"Where do I begin?" No, this isn't the opening line from the theme to Love Story, it's a question that I'm often asked by drummers who want to get into electronic percussion for the first time.

The answer to this question depends on the specific reasons why you want to get involved with electronics. For example, if you're looking for a way to practice drum set in your apartment at 3:00 a.m., then an electronic drum set is really the only way to go. But, if you want to get into electronic percussion for your own self development, the development of your students, and the desire to enter the 21st century, then my suggestion is to buy a drum machine...

by Norman Weinberg | Illustration by Sca Halpin
plugged in

If you're a teacher working either out of your home or at a local drum shop or music store, it's important to realize that your students will have a better educational experience if you can incorporate aspects of electronic percussion into their lessons. This technology isn't going away, and those who adapt to it are more likely to outlive those who don't. Players who have experience working with the technological side of music making are going to be in higher demand than those who don't have these skills.

Why a drum machine? I'm glad you asked! It's one of the most useful and versatile tools in an electronic music studio. Here are a couple of additional reasons why a drum machine is a great first electronic percussion purchase:

1. By working with the drum machine, you'll learn (and teach) programming and compositional techniques that will apply to just about any electronic music format from MIDI sequences to digital multi-track recorders.

2. Used drum machines are now flooding the market, both in brick and mortar music stores and pawn shops, and on Internet classified ads and auctions. If you shop around, you should be able to find a high quality drum machine with lots of great sounds and features between $75 and $125.

3. No matter how sophisticated your electronic percussion studio becomes in the future, you can always use your drum machine as a MIDI sound module for studio work or live performance.

Working with a drum machine is a great tool for personal growth. Drum machines can easily be incorporated into personal practice routines and teaching methodologies that can make real improvements in a short amount of time.

Below are just a few of the ways that you might be able to incorporate a drum machine into your teaching studio.

**Metronome Subdivisions.** Using a drum machine as a standard metronome isn't an earthshaking new idea. But add a little creativity, and you can make use of a few variations that aren't possible with a "normal" metronome.

For example, instead of just a regular click, you can select different sounds for the various subdivisions of the beat. In Ex. 1 (see facing page), a snare drum plays quarter-notes, an agogo bell plays eighths and a shaker lays down sixteenths. In this way, it's easy to hear how each note value relates to the others and to the measure as a whole. Keep in mind that if you don't like the way these particular sounds fit together, you can re-program the pattern to play any other sound included in your drum machine.

**Complex Subdivisions.** What would Dave Brubeck, Mahavishnu Orchestra, and most prog rock bands of the '70s have been without creative combinations of twos and threes? How about working on your 17/16 time grooves? There are several ways to divide a measure with that time signature, none of which can be accomplished with a regular metronome. But with a drum machine, anything is possible! If your machine won't let you program a single measure with 17 beats, you can work around that by programming two separate patterns (such as one bar of 9/16 and another bar of 8/16 or 2/4) and combining them together in song mode. In Ex. 2, we decided on a subdivision pattern of 3+2+3+2+2+3+2. The agogo sound plays each sixteenth, the snare highlights the rhythm of eighths and dotted eighths, and the kick drum plays the larger "three unequal beats" in each measure.

**Grooves.** If you get a little more creative, you can have your metronome groove instead of just pounding out the basic rhythms. In Ex. 3, the drum machine is programmed with a two-bar rhythm that has a little more life and interest than working with a metronome. Working on a guagancó or an Afro-Cuban 6/8? Just program the drum machine to play the percussion parts while you or your student plays on top of this rhythmic bed. In fact, soloing over these percussion grooves is big fun and a great way to develop musical solos.

**Free Wheeling.** Sure, your time may be great while you play along with the metronome, but how solid is your groove when the metronome is gone? With this little practice tool, you'll know! The idea is to play along with the drum machine (Ex. 4) and keep the groove stable even when the drum machine drops out in the last measure. When the pattern repeats, you'll be able to hear if you held the time steady or if you pushed forward or dragged back. If this exercise wasn't much of a challenge, you can easily extend the number of measures that the drum machine is silent. Can you hold the groove for two bars, four bars, eight?

**Open/Close/Open Practice.** If you teach the control required to perform rudiments or other technical studies in the traditional manner of slow-to-fast-to-slow, you will be happy to know that most drum machines allow a programmer to speed up and slow down patterns. There are several ways to do this. Here are two:

Method one: Program a pattern that is a single measure of quarter time and program a single cowbell quarter note. Using the song mode, have this measure repeat over and over again with a gradual accellerando from slow to fast and then a gradual ritardando back to slow again. The result is that each click of the metronome will speed up at your programmed rate, creating a perfectly smooth "ramp" from one tempo to another.

Method two: Instead of having a smooth and gradual change of tempo, you can program the accellerando in "steps." To do this, program a series of quarter-notes in a four-measure pattern. Then program the accellerando to kick in between one repeat and the next. This way, the tempo is stable for four bars, then jumps instantly to the next tempo.
Depending on your practice or teaching requirements, you can make each “step” last as many measures as desired.

**Method Books.** Some of us learn better by reading, and some of us learn better by hearing. Why not do both and have the support of hearing how something sounds in addition to seeing how it looks on the page?

If you work with any of the many wonderful drum set method books that are on the market, it’s easy to program the exercises into the drum machine. Now your students can hear how the exercises should sound, and you can even have your students play along with them during a lesson. It’s like using a metronome that is programmed to play exactly the same thing that the student is playing. One of the huge advantages is that the tempo controls on drum machines often range from 20 bpm to 250 bpm or more. If the student has trouble playing an exercise at the written tempo, just pull the tempo back down to one that can be performed successfully.

**Polyrhythms.** Everyone likes to play with polyrhythms! It’s fun, it’s exciting, and it builds strong bones! Getting your students to understand polyrhythms is much easier when they can hear how the two rhythms interact with each other. While you won’t be able to program most drum machines to play extremely complex polyrhythms like 23:27, it’s pretty easy to program most of the common polyrhythms. Ex. 5 illustrates how some of these rhythms can be programmed. Be sure to use two very distinct sounds for each of the different voices (such as a cowbell and a snare drum) so that your student can distinguish the individual rhythms.

Want to give your student an additional challenge? Have them play along with the drum machine’s 4:3 pattern and alternate four-bar phrases between a jazz waltz (in the “3” rhythm) and a swing pattern (in the “4” rhythm).

**Balancing Act.** We all know how important instrumental balance is to creating the proper musical style, and making that style seem natural. Nobody wants to hear a heavy “four-on-the-floor” in a jazz combo setting! You can illustrate this to your students on a drum machine by adjusting the relative volume of each of the instruments in the drum set. For example, changing the balance of the hi-hat in relation to the snare and bass drum will dramatically alter the feel of a groove.

Okay then, feel better about taking the plunge into the digital domain? Try a few of these practice and teaching techniques to pique both you and your student’s interests. Apply a little of your own creativity to your practice and teaching style and you’re sure to come up with several new ideas. As you program these patterns and songs into your drum machine, you’ll learn all the necessary skills and techniques you need to better understand the technology. By the way, have your students help you program. They’ll love it!