

Installation

Branches requires a **-12V / +12V power supply (2x5 pin connector)**. The ribbon cable connector must be aligned so that the red stripe of the ribbon cable (-12V) is on the same side of the module's power header as the "Red stripe" marking on the board. The power consumption is:

+12V: 10 mA; -12V: 1 mA.

The trigger/gate signals generated by Branches have a +5V level.

Online manual and help

The full manual can be found online at:

mutable-instruments.net/modules/branches/manual

For help and discussions, head to:

mutable-instruments.net/forum



Please refer to the online manual for detailed information regarding compliance with EMC directives

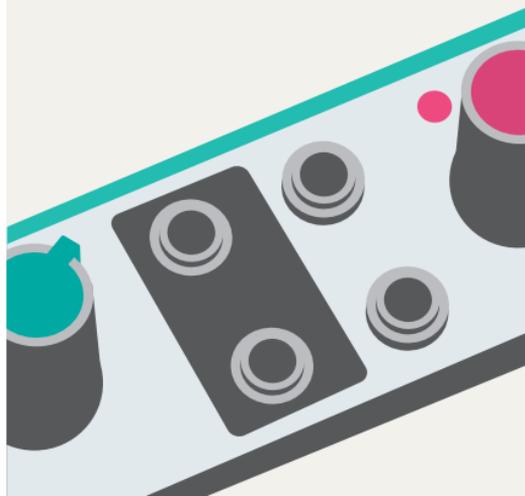


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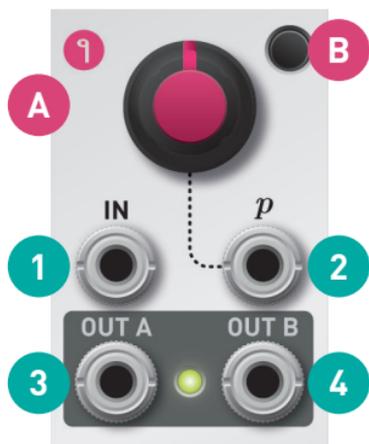
Branches

Dual Bernoulli gate



Branches consists of two identical sections called **Bernoulli gates**. An internal connection routes the input of section 1 to section 2 – unless a jack is connected into the input of section 2.

The Bernoulli gate



Upon receiving a trigger on its **IN input (1)**, the module tosses a virtual coin: if the outcome is heads, the trigger is sent to **output A (3)**; if the outcome is tails, the trigger is sent to **output B (4)**.

The **probability knob (A)** and the associated **CV input (2)** change the odds of the “heads” and “tails” outcomes.

In extreme settings, the outcome is no longer random – causing the module to behave like a voltage-controlled switch.

Toggle mode

In **toggle mode**, the module associates the “heads” and “tails” outcomes to a different pair of decisions: “continue sending the trigger to the same output as before” and “send the trigger to the opposite output”.

Press the **switch (B)** to enable or disable the toggle mode.

Latch mode

When the **latch mode** is enabled, an **output (3) or (4)** stays at +5V until the other output gets activated.

Hold the **switch (B)** for more than 1s to enable or disable the latch mode.

Toggle and Latch settings are kept in memory even if the module is powered off.