

# Beatnik RA1200P Rhythmic Analyzer

RIGHT ON  
BEAT



BY **NORMAN WEINBERG**

For years, technology-savvy drummers have used computers and MIDI sequencing software to get a “visual window” into their timing, touch, and rhythmic precision. To do this, though, they needed a computer (of course), the right software, an electronic drum pad and stand, a trigger-to-MIDI interface, and a computer-MIDI interface. Oh, and also an electrical outlet and perhaps a surge-protected power strip.

But now you can control much of the same technology in a small and portable package – the Beatnik Rhythmic Analyzer. What makes this machine unique are the five built-in analyzers with four different data views to gain insight into your performance abilities. It can measure the timing of every stroke you play and give you a visual representation of that stroke’s rhythmic accuracy (as well as a history of your rhythmic precision over time). And it even boasts four skill levels,

a built-in 25-250 bpm metronome, and the ability to play any permutation of rhythm from quarter-notes to thirty-second-notes.

## QUICK LOOK

The front panel of the Beatnik couldn’t be more clearly designed. On the left side are the settings buttons: Analyzers, Views, Skill, Preferences, Reser, and Start/Pause. On the right side are the buttons for the metronome: Tempo, Note/Beat, Permutations, Phrase Setup, Volume/Sensitivity, and Click/Tap. The only other control is a selector knob that’s used to enter data. Basic programming is totally intuitive. If you want to change the tempo, note value, or volume, you just press that parameter’s button until it lights up. Once the button is illuminated, the round selector knob determines the value in the LCD.

Around the back of the unit is a minijack headphone output, power switch, backlight switch, and DC-9V input. When you’re us-

ing the headphones, the internal speaker’s output is automatically disconnected.

The unit’s LCD display is 48 pixels tall by 128 pixels wide. The width of the display represents the time window of a single quarter-note, which is divided into 128 equal time subwindows. Each of the 128 time subwindows is equal to one 512th-note. Beatnik uses the 128 columns of pixels across the width of the display to represent the 128 different 512th-notes – the basic accuracy level of the unit. As you play, the Beatnik displays the timing and velocity of every stroke. The timing is represented by the position of a vertical line along the display’s width. The velocity is shown by the height of the line. Using this type of display, it’s very easy to “see” your playing.

Depending on the skill level selected, the click markers (vertical lines) get thinner and thinner. As you play, Beatnik “scores” your performance in relation to the skill level. At the low level, strokes must be within seven

512th-notes to be scored as accurate. The medium level has a tolerance of five 512th-notes. The high and expert settings have tolerance levels of three and one 512th-notes, respectively. You can change the skill level when the machine is paused to see how your percentage score would be affected at the different levels. For example, a 98-percent score at the low level might be equal to a 32-percent score at the expert level.

## ANALYZERS

The Groove analyzer measures your ability to play at a consistent tempo. There are four levels of difficulty: +/-5 bpm, +/-10 bpm, +/-20 bpm, and +/-25 bpm. As you work in this analyzer, it's less important that each and every note is hit exactly with the click. Instead, what's important is that the overall tempo remains locked in place. A moving arrow shows your tempo within the level of difficulty, and you can see when you slow down or speed up. If your time is steady and consistent, even if it's consistently behind the click, the position of the arrow will remain stationary. If you start to drag too far below the indicated tempo, you'll hear a low warning buzzer, if you push the tempo too far, you'll hear a higher buzzer.

The Dynamics analyzer measures your dynamic control and stroke velocity while you play with a click track. In this mode, the screen shows a single vertical click marker that represents all subdivision click points. As you play, the timing of the stroke is placed as a vertical line while the stroke's velocity level is represented by the height of the line. It's a clear way to show both the rhythmic timing and the velocity at the same time.

