How to use this book

What you need

There is a multitude of equipment available to a DJ. New technologies are developing all the time, making DJ-ing more affordable and ever-increasing the functionality. For the purposes of this book, we have focused on the following three set-ups:

Vinyl turntables + Mixer
CDJs + Mixer
Controller + Software

There are many variations of these — different brands distinguish their hardware in subtle ways — but equivalent functions can be found on whichever set-up you decide to use, however cheap or expensive. Do not let your medium be the reason not to start your journey. In order to learn the whole spectrum of techniques covered in this book, you will need:

- **two jog wheels or platters**
- **a two-channel mixer**
- **speakers**
- **a pair of headphones.**

Audio

Accompanying audio can be downloaded from **futuredjs.org/book**. Once you have downloaded the music, import the folder into the DJ software of your choice.

If you have a vinyl-only set-up, it is important that you have a number of records of the same style and genre in order to work through this book. An ideal way to practise beat-matching is to have two of the same record.

FutureDJs terms

Tracks	Also known as songs. Throughout the book they will be referred to as tracks.
Deck 1	The left deck.
Deck 2	The right deck.
The platter/jog wheel	We will use 'platter' when referring to vinyl turntables and 'jog wheel' when referring to a digital set-up.
Electronic music	This is an umbrella term for all the genres and styles of music covered in this book.

Key to icons

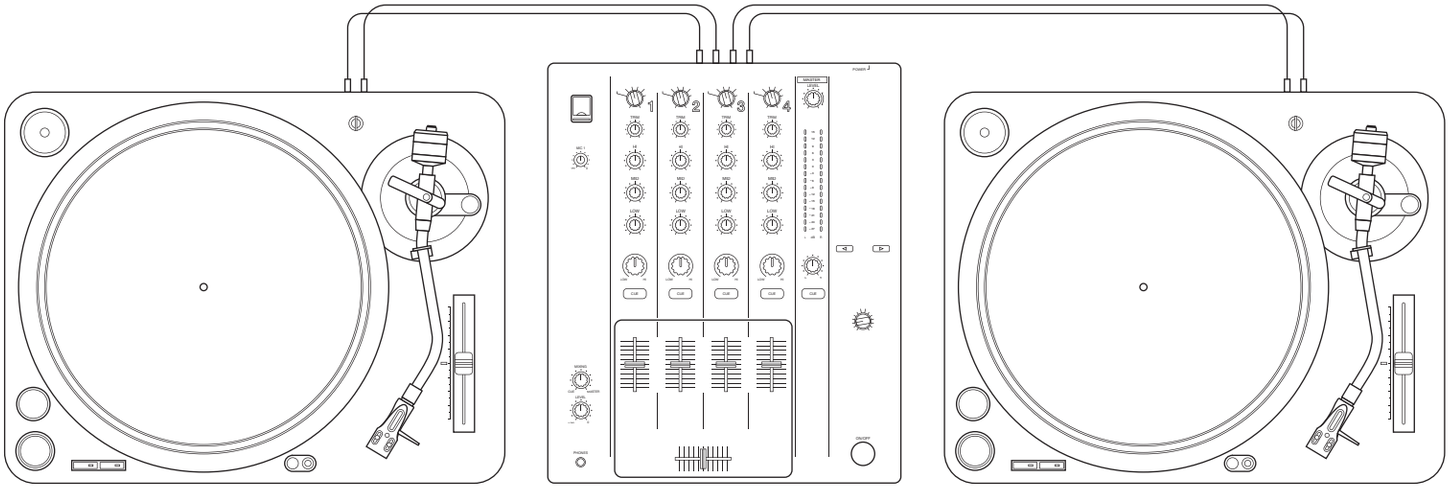
	tips and bright ideas		sends you to reminders or relevant topics elsewhere in the book
	extra information		warning

Getting to know your equipment

In the beginning, turntables were the only option for DJs, and vinyl records were the source of music. Regardless of what medium you, as a DJ, choose to play on, you should be able to transfer your skills back to the turntables with a little bit of practice.

