

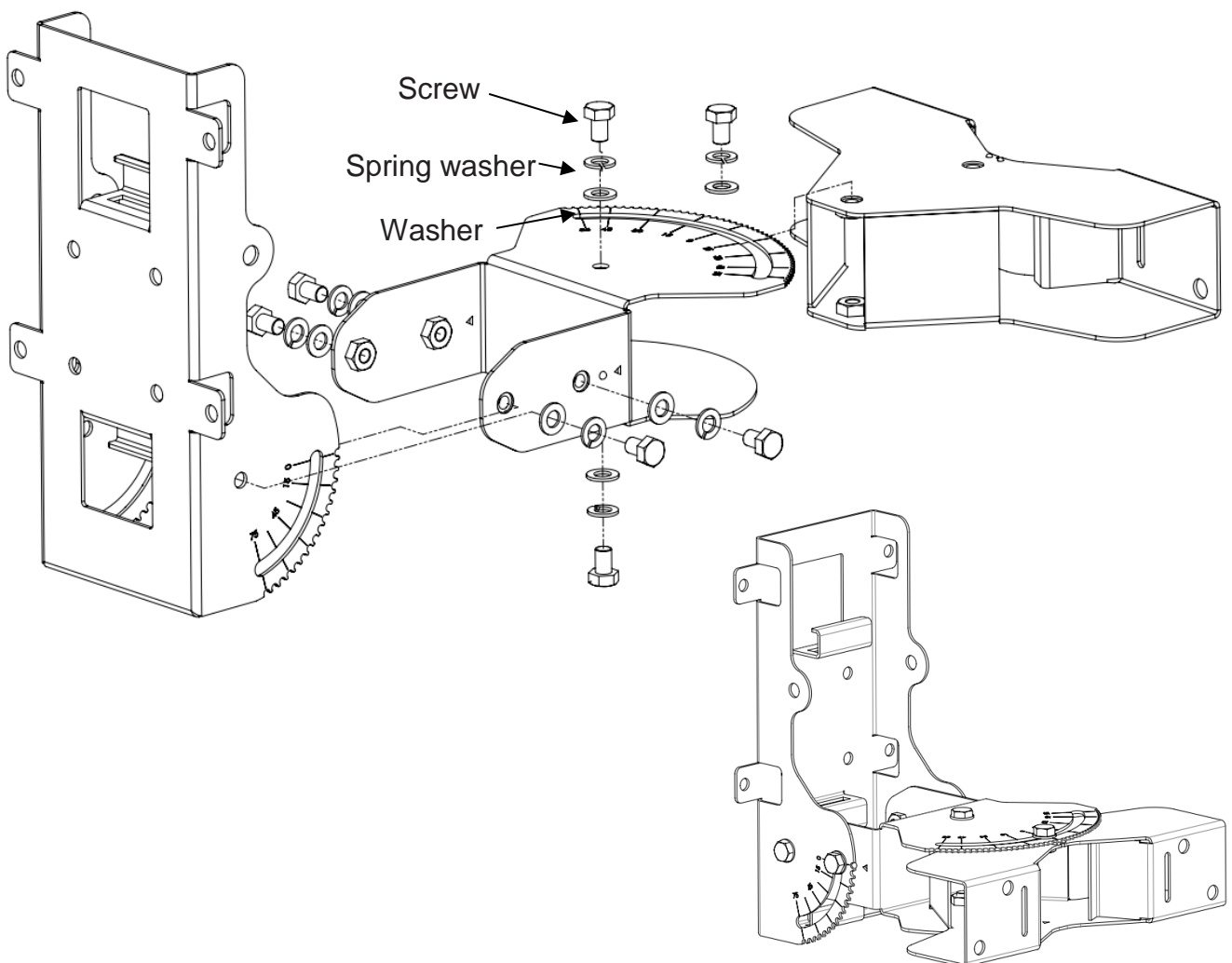
Installation Guide for CMAX-DM20/DM22S/DM30/ DM60-xxx Antennas

Note: Please read the complete description before starting the installation. Be sure that connectors are properly sealed from water if no cables are connected to them after installation.

