

# DJ Advice

## By David Bruml of Funktion One

An important factor in maximising sound quality is the understanding and ability of the DJ. There are a few basic things to focus on:

### 1. Use WAVs as opposed to MP3s to play out

From our perspective, MP3s are really unacceptable in terms of sound quality to play out on good sound systems - it would be great if general perceptions could change and evolve so that more DJs understood the importance of file formats in relation to sound quality. The bass really suffers with MP3s as does mid-high clarity, resolution and spaciousness. We have had numerous experiences of turning up at potentially great events to find things seriously compromised by the use of MP3s - many DJs seem unaware that there's anything wrong - but it actually quashes the vibe. Good source quality leads to potential for deeper musical experiences (sound system and environment permitting!).

The whole compressed MP3 format originated because of bandwidth and storage limitations which really aren't a major factor anymore (certainly to anyone serious about their sound).

In setting music policies for a club, it is good practice to request that the use of MP3s is kept to an absolute minimum.

### 2. DJ Equipment Selection

DJ mixer and DJ monitor selection are important in realising the full potential of the loudspeakers. Despite their marketing, the most widely used DJ mixers actually adversely effect achievable sound quality and are very often the weakest link in the signal chain. Our recommendation is for a mixer called the FF6000 (manufactured by UK company Formula Sound <http://www.funktion-one.com/FF6000.htm>). Monitor selection is important too so that the DJ shares a similar sonic experience to that of the audience – it encourages them to keep the system in proper balance.

### 3. Keep the mixer undistorted (in the green and amber)

It's amazing how many DJs overdrive their mixers (into the red). This inevitably introduces distortion which makes the sound unpleasant on the dancefloor particularly at high sound levels. If the sound system has been properly specified for the space, then there is no need to overdrive the front end to get the desired sound pressure level on the dancefloor. Some mixers actually sound pretty good when not overdriven but totally fall apart when driven in the red. This falls into the same area as general sensitivity for appropriate level - we are aiming for a level pocket, where the sound is totally physically involving, but leaves the ears comfortable so that the music can be explored pain free. A clean sound system can definitely be run louder than one with higher distortion (whether inherent or introduced), but general awareness of what is too loud for people needs to be increased. So, keep it in the green and amber and out of the red, - once the signal is distorted there's no getting back to purity later.

### 4. Unless using it to mix (or for momentary effect) keep the EQ flat.

If a sound system is set up really well, a DJ applying lots of general EQ on the mixer (or system tech EQing the system) can really adversely effect the experience on the dancefloor. EQ obviously effects the tonal balance and often the dj in the removed booth location is listening on monitors that bear little sonic resemblance to the sound on the floor. On a more subtle level, EQ also effects the phase, so a rippled EQ means that some frequencies are effectively out of time with others which makes the sound appear distant. Clean and flat is much better.

At Funktion One we are alone in using no system EQ (for the above reasons) or compression driver midrange (which inevitably adds distortion) - both major factors in the sound quality we deliver.