

P040-0013 Revision B, May 2021

Instruction Manual, Stadium Panel Antennas

General

This instruction manual contains all necessary information required to assist in the correct installation of Stadium Panel Antennas.

Following symbols can be found next to text outlining important information.



Please follow the procedure marked with this symbol precisely. Non-compliance may lead to damage of the product.



Handy tips when installing product.

Unpacking

Make sure that the antenna and the accessory items listed below are provided and have not been damaged during transport.

- Antenna
- Mounting kit
- Installation Instructions (this document)







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.

Installation Instructions – Fixed Downtilt Mounting Kit (F-122-GL)

Assemble both mounting brackets to the antenna as per Figures 1, 2 & 3 of this document.



The Stadium antenna is designed to be mounted to a horizontal mounting pole.



Attach the mounting kit assembly to the antenna, before trying to clamp the brackets to the pole.



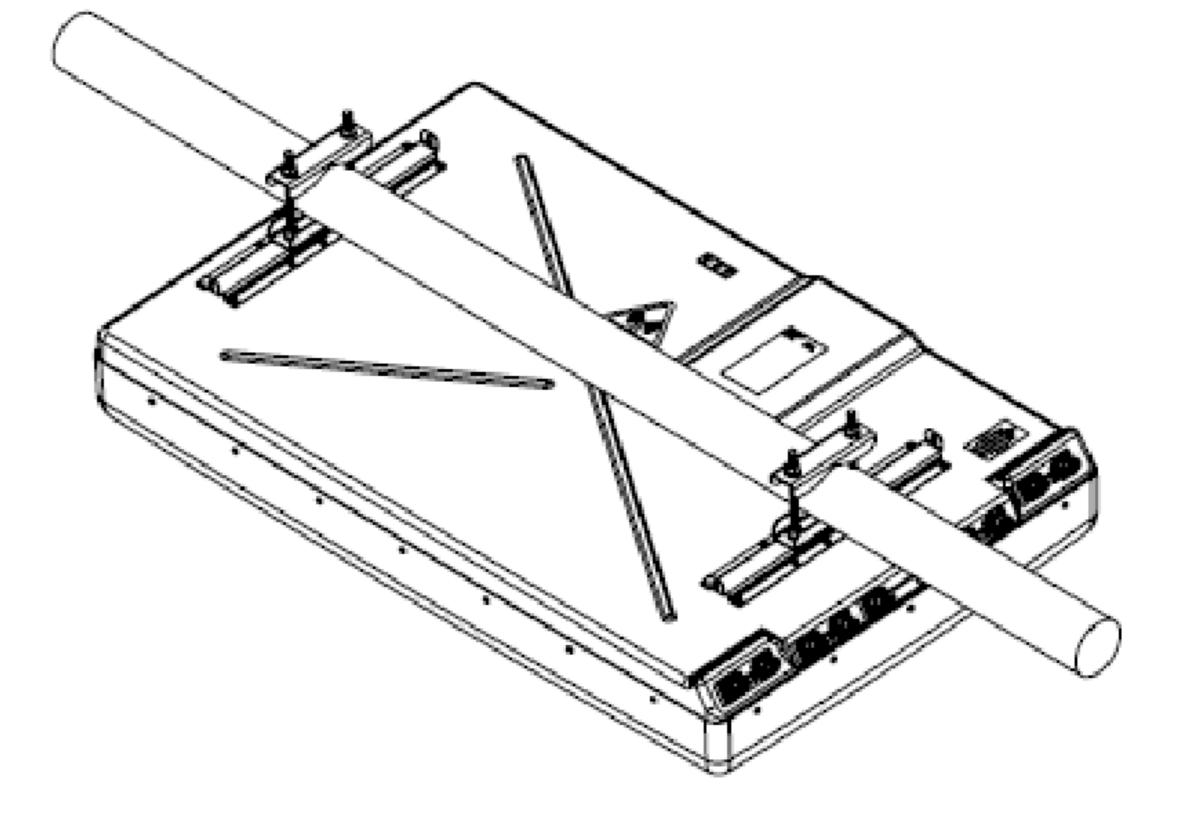
Ensure a torque spanner is used when tightening fasteners, see Figure 2 for correct torque recommendations.



