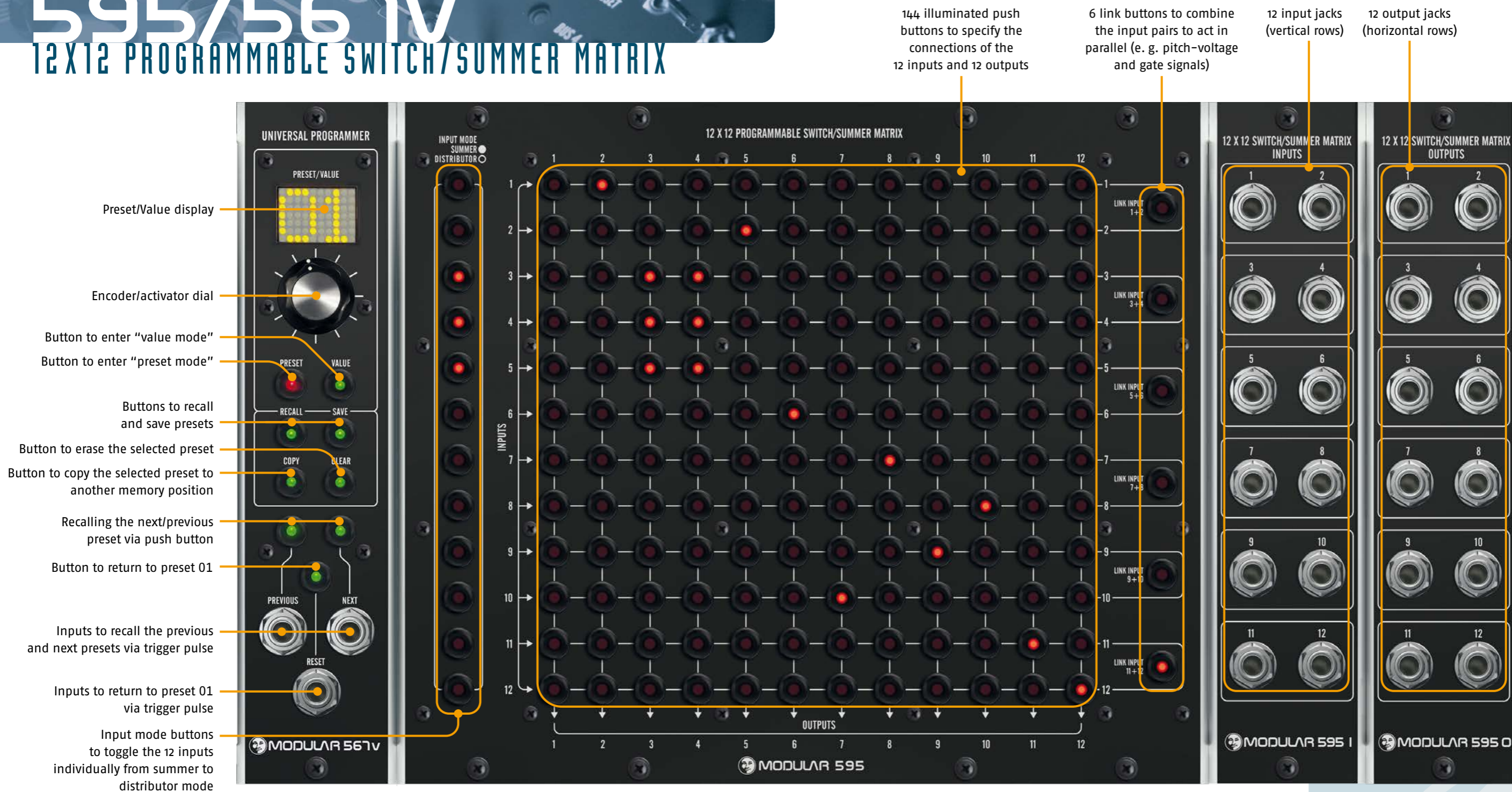


595/567v

12 X 12 PROGRAMMABLE SWITCH/SUMMER MATRIX



144 illuminated push buttons to specify the connections of the 12 inputs and 12 outputs

6 link buttons to combine the input pairs to act in parallel (e. g. pitch-voltage and gate signals)

12 input jacks (vertical rows)

12 output jacks (horizontal rows)

- Preset/Value display
- Encoder/activator dial
- Button to enter "value mode"
- Button to enter "preset mode"
- Buttons to recall and save presets
- Button to erase the selected preset
- Button to copy the selected preset to another memory position
- Recalling the next/previous preset via push button
- Button to return to preset 01
- Inputs to recall the previous and next presets via trigger pulse
- Inputs to return to preset 01 via trigger pulse
- Input mode buttons to toggle the 12 inputs individually from summer to distributor mode

The **M 595 PROGRAMMABLE SWITCH/SUMMER MATRIX** is a solution to manage the distribution and/or mixing of 12 inputs to 12 outputs.

