April 28, 2025

AltoPlex D621 Quick Start Guide

D621 box contents

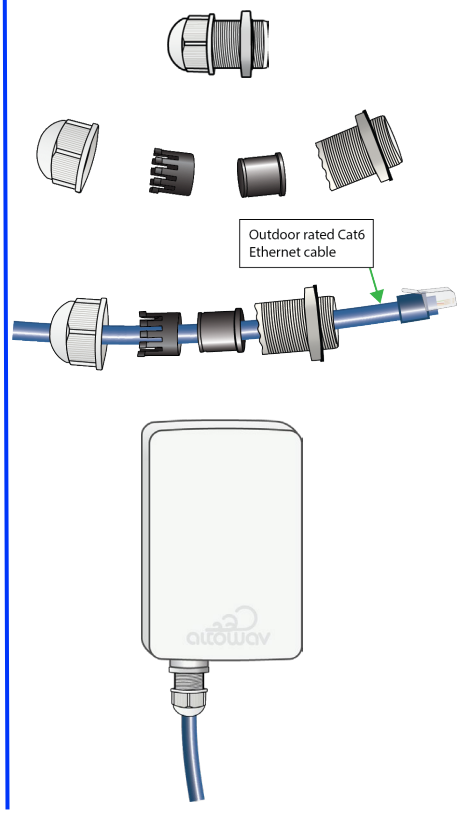
- D621 radio.
- IP67 cable gland.
- QR code card for Quick Start and User Guide.

Available Power over Ethernet (PoE) options

- Indoor PoE injector: Part number AX-P-IN-AT-5G.
- Outdoor PoE switch: Part number AX-PSW-OD-4AT-4C25
  Mounting bracket: Part number AX-PSW-OD-MOUNT.

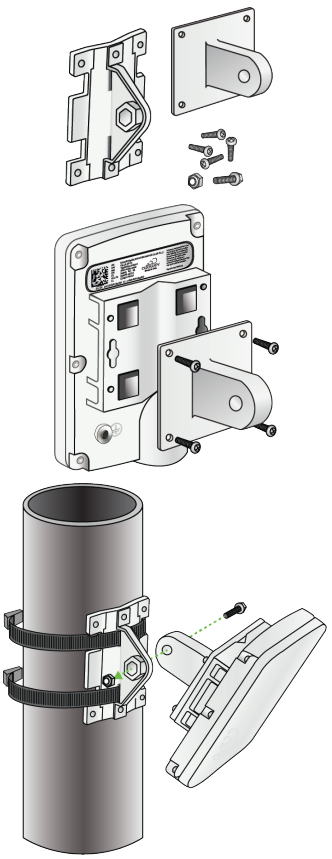
Cable gland

Ethernet cable installation

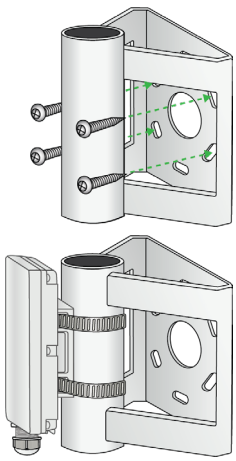


Optional mounting brackets

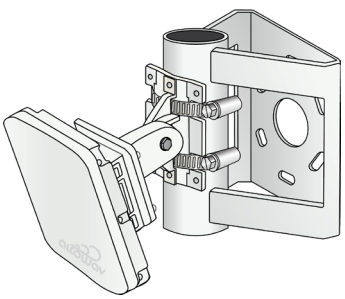
Model number: : AX-AW3-MT-EXT



Model number: AX-AW3-MT-WALL



Both mounting options combined:



