Extra Mullet
Combining Buffered Mult

<table>
<thead>
<tr>
<th>Type</th>
<th>Mult</th>
</tr>
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<tbody>
<tr>
<td>Size</td>
<td>6HP Eurorack</td>
</tr>
<tr>
<td>Depth</td>
<td>0.8 Inches</td>
</tr>
<tr>
<td>Power</td>
<td>2x5 Eurorack</td>
</tr>
<tr>
<td>+12 mA</td>
<td>50 mA</td>
</tr>
<tr>
<td>-12 mA</td>
<td>10 mA</td>
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The Extra Mullet is the bigger, badder version of the Mullet. It’s just as business in the front, but has way more party in the back: an extra 2HP strip mixes inputs for 7 extra outputs that sum combinations of the four inputs.
**Power**

To power your Noise Engineering module, turn off your case. Plug one end of your ribbon cable into your power board so that the red stripe on the ribbon cable is aligned to the side that says -12v and each pin on the power header is plugged into the connector on the ribbon. Make sure no pins are overhanging the connector.

Line up the red stripe on the ribbon cable so that it matches the white stripe and/or -12v indication on the board and plug in the connector.

Screw your module into your case BEFORE powering on the module. You risk bumping the module’s PCB against something metallic and damaging it if it’s not properly secured when powered on.

You should be good to go if you followed these instructions. Now go make some noise!

A final note. Some modules have other headers -- they may have a different number of pins or may say NOT POWER. In general, unless a manual tells you otherwise, DO NOT CONNECT THOSE TO POWER.

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**Warranty**

Noise Engineering backs all our products with a product warranty: we guarantee our products to be free from manufacturing defects (materials or workmanship) for one year from the date of the original retail purchase (receipt or invoice required). The cost of shipping to Noise Engineering is paid by the user. Modules requiring warranty repair will either be repaired or replaced at Noise Engineering’s discretion. If you believe you have a product that has a defect that is out of warranty, please contact us.

This warranty does not cover damage due to improper handling, storage, use, or abuse, modifications, or improper power or other voltage application.
Interface

In 1-4
    Extra Mullet has four circularly normaled input jacks (left side of module). LEDs light up when a signal is received.

Out 1-4
    Each input has two outputs. Because inputs are normaled, if no input is plugged into an input, outs flow from input above it.

Extra Outs
    Extra Outs combine inputs additively. Extra Mullet is set up so that there are seven unique combinations of inputs. These function on both gates/triggers and on CV inputs.

Input & output voltages
    Extra Mullet’s inputs and outputs are rated for -10v to +10v.
Patch Tutorial

First patch:

Plug a CV source into any input. Patch the Out to CV-in on a module you would like to modulate.

Now instead patch one of the Extra Outs: note how these signals differ because the normaled signal is added in the Extra Outs.

Next, plug multiple CV sources into EM inputs. Patch Outputs to CV inputs on a module you would like to modulate. Patterns will differ as the different inputs are summed.

Using Extra Mullet with Gates:

Plug up to four gate inputs into Ins. Patch any combination of Outs and Extra Outs to modules for interesting variety in rhythms. (Note that a single gate in, while still additive, will not result in different patterns for the combined outputs.)

Using Extra Mullet with CVs:

Plug up to four CV inputs into Ins. Patch any combination of Outs and Extra Outs to modules for up to 11 versatile CV outs.

Using Extra Mullet with a Combination of CVs and Gates:

Because EM performs simple summations, it can be used with any combination of inputs (although summation of pitch CVs is not necessarily recommended as EM is not calibrated for this use). You can mix and match CV and Gate signals for unique output patterns on extra outs.
Noise Engineering
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Genesis and Design Notes

The original module started when Noise-E friend Shawn Jimmerson informed us that we needed a module called “The Mullet.” It was pretty clear that that could only be a buffered mult. A few years later, we realized (with Kris’ growing obsession with CVs) that it would be pretty simple to give the Mullet a lot more bang for its buck. I mean, if you’re going to have a mullet, you should go all out, right? And the son of the mullet, Extra Mullet was born.

Special Thanks

Shawn Jimmerson
William Mathewson
Mickey Bakas
Tyler Thompson
Alex Anderson