- 12 DC-coupled and buffered inputs and outputs, fully analogue with a high precision signal path.

Input mode

- Routing/Distribution (off/on) or mixing signals (off-third-twothirds-full)

Link mode

Inputs and outputs are paired to handle immediately a combination of e.g. the CV and GATE outputs of a sequencer or a stereo audio signal.

Programmer

- 99 memory locations with an independant edit buffer.
- The programmer's endless rotary encoder with integrated pushbutton does allow to dial to a memory location and to confirm/abort a command (RECALL, SAVE, COPY, CLEAR).
- With the lower "go to" buttons/jacks one can step through memory positions in either direction, even with trigger pulses from external sources.

595/567V

SWITCH/SUMMER MATRIX & PROGRAMMER MODULE

PRESET MODE

Preset Preview

The mode is activated automatically as soon as the encoder dial is turned (cw plus, ccw minus).

All buttons are deactivated and the PRESET-LED is blinking red.

The connected 595 is displaying the preset information while the dial is turned.

All buttons of the 595 itself are blocked.

Pushing the encoder dial is

- Ending the preview mode
- Saving the former active preset permanently
- Making the dialed preset number the current one
- Updating the edit buffer with the now active preset number.

Note: PREVIOUS-, NEXT- and RESET-buttons and -jacks are disabled.



Preset Management

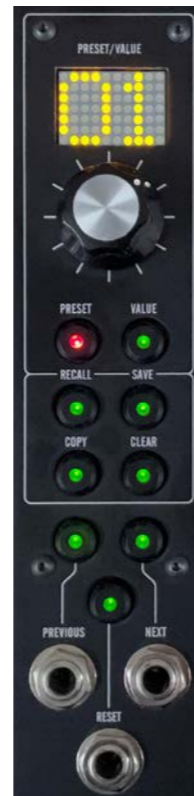
To recall an adjusted or modified preset, push the RECALL-button (RECALL-LED blinks red), select the desired preset number using the encoder dial and push it (RECALL-LED returns to steady green, preset is recalled).

To save an adjusted or modified preset, push the SAVE-button (SAVE-LED blinks red), select the desired preset number using the encoder dial and push it (SAVE-LED returns to steady green, preset is saved).

To erase an adjusted or modified preset, push the CLEAR-button (CLEAR-LED blinks red), select the desired preset number using the encoder dial and push it (CLEAR-LED returns to steady green, preset is erased).

To duplicate an adjusted or modified preset or to move it to another preset push the COPY-button (COPY-LED blinks red), select the desired source preset using the encoder dial, push the SAVE-button (SAVE-LED blinks red and COPY-LED blinks green), select the desired destination preset using the encoder dial and push it (LEDs return to steady green). The preset is copied now.

Note: PREVIOUS-, NEXT- and RESET-buttons and -jacks are disabled.



VALUE MODE

VALUE-LED is on and red RECALL-LED is on and green

1. Edit Value of the matrix position (button of the 595) selected: This is achieved by pushing the VALUE button of the 567.
 2. Set Value of matrix position (button of the 595) selected: This is achieved by using any matrix position button (1/1 ... 12/12).
- Initial level of attenuation is 1:1 (ON).

Turning the encoder dial is selecting the level of attenuation.
Pushing the dial is updating the level of attenuation.

Voltage level (attenuation):

OUTPUT 1 is one 3rd of INPUT 1



OUTPUT 1 is two 3rds of INPUT 1



OUTPUT 1 equals INPUT 1



KEEP IN MIND

Edit Buffer & Persistence

Scheduled: The edit buffer (the current active preset) is **saved permanent** every **five minutes**.
 <NEXT> The edit buffer (the current active preset) is **saved permanent before** the button is released and or the input jack has „fired“.
 <PREVIOUS>
 <RESET> Afterwards the edit buffer reflects the then active preset.

INPUT and LINK MODE specifics (595)

Pushing „INPUT MODE“ and/or „LINK“ buttons of the 595 will cancel VALUE mode at and switch the 567V back to PRESET mode.

These „functions“ influence more than one matrix position of the 595 and require certain internal house keeping:

- DISTRIBUTOR** Only one matrix position in a column can be activated. Therefore all active matrix positions of that very column will be cleared.
- SUMMER** More than one matrix position in a row can be activated. Therefore all active matrix positions of that very row will be cleared.
- LINK** Two consecutive rows (say 1 and 2) will be influenced. Therefore all active matrix positions of both rows will be cleared. Pushing a button of any of the 4 matrix positions (say 1/1, 1/2, 2/1, 2/2) will set (or reset) matrix positions 1/1 and 2/2 only. Both will receive the same level of attenuation.

