

EECO[®]

CATALOG
EM-7

MEMBRANE AND ELASTOMER KEYPADS

CUSTOM MEMBRANE KEYPADS

EECO Switch has designed and manufactured high quality membrane keypads for over 25 years.

Our experience in switch design sets EECO apart from other suppliers. EECO Switch is one of the few manufacturers of both electro-mechanical switches and membrane keypads. Most membrane suppliers are primarily label designers and printers. They may know how to print labels and signs but they do not know the intricacies of good switch design and manufacturing. As a switch manufacturer for over 50 years, EECO Switch offers both high-quality switch design and beautiful graphics capabilities. Our client list includes top-tier manufacturers of medical equipment, avionics equipment and industrial controls worldwide. They rely on EECO Switch for the quality and reliability their equipment demands.



Let EECO Switch design and manufacture a custom membrane keypad to meet YOUR demanding application and see the difference.

We Offer

Superior switch circuit design
Custom graphic design
ESD shielding
Fiber optic illumination

Custom embossing
Metal or polymer domes for tactile feedback
LED illumination
Dead front illuminated graphics

When your project calls for a custom membrane keypad call the Switch Experts at EECO SWITCH!

CUSTOM ELASTOMER KEYPADS

If your next project requires a keypad, EECO's elastomer keypads deliver a "custom" look and feel at a very "standard" price.

Let the Switch Experts at EECO Switch design and manufacture a custom elastomer keypad to complement your next product design. EECO Switch offers an endless variety of colorful and durable molded elastomer keypads manufactured to your exact specifications. Our engineers will help you select the correct material, key travel layout and graphics especially for your specific requirements. EECO can also combine our membrane and elastomer keypad expertise to create a complete custom keypad assembly for you. Our elastomer keypads are found in a wide range of applications around the world.



Rely on EECO Switch for the quality you demand. Why trust your keypads to anyone else?

We Offer

Infinite variety of key shapes
Custom color matching
Custom printed legends
PlaS Series Hybrid Plastic/Silicone Technology

Many Optional Protective Finishes
Duracoat Simulated Plastic Finish
SCS Parylene Conformal Coating
Encap Plastic Key Top Coating

MICRO-DIP® ROTARY CODED DIP SWITCHES

4800 SERIES

The 4800 Series Micro-DIP® is a true SURFACE MOUNT version of our popular Micro-DIP family.

Like all EECO MICRO-DIPS®, the **4800 Series** permits direct setting of binary-coded values for PROMs and other user-addressable devices. All materials used in the **4800 Series** were carefully selected to withstand the rigors of the surface-mount process, then engineered into an ultra low profile, fully sealed package. The compact dimensions of the **4800 Series** require minimal board space and permit closely stacked PCB designs. The ultra low profile design permits unrestricted heat flow during installation, eliminating the possibility of shadowing adjacent components. The **4800 Series** is covered by a one year warranty.

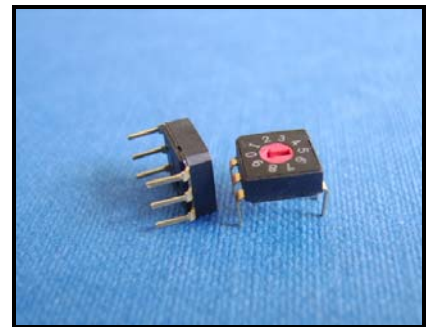
LEAD-FREE!



4600 SERIES

The 4600 Series Micro-DIP® continues the EECO tradition of innovative switch design.

Like all EECO MICRO-DIPS, the **4600 Series** permits direct setting of binary-coded values for PROMs and other user-addressable devices. The **4600 Series** features high temperature materials carefully selected to withstand the rigors of today's automated soldering and cleaning processes. The **4600 Series** is fully sealed switch, and the compact dimensions of the **4600 Series** require minimal board space. The ultra low profile design permits unrestricted heat flow during installation, eliminating the possibility of shadowing adjacent components. The **4600 Series** is covered by a one year warranty.



