

Ohmforce – Bohm

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Creative Modulation Ideas for Ohm Force Bohm

A Eurorack musician's take on how to push Bohm beyond "just kicks"

Bohm is marketed as a stereo dual-voice kick system, but the manual makes it clear it can do much more if you treat it like a playable synth voice + rhythmic layer generator + sidechain/effects hub. The biggest takeaway is:

- **Bohm voice** can be pitched and sustained with **HIT as a gate**
- **Groove** is not just a rumble generator; it's a second rhythmic synth voice with envelope logic
- **Performer** can turn the whole thing into a ducking / filtering / beat-roll performance processor
- Different **models reinterpret controls differently**, so modulation feels very different model-to-model

That means you can get: - **distorted percussion - talking / tearing basslines - pseudo-pads and haunted drones - industrial tops, reese-adjacent lows, broken techno thumps, DnB stabs**

Best core ideas from the manual

Before patch recipes, here are the most important modulation facts from the manual:

1. HIT can be a trigger or a gate

This is huge. If **HIT stays high**, the sound sustains. That means Bohm can act more like a bass synth/drone voice than a one-shot kick.

Use this for: - bass notes - held drones - long evolving atmospheric tones - pitch-tracked lines

2. PITCH can track 1V/oct

The manual says for proper pitch tracking: - set **PITCH knob fully CCW** - set **PITCH attenuverter fully CW** - choose proper **Pitch CV range** in system settings: 0 . . 1V , 1 . . 2V , or 2 . . 3V - make sure sequencer is **1V/oct**

This is essential for: - dubstep bass riffs - DnB subs - melodic industrial percussion - pad/drone harmonics

3. CURVE matters a lot

The pitch envelope curve moves from: - **808-style** counterclockwise - **909-style** clockwise

The manual notes that fully CCW reaches the fundamental frequency quicker. That means: - shorter, more solid bass pitch center - better bassline tuning - more stable held-note behavior

While clockwise can give: - more exaggerated punch / dive - more synthetic attack - more aggressive transient motion

Modulate or perform this manually for big character changes.

4. COLOR is often a wavetable motion control

On many models, **COLOR** is not simply "brightness." It often controls: - wavetable position - position over time - transient harmonic content - sound source blend on Groove

This is probably one of the best CV destinations for "alive" sounds.

5. Groove is a second voice, not just an effect return

Groove has: - its own trigger input: **CLOCK** - relative **PITCH** and **LENGTH** - **COLOR** source blending - **2 / 3 / 4 taps** shaping an envelope - **TAPS CV output**

That means Groove can become: - a tuned secondary bass layer - a metallic top layer - an evolving rumble envelope source - a modulation generator via **TAPS out**

6. Performer can process kick, input, or both

Performer has: - external stereo input - ducking on every **HIT** - effect modes like **DJ Filter, HP, LP, Beat Roll, Slip Roll** - channel selector: **ALL / KICK / INPUT**

This opens up a lot: - sidechained pads - pumping drones - beat-repeat resampling - filtered industrial atmospheres

Best models for the sounds you want

For distorted percussion

Use: - **FM-2X** - **OLP4** - **VX-T** - **PX3** - **SP-6** - **WT-4**

Why

- **FM-2X / OLP4** = sharper synthetic FM attack, industrial metal
 - **VX-T** = strong transient shaping
 - **PX3** = weird, hard, experimental with object-hit layers
 - **SP-6 / WT-4** = layered transient and wavetable body
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For dubstep / DnB basslines

Use: - **FM-2X** - **HZ-1** - **VX-T** - **XT-88** - **OLP4**

Why

- **FM-2X** = very strong bass transient and FM bark
 - **HZ-1 / VX-T** = clean-to-nasty wavetable motion
 - **XT-88** = user wavetable/sample import for custom bass timbres
 - **OLP4** = weird FM motion and metallic bass growl
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For haunting atmospheric pads / drones

Use: - **PM-K1** - **HZ-1** - **VX-T** - **XT-88** - **WT-4** - Groove + Performer together

Why

- **PM-K1** can become roomy, resonant, ambient, especially with long held gates
 - **HZ-1 / VX-T / WT-4** can be softened into wavetable drones
 - **XT-88** can use custom wavetables and layers
 - Performer ducking/filtering can make things breathe
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Modulation strategies by sound type

1. Distorted percussive sounds

A. Industrial metallic kick/snare hybrid

Try on:

- **FM-2X**
- **OLP4**
- **VX-T**

Patch:

