DRUM MACHINE PROGRAMMING

NORMAN WEINBERG

PROGRAMMING WITH LATIN RHYTHM INSTRUMENTS, PART 1

DRUM MACHINES USED TO BE SIMple. Only a few years ago most units offered a lean array of internal samples — some standard drumkit sounds and maybe a cowbell, handclap, or tambourine. But today, you'll be hard pressed to find a drum machine that *doesn't* offer several dozen samples, including congas, shakers, cuicas, agogos, timbales, whistles, and other instruments from Latin America or Africa. What do you do with these additional sounds? In general, these instruments can be used to add motion and color to a groove. And in traditional Latin music, the rhythm instruments perform repetitive patterns of one or two measures that provide the foundation of the beat, seldom straying into the area of "fills" or "solos."

Claves. Claves are two sticks of resonant wood that are played by being struck together. The rhythm they play is called "the clave." The clave is one of the most important rhythms in Latin American music, as it sets the rhythmic and structural foundation for all the other instruments in the group. There are two basic clave patterns. The first is the "three-two" clave,

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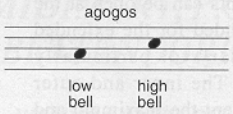
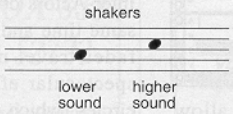
key to Ex. 3

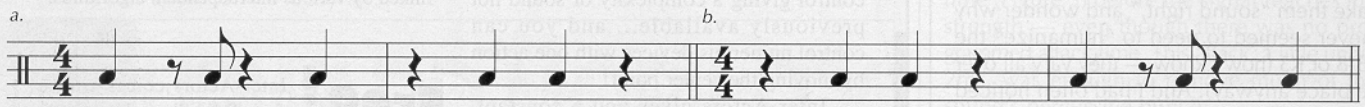


key to Ex. 4

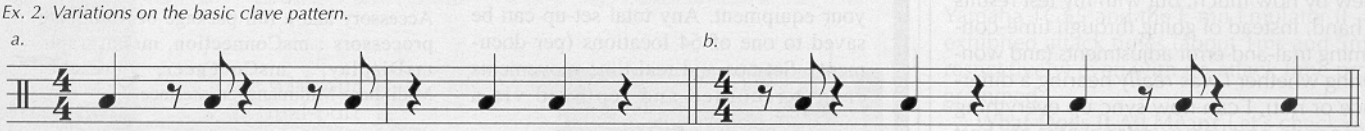


key to Ex. 5

Ex. 1. Standard "three-two" and "two-three" clave patterns.



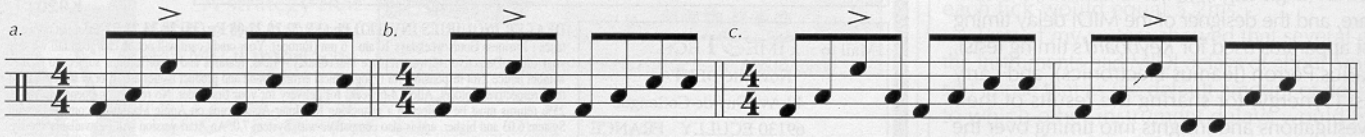
Ex. 2. Variations on the basic clave pattern.



Ex. 3. Basic one- and two-bar agogo patterns.

Ex. 4. Standard shaker patterns.

Ex. 5. Basic rhythm patterns for a single conga drum (5a and 5b) and for high and low congas (5c).



and the second is called the "two-three" clave. As you can see from Examples 1a and 1b, the only difference between the two patterns is the phrasing.

When programming clave rhythms, it's perfectly acceptable to alter the basic pattern by delaying or anticipating one or more notes (See Examples 2a and 2b). Whether you use a traditional or altered clave pattern, keep it consistent. The clave rarely changes during the course of a tune and almost never assumes a soloing role.

Agogos. Agogos are double iron bells usually tuned in thirds. Examples 3a and 3b show two different one-measure patterns. The first example is fairly open, and leaves some rhythmic space for the other percussion instruments. The second example repeats every half-measure, and for that reason, conveys more energy and forward motion. Example 3c is a moderately busy two-bar pattern that stresses the second half of each measure with accents on the higher bell.

Shakers. Ganza, chocalho, maraca, afuche, cabasa, caxixi, and even the tambourine fall within the category of shakers. In order to program shakers effectively, use at least two different sounds. These instruments produce subtle — yet distinctive — colors depending on how the seeds, pellets, or jingles strike the inner surface of the instrument. When the shaker is moved away from the body, the sound is a little lower in pitch and slightly shorter. You can experiment with detuning, changing a filter, or altering the decay time of the samples to imitate forward/backward movements.

Shakers perform rhythms that are functionally similar to hi-hat cymbals. Constant eighth-note patterns are common (such as those in Examples 4a-c), with accents providing the feel and forward momentum. Example 4d is a pattern that emphasizes the tonal differences created by the physical movement of the shaker.

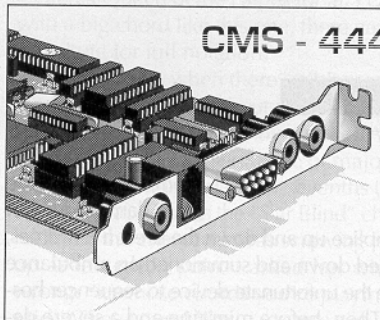
Congas. Conga drums are a family of instruments. The most common drum sizes are small (quinto), medium (conga), and large (tumba). Each drum is capable of creating a wide variety of sounds depending on the player's stroke. The first step in creating authentic conga patterns is finding conga samples that imitate the natural sounds of a seasoned percussionist. This task is easier with drum machines and drum modules that offer extensive sound editing.

Examples 5a and 5b illustrate two basic rhythm patterns for a single conga drum using four different strokes. Palm/heel strokes are low and muted. Finger strokes are a little higher in pitch, but still muted. The slap is the highest pitch and should sound sharp and crisp. The open stroke creates a full-bodied tone with the longest sustain. If your drum machine has both high and low conga samples, try the two-bar pattern in Example 5c.

Next month, we'll investigate the quijada, cuica, guiro, timbales, and a few other toys. Until then, play around with some of these instruments and try adding some spice to your next rhythmic stew. ■

SERIES 4
MIDI INTERFACE

CMS - 444



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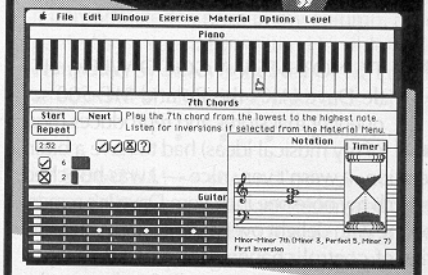

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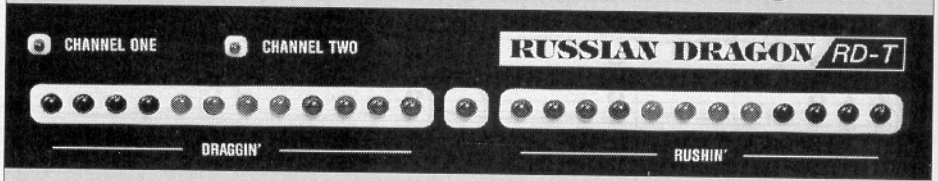

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