

GROUNDING

System grounding and lightning protection are essential, especially for exterior-mounted antennas exposed to the elements (refer to the National Electrical Code). Never install an antenna where it may fall and contact electrical lines. For static discharge protection, install an ionizing-gas type lightning arrester as close as possible to equipment (Cushcraft LAC4NI or equivalent).

SPECIFICATIONS

| | |
|-----------------------------|--------------------------------------|
| Model: | S24015P12NF |
| Frequency: MHz | 2400-2500 |
| Gain: | 15 dBi |
| VSWR: | 1.5:1 |
| E-Plane (3 dB beamwidth): | 29° |
| H-Plane (3 dB beamwidth): | 31° |
| Polarization: | Linear, Vertical |
| Front to Back Ratio: | 24 dB |
| RF Connector: | Type N female |
| Cable | 12" Black UltraLink [®] |
| Weight lb. (kg): | 1.5 (.57) |
| Mounting: | Wall / Mast |
| Dimensions in.(cm): | 10 x 10 x 1.5 (25.4 x 25.4 x 3.8) |
| Enclosure: | PVC / Acrylic |
| Mast Diameter Max. in.(cm): | 2 (5.1) |
| Power (Watts): | 50 |

LIMITED WARRANTY

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SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

WARRANTY AND LIABILITY

Cushcraft Corporation shall not be liable for any incidental or consequential damages which may result from a defect, or use, improper or otherwise or installation, improper or otherwise.

Please contact your vendor for technical support and warranty service.



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S24015P

(2.4 - 2.5 GHz)

ASSEMBLY AND INSTALLATION INSTRUCTIONS



APPLICATION

Designed for ISM applications, the S24015P is a directional 4-element patch array enclosed in a uv-stable weatherproof radome. This antenna may be used to focus available output power for extended point-to-point link coverage or for providing targeted sector coverage in the 2.4-GHz band.

SAFETY

The S24015P and all associated equipment should be installed in accordance with applicable local and national electrical code guidelines to ensure safe operation.

ANTENNA LOCATION

The S24015P may be mounted at interior or exterior locations. For link installations, a line-of-sight path between antennas works best. Although 2.4 GHz signals penetrate cubical dividers and interior partitions with little attenuation, reinforced block walls, banks of metal cabinets, or steel shelving may attenuate signals or cause multipath, a condition where reflected signals interfere with the primary signal. Because antenna beam width is restricted to 15-degrees each side of center, the S24015P must be aimed accurately during installation in order to provide optimum gain and best performance.

MOUNTING

The S24015P is supplied with a universal articulating mount that accepts masts sizes up to 2 inches (5.1 cm) or mounts flat against any vertical wall. This mount is especially designed to provide wide-range articulation in both the azimuth and elevation planes.

ASSEMBLY

The articulating mount is installed to the back plane of the antenna, as shown in Figure-1:

1. Place one support bracket (70) over the four studs protruding from the antenna back plane to form the elevation-plane hinge. Secure in place using #8 lock washers (19) and nuts (11).

2. Attach the antenna extension arm (57) to the support bracket as shown, using a 1-1/2" bolt (27), lock washer (84), and nut (85). Tighten only enough to hold in place--antenna will be aimed later after assembly is complete.

For wall-mount installations, position and secure the remaining support bracket (70) to the wall surface using appropriate hardware (Figure 2) before proceeding to Step-3. For pole-mount installations, continue.

3. Install the opposite end of the support arm (57) into the remaining bracket (70) to form the azimuth-axis hinge using a 1-1/2" bolt (27), lock washer (84), and nut (85).

4. For pole installation, clamp V-bracket (26) and U-bolt (04) to the mast, then secure bracket (70) in place using lock washers (19) and nuts (18).

5. Rotate antenna to the desired directional position and tighten hardware. Also, adjust antenna to the desired elevation position and tighten.














| KEY | P/N | DISPLAY | DESC | SIZE | QTY |
|-----|--------|--|-------------------|--------------------|-----|
| 04 | 010404 |  | U-BOLT | 2-1/8" | 1 |
| 11 | 010011 |  | SS HEX NUT | # 8-32 | 4 |
| 18 | 010118 |  | SS HEX NUT | 5/16" 18 | 2 |
| 19 | 010119 |  | SPLIT LOCK WASHER | 5/16" | 2 |
| 27 | 014527 |  | SS BOLT | 1/4 -20 x 1 - 1/2" | 2 |
| 41 | 011941 |  | SPLIT LOCK WASHER | # 8 | 4 |
| 26 | 195726 |  | V - BRACKET | --- | 1 |
| 57 | 195657 |  | MOUNTING BRACKET | --- | 1 |
| 70 | 195670 |  | BRACKET | --- | 2 |
| 84 | 010084 |  | SPLIT LOCK WASHER | 1/4" | 2 |
| 73 | 155773 |  | WALL ANCHOR | # 8 | 4 |
| 72 | 015772 |  | SS SCREW | 8/18 x 1-1/4" | 4 |
| 85 | 010085 |  | SS HEX NUT | 1/4" - 20 | 2 |

Figure-1

Two weep holes are provided in the S24015P radome, one on either side of the cable exit. These holes must be kept free of debris to prevent condensation from forming inside the radome.