Tools required:
Wrench, width: 13 mm

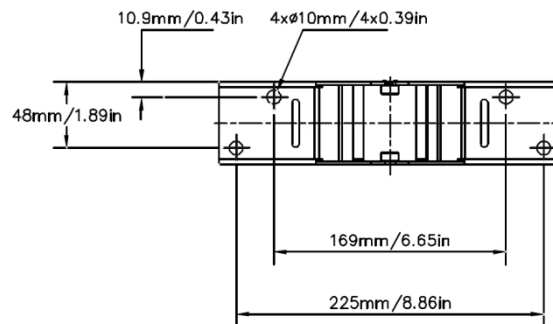
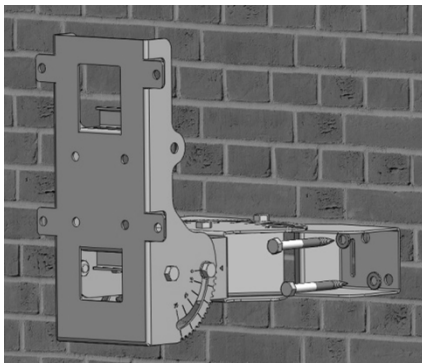


1. Assembly



Fit the 3 parts together and fasten with screws M8 x 16, washers, and spring washers (M8 torque: 27 N-m)

2. Wall Mounting

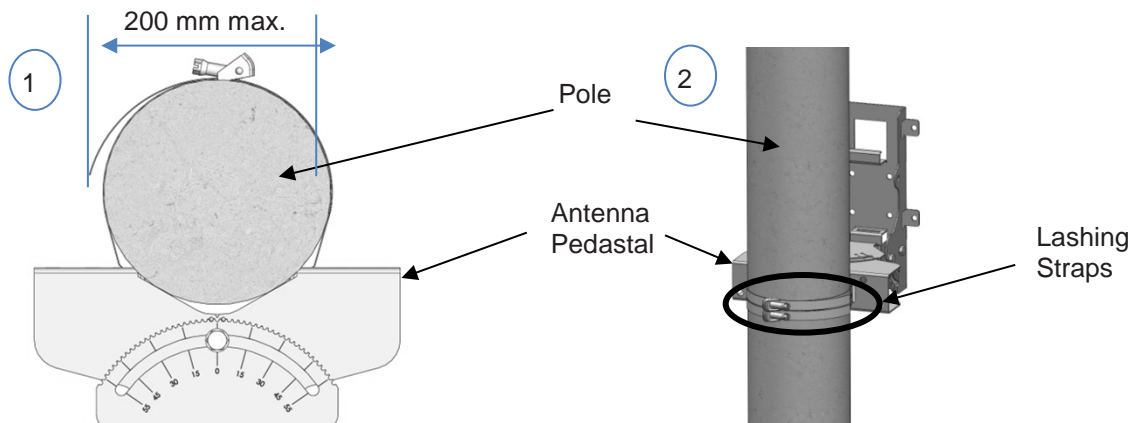


1. Mark 4 holes onto the wall as shown in the drawing above.
2. Drill 4 holes into the wall and insert appropriate dowels into holes.
3. Attach the antenna pedestal.

