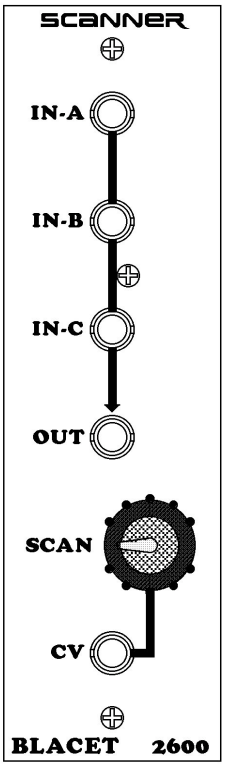
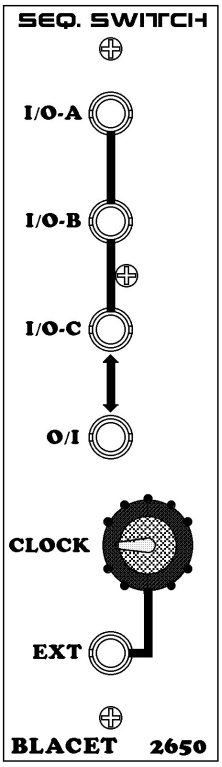
Scanner/Switch

BLACET RESEARCH MODEL MD2600 Scanner
BLACET RESEARCH MODEL MD2650 Switch

User Manual





Blacet Research 15210 Orchard Rd Guerneville CA 95446
blacet@blacet.com http://www.blacet.com 707-869-9164
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Introduction

The Blacet MD2600 Scanner and MD2650 Sequential Switch perform similar functions but with some important differences.

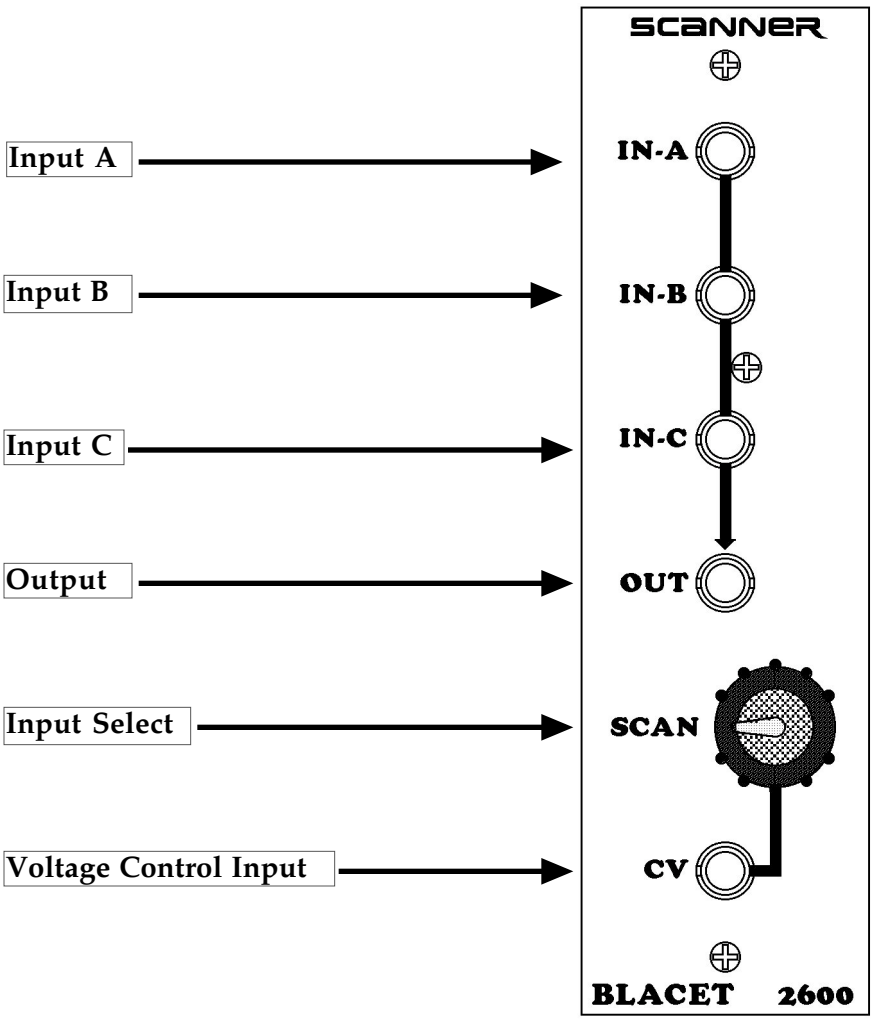
The **Scanner** selects one of three inputs via a control voltage and sends it to the output. The inputs can be made to overlap, so that the switching point is not abrupt. Adjacent inputs will appear blended at the output over a portion of the CV range.

Trimpots on the Scanner allow changing the effective range of the CV input and the overlap amount.

The **Sequential Switch** is a clock driven device and has only one input present at the output at a time. The Switch is also bidirectional, where the Scanner is not. The module has a built in clock or can be overridden with an external clock.

A DIP switch on the module allows three stages or four stages with the last stage "off".

Both modules can be used for audio or CV signals.



