



Installation Instruction for C-MAX-LHM2 Antennas



C-MAX-LHM2-30-I53,
C-MAX-LHM2-3030-I53,
C-MAX-LHM2-22-I53,
C-MAX-LHM2-60-I53

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Andrew Wireless Systems GmbH, 30-August-2023

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1. General

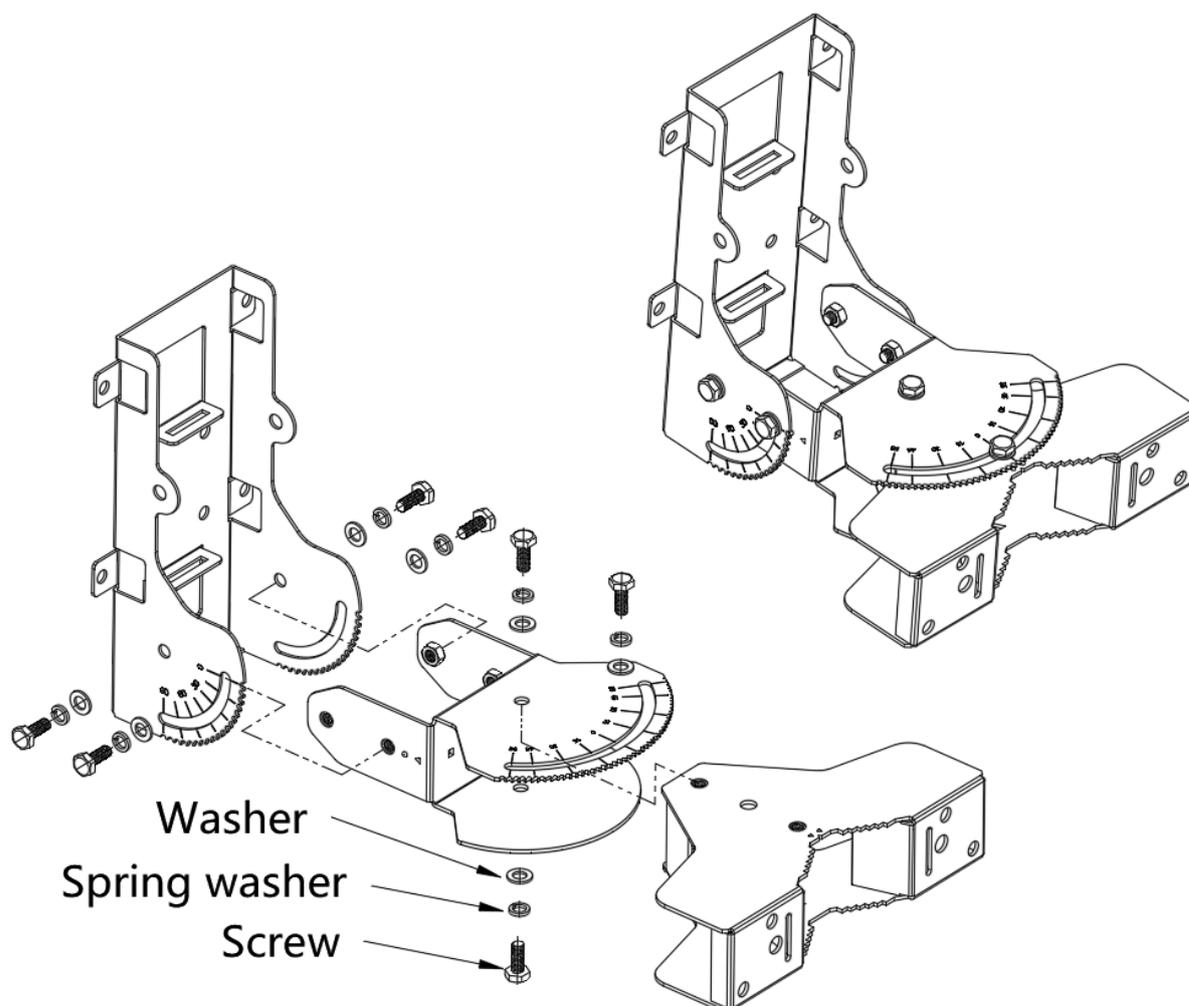
Notes:

- 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.
- To minimize the risk of thread seizure, an anti-corrosion oil or grease can be used on nuts and bolts.

