

# Bourns® Commercial Panel Controls

## *Short Form Brochure*



**BOURNS®**

# Introduction

Bourns® Sensors and Controls Division is committed to providing customers with an expanding array of commercial panel controls 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 and slide panel control solutions.

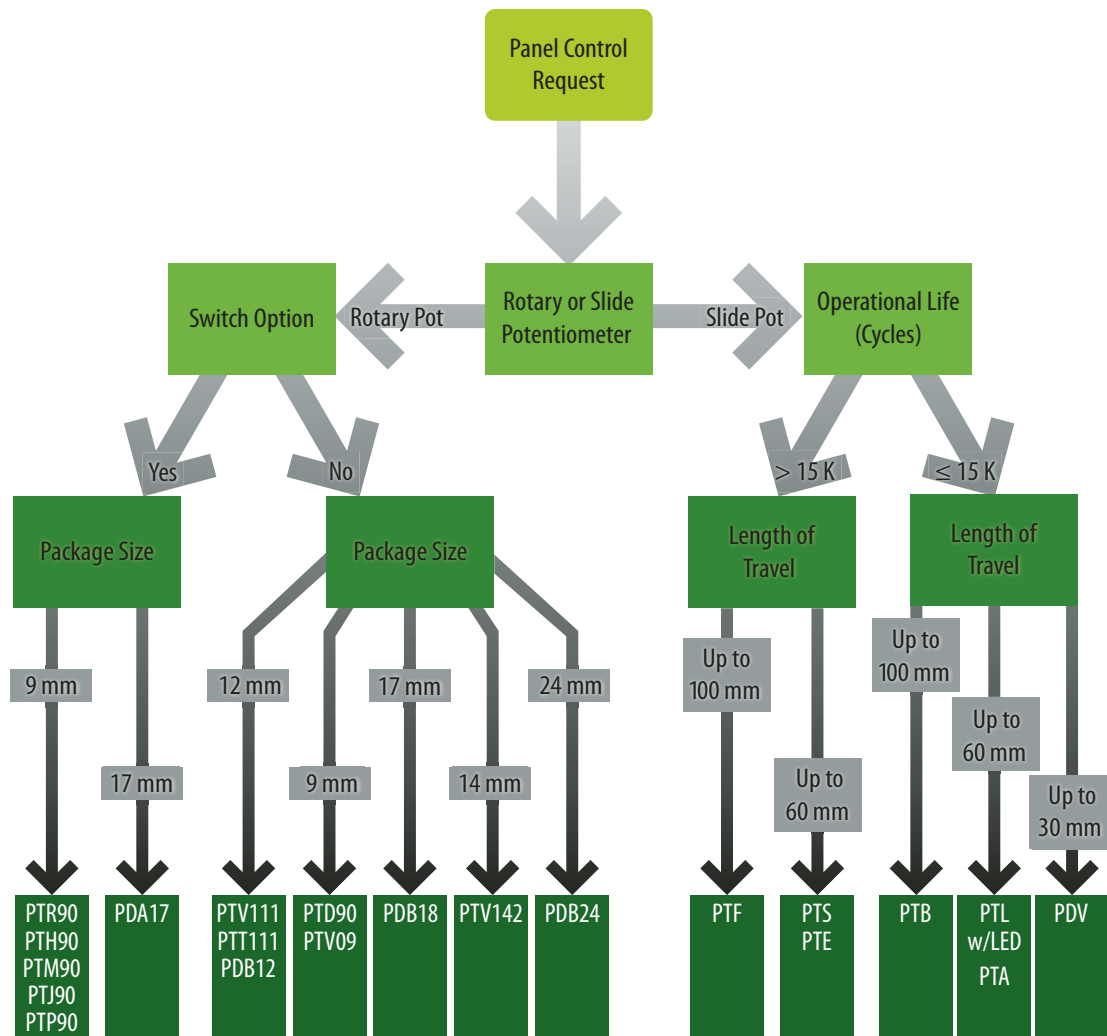
Bourns® commercial rotary panel control products include 9, 12, 14, 17 and 24 mm package sizes, and offer variety of shaft lengths, multiple section

options, center detent, insulated or metal shaft, audio or linear taper, different terminal styles, and a variety of other standard options.

In addition to its rotary line of panel controls, Bourns offers a family of slide potentiometers. Features include travel lengths ranging from 15 mm to 100 mm with options such as dual gang element, center detent, multicolored LED, various lever styles, and many other standard features and options.

