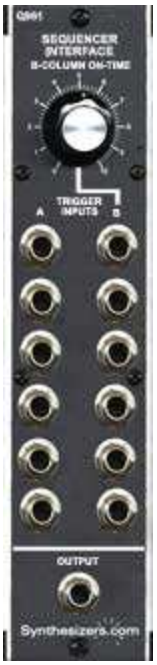
Q961 Sequencer Interface

Aug 2014

The Q961 Sequencer Interface is modeled after the Moog 961 Interface module and is used to combine trigger signals to create a single trigger output. Trigger signals (Called Gate signals in modern systems) are logically OR'd together - any trigger input gets routed to the output. Column 'A' trigger inputs go directly to the output, while Column 'B' trigger inputs can have their On-time manually limited or extended from 40ms to 4 seconds with the panel control.



Specifications

Panel Size: Single width 2.125"w x 8.75"h.
Column B On-Time: 40ms to 4 seconds
Trigger Input Thresholds: 1.5V
Trigger Input Levels: -15V to +15V
Trigger Output Levels: 5V
Power: +15V@10ma, -15V@10a, +5@1ma.

Controls and Connectors

Column B On-Time Control
Sets the time that the triggers from column B remain routed to the output.
Adjustable from 40ms to 4 seconds.

Column A Trigger Inputs
The 6 trigger (Gate) inputs are logically OR'd and routed to the output.
Typically these triggers come from a Q960 Sequential Controller

Column B Trigger Inputs
The 6 trigger (Gate) inputs are logically OR'd, time adjusted, then routed to the output.
Typically these triggers come from a Q960 Sequential Controller

Output
The logical OR of all trigger inputs.
Typically patched to one or more Envelope Generators.

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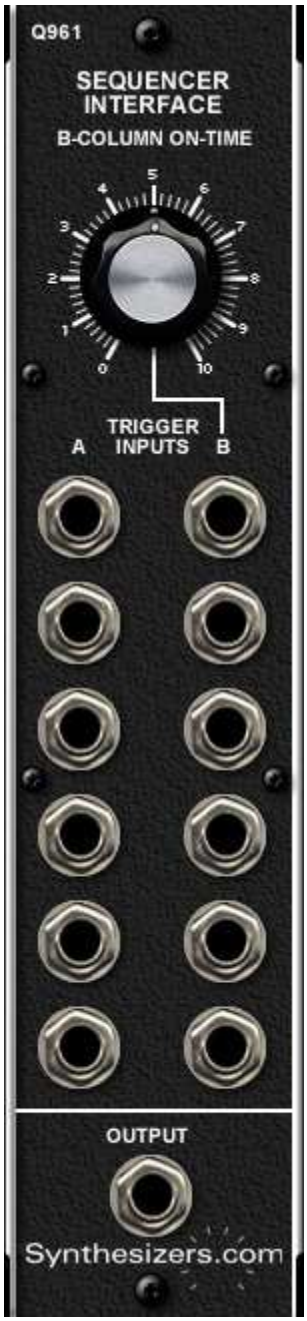
The Q961 combines multiple triggers (gates) from the Q960 Sequencer into a single output which can be used to drive other modules such as envelope generators. The left section simply combines triggers, the right section combines triggers and gives control over their output timing.



Controls the length of time right-side triggers stay ON.

Triggers on this side are combined then sent to the output.

Triggers on this side are time-adjusted with the knob setting then sent to the output.

Trigger (gate) output with all the combined inputs.

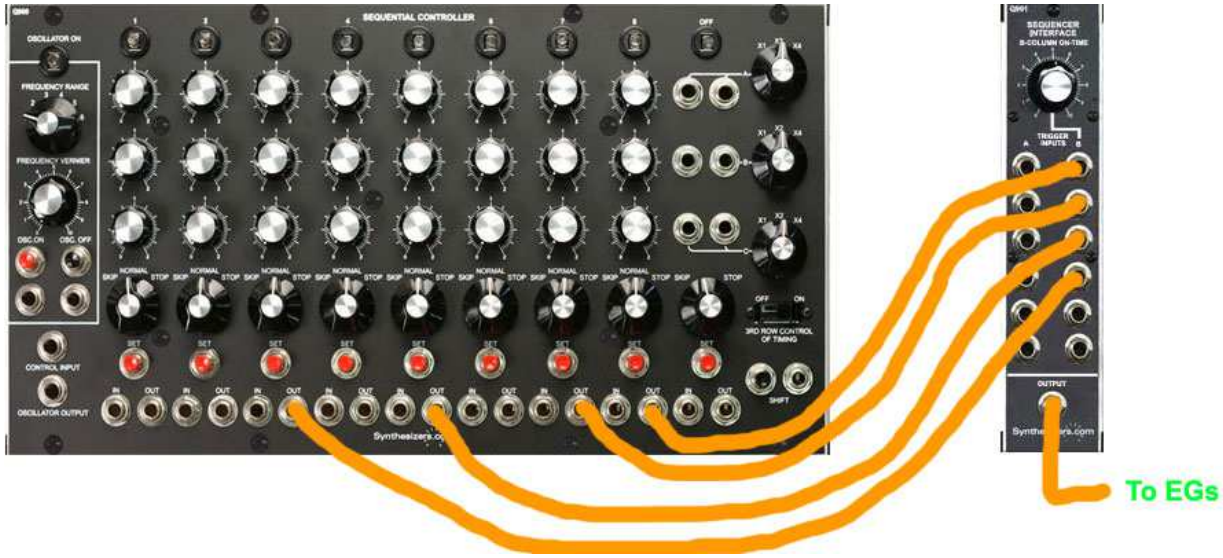
Usage and Patch Tips

The most common use for the Q961 is to combine triggers from the Q960 sequencer so certain stages produce notes (Triggers to Envelope Generators), and others do not.

Varying Control of Envelope Generators
By using the column B inputs, changes in the trigger timing can be used to produce interesting effects not possible with a static trigger time.

As a Keyboard Gate Modifier
Use the Q961 to make trigger signals from every keypress have a certain timing.

Typical trigger Combining Patch



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Calibration and Testing

This module requires no calibration.

1. Apply a 5V trigger (Gate) to each column A input.
2. The output should produce a gate for each input.
3. Route the output to an envelope generator that controls an amplifier in a typical synthesizer patch.
4. Apply a 5v gate from a keyboard to each column B input.
5. Adjusting the column B On-Time should determine the length of time the gate stays on and affect the sound produced.

Power Connector

6 pin .1" MTA type connector made by AMP. Available from Mouser Electronics or Digi-Key. Modules have a male PCB mount connector and cable harnesses have a female.

Part Numbers:
Female cable mount: #6404416
Male PCB mount: #6404566

Pinout:
1 = +15v
2 = key (pin removed)
3 = +5v
4 = gnd
5 = -15v

Not all voltages are used on all modules.

PC Board Layout