Tools required: Wrench,
width: 13 mm



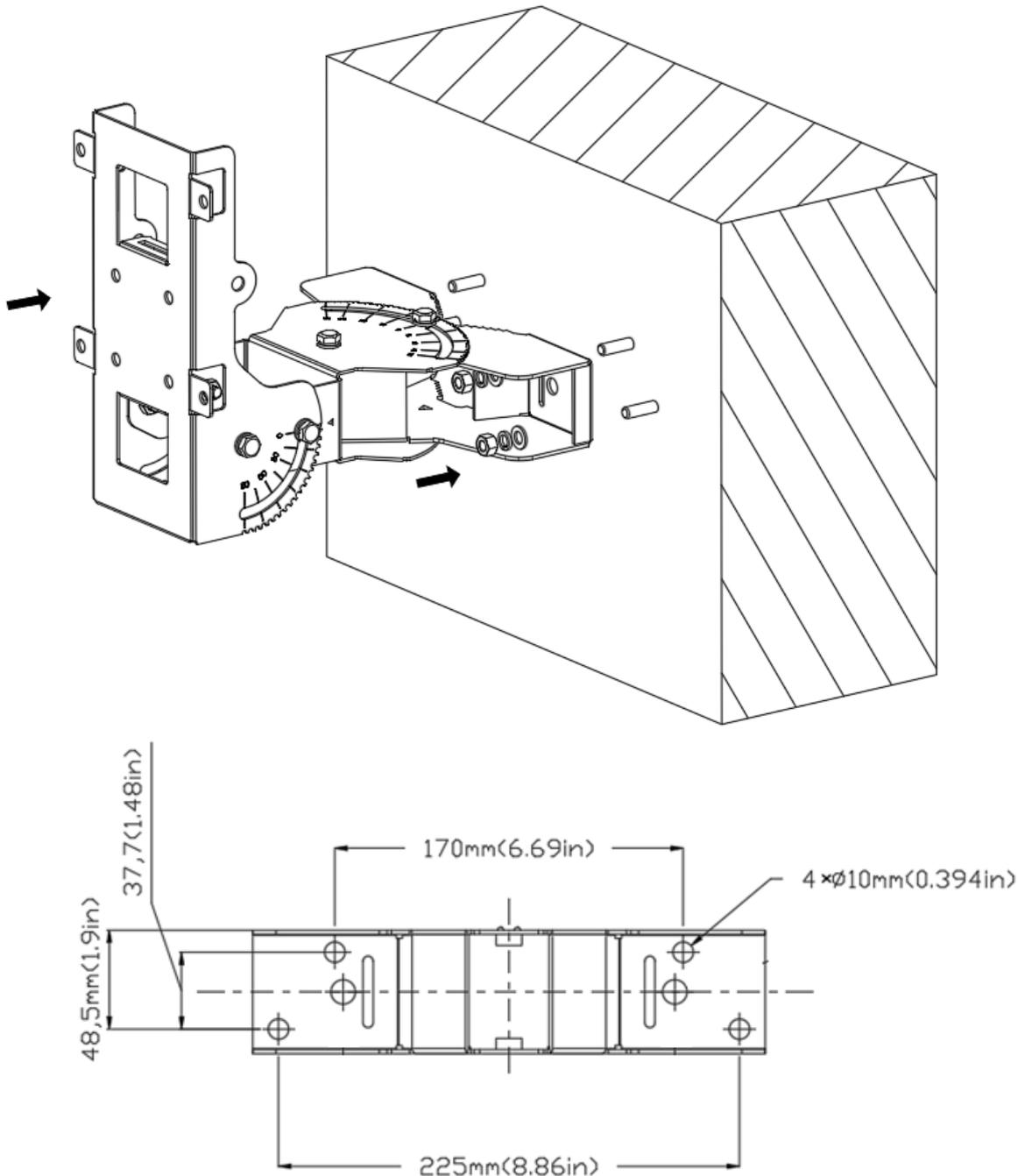
2. Assembly



Fit the 3 parts together and fasten with screws M8 x 20, washers, and spring washers (M8 torque: 27 Nm).

3. Wall Mounting

To mount the antenna to a wall (pole mounting see next chapter), proceed as follows:



