

095010-000 Revision M, May 2016

## Broad Band Gain Antennas DB228 Series

### GENERAL INFORMATION

DB228 antenna arrays combine two DB224 antennas that are mounted and phased together.

### ASSEMBLY AND INSTALLATION

1. Attach the antenna mounting frame to the top of the tower as shown in Figure 1.
2. For a circular pattern, mount both antennas to the mounting frame as shown in Figure 3. For an off-center pattern, mount both antennas to the mounting frame as shown in Figure 4.
3. Connect both antenna feed cables to the phasing harness and wrap the connections thoroughly with Vapor-Wrap (part number 11317 or 11316). Work the compound into all cracks and smooth over the outer jackets to ensure a water tight seal.
4. To reach the proper connecting points, the lengths of the phasing harness cables may be longer than necessary; however, the cables should not be cut since these lengths are critical. Carefully fold any surplus cable and secure it to the antenna mast or mounting frame.
5. Connect the station transmission line to the remaining pigtail of the phasing harness (marked with red tape) and thoroughly wrap the connection with Vapor-Wrap.
6. To complete the mounting procedure, attach the sway braces to the lower antenna as shown in Figure 2.

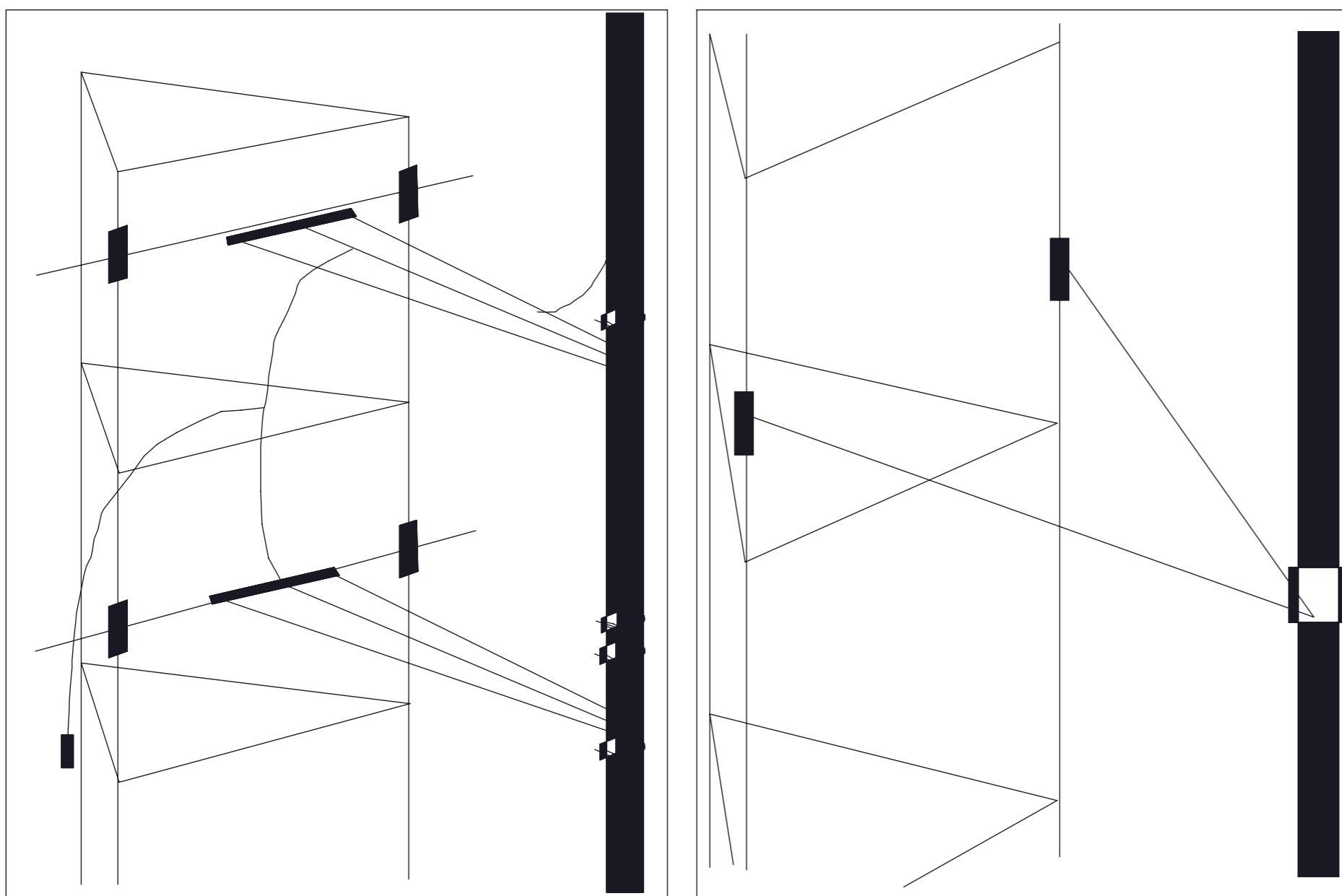
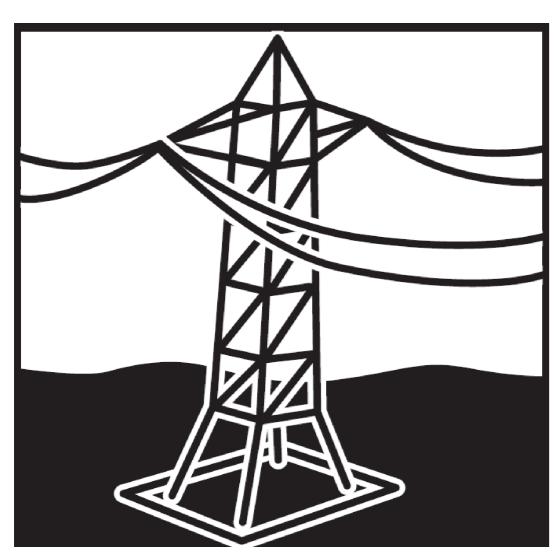


