

EMBEDDED TEST SOLUTIONS



RELAY SWITCHING SOLUTIONS

No custom test equipment is complete without some form of relay switch function. Often the applications include switching DUT power, setting control conditions, routing RF test signals and so much more.

The **Relay Switching Solutions'** collection from OI, offer test developers an impressive array of practical solutions that are easy-to-use, offer huge flexibility and comes with a price tag that is just a fraction of the cost for comparable PC-based test instruments.

With our switching solutions there is no need to provide a separate power source, OI relay modules are powered by the USB interface. To learn more about how our switching products are used and applied, just go to the OI website and request a demo unit for a free 10-day trial period.

SPECIAL BENEFITS

- *Wide assortment of relay switching configurations*
- *Easy access to instrument resources*
- *Compact size, module just 2.50" x 2.75"*
- *Embedded or USB Interface*
- *Compatible with Lab-View, LabWindows, VB, HP-Vee, C/C++, Python & many others*
- *Low cost, OI modules can be as much as 60% less than traditional PC-based test instruments*
- *Use to build Smart Test Fixtures, create custom desktop test equipment or support larger ATE test systems*

General Purpose & Beyond

The RELAY-MATE and SWITCH-MATE modules (shown below), are your "go to" solutions when a basic relay switch is required. This group also includes additional relay modules that offer extended performance (switch 200Vdc), faster switching speed and greater relay densities.

MUX Mania

The MUX-MATE and 4WIRE-MATE modules offer unique signal multiplexing capabilities. When combined with a low-cost DMM, the MUX-MATE delivers an awesome 16-Ch scanner function. Use the 4WIRE-MATE to create a "gang" switch (for switching RS-232, USB, SPI & I²C circuits).

Switching Expansion Module

For applications that require large relay configurations, OI is developing a new module called the SEM-MATE. The SEM-MATE will allow any combination of 8, OI relay modules to work-in-concert as single integrated unit.

RELAY-MATE

8-DPDT Relay Module



- 8-DPDT, 2 FORM-C, 1 Amp Relays
- LED indicate each active relay
- Rapid switching, < 4msec activation time
- Easy screw terminal connections or single consolidated header

SWITCH-MATE

8-SPST Relay Module



- 8-SPST, 1 FORM-A, 1 Amp Relays
- LED indicate each active relay
- Rapid switching, < 1msec activation time
- Easy screw terminal connections or single consolidated header

MUX-MATE

16-Ch Signal Multiplexer Module



- 16 X 2 X 1 Mux (16 relays, 2-poles and 1 common output)
- LED indicate each active relay
- Rapid switching, < 4msec activation time
- Easy screw terminal connections or single consolidated header

4WIRE-MATE

8-CH 4PST Matrix Module



- 8 X 4 X 1 Multiplexer (8-channels, 4-poles, 1 common output)
- LED indicate each active relay
- Rapid switching, < 4msec activation time
- Easy screw terminal connections or single consolidated header

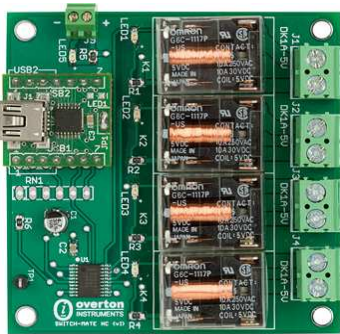
ORDER INFO

RELAY-MATE, 8-DPDT Relay Module ETS-4010-00 RELAY-MATE, with optional USB Interface ETS-4011-00	SWITCH-MATE, 8-SPST Relay Module ETS-4110-00 SWITCH-MATE, with optional USB Interface ETS-4111-00	MUX-MATE, 8-SPST Relay Module ETS-4210-00 MUX-MATE, with optional USB Interface ETS-4211-00	4WIRE-MATE, 8-SPST Relay Module ETS-4410-00 4WIRE-MATE, with optional USB Interface ETS-4411-00
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(Oi) Relay Switching Solutions' Selection Chart

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Subject to change without notice



The (Oi) family of **Relay Switching Solutions'** make it possible to develop custom test & measurement equipment with tremendous ease and flexibility, and for far less cost. In most cases, the cost per module can be as much as 60% less than a comparable PC-based instrument card.

