

BROAD-BAND TELEVISION AMPLIFIERS

Provide Superior Television Distribution for Small Economical Systems

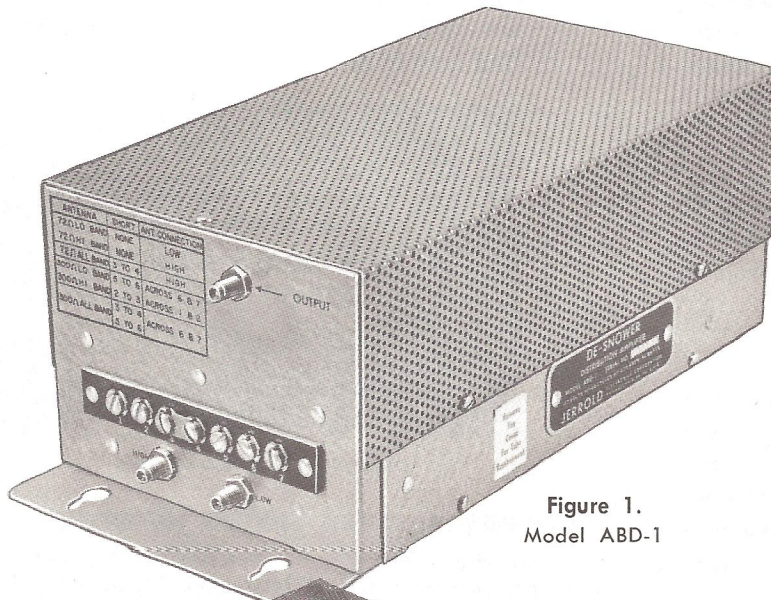


Figure 1.
Model ABD-1

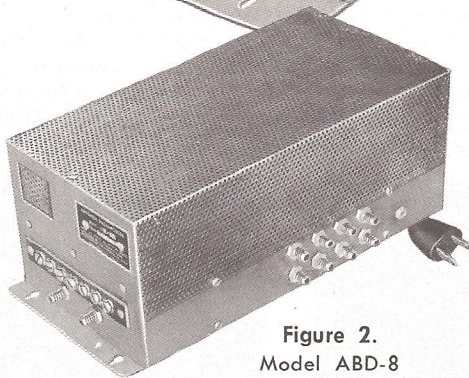


Figure 2.
Model ABD-8

FEATURES

- Low noise cascode input
- Universal antenna input
- Up to 8 R.F. outputs
- Wide bandwidth

APPLICATIONS

Distribution Amplifiers in

- Garden Courts
- Dealer Display Rooms
- Motels and Hotels
- Building Systems

DESCRIPTION

JERROLD Model ABD-1 and Model ABD-8 are broadband television distribution amplifiers featuring a low noise, cascode input and wide-band response; Channel 2 through Channel 6, and Channel 7 through Channel 13. The amplifiers utilize the JERROLD "universal antenna input system" and may be connected to a wide range of antenna systems of either 72 ohms, or 300 ohms impedance. Both units incorporate self-contained power supplies and utilize five tubes for optimum performance.

MODEL ABD-1: The Model ABD-1 has a minimum gain of 25 db and a maximum undistorted output of 0.1 volt RMS per channel for 7 channel operation. The amplifier is suitable for building systems such as motels, hotels, and garden courts where a limited number of the units are to be cascaded. For multiple trunk-line or feeder line applications the output of the Model ABD-1 may be divided by using the JERROLD Model 1562, or Model 1514, reactive splitting units. Refer to Installation Instructions, Section 2 of this Technical Data Sheet.

MODEL ABD-8: The Model ABD-8 contains 8 output connectors which may be used for distribution. The amplifier is especially suited for stores and dealer display rooms where up to eight television receivers are to be used from a single amplifier.

The amplifier exhibits a minimum gain of 10 db when 4 or 8 of the outputs are used.

| SPECIFICATIONS | | MODEL ABD-1 | MODEL ABD-8 |
|--------------------|--------|--|---|
| GAIN | | 25 db | 10 db |
| BANDWIDTH | | Channels 2-6 and 7-13 | |
| RECOMMENDED INPUT | | 500 uv to 5,500 uv | |
| RECOMMENDED OUTPUT | | 0.1 volt per Channel for 7 Channel operation | 50,000 uv per Channel for 7 Channel operation |
| NOISE FIGURE | | 6 db low band, 7.5 db high band | |
| IMPEDENCE | INPUT | 75 ohms unbalanced, 300 ohms balanced | |
| | OUTPUT | 75 ohms unbalanced | |
| FUSE PROTECTION | B + | 1/10 Amp. Slo-Blo | |
| | PR 1 | 1/2 Amp. Slo-Blo | |
| POWER REQUIREMENTS | | 117 volts a-c, 50-60 cps. @ 35 watts | |
| TUBE COMPLEMENT | | 3—6BQ7-A 1—6CB6 1—6AK5 | |
| DIMENSIONS | | H—4", W—5", D—11" | |
| WEIGHT | | 7-1/2 lbs. | |

INSTALLATION

Model ABD-1 and Model ABD-8 may be mounted in either the vertical or horizontal position, and contain mounting holes in the bottom cover plate to facilitate wall mounting. No special precautions need be used in choosing the mounting location of the amplifiers other than sufficient ventilation and protection from the weather be provided.

