

## Barbican Concert Hall Sound System Specification

### PA, FOH and Monitor System

#### Main PA

The system is predominantly Meyer Sound and is driven by Meyer Sound Galileo and Galaxy digital processors, which provide the time alignment and EQ for each part of the system including ancillary loudspeakers, if required.

#### Flown arrays:

##### Main L/R:

- 1 x MEYER SOUND M3D - SUB
- 1 x MEYER SOUND MILO 60
- 4 x MEYER SOUND MILO 90
- 2 x MEYER SOUND MILO 120

##### Centre:

- 8 x MEYER SOUND M'ELODIE

##### Out fill L/R:

- 2 x RENKUS HEINZ TR 12-1

#### Stage PA:

- 8 x MEYER SOUND 900LFC Sub  
(2 per side are recommended for most events.  
For very sub-heavy events only, 4 per side can be provided)
- 4 x MEYER SOUND UPJ out fill
- 8 x MEYER SOUND M1D front fill

#### Sound Consoles

Choice of FOH sound consoles

- DiGiCo SD7 Core 2 - OpticalCON
- DiGiCo SD9 Core 2– with OpticalCON fitted

Monitor console – subject to availability.

- DiGiCo SD10 Core 2 - OpticalCON

DiGiCo I/O Options available depending on requirements:

- 1x SD Rack 56 analogue Inputs / 24 analogue Outputs
- 1x SD Mini-Rack 24 analogue Inputs / 8 analogue Outputs
- 1x D-Rack (with Optics) 32 analogue Inputs / 16 analogue Outputs
- 1x SD Mini-Rack 16 analogue Inputs / 8 analogue, 8 AES Outputs – this rack is permanently installed providing input to the PA system processors
- 1x SD Mini-Rack 8 analogue, 8 AES Inputs / 8 analogue, 8 AES Outputs – this rack is permanently installed in the BTV studio

Other sound consoles:

- DiGiCo SD9 Core 2 – OpticalCON fitted – permanently installed in BTV studio
- Yamaha M7CL-32 (32 mono/ 4 stereo), with DANTE option card fitted
- Yamaha LS9-16, with DANTE option card fitted
- Soundcraft Si Performer 1, with DANTE option card fitted

**In-house help and support are provided when using our consoles. Please contact us for up-to-date information on the software versions running on the consoles.**

## Foldback and Monitoring

- 4x d&b D20 amps
- 16x d&b M4 monitors
- 8x d&b MAX15 monitor wedges
- 1x UPJ (flown on the back of the centre cluster – for low level speech foldback)
- 3x Shure PSM900

## Available on request

- Avalon 737
- Tascam DA20 mk 2 CD Player
- Denon DN-C635 CD Players
- QLab v3 and v4
- RME Fireface UFX+ and RME Fireface 800
- Interspace Industries 3.5mm jack PC DI boxes
- Interspace Industries USB AiO audio interface
- Effects rack consisting of:
  1. Lexicon PCM 91 Digital Reverb
  2. TC M-3000 Multiple FX processor
  3. Yamaha SPX 990 Multiple FX processor
  4. Roland D2 Echo

## Audio Tie Lines - Stage to FOH Mixing Position

We have a line system comprising of 12-way boxes on Veam which usually plug into our DiGiCo SD racks and are available over the optical loop. Alternatively, the FOH mix-position-to-stage has 72 analogue lines + 12 returns all on XLR tails FOH, with passive monitor desk splits (also on XLR tails situated SL) and 12-way XLR stage boxes.

There are dedicated OpticalCON patch points at FOH, on stage (SR and SL), and various other locations around the venue for linking into the DiGiCo fibre network. OpticalCON to HMA optical connector convertor cables and boxes are also available upon request.

## Data

Extensive CAT5e patching capability around the venue including: 4 points at FOH and 2 at SR and SL.