Installation tips

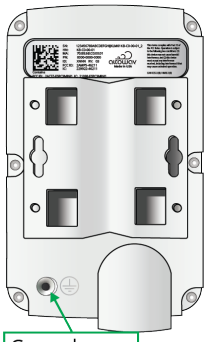
- Use a detailed network diagram to provide installation information for radios in the network.
  - Site location for installation – used for location/description information.
  - Planned role – Distribution node (DN) or client node (CN). The D621 defaults to a DN role.
    - If the radio will be used as a client node:
      - The hostname (KB-XX-XX-XX) is required to create a link to the radio. The hostname is included on the box label and listed as **HN:** on the label on the back of the radio.
      - During bench configuration, configure the radio to use the CN role. See instructions below.
- If the radio will be used as a distribution node and will link to another distribution node, use either:
  - **Bench configuration** — Configure radio connections prior to installation. With this method of configuration, distribution nodes must be specifically installed to match the configured radio links. See page 3 for details.
  - **DN link auto-configuration** — Radios can be installed in the field without prior configuration, and the links established after installation. This does not require that distribution nodes are installed in a specific order. See page 4 for details.
- If the D621 is repositioned or re-aimed after connections are made, reset the **DN responder** or **CN responder** for the link, reboot the device, or power cycle it to refresh connections.

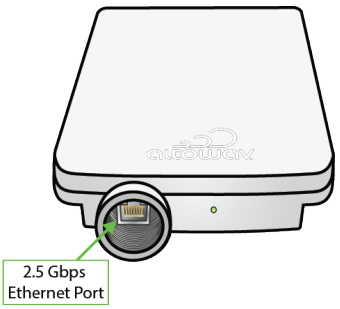
  After resetting a link, run traffic through it to verify radio stats and MCS levels per network baseline.

Installation

Note: If bench configuration is used, perform the configuration prior to installation. See page 3 for instructions

1. Attach a ground wire to the ground screw.
   Local codes determine whether grounding is required or optional.
2. Securely mount the D621 on a pole or wall with clear line of sight (LOS) for the wireless link, and no obstructions to GPS above the unit.
   - Make sure the device is aimed for clear LOS to client nodes and, if applicable, to the distribution node at the remote end of the wireless link. Mounting bracket Model AX-D6C4-MOUNT is recommended for a secure mount on a pole or wall.
3. Connect to PoE:
   - Install Cat6 cable into Ethernet port of the D621 and the other end into the PoE injector/switch.
   - Power up the PoE injector/switch.
4. Verify power. LED is red while powering up, then flashing green/red while booting, then flashing green (waiting for wired or wireless links) or solid green (wire connection and at least one wireless connection).





Connecting to the radio

1. Provide power to the radio by using either a PoE injector or a PoE switch. Connect your computer to the LAN port on the injector, or to the network.
2. Access the WebUI of the radio by by typing **https://*hostname*.local** or **https://*ip_address*** in your browser's URL address bar.
   - By default, AltoPlex radios use dynamic IP assignment and also have a default fallback IP:
     - Release 3.6.0 later: 192.168.0.1. Radios upgraded to 3.6.0 will have a default IP of 192.168.0.51 unless they have a different configured static IP address or have been factory reset.
     - Prior to 3.6.0: Default IP provided on a sticker at manufacturing time.
     - You may need to reconfigure your computer's networking to be a member of the radio's subnet (for example, 192.168.0.x).
   - If your computer supports mDNS and is on the same subnet as the radio, you should be able to use the hostname.
   - To access the radio by using Wi-Fi, you must be in close range of the radio — generally within 10 -20 feet. By default:
     - The SSID of the access point corresponds to the hostname of the radio (KB-XX-XX-XX).
     - The password for the access point is AltoWav@123.
     - The IP address of the radio for Wi-Fi management purposes is 192.168.5.1.
3. At the warning screen, click **Advanced** and then **Proceed to...**
4. Click login to log into the WebUI. The default password is **admin**.

