

# Bastl Instruments – Dark Matter

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- [Manual PDF](#)
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Certainly! Here is a concise cheat sheet for the **Bastl Instruments Dark Matter Feedback Observatory** Eurorack module based on your screenshots.

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[View the official Dark Matter Manual \(PDF\)](#)

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## Dark Matter: Cheat Sheet

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### Overview

- **Type:** Feedback/Distortion/EQ with dynamic shaping
  - **Role:** Feedback processing, unique textures, aggressive FX, creative distortion
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### Panel Reference

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#### Inputs

- **Input:** Main audio signal input (**±5V** typical).
- **Drive CV:** CV control for drive/gain (**0–5V**).
- **Dynamics CV:** CV for envelope's effect on drive/gain (**0–5V**).
- **Tone CV:** CV control for EQ (**±5V**).
- **FBK CV:** CV control for feedback loop's VCA (**0–5V**).
- **X-Fade CV:** CV for crossfade between dry & feedback (**0–5V**).
- **EXT FBK IN:** External feedback loop input (audio).

## Outputs

- **X-Fade Out:** Main output, post crossfade section (audio).
  - **Dynamics Out:** Envelope follower output (**0–5V**).
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## Knobs, Sliders, Switches

**DRIVE - Knob:** Sets gain/saturation of input VCA. - **Switch ("Drive/Drive+"):** Hyperdrive mode for hard clipping & distortion.

**DYNAMICS - Knob:** Envelope intensity amount (how much envelope affects Drive). - **Dynamics Out Jack:** Envelope follower out (**0–5V**).

**TONE - BASS** and **TREB** Sliders: 2-band EQ shaping. - **Boost:** Pushes bass/treble for extra impact. - **Tone CV Input:** Modulates both bands simultaneously (**±5V**).

**FBK - FBK Fader:** Sets VCA amount in feedback path. - **FBK CV:** Controls feedback VCA (**0–5V**). - **EXT FBK IN Jack:** For routing external FX/device into the feedback loop. - **Polarity Switch:** Inverts phase of feedback loop.

**X-FADE - X-Fade Fader:** Crossfades between dry (drive) and feedback. - **X-Fade CV Input:** Controls position of X-fade (**0–5V**).

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## Other Controls

- **Boost (Dynamics):** Extra punch to envelope effect.
  - **Signal/Drive LED:** Shows gain and drive state.
  - **Dynamics LED:** Shows envelope activity.
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## Quick Start

1. Patch audio to **Input**, **X-Fade Out** to your mixer.
2. Set **Drive** for desired saturation; use **Hyper** for harder distortion.
3. EQ with **Bass/Treb** sliders.

4. Set **FBK** slider for feedback intensity; try **Polarity** switch for phase effects.
  5. Play with **X-Fade** to balance clean vs. effect signal.
  6. Modulate **CV inputs** for dynamic, rhythmic, or evolving results.
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## Reference Table: Jacks & Controls

Label	Function / CV Range	Type	Notes
<b>INPUT</b>	Audio in	Input	Main signal, ±5V
<b>DRIVE CV</b>	0–5V	Input (CV)	VCA drive/gain
<b>DYNAMICS CV</b>	0–5V	Input (CV)	Envelope VCA amount
<b>TONE CV</b>	±5V	Input (CV)	EQ bands
<b>FBK CV</b>	0–5V	Input (CV)	Feedback VCA
<b>X-FADE CV</b>	0–5V	Input (CV)	Dry/feedback mixer
<b>EXT FBK IN</b>	Audio in	Input	Insert FX or devices into FEEDBACK loop
<b>X-FADE OUT</b>	Audio out	Output	Mixed output
<b>DYNAMICS OUT</b>	0–5V Envelope	Output (CV)	Envelope follower

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## Tips

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- Use **EXT FBK IN** to route reverb/delay for true "echoes."
  - **FBK Polarity** for different phase coloration in feedback path.
  - **Dynamics Out** can trigger or modulate other modules in sync with audio.
  - Try aggressive **Drive** settings with **Tone** boost for crunchy leads or drums.
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## Specs

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- **Power:** +12V: 75mA, -12V: 60mA
  - **HP:** 13
  - See manual for advanced patch suggestions!
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