3. Pole Mounting

3.1. Pole Mounting with Lashing Straps (suggestion)

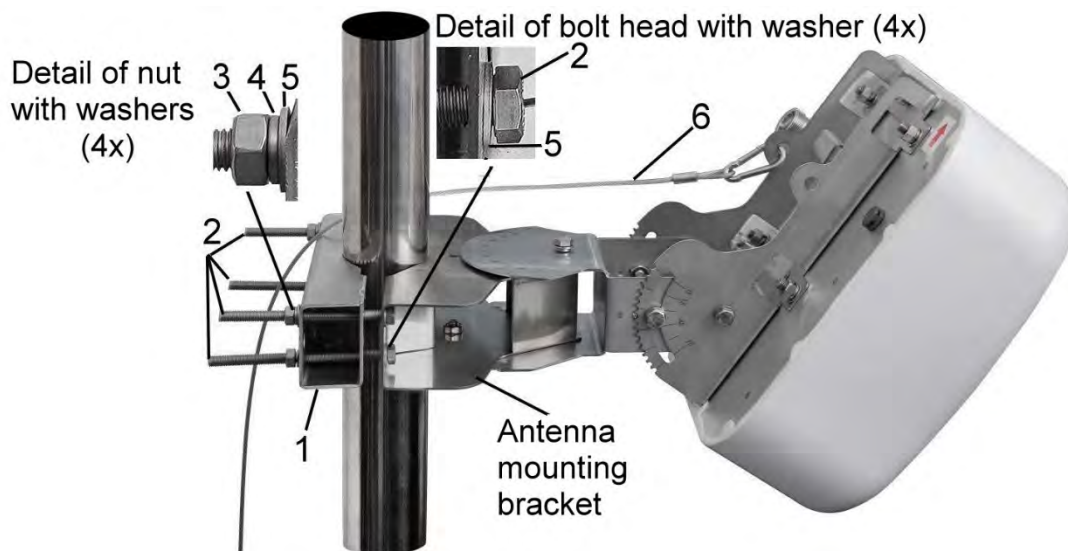
Note: This pole mounting procedure is for reference only. Other than the shown pole mounting material can be used to mount bracket and antenna to a pole. Make sure the installation will safely support the combined load of the bracket, antenna, and connected cables.



1. Lay proper lashing straps around pole and lead them through mounting bracket.
2. Adjust bracket in antenna direction and fasten bracket.

3.2. Optional Pole Mounting Kit

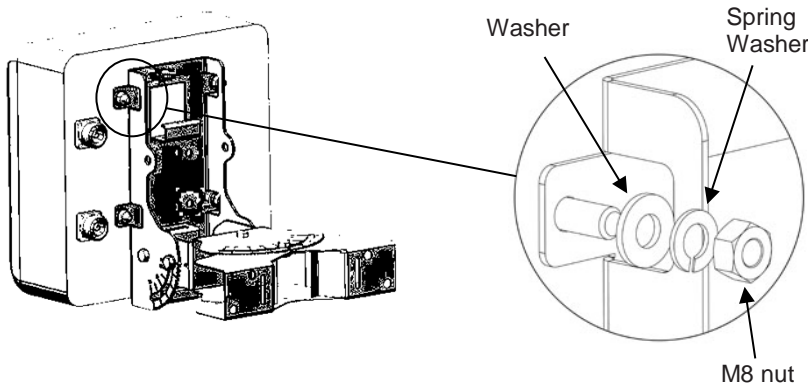
Optionally, a pole-mounting kit can be ordered separately from the supplier (ID 7814722). The recommended pole diameter for this mounting kit is 60 - 150 mm. To mount an antenna to a pole using this kit, proceed as follows:



1. Insert the four bolts M8x200 (2) with four of the file washers (5) into the antenna mounting bracket (see detailed illustration of bolt head)
2. Insert the pole mounting bracket into these four bolts and place the file & spring washers (4 & 5) and the M8 nuts (3) over each bolt (detailed illustration).
3. Tighten the four M8 nuts observing the specified torque of 27 Nm.
4. Hang in the safety wire (6) and attach it to a suitable structure for fall protection.