- Send regular triggers to **HIT**
- Send a fast random or stepped CV to:
 - **ATTACK CV**
 - **TRS DECAY CV**
 - **TRS TONE CV**
- Send a slower LFO to **COLOR CV**
- Use **VELOCITY CV** with random accents
- Set Bohm FX variation to:
 - **HARD**
 - **WAVEFOLD**
 - **BITCRUSH** if available
 - **DECIM** if available

Why it works

- **ATTACK** affects transient intensity
- **TRS DECAY** changes click/toc length
- **TRS TONE** changes dark/bright transient color
- **COLOR** moves the oscillator/wavetable body

- **VELOCITY** gives non-repeating impact

Extra trick

Use a clock divider/multiplier so one modulation source changes every 2, 3, or 5 hits rather than every hit. That creates repeatable “machine language” percussion instead of chaos.

B. Broken hardcore kick with tearing top

Try on:

- **PX3**
- **SP-6**
- **WT-4**

Patch:

- Trigger **HIT** with your main rhythm
- Send a sequenced CV to **PITCH CV** for tuned percussion jumps
- Modulate **COLOR CV** with a medium-speed envelope or LFO
- Modulate **FX CV** with random stepped voltage
- Turn **LENGTH** fairly short
- Turn **CURVE** toward 909 side for more punch movement
- Layer Groove lightly with high **COLOR**

Why it works

These models combine wavetable kick body and transient/sample layering. When pitch and color move together, they stop reading as a standard kick and start becoming hard-edged drum voices.

Performance move

Make the **FUNCTION CV** randomize in Studio mode between takes. Since Bohm randomization is designed around “sweet spots,” you can quickly discover distorted percussion presets.

C. Glitch percussion via Groove taps

Patch:

- Main beat to **HIT**
- Faster clock, like 16ths or triplets, to **Groove CLOCK**
- Modulate **TAPS CV**
- Modulate Groove **COLOR**
- Put Groove FX on **HP** or **BP**
- Keep Groove **VOL** fairly high
- Use irregular tap settings on **2 / 3 / 4**

Why it works

Groove repetitions are **retriggered**, not delayed copies. That means the groove voice acts like a sequenced percussion synth. With HP/BP filtering and changing tap levels, it becomes a clattery glitch layer rather than a normal rumble.

Best use

- industrial hats from a kick source
 - neuro-ish ghost percussion
 - broken beat tops
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2. Crazy basslines for dubstep / drum and bass

First, the setup for proper bass playing

Per manual: - **PITCH knob full CCW** - **PITCH attenuverter full CW** - set **Pitch CV** system range properly - use **1V/oct** sequencer - use longer **LENGTH** or hold **HIT gate**

This is the main unlock for turning Bohm into a bass synth.

A. FM growl bass

Best model:

FM-2X

Patch:

- Send a pitch sequence to **PITCH CV**
- Send matching gates to **HIT**
- Set **LENGTH** fairly long
- Use medium **SUSTAIN**
- Modulate:
 - **ATTACK CV** with envelope or velocity
 - **TRS TONE CV** with a slow triangle LFO
 - **COLOR CV** with another slow/moderate LFO
 - **FX CV** with manual performance or sequencer lane
- In variations, explore **RATIO**

Why it works

FM-2X gives you: - sub carrier - modulator-driven attack/growl - wavetable-dependent tone changes - ratio variation for harmonic character shifts

What to listen for

- low ratios = heavier sub and weight
- higher ratios = more edge / metallic bark
- ATTACK modulation = changes how hard the FM bites
- TRS DECAY/TONE = changes the growl contour

Dubstep move

Patch an LFO or envelope to **ATTACK CV** and sync it to phrase length. You'll get "opening" growls on selected notes without losing low-end consistency.

B. Wobble / vowel-adjacent bass

Best models:

- HZ-1
- VX-T
- WT-4
- XT-88

Patch:

- Pitch sequence into **PITCH CV**
- Gates into **HIT**
- Long **LENGTH**
- Moderate **SUSTAIN**
- Slow/tempo-synced LFO into **COLOR CV**
- Another LFO into **FX CV**
- Optional stepped random into **CURVE CV**

- Performer FX set to **DJ FILTER** or **LP**
- Use Performer channel set to **KICK** or **ALL**

Why it works

On these wavetable-oriented models, **COLOR** often sweeps harmonic position over time. This behaves a lot like a wavetable sweep or moving tone contour. Add Performer filtering and you get pseudo-formant movement.

