Ohmforce — Bohm

- Manual PDF

Ohm Force Bohm Eurorack Manual

Using Bohm, Groove, and Performer to create melodic components

Although **Bohm** is presented as a stereo dual-voice **kick** system, the manual makes it clear that it can do much more than drum duties. Used together, **Bohm + Groove + Performer** can become a compact **melodic bass / riff / drone / resampling / performance FX voice** for Eurorack.

Big picture

These modules can create melody in four main ways:

1. **Bohm as a pitched synth voice**
2. The manual explicitly states that **pitch tracking can be used to play bass lines**.
3. Bohm's kick engine becomes a playable oscillator/enveloped synth when you use:
    - **PITCH CV**
    - a long enough **LENGTH**
    - optionally a **gate** on **HIT** instead of a short trigger
4. **Groove as a second related melodic voice**
5. Groove is a second kick voice triggered by **CLOCK**

6. Its **PITCH** and **LENGTH** are **relative to Bohm**
7. That makes it ideal for:
    - harmonically related bass doubling
    - octave / interval reinforcement
    - rhythmic melodic repeats
    - drones and rumble beds
8. **Performer as a melodic processor**
9. Performer adds:
    - stereo input
    - ducking
    - performance FX
    - selectable processing of **kick**, **input**, or **both**
10. This means Bohm/Groove can be used as melodic sources, while Performer shapes them into playable transitions, filter sweeps, beat-roll textures, and sidechained musical layers.
11. **Snapshots and Live modes as “preset melody states”**
12. A snapshot stores:
    - model variations
    - knob positions
13. Programs and Live modes let you sequence or cue different melodic states:
    - bassline section
    - chorus octave
    - breakdown drone
    - distorted lead-like hit

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1. Bohm as a melodic voice

Pitch tracking

The most important melodic feature in the manual is here:

- Bohm **PITCH** spans approximately **C1 to C2**
- It supports **1V/oct pitch tracking**
- For proper pitch tracking:
- set **PITCH knob fully counterclockwise**
- set **PITCH attenuverter fully clockwise**
- choose the proper **Pitch CV system setting**:
  - `0..1V`
  - `1..2V`
  - `2..3V`
- ensure your sequencer outputs **1 Volt per octave**

This means Bohm can function as a **monophonic bass synth voice** over a one-octave window, depending on configuration and model behavior.

Use HIT as a gate, not only a trigger

The manual says:

- **HIT can work both as a trigger or a gate**
- If **HIT remains on**, the kick sustains
- When HIT is released, the sound decays

For melody, this is huge. It means you can send: - a **gate sequence** - a keyboard/gate - a sequencer with variable gate lengths

This transforms Bohm from a percussive one-shot into a **sustained playable voice**, especially for: - basslines - drone notes - acid-like plucks - sustained sub melodies

Envelope controls for note shaping

Even when using Bohm melodically, the kick controls become useful synth-shaping controls:

- **LENGTH** = total note duration / tail length
- **SUSTAIN** = body/level of the sustained note
- **ATTACK** = transient amount and attack emphasis
- **CURVE** = pitch envelope behavior
- **TRS DECAY** = click/transient duration
- **TRS TONE** = transient brightness
- **COLOR** = timbral evolution of the oscillator
- **FX** = post effect amount

So for melodic use: - reduce transient-heavy settings for smoother notes - lengthen **LENGTH** - increase **SUSTAIN** - use **HIT gate** for true sustain - use **COLOR** and **FX** as musical tone controls

Which Bohm models are most melodic?

From the manual, these are especially promising:

FM-2X

Best for: - FM basslines - techno bass melodies - metallic subs - playable low-end riffs

Why: - 2-operator FM structure - **ATTACK** controls FM amount - **TRS TONE** changes modulator waveform - **RATIO** variation changes harmonic relationship

Musically, this can move from: - clean sine-ish bass - to punchy FM bass - to more overtone-rich melodic lines

HZ-1

Best for: - classic electronic basslines - smoother melodic kick-bass hybrids

Why: - wavetable oscillator + transient synth - analog-style wavetable options - variable click choices

VX-T

Best for: - sharper, articulated melodic parts - percussive leads - bass + hi-click hybrid sequences

Why: - transient synth is more pronounced and tunable - can create top-heavy melodic attacks

WT-4

Best for: - rounded “analog-style” melodic bass - layered, musical low-end phrases

SP-6 / PX3

Best for: - more aggressive melodic content - industrial / experimental riffs - textured bass hooks

XT-88

Best for: - custom melodic design

Why: - load your own **wavetables** - load your own **samples** - tune **BRIGHT** and **LAYER VOL** - create a hybrid oscillator + sampled layer melodic voice

This is probably the most powerful model if your goal is to turn Bohm into a custom bass instrument.

