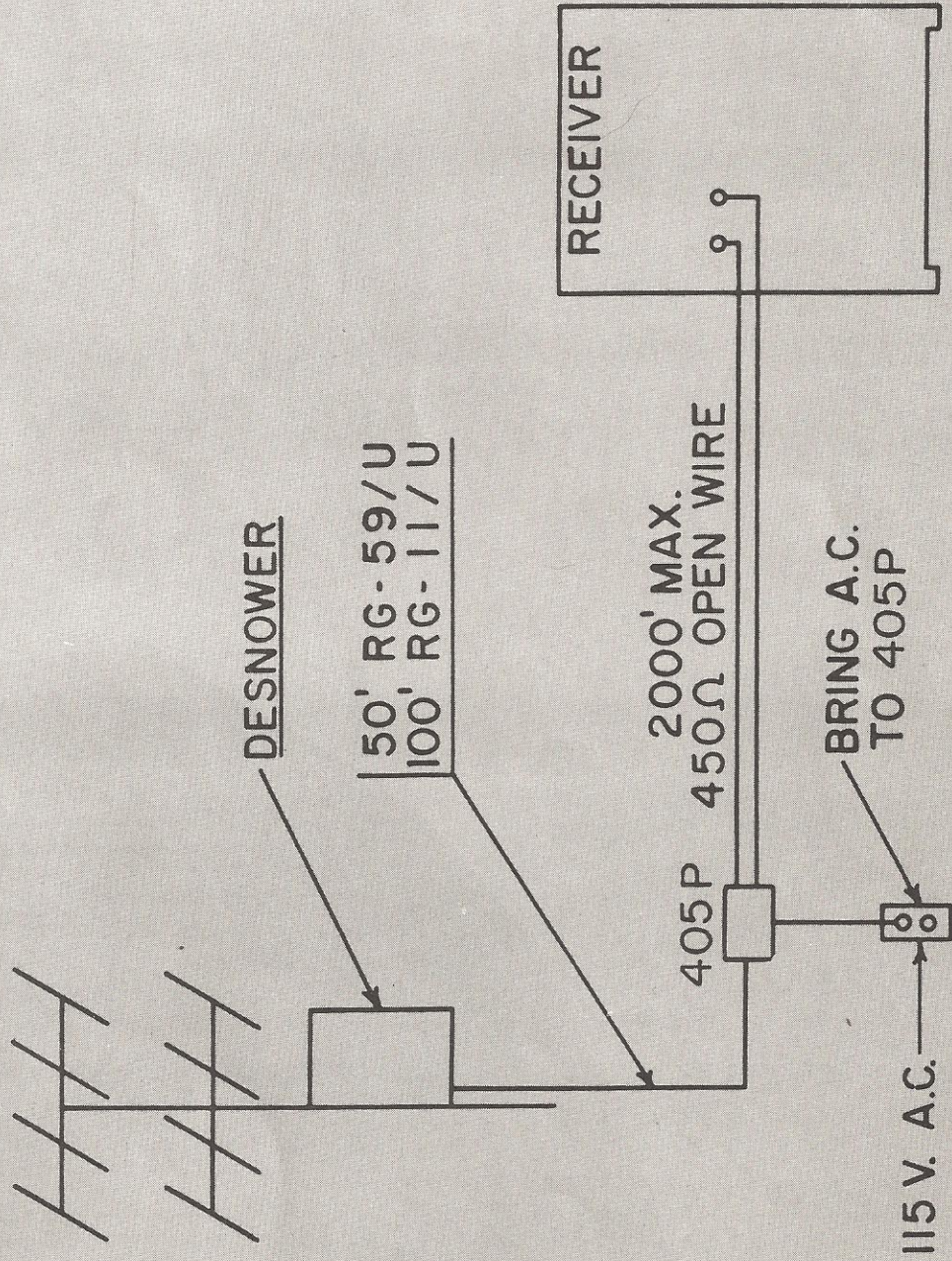
SPECIFICATIONS

Gain 25 db
Bandwidth TV channels 2-13
Flatness $\pm 1\frac{1}{4}$ db
Minimum input 50 microvolts
Maximum undistorted output .1v/channel for 3 channels
Noise figure 6 db low band, 7.5 db high band
Tube complement 3-6BQ7A, 1-6CB6, 1-6AK5

