

## Model Railway Control Panels CP101, CP102 & CP103 Single Speed Controller



*Brimal announce a New range of Track Speed Controllers with Points and Signal switch positions incorporated into the panels.*

**This is a great starter Control Panel:  
It gives you a Speed Controller, a Forward / Reverse switch with indication, and positions for either 10 Points switches, or 10 Signal switches, or a combination of both.**

- CP101** This unit is just the front panel with Speed Controller And Forward / Reverse switch for mounting in your console.
- CP102** This unit is the same as above but mounted in a Black Slopped top desktop enclosure, it has a Terminal strip inside on a mounting plate for Interconnections. The rear has protected holes for your switch wires and a 4 pin locking plug & socket for power in and Track power out.
- CP103** This unit is as the CP102 but also includes 5 Point switches (SW301-1) and 5 Signal Switches (SW305-1) See below for full details on switches

The front panel is made of 3mm clear perspex with the lettering reverse printed on the back, so the lettering will never wear out from rubbing or cleaning.

The panels can be notated with the track ID it is controlling and the switches can be notated with the points, signal, or other item it is controlling.

The controller does not come with a transformer you will need to provide 5-16vDC to the unit.

There is a 4 pin locking socket on the rear of the box, (plug provided free with unit) for your power into the unit (2 wires) and variable power to your tracks (2 wires). There is a mounting board inside the box which can be used to mount terminals blocks, or the like for interconnection, both these can be removed if mounting the control panel in a console. See image below.



As our new range of panels are all the same size they can be mounted in a console, and as your system expands more panels can be added, for example if you require more speed controller, there is the CP200 for 2 sets of speed controller, CP300 for 3 sets of speed controllers. The CP600 is a switch panel to take up to 18 further switches. (See example below)



The Switch boards and indicators come in 3 types. All types have screw terminals to connect the switch and the LED, (no need for soldering in a tight space.) as they come pre assembled on a printed circuit board. Installing them into the panel only requires the fixing of the switch in place, the LED is at a preset height so protrudes through the second hole to the right height.

The choice is yours as to how many & what combination of switches you require, and if you require more than 10, then the CP600 can be placed beside the controller to give you a further 18 switch positions.

**Type 1 (SW301-1)**

This is used for point motors with a momentary UP biased to the centre, momentary DOWN biased to the centre. The indicator is a dual colour LED (red & green) which is driven by the switch on the point motor, sensors on the track, or the MR204 memory circuit.

**Type 2 (SW303-1)**

This switch has a ON-OFF-ON configuration, and can be used for Isolating track, or switching polarity from one track to another, switching street lights or building lights. The indicator is a dual colour LED and can be wired directly into the switch or any other circuit.

**Type 3 (SW305-1)**

This is a ON-OFF, or ON-ON switch. The switch can be used for simply switching On & Off equipment, 2 aspect signal lights. Again the indicator is a dual colour LED and can be wired directly into the switch or any other circuit.

The following are Power Supplies that work well with this unit: Both are Chassis mounted fully enclosed Power Supplies. Short Circuit Protection, Overload & Overvoltage protection. Adjustable output voltage.

**PW104**

Input AC 100 - 240V 50/60Hz, Output Voltage: 12V DC, Power:60W, Output Current: 0-5A

**PW105**

Input AC 100 - 240V 50/60Hz, Output Voltage: 12V DC, Power:120W, Output Current: 0-10A