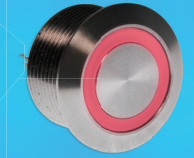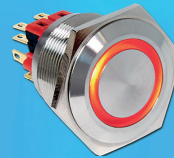# E•SWITCH®

Switches for Today's

ANTI-VANDAL
MARKET

High Level of Security

An anti-vandal switch is an electro-mechanical switch designed to be installed in devices and equipment where it is susceptible to harsh use, vandalism, theft, as well as withstand extreme temperatures and be resistant to dust and moisture. Common applications include pedestrian cross-walks, self-serve parking ticket kiosks, automated bank teller kiosks, apartment intercom systems and gated community security keypad panels.

Anti-vandal switches are also referred to as vandal-resistant, vandal-proof, tamper-resistant or tamper proof. Demand for a switch designed with durability in mind developed in the early 1980s. ATMs and other equipment with public access to keyboards used standard computer keyboard buttons. This made them easy to vandalize by removing and rearranging the keys, which caused users to enter an incorrect password or number passcode preventing access to a bank account or the proper function of a ticket kiosk. In some cases, key pads were missing all together making the keyboard unrecognizable. Thus, for security reasons and to avoid vandalism, keypads were designed with flat surface keys and panels that wouldn't allow any access in between actuator and switch body, nor will the design provide access under or behind the keys with sharp or metal tools. Today, the anti-vandal switch now offers that same security in an individual switch to prevent vandalism.

Intercom Device

Parking Ticket Kiosk

ATM
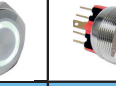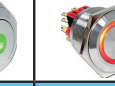
Airport Security

APPLICATION & SWITCH MATRIX

The applications listed below are only a small sampling of the many uses for anti-vandal switches.

		PV0	PV1	PV2	PV3	PV4	PV5	PV6	PV7	PV8
	Diameter	12mm	19mm	16mm	16mm	19mm	12mm	16mm	22mm	25mm
	Functions	SPST Off-(On)	SPST Off-(On)	SPST Off-(On)	SPST or DPDT	SPDT or DPDT	SPST Off-(On)	SPST Off-(On)	SPDT	SPDT or DPDT
	Illumination	Dot or Ring	N/A	N/A	Dot or Ring	Dot, Ring or Power Symbol	N/A	Dot or Ring	Dot or Ring	Dot or Ring
Industrial										
Control Panel						◆		◆	◆	◆
Intercom System		◆	◆	◆			◆			
Fire Alarm		◆	◆	◆	◆					
Auto Battery Charge Station				◆		◆	◆			
Machinery CNC Controls			◆			◆		◆	◆	
Surveillance Control Panel			◆	◆		◆		◆	◆	
HVAC Equipment		◆					◆			
Utility Vehicle Dashboard			◆	◆	◆	◆	◆			
Medical										
Defibrillator			◆	◆	◆	◆		◆	◆	◆
Dental Equipment		◆		◆			◆			
Electric Wheelchair			◆		◆		◆			
Blood Test Machine		◆	◆				◆	◆	◆	◆
Neuro Diagnostic Equipment				◆	◆					
Incubator			◆	◆		◆	◆	◆		
Portable Diagnostic Cart		◆	◆		◆	◆		◆		◆
X-ray Imaging Equipment						◆	◆			
Endoscopy Surgical Equipment				◆					◆	◆
Emergency Transport Equipment							◆	◆	◆	
Motion Control Equipment			◆		◆	◆		◆		
Audio/Visual										
Office Intercom System			◆						◆	
Screen Projector						◆		◆		
Appliances										
Water Heater		◆		◆	◆					
High End Grills			◆		◆	◆	◆	◆		◆
Commercial Stove/Range				◆		◆	◆			◆
Commercial Washer/Dryer								◆	◆	
Transit Related										
Electro-hydraulic Controls				◆			◆			
Forklift Battery Charger		◆	◆			◆		◆	◆	
Satellite Radio Control		◆		◆				◆		◆
Fleet Tracker Activity			◆	◆	◆	◆			◆	
Wheelchair Lift		◆		◆		◆	◆	◆		
Lawn Tractor		◆			◆					◆
Home Maintenance										
Tankless Water Heater			◆		◆					
Pressure Washer							◆	◆	◆	◆
Lawn Tractor Controls		◆			◆			◆		
Agricultural										
Robotic Harvest Equipment									◆	◆
Irrigation System						◆				◆
Industrial Control Joystick			◆	◆			◆			

