

The Q963 Trigger Bus is an aid module for the Q960 Sequential Controller. The user can manually route each trigger output from the Q960 to one of 2 bus outputs - A or B. A center position is provided to prevent the trigger from going to either output, resulting in a rest for that stage.

Connection to the Q960 is done with a short cable behind the panel, so the Q963 must sit next to the Q960. Up to 5 Q963 modules can be daisy-chained to one Q960 Sequencer providing a total of 10 trigger buses.

## Controls and Connectors

### Trigger Switches

A switch is provided for each of the 8 stages on the Q960 sequencer. Each switch has 3 possible positions - A, center, B. In position A, the trigger is routed to the A output connector. In position B, the trigger is routed to the B output connector. In the center position, the trigger is not routed to either connector.

### Output Bus A Connector

A trigger signal will appear for any stage that is switched to the A side. Typically patched to one or more Envelope Generators.

### Output Bus B Connector

A trigger signal will appear for any stage that is switched to the B side. Typically patched to one or more Envelope Generators.

## Specifications

**Panel Size:** Single width 2.125"w x 8.75"h.

**Trigger Output Levels:** .8V - 4V

**Power:** None

## Usage and Patch Tips

The Q963 provides real-time control of trigger outputs from the sequencer resulting in interesting patterns and control of rests (trigger off).

Multiple buses provide a way to route selected sequencer stages to different envelope generators and patch paths.

### Trigger Duty Cycle

It's important to realize that each trigger output is 100% duty cycle. The trigger is On for the entire time that the stage is On. This means that 2 adjacent triggers result in one long trigger instead of 2 distinct triggers. You can change the duty cycle of the Q963 outputs to match the Q960's oscillator using the special Q963WF cable. This results in independent triggers for adjacent outputs. The Q960's oscillator output has a 90% duty cycle, or a variable duty cycle if you attach an optional potentiometer.



## Installation

Installation is performed by simply plugging in the cable from the Q963 to the Q960's PCB. An extra connector on the Q963 provides connection to additional Q963's.

