Commercial Panel Controls
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
- CO2-, 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
<table>
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<tr>
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| PDB08  | 10K Cycles Min. | Carbon   | No            | 2                    | Yes           | -10 to +60 °C         | 0.03 watts   | - Plastic Shaft  
|        |                |          |               |                      |               |                       |              | - Low Profile  
|        |                |          |               |                      |               |                       |              | - Center Detent  
|        |                |          |               |                      |               |                       |              | - Audio & Linear Tapers  
|        |                |          |               |                      |               |                       |              | - PC-Pin Layout for Board-mount  
|        |                |          |               |                      |               |                       |              | - RoHS compliant* |
| PDB12  | 15K Cycles     | Carbon   | No            | N/A                  | Yes           | -10 to +50 °C         | 0.04 to 0.08 watts | - Assortment of pin layouts  
|        |                |          |               |                      |               |                       |              | - Insulated shaft style  
|        |                |          |               |                      |               |                       |              | - Variety of resistance values  
|        |                |          |               |                      |               |                       |              | - Center detent option  
|        |                |          |               |                      |               |                       |              | - RoHS compliant*  
|        |                |          |               |                      |               |                       |              | - Wide range of resistance tapers |
| PDB18  | 15K Cycles     | Carbon   | No            | 2                    | Yes           | -10 to +50 °C         | 0.06 to 0.2 watts | - Variety of pin styles  
|        |                |          |               |                      |               |                       |              | - Assortment of shaft lengths  
|        |                |          |               |                      |               |                       |              | - Variety of detent options  
|        |                |          |               |                      |               |                       |              | - RoHS compliant*  
|        |                |          |               |                      |               |                       |              | - Wide range of resistance tapers  
|        |                |          |               |                      |               |                       |              | - Variety of resistance values |
| PDB182 | 15K Cycles     | Carbon   | No            | 2                    | No            | -10 to +50 °C         | 0.06 watts   | - Center detent standard  
|        |                |          |               |                      |               |                       |              | - Rear solder lugs or PC pins  
|        |                |          |               |                      |               |                       |              | - 250K & 500K standard resistance values  
|        |                |          |               |                      |               |                       |              | - Standard M and N taper  
|        |                |          |               |                      |               |                       |              | - RoHS compliant* |
| PDB183 | 15K Cycles     | Carbon   | Yes           | 2                    | Yes           | -10 to +50 °C         | 0.1 to 0.2 watts | - PC pin or solder lug options  
|        |                |          |               |                      |               |                       |              | - Push-pull switch  
|        |                |          |               |                      |               |                       |              | - Assortment of resistance values  
|        |                |          |               |                      |               |                       |              | - Variety of shaft lengths  
|        |                |          |               |                      |               |                       |              | - Wide range of resistance tapers  
|        |                |          |               |                      |               |                       |              | - RoHS compliant* |

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| **PDB185** | 15K Cycles | Carbon | Yes | N/A | No | -10 to +70 °C | 0.1 to 0.05 watts | - Split knurled or plain shaft options  
- DPDT latching-push switch  
- Metal bushing and shaft  
- Linear and audio taper options  
- RoHS compliant* |
| **PDB24** | Standard: 15K Cycles  
High: 500K Cycles | Carbon | No | N/A | Yes | -10 to +70 °C | 0.25 to 0.5 watts | - High rotational life  
- Metal shaft style  
- Center detent option  
- RoHS compliant*  
- Wide range of resistance tapers |
| **PDF24** | 500K Cycles | Carbon | No | No | No | -10 to +85 °C | 0.5 to 0.25 watts | - Long Life Carbon Element  
- Plain or slotted shaft option  
- Anti-rotation pin  
- Audio or linear taper options  
- Variety of resistance values  
- RoHS compliant* |
| **PRM16** | 15K Cycles | Carbon | No | 2 | No | -10 to +70 °C | 0.05 to 0.1 watts | - Remote controllable  
- Suitable for motorized /manual operation  
- Dual gang option  
- Smooth manual operating feel  
- Various taper options  
- RoHS compliant* |
# Bourns® Commercial Panel Controls

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<td><strong>PRS11S</strong></td>