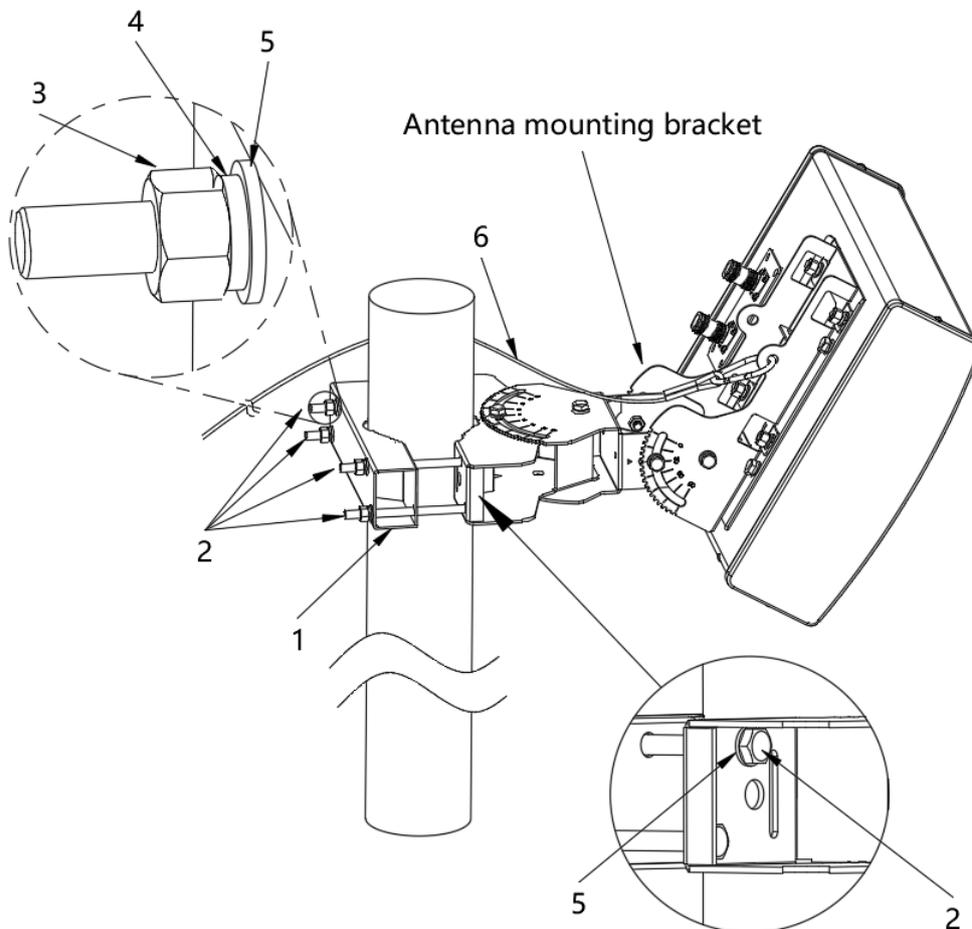
1. Mark 4 holes onto the wall as shown in the drawing above (diameter of the 4 holes: 10 mm).
2. Drill four holes into the wall and insert appropriate expansion bolts into the holes.
3. Attach the antenna pedestal.

