

Electronic music tools

Electronic music tools allow us to create, record, edit, mix and produce music.

DAW (Digital Audio Workstation) – software used to record, edit, and produce music.

Synthesised sound – the electronic generation of sound where no acoustic source is used.

MIDI (Musical Instrument Digital Interface) – digital data that represents musical performance information, such as pitch and duration, used to control virtual and hardware instruments.

Piano roll – a grid view in a DAW used to input and edit MIDI notes.

Quantise – a DAW function that adjusts notes to align with the beat or rhythmic grid.

Velocity – the force or intensity with which a note is played, affecting its volume or tone.

Automation – a process in a DAW that allows changes to be programmed over time. For example, volume, panning or effects.

Vocoder – a synthesiser that generates timbres and pitches based on the audio input (usually vocals). It can harmonise the voice or make the voice sound ‘robotic’.

Mixdown/export – the process of combining all tracks in a project into a single audio file. For example, MP3 or WAV.

Electronic music techniques and devices

Electronic music techniques and devices are used to manipulate the elements of music.

Sampling – the use of recorded sounds to add layers or generate new musical material.

Looping – when a fragment or section of sound is repeated identically. Multiple loops can be layered to vary the texture.

Delay – the repetition of a sound to create ‘echoes’ which can fade out.

Reverb – an effect used to simulate an acoustic space.

Distortion – an effect where sound is manipulated to thicken the tone, often resulting in an abrasive timbre.

Auto tune – an effect where the pitch of an instrument/voice is manipulated to sound ‘in tune’. This can create an unnatural vocal timbre.

Bit crushing – a digital effect that degrades the original sound by reducing its resolution (similar to a pixelated image). Its distinctive tone can sound like a corrupted audio file.

Synth pad – a sustained synthesized sound or chord, used as a harmonic and textural layer.

Octave shifting/pitch shifting – the manipulation of a sound up or down an octave or to a different pitch.

Filtering – filters are used to remove specific frequency content from a sound, manipulating its timbre.

Filter sweep – where the frequencies being filtered out are swept from high to low or low to high, causing a change in brightness through time. This can often be identified as a ‘whoosh’ during a transition in the music.

Bass drop or beat drop – is a point in a track where a sudden change of bass line or rhythm occurs, preceded by a build-up section and break. It is used as a structural device to build and release tension.