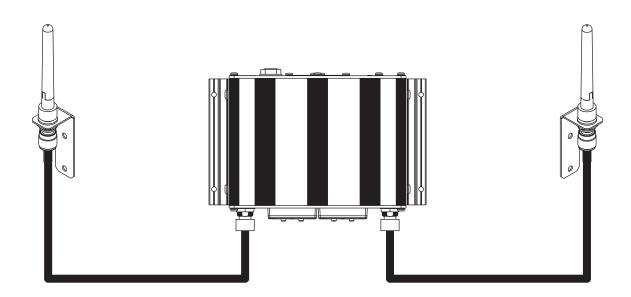
ClearOne®

DIALOG® 20 Wireless Microphone System Antenna Installation Guide



ClearOne DIALOG 20

The ClearOne DIALOG 20 Wireless Microphone System is a compact, feature-rich, and complete 2-Channel Wireless Microphone System built on the 2.4 GHz RF band and utilizing spread spectrum, frequency-hopping technologies to deliver a simple-to-use, robust, and secure wireless microphone system. The system consists of a Receiver with two, built-in, passive antennas. When using a ClearOne Antenna Cable Kit, the antennas can be extended to either 10' or 25' lengths in either direction easily accommodating most conference requirements and room types. These Plenum-rated antennas adhere to most municipal fire codes, and therefore, they can be extended inside ceiling crawl spaces for discreet installation. The available transmitters include: Boundary tabletop, Gooseneck podium, Handheld and Beltpack.



Example of "A" and "B" antennas with antenna cable kit configuration.

Receiver-Mounted Antennas:

DIALOG 20 Receivers come with two, Plenum-rated, dipole antennas.

- Mount the antennas on the front of the receiver using a non-conductive adhesive on the threads of the Female TNC Connector.
- Tilt the antennas slightly outward.



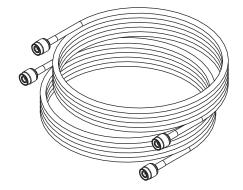
Antenna Cable Kits:

DIALOG 20 Antenna Cable Kits are available in two lengths.

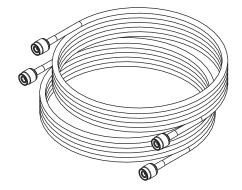
The DIALOG 20 Antenna Cable kit can be used to extend the passive, Plenum-rated, dipole antennas that are included with the DIALOG 20 Receiver.

Choose either a 10' (ft) or 25' (ft) Antenna Cable Kit.

Includes required hardware. <u>Does not</u> include antennas or adhesive.



10' (ft) length for small rooms (RG58 Plenum Cable) SKU: 910-6105-011



25' (ft) length for large rooms (RG8 Plenum Cable) SKU: 910-6105-021

Confirm the Box Contains the Following:

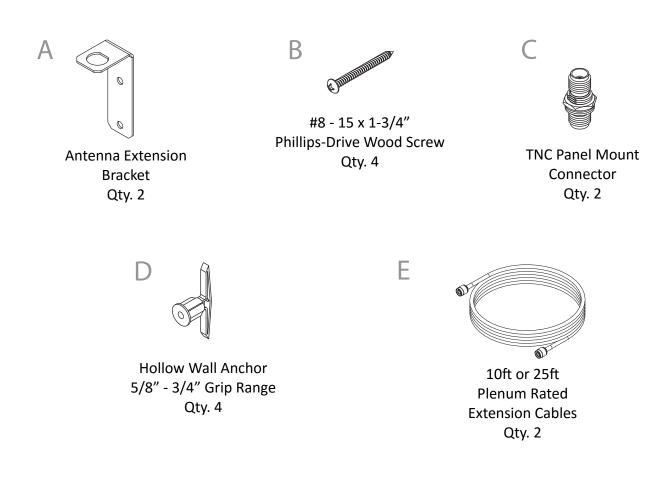
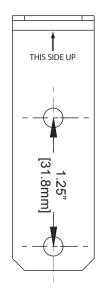
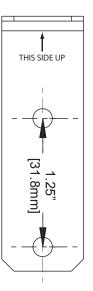


Fig. 1 Bracket Hole Templates (Actual Size)

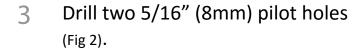


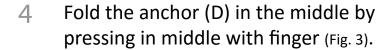


Use these cable extension brackets templates to mark the pilot holes.