(Note: Expansion bolt parts have to be provided by the user.)

4. Pole Mounting (115 mm max. pole diameter)

Optionally, a pole-mounting kit can be ordered separately from CommScope (ID 7814722). The recommended pole diameter for this mounting kit is 60 - 115 mm. To mount an antenna to a pole using this kit, proceed as follows:

Detail of nut with washers (4x)



Detail of bolt head with washer (4x)

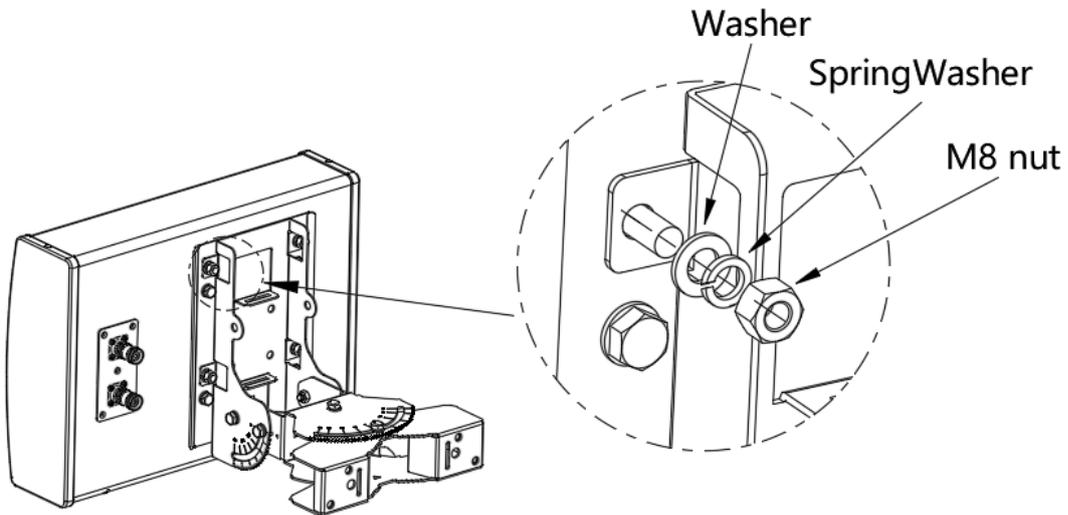
1. Insert four M8x200(2) bolts and four filled-corner washers (5) into the antenna mounting bracket (see bolt head for details).
2. Insert the pole mounting bracket into these four bolts and place the washers & spring washers (4 & 5) and the M8 nuts (3) over each bolt (detailed illustration).
3. Tighten the four M8 nuts observing the specified torque of 27 Nm.

Note:

This installation method is applicable to the CMAX-LHM2-series antenna (CMAX-LHM2-30-I53, CMAX-LHM2-3030-I53, CMAX-LHM2-22-I53, CMAX-LHM2-60-I53).

