

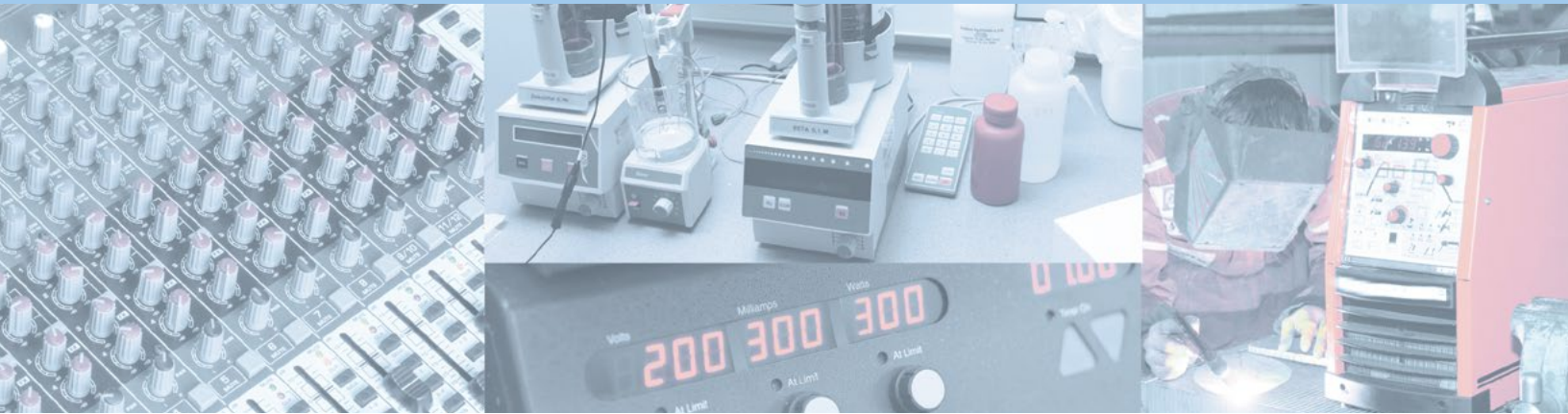


# Commercial Panel Controls



**BOURNS®**

# Introduction



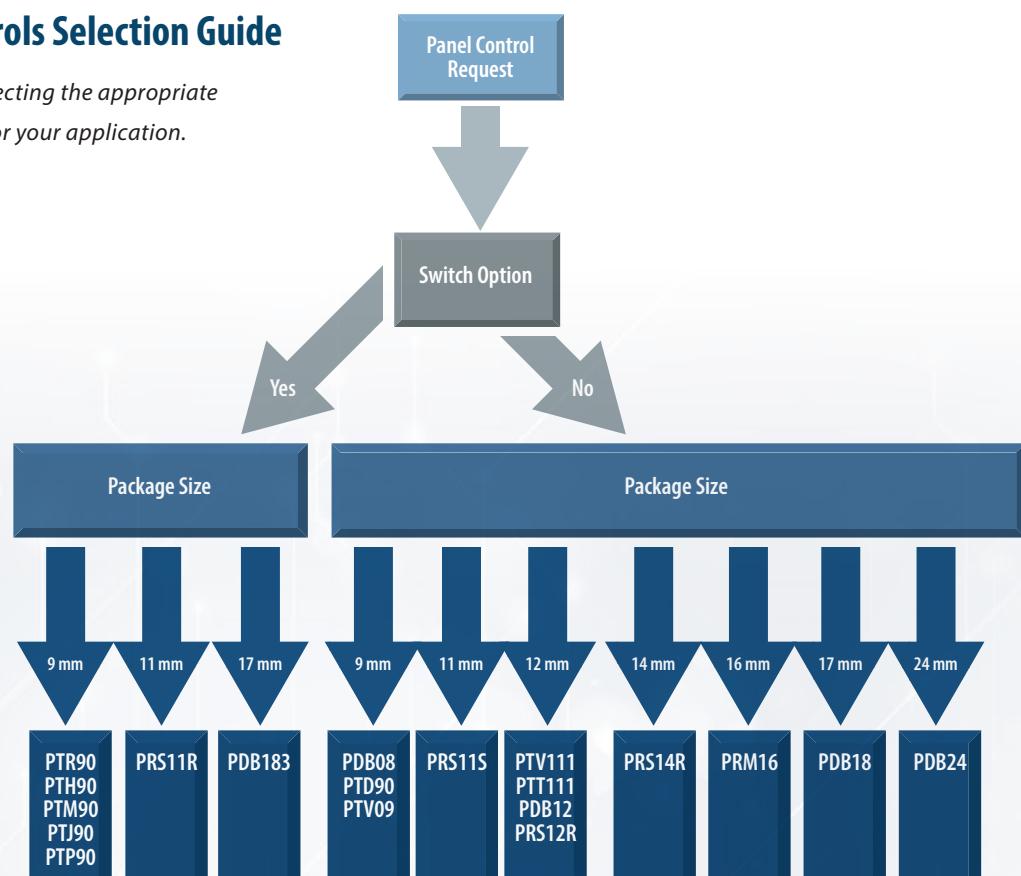
Bourns Sensors and Controls Product Line is committed to providing customers with an expanding array of potentiometers suitable for use in a wide variety of commercial and consumer applications. Bourns' portfolio of commercial panel controls is designed to provide the consumer electronics market with cost-effective yet durable rotary panel control solutions.

