



Remote Aerial Installation Guide

General

The Directional Aerial and Vertically Mounted Aerial, are for use with all Radio Cluster Communicators (RCC's) and Radio Hubs with the remote aerial facility and are available under the following part numbers;

- FC-868-A03** FireCell Vertically Mounted Antenna c/w 3 metres of coax
- FC-868-B03** FireCell Directional Antenna c/w 3 metres of coax
- FC-868-D03** FireCell Weather Resistant Vertically Mounted Antenna c/w 3 metres of coax
- FC-868-E03** FireCell Weather Resistant Directional Antenna c/w 3 metres of coax

The Vertically Mounted Aerial can be fitted directly to the wall using the fixing bracket. It can also be fitted in conjunction with a 7235 pole mounting kit. The Directional Aerial must however be installed using the 7235 pole mounting kit. Installation must conform to BS5839: Part 1 (or applicable local codes). Both aerials are monitored with an end of line 47k resistor.

Installation

Ensure that the aerials are sited in accordance with the survey and design details. The recommended minimum distance between metal objects or other equipment from the aerial is 600mm. When using 2 external aerials, a minimum distance of 700mm is required between the aerials. This distance is also required from the Radio Hub or RCC. Note: Non weather resistant aerials must be installed internally within a building.

Aerial positions are shown below in figures 1 & 2. On the RCC, aerial positions 1 and 4 are used for the device communication path. Aerial positions 2 and 3 are both used for the network communication path. When extending the network communication path, aerial positions 2 or 3 can be utilised.

It can be seen on figure 2 that the Radio Hub also has four aerial positions. Since both sides are used for the network communication path to the RCC's, we will need to fit the aerials on both sides of the radio hub. Connection shall be necessary to aerial positions 1 and 2 or 3 and 4. These aerials should be mounted a minimum of 2 metres apart.

RCC Aerial Positions:

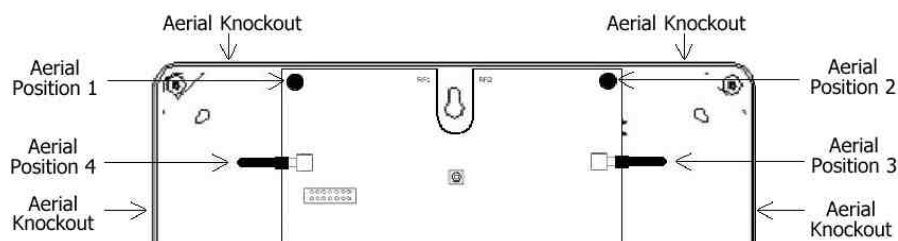


Figure 1

Radio Hub Aerial Positions:

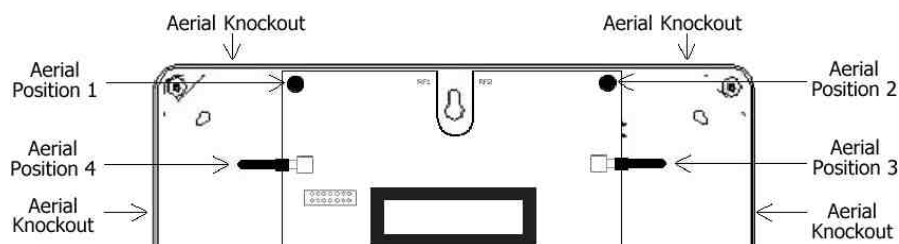
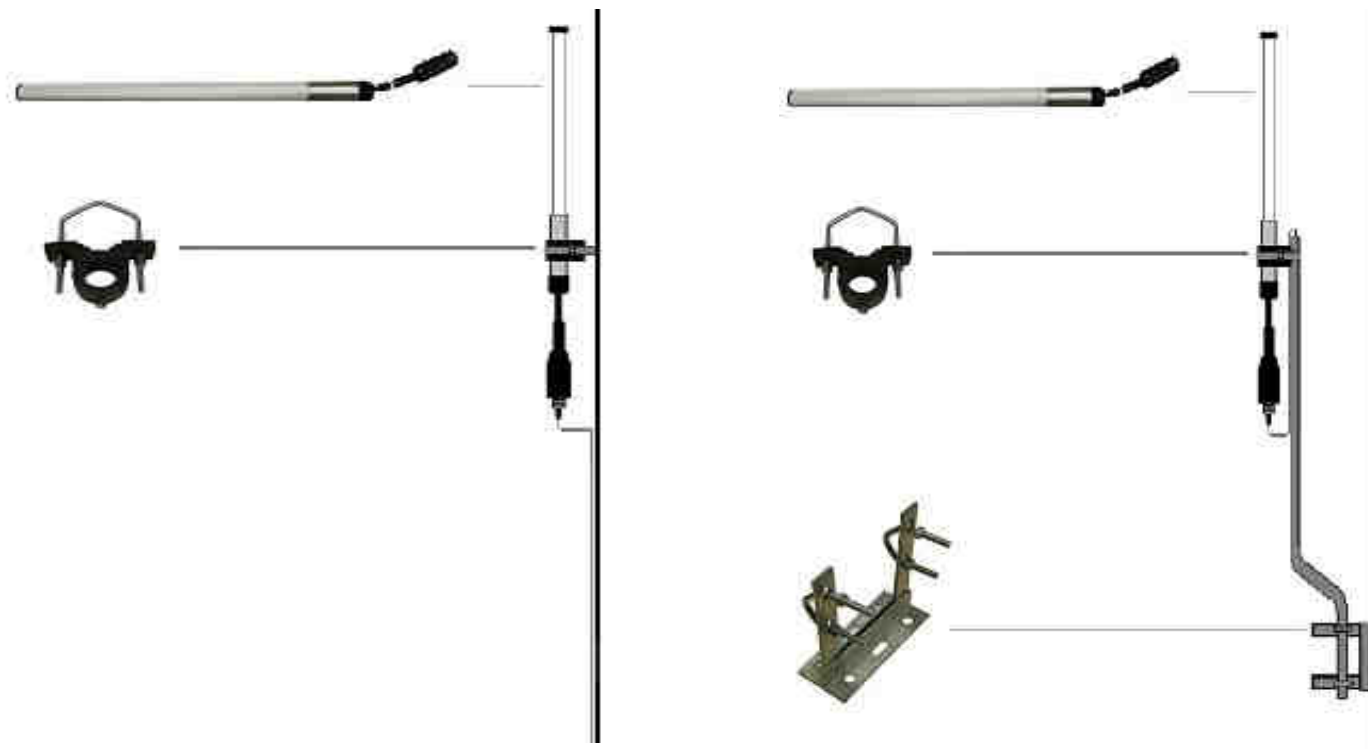


Figure 2

In order to fit the aerials we will need to remove the aerial knockouts. Care must be taken when removing knockouts, to avoid damaging the pcb. If unsure the pcbs can be removed by unclipping them from the back box. Only the knockouts shown in figures 1 and 2 should be used for routing the aerial cables. The aerials should be mounted as detailed below:

FC-868-A03 and FC-868-D03 High Gain Aerial installed directly and also in conjunction with a 7325 Pole Mounting Kit if required:-



FC-868-B03 and FC-868-E03 Directional Aerial installed in conjunction with a 7325 Pole Mounting Kit:-