Make it more aggressive

- Add Groove as a higher pitched layer
- Set Groove **PITCH** above center
- Use Groove **COLOR** to blend noise/grit/sub components
- Filter Groove with **BP** or **DIST**
- Keep Bohm as the sub anchor

This gives a bass patch with: - Bohm = body/sub - Groove = grit/motion/top harmonics

That's a very dubstep/neuro concept.

C. Reese-ish stereo bass stack

Best models:

- **XT-88**
- **WT-4**
- **HZ-1**
- **OLP4**

Patch idea:

- Bohm voice: long bass note sequence
- Groove clock: fast subdivisions
- Groove **PITCH** slightly above or below center

- Groove **LENGTH** around center or longer if repetition source is active
- Bohm and Groove stereo width up
- Modulate Bohm **COLOR**
- Modulate Groove **COLOR**
- Use Performer **DJ FILTER** with moderate resonance

Why it works

It won't be a classic detuned dual saw reese, but it can create a similar feeling: - wide moving low-mid texture - animated upper harmonics - unstable stereo edge - filtered motion

Advanced trick

Use **Panning** system settings: - Bohm hard left - Groove hard right - Performer center or one side

Now process left/right externally with separate Eurorack chains for serious stereo destruction.

D. Machine-gun DnB stabs

Best models:

- **FM-2X**
- **OLP4**
- **PX3**

Patch:

- Short gates into **HIT**
- Fast sequenced pitch line
- High **ATTACK**
- Short/medium **LENGTH**
- Random accents into **VELOCITY**

- Modulate **CURVE** per phrase
- Modulate **TRS TONE**
- Use hard distortion mode
- Add Groove taps in sync with 16ths

Why it works

This gives sharp, tuned impacts that sit between kick, bass, and tom. Great for: - jump-up stabs - techstep bass punctuation - industrial fills

3. Haunting atmospheric pad sounds

This is the most non-obvious use of Bohm, but the manual directly supports it because: - **HIT can sustain with a gate** - **PITCH can track** - **Performer ducks and filters external audio** - Groove can create evolving envelopes and texture layers

The key is to stop thinking “kick” and think “held digital resonant voice.”

A. Bohm as a dark drone/pad oscillator

Best models:

- HZ-1
- WT-4
- XT-88
- PM-K1
- VX-T

Patch:

- Send long gates or manually hold **HIT**
- Use very long **LENGTH**

- Medium/high **SUSTAIN**
- Lower **ATTACK**
- Slow LFO into **COLOR CV**
- Very slow random or triangle into **CURVE CV**
- Small pitch modulation from a slow random source into **PITCH CV** in addition to your base note
- Use Bohm FX lightly
- Use Performer **LP** or **DJ FILTER**
- Add external reverb after Bohm

Why it works

A held Bohm tone with wavetable motion can become a haunting sustained sound, especially when pitch dive behavior is minimized and the transient is tamed.

Important

For cleaner sustained notes: - keep **CURVE** more toward the side that stabilizes pitch sooner - lower transient emphasis - avoid overly short **LENGTH**

B. PM-K1 haunted drum room

Best model:

PM-K1

This model is totally different: - **PITCH** = drum size/tension - **ATTACK** = beater volume - **TRS TONE** = beater reverberation decay - **SUSTAIN** = ambient mic volume - **LENGTH** = room size - **FX** = stereo spread of ambient mic

Patch:

- Send sparse gates to **HIT**

- Long gate lengths
- Low **ATTACK**
- High **SUSTAIN**
- Long **LENGTH**
- High **FX** for stereo spread
- Modulate **PITCH** slowly
- Modulate **TRS TONE** with slow random CV

Result

This can create: - ghostly resonant drum rooms - cinematic low thuds - ritual ambient percussion - almost-tom, almost-space, almost-pad textures

This is probably the fastest path in Bohm to “haunting.”

