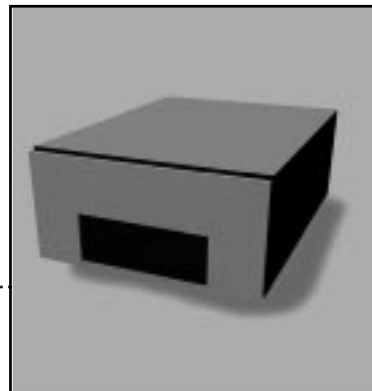


Cell Controller

Installation Manual

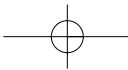


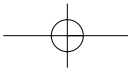
Warnings	2
Included In This Package	3
About Antennas	4
Placement	5
Mounting	6
Installing	7
Technical Specification	7



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PinPoint Local Positioning Systems





! Warnings

Always place the Cell Controller in a well ventilated area.

Never block the Cell Controller's air vents.

Keep the Cell Controller away from water.

Never attach the Antenna cables while the Cell Controller is powered on! Equipment damage may result!

Do not overtighten the Coaxial Cables!

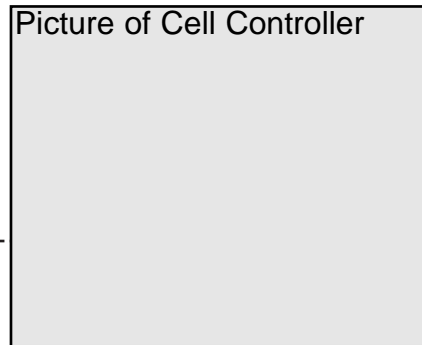
Do not kink or tightly bend the Coaxial Cables!

Changes and modifications not expressly approved by PinPoint Corporation could void the user's authority to operate the equipment.

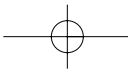
Included in this package

1 Cell Controller

1 AC power cord



PinPoint Local Positioning Systems



Installing Cell Controllers

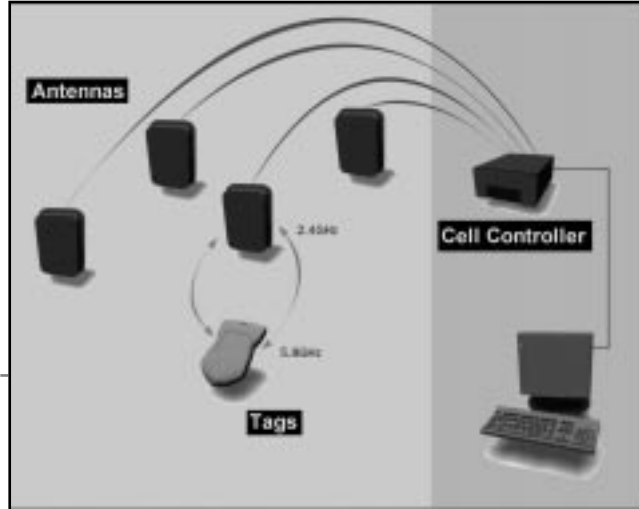
About Cell Controllers

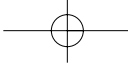
The Cell Controller is the primary data collection tool of the 3D-iD system.

The Cell Controller coordinates the Antennas broadcasts and then analyzes the signals returned by the Tags.

To do this, the Cell Controller broadcasts spread spectrum signals at 2.44GHz to the 3D-iD Tags via its attached Antennas. It then measures the total time transpired until the return signals (at 5.77GHz) are received from the Tags. Using this information it calculates the distance the Tag is from the Antenna, called Tag Antenna Distance (TAD) data.

The Cell Controller sends the data it generates to the ViewPoint Software via a standard ethernet link. The software will, using the data collected from several Antennas, accurately determine a Tag's location.



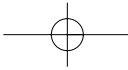


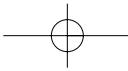
Cell Controller Placement

The Cell Controller must be located sufficiently close to each of its antennas in order to account for a fixed cable length (100 feet).

The Cell Controller must be located in proximity to a standard AC power outlet (grounded) and an appropriate network jack.

The Cell Controller must be placed in a location with adequate ventilation.



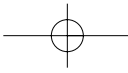


Mounting the Cell Controller

The Cell Controller may be placed upon any sufficiently sturdy, flat surface such as a table or a desk. Remember to allow for adequate ventilation.

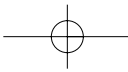
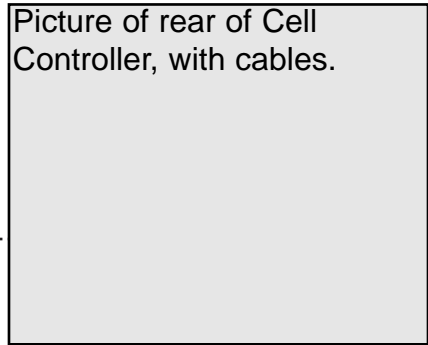
Other Cell Controller mounts that may be purchased separately through your PinPoint sales representative are:

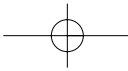
- Horizontal Mount
- Vertical Mount
- Durable Mount (NEMA rated for harsh environments)



Installing the Cell Controller

1. Attach the enclosed power cord to the AC outlet on the Cell Controller. Plug the power cord into the wall outlet.
2. Attach the appropriate network cable (ethernet) to the Cell Controller. The ethernet cable should be connected to the ViewPoint network.
3. Attach up to 16 Antennas (depending upon the system layout) to the antenna ports using the specified 3D-iD Coaxial Cables (shipped separately). Attach the Antennas where indicated by your certified system integrator.
 - Never attach the Antenna cables while the Cell Controller is powered on! Equipment damage may result!
 - Do not overtighten the coaxial cables!
 - Do not kink the coaxial cables!
4. Turn on the Cell Controller using the power switch. The Cell Controller will enter a mode where it continuously searches for the server software on the network.





Maintaining the Cell Controller

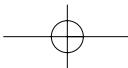
Once operating, the Cell Controller will continue to function with minimal maintenance.

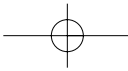
Dust Screen

There is a permanent dust screen covering the ventilation fan that should be checked every six months. If necessary, the guard and screen should be removed, cleaned and replaced. Be sure to power off the Cell Controller before cleaning the screen.

Fuse

The Cell Controller's fuse (#313-xA 250V fuse) should be replaced as necessary.





Technical Specifications

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Frequency:

Tx: 2.442 GHz

Rx: 5.770 GHz

Radiated Power: <1 W EIRP

AC Power: 110/220V AC, 50/60 Hz

Read Range: 125 feet

Performance: Detect a 3 second tag in a population of:
200 tags within 10s (99% confidence)
500 tags within 25s (99% confidence)

Dimensions: 18 x 9 x 6

Environment: -20 C 50 C (operating range)
5% - 95% humidity, no condensation

See Cell Controller Data Sheets for details

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