Bourns® commercial rotary panel control products include 9 - 24 mm package sizes, and offer a variety of shaft lengths, multiple section options, center detent, insulated or metal shaft, audio or linear taper, different terminal styles, and a variety of other standard options.

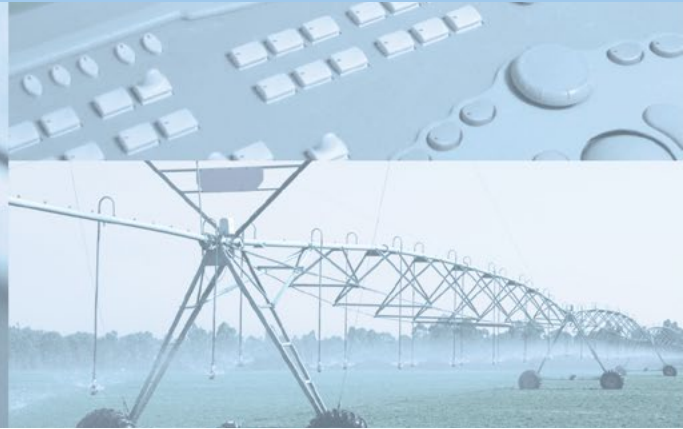
Select models have integrated rotary, push-pull, or push latching switches for added function in a single control. Select models also offer dual concentric shafts to facilitate the adjustment of multi-section panel controls separately. With a wide variety of panel controls and options, Bourns has a solution to fit most every application.

## Commercial Panel Controls Selection Guide

*This flowchart will assist you in selecting the appropriate commercial panel control model for your application.*



# Array of Applications



## Professional and Commercial Audio

- Audio mixers
- Broadcast consoles
- Digital drums
- Digital pianos
- Electric guitars
- Electronic keyboards
- Game stations
- Home sound systems
- Lighting systems
- Mobile DJ systems
- Portable stereos
- Video editing stations

## Test and Measurement Product Applications

- Appliance testers
- Backplane testers
- Battery testers
- Board in-circuit testers
- Cable testers
- Calibration equipment
- Component testers
- Continuity testers
- Counters
- Cycle testers
- Disk drive testers
- Distortion testers
- Electric motor testers
- Electrostatic testers
- Environmental chambers and testers
- High voltage testers
- Hi-pot testers
- Integrated circuit testers
- Laser and fiber optic testers
- Light testers
- Logic and spectrum analyzers
- Oscilloscopes
- Power supply testers
- Radiation & X-ray testers
- Signal level testers
- Telecom line testers
- Timers
- Transmission testers
- Tube testers
- TV/Video generation testers
- Ultrasonic testers

## Portable Electronics Product Applications

- 2-way radios
- Appliances
- Bar code scanners
- Battery chargers
- Copiers
- Cordless phones
- CO<sub>2</sub>-, gas-, heat- and humidity-detectors
- Intercom systems
- Irrigation controllers
- Multimeters
- Portable monitoring equipment
- Power generators
- Radio systems
- Scanners

## Consumer (White) Goods

- Blenders
- Clothes dryers
- Clothes washers
- Food processors
- Hand mixers
- Microwaves
- Refrigerators
- Stove top controls

## Telecommunications Product Applications





- 2-wire communication interfaces
- 2-way radios
- Access equipment
- CB and shortwave base stations
- Computerized telephone equipment
- Data communications equipment
- Digital television cable boxes
- Hardwired communication interfaces
- Hardwired remote controls
- Headset amplifiers
- Internet telephony equipment
- Mobile phone equipment
- Mobile phone headsets
- Satellite systems
- Video conferencing equipment
- Wireless remote controls