Turntables and vinyl

In the 1970s in Disco clubs, DJs like Larry Levan would play 7-inch (18cm) records that would normally last no longer than a couple of minutes. In a rather peculiar turn of events, a remixer called Tom Moulton discovered the 12-inch (30cm) record. When he pressed his record he was quite literally blown away by the sound it created — louder, phatter and perfect for the bass-heavy sound-systems in New York at the time. The 12-inch record was a huge success and allowed artists to make longer tracks, ideal for DJ sets. Turntables are still used to this day because of the feeling they create and the sound they produce.



There are three different ways a turntable can be operated: belt, quartz and direct drive.

Advantages

- A vinyl turntable creates an analogue waveform, which can be said to produce a warmer, richer sound quality than digital formats.
- Many tracks are available on vinyl only.
- It gives the DJ a tactile experience — the feeling of physically interacting with the music.

Disadvantages

- Vinyl records are large and heavy.
- They can get scratched and skip.
- Needles are fragile.
- More expensive to buy.
- Lots of tracks are not made on vinyl.
- Turntables need regular servicing.
- Can produce feedback at low frequencies.

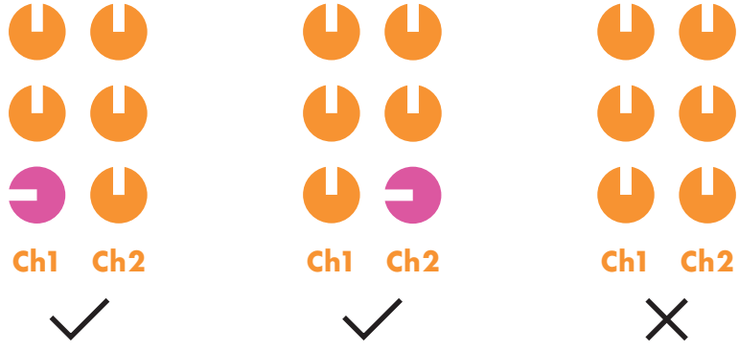
EQs

EQs enable a DJ to carve out space for a new track to slot into, as well as giving them control of the overall level of the mixed signals.

Levels
Playing two tracks at the same time without EQ adjustment can push your levels into the red. The lows are the loudest frequency range of a track in electronic music. Introducing a second bass-heavy track into the mix may push the master level meter into the red.

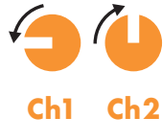
Track 1 Track 2 Master

As we don't want two kick drums kicking at the same time, cut the bass frequency on one track in the mix. This will enable you to play two tracks together.



Turn down, not up
Be wary of boosting EQs. Tracks are mastered to be as loud and as close to the limits as possible. Boosting the volume further with the EQs can result in distortion. Get into the habit of not adding too much bass without taking some away from the other channel.

The bass swap
One of the best tools any DJ has is the control of the low frequencies – the bass. Take this out and your audience will be yours the moment you bring it back in; just make sure you don't do it too often, because people need bass – it's a primal thing. The bass swap is the moment you transfer the energy from the first track to the second by turning down the bass on Track 1 and, at the same time, turning up the bass on Track 2.



Mids and highs
The mid and high frequencies do not affect the overall volume as much as the bass. Use them to create space for elements to come through the mix. Tracks combine better when there is space available for a new element to enter into. If Track 1 is taking up this frequency range and you try to introduce another track in the same range, it will be covered, the sound will be muffled, and the mix will sound messy. Use your ears to analyse which ranges are being used more by each track, and then adjust the mids and highs to help the two combine.