<td>15K Cycles</td>
<td>Carbon</td>
<td>No</td>
<td>N/A</td>
<td>No</td>
<td>-10 to +70 °C</td>
<td>0.025 to 0.05 watts</td>
<td>- Standard SMT profile compatible - Assorted resistances and tapers - Flattened, slotted and knurled shaft styles - Wide operating temperature range - RoHS compliant*</td>
</tr>
<tr>
<td><strong>PRS11R</strong></td>
<td>15K Cycles</td>
<td>Carbon</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>-20 to +70 °C</td>
<td>0.05 watts</td>
<td>- Flattened Metal Shaft Option - Horizontal &amp; Vertical Mount Option - Dual-Potentiometer - Audio &amp; Linear Tapers - PC-Pin Layout for Board-mount - RoHS compliant*</td>
</tr>
<tr>
<td><strong>PRS12R</strong></td>
<td>10K Cycles</td>
<td>Carbon</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>-10 to +70 °C</td>
<td>0.05 watts</td>
<td>- Various Metal Shaft Option - Horizontal &amp; Vertical Mount Option - Dual-Potentiometer - Audio &amp; Linear Tapers - PC-Pin Layout for Board-mount - RoHS compliant*</td>
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<tr>
<td><strong>PRS14R</strong></td>
<td>15K Cycles</td>
<td>Carbon</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>-10 to +70 °C</td>
<td>0.05 watts</td>
<td>- Flattened Plastic Shaft Option - Horizontal &amp; Vertical Mount Option - Dual-Potentiometer - Center Tap Option - Audio &amp; Linear Tapers - PC-Pin Layout for Board-mount - RoHS compliant*</td>
</tr>
<tr>
<td><strong>PTV09</strong></td>
<td>10K Cycles</td>
<td>Carbon</td>
<td>N/A</td>
<td>1</td>
<td>Yes</td>
<td>-10 to +50 °C</td>
<td>0.05 watts</td>
<td>- Insulated shaft - Snap-in clip - Center detent - RoHS compliant*</td>
</tr>
<tr>
<td><strong>PTV/PTT111</strong></td>
<td>15K Cycles</td>
<td>Carbon</td>
<td>No</td>
<td>2</td>
<td>Yes</td>
<td>-10 to +50 °C</td>
<td>0.05 watts</td>
<td>- Insulated shaft - Snap-in clip - Center detent - RoHS compliant* - Assorted pin layouts - Center tap option</td>
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| PTD90 | 15K Cycles     | Carbon  | No            | 8                   | Yes          | -10 to +50 °C        | 0.025 to 0.05 watts | - Knurled and flatted shaft styles  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Audio taper option  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Tracking error within ±3 db  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Ganging up to 8 sections available  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - RoHS compliant*  
|       |                |         |               |                     |              |                      |             |         |
| PTH90 | 15K Cycles     | Carbon  | Yes           | 2                   | Yes          | -10 to +55 °C        | 0.05 watts  | - Assortment of resistance tapers  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Dual concentric shaft  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Dual gang element  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Flatted, slotted and knurled shaft styles  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Center detent option  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - RoHS compliant*  
|       |                |         |               |                     |              |                      |             |         |
| PTJ90 | 10K Cycles     | Carbon  | Yes           | 2                   | Yes          | -10 to +55 °C        | 0.025 to 0.05 watts | - Assortment of resistance tapers  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Dual concentric shaft  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Slotted or flatted shaft styles  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Dual gang element  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Center detent option  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - RoHS compliant*  
|       |                |         |               |                     |              |                      |             |         |
| PMT90 | 15K Cycles     | Carbon  | Yes           | 2                   | Yes          | -10 to +55 °C        | 0.025 to 0.05 watts | - Assortment of resistance tapers  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Variety of shaft lengths  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Flatted, slotted and knurled shaft styles  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Center detent option  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - RoHS compliant*  
|       |                |         |               |                     |              |                      |             |         |
| PTP90 | 15K Cycles     | Carbon  | No            | 2                   | Yes          | -10 to +55 °C        | 0.025 to 0.05 watts | - Assortment of resistance tapers  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Push latching shaft  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Flatted, slotted and knurled shaft styles  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Center detent option  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - RoHS compliant*  
|       |                |         |               |                     |              |                      |             |         |
| PTR90 | 15K Cycles     | Carbon  | Yes           | 8                   | Yes          | -10 to +55 °C        | 0.025 to 0.05 watts | - Knurled and flatted shaft styles  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Audio taper option  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Tracking error within ±3 db  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - Ganging up to 8 sections available  
|       |                |         |               |                     |              |                      |             |         |
|       |                |         |               |                     |              |                      |             | - RoHS compliant*  
|       |                |         |               |                     |              |                      |             |         |