"Play the mixer like a musical instrument"

Introduction

Before DJ equipment became widely available, most DJ's learned their skills at discotheques. As a "resident," the DJ had access to professional equipment as well as 12” promotional mixes - which at that time - gave the club DJ's a virtual monopoly on the presentation of dance music. Eventually these club jocks got slots on the radio and the first "mix-shows" emerged (such as Chicago's Hot Mix 5 on WBMX-FM). Beat mixing was exposed to the masses.

Perhaps the most significant development in the evolution of DJ equipment occurred when Technics released the "direct-drive" SL-1200 in 1974, and the improved SL-1200MK2 Turntable in 1978-79. Still considered the industry standard, the "twelve-hundred" enabled DJ's to scratch and mix without fear of breaking and/or stretching the belt found in belt-drive turntables.

Hip Hop, which originated in the Bronx (New York) during the early-to-mid-70's, strongly influenced the evolution of DJ equipment - particularly turntablism. DJ's such as Kool Herc (first DJ to loop two identical records on two turntables-1973), Grand Wizard Theodore (first DJ to scratch-1977), Grandmaster Flash ("peak-a boo cue system"), and Afrika Bambaataa ("godfather of hip hop" - produced Planet Rock) invented turntable techniques that eventually spread throughout the world - particularly when Grand Mixer DST performed on the turntables in Herbie Hancock's "Rockit" video (1980's). Scratching was exposed
to the masses.

With the growth of raves, the demand for DJ equipment also grew. Speciality shops catering to rave and hip hop DJ's proliferated and almost anyone that wanted to become a DJ had access to professional equipment and music. In addition, because of the Internet, 12" remixes could be obtained for free and sometimes quicker than conventional distribution methods. The nightclub DJs' monopoly in breaking new dance music had ended.

The Basic Set-Up

As Table 1 below shows, the basic DJ set-up includes two turntables (or two CD players), headphones, RCA stereo cables, and a mixer, which is connected to an amp and/or amp rack via the mixer's master output. It should be noted that many DJ's on a budget often employ the auxiliary input on their home stereos in lieu of an expensive amp/speaker set-up. The mixer's "crossfader" (the horizontal bar on the mixer) enables the DJ to switch the volume between Channel 1 (the red turntable on the left) and Channel 2 (the blue turntable on the right). Each channel has an "upfader" volume control (the vertical bars) and can usually accommodate two input sources (such as phono and CD). In addition, many mixers have "gains" (aka "trim") that also controls a particular channel's volume. With the addition of the master volume, which controls total volume output, a DJ usually has four places to control a song's volume (crossfader, channel gain, upfader, and master volume) - with the crossfader serving as the bridge between channels.
A DJ should also know how to work a mixer's (or rack's) equalizer (EQ). According to DJ Timothy Heit, "because hearing is normally around 4 kHz, you want to lower that frequency (and perhaps the frequencies near it) on the equalizer. This creates a comfortable listening environment (e.g., the customers can hear one another). While desirable, higher frequencies, such as tweeters, can damage hearing. However, low-end bass frequencies are not as damaging - it tends to cause listening fatigue instead."

**Purchasing Equipment**

Today, it's not uncommon to find DJ's that practice, record, and even remix tracks at home studios. If you're about to start a home DJ-studio or need mobile DJ equipment, then consider investing in equipment that accommodates your style. Hip hop DJ's for example, usually purchase scratch mixers and direct-drive turntables. It should be noted that unless you're on a strict budget, avoid purchasing belt-drive turntables. On the other hand, if you plan on spinning corporate clubs, mobile-weddings, and/or MP3's, you'll most likely mix on CD players (such as Pioneer's CDJ series) or computer programs such as the PCDJ. Ideally, you should learn to play CD players and turntables interchangeably (so that your music sets aren't constrained). DJ's such as Josh Wink employ CD's and vinyl equally.

If you're new to this scene, the following is a sample of basic DJ equipment (with Disc Jockey 101 prices). For a complete list, see the [Disc Jockey 101 Gear page](http://www.discjockey101.com/equipment101.html).

**Headphones**

- **Sony MDR-V700DJ Headphones** ($109.95)
- **Sony MDR-V500DJ Headphones** ($64.95)
- **Advent Wireless Headphone System** ($94.99)

**Cartridges**
**Slipmats**

- Technics Classic Slipmat ($17.95)
- Coming Soon

**Turntables**

- Technics SL-1200MK2 Turntable ($409.95)
- Numark TT-1650 Direct-Drive Turntable ($199.95)

**Mixers**

- Numark 3-Line Scratch Mixer ($229.95)
- Numark 2-Line Scratch Mixer ($119.95)
- Numark 3-Line Scratch Mixer ($149.95)

**CD Players**

Microphones

Shure SM58-LC Mic

Related Links

Technics SL-1200MK2 Turntable FAQ