# Bourns® Commercial Panel Controls


PDB08	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	10K Cycles Min.	Carbon	No	2	Yes	-10 to +60 °C	0.03 watts	<ul style="list-style-type: none"> <li>• Plastic Shaft</li> <li>• Low Profile</li> <li>• Center Detent</li> <li>• Audio &amp; Linear Tapers</li> <li>• PC-Pin Layout for Board-mount</li> <li>• RoHS compliant*</li> </ul>
PDB12	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	N/A	Yes	-10 to +50 °C	0.04 to 0.08 watts	<ul style="list-style-type: none"> <li>• Assortment of pin layouts</li> <li>• Insulated shaft style</li> <li>• Variety of resistance values</li> <li>• Center detent option</li> <li>• RoHS compliant*</li> <li>• Wide range of resistance tapers</li> </ul>
PDB18	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	2	Yes	-10 to +50 °C	0.06 to 0.2 watts	<ul style="list-style-type: none"> <li>• Variety of pin styles</li> <li>• Assortment of shaft lengths</li> <li>• Variety of detent options</li> <li>• RoHS compliant*</li> <li>• Wide range of resistance tapers</li> <li>• Variety of resistance values</li> </ul>
PDB182	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	2	No	-10 to +50 °C	0.06 watts	<ul style="list-style-type: none"> <li>• Center detent standard</li> <li>• Rear solder lugs or PC pins</li> <li>• 250K &amp; 500K standard resistance values</li> <li>• Standard M and N taper</li> <li>• RoHS compliant*</li> </ul>
PDB183	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	Yes	2	Yes	-10 to +50 °C	0.1 to 0.2 watts	<ul style="list-style-type: none"> <li>• PC pin or solder lug options</li> <li>• Push-pull switch</li> <li>• Assortment of resistance values</li> <li>• Variety of shaft lengths</li> <li>• Wide range of resistance tapers</li> <li>• RoHS compliant*</li> </ul>


\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.


PDB185	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	Yes	N/A	No	-10 to +70 °C	0.1 to 0.05 watts	<ul style="list-style-type: none"> <li>• Split knurled or plain shaft options</li> <li>• DPDT latching-push switch</li> <li>• Metal bushing and shaft</li> <li>• Linear and audio taper options</li> <li>• RoHS compliant*</li> </ul>
PDB24	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	Standard: 15K Cycles  High: 500K Cycles	Carbon	No	N/A	Yes	-10 to +70 °C	0.25 to 0.5 watts	<ul style="list-style-type: none"> <li>• High rotational life</li> <li>• Metal shaft style</li> <li>• Center detent option</li> <li>• RoHS compliant*</li> <li>• Wide range of resistance tapers</li> </ul>
PDF24	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	500K Cycles	Carbon	No	No	No	-10 to +85 °C	0.5 to 0.25 watts	<ul style="list-style-type: none"> <li>• Long Life Carbon Element</li> <li>• Plain or slotted shaft option</li> <li>• Anti-rotation pin</li> <li>• Audio or linear taper options</li> <li>• Variety of resistance values</li> <li>• RoHS compliant*</li> </ul>
PRM16	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	2	No	-10 to +70 °C	0.05 to 0.1 watts	<ul style="list-style-type: none"> <li>• Remote controllable</li> <li>• Suitable for motorized /manual operation</li> <li>• Dual gang option</li> <li>• Smooth manual operating feel</li> <li>• Various taper options</li> <li>• RoHS compliant*</li> </ul>


# Bourns® Commercial Panel Controls


PRS11S	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	N/A	No	-10 to +70 °C	0.025 to 0.05 watts	<ul style="list-style-type: none"> <li>• Standard SMT profile compatible</li> <li>• Assorted resistances and tapers</li> <li>• Flatted, slotted and knurled shaft styles</li> <li>• Wide operating temperature range</li> <li>• RoHS compliant*</li> </ul>

PRS11R	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	Yes	No	No	-20 to +70 °C	0.05 watts	<ul style="list-style-type: none"> <li>• Flatted Metal Shaft Option</li> <li>• Horizontal &amp; Vertical Mount Option</li> <li>• Audio &amp; Linear Tapers</li> <li>• PC-Pin Layout for Board-mount</li> <li>• RoHS compliant*</li> </ul>


PRS12R	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	10K Cycles	Carbon	No	No	Yes	-10 to +70 °C	0.05 watts	<ul style="list-style-type: none"> <li>• Various Metal Shaft Option</li> <li>• Horizontal &amp; Vertical Mount Option</li> <li>• Dual-Potentiometer</li> <li>• Audio &amp; Linear Tapers</li> <li>• PC-Pin Layout for Board-mount</li> <li>• RoHS compliant*</li> </ul>


PRS14R	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	No	Yes	-10 to +70 °C	0.05 watts	<ul style="list-style-type: none"> <li>• Flatted Plastic Shaft Option</li> <li>• Horizontal &amp; Vertical Mount Option</li> <li>• Dual-Potentiometer</li> <li>• Center Tap Option</li> <li>• Audio &amp; Linear Tapers</li> <li>• PC-Pin Layout for Board-mount</li> <li>• RoHS compliant*</li> </ul>