3500 SERIES

The 3500 Series Micro-DIP® is a low profile, fully sealed rotary DIP switch designed for today's automated soldering processes!

Featuring direct decimal to binary conversion, the **3500 Series Micro-DIP** is a user friendly means of addressing PROM's or setting micro-processor controlled devices. The **3500 Series** is offered in six binary and decimal codes, each color-coded for fast identification, with extended shafts and right angle orientations for maximum design flexibility. The **3500 Series** is covered by EECO's exclusive **Lifetime Warranty**.



2300 SERIES

An EECO innovation, the 2300 Series Micro-DIP® family includes the industry's only double pole rotary DIP switch.

Ideal for CMOS applications, the **2300 Series** double pole switch offers a unique output arrangement in which all four bits are always connected to one of the two commons, allowing the use of a single pull-up resistor instead of 4 as required by conventional DIP switches. The **2300 Series** includes 10 and 16 position double pole models, plus a 10 single pole right angle version. The double pole switches are available with process seals for wave soldering, and all **2300 Series** are color coded for easy identification during assembly. The **2300 Series** is covered by EECO's exclusive **Lifetime Warranty**.



RoHS COMPLIANCE

EECO Switch is fully committed to complying with the European Lead-Free and RoHS directives. All EECO 2300, 3500, 4600 and 4800 Series Micro-DIP switches are Lead-Free and RoHS compliant.

STRIPSWITCH ROTARY CODED SWITCHES

2100 SERIES

The 2100 Series StripSwitch® is a P.C. board-mounted thumbwheel switch, featuring direct addressing in a compact package.

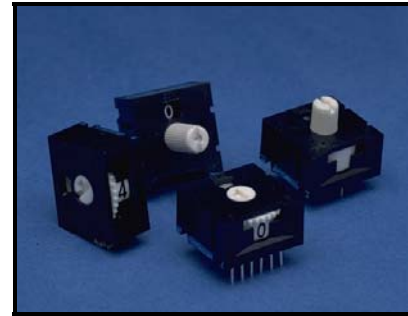
The 2100 Series may be configured in assemblies of one to four switches on a single terminal strip, reducing assembly time and cost. Each switch may be a different code. The 2100 Series offers 10 legend locations, screwdriver or thumbwheel adjust, and two optional extended shafts to accommodate any design specification. The 2100 Series offers a wide variety of 10 and 16 position binary and decimal codes. Other 2100 Series features include stop pins and special rotor markings to create a customized yet low cost operator interface. The 2100 Series is covered by EECO's exclusive *Lifetime Warranty*.



2700 SERIES

The 2700 Series StripSwitch® combines the many advanced features of the original 2100 Series into a compact, fully sealed switch design suitable for wave soldering and automated cleaning processes.

The 2700 Series features legends located on both the top and side of the thumbwheel for maximum design flexibility and user convenience. Available options for the 2700 Series include ¼" and ½" extended shafts, black or white thumbwheels, stops, and a wide variety of 10 and 16 position binary and decimal coded outputs. Custom rotor markings are also available in all 2700 Series versions. The 2700 Series StripSwitch is covered by EECO's exclusive *Lifetime Warranty*.



STANDARD KEYPADS

EK SERIES STANDARD KEYPADS

EK Series Keypads offer telephone-style standard keypads at an economical price.

EECO's EK Series keypads are available in three standard configurations. Choose between two 12 key models in a standard 3 x 4 key matrix, or a 16 key version in a convenient 4 x 4 layout to control additional functions. All EK Series keypads feature permanent legends using double-shot molded keys for superior legibility and long life. EK Series keypads are a compact and economical method of data entry. Typical applications include telephones and commutations devices, security systems and machine controls. All EK Series keypads are covered by a one year warranty.



