

Desert Moon Audio

RHYTH-O-MATIC

ROM-16

Analog Drum Machine · Sixteen Rhythms, Eleven Voices



Sixteen rhythms on chunky push-keys, any two of which play at once. Eleven analog drum voices, a TEMPO dial and a red beat lamp. Press START and it plays. Then an EFFECTS panel turns the whole drum bus into your own sound, and an ARRANGE page gives it fills, phrases and a voice mixer. Nothing in it is sampled.

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A NOTE ON THE DESIGN

Ryth-O-Matic is an original Desert Moon Audio design. Every voice is a circuit rather than a recording: a resonator that rings and drops in pitch for the drums and congas, filtered noise for the snare rattle and maracas, and six square-wave oscillators through band-pass filters for the hats, cymbal and cowbell. That is why TUNE and DECAY reshape every sound continuously instead of stretching a sample.

1.1 What Gets Installed

FORMAT	LOCATION
Audio Unit	/Library/Audio/Plug-Ins/Components/Rhyth-O-Matic.component
VST3	/Library/Audio/Plug-Ins/VST3/Rhyth-O-Matic.vst3
AAX	/Library/Application Support/Avid/Audio/Plug-Ins/Rhyth-O-Matic.aaxplugin
VST3 (Windows)	C:\Program Files\Common Files\VST3\Rhyth-O-Matic.vst3
AAX (Windows)	C:\Program Files\Common Files\Avid\Audio\Plug-Ins\Rhyth-O-Matic.aaxplugin

Rhyth-O-Matic is an **instrument**, not an effect. After installing, restart your DAW or rescan its plug-in list, then create an **instrument track** (a software-instrument or MIDI track) and choose Rhyth-O-Matic from **Desert Moon Audio**. In Logic it is under AU Instruments; in most other hosts it sits with the drum machines.

2.1 Five Minutes In

Press play in your DAW. With **HOST SYNC** lit, as it is when the unit loads, Rhyth-O-Matic follows the song's tempo and bar and plays **Rock 1**. Without a running song, press **START**: the unit runs on its own clock at the **TEMPO** dial, and the red lamp flashes on every beat.

Now try the rhythm keys along the bottom. Press one to play it. Press a second and both play at once, each on its own grid against the same bar, so a straight rock under a triplet shuffle gives the lopsided grooves these boxes were loved for. Press a lit key to release it.

Turn **SWING** up for a shuffle feel, **ACCENT** for more push on the marked hits, and **BALANCE** toward PERC to bring the hats, cymbal, cowbell, claves and maracas forward. Press **FILL** and the current bar becomes a fill with a crash on the next downbeat. Then open **EFFECTS** and turn anything.

2.2 Resizing

Drag the window's corner. The panel keeps its shape and every control scales together.

DEFAULTS

POWER, in the top-right corner, is the host's own bypass. START, FILL and POWER are never stored in a preset, so loading one never stops the unit or switches it off.

1.2 The 14-Day Trial

Rhyth-O-Matic runs **fully featured for fourteen days** from the first time it loads — every rhythm, every control, every preset, nothing held back. The notice on the top band, to the left of POWER — **TRIAL – 14 DAYS LEFT** — counts the days down. When the trial ends the unit stays in your sessions but goes silent until a license is entered; your settings are kept. Licenses are sold at **desertmoonaudio.com**.

1.3 Entering Your License

Your license key is in the order email: one long line beginning DMA1-. Click the trial notice, paste the key in and press **Activate**. The first activation on a machine takes one quick internet check, which registers this computer against your key; from then on the plug-in runs fully offline, apart from its once-a-day update check. There is no account and no dongle. One key covers every format — Audio Unit, VST3 and AAX — and is kept in
~/Library/Desert Moon Audio/Rhyth-O-Matic/ on macOS.

1.4 Seats and Moving Machines

One key activates **up to four computers you personally own** — a studio desktop, a laptop and a couple of spares. To move to a new machine, open the preset bar's menu on the old one and choose **Deactivate This Machine...**; that hands the seat back at once and returns that copy to trial mode. If the old machine is gone — sold, wiped or dead — write to **info@desertmoonaudio.com** with your order number and the seat is released by hand.