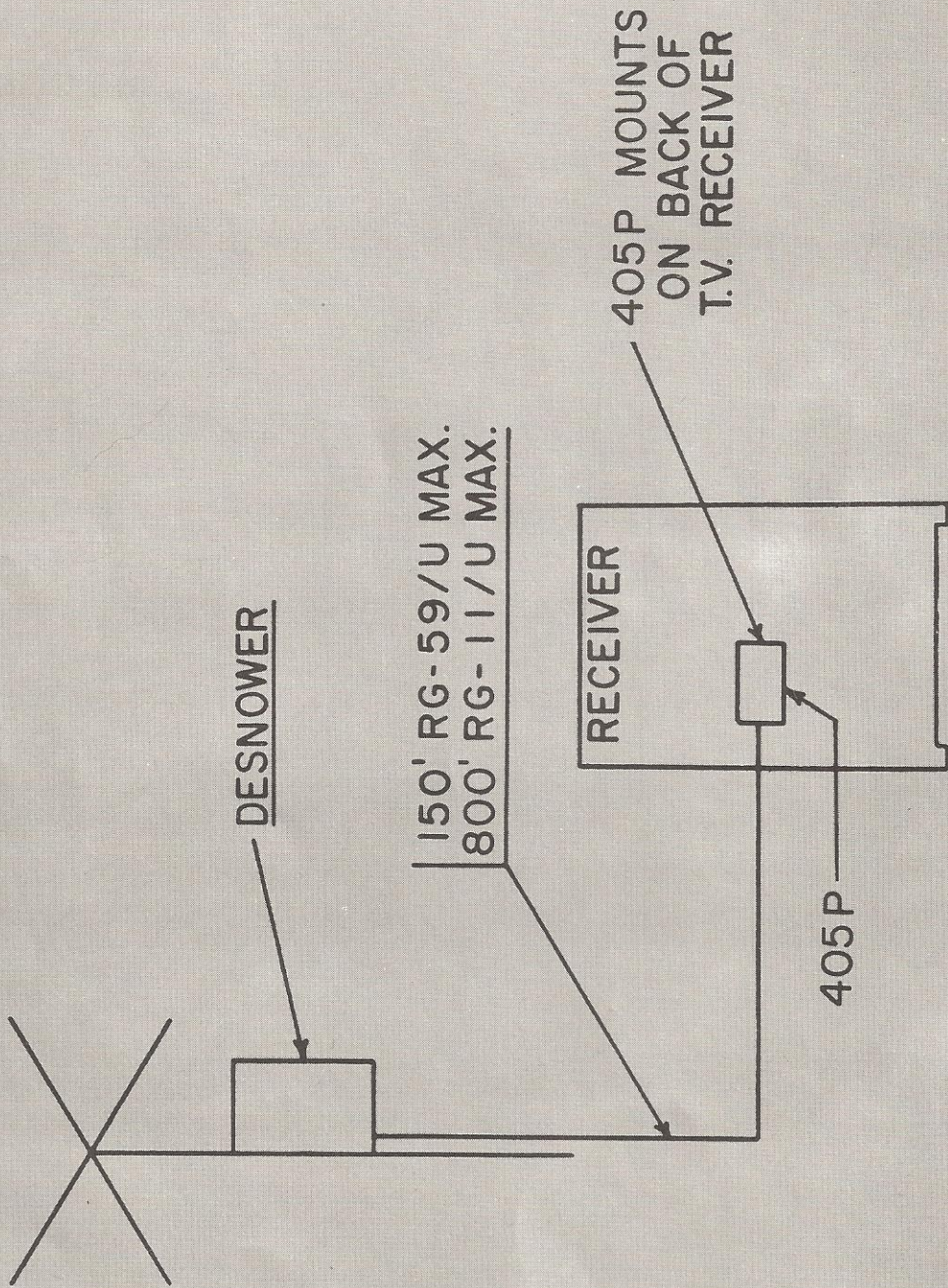
USED AS DRIVER AMPLIFIER

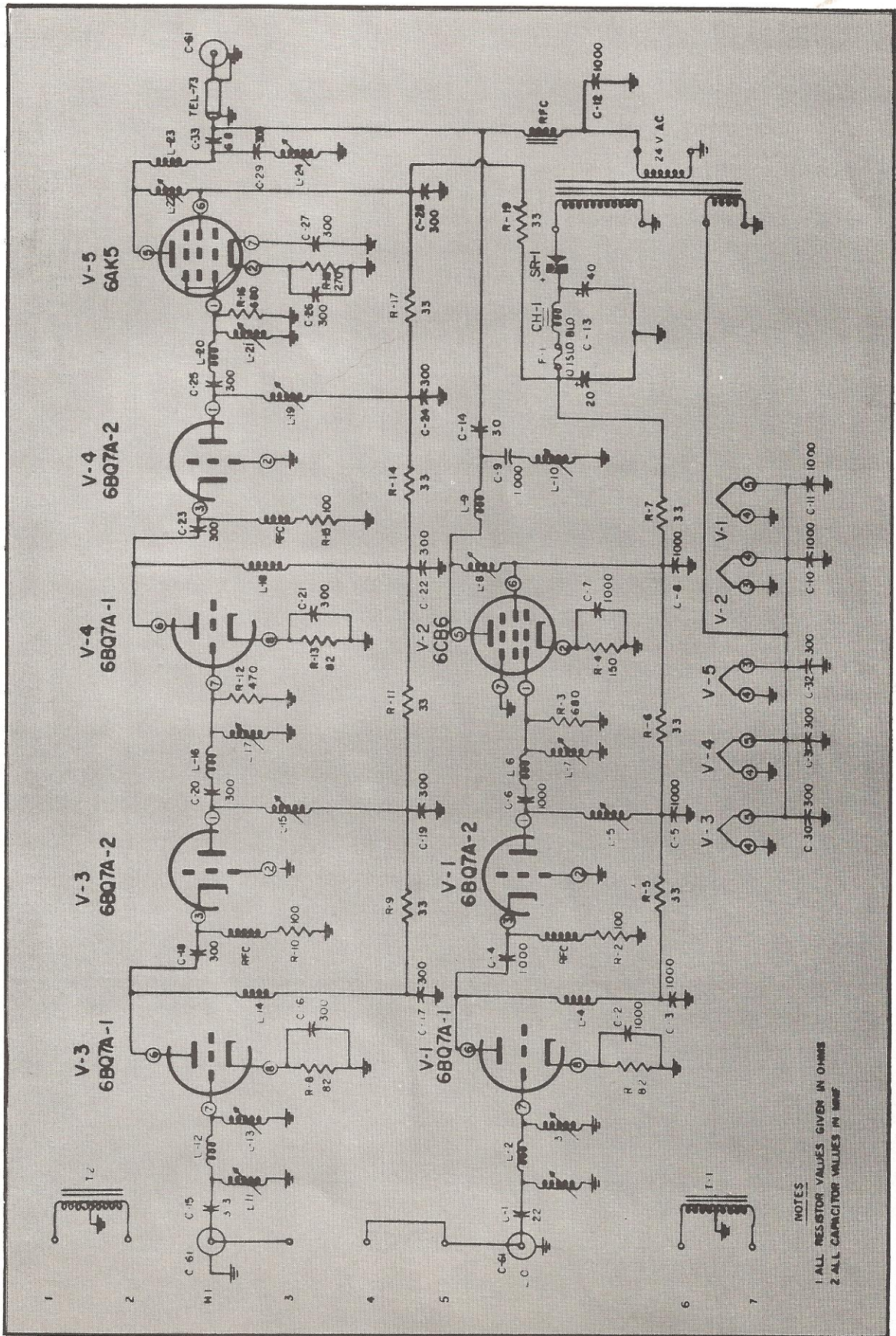


FOR EXTREMELY LONG RUNS



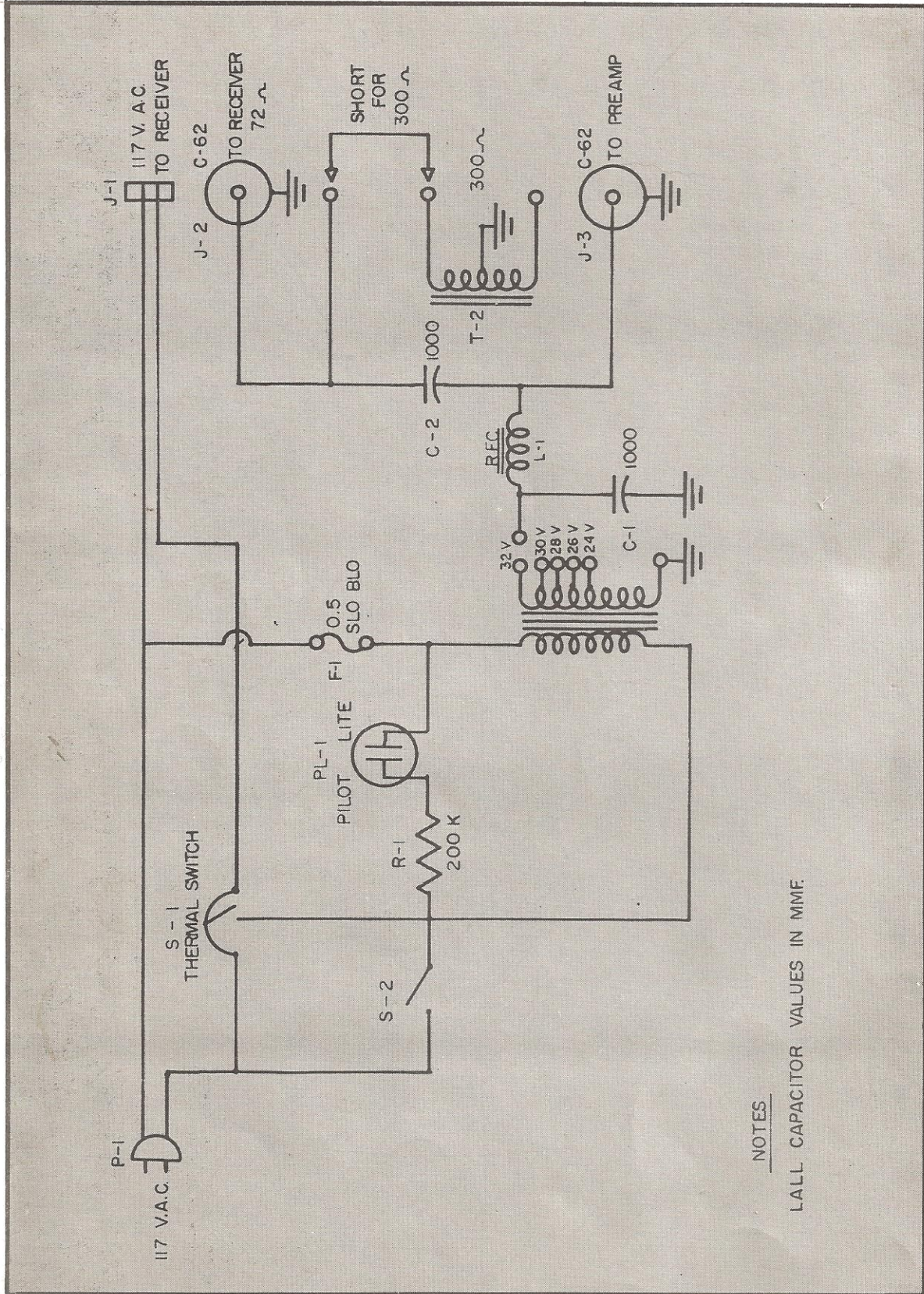
TYPICAL HOME INSTALLATION





NOTES
 1 ALL RESISTOR VALUES GIVEN IN OHMS
 2 ALL CAPACITOR VALUES IN MMF

SCHEMATIC DIAGRAM FOR ANTENNA TOP PREAMPLIFIER
MODEL DSA 132



NOTES

LALL CAPACITOR VALUES IN MMF.

SCHEMATIC DIAGRAM FOR REMOTE POWER SUPPLY
MODEL 405 P

JERROLD ELECTRONICS CORPORATION

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