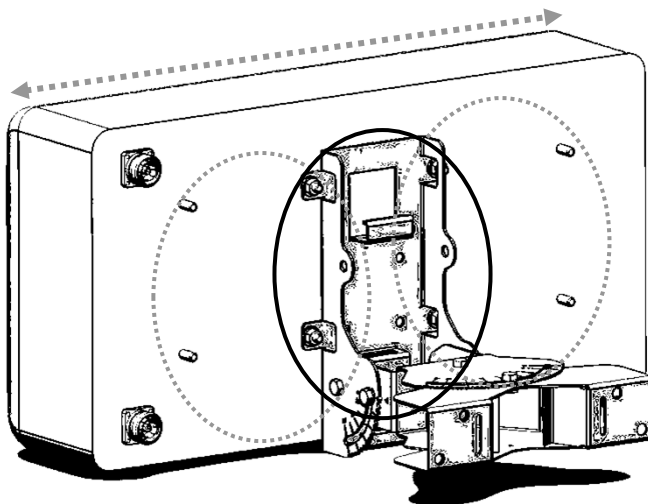
4. Antenna Mounting

4.1. DM60 Antenna Mounting



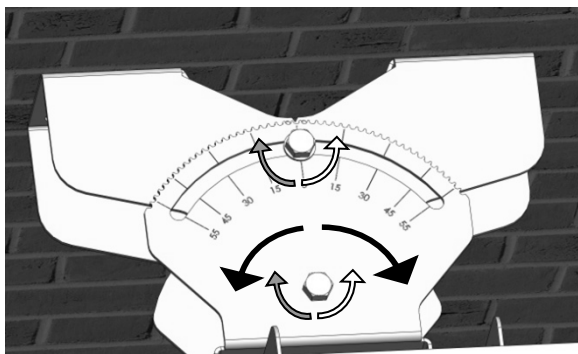
Attach antenna and fasten it with washers and M8 nuts (M8 torque: 27 N-m)

4.2. DM20/DM22S/DM30 Antenna Mounting



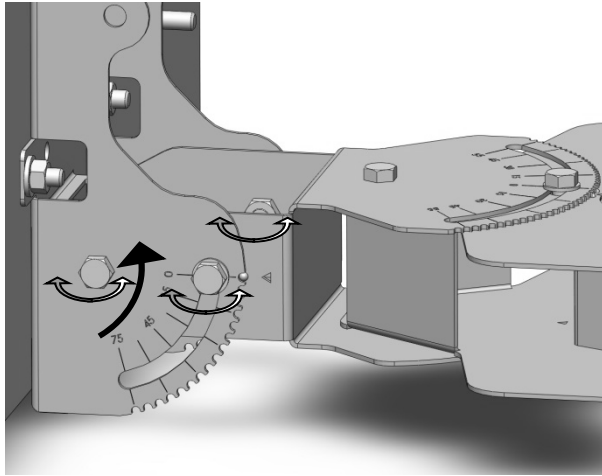
Depending on space available and adjusting angle, the DM20/DM22S/DM30 antenna can be mounted onto the pedestal in 3 alternatives (see circle marks in picture to the left-hand side).

4.3. Azimuth angle



1. Loosen the 3 fixing screws. (Do NOT unscrew them completely.)
2. Adjust your desired angle. The complete antenna pedestal can be swiveled to the left- / right-hand side by up to 55°.
3. Tighten the fixing screws.

4.4. Elevation Angle

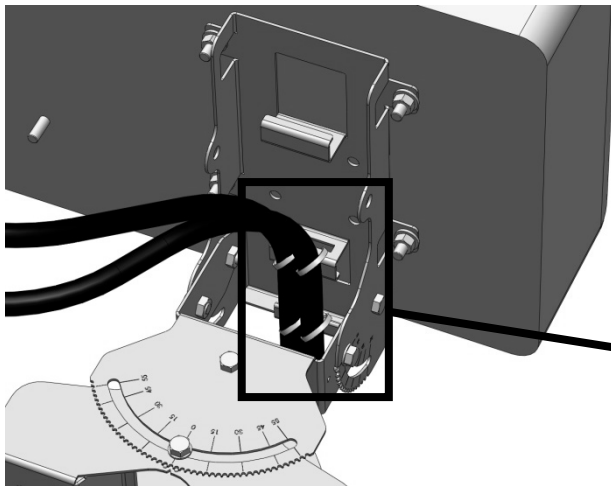


Loosen the 4 fixing screws at the left- and right-hand side. (Do NOT unscrew them completely.)

2. Adjust your desired angle.

3. Tighten fixing screws.

4.5. Antenna Cable



Connected antenna cables can be arranged and fixed with cable ties as shown.