1.5 Updates and Support

Updates are free for as long as you own the plug-in. Rhyth-O-Matic checks once a day for a newer version and shows a small notice on the panel when one exists; download the current installer and run it over the top — nothing needs to be uninstalled and your presets stay where they are. Questions, problems or a lost key:
info@desertmoonaudio.com.



- 1 **Preset bar** — step, name window, A/B, undo, redo, save, revert, menu.
- 2 **POWER** — the host's bypass, with its pilot lamp.
- 3 **VOLUME** — output level.
- 4 **BALANCE** — drums against percussion.
- 5 **SWING** — eighth-note shuffle feel.
- 6 **ACCENT** — how far the accented hits stand out.
- 7 **FILL** — make this bar a fill.
- 8 **EFFECTS** — open the effects panel.
- 9 **ARRANGE** — open the arrange page.
- 10 **WEAR** — the looseness of a well-used box.
- 11 **TEMPO** — the unit's own clock, 40–240 BPM.
- 12 **Beat lamp** — flashes on every beat.
- 13 **HOST SYNC** — lock to the host's tempo and bar.
- 14 **START / STOP** — run the unit's own clock.
- 15 **Rhythm selector** — sixteen rhythms, any two at once.



The rhythm selector: rock in white, swing and waltz in yellow, the Latin and ballroom rhythms in red.

Sixteen rhythms, each written for the full voice set. Press a key to play it; press a second and both play together; press a lit key to release it. Each rhythm runs on its own grid — sixteenths, triplets or three beats to the bar — against one shared bar clock, which is what makes the combinations interesting: a 16-step rock against a 12-step shuffle never lines up quite the same way twice in a bar.

KEY	GRID	KEY	GRID
Rock 1 · 2 · 3	Sixteenths, 4/4	Bossa Nova	Sixteenths, 4/4
Slow Rock	Triplets, 4/4	Samba	Sixteenths, 4/4
Swing	Triplets, 4/4	Rhumba · Cha-Cha	Sixteenths, 4/4
Shuffle	Triplets, 4/4	Mambo · Beguine	Sixteenths, 4/4
Waltz	Straight, 3/4	Tango · Foxtrot	Sixteenths, 4/4
Jazz Waltz	Triplets, 3/4		

4.1 The Eleven Voices

Bass drum, snare drum, rim shot, closed and open hi-hat, cymbal, cowbell, claves, maracas, and high and low conga. The drums and congas are resonators that ring and fall in pitch; the snare rattle and maracas are filtered noise; the hats, cymbal and cowbell come from six square-wave oscillators at unrelated pitches, which is where their metallic sizzle comes from. A voice struck again while it still rings carries on from where it was rather than cutting off, so fast rolls never click.

VOLUME 0 ... 100 % · rest 80 %

Output level. A soft knee in the last part of the headroom means two rhythms under heavy FUZZ never spit at full scale.

BALANCE DRUMS ... CENTER ... PERC

Drums against percussion. Toward DRUMS the hats, cymbal, cowbell, claves and maracas come down; toward PERC the kick, snare, rim shot and congas do. At CENTER everything is at full level.

SWING 0 ... 100 % · rest 0

An eighth-note shuffle. The off-beat eighths are dragged toward triplet time and the sixteenths move with them, so at full swing a straight rhythm has become a shuffle. Rhythms already on triplets ignore it.

ACCENT 0 ... 100 % · rest 50 %

How far the accented hits stand out. At zero every hit is the same; at full, the unaccented hits sit 10 dB down.

WEAR 0 ... 100 % · rest 0

The looseness of a well-used box. Hits land up to 22 ms late and 5 dB uneven, each a little off in pitch and length, and the tuning drifts; past half-way the odd hit drops out. It is repeatable, so a bounce sounds the same every time.

TEMPO 40 ... 240 BPM · rest 120

The unit's own clock, used when HOST SYNC is off or the host is stopped. The red lamp flashes on every beat.

HOST SYNC on at load

Lit: while the host plays, its tempo and bar position take over, so the pattern locks to the song through loops, locates and tempo changes. Unlit: the unit keeps its own time.