The clamp brackets can clamp pipe diameters between 50 mm (2") & 115 mm (4.5").

For typical installations the minimum recommended pipe diameter is 75 mm (3").

Figure 1. Correctly Assembled Mounting Brackets



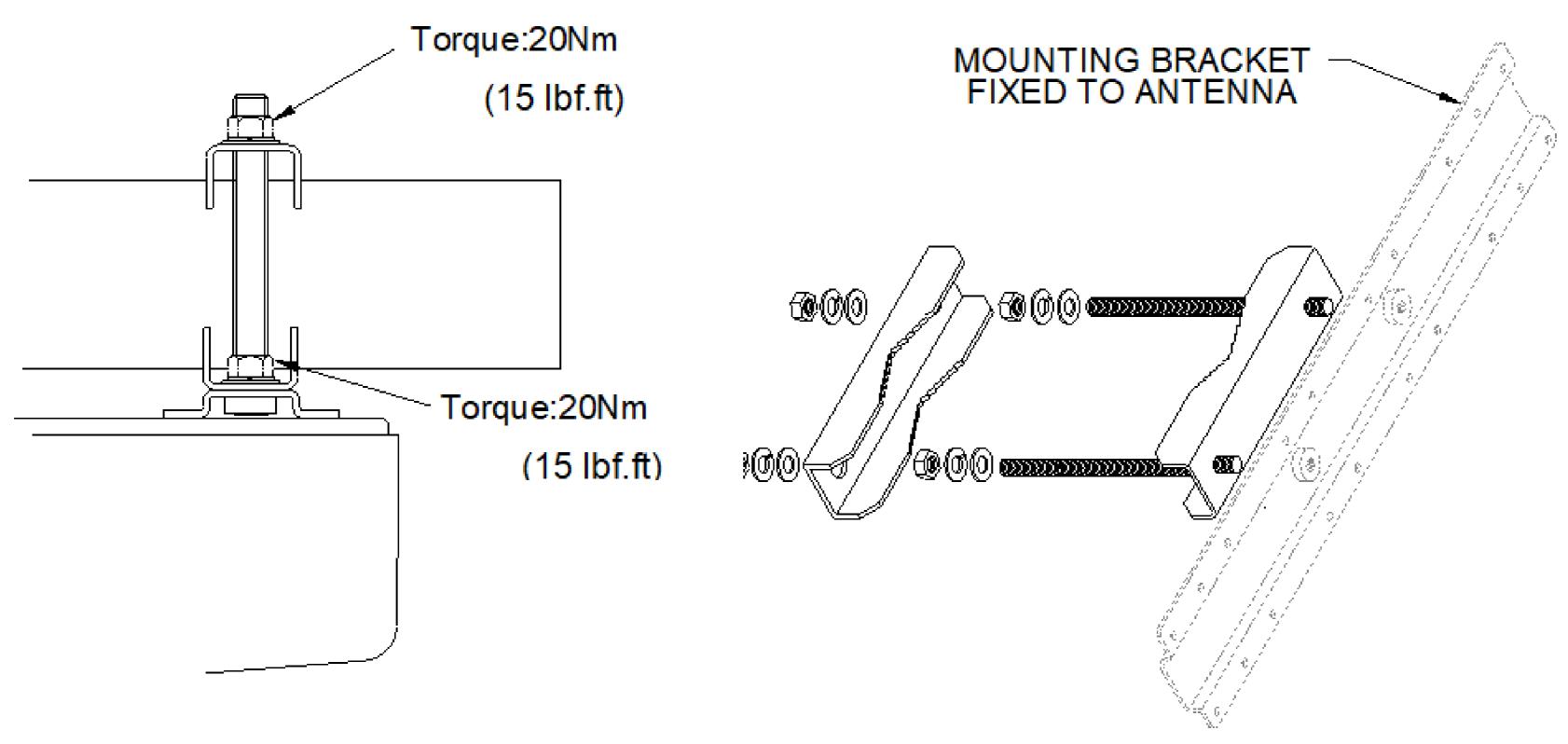


Figure 2. Fixed Downtilt Mounting Bracket Assembled to Antenna & Pole

Figure 3. Fixed Downtilt Mounting Bracket Exploded Assembly

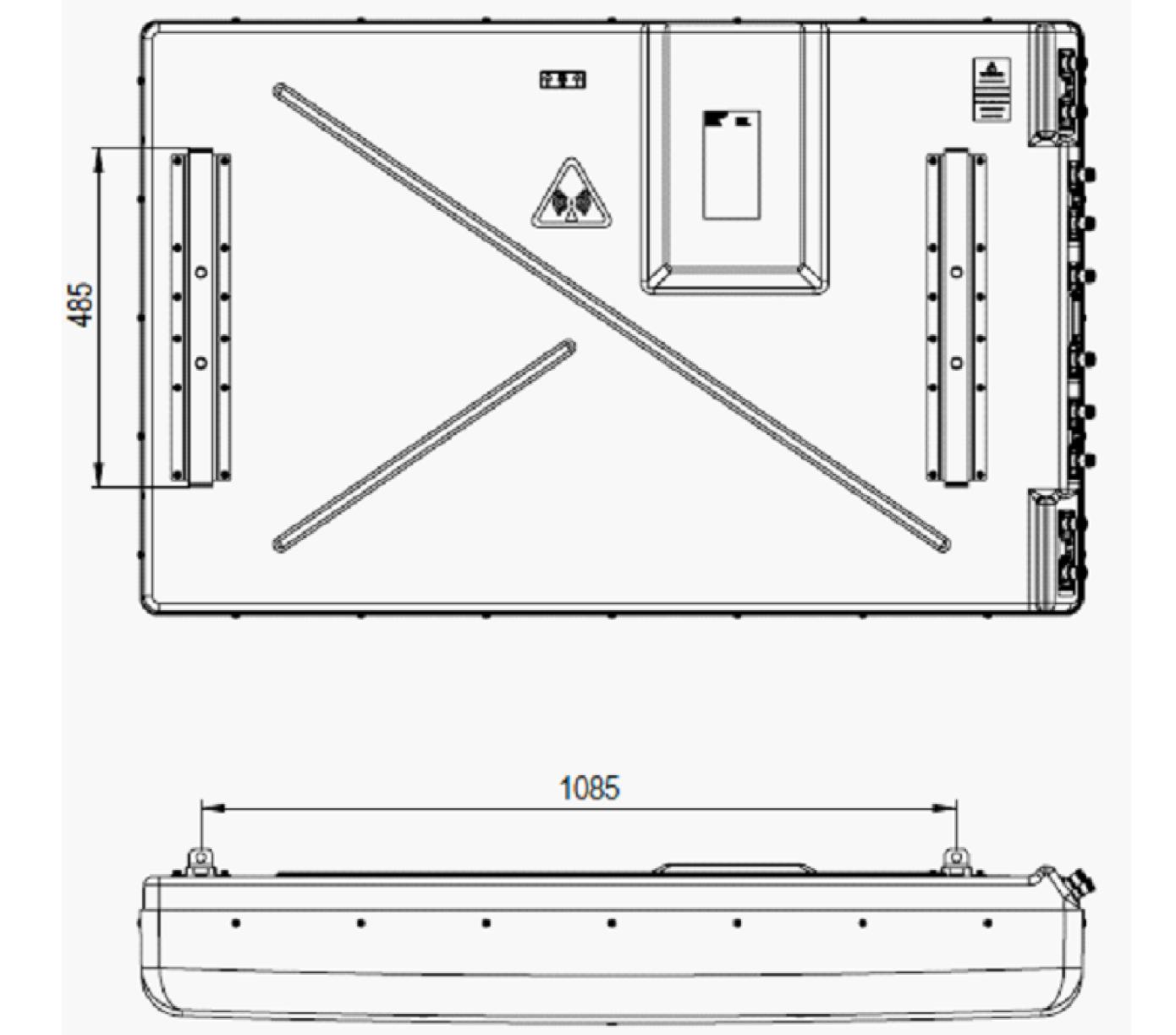


Figure 4: Four safety tether attachment points

(Tether cables not supplied)

Installation Instructions – Pivot Limitations

Although the mounting kit is a fixed downtilt design, the antenna can still be pivoted around a circular pole to mechanically adjust the beam center of the antenna. This degree of pivoting may be limited for water ingress reasons, however if the stadium antenna is completely shielded from precipitation, there is no limitation to the mechanical pivoting.