ANTENNA CONNECTIONS:

Model ABD-1 and Model ABD-8 may be used with any commercially available TV antenna, or combinations of antennas. The choice of antenna array will dictate which input connections are used.

300 Ohm Antennas

For example, if a single 300 ohm antenna is used the lead-in is connected to terminals 1 and 2. Connecting links are placed from 3 to 4 and from 4 to 5. The 75 ohm coaxial connectors are not used. This installation is most economical and can be utilized when all of the TV stations are in the same general direction.

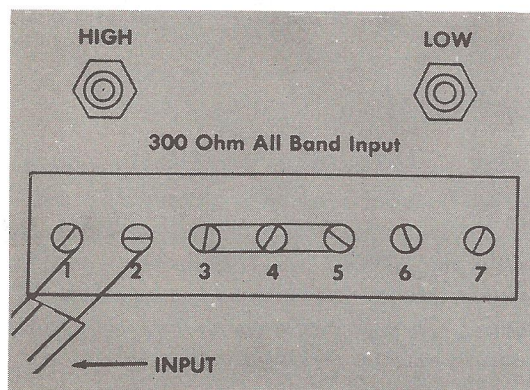


FIGURE 3—300 OHM ALL BAND INPUT

It may be more desirable to use separate high and low band 300 ohm antennas. In this case the high band antenna is connected to terminals 1 and 2 and the low band antenna is connected to terminals 6 and 7. Connecting links are placed from 3 to 4 and 5 to 6. Again, coaxial connectors are not used. This type of installation is especially useful when the low band channels are in one general direction and the high band channels are in another direction. It is also desirable when separate high and low band yagi antennas are used.

72 Ohm Antennas

If a 72 ohm all band antenna is used, connect the lead-in to the high band coaxial connector and place the jumper across terminals 4 and 5. If 72 ohm high and low band antennas are used, lead-ins are connected to the high and low band coaxial inputs and NO CONNECTING LINK IS NEEDED.

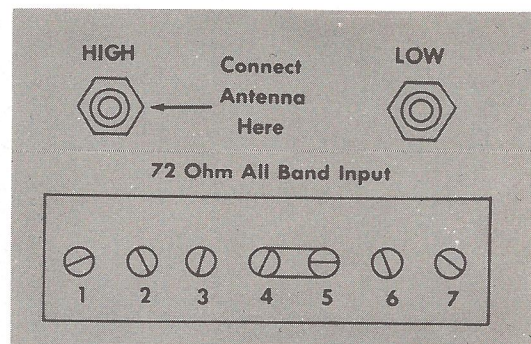


FIGURE 4—72 OHM ALL BAND INPUT

AUXILIARY ANTENNA MIXING NETWORKS

Maximum flexibility is provided by the use of auxiliary Antenna Mixing Networks, Model DMN-Hi and Model DMN-Lo. These networks permit 3 low channel antennas (DMN-Lo) and/or 3 high channel antennas (DMN-Hi) to be combined and fed to the amplifiers. Write for JERROLD Technical Data Sheet #555-S for detailed instructions.

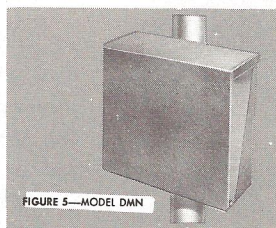


FIGURE 5—MODEL DMN

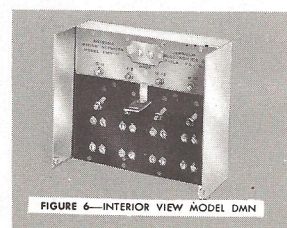


FIGURE 6—INTERIOR VIEW MODEL DMN

EXTRA GAIN IN WEAK SIGNAL AREAS

If the antenna signals are very weak and the installer finds that the center of distribution is not the proper location for the antenna, it may be necessary to utilize additional gain. The JERROLD Model DSA-132 all-band antenna top mounted preamplifier or the JERROLD Model DSA-62 low-band antenna top mounted preamplifier permit noise free reception and long runs to the antenna location. Write for JERROLD Technical Data Sheet #534 for complete information on the JERROLD DSA type preamplifiers.

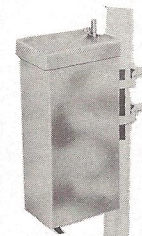


FIGURE 7—MODEL DSA-62