

# **Technical requirements**

# **General approach**

Flytecase is autonomous for their in-ear monitoring, which are pre-programmed and mixed in dedicated busses through a rack-mount digital mixer that is brought along by the band. To achieve this, the vocal microphones are going into their own equipment (Metric Halo ULN-8) but the signals are split beforehand and sent unprocessed to the front of house (FOH). The guitars and the bass are captured in D.I. and two drum microphones are brought along for our own monitoring. The drum microphones are not sent to the FOH and will be placed additionally to the venue microphones on our own stands.





#### Patch

Input	Channel	Material	Insert
1	Kick	Heil PR40, AKG D112, Shure Beta52, Sennheiser e602	Comp 1
2	Snare	Heil PR20, Shure Beta56, Shure SM57	Comp 2
3	Hi-Hat 14"	Heil PR20, Shure SM81, Shure SM57	
4	Tom 1 13"	Heil PR20, Shure Beta56, Sennheiser e604	
5	Tom 2 14"	Heil PR20, Shure Beta56, Sennheiser e604	
6	Tom 3 18"	Heil PR20, Shure Beta56, Sennheiser e604	
7	Cymbals L	Heil PR30, Shure SM81, AKG C451	
8	Cymbals R	Heil PR30, Shure SM81, AKG C451	
9	Bass	DI box, -20dB gain attenuation	
10	Guitar 1 L	DI box, -20dB gain attenuation	
11	Guitar 1 R	DI box, -20dB gain attenuation	
12	Guitar 2	DI box, -20dB gain attenuation	
13	Vocals Backing	Personal Mic, Heil PR20	Comp 3
14	Vocals Lead	Personal Mic, Heil PR35	Comp 4
15			
16	FX L	TC Electronics, Lexicon	
17	FX R	TC Electronics, Lexicon	

Remarks: The vocal microphones are provided by the band, all the other microphones need to be provided by the venue with comparable microphones to the ones that are listed.

## **Stage Outputs**

Flytecase doesn't use stage outputs and relies entirely on in-ear monitoring. **Stage monitors should thus be muted** to prevent excessive on-stage sound for no reason.



#### Installation, secure storage, sound check

Flytecase needs at least 30 minutes to install their equipment, this doesn't include the sound check. A secured area without public access needs to be provided to store their equipment if other bands are playing before or after.

The time available for the sound check will be at least 15 minutes.

This brings the installation, setup and sound check time to at least 45 minutes before the actual concert.

## Front of house equipment

The front of house mixing console, amplifiers, speakers and effects need to be of professional quality and geared towards live P.A. Flytecase might refuse to play if studio, semi-pro or amateur equipment is present such as Behringer, Eurodesk, ... The equipment needs to be in good working order.

Note that guitars and bass are totally un-amped and connected through DI. It is of critical importance that good quality DI boxes are present, like for instance Radial JDI or BSS AR-133. Low-cost DI boxes might drastically diminish the sound quality and introduce parasites. Since this is at the source of the sound emission, Flytecase is picky about the quality of the DI boxes.

There needs to be at least 16 inputs, 4 auxiliary mix busses, 4-band EQ with parametric mid on each channel, and three channels of professional quality 31-band graphic equalizers (one for each output).

At least 4 individual compressor channels need to be available as inserts. Preferred brands are BSS, DBX, Drawner. Again, avoid low-cost.

At least one stereo effect send with a high quality professional reverb and delay needs to be available. Preferred models are TC Electronics (M 3000, M-One, ...) and Lexicon (PCM, MPX, MX, ...). Low-cost effects, like Behringer, will not be accepted.

The front of house mixing console can't be located behind the stage or to the side, it needs to be located at a properly studied location for professional live mixing, preferably centered in front of the stage. This obviously excludes resonant locations like the inside of a van.

The power of the FOH speakers needs to be sufficient for the size of the venue and be at least 2-way with separate woofer or sub-woofer. They need to be able to uniformly cover the area where the audience is located. Also, the maximum sound level has to be able to reach at least 100dB at the location of the FOH mixing console.

The whole system has to be pre-calibrated and void of buzz, saturations and parasites.



#### Stage

The venue needs to have a dedicated and stable stage that is able to hold the weight of the band members and all the equipment. The stage shouldn't move at all when it's being jumped upon during the performance. The minimum width should be 5 meters and the minimum depth 3 meters. The access to the stage should be comfortable and not create a security hazard while carrying heavy and large equipment.

The electrical outlets on stage need to be properly grounded and provide stable 230V - 50Hz without spikes. Any physical or equipment damage caused by an improper electrical installation will be the responsibility of the concert organizer.

# Lightning

There needs to be sufficient on-stage lightning to highlight each musician individually and independently from the lightning of the reset of the venue.

## Non compliance

Non compliance to any of the technical requirements can be seen as a unilateral breach of contract and Flytecase might refuse to play while still receiving the financial compensation that was agreed upon.