More inputs, less HP

Xcelon Xi3 is a compact three-channel stereo audio input expander for the Xcelon eurorack mixer. The module includes core mixing features and connections meant to expand the number of mixer inputs without sacrificing valuable space.

Features

- Adds three stereo/dual-mono channels to Xcelon mixer in just 8 HP
- Two stereo FX sends and two stereo output mix busses selectable per-channel
- VCA-based volume controls with CV input and responsive LED indicators
- Configurable jumpers for dual-mono operation allowing up to six mono sources
- Pre/post-fader direct output ports for all three stereo channels

Technical Specs

- **Audio Inputs:** 6 x 3.5 mm jacks (3 stereo pairs)
- **CV Inputs:** 3 x 3.5 mm jacks (0 to +5 V)
- **Input Impedance:** 47 kΩ
- **Width:** 8 HP
- **Depth:** 1.5 in (38 mm)
- **Weight:** 4.4 oz (125 g)
- **Power:** +12 V 55 mA, -12 V 50

Jumper Settings

Each channel has a custom jumper setting found on the back of the module.

INPUT	2 jumpers
STEREO (default)	Stereo left and right input (panned left and right)
DUAL-MONO	Two discrete mono inputs (mixed and panned center)

Because a channel's two inputs share a volume parameter, signal balance in dual-mono mode must be adjusted prior to Xi3 input.

Limited Warranty

This product is guaranteed to be free of functional defects for a period of 180 days from original purchase date. Proof of purchase is required for any warranty claim. Return shipping costs are covered by Boredbrain Music within the first 30 days of purchase only. Products with obvious signs of abuse or that have been modified by the end user, may not be covered under this warranty, at the discretion of Boredbrain Music.

Service & Inquiries

If you experience a problem with your Boredbrain product, or just want to share something interesting with us, please contact us at the link below and be sure to include your name, original purchase date, and a description of the problem you are experiencing. Then just hold tight, as we return most inquiries within 48 hours. We want to work with you to resolve your issue as soon as possible. Thank you!

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XCELON Xi3

MINI 3-CHANNEL MIX EXPANDER

USER GUIDE

The 8HP module provides essential channel parameters for each channel such as volume control, both stereo effects sends, and mix bus selection. Xi3 channels share the same mix bus and FX send architecture as the main mixer, integrating seamlessly within the Xcelon system. Like the Xcelon and XP3 channel expander, Xi3 also includes both pre and post-fader direct output headers for advanced routing and multi-channel recording.

Connection & Configuration

Xi3 is connected to the main Xcelon mixer using the supplied 16-pin ribbon cable, from its port labeled **MIXER** to one of Xcelon's two expansion ports labeled **EXPANDER 1** or **EXPANDER 2**. The mixer supports up to two channel expanders using any combination of Xi3 and/or XP3 modules. It is possible to connect more than two channel expanders using a flying bus cable, but low noise performance cannot be guaranteed.

IMPORTANT: The expander ports should NOT be connected to a eurorack power bus or damage to the module(s) can occur.

Each of the three channels has a pair of audio input jacks (**IN 10 L**, **IN 10 R**, etc.) for left and right stereo signals. These inputs are designed to accept typical eurorack-level audio signals from -5 V to +5 V (10 Vpp). The jacks are also normalled such that a single mono source in the left jack is simply copied to the right.

Alternatively, two discrete mono sources can also share a channel by configuring the two rear jumpers on the back of the module of the corresponding channel. In the default **STEREO** configuration, the two inputs are positioned hard left and hard right. With the jumpers in the **DUAL-MONO** position, the channel input signals are mixed together and positioned in stereo center. Signals that do not need stereo panning can then be doubled-up on a single channel, such as kick and snare drum, two different bass sounds, etc. This allows Xi3 to handle up to six independent mono sources in a compact footprint.

Channel Controls

The **VOL** parameter adjusts the channel volume with a linear response for smooth fade ins and outs. The jack directly below each pair of audio inputs is the channel's volume CV input, which allows for external voltage control within a range of 0 to +5V. This voltage input is biased by the **VOL** knob position (summed). The brightness of the adjacent white LED indicates the channel volume level and any incoming CV.

The channel's other two knobs, **FX1** and **FX2**, are independent stereo effects sends. Using these parameters, an adjustable amount of the channel signal can be sent to Xcelon's two shared effects busses **FX SND 1** and **FX SND 2**, which are commonly used for time-based effects such as delay and reverb. On Xi3, both **FX1** and **FX2** are post-fader sends, meaning the amount of sent signal is also affected by the channel's volume position.

Note: Unlike the main mixer channels, FX1 and FX2 send levels are manual only and do not have CV inputs.

The **AB** switch assigns the channel output to one or both of Xcelon's main output mix busses. In the leftmost and rightmost positions, the channel is routed to only one of the two busses, either **A** or **B**. In the middle position, the channel is routed to both simultaneously, allowing for parallel processing, AFL monitoring (after fade listen), and other creative uses.

Expanded Mixing Applications

In addition to general channel expansion, Xi3 is ideal for inputs that do not require frequent hands-on control but remain an important part of the mix. These may include more advanced FX returns, where processed signals are sent back into the mix and rerouted back to the FX busses to create feedback effects or feed into other effect chains for complex textures.

Xi3 is also well suited for integrating stereo submixes, such as a drum submix from another mixer, or parallel processed signals returning from other modules. For example, signals tapped and sent out through the IO module for processing can be returned to Xi3 as stereo channels, with control over volume, stereo routing, and FX sends.

By handling these types of sources, Xi3 makes it easy to integrate supporting elements and processed layers without using full-featured mixer channels.

Direct Outputs

Just like the main Xcelon mixer and XP3 expander, Xi3 is equipped with direct output ports to access individual channel signals for multi-track recording and other routing. Its bank of three stereo channels has two direct output ports, **PRE** and **POST**, to tap the channel signals either before or after the volume control.

These groupings of six signals are connected using an 8-pin cable to the optional direct output modules— IO, TRS and DB25 for balanced line outputs, and the CUE module for PFL monitoring. They can be mixed and matched in any order, and both the **PRE** and **POST** direct outputs for a bank of channels can be used simultaneously.