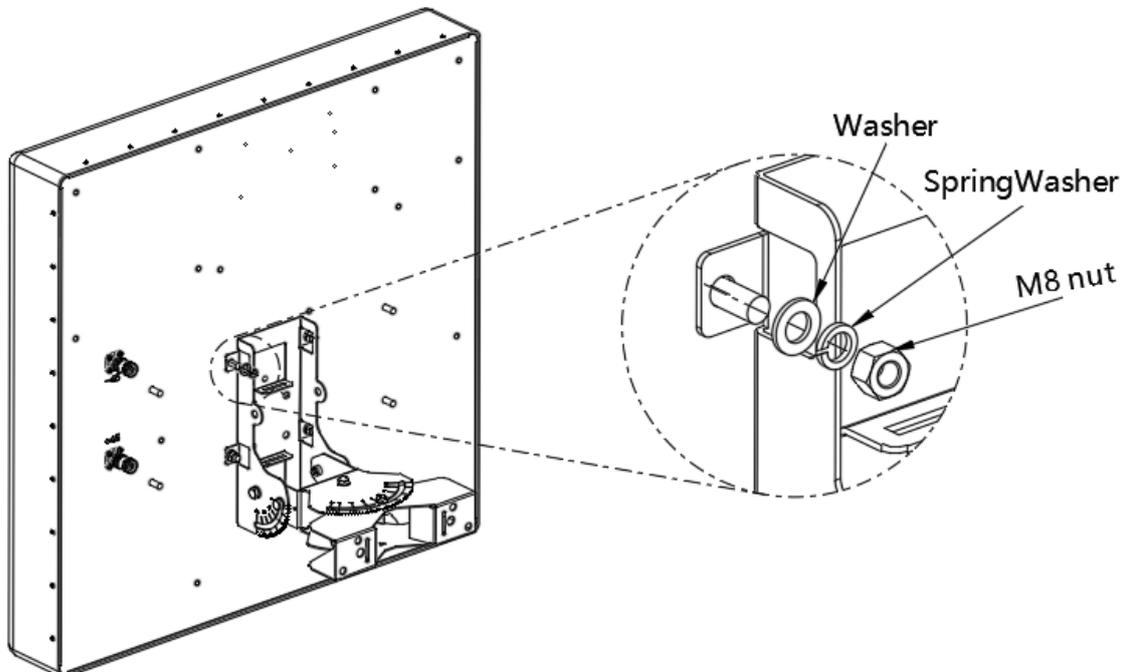
5. Antenna Mounting

5.1. CMAX-LHM2-30-I53, CMAX-LHM2-22-I53, CMAX-LHM2-60-I53



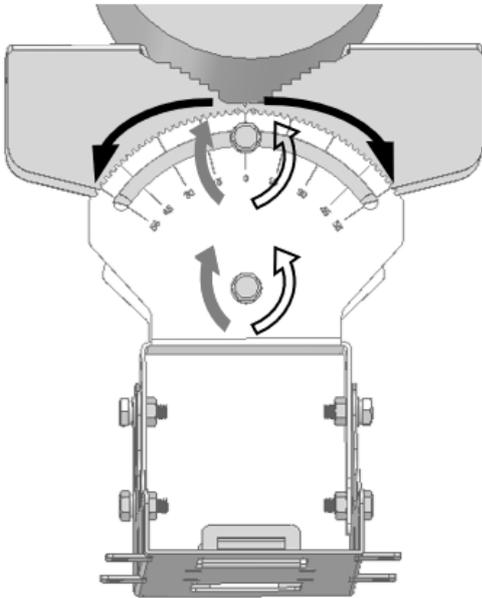
Attach antenna and fasten it with washers and M8 nuts (M8 torque: 27 Nm).

5.2. CMAX-LHM2-3030-I53

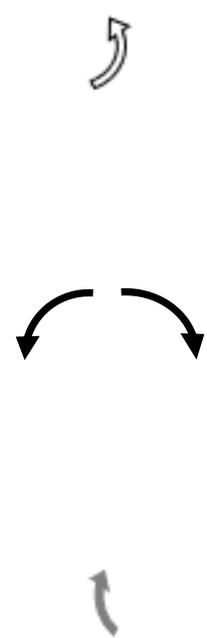


Attach antenna and fasten it with washers and M8 nuts (M8 torque: 27 Nm).