PTV09	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	10K Cycles	Carbon	N/A	1	Yes	-10 to +50 °C	0.05 watts	<ul style="list-style-type: none"> <li>• Insulated shaft</li> <li>• Snap-in clip</li> <li>• Center detent</li> <li>• RoHS compliant*</li> </ul>


PTV/PTT111	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	2	Yes	-10 to +50 °C	0.05 watts	<ul style="list-style-type: none"> <li>• Insulated shaft</li> <li>• Snap-in clip</li> <li>• Center detent</li> <li>• RoHS compliant*</li> <li>• Assorted pin layouts</li> <li>• Center tap option</li> </ul>

\*RoHS Directive 2015/863, Mar 31, 2015 and Annex.


PTD90	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	8	Yes	-10 to +50 °C	0.025 to 0.05 watts	<ul style="list-style-type: none"> <li>• Knurled and flatted shaft styles</li> <li>• Audio taper option</li> <li>• Tracking error within <math>\pm 3</math> db</li> <li>• Ganging up to 8 sections available</li> <li>• RoHS compliant*</li> </ul>

PTH90	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	Yes	2	Yes	-10 to +55 °C	0.05 watts	<ul style="list-style-type: none"> <li>• Assortment of resistance tapers</li> <li>• Dual concentric shaft</li> <li>• Dual gang element</li> <li>• Flatted, slotted and knurled shaft styles</li> <li>• Center detent option</li> <li>• RoHS compliant*</li> </ul>

PTJ90	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	10K Cycles	Carbon	Yes	2	Yes	-10 to +55 °C	0.025 to 0.05 watts	<ul style="list-style-type: none"> <li>• Assortment of resistance tapers</li> <li>• Dual concentric shaft</li> <li>• Slotted or flatted shaft styles</li> <li>• Dual gang element</li> <li>• Center detent option</li> <li>• RoHS compliant*</li> </ul>

PTM90	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	Yes	2	Yes	-10 to +55 °C	0.025 to 0.05 watts	<ul style="list-style-type: none"> <li>• Assortment of resistance tapers</li> <li>• Variety of shaft lengths</li> <li>• Flatted, slotted and knurled shaft styles</li> <li>• Center detent option</li> <li>• RoHS compliant*</li> </ul>

PTP90	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	No	2	Yes	-10 to +55 °C	0.025 to 0.05 watts	<ul style="list-style-type: none"> <li>• Assortment of resistance tapers</li> <li>• Push latching shaft</li> <li>• Flatted, slotted and knurled shaft styles</li> <li>• Center detent option</li> <li>• RoHS compliant*</li> </ul>

PTR90	Rotational Life	Element	Switch Option	Multi-section (Max.)	Detent Option	Operating Temp. Range	Power Rating	Features
	15K Cycles	Carbon	Yes	8	Yes	-10 to +55 °C	0.025 to 0.05 watts	<ul style="list-style-type: none"> <li>• Knurled and flatted shaft styles</li> <li>• Audio taper option</li> <li>• Tracking error within <math>\pm 3</math> db</li> <li>• Ganging up to 8 sections available</li> <li>• RoHS compliant*</li> </ul>



# Worldwide Sales Offices

Country	Phone	Email
Americas:	+1-951-781-5500	americus@bourns.com
Brazil:	+55 11 5505 0601	americus@bourns.com
China:	+86 21 64821250	asiacus@bourns.com
Europe, Middle East, Africa:	+36 88 885 877	eurocus@bourns.com
Japan:	+81 49 269 3204	asiacus@bourns.com
Korea:	+82 70 4036 7730	asiacus@bourns.com
Singapore:	+65 6348 7227	asiacus@bourns.com
Taiwan:	+886 2 25624117	asiacus@bourns.com
Other Asia-Pacific Countries:	+886 2 25624117	asiacus@bourns.com
<b>Technical Assistance</b>		
Region	Phone	Email
Asia-Pacific:	+886 2 25624117	techweb@bourns.com
Europe, Middle East, Africa:	+36 88 885 877	eurotech@bourns.com
Americas:	+1-951-781-5500	techweb@bourns.com

**BOURNS®**  
**www.bourns.com**

Bourns® products are available through an extensive network of manufacturer's representatives, agents and distributors. To obtain technical applications assistance, a quotation, or to place an order, contact a Bourns representative in your area.

Specifications subject to change without notice. Actual performance in specific customer applications may differ due to the influence of other variables. Customers should verify actual device performance in their specific applications.

COPYRIGHT © 2022, BOURNS, INC. • 2/22 • e/SC2010  
"Bourns" is a registered trademark of Bourns, Inc. in the U.S. and other countries.