Techno

Sub-genres
Minimal Techno
Dub Techno
Detroit Techno
Industrial Techno

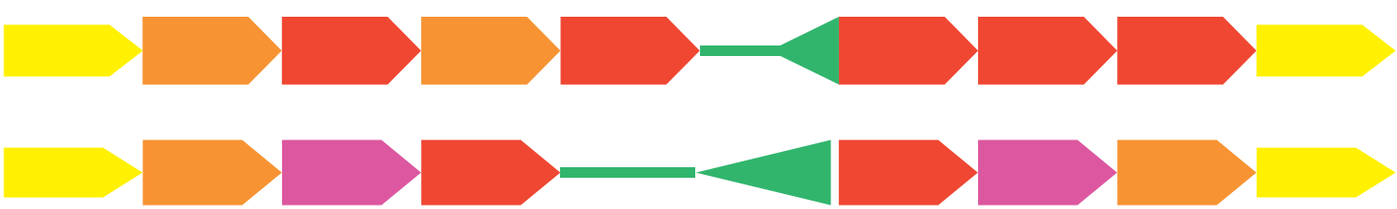
Origins
Detroit
1980s
Berlin

Tempo
125—140 bpm

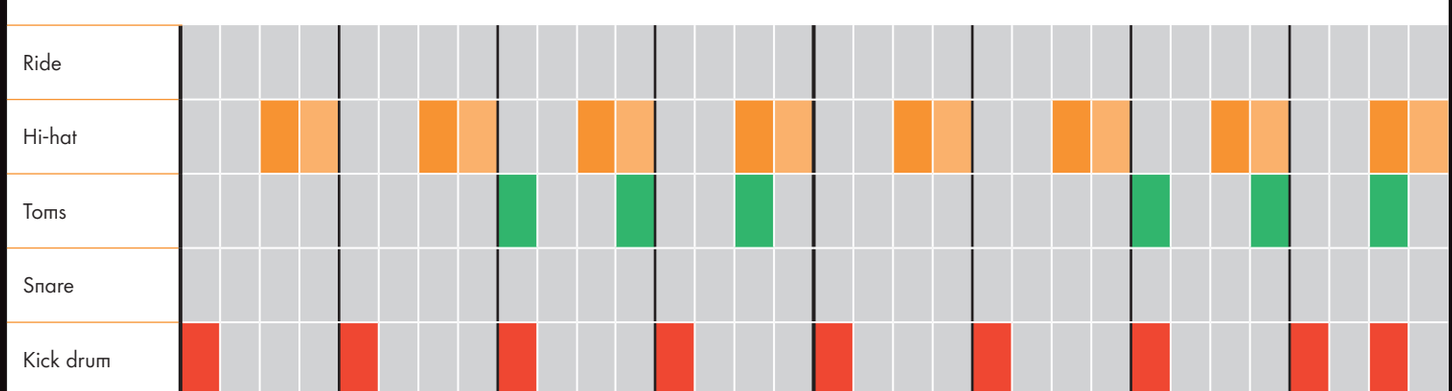
Pioneers
Juan Atkins
Kevin Saunderson
Derrick May (Belleville three)
Underground Resistance
(Jeff Mills, Mike Banks, Robert Hood)
Richie Hawtin
Jeff Mills
Joey Beltram
Carl Cox
Kraftwerk

Defining characteristics
- Powerful, dark and mechanical in mood
- Often in minor keys
- 4/4 time signature, kick drum on every beat
- Syncopated percussive layers that interact with each other
- Slowly evolving textures
- Eerie soundscapes and white noise

Typical structure



Drum rack



Check out
The Bells — Jeff Mills
No Way Back — Richie Hawtin
M04A — Maurizio
Pacific State — 808 State
Your Mind — Adam Beyer

Record labels
Plus 8
R&S Records
Semantica
Axis Records
Tresor Records
Transmat Records
Metroplex
Drumcode

According to Abstract Man, Techno is a celebration of the beauty of originality and the power of people unified by shared values and beliefs. In its truest form, it encompasses freedom, unity, openness and connection. Techno can ground us: finding meaning and calm in the rhythms, strength and stability in the low frequencies and connection to ourselves, our challenges and each other.