



A20-EC Antenna

Installation Manual



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Warnings

The 3D-iD Antenna is intended for indoor use only. Use of the Antenna outdoors can cause damage to its internal components. Contact your PinPoint sales representative for details regarding outdoor use of the 3D-iD system.

Do not mount the Antenna in places that are excessively humid or where it is likely to get wet.

When placing your antenna, keep in mind that metallic objects, dense walls, microwave ovens and other obstacles can alter radio signals, limiting the Antenna's effectiveness. See your certified system integrator for proper Antenna placement.

The antenna must be installed so that there is at least a 6 inch gap between it and any possible contact with people. Failure to install it in this fashion may invalidate the user's license to operate this product.

Included In This Package

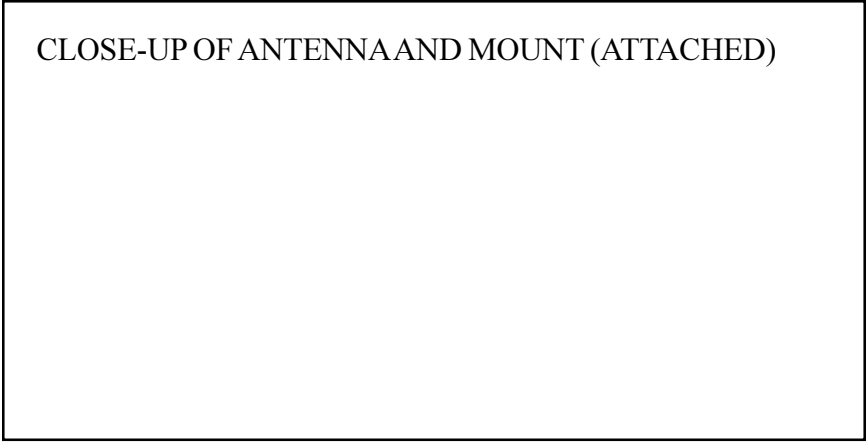
1 Antenna

1 Antenna mount, including:

- 1 Base plate
- 1 Mount post
- 1 Mounting Plate
- 2 Screws (1/2")
- 2 Washers
- 1 Allen wrench

1 Antenna card (optional)

CLOSE-UP OF ANTENNA AND MOUNT (ATTACHED)

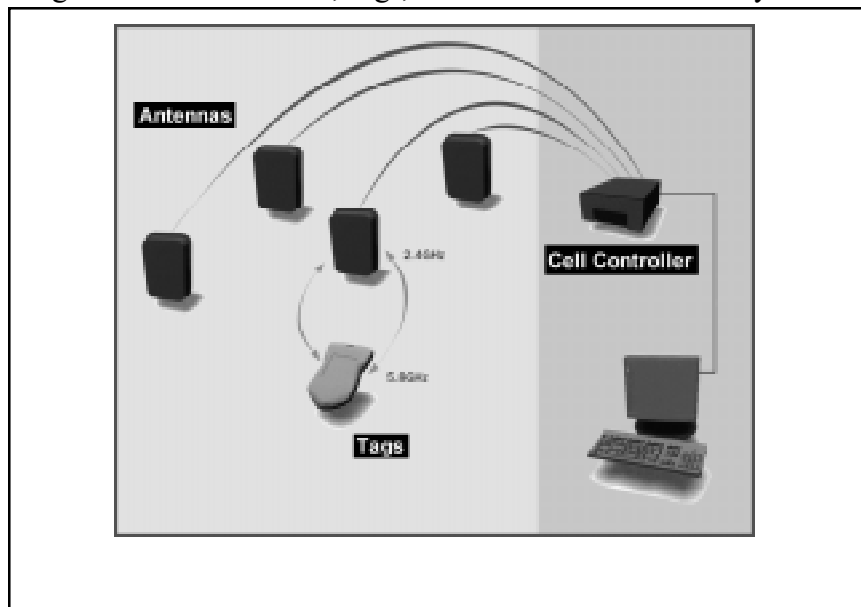


About Antennas

The 3D-iD Antennas are attached to the Cell Controller and are DC powered by special, low-loss Coaxial Cables. Up to sixteen (16) Antennas may be attached to a single Cell Controller. The Cell Controller generates a 2.44GHz radio signal which it sends to the Antenna via the Coaxial Cable connecting them. The Antenna broadcasts the signals to the surrounding area with an ellipsoidal radiation pattern. Any Tags that are within range receive the signal, add their serial number, and transfect the signal back to the antenna at 5.77GHz. The Antenna then sends the response back down to the Cell Controller which measures the delay between when the signal was sent and when it was received, thus generating Tag-Antenna Distance (TAD) data.

The Antennas come with a mount allowing them to be attached to a flat surface, such as a wall. For other mounting configurations, please contact your certified 3D-iD system integrator.

Diagram of Cell Controller, Tags, Antennas and the Software system.



Antenna Placement Tips

The exact location of Antennas will be determined by a certified 3D-iD system integrator. The Antennas will be positioned to optimize the locating capability of the system in accordance with the requirements set forth by the customer.

The Antennas should be mounted in locations that prevents accidental contact or intentional destruction. Mounting the Antennas near ceilings and out of reach is strongly recommended.

The Antennas should not be placed very close to metal walls, microwave ovens or other objects that will hinder their performance. Metallic objects and dense walls can alter the radiation pattern of the Antennas.

The Antennas must be placed within sufficient distance of their corresponding Cell Controller (100 feet). The Coaxial Cables connecting an Antenna to its Cell Controller must not be stretched, kinked or otherwise damaged during Antenna installation.

The antenna must be installed so that there is at least a 6 inch gap between it and any possible contact with people. Failure to install it in this fashion may invalidate the user's license to operate this product.

Mounting the Antenna

The Antenna mount is intended for flat walls of varying construction. Please contact your certified 3D-iD system integrator for other mounting applications.

- 1) Using the appropriate hardware, securely attach the circular baseplate of the mount to a flat surface in the desired location. Ensure sufficient clearance is left between the baseplate and any nearby ceilings and walls to allow for full adjustment of the Antenna once it is mounted.
- 2) Attach the mount's post to the base plate. Tighten the lock nut with a pliers.
- 3) Prepare the Antenna by attaching the small, rectangular mounting plate to the back of the Antenna with the two (2) included 1/2" screws and washers.
- 4) Attach Antenna to mount by aligning the mounting plate on the Antenna with the threaded bolt at the end of the post and rotating the Antenna until it stops. Tighten the locknuts to secure the Antenna.

PICTURES OF 1) BASE PLATE AND POST IN WALL
2) BACK OF ANTENNA WITH MOUNTING PLATE

Installing the Antenna

- 1) Loosen both set screws on the mount with the enclosed wrench. Align the Antenna so it is oriented in the direction indicated by the system integrator. Tighten both set screws
- 2) Attach the Antenna to its appropriate Coaxial Cable. For tension relief, insert a tie wrap through the guide on the back of the antenna and secure the Coaxial Cable with the tie-wrap.

PICTURE OF MOUNTED ANTENNA

Technical Specification

Frequency: Tx: 2442 ± 83.5 MHz
Rx: 5800 ± 150 MHz
Power: 12 V DC (supplied from coaxial cable)
Radiation Pattern: Ellipto-conical (62° azimuth, 32° elevation)
Dimensions: 10" x 7" x 2"
Environment: -20°C – 40°C (operating range)
5% - 95% humidity, no condensation
See Cell Controller/Antenna Data Sheets for details

PinPoint Corporation

One Oak Park Bedford, MA 01730

<http://www.pinpointco.com>

phone: 781-687-9720

fax: 781-687-9730