Hollow-Wall Antenna Installation:

- 1 Determine required mounting location.
- 2 Using the antenna extension brackets or the templates (fig. 1; Pg. 2), mark the two (2) mounting hole locations.





- Insert anchor in hole and tap flush with a hammer (Fig. 4).
- Use nail or small screwdriver to pop anchor open behind hollow wall (Fig. 5; not necessary for thick or solid walls).

Do not hammer nail or screwdriver.

- 7 Remove the nail or screwdriver.
- 8 Repeat steps 4 7 for the second anchor.

 To avoid interference, only one anchor should be installed vertically.
- Secure antenna extension bracket (A) using two (2) wood screws (B) (Fig 6).
 Do not overtighten screws.

Hollow wall anchors (D) may be used as wedge anchors in walls thicker than 3/4" or as expansion anchors in solid walls.

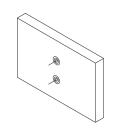


Fig. 2 Wall Anchor

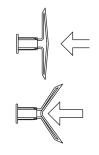


Fig. 3 Wall Anchor



Fig. 4 Wall Anchor Flush

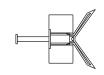


Fig. 5 Wall Anchor open in wall

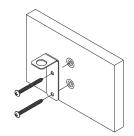


Fig. 6 Secure Bracket to Wall

ClearOne_® DIALOG[®] 20

Wood-Stud Antenna Installation:

- 1 Determine required mounting location.
- Using the antenna extension bracket or the template (fig. 1; pg. 2), mark two (2) mounting hole locations.
- 3 Drill two 7/64" (2.5mm) pilot holes to a depth of 1-3/4" (45mm).
- 4 Secure the antenna extension bracket (A) to the structure using two (2) wood screws (B) (Fig. 7).

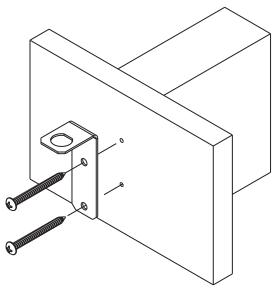


Fig. 7 Wood Stud Wall Mount Installation

Mounting Antennas to Wall, Ceiling or AV Rack:

- Mount antenna over-head and within line of site to transmitters. The dipole antenna's reception is strongest at the sides of the antenna with a null point at the tip. Therefore, it is best to tilt the antenna so that the side faces the transmitters.
 - Wall Mount (Fig. 8).
 - Ceiling Mount (Fig. 9, 10, 11).
 - Ceiling Mount RX with PoE to CONVERGE® Pro 2 or Beamforming Mic Array 2 (Fig. 11).
 - AV Rack Mount (Fig. 12).
- 2 Separation distance of antennas should be a minimum of 2' (ft.) and maximum of 30' (ft.).
- 3 Attach TNC panel mount connector (C) and secure both the antenna and the extension cable (E) to the antenna extension bracket (A) by using a non-conductive adhesive on the threads of both sides of the TNC Panel Mount Connector (Fig. 8).

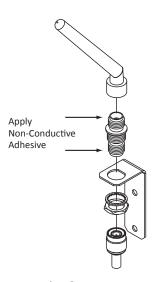


Fig. 8 Antenna Bracket Assembly Wall Mounted

- 4 Attach the other end of the extension cable to the DIALOG 20 Receiver and secure by using a non-conductive adhesive on the threads of the Female TNC Connector.
- 5 Repeat steps 1 to 4 for the second antenna and extension cable.

Suggested Mounting Options: Power Over Ethernet To CONVERGE Pro 2 or • III II • To Receive Beamforming Mic Array 2 Fig. 9 Fig. 10 Fig. 11 Fig. 12 Plenum-Rated Antennas Receiver Mounted on Plenum-Rated Antennas Antenna Mounted in the Crawl **Outside of Ceiling Tile** Mounted below the Position with PoE to CONVERGE Space above the Ceiling Ceiling Tiles. **AV Rack** Tiles using 3rd party Pro 2 or Beamforming Mounted "T-Bracket". Mic Array 2

Professional installation is required. Installer is responsible for securing antennas with a non-conductive adhesive and ensuring mounting hardware is appropriate to their particular installation.



CLEARONE LOCATIONS

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