## Commercial Panel Controls Selection Guide

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



# Bourns® Commercial Panel Controls

## PANEL CONTROLS



**PDA 17**

Rotational Life	15K Cycles
Element	Carbon
Switch Option	Yes
Multi-section (Max.)	1
Detent Option	No
Operating Temp. Range	-10 °C to +50 °C
Power Rating	0.05 to 0.1 watts

### Features

- Switch option
- Wide assortment of resistance tapers
- RoHS compliant



**PDB 12**

Rotational Life	15K Cycles
Element	Carbon
Switch Option	No
Multi-section (Max.)	2
Detent Option	Yes
Operating Temp. Range	-10 °C to +50 °C
Power Rating	0.04 to 0.08 watts

### Features

- Assortment of pin layouts
- Insulated shaft style
- Single gang panel control
- Center detent option
- RoHS compliant
- Wide range of resistance tapers



**PDB 18**

Rotational Life	15K Cycles
Element	Carbon
Switch Option	No
Multi-section (Max.)	2
Detent Option	Yes
Operating Temp. Range	-10 °C to +50 °C
Power Rating	0.06 to 0.2 watts

### Features

- Single and dual section control
- Metal shaft style
- Variety of detent options
- RoHS compliant
- Wide range of resistance tapers



**PDB 24**

Rotational Life	Standard: 15K Cycles / High: 500K Cycles
Element	Carbon
Switch Option	No
Multi-section (Max.)	1
Detent Option	Yes
Operating Temp. Range	-10 °C to +70 °C
Power Rating	0.25 to 0.5 watts

### Features

- High rotational life
- Metal shaft style
- Center detent option
- RoHS compliant
- Wide range of resistance tapers



**PTD 90**

Rotational Life	10K Cycles
Element	Carbon
Switch Option	No
Multi-section (Max.)	8
Detent Option	Yes
Operating Temp. Range	-10 °C to +50 °C
Power Rating	0.025 to 0.05 watts

### Features

- Knurled and flatted shaft styles
- Audio taper option
- Tracking error within 3 db
- Ganging up to 8 sections available
- RoHS compliant

## PANEL CONTROLS (CONTINUED)



**PTH 90**

Rotational Life	15K Cycles
Element	Carbon
Switch Option	Yes
Multi-section (Max.)	2
Detent Option	Yes
Operating Temp. Range	-10 °C to +55 °C
Power Rating	0.05 watts

### Features

- Assortment of resistance tapers
- Variety of shaft lengths
- Dual gang element
- Flatted, slotted and knurled shaft styles
- Center detent option



**PTJ 90**

Rotational Life	10K Cycles
Element	Carbon
Switch Option	Yes
Multi-section (Max.)	2
Detent Option	Yes
Operating Temp. Range	-10 °C to +55 °C
Power Rating	0.025 to 0.05 watts

### Features

- Assortment of resistance tapers
- Dual gang element
- Center detent option
- RoHS compliant



**PTM 90**

Rotational Life	15K Cycles
Element	Carbon
Switch Option	Yes
Multi-section (Max.)	2
Detent Option	Yes
Operating Temp. Range	-10 °C to +55 °C
Power Rating	0.025 to 0.05 watts

### Features

- Assortment of resistance tapers
- Variety of shaft lengths
- Flatted, slotted and knurled shaft styles
- Center detent option
- RoHS compliant



**PTP 90**

Rotational Life	15K Cycles
Element	Carbon
Switch Option	Yes
Multi-section (Max.)	2
Detent Option	Yes
Operating Temp. Range	-10 °C to +55 °C
Power Rating	0.025 to 0.05 watts

### Features

- Assortment of resistance tapers
- Push latching shaft
- Flatted, slotted and knurled shaft styles
- Center detent option
- RoHS compliant



**PTR 90**

Rotational Life	10K Cycles
Element	Carbon
Switch Option	Yes
Multi-section (Max.)	8
Detent Option	Yes
Operating Temp. Range	-10 °C to +50 °C
Power Rating	0.025 to 0.05 watts

### Features

- Knurled and flatted shaft styles
- Audio taper option
- Tracking error within 3 db
- Ganging up to 8 sections available
- RoHS compliant

**PTV 09**

Rotational Life	10K Cycles
Element	Carbon
Switch Option	No
Multi-section (Max.)	1
Detent Option	Yes
Operating Temp. Range	-10 °C to +50 °C
Power Rating	0.05 watts

**Features**

- Insulated shaft
- Snap-in clip
- Center detent
- RoHS compliant

**PTV/PTT 111**

Rotational Life	10K Cycles
Element	Carbon
Switch Option	No
Multi-section (Max.)	1
Detent Option	Yes
Operating Temp. Range	-10 °C to +50 °C
Power Rating	0.05 watts

**Features**

- Insulated shaft
- Snap-in clip
- Center detent
- RoHS compliant
- Assorted pin layouts

**PTV 142**

Rotational Life	15K Cycles
Element	Carbon
Switch Option	No
Multi-section (Max.)	1
Detent Option	Yes
Operating Temp. Range	-10 °C to +50 °C
Power Rating	0.05 watts

