

## Tech Brief: Linking multiple iCue base receivers with CAT5 cable.

For a large venue lecture hall that seats over 250 students you may need to install additional iCue base units to get full coverage.

The seating capacity is only a rule of thumb, as one iCue base can receive an unlimited number of remotes, it is the system range and room obstructions that determines when additional iCue Bases are required.

There are a lot of factors that contribute to the realized range of the iCue system, including dimensions of the room, iCue base placement (i.e. inside a podium, or outside with exposed antenna), room layout and construction materials, room obstructions (i.e. columns and walls) and a host of others with detrimental combinations.

Setting up a large room should begin with a simple performance test as follows:

1. Connect an iCue base to the (powered up) podium computer.
2. Place the iCue base where you intend it to be located throughout the semester.
3. Test that an iCue remote gets a green light acknowledgment on a button press at various seating locations in the room with special attention to worse case seats (i.e. farthest away from the podium) and worst case conditions (i.e. holding the remote low and behind the seat in front).

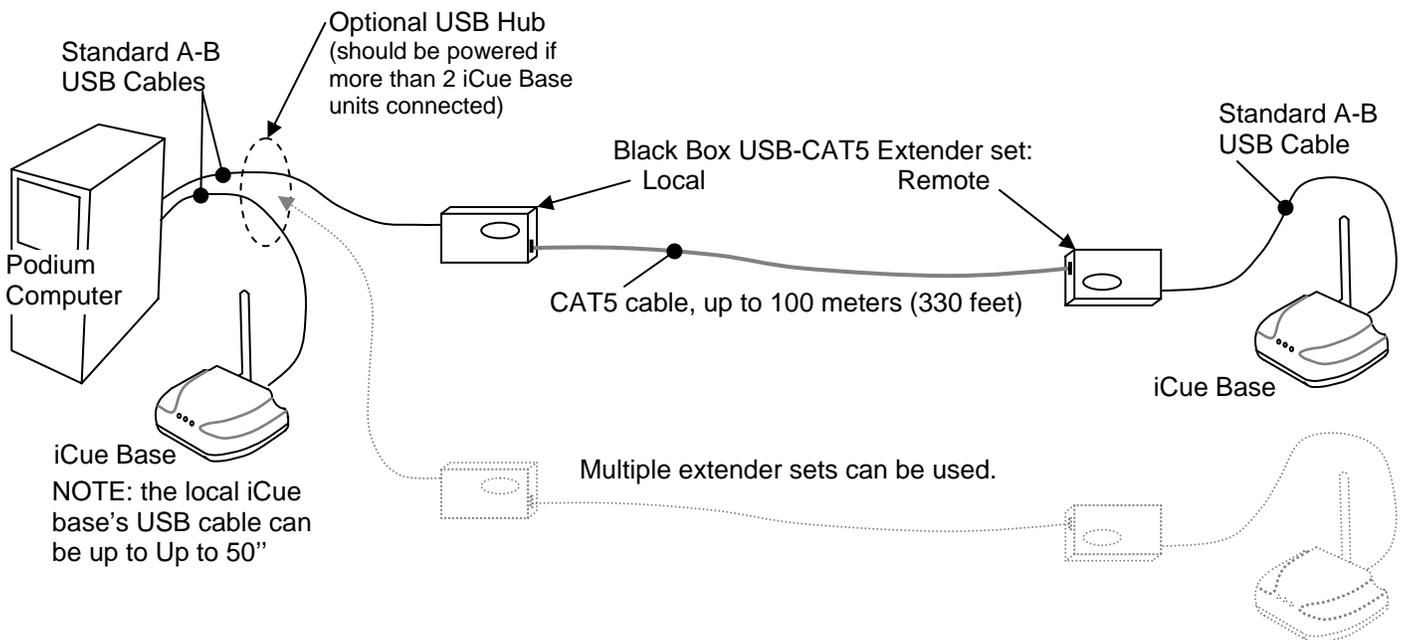
If this test goes well (i.e. always get a green light) then the single podium located iCue base should be fine. However, the room conditions will change when populated with students, typically for the worse. So if there are any concerns with empty room testing you should consider adding an additional iCue base, or relocating the single iCue base.

If relocating your current desktop iCue base so that the antenna is exposed is not an option, or still does not perform then H-ITT offers the following solution:

Use a powered USB-CAT5-USB extender set to centrally locate the iCue base, or add additional iCue base(s) at the far end(s) of the room. There are several commercial solutions available for this application. H-ITT has tested and recommends Black Box Network Services part number Part # IC245A for this application:

[http://www.blackbox.com/Store/Results.aspx/search-IC245A-R2%60%60si\\_product](http://www.blackbox.com/Store/Results.aspx/search-IC245A-R2%60%60si_product)

This allows you to run a low cost CAT5 cable up to 100 meters (330 Feet) and supply power to remotely located iCue base units as depicted below.



H-ITT offers special order iCue base unit(s) with mounting hardware that can be used to mount the remotely located iCue base to a wall or ceiling. Contact [support@h-itt.com](mailto:support@h-itt.com) or call support at 888-322-0089 for additional information.