C. Pad made from Groove envelope + external sound

Patch:

- Feed a stereo drone/oscillator into **Performer IN**
- Set Performer ducking moderate
- Send sparse or rhythmic triggers to **HIT**
- Set Performer FX to **LP** or **DJ FILTER**
- Use Bohm only lightly, or even nearly silent
- Set **TAPS OUT** system setting to:
 - **GROOVE**
 - or **PERF**
- Use that CV output to modulate an external VCA/filter/reverb send

Why it works

Now Bohm becomes the rhythmic ghost controlling another sound source:
 - the pad breathes with the kick - Groove envelope creates non-standard swells - Performer ducking gives transparent or exaggerated pumping

This is excellent for: - haunted pads behind broken beats - sidechained cinematic wash - evolving dub-techno atmospheres

D. Granular-feeling haunted loops with Performer

Patch:

- Feed texture, radio noise, field recording, or resampled ambience into **Performer IN**
- Set channel mode to **INPUT** or **ALL**
- Use **SLIP ROLL** or **BEAT ROLL**
- Trigger **HIT** sparsely
- Use synced Performer FX switching if desired
- Modulate **DUCK**
- Modulate **FX**
- Mix in Bohm quietly as a low pulse

Why it works

Performer can stutter and resample input around hits, which turns static ambience into ghost rhythm. Great for: - dark DnB intros - haunted breakdowns - IDM-ish shattered atmospheres

Cross-modulation ideas using Bohm's own outputs and logic

1. Use TAPS OUT as a modulation source

The manual says TAPS output can emit: - **GROOVE** envelope - **I BOHM** inverted Bohm envelope - **PERF** performer envelope - **BOHM** Bohm envelope

This is one of the coolest features.

Uses:

- send to external filter cutoff for synced movement
- send to VCA controlling noise layer
- send to reverb send amount
- send to wavefolder depth
- use **I BOHM** to create inverse movement against the kick

Great patch

- Set TAPS OUT = **I BOHM**
- Route to external oscillator VCA
- Now your external drone swells in the spaces *between* the kick hits

That's instant haunted atmosphere.

2. Groove as modulated bass grit layer

The Groove section has: - repetition - kick reverb - noise - grit + sub

Since **COLOR** blends these, slow CV on Groove COLOR can morph from: - rhythmic repeat - to hiss/noise texture - to gritty low-end layer

This is extremely useful for neuro / bass music hybrid patches.

3. Performer ducking as rhythmic spectral carving

The **DUCK BS** variation sets a band split frequency: - lows duck - highs preserved

This is powerful and easy to miss.

Use it for:

- keeping air/transients from an external pad while clearing room for Bohm low-end
- subtle sidechain instead of full pumping
- rhythmic bass/pad integration

For haunting pads, this is often better than full-range ducking.

Specific patch recipes

Patch 1 – “Neuro Kick Bass Monster”

Goal

Aggressive bassline with attack bark and moving upper harmonics

Model

FM-2X

Patch

- sequencer pitch -> **PITCH CV**
- gate sequence -> **HIT**
- velocity lane/random accents -> **VELOCITY CV**
- envelope/LFO -> **ATTACK CV**
- slow LFO -> **TRS TONE CV**
- manual or sequenced modulation -> **FX CV**
- Groove CLOCK -> 16ths
- Groove COLOR around grit/noise area
- Groove PITCH slightly above center
- Groove FX = **DIST**

- Performer FX = **DJ FILTER**
- Performer CHN = **KICK**

Notes

Keep Bohm as the sub/fundamental and Groove as the upper dirt.

Patch 2 – “Broken Factory Percussion”

Goal

Metallic industrial percussion line

Model

OLP4 or PX3

Patch

- Euclidean triggers -> **HIT**
- stepped random -> **PITCH CV**
- random gate accents -> **VELOCITY CV**
- slow random -> **TRS DECAY CV**
- fast attenuated random -> **ATTACK CV**
- Bohm FX = **HARD** or **WAVEFOLD**
- short **LENGTH**
- Groove clock at odd division
- Groove FX = **HP**

Notes

This produces a line that sits between tuned drum hits and machine noise.

Patch 3 – “Dubstep Wobble Pad”

Goal

A sustained, wobbling dark harmonic bed

Model

HZ-1, WT-4, or XT-88

Patch

- hold **HIT** high with long gate
- root pitch to **PITCH CV**
- slow sine LFO -> **COLOR CV**
- second slower triangle -> **FX CV**
- tiny slow random -> **PITCH CV** mixed in
- Performer IN <- external reverb return or texture source
- Performer DUCK moderate
- Performer FX = **LP**
- CHN = **ALL**

Notes

This works best if you reduce the attack transient and let wavetable movement do the talking.

Patch 4 – “Ghost Chamber”

Goal

Haunted cinematic percussive ambience

Model

PM-K1

Patch

- sparse triggers/gates -> **HIT**
- slow random -> **PITCH CV**
- slow random -> **TRS TONE CV**
- high **SUSTAIN**
- long **LENGTH**
- high **FX** width
- external shimmer or long reverb after Bohm

Notes

This makes spectral low-end drum ghosts and ritual room tones.

