

# Alexander Dennis Double Decker PA Replacement

We are often approached by fleet managers because the factory installed PA system in their used Alexander-Dennis Double Decker has been removed or doesn't work. If working, they often ask about a headset or wireless mic upgrade that the factory system doesn't support.

Ready2Talk is your solution.

#### Before you start, here are some quick points to consider.

- Replacing or installing the PA in a Double Decker Bus is often seen as challenging, but when you step back, it's a normal PA installation only with the speakers upstairs and downstairs, compared to speakers front and back.
- Although the installation is not difficult, having some car audio installation or vehicle wiring experience is advisable, but you don't have to be a rocket scientist.
- Please approach the project with your overall needs firmly in mind. Will you be using a live step on guide or 2 guides, recorded narration, video or a karaoke tour? It doesn't have to be complicated or expensive, you just need to start with a clear plan.
- Since many of these DD buses were originally designed for Transit not Tourism, their limited number of speakers may not be adequate for proper sound distribution in its new role.
- Adding additional speakers will solve the sound distribution issue, the PA 64 can easily power the additional speakers and you can use the factory wiring that feeds the existing speaker zones.
- A word of wisdom; don't use a mix of old and new speakers, replace them all with new 4 Ohm speakers. They are inexpensive and it will guarantee a successful outcome and could save you hours of diagnostic work.
- There are easy to follow speaker wiring diagrams in our PA 64 manual, so your new number of speakers will safely work within the PA 64's connection design parameters.
- If you have an open top Double Decker, or are building a party bus, it may be recommended to add a secondary amp to overcome the increased ambient noise.
  - But before you add an amp, first address how many speakers you'll need for proper sound distribution. Just increasing the volume to a limited number of speakers can really annoy the people sitting directly under them and others still won't hear properly.

# Wrapping up

Correctly choosing the PA, microphones and number of speakers will play a big role in your new system's overall success. It doesn't have to be complicated or expensive, just tell us your plans for your Double Decker and we're here to guide you along.

#### **Installation Instructions**

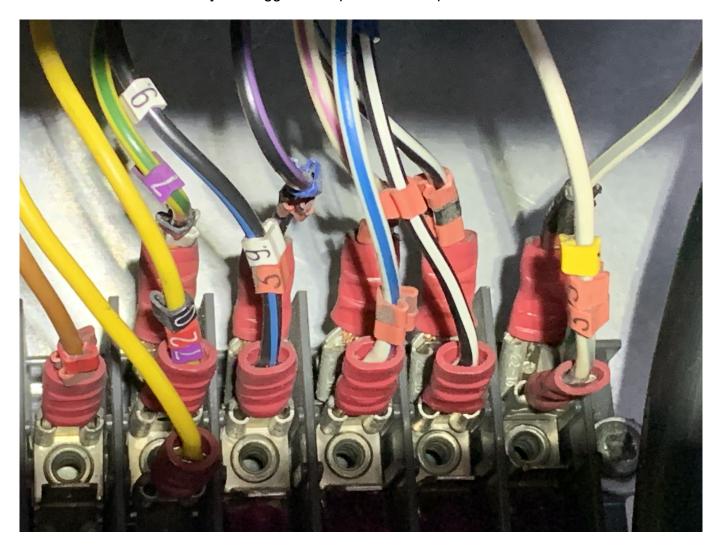
**Note:** The speaker wire info below was supplied from one of our fleet customers previous installations. Please use this info as a reference and contact us if you have any questions before proceeding.

The factory speaker wires can be found in an enclosure above the driver's side window. You'll find a jumper panel connecting the 2 wires for the upper right to the 2 wires for the lower right speaker wires, same for the upper and lower left speakers. (See Image below)

Once identification is confirmed, each zone can be disconnected from jumper panel and connected directly to the PA 64 output wires using the following colour codes.

Upper Left + Gry/Wht to Upper Left - Blk/Wht to	Upper Right + Blk/Pur to Upper Right – Wht/Pur to	
Lower Left + Wht/Gry to Lower Left – Wht/Blk to	Lower Right + Blk/ Blu to Lower Right – Wht/Blu to	•

**Note:** If you want to confirm each speaker zone, quickly touch a 9V battery across each pair of speaker wires and you'll hear the clicking from all speakers connected to those wires. If no sound is heard that generally means one speaker in that zone is defective which will disable the entire zone. This is why we suggest to replace all the speakers with new.



### For Open Top Double Deckers

- To offset the increased outdoor ambient noise, we suggest connecting a 2 x 100W speaker level input amp between the PA 64's Green and Purple output wires and the upper speakers.
- 2. Leave the PA 64's Gray and White output wires connected directly to the lower speakers as noted above.
- 3. Since both the upper and lower speakers are controlled by the PA 64's mic volume control, it is important test the upper and lower speaker volumes then set as required.
- 4. First set the Mic Volume control to your desired volume level for the downstairs speakers. Normally about 50%.
- 5. Once the downstairs mic volume is set, then without adjusting the mic volume, adjust the input gain on the amp to match the required output level to the upper speakers. Now when the mic volume knob is adjusted, both levels will adjust proportionately.

### Connecting a Stereo to the PA 64

An aftermarket stereo can easily be connected to the PA 64 using an RCA cable. Once connected, set the PA 64's input switch to LOW.

When playing music from the stereo, the position of the PA 64's front mounted "Audio Mute" knob presets what happens to the music when the mic is turned on. It is completely user variable from 0% to 100% music muting. This is great feature for karaoke tours.

## **Mic Options**

Ready2Talk has many microphone options, from hand mics to headsets, wired and wireless, even a gooseneck and with the PA 64's dual mic inputs, you can use 2 x mics individually or simultaneously.

If the tour guide is upstairs is using a wired mic, you'll need to pre-run a mic extension cable upstairs. 1 x RME 20 and 1 x 4P EXT15 giving you a combined 35 ft. cable.

But, when using a *Ready2Talk* HM BT4 wireless hand mic or HS BT4 wireless headset; even though the receiver box connected to the PA 64 downstairs, the range is completely reliable throughout the upper level. A wireless mic also allows your guides to interact with all your guests and you save the cost and time to run a wired mic extension cable upstairs.

# Wrapping up

Until now, fleet operators with Double Deckers had limited PA options, with *Ready2Talk* upgrading your sound system isn't difficult or expensive.

And with our large selection of PA's, microphone adaptor boxes and our many microphone options, we can support your entire fleet, from vans, cutaways, trolleys and motorcoaches. Using just one mic type means effortless universality across your entire fleet. Please let us know how can we help?