

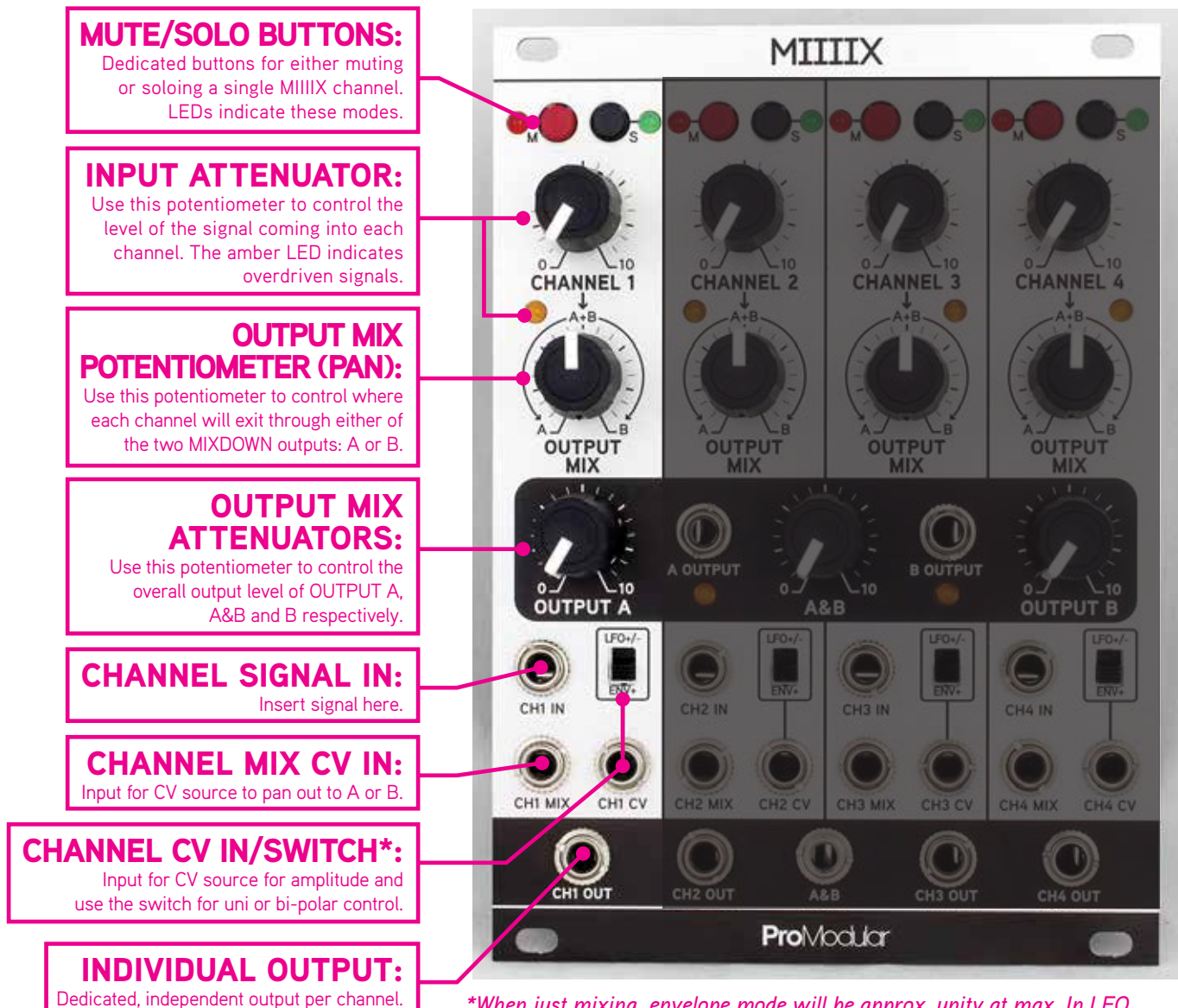
Thank you for purchasing the ProModular MIIIX Eurorack Module. MIIIX is the brain of our mixing suite of modules that will add VCAs, panning, performance muting and solo control, stereo outputs and distortion (if desired) in your eurorack system. The MIIIX family is essentially a suite of modular modules, and you can mix and match to create your perfect setup.

### MAIN FEATURES:

- Four channels of high quality mixing, including CV control over amplitude/saturation and semi-log panning.
- Four independent logarithmic VCAs with independent outputs.
- Silent mute/solo function.
- Expandable to up to 3 additional MIIIX modules (4 total), providing up to 16 channels of audio on the mute/solo bus.
- Two CV input modes per channel to accommodate unipolar and bipolar signals and CV saturation.
- Dedicated A/B (left/right) main output attenuators.
- High fidelity current mode stereo headphone and line output with attenuator.

**Power:** Quiescent: +222mA /-185mA, Max: +259mA/-185mA

### SINGLE CHANNEL OVERVIEW



*\*When just mixing, envelope mode will be approx. unity at max. In LFO mode, a generous headroom for saturation level is added - typically saturation starts after 12 o'clock.*

**ENVELOPE CV SPECIFIC FEATURES:**

Additionally with CV, envelope mode is for unipolar positive CV sources in the 8-10V range. If more gain or saturation is desired when using an envelope as CV, LFO mode can be used. LFO mode is designed for using bipolar +/-5V CV sources from LFOs, VCOs etc.

