

All ALM / Busy Circuits modules strive to follow a consistent control style and look across all modules. This document presents a basic guide to these conventions.

#### INPUTS & OUTPUTS

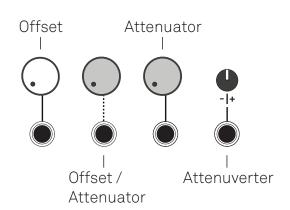
All inputs are labelled with a triangle near their jack input or close by the associated control. Outputs are simply labelled by name or function.



#### ATTENUATORS AND OFFSETS

Knob cap colour, style and graphical elements will denote the functionality of the control.

White knobs are always used for offset controls. A visually associated control voltage input jack will be added to the offset position. Offsets may be preceded by attenuators wired in series.



Grey knobs are used for attenuators and controls that change from offsets to attenuators the moment a signal is patched to their associated input (as to save panel space). A dashed line leading from an input to a grey knob indicates that its state is dependent on the presence of an input.

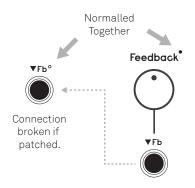
Small black 'thumb' knobs may also be used as attenuators and gain controls for audio inputs/outputs.

Attenuverters (attenuators that additionally can invert signals) are labeled with -|+.

## NORMALLED CONNECTIONS

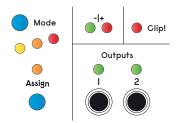
Normalled connections are internal 'default' type connections which get broken when patched.

Any such connections are indicated by a small circle to the upper right of their label. A solid circle indicates that the input will be internally connected to an input with an open circle when it is not patched. Upon patching to the 'open circle' input the connection is broken and both jacks function independently.



### LED INDICATORS

LEDs are used on ALM modules to either indicate a specific module state or input/output signal levels.



Loosely - Green LEDs are typically associated with on/off states like gates or triggers but may also function as voltage meters for negative voltage. Red LEDs typically function as clip indicators / voltage meters for positive voltage. Also red is typically used with yellow and orange LEDs for switch states and mode selectors.

# **ADDITIONAL ELEMENTS**

There may well be unique control elements for a module with specific functionality. In such a case panel graphics and layout will endeavour to provide clues.

For example, a program encoder is indicated by a graphic with an arrow and a push button showing that it is a combined control used to scroll and select during operation.



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Keep in mind however we're not building lab or medical equipment here and sometimes like to break our own rules :)