

Introduction

Since the 1970s, programmable drum machines, turntables, samplers, and sequencers have been an important element in hip-hop, pop, r&b, and other musical genres. The idiosyncratic sounds of popular drum machines like the Roland 808 or the sampled and remixed breaks of James Brown and other funk artists have largely come to define the sonic landscape of many types of popular music. In the 80s, dance music became almost entirely devoid of live drumming and by the 90s genres of music began popping up that had no discernable human performances of any kind on any instrument – everything was programmed instead of sampled. There was a time when human drummers were thought to be near extinction and articles were written prognosticating the steady decline of human drum performance. Thankfully, that bleak future has not come to pass and human drummers are still relevant today.

Electronic music can take many forms: jungle, rave, house, big beat, drum and bass, trance, dub, industrial, dancehall, step, hardcore, grime, techno, trip hop, acid, and many more. These genres are all essentially taking the raw ingredients of music, chopping them up in a labyrinth of computers, wires, plugins, rack modules, turntables, sequencers, and midi controllers, and rehashing that information into songs that bear no resemblance to music performed on traditional instruments. Electronic music has its own unique sound palette largely crafted in the USA, starting in the 70s, and generally moving over to the UK by the 90s. It is an identifiable set of sonic textures that are unlikely to be mistaken for real instruments or live performances. This sound palette has ultimately made its way into rock, pop, metal, and other genres that are not traditionally created inside of computers. Sometimes the electronic soundscape is featured heavily, as in industrial rock, and sometimes it is used as a subtle texture in the background of an otherwise human performance. Drum breaks, especially, are now sprinkled through massive swaths of the popular music spectrum and the phenomenon of live human performances emulating the sampled electronic sound has been growing.

The fact is, the sampled and chopped up sound of DJs and producers does not appear to be waning much in popularity, nor is it prudent, as a real drummer, to write it off as some historical oddity. The best course of action for a 21st century drummer is both to be comfortable with the idea of playing alongside sampled or programmed beats and to also be able to recreate sampled sounding or drum-machine-like beats and fills without the use of electronics. Using a traditional rock or jazz drumming mentality and skill set to attack modern music sometimes leaves human drummers at a disadvantage. Our musical training has not, under most circumstances, enabled us to easily recreate the idiosyncrasies of electronic beats. Updating that rock or jazz skillset to accommodate the sounds and rhythms of drum and bass is one step toward keeping your craft relevant to the current automated musical world. Aside from simply fighting for your musical territory against machines, playing drum and bass music as a live human musician can also open up a new realm of interesting improvisation and musical communication with our eternal rhythm section companion, the bass player, and of course keyboardists and other musicians as well. Turntablism and DJ culture, starting as far back as the 70s, set a precedent for the acceptability of minimalist music based almost entirely on looped beats and bass lines, allowing the drums to step closer to the spotlight than ever before. Even when trying to sound like a machine, a human can always improvise, adapt, and think on his or her feet in a way that a machine or even a human controlling a machine cannot. The fluid adaptability of a real drummer on real drums is inimitable and preferable in many cases. Fusing the vibe of a sampled break with the live sensibility of a real drum break creates a synergy that is musically interesting and fun to play. If nothing else, the coordination and chops that are required to recreate an authentic jungle breakbeat are worth having at your disposal in any situation.

In addition to just playing the patterns, getting a reasonable approximation of highly processed electronic

drum sounds is important for drum and bass. A good starting point would be a kit already set up and tuned for old school funk playing. A typical electronic drum and bass break will employ a range of effects and tweaks on the drum sounds that require extra effort for the acoustic drummer to achieve. One such effect is to use multiple snare samples or pitch-shifted or speed-altered snare samples. Playing everything on the same snare drum will ultimately not result in an authentic sound. Employing at least 2 snare drums of significantly differing pitch and timbre is a good idea. Many drum and bass players set up the lower pitched snare as their normal, primary drum and then place a smaller or more tightly tuned drum to the left of the hi-hat. This is, of course, not a mandatory arrangement. You could switch the positions of the drums or find a location for the second snare that works better on your kit. Some of the patterns in this book will be written with a second snare drum specifically indicated so that you can see some of the possibilities of the extra drum.