	PV9	PV10	PVA3	PVA6	PVL	PVT4	ULV4	ULV7	ULV8
Size	28mm	40mm	16mm	16mm	6-19mm	19mm	19mm	22mm	25mm
Circuit	SPDT or DPDT	SPDT or DPDT	SPDT	SPST Off-(On)	N/A	SPST Off-(On)	SPDT or DPDT	SPDT or DPDT	SPDT or DPDT
Illumination	Dot or Ring	Dot or Ring	Ring	Ring or Power Symbol	Pilot Lamp	Ring	Dot, Ring or Power Symbol	Ring or Ring w/ Power Symbol	Ring

Prewired Assemblies Available!

- Order prewired switch assemblies
- Reduce extra cost and time for you to arrange off site
- Inquire about custom options

ULV Series Wire Lead Assembly Options

ULV Wire Leads
- Pre-order with wire leads attached
- 300mm long wire leads
- Compatible with a variety of connectors

Ordering Options
- Option 1: ULV switch only
- Option 2: ULV switch with wire leads

Option 1

ULV4   ULV7   ULV8

Option 2

PV Series Wire Lead and Assembly Options

PV Series Assembly Options
- Pre-order with leads attached
- 300mm long wire leads
- Compatible with a variety of connectors

Available for PV Series: 3, 4, 7, 8, 9, 10
- Option 1: PV switch only
- Option 2: PV switch with wire leads
- Option 3: PV Socket only
- Option 4: PV Socket with wire leads

Option 1

PV3   PV4   PV7
PV8   PV9   PV10

Option 2

Option 3

Insertable socket extension to switch terminals allows easy, efficient termination.

Option 4

When Function Meets Aesthetics

E-Switch offers a large selection of anti-vandal switches, PV Series and ULV Series,
which are available with numerous options. The anti-vandal line ranges in sizes,
from a 6mm diameter illuminated indicator to a 40mm panel cutout pushbutton.
Multiple options are available in function, body and actuator finishes, non-illuminated
or choose from multiple lens styles and LED color options, as well as illumination voltage.
Many of the anti-vandal series are rated IP65 or IP67 for dust and moisture protection.
Not only is E-Switch's anti-vandal product line highly robust and functional, it is deemed
quite attractive. Body finishes and solid style actuator, whether non-illuminated or
 illuminated makes for a highly aesthetic switch. So aesthetically pleasing that it is often
used in applications that do not require anti-vandal properties. Such applications include
dashboard controls on motor boats, ATV's and tractor lawn mowers; as well as
appliances, HMI and audio/visual control panels.
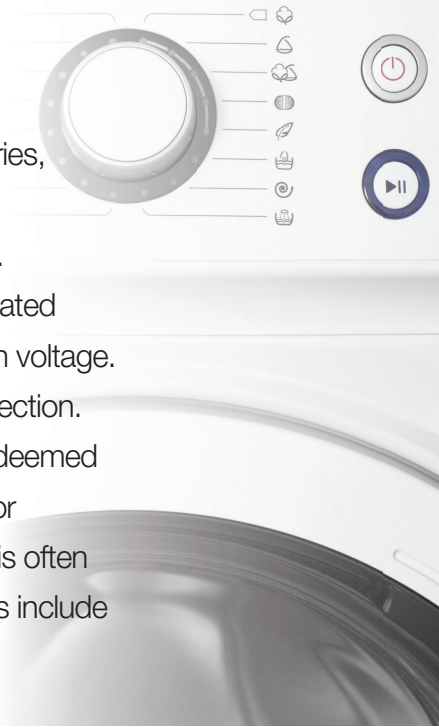
Get Wired with E-Switch

The popularity of the anti-vandal switches has created new product line extensions.