FOH, SR and SL all have the following tie lines to the projection room:

- 6x BNC (HD SDI / MADI)
- 8x Multimode fibre on ST connectors
- 4x Singlemode fibre on LC connectors

## Communications

- 2 Channel wired RTS comms are provided
- Clear-Com Freespeak II 1.9GHz digital wireless comms with 10 Beltpacks

## Radio Frequencies in the Concert Hall

Clear-Com Freespeak II digital wireless comms use 1.9GHz.

There is extensive use of 2.4GHz and 5GHz Wi-Fi within the Barbican Centre.

It is strongly recommended not to rely on Wi-Fi for show control or other show critical systems!

We have extensive CAT5e and fibre patching facilities as an alternative to Wi-Fi.

Channels used for Shure UHF-R radio microphone system in the Concert Hall and Telex Wireless Comms Packs.

1	Shure UHF-R 1	608.175Ch 38
2	Shure UHF-R 2	616.425Ch 39
3	Shure UHF-R 3	621.100Ch 39
4	Shure UHF-R 4	624.500Ch 40
5	Shure UHF-R 5	631.800Ch 41
6	Shure UHF-R 6	632.200Ch 41
7	Shure UHF-R 7	635.750Ch 41
8	Shure UHF-R 8	637.425Ch 41
9	Shure UHF-R 9	639.325Ch 42
10	Shure UHF-R 10	646.325 Ch 43

**ANY INCOMING EQUIPMENT MUST BE TUNED TO THESE RADIOMIC FREQUENCIES UNLESS A SPECIFIC LICENSE IS OBTAINED FROM JFMG**  
<http://www.jfmg.co.uk>

### Power

Stage Right and Stage Left have the following on Ceeform:

1x 125A 3Ø, 1x 63A 3Ø and 2x 16A 1Ø, as well as 1x 110VAC 16A all available for Sound, AV and Backline power.

### Microphone List

Brand	Model	Misc.	Qty.
AKG	C411 PP	Contact mic	4
	C414B-ULS		4
	C414B-XLS		4
	C451		2
	C460 Cardioid	C61 head	8
	C460 Omni	C62 head	2
	C460 Hyper	C63 head	2
	C480		1
	C5		2
	C535		3
	C747		6
	D12E		1
AMT	M40	Piano mic	1
AUDIO-TECHNICA	AE2500		1
	AT857QM	Gooseneck mic	4
AUDIX	D6		1
BEYERDYNAMIC	M201 N		1
	M201 TG		2
	M88		10
BSS DI Box	AR-133		14
COLES	4104-B		1
COUNTRYMAN	H6 headset	Beige	6
	H6 headset	Black	3
	H6 headset	Tan	3
CROWN	PCC160		2
DPA	2011C		2
	4011A		4
	4060	Black	15
	4061	Black	5

# barbican

	4066 headset	Black	2
	4099 Classic		11
	4099 Loud		2
	Clips for 4099	Piano magnet mount	8
		Violin/Viola clamp	10
		Cello bridge	2
		Double Bass bridge	2
		Guitar clamp	4
		Brass	3
		Drum	2
		Universal Velcro clip	2
	SC4098-BX30	Gooseneck mic	4
ELECTROVOICE	PL80		1
	RE16		3
	RE20		2
NEUMANN	KM184		12
	KMS 140		2
+48v POWER ADAPTORS		TA4F 4-pin Mini XLR	9
SENNHEISER	E901		1
	E904		4
	E906		2
	MD421		9
	MD918 U		3
SCHOEPS	CMC 5	MK21 head	2
	CMC 6	MK4 head	2
SHURE	BETA 52A		2
	BETA 57A		8
	BETA 58A		4
	BETA 87A		6
	BETA 91		2
	BETA 98		5
	BETA Preamp		1
	MICROFLEX Preamp		5
	SM57		18
	SM58		12
	SM58 Switched		2
	SM81		4
	SM87		1
	SM98		5
	UR-1	Wireless beltpack	10
	UR-2	Wireless c/w 58 head	10
	UR-3	Wireless XLR transmitter	2
SONY	C48		2

All microphones are provided with stands and clips.

# barbican

Please note that all equipment details, quantities, and specification are subject to change, and availability.

Some items may incur recharges.