RoHS COMPLIANCE

EECO Switch is fully committed to complying with the European Lead-Free and RoHS directives. All EECO 2100 and 2700 Series StripSwitch rotary coded switches and EK Series standard keypads are Lead-Free and RoHS compliant.

THUMBWHEEL SWITCHES

1000 SERIES

If a front panel, pushwheel switch in the smallest possible package is part of your design requirements, EECO's 1000 Series is the ideal solution

The **1000 Series** is the smallest rear-mount pushwheel digital switch available today. Actuation methods include thumbwheel, push-set and pen-set models. The pen-set version eliminates the possibility of accidental setting changes, and is ideal for critical "set and forget" applications. The **1000 Series** is offered in either binary or decimal code versions, and optional features include stop pins, and provision for diode installation. The **1000 Series** is backed by EECO's one year warranty.



1100 SERIES

EECO's 1100 Series switches offer four different actuator styles in a compact, snap-in design.

The **1100 Series** snaps in from the front of the panel, making installation fast and easy. The **1100 Series** is offered in four different actuator styles, allowing the engineer the greatest design flexibility. Actuator styles include standard thumbwheel, push-set, pen-set and lock-set models. The pen-set and lock-set models eliminate accidental setting changes and are an ideal choice for critical "set and forget" applications. The **1100 Series** is offered in either binary or decimal code versions, and optional features include stop pins, and provision for diode installation. The **1100 Series** is backed by EECO's one year warranty.



1400 SERIES

EECO's 1400 Series switches feature snap-in front mounting in a large, easy to use package size.

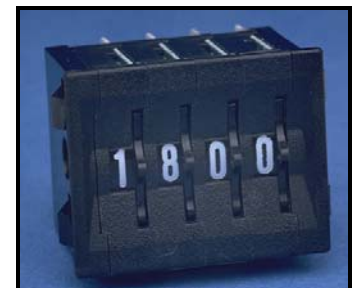
The **1400 Series** snaps in from the front of the panel, allowing the user to create multi-switch assemblies quickly without the need for additional mounting hardware. The **1400 Series** is offered in a choice of thumbwheel, push-set and lock-set actuator styles. The lock-set model features hinged actuators which fold flush with the front of the switch, eliminating accidental setting changes, and are an ideal choice for critical "set and forget" applications. The **1400 Series** is available as either a 10 position decimal code switch or as a 10 or 16 position binary coded version. Optional features include stop pins, and provision for diode installation. The **1400 Series** is backed by EECO's one year warranty.



1800 SERIES

EECO's 1800 Series features large, easy to read characters and a snap-in mount design.

The **1800 Series** is a slim .315" (8 MM) wide to conserve front panel space. The **1800 Series** is offered in the most popular binary and decimal output codes for design flexibility. Other options include F-pins for attaching an accessory PC board, stop pins, and provision for diode installation. The **1800 Series** offers superior performance at a very economical price. The **1800 Series** is backed by EECO's one year warranty.



THUMBWHEEL SWITCHES

1776/1976 SERIES

EECO's 1776 and 1976 Series thumbwheel switches are the standards of the industry. Both Series offer 8, 10, 12 or 16 position binary or decimal output codes for every possible application.

The *1776 Series* is a standard .500" wide, while the *1976 Series* is .350" wide to save valuable front panel space. Optional notched terminals allow motherboards to be easily attached. The list of available options includes custom legends, lighting options, doublewide message units and fast-mount installation hardware. Many switch models offer mounting provisions for diodes. The *1776 and 1976 Series* both offer proven reliability at an economical price, and both are backed by EECO's one-year warranty.

LEAD-FREE!



2000 SERIES

EECO's 2000 Series is ideal for demanding industrial control applications. The large size of the switch makes it easy to operate, even if the operator is wearing gloves.

