

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:	S54717PNM
Frequency: GHz	5.47-5.85
Gain:	17 dBi nominal
VSWR:	1.5:1
E-Plane (3 dB beamwidth):	17°
H-Plane (3 dB beamwidth):	17°
Polarization:	Linear, Vertical
RF Connector:	Type N female
Cable	12"
Weight lb. (kg):	0.75 (.34)
Mounting:	Wall / Mast
Dimensions in.(cm):	6.75 x 6.75 x 1.1 (17.1 x 17.1 x 2.8)
Enclosure:	PVC / Acrylic
Mast Diameter Max. in.(cm):	2 (5.1)
Power (Watts):	10

S54717PNM

(5.47 - 5.85 GHz)

ASSEMBLY AND INSTALLATION INSTRUCTIONS



APPLICATION

Designed for outdoor Mesh Network applications requiring directivity, the S54717PNM is 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 5.5-GHz band.

SAFETY

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

ANTENNA LOCATION

The S54717PNM may be mounted at interior or exterior locations. For link installations, a line-of-sight path between antennas works best. Although 5.5 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 antenna must be aimed accurately during installation in order to provide optimum gain and best performance.

MOUNTING

The S54717PNM 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.

LIMITED WARRANTY

CUSHCRAFT CORPORATION, P.O. BOX 4680, MANCHESTER, NEW HAMPSHIRE 03108, WARRANTS TO THE ORIGINAL CONSUMER PURCHASER FOR TWO YEARS FROM DATE OF PURCHASE THAT EACH CUSHCRAFT ANTENNA IS FREE OF DEFECTS IN MATERIAL OR WORKMANSHIP. IF, IN THE JUDGMENT OF CUSHCRAFT, ANY SUCH ANTENNA IS DEFECTIVE, THEN CUSHCRAFT CORPORATION WILL, AT ITS OPTION, REPAIR OR REPLACE THE ANTENNA AT ITS EXPENSE WITHIN THIRTY DAYS OF THE DATE THE ANTENNA IS RETURNED (AT PURCHASER'S EXPENSE) TO CUSHCRAFT OR ONE OF ITS AUTHORIZED REPRESENTATIVES. THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESSED WARRANTIES, ANY IMPLIED WARRANTY IS LIMITED IN DURATION TO ONE YEAR. CUSHCRAFT CORPORATION SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES WHICH MAY RESULT FROM A DEFECT. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS OR EXCLUSIONS OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION AND EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE. THIS WARRANTY DOES NOT EXTEND TO ANY PRODUCTS WHICH HAVE BEEN SUBJECT TO MISUSE, NEGLIGENCE, ACCIDENT OR IMPROPER INSTALLATION, ANY REPAIRS OR ALTERATIONS OUTSIDE OF THE CUSHCRAFT CORPORATION FACTORY WILL NULLIFY THIS WARRANTY.

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.



48 PERIMETER ROAD, MANCHESTER, NH 03103
Tel: 603-627-7877-Fax: 603-627-1764
email: sales@cushcraft.com - web: www.cushcraft.com

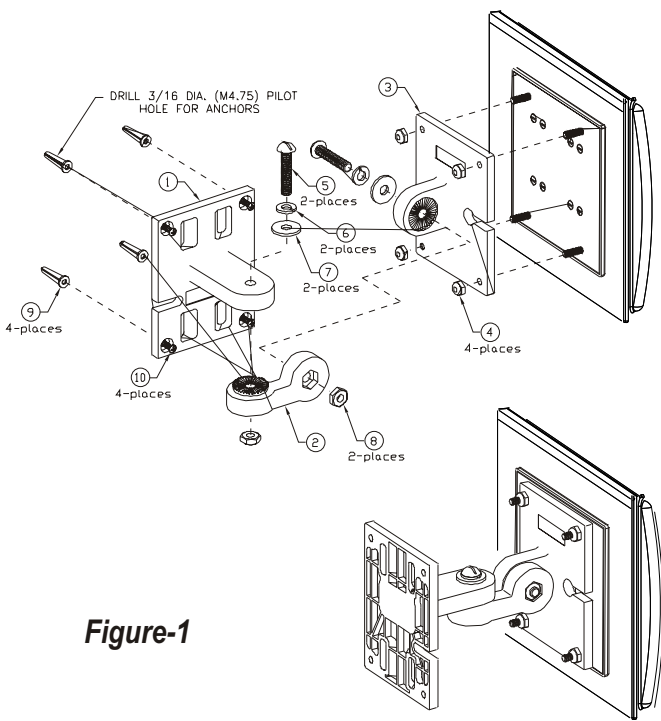


Figure-1

KEY	DISPLAY	DESC	SIZE	QTY
7		FLAT WASHER	1/4"	2
11		HOSE CLAMP	—	2
2		ARTICULATING ARM	—	1
1		WALL / MAST MOUNT	—	1
3		ANTENNA MOUNT	—	3
9		PLASTIC WALL ANCHOR	# 8	4
10		SS MACHINE SCREW	#8-18 x 3/4"	4
5		MACHINE SCREW	1/4" -20 x 1-1/4"	2
6		SS SPLIT LOCK WASHER	1/4"	2
8		SS HEX NUT	1/4" -20	2
4		SS / Nylon HEX NUT	8/32"	4

ASSEMBLY

Install the articulating mount to the antenna back plane, as shown in Figure-1:

1. Find the molded antenna mount (3) and four 8-32 nylon lock nuts (4). Use the nuts to attach the mount to the exposed studs on the back of the antenna.
2. Find the molded articulating arm (2). Also, find a 1/4"-20 x 1-1/4" machine screw (5), 1/4" lock washer (6), 1/4" flat washer (7), and 1/4"-20 hex nut (8). Use hardware to secure the molded arm to the antenna mount as shown in Figure-1.
3. For installation on flat surfaces, find the molded wall/mast mount (1) and use it as a drill template to mark hole locations. Drill four 3/16" diameter pilot holes and install wall anchors (9). Install the mount using four 8-18 x 3/4" self-tapping screws (10).
4. For pole or mast installations, find two worm clamps (11) and install as shown on the molded wall-mast mount (1). Encircle pole with each band and tighten.
5. To attach the antenna assembly to the wall/mast mount, find a 1/4" x 1-1/4" machine screw (5) and install a 1/4" lock washer (6) and a 1/4" flat washer (7) as shown. Use the screw to attach the free end of the articulating arm to the mount, securing in place with a 1/4"-20 nut (8).
6. Loosen 1/4" pivot screws as needed to position antenna for desired azimuth and elevation steering. When antenna is in adjusted, tighten all hardware securely.