Use (Oi) relay modules to build smart Mechanical Test Fixtures, develop custom desktop test equipment or support larger ATE test systems. The modules are just 2.50" x 2.75" inches in size, and can be externally controlled by our embedded controllers (i.e., the Pico-MATE), or with a standard PC or MAC (with an optional USB interface). The on-board hardware resources can be easily accessed by simple screw terminal connections or through consolidated header connectors.



"The Future of Electronics Test"

MODEL	CONFIGURATION	SPECIFICATION	PART NUMBER	USB OPTION	APPLICATIONS
RELAY-MATE ^(vi)	8-DPDT Relays	30Vdc @ 1A ea	ETS-4010-00	ETS-4011-00	General Purpose (G/P), Small Signal (S/S)
RELAY-MATE/HC ^(vi)	4-DPDT Relays, High Current	30Vdc @ 5A ea	ETS-4020-00	ETS-4021-00	G/P, S/S, High Current (H/C)
RELAY-MATE/HP ^(vi)	8-DPST Reed Relays, High Performance	200Vdc @ 1A, Fast Switching	ETS-4030-00	ETS-4031-00	G/P, S/S, High Performance (H/P) & Fast Switching (F/S)
RELAY-MATE/RF ^(vi)	4 Port, 3-CH DPDT 4GHz 50Ω Relay Module	100Vdc @ 0.5A, Fast Switching	ETS-4040-00	ETS-4041-00	RF, H/P & F/S
SWITCH-MATE ^(vi)	8-SPST Relays	24Vdc @ 1A ea	ETS-4110-00	ETS-4111-00	General Purpose, Small Signal
SWITCH-MATE/HC ^(vi)	4-SPST, 10A High Current Relays	30Vdc @ 10A ea	ETS-4120-00	ETS-4121-00	G/P, S/S, H/C
SWITCH-MATE/HCI ^(vi)	4-SPST, 20A High Current Relay	250Vac @ 20A ea	ETS-4140-00	ETS-4141-00	G/P, H/C
SWITCH-MATE/HCIII ^(vi)	2-SPST, 30A High Current Relay	250Vac @ 30A ea	ETS-4150-00	ETS-4151-00	G/P, H/C
SWITCH-MATE/HCIV ^(vi)	8-SPST, 6A High Current Relay	250Vac @ 6A ea	ETS-4160-00	ETS-4161-00	G/P, S/S, H/C
SWITCH-MATE/HP ^(vi)	8-SPST Reed Relays, High Performance	200Vdc @ 1A, Fast Switching	ETS-4130-00	ETS-4131-00	H/P & F/S
SWITCH-MATE/HPII ^(vi)	16-SPST Reed Relays, High Performance	200Vdc @ 1A, Fast Switching	ETS-4190-00	ETS-4191-00	H/P & F/S
SWITCH-MATE/HV ^(vi)	8-SPST Reed Relays, High Voltage	1KVdc @ 1A, Fast Switching	ETS-4170-00	ETS-4171-00	High Voltage (H/V) & F/S
SWITCH-MATE/SSR ^(vi)	8-SPST Solid-State Relays	60Vdc @ 1A, Ultra-Fast Switching	ETS-4180-00	ETS-4181-00	G/P, H/P & Ultra-Fast Switching
SWITCH-MATE/SSII ^(vi)	4-SPST High Current Solid-State Relays	60Vdc @ 10A, Ultra-Fast Switching	ETS-4100-00	ETS-4101-00	H/C, G/P, H/P & Ultra-Fast Switching
MUX-MATE ^(vi)	16-Ch Signal Multiplexer	16 Relays, 30Vdc @ 1A ea	ETS-4210-00	ETS-4211-00	Small Signal Multiplexing
MUX-MATE/HP ^(vi)	16-Ch Signal Multiplexer High Performance	16 Relays, 200Vdc @ 1A, Fast Switching	ETS-4220-00	ETS-4221-00	H/P Signal Multiplexing & F/S
MUX-MATE/HPII ^(vi)	32-Ch Signal Multiplexer High Performance	32 Relays, 200Vdc @ 1A, Fast Switching	ETS-4230-00	ETS-4231-00	H/P Signal Multiplexing & F/S
MATRIX-MATE ^(vi)	4X4 DPDT Relay Matrix	16 Relays, 32Vdc @ 1A	ETS-4310-00	ETS-4311-00	Small Signal Multiplexing
4WIRE-MATE ^(vi)	4X8 DPDT Signal Multiplexer	16 Relays, 32Vdc @ 1A	ETS-4410-00	ETS-4411-00	"Gang" Panelized PCB Support