

## Application Note:

### Overview: Considerations for the set up and operation of 16 channel systems.

The purpose of this document is to outline some basic steps for successfully implementing a 16 channel Revolabs Executive system. The first important consideration is making sure there are no other 1.9GHz devices operating within a distance that would interfere with the operation of the Revolabs system. It is also important that the antennas are within a direct line of site where the microphones are to be used.

1. Placement of the rack mount bases and orientation of Antennas. The 2 base units should be mounted high in the rack. Take care to position the antennas on the base so that they do not overlap. Place one set of antennas pointing upward and the lower unit pointing down. The antennas must be facing the area in which the microphones are to be used. There should be no heavy walls or metal doors between the bases and microphones.
2. Before connecting the buss of the 2 bases and switching the systems into local and remote modes to set them up as a 16 channel system, pair all the microphones first. Do this by powering up each base separately and pair the first 8 microphones (as outlined in the manual) then shut the base off. Then pair the next unit the same way.
3. Next set each unit into the proper channel mode. Set 1 unit in A channel mode and the other to B channel mode operation (as outlined in appendix B of the manual). This is achieved by pressing and holding the odd numbered buttons (1,3,5,7) on the front of base and powering the unit up. The odd numbered LED will begin to flash green to indicate the 3 modes of operation. One green, two green and then three green LED flashes and will cycle again as long as you hold the buttons. For A mode you will release on the second flash of two green flashes and for B mode on the third flash of three green flashes. This step can be performed individually, in pairs (1+3 & 5+7) or all at once. You can confirm that you have successfully place the unit into the correct modes by cycling the power of each and making sure all the odd LED are flashing the correct mode (2 flashes for A and 3 flashes for B).
4. With the power off on all units, connect the buss cable between both units. On the unit set for A mode, leave the "Local/Remote" switch in Local. On the unit set for B mode switch the "Local/Remote" switch to remote.
5. Now power up both units. It is best if they either all power up at the same time or alternately the Local unit powers up first then the Remote unit.
6. Remove the microphones four at a time and spread them out as they would normally be configured. Give them a moment to establish communications with the base then continue to remove them four at a time until they are all deployed.

**Note:** A common mistake when testing our system is to remove all the microphones and cluster them together in very close proximity to each other. When a large number of microphones are positioned in this way maintaining RF transmission will become difficult for many of the microphones. It is important that when testing the operation of the microphones that they are placed as they would normally be used (spread out).