The *2000 Series* is available with an optional internal O-ring seal for use in harsh environments. The *2000 Series* switch is .500" wide and features PCB termination designed to accept a variety of edge connectors, and also allows direct wiring. Other options such as lighted indicators, custom legends, stops and diode provisions make the *2000 Series* an excellent choice for heavy-duty industrial control applications demanding high reliability. The *2000 Series* is backed by EECO's one-year warranty.



7000 SERIES

The 7000 Series combines heavy-duty construction and a compact package size.

Designed to meet demanding military performance specifications, the *7000 Series* switch features a unique one-piece housing design to permanently seal the contacts from moisture, dirt, and dust. The *7000 Series* is available in either P.C. board or flexible cable termination styles, and in a variety of decimal or binary output codes. Optional features include lighted legends, EMI/RFI shielding and a doublewide message unit. Lamps are easily replaced without tools on lighted models. Typical applications include military and commercial aircraft, shipboard, and harsh industrial environments. The *7000 Series* is backed by EECO's one-year warranty.

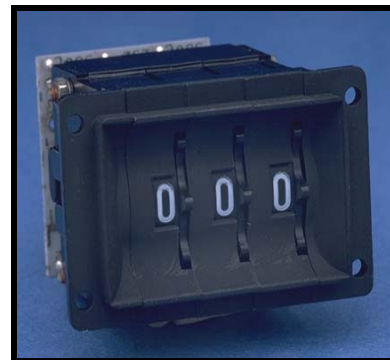


THUMB POT SERIES

EECO's THUMB POT™ is a digital voltage divider which allows the user to set varying voltages while maintaining a constant resistance within the circuit.

Sharing many of the features and options of our *1776 and 1976 Series* switches, the *THUMB POT* is available in 2, 3, or 4 decade models, with resistance values from 1,000 to 100,000 ohms. The *THUMB POT* is based on a proprietary circuit developed by EECO, using matched resistor pairs. Unlike rotary or dial potentiometers, the *THUMB POT* offers exact setting repeatability, with setting accuracy as precise as $\pm 0.05\%$ of full scale voltage.

The *THUMB POT* is covered by EECO's one-year warranty.



RoHS COMPLIANCE

EECO Switch is fully committed to complying with the European Lead-Free and RoHS directives. All EECO 1000, 1100, 1400, 1800, 1776/1976, 2000 and 7000 Series standard thumbwheel switches are Lead-Free and RoHS compliant. Consult the factory for information on RoHS status for the Thumbpot Series, and certain optional features.

SWITCH PRODUCT FEATURES AND OPTIONS	1000	1100	1400	1776	1800	1976	2000	2100	2300	2700	3500	4600	4800	7000	T-POT
Color Coded Body or Rotor									△		△	△	△		
Custom Characters	●	●	●	●	●	●	●	●		●				●	●
Decimal Point	●	●	●	●	●	●	●	?		?				●	●
Diode Provision and Installation	●	●	●	●	●	●	●							●	
Double Wide Switch				●										●	
EMI/RFI Shielding				●		●	●							●	●
Extended Shaft								●		●	●	●	●		
Fast Mount Hardware				●		●									●
Gloss Finish				△		△	△	△	△		△				△
Knob											△	●	●		
Lighted Characters				●		●	●							●	
Lighted Decimal Point ¹				●		●	●							●	
Matte Spray Finish				●		●	●							△	●
Molded Matte Finish	△	△	△		△					△					
Motherboard Mounting Pins	●	●	●	●	●	●								?	
Permanent Seal										△	△	△	△	△	
Process Seal									●						
Rear Panel Mount				△		△	△							△	
Right Angle Mount									●		●				
Snap In Panel Mount	△	△	△		△										
Stop Pins	●	●	●	●	●	●	●	●		●				●	●

FEATURES AND OPTIONS LEGEND

△ = Standard Feature

● = Optional Feature

? = Consult Factory

¹ = Lighted Decimal Point available on spacer only, 7000 Series.

Certain options may require additional tooling and/or NRE charges. Consult EECO Switch for additional information.

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