Patch 5 – “Self-Pumping Atmosphere”

Goal

Pad that breathes around Bohm hits

Patch

- external pad/oscillator/mixer send -> **Performer IN**
- Bohm plays sparse kick or bass pulses
- set **TAPS OUT = PERF** or **I BOHM**
- send TAPS OUT to external filter/VCA controlling a second drone
- Performer DUCK moderate to high
- Performer DUCK BS set so highs remain
- Performer FX = **DJ FILTER**

Notes

This makes the whole system feel like one breathing instrument.

Best modulation sources to pair with Bohm

Great CV types for Bohm

Because many parameters are macro controls, Bohm responds best to **musical**, not purely chaotic, CV.

Use: - **slow triangle / sine LFOs** for COLOR and FX - **stepped random** for VELOCITY, ATTACK, PITCH jumps - **envelopes** for ATTACK and FX - **burst/ratchet clocks** for Groove CLOCK - **sample & hold** for transient tone changes - **sequenced CV lanes** for COLOR movement phrase-by-phrase

Best parameter pairings

For bass

- PITCH + COLOR
- PITCH + FX
- ATTACK + TRS DECAY
- COLOR + Performer filter

For percussion

- ATTACK + TRS TONE
- PITCH + VELOCITY
- CURVE + LENGTH
- Groove COLOR + TAPS CV

For atmospheres

- **COLOR + FX**
 - **PITCH + CURVE** very slowly
 - **Performer DUCK + DJ FILTER**
 - **TAPS OUT** -> external VCA/filter
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Underused manual features that are especially creative

1. Load snapshots with pots positions

This means you can create families of radically different bass/percussion/pad states and recall them like presets for a set.

Use it for: - section changes in a live DnB set - switching from kick to bass drone instantly - verse/chorus transitions

2. Program knob modes: Latch / Relative / Override

If you want one control always live during performance: - set that parameter to **OVR**

Example: Keep **COLOR** on override in a live bass patch so you always have hands-on “wobble depth.”

3. Panning modes

Hard-pan: - Bohm left - Groove right - Performer center or opposite side

Then process channels separately outside Bohm. This is killer for: - stereo bass mangling - asymmetrical distortion - pseudo-mid/side destruction

4. Post EQ

Since Bohm and Groove can get very bass-heavy or harsh, Post EQ can be used like global voicing: - cut excess mud - boost bite - tame fizz

Very useful if you build dubstep/DnB patches that overload the low mids.

My strongest recommendations

If I were using Bohm for your goals, I would focus on these 5 workflows:

1. Use HIT as a gate

This is the biggest key to turning Bohm into: - bass synth - drone - pad voice

2. Treat Groove as a separate texture oscillator

Not just rumble. Use it as: - tops - grit - ghost notes - bass harmonics

3. Use Performer as part of the sound design, not just end-of-chain

Especially: - DJ FILTER - LP/HP - ducking - beat/slip roll on input or kick

4. Modulate COLOR constantly

On Bohm and Groove both. This is where a lot of movement lives.

5. Use TAPS OUT as a real modulation source

It can animate the rest of your rack and make Bohm the rhythmic brain of a larger patch.

Quick starting recipes

Fast distorted percussion starter

- Model: **PX3**
- Short LENGTH
- High ATTACK
- Medium TRS DECAY
- Random VELOCITY
- Slow COLOR modulation
- FX distortion mode
- Groove HP filtered tops

Fast dubstep bass starter

- Model: **FM-2X**
- PITCH track enabled
- HIT as gate
- Long LENGTH
- Moderate SUSTAIN
- LFO on COLOR
- Envelope on ATTACK
- Performer DJ FILTER

Fast haunted pad starter

- Model: **WT-4** or **PM-K1**
- Long gate to HIT
- Long LENGTH

- High SUSTAIN
 - Slow COLOR or PITCH modulation
 - Performer LP
 - external long reverb
 - TAPS OUT to modulate another drone layer
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Final thought

Bohm is most interesting when you stop asking it to be a kick drum and instead patch it like: - a **bass voice with transient architecture** - a **dual-voice percussion synth** - a **stereo drone generator** - a **sidechain and resampling performance processor**

If you want, I can also turn this into: 1. a **set of specific patch sheets**,
2. a **genre-focused guide** for **dubstep / neuro / industrial techno / dark ambient**, or
3. a **“best CV inputs by model” cheat sheet**.

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