A purely electronic snare sound is often created in a drum machine by taking white noise, a mixture of every audible frequency, and subtracting unwanted bands of EQ until a snare-like effect is achieved with the remaining noise. In fact, many years ago nearly all synthesized instrument sounds used to be created in this way. The subtractive synthesis method leaves the snare sounding a bit like a burst of static without much decay after the initial hit. To mimic this effect on acoustic drums there are a few different options. The easiest way is to take a regular splash cymbal from your collection and place it on the batter head of the drum. The cymbal will bounce up slightly when you strike the drum and upon its return to the head, it will choke the ring and decay of the drum. You can also hit the cymbal instead of the head for an additional texture. Meinl actually makes a product called the Drumbal that is designed for this purpose, though a regular splash will work just fine. Several companies have taken this idea in a slightly different direction and produced an alternative version of the cymbal-on-drum concept. Sabian makes a Hoop Crasher that is essentially the outer edges of a couple of cymbals with the bells and center of the bows removed. It sits just inside the rim of your snare allowing you to play the center of the snare normally, or play a rimshot that incorporates the cymbal, or play the cymbal on its own. This gives you a few new white noise snare sounds to work with. You can make your own version of this if you have an old cymbal or two with a bell crack or a really bad keyhole. Using proper safety and tools of course, you can cut your own hoops crashing effect cymbals with the option to attach tambourine jingles or other metallic elements to this to customize your sound. It's a project with no guarantee of success, depending in your level of handiness, but it could provide a great sound and a good second life to a badly damaged cymbal. There is also a product called a Big Fat Snare Drum that is essentially a mat that lays over your batter head. This can be equipped with tambourine jingles to give differing sounds. Again, you can create your own by cutting the hoop off of an old snare head and placing a flat circle of mylar head material on your normal batter head. This mostly just serves to dampen the snare sound to an intense degree, giving it a more sampled and processed character. Once you have achieved a few good snare sounds you can think about your kick.

The bass drum sounds of electronic music are often very deep and round but can also have a subtractive synthesis type white noise nuance to them. Sampled bass drums are often taken from old funk recordings and will sound fairly dry and tight. Tuning appropriately to come up with a sound that makes sense with the style, and with the rest of your setup is essential. Excessive ring, metallic attack, or soft jazzy fleece impact are not effective sounds for drum and bass playing.

Cymbals are a huge part of the drum and bass sound and should be generally characterized as dry and crisp with a short decay, and often a trashy overtone. Hi-hats ought to be trashy and light to achieve the drum machine sound. It is often a good idea to employ more than one pair with different sounds. In addition to your primary hats, a second pair should be used elsewhere. It is not necessary to have a pedal attached, but just to have a closed sound available for a contrasting texture. This second hat can be mounted near the ride or near the primary hi-hat, as you see fit. Many companies make specific cymbal stacks for a short trashy sound with little to no decay. These are a great alternative to a second hi-hat or a good addition

to your multiple hi-hat setup as they inherently have a subtractive synthesis type of sound. You can, of course, create your own stack from your existing collection of cymbals. The ride cymbal in the drum and bass context is often very jazz oriented. A dry traditional jazz ride like a Zildjian K, Sabian HH, Meinl Byzance, Istanbul, or Bosphorus is usually best as it will again mimic the sounds of sampled breaks from the 60s and 70s. A second ride, just the like the snare and hi-hat, is a great idea so that you can abruptly switch to a different pitch and tone like a producer can switch samples or change effects. Many jazz players already employ multiple rides, so this isn't a far-fetched idea.

Once you have a setup that includes at least 2 snares, a nice kick, a couple of hi-hats, and a good jazzy ride or two, you are basically ready to go. You might include a couple of toms, as part of a normal 4 piece drum kit setup, but components beyond the basics are rarely used in electronic music. A wrap-around tom setup would be a waste of your time and space, as would most splash cymbals, chinas, crashes, and other relatively normal drum kit pieces. The vast majority of playing in the drum and bass style is just cymbal, snare and kick, including nearly all of the fills. If you are going to be transporting your drums for gigs or to jam with other musicians, leaving most of your toms and other cymbals at home would be a very efficient and effective way to lighten your load, focus your playing, and allow you to effectively arrange your necessary components in an easily playable manner that suits you.