START / STOP latching

Runs the unit's own clock from the downbeat. Press again to stop.

FILL key

The current bar becomes a fill and the next downbeat gets a crash. Pressed late in a bar, it takes the next bar instead. The fill's style is set on the ARRANGE page.

MIDI GM drum map

Notes play the voices on the General MIDI drum map: 36 bass drum, 38 snare, 37 rim shot, 42 closed hat, 46 open hat, 49 cymbal, 56 cowbell, 75 claves, 70 maracas, 63 and 64 high and low conga. MIDI Start and Stop drive the clock.



The EFFECTS key opens the panel: the voice trims, then the chain that runs on the whole drum bus.

The chain runs in this order on the summed drums: **FUZZ** → **CRUSH** → **TONE** → **REVERSE** → **DELAY** → **VERB**. Every stage is smoothed, so a wild sweep while the unit plays is a gesture, not a string of clicks, and every stage at zero is completely out of the circuit.

TUNE · DECAY ±12 st · 50 ... 200 %

Every voice together: pitch in semitones, and how long each rings. Because the voices are circuits, a detuned kit sounds like a different kit, not a slowed-down one.

FUZZ · CRUSH 0 ... 100 %

FUZZ drives the bus into distortion. CRUSH lowers bit depth and sample rate together, for everything from gritty to broken.

TONE DARK ... FLAT ... BRIGHT

A tilt: darker or brighter around the middle, with the whole kit moving together.

REVERSE 0 ... 100 %

The previous beat played backwards under the live one. Because the window is exactly a beat, the reversed hits still land on the grid — a reversed-cymbal machine you can leave running.

DELAY · TIME · FEEDBACK 1/16 ... 1/2

A tempo-synced echo: 1/16, 1/8T, 1/8, 1/8D, 1/4 or 1/2. Changing TIME crossfades between repeats instead of sliding the pitch.

VERB · MIX · ON 0 ... 100 %

VERB is a small spring tank. MIX blends the whole chain against the dry drums, and ON switches the section in and out. Off, or fully dry, the chain does not run at all and its tails are cleared, so an old echo never jumps back in when it is switched on.



The ARRANGE key opens the arranger: automatic fills, the fill style, what two rhythms do together, and the voice cancel keys.

AUTO FILL OFF · 2 · 4 · 8 · 16 bars

Plays a fill by itself on the last bar of every group of that many bars, so a pattern phrases like a drummer without you touching FILL.

FILL ROLL · BREAK · CYMBAL · RANDOM

ROLL builds the snare on the beats with a conga answer. BREAK drops the drums for the congas and closes on claves. CYMBAL rides open hats over the snare into the crash. RANDOM picks one each time.

ARRANGE BOTH · A / B · B AS FILL

What two lit rhythm keys mean. BOTH plays them together. A / B alternates them bar by bar. B AS FILL plays the first until a fill bar, when the second plays the whole bar instead.

CANCEL VOICE four latching keys

Takes a voice group out of every rhythm: CYMBAL / HIGH HAT, BASS DRUM, SNARE DRUM, or COW BELL / CLAVES. The congas and maracas always play. Build a groove up, or strip one down to its percussion.

The bar across the top carries the whole preset system. Arrows step through the factory bank and then your own; the readout names what is loaded; click it for the full menu. **A/B** flips between two scratch settings; **undo** and **redo** walk the edit history; the disk saves under a name; the ring puts back the loaded preset. Saved presets live in ~/Library/Desert Moon Audio/Rhyth-O-Matic/Presets as .rompreset files. START, FILL and POWER are not part of a preset.

