



## Lighting Control and Patching

(Updated 25/02/23 CHTJ)

### Control

ETC Gio@5 2048, with ETC Nomad Puck backup in the LX control box. Both are networked to an ETC DMX-RDM Two port Net3 gateway in the patchbay. The lighting network is by default provided in the control box and at the auditorium plot desk position, but can be patched onto stage or elsewhere if desired. An iPod touch with the ETC iRFR app can be signed out from the administration office.

The 2 DMX universes output from the Net3 gateway are presented on a set of linked DMX splitters that are patched 1-to-1 with the outputs around the theatre – there are switches on each leg of the splitter to select universe 1 or 2, so no repatching is required.

The houselights are permanently installed GDS Arcsystem LED units. They are on DMX address 500, on the same leg of the DMX patch as the installed dimmers, which is usually on universe 1.

All dimmers, stage power and lighting hardpower circuits are controlled by motorised circuit breakers. These can be turned on & off from the scene dock downstairs or from the LX control box, and switched on only from the stage left wing.

### Installed Dimming

All dimmers are Zero88 Chilli Pro 24 units in the patchbay.

- Address 1-96: 96x 10A dimmers
- Address 97-116: 18x 16A dimmers
- Address 117-120: 4x 16A switchable hardpower

All outputs are fully patchable with 2 outputs per circuit. Non-dimmable loads must NOT be connected to the dimmer circuits; the 'switch' dimmer law/curve is not a relay and should only be used to switch dimmable loads.

### Temporary Power and Portable Dimming

Connected to stage power distribution board (250A 3ph combined max):

- 1x 32A1Ø upstage
- 1x 63A1Ø upstage
- 1x 63A1Ø upstage left
- 1x 63A1Ø downstage right
- 1x 63A1Ø upstage on counterweight gallery
- 1x 63A1Ø in orchestra pit
- 1x 63A3Ø in scene dock below stage

Connected to lighting power distribution board (400A 3ph combined max):

- 1x 32A1Ø downstage on counterweight gallery (intended for strobe power)

3x 63A1Ø in patchbay

Up to 6x portable 6 channel dimmers may be available with 63A1Ø inputs, as well as other temporary power distribution. Note that the single phase 63A sockets are protected with a 30ma RCD for the direct connection of dimmers and similar final distribution. The three phase 63A socket is protected by a 300ma S-type RCD and must be used with further distribution protected with a 30ma RCD if used for dimmers or sockets. You must discuss this with the Technical Manager if you are intending to use this socket.

## Patch

All circuits available at Powercon panel in patchbay.

## Outputs

120 dimmer/switch channels as described above (2 Powercon outputs each)

12 LX Hardpower channels (4 Powercon outputs each)

Sound Sources, Sound Amps, Video Power, Temporary Blue Workers, Temporary Emergency Lights, General Stage Power (4 Powercon outputs each)

## Circuits FOH (66 circuits total)

Bridge 1 (12 circuits)

Bridge 2 (12 circuits)

Rear of Auditorium Bar (4 circuits)

Orchestra Pit (4 circuits)

Ladders (6 circuits each side)

Perches (6 circuits each side)

Houselight bars (3 circuits each side)

Juliettes (1 circuit each side)

Control Boxes (1 circuit each box)

## Circuits Stage (124 circuits total)

Counterweights (72 circuits – 4 boxes of 3 Socapex connectors each)

Hemps (18 circuits – 3 boxes of 1 Socapex connector each)

Dip Traps (18 circuits)

Pros Booms (8 circuits each side)

For overstage bars there are a variety of Socapex cables, breakouts, breakins and 12x 6 way IWBs which are attached to counterweight bars as required.