5.3. Azimuth Angle

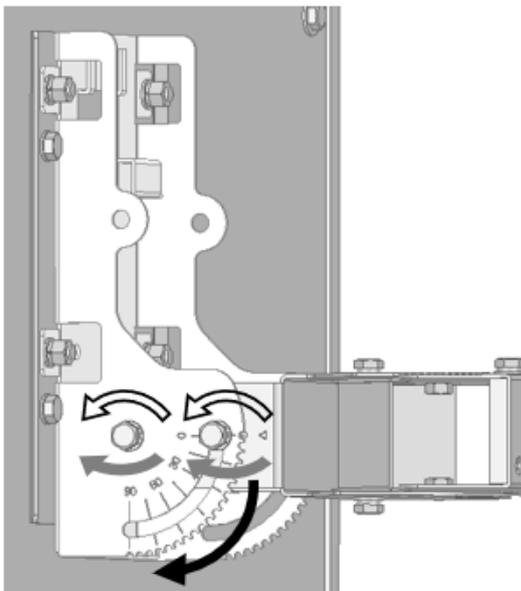


1. Loosen the three fixing screws at the top and bottom side. (Do not unscrew them completely.)
2. Adjust your desired angle. The complete antenna pedestal can be swivelled to the left-/right-hand side by up to 50° when mounted to a pole. With wall mounting, this angle is different for each antenna type (see table below).
3. Tighten the fixing screws.



| Antenna | Max. azimuth adjustment |
|--------------------|-------------------------|
| CMAX-LHM2-30-I53 | 40° |
| CMAX-LHM2-3030-I53 | 40° |
| CMAX-LHM2-22-I53 | 27° |
| CMAX-LHM2-60-I53 | 50° |

5.4. Elevation Angle



1. Loosen the four fixing screws at the left- and right-hand side. (Do not unscrew them completely.)
2. Adjust your desired angle. The complete antenna pedestal can be swivelled to down-tilt angle 0-90°. Note: The bracket can be installed in the opposite direction to achieve up-tilt angle).
3. Tighten the fixing screws.