8.1 The Factory Bank

Init The unit as it loads: Rock 1 at 120, every control at rest. ROCK 1 · 120 BPM	Banana Kong Doug's own: Samba and Rhumba taking turns bar by bar, a little of everything on the effects panel. SAMBA / RHUMBA A/B · FUZZ · CRUSH · REVERSE · DELAY · VERB
Lounge Bossa A warm bossa with a touch of spring. BOSSA NOVA · 118 · ACCENT 60 · VERB 28 · TONE DARK	Rock Meets Samba Straight rock over a samba, both at once. ROCK 1 + SAMBA · 104 · ACCENT 65
Swing Shuffle Swing and shuffle stacked, percussion forward. SWING + SHUFFLE · 132 · BALANCE PERC 20 · VERB 15	Dusty Break A crushed, swung, dark break for lo-fi. ROCK 3 · 92 · SWING 35 · CRUSH 38 · FUZZ 22 · DECAY 80
Tape Tango A tango through a dotted-eighth echo. TANGO · 126 · DELAY 1/8D · FEEDBACK 45 · VERB 20	Backwards Mambo A mambo with the last beat reversed under it. MAMBO · 112 · REVERSE 62 · VERB 30 · DECAY 130
Fuzz Waltz Two waltzes, straight and triplet, through fuzz. WALTZ + JAZZ WALTZ · 150 · FUZZ 66 · TONE BRIGHT	Cha-Cha Machine Cha-cha over rock, swung and hard-accented. CHA-CHA + ROCK 1 · 122 · SWING 30 · ACCENT 85
Slow Motion Slow rock tuned down, long and dark. SLOW ROCK · 66 · TUNE -7 · DECAY 170 · VERB 45 · DELAY 1/4	Hi-Fi Disco A bright, tight rock and cha-cha together. ROCK 3 + CHA-CHA · 124 · ACCENT 30 · TUNE +2 · TONE BRIGHT
Broken Radio Crushed to bits with a sixteenth-note echo. FOXTROT + RHUMBA · 108 · CRUSH 72 · DELAY 1/16 · REVERSE 30	Dub Beguine Beguine into a long triplet echo. BEGUINE · 96 · DELAY 1/8T · FEEDBACK 72 · VERB 35
Four Bar Phrase Rock 1, with a Rock 3 bar as the fill every four bars. ROCK 1 / ROCK 3 · B AS FILL · AUTO FILL 4 · RANDOM · WEAR 35	Worn Samba Samba and cha-cha alternating on a tired box. SAMBA / CHA-CHA A/B · AUTO FILL 8 · BREAK · WEAR 70
Haunted Ballroom Jazz waltz and tango, reversed, tuned down, drenched. JAZZ WALTZ + TANGO · 84 · REVERSE 45 · VERB 60 · TUNE -4	

9.1 Where to Start

A backing groove for writing: one rhythm, HOST SYNC on, AUTO FILL every 8 bars. **Lo-fi and hip-hop:** Rock 3 or Bossa Nova, SWING toward 35 %, CRUSH and a dark TONE — the **Dusty Break** preset. **Something no drummer would play:** two rhythms on different grids, like Rock 1 with Samba or Waltz with Jazz Waltz. **Ambient and dub:** a slow tempo, DECAY up, REVERSE and a long DELAY with high FEEDBACK — **Dub Beguine** and **Haunted Ballroom** start there.

9.2 Playing It From MIDI

Leave START off and play the voices from a MIDI clip or a pad controller on the General MIDI drum map (section 5). The EFFECTS chain, TUNE and DECAY apply to played notes too, so it doubles as an analog drum kit.

10 Specifications

ITEM	VALUE
Type	Instrument: AU music device, VST3 Instrument (Drum), AAX instrument
Formats	Audio Unit, VST3 and AAX on macOS (universal binary, native on Apple Silicon and Intel); VST3 and AAX on Windows
Rhythms	16, any two at once; straight, triplet and 3/4 grids
Voices	11 analog circuit models; nothing sampled
Tempo	40–240 BPM, or locked to the host
Effects	Fuzz, crush, tone, reverse, synced delay, spring reverb; dry/wet mix
MIDI	General MIDI drum map in; MIDI Start / Stop
Output	Stereo (summed on a mono track)
Sample rates	44.1 – 192 kHz
CPU	About 0.8 % of one core at 48 kHz, everything on
Trial	14 days, fully featured; then silent until licensed
License	One key, four computers, all formats; offline after activation

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Rhyth-O-Matic ROM-16 · User Manual · Version 1.0.2

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