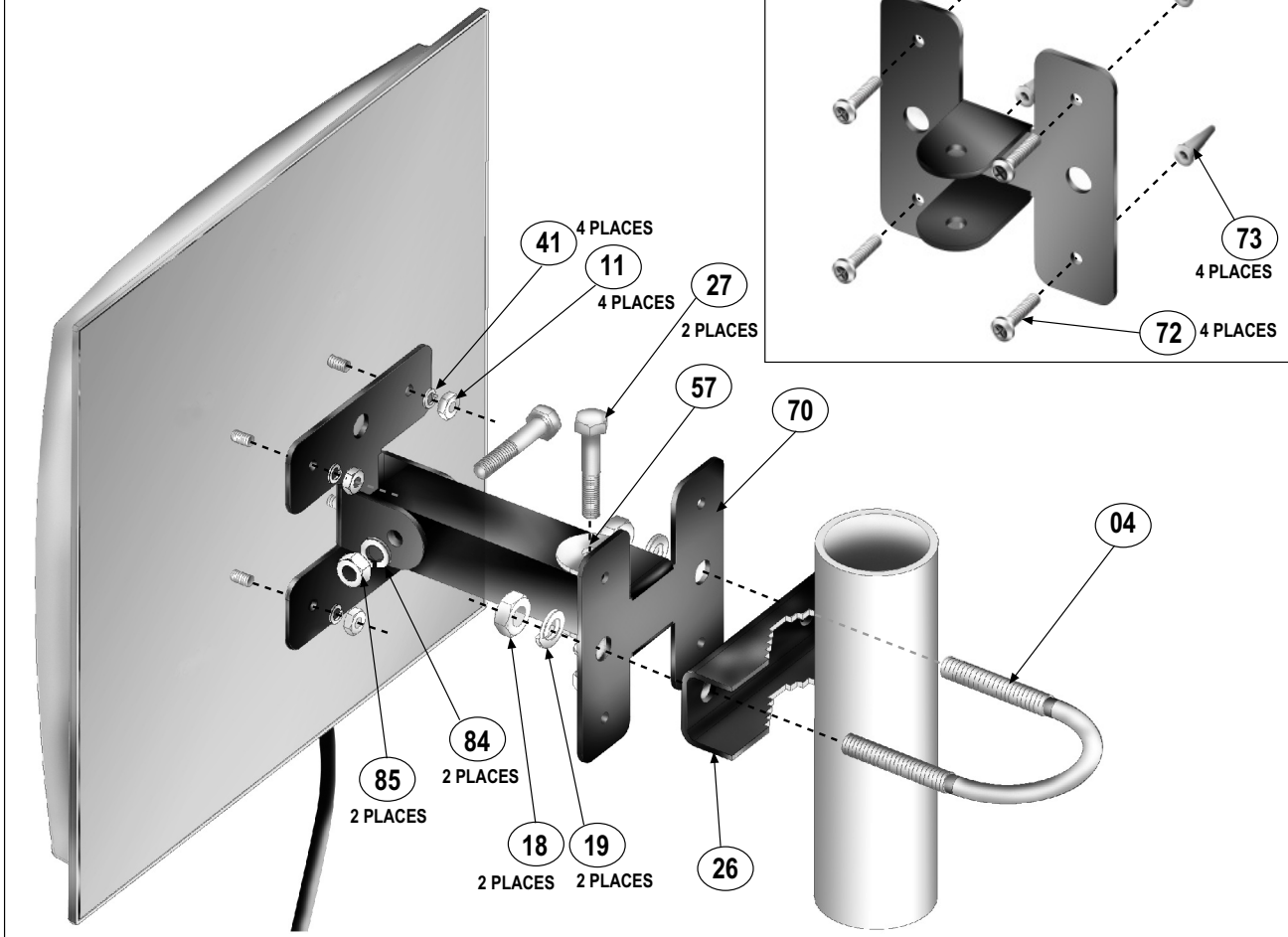


Figure-2

Wall Mount Applications