



## Sound Patch Details

Last updated 19/07/23 by CHTJ

### General Notes

The Sound Box is positioned in the rear wall of the auditorium. It houses the console, bantam patch with a RIO, the Mac Mini, radio mic receivers, and a set of Dante network switches. The amplifier rack is positioned in the Patchbay. It houses the power amplifiers and Speakon patch, as well as the video and intercom patches.

Under no circumstances should the installed equipment in either of the Sound Box or Patchbay racks be removed or dismantled. If you believe you require access to the racks, please seek the prior approval from the Technical Manager.

### Bantam Patch

All of the analogue tielines and analogue multicore points (see below for locations), as well as inputs and outputs for all installed equipment such as the CD player, power amplifiers and radio mics, are brought out to a bantam patch panel. This patch panel contains a permanently connected RIO 3224-D (unit ID 1) acting as an interface to the Dante network and console. The usual connections to the RIO are made via normalling, so no patch cables need to be inserted in order to make the default Dante patch and console showfile work.

### Dante Network

The Dante network connects together the console, the Wavetool & QLab Macs (via Dante Virtual Soundcard) and two RIO stage boxes via a set of dedicated set of redundant CAT 6a tielines. These are patched from two locations, either in the sound box or in a rack DSL. There are also points around the stage to connect the second RIO 3224-D (unit ID 2) for use as a stage box for a band or similar.

Altering the Dante network patch within Dante Controller *must* be discussed with and approved by the Technical Manager in good time before the get-in as it may affect other shows running in rep with yours.

The default Dante network patch is:

RIO Rack 1 Inputs 1-28	Mac DVS Outputs 1-4	RIO Rack 2 Inputs 1-32
↓	↓	↓
Console Inputs 1-28	Console Inputs 29-32	Console Inputs 33-64
Console Outputs 1-16	Console Outputs 17-32	Console Outputs 33-64
↓	↓	↓
RIO Rack 1 Outputs 1-16	RIO Rack 2 Outputs 1-16	Mac DVS Inputs 1-32

Note that the last 4 analogue inputs on the first RIO are by default not available to the console as they are replaced by Dante Virtual Soundcard for QLab. If you do require more analogue inputs consider using the Omni inputs on the console which are available on the bantam patch in preference to changing the Dante network patch, which could potentially have consequences for other shows as these settings are not recalled with the console showfile.

### Moving the Console

The CL3 console can be connected either in the Sound Box or at the back of the auditorium using a dedicated cable loom. The connection panels provide power, Dante primary and secondary

network connections, control network, intercom, bidirectional MIDI and analogue connections for the console Omni ports.

No repatching is required for moving the console. Repatching other services such as KVM for the Mac Mini monitor may be required however.

### **Analogue Tie Lines**

Tie lines on balanced XLR connections are installed around stage, as well as to the Bar (x2), LX Plot Point (x2), Paging system rack (x4), FOH Corridors (x2 each side), Dressing Room 1, Dressing Room 2, the Green Room (x2), Dressing Room stairs (x2) and the Box Office (x2).

The stage XLR points are in the Pit (x8), Upstage (x8), Larkum Studio (x8), SL Ladder, SR Ladder, SL Perch (x2), SR Perch (x2), SL Juliette (x2), SR Juliette (x2), DSL (x4), DSR (x4), MSR (x2), Cwts (US & DS), Hemps (US & DS), Spot SR, Spot SL, Bridge 1 (x2) and Bridge 2 (x2)

### **Speakon Patch**

Outputs from the d&b EPAC amplifiers are permanently patched to the FOH PA. Outputs from the 8 channels of QSC amplifiers can be patched to: Rear of Auditorium (SL & SR), Ladders ( SL & SR), Perches (SL & SR), Juliettes (SL & SR), Downstage (SL & SL), Midstage (SR), Upstage (Centre x2 and SL x2 ), the Pit (x2), Bridge 1, Bridge 2, CWTS (US & DS), Hemps (US & DS) and the Larkum Studio (x4).