CONTROL INPUTS

PREVIOUS-jack / RESET-jack / NEXT-jack: Rising edge (signal level greater than approx. 1V) switches to the next preset (incl. RECALL)

POWER ON

PRESET MODE with most recently saved preset copied to the edit buffer and made active.

SETTING THE MIDI CHANNEL

1. Switch on power and push the PRESET-button at that time.
2. PRESET-LED blinks red
3. Select the desired MIDI channel (1 to 16) using the encoder dial and push it.
4. The MIDI channel is stored permanently across power cycles.
5. The software of the module will continue with its startup sequence.

595/567v

SWITCH/SUMMER MATRIX & PROGRAMMER MODULE

MATRIX – THE BASICS

- One INPUT (row) can „DISTRIBUTE“ (route) - (INPUT MODE led is off) to one or more OUTPUT(s) (columns)
- One or more INPUT(s) can be „SUMMED“ (added) - (INPUT MODE led is on) and the „SUM“ is available at one or more OUTPUT(s). Three levels of attenuation (one third, two thirds, full level) are possible – see previous page
- in any combination with certain logic applying

A FEW EXAMPLES



INPUT 1 is „DISTRIBUTED“ to OUTPUTS 1 to 4



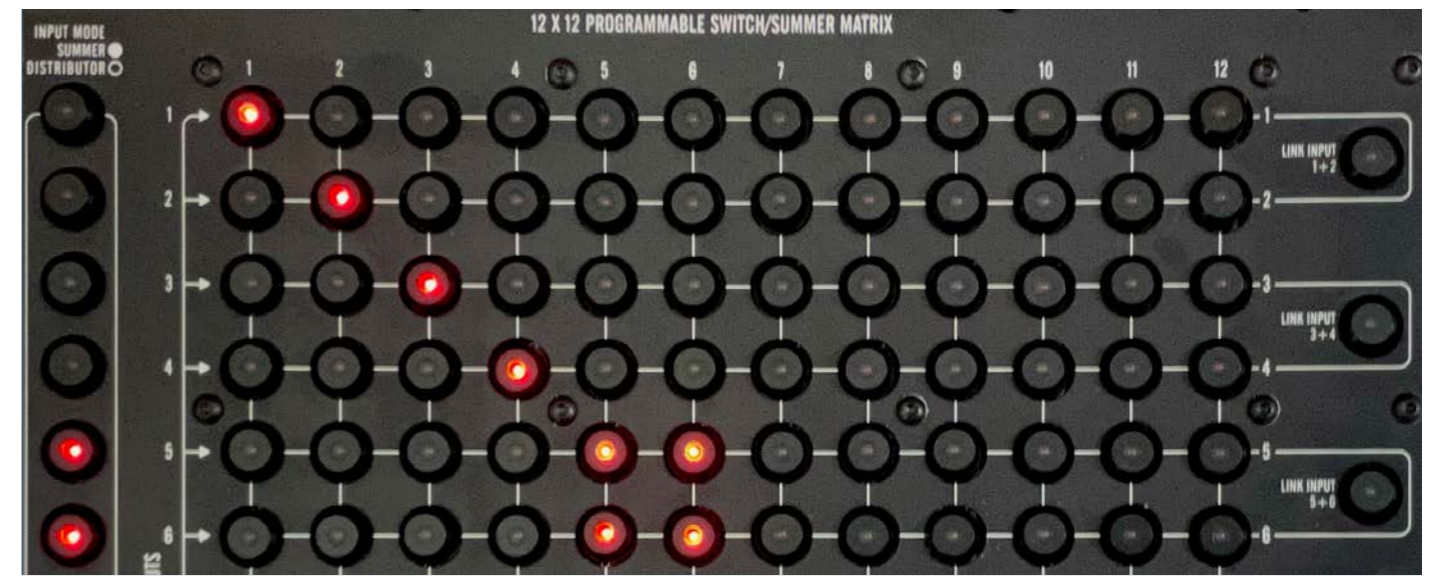
INPUT 1 and 2 are „SUMMED“ and the sum of the two signals is available at both OUTPUT 1 and 2