**Features**

- Insulated shaft
- Snap-in clip
- RoHS compliant
- Assorted pin layouts
- Center detent option
- Center tap option

## SLIDING POTENTIOMETERS

**PDV**

Rotational Life	10K Cycles
Element	Carbon
Switch Option	No
Multi-section (Max.)	N/A
Detent Option	Yes
Operating Temp. Range	-10 °C to +50 °C
Power Rating	0.05 to 1.0 watts

**Features**

- 10 to 30 mm travel
- Single or dual gang
- Center detent
- RoHS compliant

**PTA**

Rotational Life	15K Cycles
Element	Carbon
Switch Option	No
Multi-section (Max.)	N/A
Detent Option	Yes
Operating Temp. Range	-10 °C to +50 °C
Power Rating	0.015 to 0.25 watts

**Features**

- Metal housing
- 15 to 60 mm travel
- Dust cover option
- Center detent
- RoHS compliant

## SLIDING POTENTIOMETERS (CONTINUED)



**PTB**

Rotational Life	15K Cycles
Element	Carbon
Switch Option	No
Multi-section (Max.)	N/A
Detent Option	Yes
Operating Temp. Range	-10 °C to +50 °C
Power Rating	0.015 to 0.5 watts

### Features

- Metal housing
- 15 to 100 mm travel
- Dust cover option
- Center detent
- RoHS compliant



**PTE**

Rotational Life	100K Cycles
Element	Carbon
Switch Option	No
Multi-section (Max.)	2
Detent Option	No
Operating Temp. Range	-10 °C to +55 °C
Power Rating	0.1 to 0.2 watts

### Features

- Assortment of resistance tapers
- 45 and 60 mm travel lengths
- Single and dual gang elements
- Long operational life
- Tracking error within  $\pm 2$  db
- RoHS compliant



**PTF**

Rotational Life	100K Cycles
Element	Carbon
Switch Option	No
Multi-section (Max.)	2
Detent Option	No
Operating Temp. Range	-10 °C to +55 °C
Power Rating	0.125 to 0.5 watts

### Features

- Assortment of resistance tapers
- 45, 60 and 100 mm travel lengths
- Single and dual gang elements
- Long operational life
- Tracking error within  $\pm 2$  db
- RoHS compliant



**PTL**

Rotational Life	15K Cycles
Element	Carbon
Switch Option	No
Multi-section (Max.)	N/A
Detent Option	Yes
Operating Temp. Range	-10 °C to +55 °C
Power Rating	0.025 to 0.2 watts

### Features

- Red, orange and green LED colors
- 20 to 60 mm travel lengths
- Center detent option
- Assortment of resistance tapers
- Various travel lengths
- Various lever sizes
- RoHS compliant



**PTS**

Rotational Life	100K Cycles
Element	Carbon
Switch Option	No
Multi-section (Max.)	2
Detent Option	No
Operating Temp. Range	-10 °C to +55 °C
Power Rating	0.25 to 0.5 watts

### Features

- High grade, long life
- Single and dual gang
- Assortment of resistance tapers
- Tracking error within  $\pm 3$  db
- 45 and 60 mm sizes
- Wide operating temperature range
- RoHS compliant



# Array of Applications

## Popular 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*

## Popular 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*

## Popular 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*

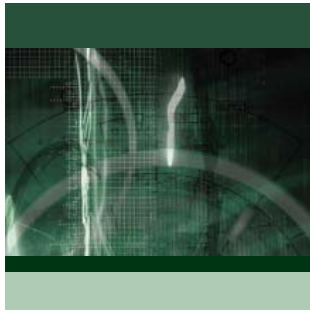
## Consumer (White) Goods

- *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*





### Worldwide Sales Offices

Country	Phone	Fax
Benelux:	+41 (0)41 768 5555	+41 (0)41 768 5510
Brazil:	+55 11 5505 0601	+55 11 5505 4370
China:	+86 21 64821250	+86 21 64821249
France:	+33 (0)2 5473 5151	+33 (0)2 5473 5156
Germany:	+49 (0)69 800 78212	+49 (0)69 800 78299
Ireland/UK:	+44 (0)1276 691087	+44 (0)1276 691088
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Malaysia (KL Office):	+60 3 71183138	+60 3 71183139
Malaysia (Penang Office):	+60 4 6581771	+60 4 6582771
Singapore:	+65 63461933	+65 63461911
Switzerland:	+41 (0)41 768 5555	+41 (0)41 768 5510
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### Non-Listed European Countries:

+41 (0)41 768 5555      +41 (0)41 768 5510

### Technical Assistance

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Asia-Pacific:	+886 2 25624117	+886 2 25624116
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### **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.



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