PM-K1

Less useful for conventional melodic sequencing: - It is a **physical model of an acoustic bass drum** - many usual controls are inactive - Groove is not supported with it

Still usable for tuned tom-like or acoustic drum-pitched lines, but not the first choice for melodic work.

2. Groove as a second melodic layer

Groove is described as a **secondary kick voice**, often for rumbles or tops. But the architecture makes it very useful melodically.

Groove follows Bohm

Its key melodic behavior:

- **PITCH on Groove is relative to Bohm PITCH**
- **LENGTH on Groove is relative to Bohm LENGTH**
- center position = same as Bohm
- left = lower than Bohm, but not below Bohm minimum
- right = higher than Bohm, but not above Bohm maximum

This means Groove is ideal for making a **dependent second voice**, such as:

- tuned reinforcement
- note doubling
- octave-above or octave-below feel
- interval-shifted taps
- moving rumble tied to the bassline

Groove sound generators as melodic textures

Groove contains 4 sound generators:

1. **Repetitions of the Bohm kick**
2. **Kick reverb**
3. **Noise**
4. **Grit + sub frequency**

Selected/blended with **COLOR**.

Repetition mode

This is the most obviously melodic: - every **CLOCK** trigger retriggers a “tap” - these are not delayed echoes; they are fresh rhythmic retriggers - tap levels are controlled by: - **2** - **3** - **4** - **TAPS CV**

This can create: - bass arpeggio-feel repeats - galloping subs - ratcheted low-end motifs - pseudo-sequenced melodic subdivisions

If Bohm is pitch-tracked, Groove’s repetitions inherit a harmonically related pitch context.

Reverb / noise / grit+sub modes

These are not “pitched melody” in the classic sense, but they are useful for **melodic support layers**: - resonant rumble tails - tuned sub under a note - noisy top texture following a bass phrase - sustained drone synced to melodic events

Groove can become a drone

The manual notes: - **GRV ENV** system option can be: - `FALL` - `SUSTAIN`

With `SUSTAIN`, Groove can hold after the 4th tap level, which is excellent for: - bass drones - sustained harmonic beds - one-note underpinning below a melody - transitions and breakdowns

Also: - **Perf Vol option** can be set so Performer VOL controls only **BOHM** - the manual says this allows **Groove to drone without hearing the Bohm kick**

That is extremely useful melodically: - Bohm can act as the triggering/pitched event source - Groove can become the sustained note layer

Groove FX as tonal shaping

Groove effect variations: - **LP** - **HP** - **BP** - **DIST**

This means Groove can function as: - a filtered bass shadow - a band-passed tonal repeat layer - a high-passed melodic top - a distorted harmonic duplicate

And **STEREO** width can widen the melodic layer spatially.

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3. Performer as the melodic glue and live processor

Performer is not a voice generator by itself, but in a melodic patch it becomes the key to making Bohm/Groove feel like a complete musical instrument.

External audio as another melodic source

Performer has: - stereo **IN** - ducking based on **HIT** - effects - routing selector

So you can bring in: - another oscillator voice - a chord source - a sampler loop - a drone - a bassline from another module

Then combine it with Bohm/Groove.

Ducking for rhythmic phrasing

The external input is ducked on every **HIT**. That means if you send in a drone, pad, or sustained oscillator: - Bohm can carve rhythmic space into it - creating a pulsing harmonic layer - synced to the melodic bass events

Performer variations make this more subtle and musical: - **DUCK TIME** = release time - **DUCK SMTH** = smoothing - **DUCK BS** = band split frequency

This is great for melody because you can: - duck only lows while preserving highs - create sidechained bass + sustained top - keep chord clarity while pulsing the low band

Selective FX routing

Performer **CHN** variation: - `ALL` - `KICK` - `INPUT`

This allows several melodic configurations:

KICK only through FX

Use if Bohm/Groove are your melodic voice and you want: - filter sweeps on the bassline - beat roll on the bass - live stutter transitions

INPUT only through FX

Use if Bohm is your rhythmic melodic anchor and incoming audio is a pad/lead/drone.