INPUTS 1 to 4 are „DISTRIBUTED“ to OUTPUTS 1 to 4

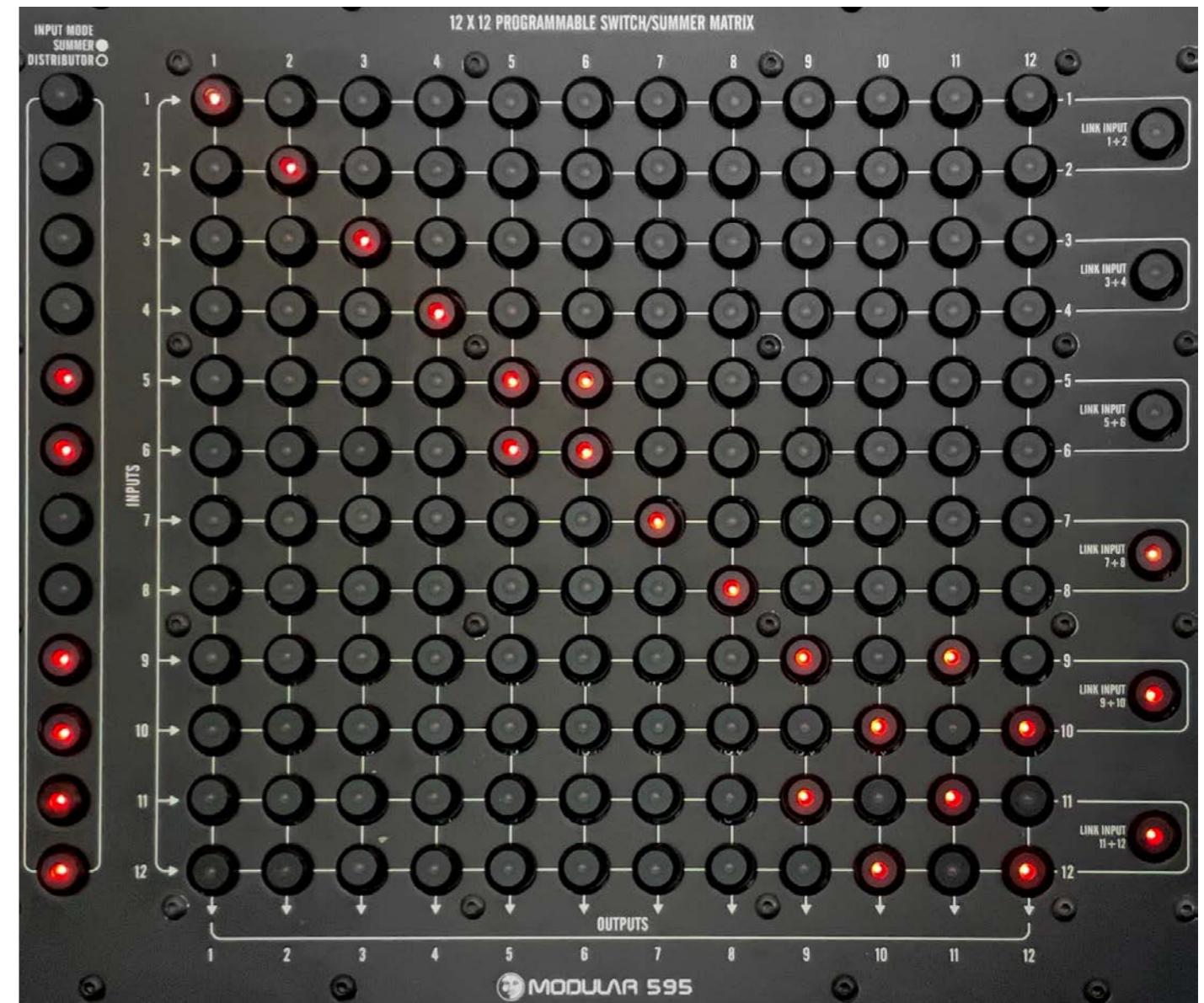


INPUT 1 and 2 are „LINKED“ and „DISTRIBUTED“ to OUTPUT 1 and 3 and 2 and 4 resp.



INPUTS 1 to 4 are „DISTRIBUTED“ to OUTPUTS 1 to 4 and

INPUTS 5 and 6 are „SUMMED“ and the sum of the two signals is available at both OUTPUT 5 and 6



INPUTS 1 to 4 are „DISTRIBUTED“ to OUTPUTS 1 to 4 and

INPUTS 5 and 6 are „SUMMED“ and the sum of the two signals is available at both OUTPUT 5 and 6 and

INPUTS 7 and 8 are „LINKED“ and „DISTRIBUTED“ to OUTPUT 7 and 8 and

INPUTS 9 and 10 and INPUTS 11 and 12 are „LINKED“ and „SUMMED“ to OUTPUT 9 (INPUTS 9 and 11) etc.