Audio Tech Sheet (Touring)

Dub Engine - The Science of Dub - Immersive 2.0

Overview

- Dub Engine - The Science of Dub - Immersive 2.0 is a touring immersive dub performance + workshop format. This tech sheet covers AUDIO only (no lighting).

Preferred immersive format

- Preferred: 9.1.4 (9 bed + sub + 4 overheads).
- Minimum: 7.1.4 (7 bed + sub + 4 overheads).
- System must allow dynamic positioning/routing via TiMax.

I/O summary (minimum)

- Console input channels: 24-32 (band + MC + playback returns).
- Immersive output channels: 12 (7.1.4) minimum; 14 (9.1.4) preferred.
- Playback interface outputs: 16 line outputs minimum (balanced).
- TiMax engine outputs: match immersive channel count above, plus spare outputs if available.

Control and spatial system (TiMax)

- TiMax processor: SoundHub (or equivalent TiMax engine) with required I/O to match speaker format.
- TiMax control: PanLab on dedicated laptop.
- Network: Gigabit switch and Cat5e/Cat6 for TiMax control network.
- Operator position: clear line to stage; talkback to stage if possible.

Audio Tech Sheet (Touring)

Dub Engine - The Science of Dub - Immersive 2.0

Playback and routing

- Playback laptop: Ableton Live (tour rig) with multichannel audio interface.
- Routing: discrete multichannel stems (bed/heights/sub) from interface to TiMax inputs.
- Sync: no timecode required.
- Redundancy (recommended): backup playback laptop preloaded with show set and interface.

FOH console and stage I/O

- Mixing console: Midas M32 (or M32R) preferred, or equivalent with 32 inputs and at least 16 buses.
- Stagebox: compatible digital stagebox (AES50 for M32) or analogue loom.
- FX workflow: console sends/returns for dub FX, plus inserts as needed.

Immersive loudspeaker system

- Bed speakers (7.1.4 minimum): L, C, R, Lss, Rss, Lrs, Rrs.
- Additional for 9.1.4: Lw and Rw.
- Overheads: Ltf, Rtf, Ltr, Rtr (4 channels).
- Subwoofer: 1 (or 2) with suitable power for bass music.
- Amplification/DSP: matched to speakers; per-speaker delay and level alignment available.

Speaker placement requirements

- In-the-round environment: speakers evenly distributed around the room; avoid blocked sightlines.
- Overheads on truss or safe flown points (rated).
- Safety: stands/truss stable, taped, and safely weighted.

Audio Tech Sheet (Touring)

Dub Engine - The Science of Dub - Immersive 2.0

Stage monitoring

- IEM preferred: 4 mixes minimum (band + MC).
- If wedges: 4 wedges minimum plus drum fill (as available).
- Talkback mic at FOH or operator position.

Microphones and DI (typical)

- MC vocal: 1 x handheld wireless or wired (plus spare).
- Drums: kick, snare, 2 x overhead, toms as available (min 4 channels).
- Bass: 1 x DI (active) + optional amp mic.
- Keys: stereo DI.
- Guitar: mic on amp or DI modeler.
- Dub FX/engineer insert points as needed.

Cabling and accessories

- Speaker cabling: SpeakON or venue standard, clearly labeled per channel.
- Audio cabling: balanced XLR/TRS for all line I/O; spare XLRs and adapters.
- Power: clean power for control laptops, TiMax, interface; 1 x UPS recommended.
- Measurement: SPL meter and measurement mic (recommended) for system alignment.

Crew (minimum)

- 1 x System tech (immersive system + TiMax)
- 1 x FOH engineer (or combined role on smaller shows)
- 1 x Stage/monitor tech (band changeovers, mics, IEM)

Immersive Dub – Centre Stage (In-the-Round)

This project is a live immersive dub performance presented with a centre-stage, in-the-round setup. The stage is positioned in the middle of the room, similar to a boxing ring, allowing the audience to stand and move around all sides of the performance area. There is no traditional front-of-stage.

Centre Stage Layout

	Audience	Audience	Audience	
Audience		Keyboard / Guitar		Audience
Audience	Bass	Drums	Scientist	Audience
Audience		Greg Hunter	Tony T (Immersive Mix)	Audience
	Audience	Audience	Audience	

Performance Notes

• Musicians and artists share the centre stage as one performance unit.
• Scientist performs live dub mixing on stage as part of the performance.
• Greg Hunter performs both with the band and directly with Scientist.
• Tony T controls the immersive spatial mix live from the centre stage.
• The structure allows fluid movement between full band sections, dub-focused moments, and spacious passages.

