# BrightSign®

# BRIGHTSIGN CAPACITIVE TOUCH USB BUTTON PANELS

Create reliable interactive experiences with ease by adding a BrightSign Capacitive Touch USB Button Panel to your display. Select from 4-button and 11-button models to trigger content playback while providing user feedback with LED lighting. Program button operations and LED lighting to meet your specific needs using BrightAuthor or BrightAuthor:connected. All BrightSign players that offer a USB connection are compatible, and they easily integrate into displays with support for custom overlays.



## Features

- Triggers content playback with programmable capacitive touch buttons
- Provides user feedback with programmable brightly colored LED lighting (on, off & variable blink speeds)
- Programmable button operations and lighting controls using BrightAuthor and BrightAuthor:connected
- Connects to BrightSign players via USB mini Type B
- Integrates easily into displays with a thin, compact board design
- Supports overlays with custom materials and graphics that match BrightSign guidelines (see below)
- Compatible with any BrightSign player that has a USB port

## **Specifications**

MODEL	BP200HI-R	BP200HI	BP900	BP900HI
Number of buttons	4		11	
LED Color	Red	Blue	Red	Blue
Dimensions	101.6 mm (W) x 63.5 mm (D) x 11.1 mm (H)		139.7 mm (W) x 101.6 mm (D) x 11.1 mm (H)	
	4.0" (W) x 2.5" (D) x .44" (H)		5.5" (W) x 4.0" (D) x .44" (H)	
Weight	46 grams or 1.62 oz		46 grams or 1.62 oz	

# **Button Panel Overlay Guidelines**

Please use these guidelines when covering BrightSign button panels with overlays, and we highly recommend that you test your application before broad deployment.

#### **Overlay Materials:**

- Plastic, Acrylic, Polycarbonate (PC), Lexan, wood and Acrylonitrile Butadiene Styrene (ABS) surfaces have all been verified to work.
- Polyester (PET) and tempered glass materials are also acceptable.
- Do not use materials that retain a static charge.

#### **Overlay Thickness:**

- The overlay material must be 1/4" or thinner.
- If the material is too thick, the buttons will not trigger.

#### **Overlay Air Gaps:**

- Ensure there is no air gap between the overlay material and the button panel board.
- For optimum performance, we recommend utilizing a single sheet of material, and printing or embossing your button graphics to the top surface of the overlay which eliminates the possibility of any air gaps and reduces the risk of material flexure.
- Multiple sheets of material with the graphics pressed between two sheets of Lexan or ABS has been done with success, but air gaps can be introduced and the overlay thickness overall should still be 1/4" or thinner.

#### **Overlay Bonding:**

- It is strongly recommended that the button panel be permanently bonded to the overlay material to prevent any PCB board flexure/ warping that may occur over time, especially if exposed to extreme temperatures or temperature swings.
- Successful integrations have secured the overlay with screws, automotive grade non-conductive RTV silicone, or 3M automotive tape adhesive.

#### **Button Panel Boot up:**

- The device self-calibrates upon every bootup and is not adjustable in the player hardware or software.
- BrightSign button pad units are not "hotplug-able" therefore they need to be connected to the BrightSign player along with any overlay material including button graphics prior to applying power.
- Upon boot up, the player checks for any connected BrightSign peripherals, verifies the firmware, and performs a calibration for the capacitive touch.
- Any changes to the overlay placement or thickness, and disconnecting the button panel and reconnecting the button panel, will nullify the previous calibration.