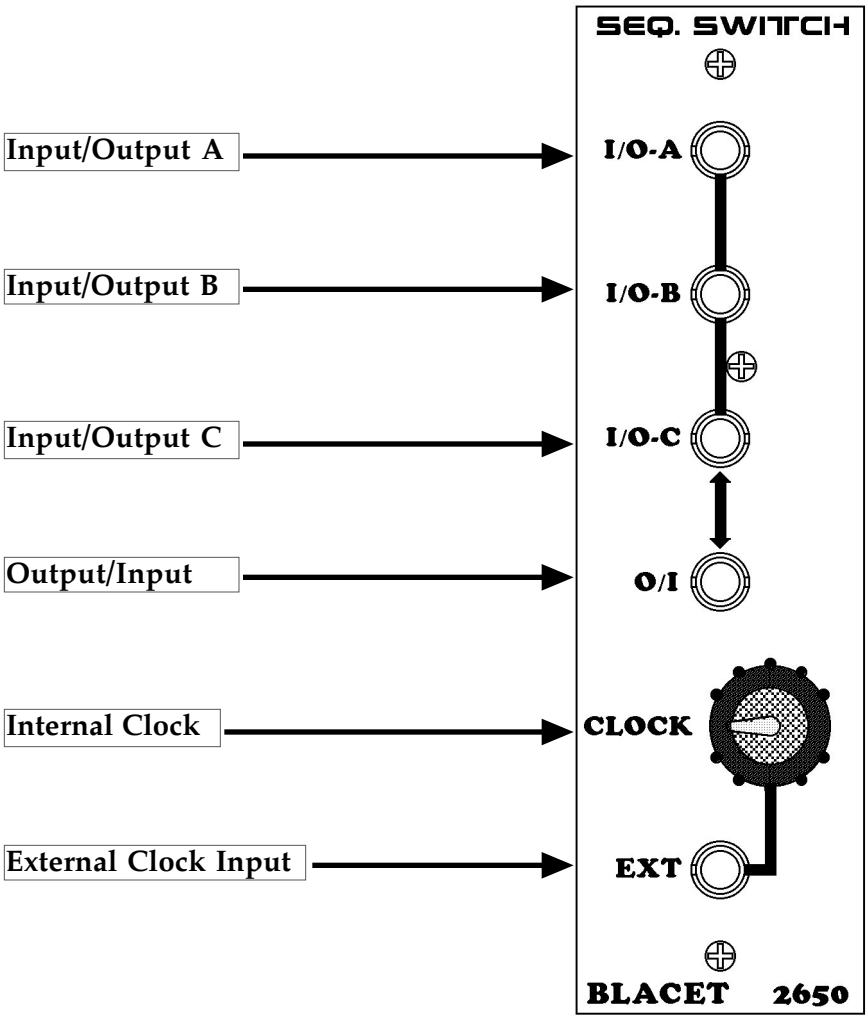
Operation Tips

Trim Pot RT1 (Ref) on the PCB board allows changing the range of the Scan knob or CV in from about 1V/step (10V Ref) at FCCW to about 0.13 V/step (1.3V Ref) at FCW. To check the actual ref voltage, measure at TP1.

To determine the size of each scan step, divide the Ref voltage by 10. For example, with a ref of 10V, each step is 1V. "A" comes on at 1V, B at 2V, C at 3V.

With a ref of 2V, each step is 0.2V.

Trim Pot RT2 (Dither) allows overlapping of adjacent input signals. FCCW will give minimal overlap and FCW will give maximum overlap.



Operation Tips

DIP switch S1 on the PCB allows selecting 3 or 4 steps. The fourth step is "off".

The sequence will reset at power on, otherwise there is no reset input. Steps will therefore have a randomness compared with other clocked modules.

The switch is bidirectional, allowing for a "three in, one out" or "one in, three out" configuration. Note the bidirectional arrow on the front panel.

The internal clock has a range of about 12S to 80Hz and is overridden by an external clock, which must be a square or pulse wave with 2V or greater positive swing. (Negative swings are OK).

Power Input Connector J6: This PCB connector requires a source of regulated +15Vdc and -15Vdc power to run the module. Use a Blacet PS500 supply or the equivalent.

Connections to this connector should be made only when the power supply is OFF and the connector must be positioned correctly on the pins. As using the wrong supply can cause damage to the unit, please contact us if you have any questions! Do not attempt to use "wall warts" to power the module.

Specifications

Front Panel Size: 5.25 x 1.5" W
Module Depth: 2.75”
Clock Range (Switch): 12S to 80 Hz
Input/Output Jacks: 3.5 mm (1/8”)
Input/Output Range: +/-15V (Switch), +/-13V (Scanner)
Power (Scanner): +/-15 Vdc @+20/-12mA
Power (Switch): +/-15 Vdc @+15/-15mA

Troubleshooting, Repair, Warranty

If you encounter problems that you can’t solve, contact us, preferably via e-mail with a description of the problem. Let us know what does and does not work. We can then help you get your module working. We can fix modules for a minimum fee of $25.

The parts contained in this unit have been carefully selected and tested. They are guaranteed for 90 days from the date of purchase.