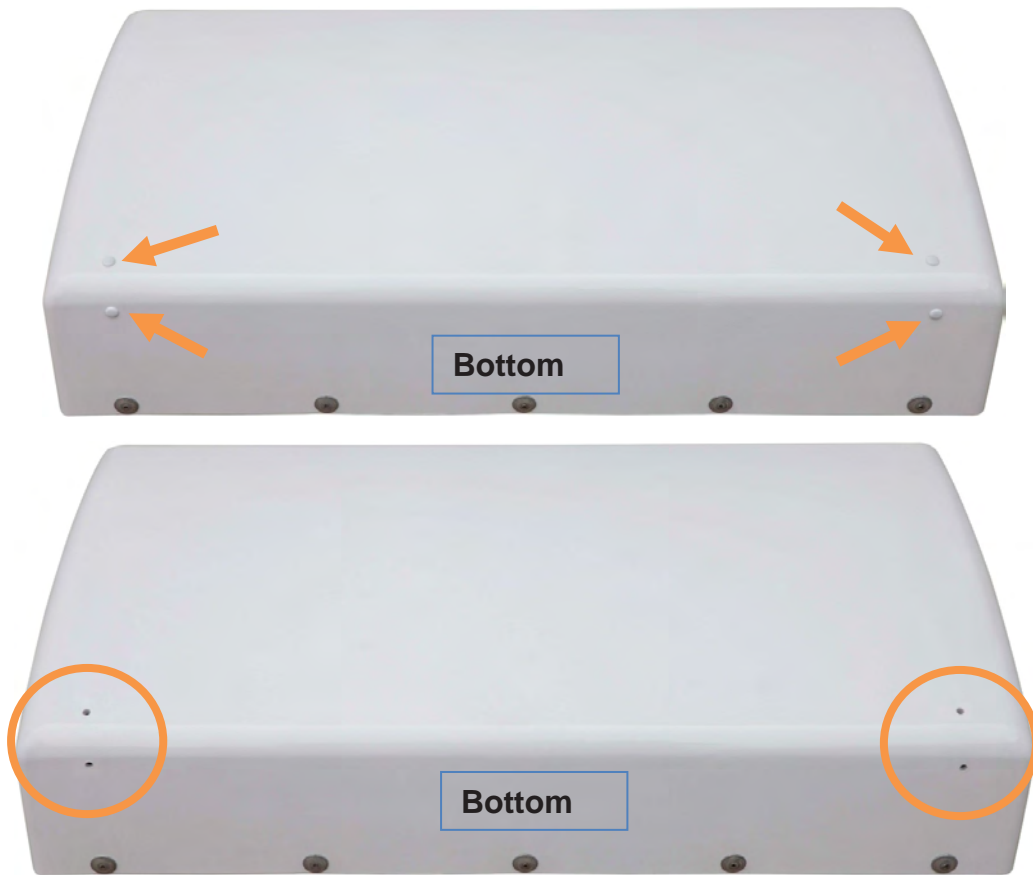


4.6. Outdoor installation

Note: For outdoor use, we recommend removing the plugs from the drain holes if the antenna is exposed to high humidity or rainfall.

NOTICE : Do not remove the plugs if the antenna is mounted other than bottom down, that means the drain holes showing to the ground. For the top and bottom of the antenna observe the arrow labeling at the rear side. Otherwise water might penetrate into and therefore damage the antenna.

Remove the plugs from the drain holes at the bottom of the antenna with a knife or a flat screwdriver. The below indicates the location of the drain holes, design and/or size of the antenna may be different.



List of Changes

Version	Changes	Release Date
M0149A7A	Initial Release	29-March-2016
M0149A7B	- chapter 0 updated, Note on pole mounting	20-April-2017
M0149A7C	- DM22S added to title and in chapter 4.2	02-October-2017
M0149A7D	- New pole mounting kit added in chapter 0	04-September-2018

© Copyright 2018 CommScope, Inc.

All rights reserved.

All information contained in this manual has been revised thoroughly. Yet CommScope accepts no liability for any omissions or faults.

CommScope reserves the right to change all hardware and software characteristics without notice.

Names of products mentioned herein are used for identification purposes only and may be trademarks and / or registered trademarks of their respective companies.

No parts of this publication may be reproduced, stored in a retrieval system, transmitted in any form or by any means, electronic, mechanical photocopying, recording or otherwise, without prior written permission of the publisher.

CommScope, 04-September-2018