E-Switch offers 300mm long wire lead assemblies for the ULV series allowing panel mount switches to be
ordered pre-wired off the shelf. The PV Anti-vandal series also offers pre-wired assembly directly to PV
series 3,4,7,8,9 and 10. In addition, E-Switch also offers a socket terminal for these PV series. The socket
can be ordered with or without wire leads. These new product extensions eliminate second sourcing wire
purchase and assembly, reduces in-house assembly labor, meaning pre-wired assemblies provide cost and
time savings.

ULV Wire

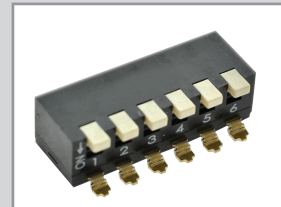**PV Wire**

PV Socket

PV Socket Wire
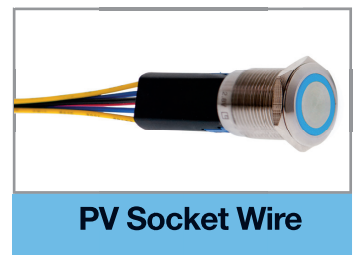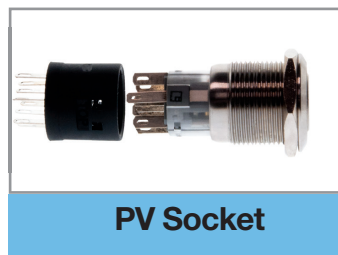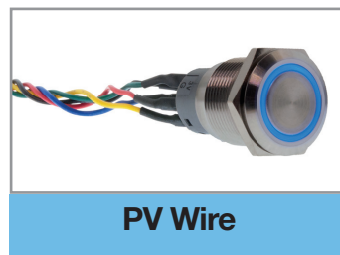
E-Switch offers a large selection of electromechanical switches to fit numerous applications in industries, such as audio/visual, telecommunications, consumer electronics, medical equipment, testing/instrumentation, computer peripherals, industrial type environments and wearable technology devices. Visit **www.e-switch.com** to view our complete line.
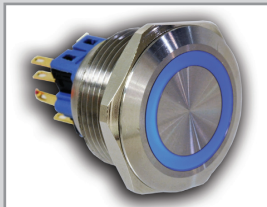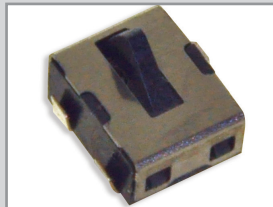
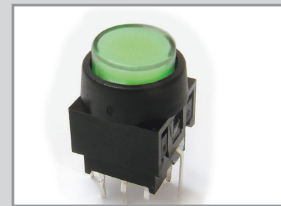|		
Anti-vandal	**Detector**	**DIP**
Keylock	**Navigation**	**Pushbutton**
Rocker	**Rotary**	**Rotary DIP**
Slide	**Snap Action**	**Tact**
Tilt	**Toggle**	**Trigger**
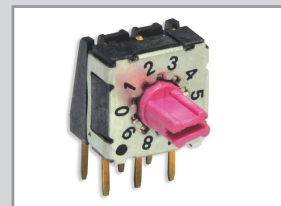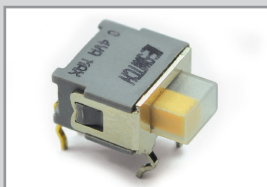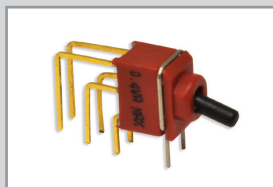
E◆SWITCH®

7153 Northland Drive N, Minneapolis, MN 55428 USA
1.800.867.2717 | www.e-switch.com