Pivoting the antenna increases the chance of water ingress through the drain holes in the radiating face of the radome. The mechanical pivoting of the antenna should be limited to 45° from the vertical plane. The antenna can be pivoted around the pole so that the beam center is raised by a maximum of 45° from vertically downwards (See figure 5). Depending on the installation site, position and surroundings the pivot angle may need to be limited to less than this to prevent water ingress.



The up arrow label at the back of the antenna provides direction of the proper antenna orientation during installation (See figure 6).

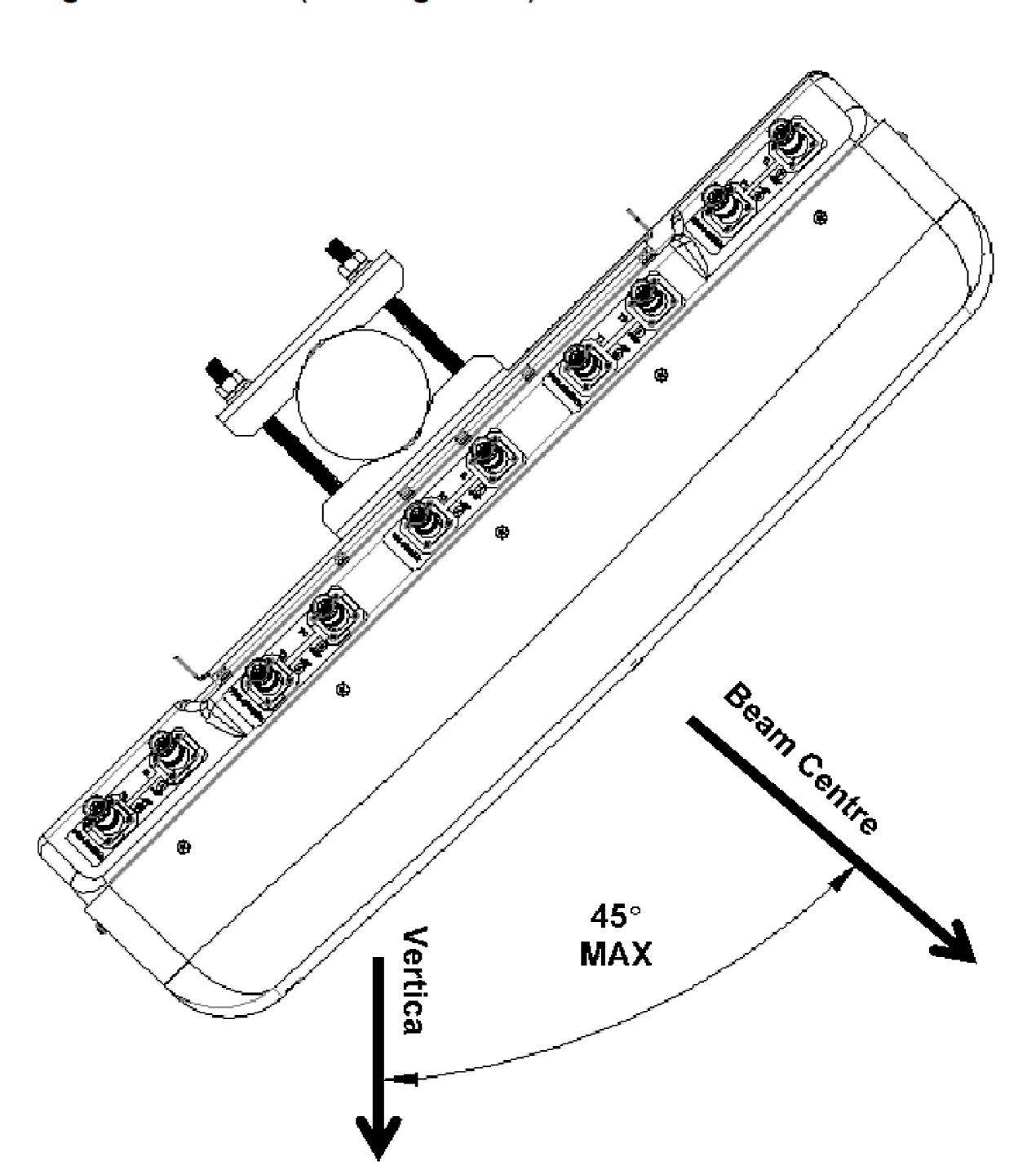
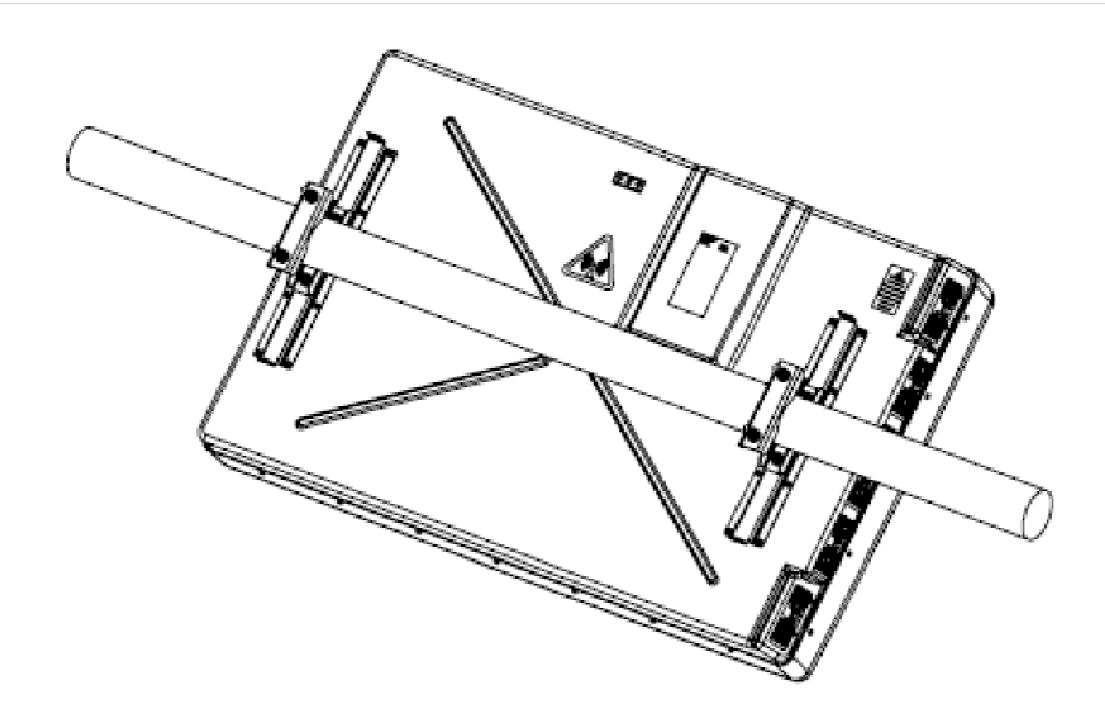


Figure 5: Maximum Pivoting of Stadium Antenna

Figure 6: Proper Antenna Orientation



Installation Instructions - RF Connection



WARNING: Do not directly connect RRH without suitable attenuation in RF path-note maximum power limit per port of 100 W.

RF Cable Connection



The 4.3-10 female connectors fitted to the antenna are designed to fit jumper cables with a standard 4.3-10 RF male connector. After ensuring both mating connectors are dry push the male connector in and tighten the connector coupling to 5-8 Nm (3.7 - 6 lbf.ft). If needed or as required by local procedures a weatherproofing kit may then be fitted to the connection.

If the RF connectors are tightened beyond the recommend torque the RF connection to the antenna may be damaged.

Figure 7 : 10 Port, Dual Polarization, Stadium Antenna