**MUTE and SOLO SPECIFIC FEATURES:**

Soloing works by muting all other channels that are not actively soloed when the solo button is active on a particular channel and is NEVER muted on it's individual output. Muting is independent of the solo, so channels can be muted despite soloing activity. Muting overrides a solo so a group of channels can be active under solo and then muted independently.

**A&B OUTPUT SPECIFIC FEATURE:**

This output can be used as a line out straight to laptop, recording device, headphones, etc.

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**PATCH IDEAS:**

### INSERT:

To use INSERT with MIIIIX, remove the five jumpers from the INSERT expansion header on the back of the MIIIIX module. Patch one end of the included expansion cable onto MIIIIX, and the other onto the Expansion header on INSERT. **MAKE SURE THAT THE RED LINE ON THE CABLE MATCHES THE MARKING ON THE HEADERS!!!** i.e. be sure that the red line is next to the marking on the back of the pcb on both modules! Attach the power cable to INSERT with the red stripe next to the stripe marking on the back of INSERT. The red stripe should be facing down towards the bottom of the module.

#### APPLYING ONE EFFECTS LOOP INSERT PER CHANNEL:

Each channel on MIIIIX routes to the respective channel's VCA unaffected\* and to the SEND output of the INSERT Expander. Patch the respective MIIIIX channel's send output to another module (effect, filter etc.) and patch that module's output to the respective INSERT return input. Dry/Wet control cross fades between the dry and wet signal, manually and via CV. Bypass removes the effects loop during this type of operation.

#### MIXING TWO EFFECTS FROM THE SAME MIIIIX CHANNEL:

Two separate effects can be applied to a single channel to be mixed/faded by the wet/dry control. Use send to route to the first effect input and route that effect's output to the return input. Then route the same MIIIIX channel's VCA output to the second input and route the second effect's output to the external input of the INSERT expander. The dry signal will now be the second effect and the wet will be the first effect. Use the CV input to modulate between the two or fade manually. Bypass removes both effect loops during this type of operation.

#### SWITCHING BETWEEN TWO INPUT SOURCES ON A SINGLE MIIIIX CHANNEL:

The INSERT external input can be used to switch between two separate signal sources per MIIIIX channel. Patch the main signal into a MIIIIX channel (MAIN signal is always directly routed to VCA output and SEND\*\*). Patch the secondary signal into the respective external input on the INSERT expander. Use the bypass/on switch to toggle between the main/secondary signals that will be routed to the mixer section of MIIIIX.

#### XFAD BETWEEN TWO INPUT SOURCES ON A SINGLE MIIIIX CHANNEL:

The INSERT external input can be used to xfade between two separate signal sources per MIIIIX channel. Patch the main signal into a MIIIIX channel (MAIN signal is always directly routed to VCA output and SEND\*\*). Patch the secondary signal into the respective external input on the INSERT expander. Now patch the send output directly into the return input.

While the insert channel is active (ON), the main and secondary signals can be mixed/faded manually or via voltage control. If the insert channel is bypassed during this operation, only the MAIN signal will be routed into the mixer section of MIIIIX.

\*The INSERT Exp. Return path is routed back to the MIIIIX mixer section only. The VCA output retains the dry signal.

\*\*If desired, the send output can be used as an additional VCA output for each channel. This output is always active.

#### INSERT AS A STAND ALONE FOUR CHANNEL WET/DRY MIXER/XFADER:

The included 5 jumpers must be applied across the pins of the INSERT expansion header on the back of the INSERT module. Make sure that the MIIIIX jumpers are also installed on the MIIIIX INSERT expansion header as well, for normal MIIIIX operation. Patch one signal into the External input. Patch a second signal into the Return input. Use Send Out as the mixed/faded signal output.

#### INSERT AS A STAND ALONE FOUR CHANNEL VCA IN INDEPENDENT FUNCTION MODE:

Patch the input signal into the return input and CV signal into the wet/dry CV input. Use SEND OUT to patch the signal output. CV Level controls the CV depth. Wet/dry controls the bias/offset for the incoming CV. BOOM!



### COMMANDER:

To use COMMANDER, attach the expansion cable onto the header on the back of the module and the other end onto the MIIIX expansion header marked "COMMANDER". Be sure that the red stripe on the cable is next to the markings on both modules.

COMMANDER features Mute and Solo CV inputs for each of the MIIIX channels to voltage control muting and soloing. Pulse signals are recommended for accurate timing but alternatively any signal that rises above and falls below +5V can be used to automate mute and solo functions.

Mute and Solo toggles with every cycle of the CV input waveform. For instance, a single pulse (rise/fall above/below +5V) will toggle mute or solo from *off to on* or *on to off* depending on the initial state. The next pulse will toggle back to the original state and so on.

**Power:** +/- 0mA



### MASTER:

To use MASTER, attach the expansion cable onto the header on the back of the module and the other end onto one or more (up to 4) of the the MIIIX expansion headers marked "MASTER". Be sure that the red stripe on the cable is next to the markings on all modules.

MASTER can be used with at least one MIIIX to add an additional attenuatable stereo/line/headphone output and dedicated attenuatable master outputs for the A/B mixes.

MASTER is a recommended expansion when 2-4 MIIIX modules are used together and provides up to 16 channels to be routed to the MASTER A/B and stereo outputs.

**Power:** +/- 50mA