Figure 1. Mounting Frame  
(part no. 018279-001).

Figure 2. Sway Brace  
(part no. 018198-001).



Do not install near power lines. Power lines, telephone lines, and guy wires look the same. Assume any wire or line can electrocute you.



Do not install on a wet or windy day or when lightning or thunder is in the area. Do not use metal ladder.



Wear shoes with rubber soles and heels. Wear protective clothing including a long-sleeved shirt and rubber gloves.

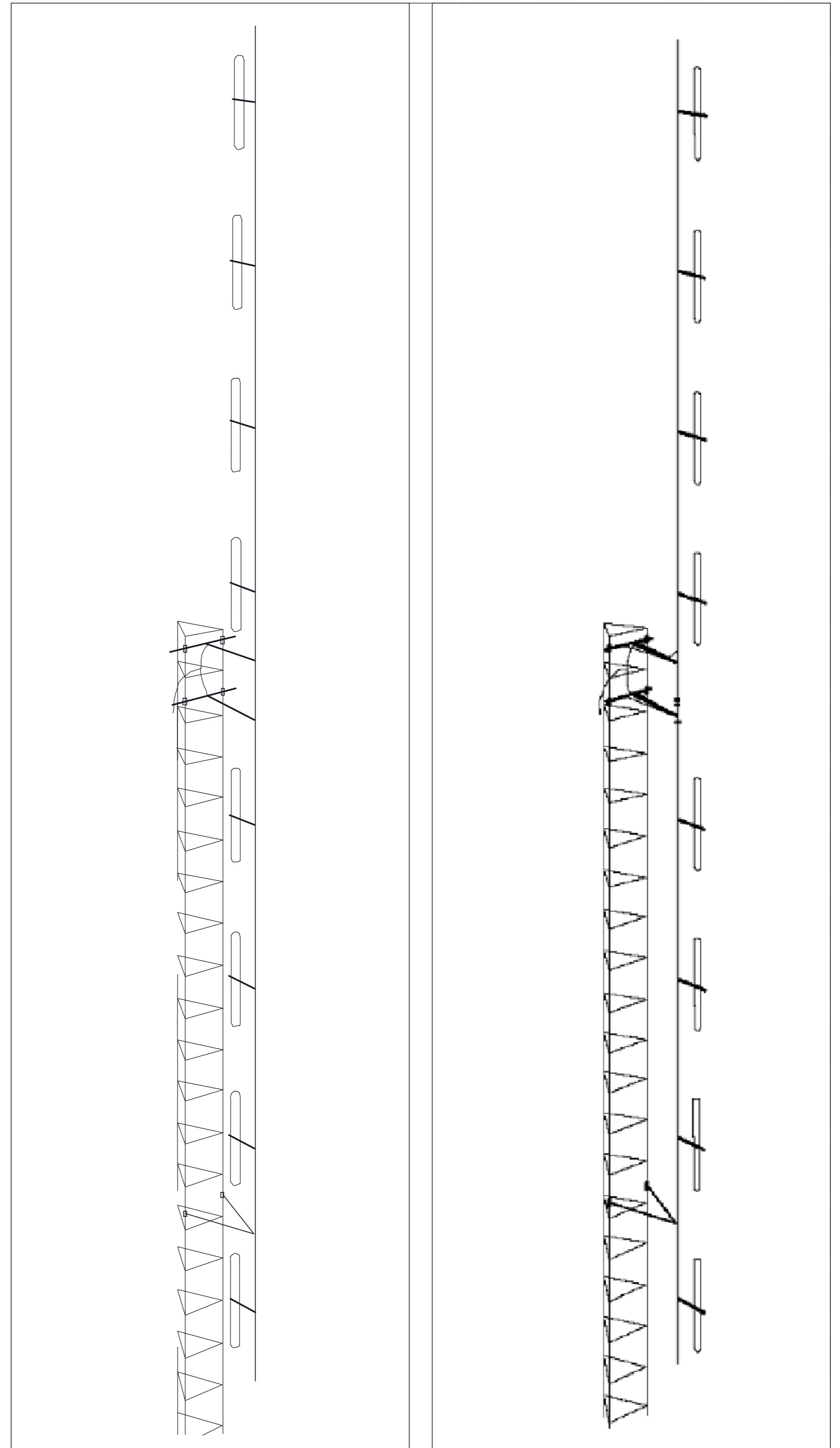


Figure 3. Circular Pattern.

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#### SAFETY NOTICE

The installation, maintenance, or removal of an antenna requires qualified, experienced personnel. CommScope installation instructions are written for such installation personnel. Antenna systems should be inspected once a year by qualified personnel to verify proper installation, maintenance, and condition of equipment.

CommScope disclaims any liability or responsibility for the results of improper or unsafe installation practices.

It is recommended that transmit power be turned off when the field installation is performed. Follow all applicable safety precautions as shown on this page.

## POST INSTALLATION INSTRUCTIONS

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1. Be careful not to crush the cables.
2. A check of the antenna VSWR, as measured at the antenna, is recommended at this time. Note this measurement carefully and record it for future reference.
3. Connect the station transmission line to the antenna jumper. (Make the connection tight, but do not apply heavy force with pliers.)
4. Carefully seal the connection to avoid moisture problems. Failure to weatherproof the cable connection will result in improper operation of the antenna.
5. Secure the feeder cable and antenna pigtail to the tower in a position that will best prevent physical damage and stress to the cable.
6. After completing the antenna and transmission line installation, make a careful visual inspection to ensure that:
  - All mechanical connections are secure;
  - The antenna is mounted to the tower with sufficient physical clearance;
  - All connections have been carefully sealed to prevent moisture problems.