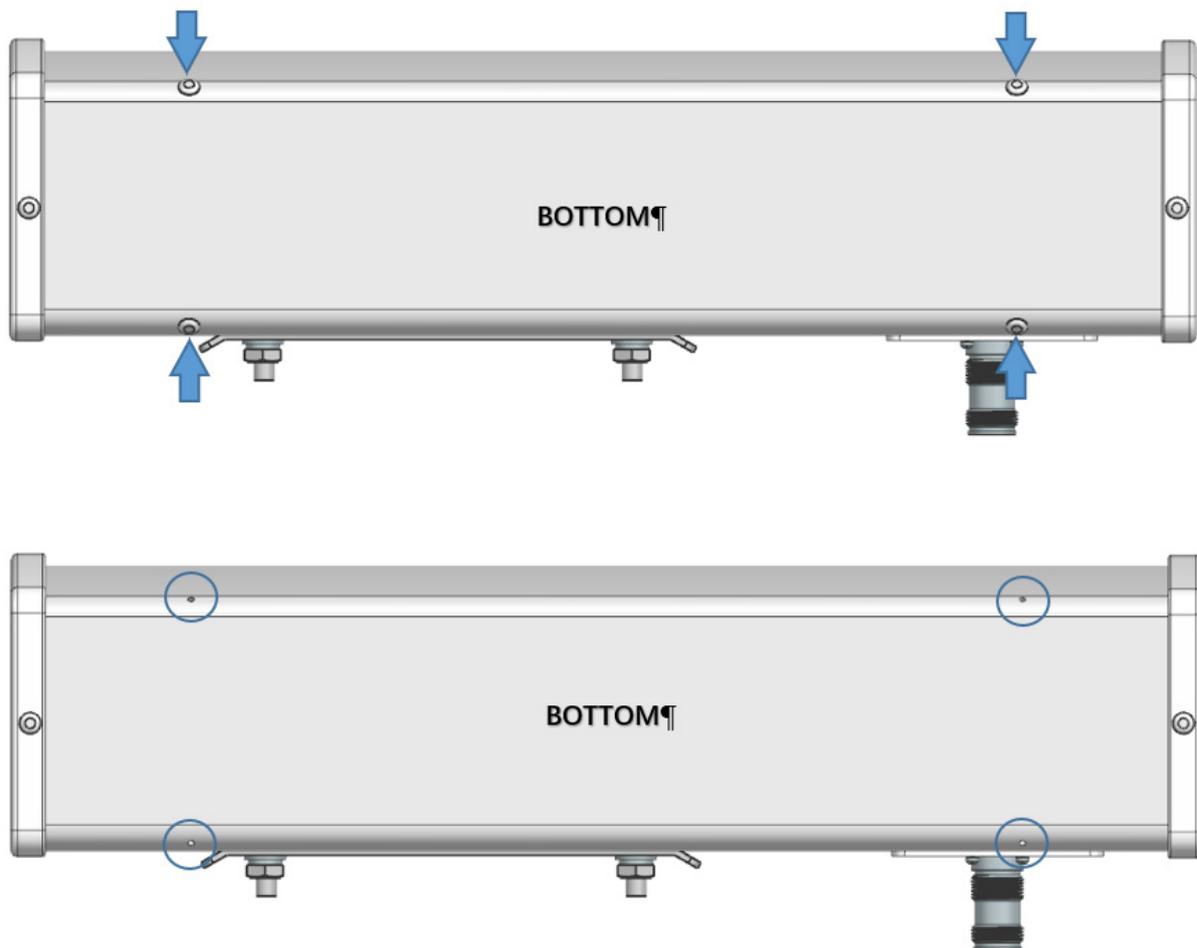


5.5. Outdoor Installation

Note: For outdoor use, the plugs must be removed from the drain hole.

NOTICE: For the top and bottom of the antenna, please observe the arrow markings on the back. The antenna must be installed with the bottom facing the ground, otherwise water may seep into the antenna and damage it.

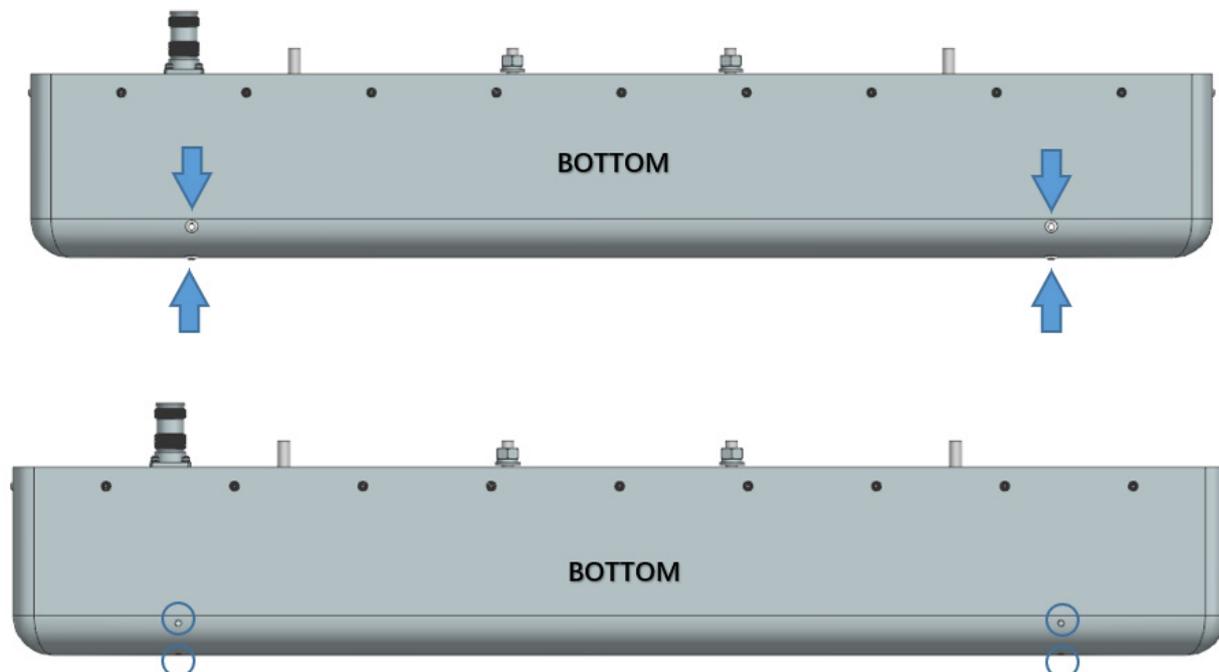
Remove the plugs from the drain holes at the bottom of the antenna with a knife or a flat screwdriver. The figure below indicates the location of the drain holes, design and/or size of the antenna may be different.