Bench Configuration

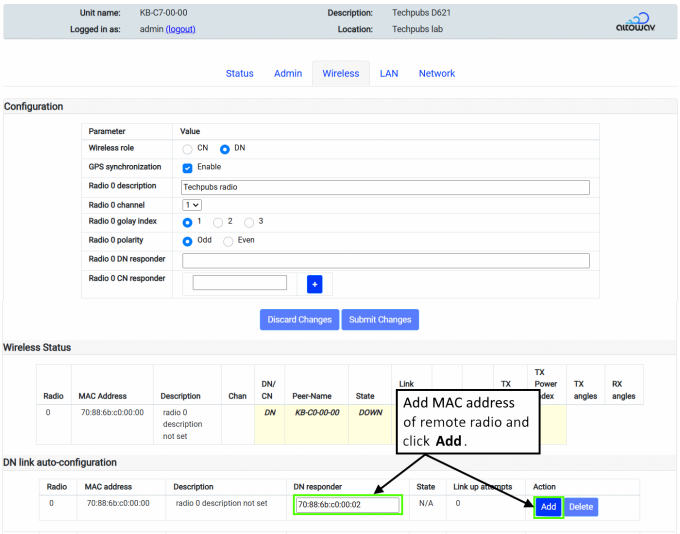
By default, GPS is required to initiate links between devices. If you are testing radio links indoors, or in locations with weak GPS signals, the link may not properly form. In this case, disable GPS synchronization on the Wireless tab and reenable GPS before installation.

1. Log into the WebUI of the radio as described in **Connecting to the radio**, above.
2. Click on the **Admin** tab and set the location and description of the radio. This is useful for install and troubleshooting. Click **Submit Changes**.
3. Click on the **Wireless** tab.
   - If the radio is being configured as a client node, For **Wireless role**, select **CN**.
   - If the radio is being configured as a distribution node, the following parameters must be configured on both radios:
     - **Wireless role** — Must be set to the default of DN.
     - **Radio 0 DN responder** — Must be set to the MAC address of the other distribution node in the link.
     - **Channel** — Both distribution nodes must be set to the same channel.
     - **Golay index** — Both distribution nodes must be set to the same Golay index.
     - **Polarity** — Must be set to the opposite polarity of the other distribution node.
4. Click **Submit Changes**.
5. Make other changes on the **LAN** and **Network** tabs as necessary. Click **Submit Changes** at each tab.

DN link auto-configuration

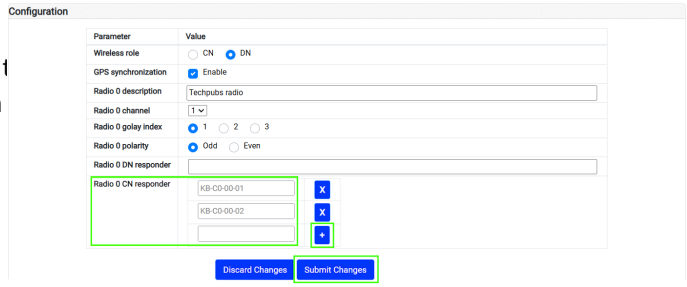
To create a link two distribution node roles:

1. Log into the WebUI of the D621 that is initiating the link, as described in **Connecting to the radio** on page 3.
2. Click the **Wireless** tab.
3. In the **DN link auto-configuration** section, for **DN responder**, add the MAC address of the D621 that will be linked to the initiator.
4. Click **Add**.



Configure links to client nodes

Note: Links to client nodes should be created at t time that the client node is installed, rather than configuring the links prior to installation.



1. Log into the WebUI of the D621 that is initiating the link, as described in **Connecting to the radio** on page 3.
2. Click the **Wireless** tab.
3. In the **Configuration** section, For **Radio 0 CN responder**, type the hostname (KB-XX-XX-XX) of the client node.
4. Click **Submit Changes**.
5. Verify connection as devices are installed. Click + to add additional client nodes.

Additional help

Altowav is committed to providing our customers with high quality technical support. Contact us at:

support@altowav.com

support.altowav.com