With the Subdivisions analyzer, you can measure how accurately you play subdivisions. Instead of showing only a single timing marker that represents every subdivision, this mode shows each subdivision individually. It's perfect for testing your skills at playing broken rhythms inside the beat – for example, the first, third, and fourth sixteenth-notes in a beat or playing on the second note of a set of sixteenth-note triplets. When playing broken rhythms, the machine will score and track only those strokes. Since the display's total width shows the timing of one complete quarter-note, it's easy to see the accuracy of each inner subdivision (from quarter-notes to thirty-second-notes).

The Phrase analyzer measures how accurately you play extended phrases up to eight

## DETAILS

**MODEL** Beatnik RA1200P Rhythmic Analyzer

**FEATURES** Four skill levels, five analyzers, four data views, backlit graphic display, click depth control, tap tempo, tap start, stand mountable (standard 8mm screw)

**NOTE VALUES** Any rhythm from one to eight divisions per quarter

**METRONOME SETTINGS** 25–250 bpm

**RHYTHMIC ACCURACY** Accurate to one 512th-note

**POWER** Six AA batteries (included), optional AC adapter

**PRICE** \$189

**CONTACT** OnBoard Research Corporation, 1321 Valwood Pkwy., Suite 440, Carrollton, TX 75006. 214-239-4005. [tuners.com](http://tuners.com)

beats in length. This mode can be programmed to play and track any combination of rhythms. For example, you can easily program the following rhythmic pattern (each number represents the number of divisions for each successive quarter-note): 1, 3, 5, 7, 2, 4, 6, 8. You can create literally trillions of these patterns for practice.

The Tracking analyzer improves your ability to make transitions between changing subdivisions. In this mode, you can change subdivision values in real time and Beatnik will “know” what you're playing. To begin working with this analyzer, just hit Start. The click plays quarter-notes no matter what settings are made in the Preferences page, and you begin playing. If you play a pair of eighth-notes, the machine will sense that you've played two notes within the click and begin scoring eighth-notes. If you change to playing groups of seven, Beatnik catches the change and will start tracking and scoring these groupings automatically.

## VIEWS

In the Real-Time view, Beatnik displays one stroke at a time, giving both the rhythmic placement and the relative dynamic. After about a second of inactivity, the stroke indicator line will disappear. Beatnik's memory, however, remembers the stroke for the two History views (explained below).

In the History 1 view, the display shows each stroke as a single pixel. If you have, for example, 25 strokes at the exact same timing position, the line at that position will be 25 pixels high. If you have three strokes at another timing position, that line will only be

three pixels high. It's a snap to see your accuracy: If you often play the last note of a group of five late, you'll know it!

If you are interested in seeing how your last 128 strokes related to the timing grid, then the History 2 view is for you. It's perfect for tracking your progress over time. If you started out consistently early, then fixed your timing, you'll see it in this view.

The Auto-Switch view automatically switches between Real-Time view and the History views. As you play, the display is in real time. When you stop playing, the view switches. By adjusting your preference settings, you can select that the machine switch to the History 1 or History 2 views.

## MORE COOL STUFF

When the metronome is playing subdivisions, the downbeat is a high pitch and the various subdivisions are played in a variety of lower pitches. This gives each subdivision rhythm a sort of “melody” than can help rhythmic identity. In addition, any subdivision can be replaced with a rest using the Permutation button. These permutations can be used in any of the analyzer functions except the Tracking analyzer. How cool is that?!

## SUGGESTION BOX

While I liked just about everything on the Beatnik, there was one issue that bothered me. The trigger sensor seems to be right below the logo at the six-o'clock position on the pad. Working with the Dynamics analyzer, I felt that the Beatnik reacted more to my playing position than to my velocity. If your hands aren't in the exact same playing spot, it's hard to determine if dynamic inequalities are due to your skill or due to the trigger's sensitivity. Adjusting the trigger's overall sensitivity didn't really fix the problem. Strokes near the sensor were always “hotter” than strokes farther away.

## VERDICT

The Beatnik is a great tool to improve the rhythmic accuracy of any drummer or percussionist – from beginner to the most seasoned pro. Programming the unit is a breeze, and interacting with the various analyzers, histories, and views is fun and insightful. You'll learn a lot about your playing by using this machine.