ALL

Process the full combined musical texture.

Performer effects for melody

Available variations: - **DJ FILTER** - **HP** - **LP** - **BEAT ROLL** - **SLIP ROLL**

These are excellent for melodic performance:

DJ FILTER

- center is neutral
- CCW low-pass
- CW high-pass
- **DJ RESO** controls resonance

Perfect for: - opening/closing basslines - breakdown filtering - morphing a bass phrase into a thin lead-like line - isolating highs from an incoming melodic texture

HP / LP

Useful for: - carving low-end vs top-end - creating arrangement movement - making one melodic layer sit behind another

BEAT ROLL / SLIP ROLL

These can turn sustained or repeating melodic material into: - glitch fills - stutters - rhythmic note slicing - end-of-phrase transitions

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4. Practical melodic patch strategies

A. Bohm as a bass synth voice

Patch - Sequencer pitch CV -> **PITCH CV** - Sequencer gate -> **HIT** - Audio from **OUT**

Set - PITCH knob full CCW - PITCH attenuverter full CW - system **Pitch CV** to correct range - **LENGTH** fairly long - **SUSTAIN** up - moderate **ATTACK** - reduced transient if too clicky

Result - monophonic bassline voice - especially strong with **FM-2X**, **HZ-1**, **WT-4**, **XT-88**

B. Bohm bassline + Groove octave/tap melody

Patch - Same as above - Clock divider/multiplier or 16th clock -> **Groove CLOCK**

Set - Groove **PITCH** slightly above or below center - Groove **LENGTH** to taste - Use **2 / 3 / 4** to shape repeats - Groove **COLOR** toward repetition source - Groove **FX** with BP or DIST

Result - Bohm gives the root note - Groove gives related rhythmic melodic taps - feels like a bassline with ratchets or ghost notes

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C. Bohm as note attack, Groove as sustained drone

Patch - Melodic gate/pitch into Bohm - Regular clock into Groove - Use Performer if available

Set - Groove system **GRV ENV = SUSTAIN** - Groove level up - Bohm more transient-forward - If Performer present, set **PERF VOL = BOHM** so Groove can remain independent - Optionally duck external audio with Performer

Result - Bohm articulates notes - Groove forms sustained harmonic/sub layer - excellent for techno hypnosis and dark ambient low-end melody

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D. Bohm + external oscillator/chords through Performer

Patch - Bohm sequenced melodically - External stereo or mono voice into Performer **IN** - Optionally send a chord or drone source

Set - **DUCK** to taste - **DUCK BS** so low band ducks more than highs - **CHN = INPUT** or `ALL` - Use **DJ FILTER** or **LP** - toggle FX synced to **HIT** for phrase changes

Result - Bohm acts as rhythmic/melodic bass anchor - incoming voice becomes breathing accompaniment - very effective for live melodic techno

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E. Snapshot-based melodic arrangement

Because snapshots save: - model variations - knob positions

you can prepare multiple melodic identities: - Step 1: clean FM sub bass - Step 2: brighter distorted chorus bass - Step 3: long drone breakdown - Step 4: filtered/stuttered fill

Then use: - **Song mode** for fixed arrangement - **Jam mode** for improvisational cueing

This is one of the strongest non-obvious melodic uses in the manual: Bohm becomes a **preset-morphing low-end instrument** rather than just a kick generator.

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5. Best model choices for different melodic roles

Best for basslines

- **FM-2X**
- **HZ-1**
- **WT-4**
- **XT-88**

Best for aggressive riffs

- **PX3**
- **SP-6**
- **OLP4**

Best for custom melodic sound design

- **XT-88**

Best for acoustic/tuned drum melodies

- **PM-K1**

Best for clicky articulated phrases

- **VX-T**

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6. Most useful system settings for melodic use

These matter a lot.

Pitch CV

Set to: - `0..1V` - `1..2V` - `2..3V`

depending on your sequencer's voltage span.

ATTVERT 2

The **SUSTAIN attenuverter** can instead control **VELOCITY CV**. This can be useful if you want more expressive sequencing of note dynamics rather than sustain amount.