Note:

CMAX-LHM2-30-I53, CMAX-LHM2-22-I53, and CMAX-LHM2-60-I53 antenna drainage hole layout is similar to the figure above. The figure above is for reference only. Verify the exact locations with the actual antenna model you have.

The following figure is the reference diagram of the drainage hole layout of the CMAX-LHM2-3030-I53 antenna.



6. Contacting CommScope

The following sections tell you how to contact CommScope for additional information or for assistance.

6.1. DAS and Small Cell Technical Support

The following sections tell you how to contact the DAS and Small Cell Technical Support team. Support is available 7 days a week, 24 hours a day.

Telephone Helplines

Use the following Helpline telephone numbers to get live support, 24 hours a day:

| | |
|---------------------------------|---|
| 24x7 | +1 888-297-6433 (Toll free for U.S. and Canada) |
| EMEA 8:00-17:00 (UTC +1) | + 800 73732837 (Toll free for parts of EMEA and Australia) + 49 909969333 (Toll charge incurred) |

Calls to an EMEA Helpline outside of the 8:00 to 17:00 time frame will be forwarded to the 24x7 Helpline.

Online Support

To go to the CommScope **Wireless Support Request** web site from which you can initiate a Technical Support ticket, do one of the following:

- Scan the QR Code to the right.
- If viewing this document online as a PDF, click on the following URL link:
- <http://www.commscope.com/wisupport>
- Enter the preceding URL into your web browser, and then press **ENTER** on your keyboard.



6.2. Waste Electrical and Electronic Equipment Recycling

Country specific information about collection and recycling arrangements per the Waste Electrical and Electronic Equipment (WEEE) Directive and implementing regulations is available on CommScope's website. To access information on the CommScope recycling program, do any of the following:

- Scan the QR Code to the right.
- If viewing this document online as a PDF, click on the following URL link:
- <http://www.commscope.com/corporate-responsibility-and-sustainability/environment/weee-customer-recycling/>
- Enter the preceding URL into your web browser, and then press **ENTER** on your keyboard.



6.3. DAS and Small Cell Technical Training

1. To access training on the online technical training site, please use the following web address or scan the QR code to the right:
<https://commscopeuniversity.com>
2. Once you have logged in, you can search for training by typing search words in the **Search** bar or by going to the Catalog page to view the available courses.
3. Instructor-led courses are conducted in North America and Europe. Before choosing a course, please verify the region.
4. For training related questions, please contact us:
icn_training@commscope.com



6.4. Accessing CommScope User Documentation

1. Access to the Customer Portal requires a user account. If you don't have an account:
 - Visit My CommScope at <https://www.mycommscope.com>.
 - Click New user registration and follow the prompts.
 - After you've registered in My CommScope, click the Request Additional Access button and select the DAS and Small Cell Customer Portal from the list of applications.
2. Scan the QR Code to the right to go directly to the CommScope DAS and Small Cell Customer Portal, where you can access the DAS and Small Cell user documentation.

Alternatively, you can go to the following web address to access the portal:
<https://www.commscope.com/membership>
3. In Tools and Documentation, search by product, document category, or title.
4. Click on the title of any document to open it.