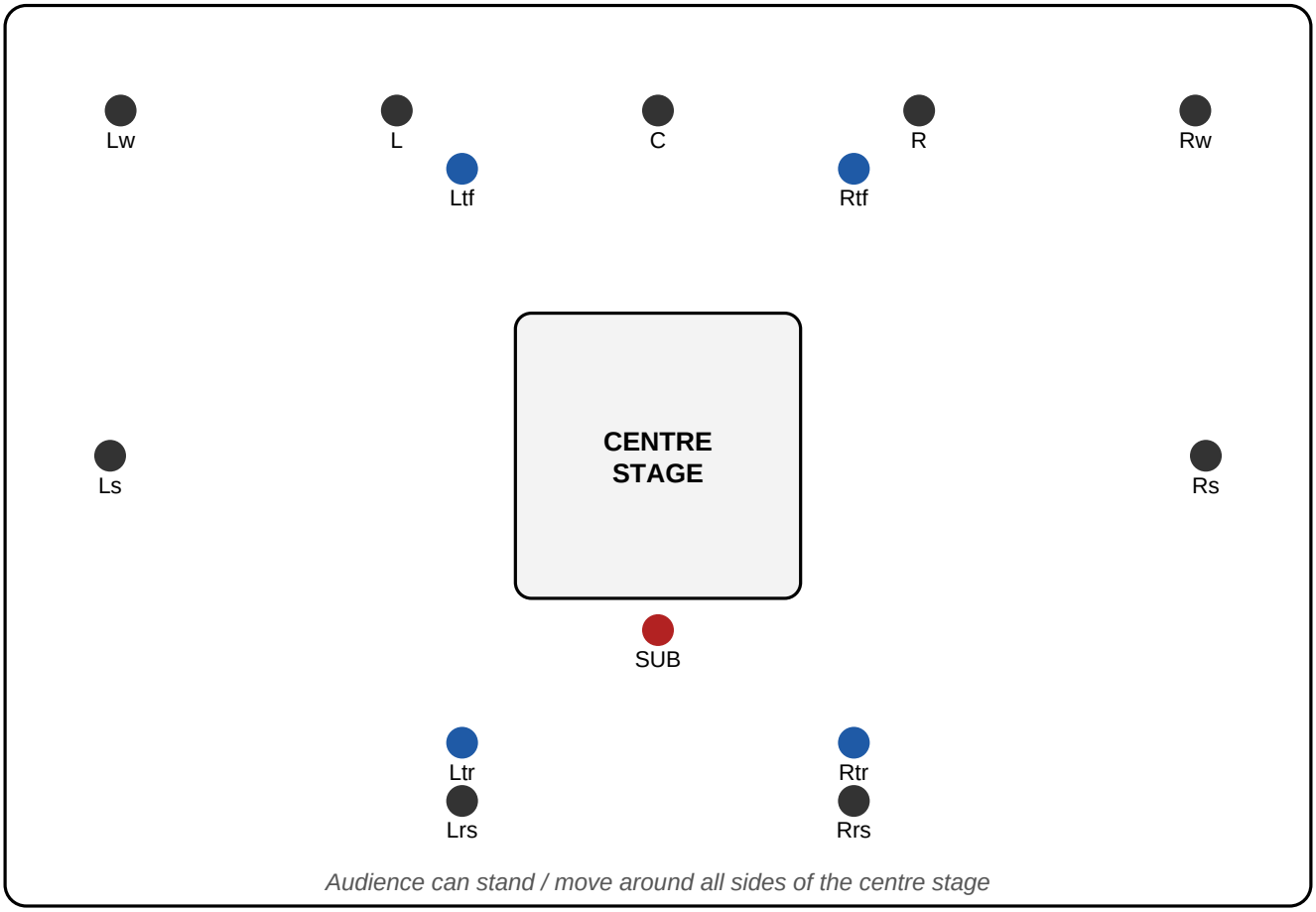
Immersive Sound (Artist & Tech Overview)

Sound is delivered through a multi-speaker immersive system placed around and above the audience. Dub effects such as delay, reverb, and drop-outs can move through the room in real time. The immersive system supports the performance and responds musically to what happens on stage. No special technical interaction is required from performers.

Immersive Dub – Speaker Layout (In-the-Round)

Simple reference layout for centre-stage performance (bed + heights + sub).

ROOM / AUDIENCE AREA



Legend

- Bed speakers (around the room)
- Height speakers (overhead)
- Sub / L