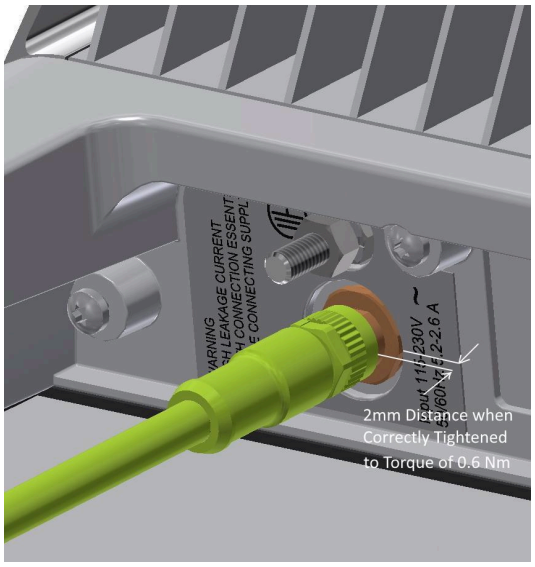
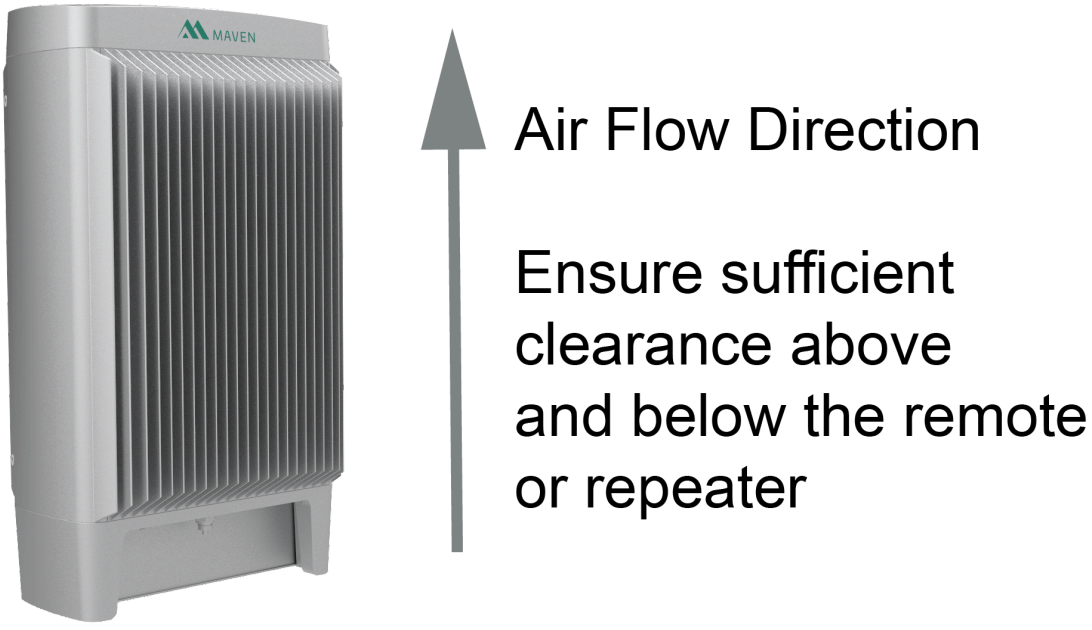
When correctly tightened the connector should sit fully home as indicated in the diagram.



Cooling requirements

In order to ensure the unit is operating within allowed temperature range, proper cooling is required. Thermal dissipation is maximum 360 Watts for a quadband operating at maximum output power in all bands.

- Mount the unit vertically with connectors / access cover down.
- Make sure the environmental operating temperature stated in the data sheet is not exceeded.
- Do not mount in direct sunlight



Antenna connection and PIM

The Antenna Connection is via a 4.3-10 Male Connector the performance of which is critical to avoiding system interference from Passive Intermodulation (PIM).

The quality of connectors, cables and all antenna system components is vital to the avoidance of PIM. PIM tested components with 4.3-10 Connectors should therefore be used throughout antenna system sections that carry high power.

In particular, the use of N type connectors and the "on site" manufacturing of antenna cables or jumpers is to be avoided. Braided screen cables are specifically not recommended.

Dirt, moisture or the slightest physical damage to connector mating surfaces will damage performance and may generate PIM.
For this reason please observe the following:

- All connector protective end caps must remain in place until the cables are ready to be joined.
- The physical condition of both connectors should be carefully examined before they are mated. If any irregularity is detected do not proceed until it has been corrected.
- Strict cleanliness must be observed during the mating operation. It should take place in dry conditions.
- Ensure that the connectors are carefully "offered up" to one another in a square orientation. Off axis alignment will damage the mating surfaces.
- Connector lock nuts must be tightened to the specified torque.
- Connector bodies and pins must not be allowed to rotate against one another during the tightening process. Support them using suitable soft jawed grips to hold their position.
- After mating apply any additional weather sealing necessary.

As faulty RF connectors inevitably cause irreversible damage to the sockets to which they are connected lack of care in connector mating can require equipment downtime and expensive repairs.

Maintenance

Orion Master Unit

The Orion only requires periodic maintenance to keep the unit clean and the cooling airways clear.

- The outside of the unit can be cleaned (when the equipment is powered down) using a damp cloth with water or mild domestic cleaning fluids as required.
- Dust should be removed from air inlet holes at front and side using a vacuum cleaner.
- The fan should be removed and the blades cleaned by wiping them with a damp cloth.
- Observe the condition of the internal heatsink on the digital board (visible through the fan aperture when this has been removed). If the fins are blocked by significant amounts of dust contact Maven Wireless Support for advice.

Apart from periodic cleaning or the updating of Radio Module and PSU Configurations as required, the fan can be replaced by the user, please contact Maven wireless for replacement/ servicing procedure and for fan part no. In all cases of suspected malfunction contact Maven Wireless Support.

Stratus, Cirrus and Cumulus units

The remote unit is designed to not require any maintenance. The unit has no user serviceable parts. In all cases of suspected malfunction contact Maven Wireless Support.

However, if the unit is installed in a very dusty area which over time might decrease the air flow around the unit and hence decreasing cooling it is recommended to perform periodic cleaning of the unit.

- Dust should be swept from the heatsink fins using a long bristled brush.
- The outside of the unit can be cleaned using a damp cloth with water or mild domestic cleaning fluids as required.