GRV ENV

- `FALL` for rhythmic behavior
- `SUSTAIN` for drones and held layers

TAPS OUT

Can output: - Groove envelope - inverted Bohm envelope - Performer envelope - Bohm envelope

This is very useful for melodic patches because you can use the output to animate other modules: - open a filter on another oscillator - duck a bass drone - modulate VCA on a melodic layer - create envelope-following accompaniment

PANNING

You can hard-pan: - Bohm - Groove - Performer input

This is surprisingly useful for melodic patching: - route Bohm to left and Groove to right - process them separately downstream - build mono dual-line structures from the stereo output

POST EQ

Useful for tuning Bohm/Groove into a more musical role in a mix: - tame club boom - emphasize note definition - shape bassline presence

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7. Creative melodic techniques

Use Bohm as a limited-range but very characterful bass synth

It won’t replace a full-range oscillator voice, but within its designed range it can produce very strong, mix-ready melodic low-end.

Use Groove as “melodic repetition” rather than rumble

Because Groove repetitions are retriggered taps, not delay echoes, they can sound tighter and more intentional than a traditional delay.

Turn kick changes into harmonic section changes

Different Bohm models and snapshots can behave like: - verse bass - chorus bass - breakdown drone - fill/stutter preset

Use Performer to make melodies breathe

With selective ducking and filter FX, Performer can make even static external melodic material feel locked to the kick/bass phrasing.

Use XT-88 to build a custom melodic hybrid

Load: - your own wavetable for pitch body - your own sample for attack/layer

That gives you a very personalized bass instrument.

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8. Limitations to keep in mind

Bohm is not a general-purpose wide-range melodic oscillator

The manual frames pitch around **C1 to C2**, so this is mainly: - bassline territory - low melodic hooks - tuned percussive phrasing

Model interpretation varies

Each model interprets controls differently, so “melodic sweet spots” will vary significantly by model.

Groove pitch is relative, not fully independent

This is great for coherence, but less ideal if you want a completely separate second melody.

Model loading time matters in live sequencing

In Song mode, steps need enough time for preloading. Extremely rapid melodic preset switching may be constrained.

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9. Best real-world musical roles

Used together, these modules are especially good for:

- **melodic techno basslines**
- **industrial bass riffs**
- **electro low-end hooks**
- **acid-adjacent FM sub sequences**
- **drone + pulse hybrid lines**
- **live performance transitions**
- **sidechained melodic layering**
- **preset-based bass arrangement changes**

In practice, the strongest melodic identity of the system is:

> **Bohm = pitched low-end voice**
> **Groove = related rhythmic/sub/drone companion**
> **Performer = sidechain, filter, and transition processor for the whole musical layer**

That combination makes the system much more than a kick module—it can function as a **complete low-end melodic instrument with performance control**.

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10. Recommended starter melodic patches

Patch 1: FM techno bass

- Model: **FM-2X**
- Pitch sequence -> PITCH CV
- Gate -> HIT
- Long LENGTH
- Medium SUSTAIN
- ATTACK moderate
- TRS DECAY low
- Groove on 16ths, low in mix

Patch 2: Rolling melodic rumble

- Bohm plays root bassline
- Groove CLOCK on 16ths
- Groove COLOR toward repetitions/reverb blend
- Groove PITCH slightly above center
- Groove BP effect
- Performer DJ filter on ALL

Patch 3: Drone bass with rhythmic articulation

- Bohm receives sparse gated notes
- Groove set to **SUSTAIN**
- Performer ducks incoming drone or chord source

- Use TAPS OUT or Bohm env to animate another VCA/filter

Patch 4: Custom hybrid bass

- Model: **XT-88**
- User wavetable for oscillator
- User sample for layer
- Sequence PITCH CV and HIT gate
- Snapshot several variants for song sections

Bottom line

Yes—these modules can absolutely be used to create melodic components.
Not as a conventional polysynth, but as a highly characterful **low-register melodic system**.

If you think of them as:

- **Bohm:** a playable kick-bass oscillator voice
- **Groove:** a harmonically linked second voice / repeater / drone
- **Performer:** a sidechaining and FX performance mixer

then together they become a powerful tool for **bass melodies, rhythmic melodic motifs, drones, and live-evolving low-end arrangements**.