Bastl Instruments — ABC Mixer

- Manual PDF

Manual PDF

Bastl Instruments ABC — using it for melodic work in a Eurorack system

The attached manual is for the **Bastl Instruments ABC**, a **6-channel mixer**. By itself, ABC does **not generate pitch, gates, envelopes, or sound**, so it is not a melodic voice on its own. But in a melodic patch, it is very useful as a **utility mixer** for combining the control voltages and audio signals that make melodies expressive and playable.

What the module does

ABC provides:

- **6 inputs**: A, B, C, D, E, F
- **2 outputs**:
- **A+B+C**
- **D+E+F**
- If nothing is patched into **A+B+C out**, that mix is **normalled into D+E+F out**, so the module can act as:
- **two 3-channel mixers**, or
- **one 6-channel mixer**
- Each channel has a **gain knob**
- **Maximum gain is 1** per channel
- By default the inputs are **AC-coupled** for audio
- There are **solder jumpers** on the back to change it for **DC-coupled CV mixing**
- There are **3 normalization jumpers** on the back:

- A normalled to D
- B normalled to E
- C normalled to F

Why this matters for melody

Melody in Eurorack usually comes from combining:

- **pitch CV**
- **sequence transposition**
- **modulation**
- **clocked variation**
- **layered audio voices**

ABC is ideal for the **combining** part.

Best melodic uses for ABC

1. Mix multiple audio voices into one melodic line or harmony bus

If you have several oscillators or full voices playing related notes:

- Voice 1 audio → A
- Voice 2 audio → B
- Voice 3 audio → C
- Output from **A+B+C** → filter / VCA / effects / final mix

This is the most direct melodic use: - combine a **lead oscillator** - a **sub octave** - a **FM layer** - or several voices playing chords or counterpoint

Because each channel has its own level control, ABC works well for balancing: - root note vs fifth - lead vs harmony - dry oscillator vs processed layer

2. Build a 6-oscillator chord or unison stack

Since A+B+C can cascade into D+E+F, you can use all six channels as one mix bus:

- Osc 1 → A
- Osc 2 → B
- Osc 3 → C
- Osc 4 → D
- Osc 5 → E
- Osc 6 → F
- Take output from **D+E+F**

This is excellent for: - supersaw-style unison - chord stacks - layered sine partials - combining multiple plucked or struck voices into one harmonic texture

For melodic music, this is especially good if the oscillators are: - tuned to chord tones - slightly detuned - spread across octaves

3. Use it as a stereo melodic mixer

The rear jumpers can normalize: - A → D - B → E - C → F

This lets you patch the same melodic sources into left and right groups and adjust each side separately. For example:

- Melody voice 1 → A
- Melody voice 2 → B
- Melody voice 3 → C
- Use **A+B+C** as Left
- Use **D+E+F** as Right

Then you can create stereo width by setting different levels on D/E/F than on A/B/C.

This is useful for: - stereo chord voices - left/right balance of arp layers - pseudo-stereo melodic textures before effects

4. Mix pitch CV sources for transposition and variation

The manual says ABC can be modified for **CV mixing** by closing the solder jumpers on the back, which bypass the capacitors and make it suitable for **DC-coupled** signals.

Once modified for CV, ABC becomes very useful for melodic control.

Example: - Sequencer pitch CV → A - Precision offset or keyboard CV → B - Slow modulation or random stepped CV → C - **A+B+C out** → oscillator 1V/oct

This lets you create: - transposed sequences - evolving melodies - offset pitch structures - controlled randomness

Important note: because this is just a mixer, not a precision adder, pitch mixing may be musically useful but may not be as exact as a dedicated precision adder for strict tonal tracking over many octaves.

Still, for: - small transpositions - melodic drift - layering sequence sources - experimental tonal work

…it can be very effective.

5. Mix modulation sources that shape melody indirectly

Even if you don't use it for pitch CV, ABC is very useful for combining modulations that affect melodic articulation:

- Envelope + LFO + velocity CV → filter cutoff
- Envelope + random CV → wavefolder amount
- Sequencer row + LFO → FM index
- Accent CV + envelope → VCA control path

This helps create more musical phrasing: - brighter notes on accents - timbre changes across a sequence - evolving harmonic content - rhythmic movement in melodic lines

Again, this requires the **CV modification** if you want proper DC-coupled CV behavior.

Patch ideas for melodic components

Patch 1: Layered lead voice

Use ABC as an audio mixer for one melody built from several sources.

- VCO saw → A
- VCO pulse → B
- Sub oscillator → C
- A+B+C out → filter → VCA → output
- Sequencer pitch CV controls all oscillators

Result: - one melody - richer timbre - easy balancing of harmonic layers

Patch 2: Harmony stack

Create a chord from several independently tuned oscillators.

- Root oscillator → A
- Third → B
- Fifth → C
- Seventh or octave → D
- Ninth or doubled root → E
- Noise/transient layer → F
- Final output from D+E+F

Result: - a full harmonic bed or stab voice - useful for pads, chord hits, and drone harmony

Patch 3: Stereo arpeggio mixer

With rear normalization jumpers set:

- Arp voice 1 → A
- Arp voice 2 → B
- Arp voice 3 → C
- Left = A+B+C
- Right = D+E+F

Set different right-side levels for a stereo image.

Result: - wider melodic field - clearer separation of lines - more polished stereo presentation

Patch 4: CV melody shaping mixer

After CV mod:

- Main sequencer CV → A
- Transpose CV from keyboard or sequencer row → B
- Stepped random CV → C
- A+B+C → oscillator pitch input

Use small amounts on B and C.

Result: - melody stays recognizable - but gains movement and variation - great for generative tonal patches

Patch 5: Two parallel melodic buses

Use ABC as two separate 3-channel mixers.

Bus 1: - Lead voice layers → A/B/C - A+B+C → lead processing chain

Bus 2: - Harmony / counter-melody layers → D/E/F - D+E+F → second processing chain

Result: - one module handles both lead and accompaniment summing

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Things to keep in mind

1. Default behavior is for audio

Out of the box, the inputs are **AC-coupled**, so it is intended primarily for **audio mixing**.

If you want to mix: - pitch CV - envelopes - gates - offsets - LFOs used as steady CV

you should use the rear **solder jumpers** to convert it for **DC-coupled CV mixing**.

2. Maximum gain is 1

This means it is a **unity-gain style mixer**, not a boost mixer. It combines signals, but does not amplify channels above their incoming level.

3. It is not a precision adder

For exact melodic pitch operations, especially 1V/oct transposition over large ranges, a dedicated precision adder is often better. ABC is best for: - practical utility mixing - approximate CV blends - experimental melodic control - audio layering

4. It is especially strong in small systems

In a compact rack, ABC is great because melodic patches often need simple summing: - several oscillators into one voice - several voices into one harmony bus - modulation sources combined for expressive articulation

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Bottom line

The **Bastl ABC** is best thought of as a **support module for melodic patching** rather than a melody generator.

It helps create melodic components by letting you:

- **layer multiple oscillators** into richer leads and chords
- **combine several melodic voices** into one submix
- **build stereo melodic mixes**
- **mix CV sources** for transposition and variation, if modified for DC coupling
- **combine modulation signals** that make melodies more expressive

So if your system already has: - sequencers - quantizers - oscillators - envelopes - filters - VCAs

then ABC becomes very useful as the glue that turns separate melodic ingredients into a coherent musical line or harmonic texture.

Generated With Eurorack Processor