Overall, the best way to gain insight into the sounds of electronic music is to listen to it. As with any musical style, the more you immerse yourself into the sounds of the genre, the better you will understand how to recreate them on your own kit. The tempo of most breaks is fairly fast, in the neighborhood of 150 to 180+ beats per minute on your metronome. Some of the simplest looking beats in the book sound very authentic at very fast speeds. Listening to actual samples at these speeds will help you determine what kinds of sounds you should be getting and what kinds of techniques you'll need to use. There are hundreds or thousands of electronic music producers, DJs, and other artists out there at this point. Some iconic DJs include Kool Herc, Afrika Bambaataa, and Jam Master Jay. Top jungle pioneers include Dillinja, Shy FX, and Goldie. The big beat genre is typified by The Prodigy, The Crystal Method, and The Chemical Brothers. Other names in drum and bass music include Doc Scott, Total Science, Funki Porcini, Plaid, and Squarepusher among many, many others. This is obviously very far from a complete list of notable names and you can easily go down a long and winding rabbit hole of electronic artists. I encourage you to do so. Listening to real drummers play drum and bass can also be quite helpful. Some flagship names include Jojo Mayer, Johnny Rabb, and Gerwin Eisenhauer. Listening to classic funk drummers from which many samples were derived like Clyde Stubblefield, Gregory Coleman, Jabo Starks, and essentially any 60s or 70s funk and soul can be very enlightening. To understand where the original breaks came from will help you to start from the foundations of the musical style.

I'll conclude the introduction on an interesting meta-musical note. The producer Squarepusher, a staple in the electronic music scene and purveyor of many a sampled funk breakbeat, has an intermittently active band called Shobaleader One. Squarepusher, in his normal capacity as an electronic artist, essentially samples a real human funk performance and creates a new electronic composition in a computer. Shobaleader One, in contrast, takes Squarepusher's electronic compositions and arranges them live on normal instruments. The whole process has a nice ironic circle of life quality to it as the end result is real humans playing live music again. Although most live drum and bass musicians have no interest in covering or recreating existing electronic music note-for-note, the whole premise of live drum and bass shares a hint of that irony. The strange quality of recreating a sample live is part of what makes live drum and bass a fun idea.

BASIC DRUM & BASS PATTERNS

These patterns are the basis for most drum and bass music. While simple, they can be extremely effective. Make sure to practice with a metronome at a variety of speeds. Ultimately, try to achieve 160-180 bpm on the metronome whenever possible for realistic and useful drum and bass speed. This will depend on the particular rhythm, of course, as 16th notes on the hi-hat will be harder to play than quarters. Clear, precise execution is the key to sounding authentic. Mixing and matching these patterns and rhythmic ideas, and also moving them to alternative drums and cymbals, will give you a massive repertoire of sounds and grooves to choose from in any drum and bass situation.

1 2 3

4 5 6

7 8 9

10 11 12

13 14 15

Live Drum & Bass

16 17 18

Measures 16-18: A three-measure phrase in 4/4 time. Each measure contains a bass line with a dotted quarter note followed by an eighth note, and a drum line with a quarter note followed by an eighth note. The bass line notes are G2, A2, B2, and C3. The drum line notes are G2, A2, B2, and C3. The phrase is divided into three measures by double bar lines.

19 20 21

Measures 19-21: A three-measure phrase in 4/4 time. Each measure contains a bass line with a dotted quarter note followed by an eighth note, and a drum line with a quarter note followed by an eighth note. The bass line notes are G2, A2, B2, and C3. The drum line notes are G2, A2, B2, and C3. The phrase is divided into three measures by double bar lines.

22 23 24

Measures 22-24: A three-measure phrase in 4/4 time. Each measure contains a bass line with a dotted quarter note followed by an eighth note, and a drum line with a quarter note followed by an eighth note. The bass line notes are G2, A2, B2, and C3. The drum line notes are G2, A2, B2, and C3. The phrase is divided into three measures by double bar lines.

25 26 27

Measures 25-27: A three-measure phrase in 4/4 time. Each measure contains a bass line with a dotted quarter note followed by an eighth note, and a drum line with a quarter note followed by an eighth note. The bass line notes are G2, A2, B2, and C3. The drum line notes are G2, A2, B2, and C3. The phrase is divided into three measures by double bar lines.

28 29 30

Measures 28-30: A three-measure phrase in 4/4 time. Each measure contains a bass line with a dotted quarter note followed by an eighth note, and a drum line with a quarter note followed by an eighth note. The bass line notes are G2, A2, B2, and C3. The drum line notes are G2, A2, B2, and C3. The phrase is divided into three measures by double bar lines.

31 32 33

Measures 31-33: A three-measure phrase in 4/4 time. Each measure contains a bass line with a dotted quarter note followed by an eighth note, and a drum line with a quarter note followed by an eighth note. The bass line notes are G2, A2, B2, and C3. The drum line notes are G2, A2, B2, and C3. The phrase is divided into three measures by double bar lines.

34 35 36

Measures 34-36: A three-measure phrase in 4/4 time. Each measure contains a bass line with a dotted quarter note followed by an eighth note, and a drum line with a quarter note followed by an eighth note. The bass line notes are G2, A2, B2, and C3. The drum line notes are G2, A2, B2, and C3. The phrase is divided into three measures by double bar lines.