Customizing IntuiSwitch™ V2.0 Controller Operation

The IntuiSwitch™ V2.0 controller allows user customizations to:

- Temporarily lock out the pushbutton to prevent an unauthorized throwing of the turnout.
- When two IntuiSwitch™ controllers are paired controlling a single turnout, allow the temporary lockout of the pushbuttons of either or both controllers to prevent unauthorized operation.
- Set the brightness of the pushbutton's blue LED to one of three levels: full, medium, or dim.
- Synchronize the state of paired controllers for the same turnout.

These customizations are performed by a series of motions of a magnet over the controller. The customizations will be remembered even after power is removed and restored. Customization may be performed again whenever desired to modify the controller behavior. Prior to customization, the IntuiSwitch™ V2.0 controller behaves the same as the original (V1.0) IntuiSwitch controller: the pushbutton is enabled, and the blue LED is at full brightness.

Using the Magnet to Modify the Controller

When the controller senses the magnet's presence, the pushbutton's blue LED will shimmer. The controller's sensing of the magnet depends on the magnet's strength, orientation and position near the controller. Become familiar with where your magnet is detected by moving it over the controller until you see the blue LED shimmer, then moving it away as soon as you see the shimmer. (The shimmer will cease once the magnet is out of sensing range.) Keeping the magnet duration over the controller to a half second or less during this familiarization will avoid starting a customizing procedure. If you accidentally start a customization, move the magnet away for forty seconds or so and the controller will exit customization with settings unaffected.

Customizing the Operating Mode

The Operating Mode determines how the IntuiSwitch™ controller responds to its pushbutton, and (if it is paired with a second IntuiSwitch™ controller) how it responds to the pushbutton on that paired controller. This ability to "turn off" the pushbutton is useful when a layout is at a show or other public locations where you may want to keep unauthorized people from throwing a turnout. When in an operating mode where the pushbutton on this controller is turned off, the blue LED will be turned off as soon as you exit the operating mode selection process.
The stall motor still receives power and the current turnout position is still shown on the IntuiSwitch™ controller – it just can't be changed by the pushbutton. It can still be changed remotely (depending on the operating mode), or by command using the magnet.

Operating Modes:

Mode # and **Blinks**	**Name**	**Behavior (with single controller)**	**Behavior (when paired with a second IntuiSwitch™ controller)**	**Blue LED on this controller (once customization is exited)**
1	Normal Operation	Turnout responds to the pushbutton.	Turnout responds to the pushbutton of either controller.	LED is lit.
2	Local Lockout	**(NOT RECOMMENDED)** Turnout responds to the pushbutton.	Turnout ignores this controller's pushbutton, but still responds to the pushbutton on the other controller.	LED is off.
3	Remote Lockout	**(NOT RECOMMENDED)** Turnout responds to the pushbutton.	Turnout responds to the pushbutton on this controller. Turnout ignores the pushbutton of the other controller.	LED is lit.
4	Full Lockout	Turnout ignores the pushbutton.	Turnout ignores the pushbuttons of both controllers.	LED is off.

To customize the operating mode, hold the magnet over the controller for three seconds, then move the magnet away. The blue LED will shimmer while the magnet is within range, to let you know when the magnet is sensed.

After three seconds of magnet detection, the pushbutton LED will start flashing, giving a series of short blinks to show the current mode number, followed by a pause with the LED off, then repeating.
To change the operating mode, hold the magnet over the controller again for a short (½ to 1 second) time, then move it away again. The controller will advance to the next operating mode, and the button LED will flash the new mode number. Repeat this until the blinks indicate the operating mode you want.
To exit configuration setting, hold the magnet over the controller for three seconds, then move it away. The pushbutton LED will stop blinking. It will be on or off solid as called for by the current operating mode.

See **Figure 1** for a graphic representation of the operating mode customization process.

Customizing the Pushbutton LED Brightness

The blue LED that lights the pushbutton can be set to any of three brightness levels: full, medium, and dim. As shipped, the LED is set to full brightness.

To customize the blue LED brightness, hold a magnet over the controller twice, lingering for at least a half second each time, with the magnet away for at least a half second between the two lingerings. (The blue LED will shimmer when the magnet is present during this process.)

The LED will then start repeating a two-second sequence of being on at the current brightness setting for a second, then full brightness, then very briefly off. This lets you see the current brightness setting relative to full brightness, and also confirms you are in brightness setting mode.

Once in this brightness-setting mode, a short (½ to 1 second) wave of the magnet over the controller, followed by moving it away, will change the brightness setting to the next level. You can repeat this until you reach the desired brightness level.

After 30-40 seconds without the magnet present, the controller will automatically return to normal operation, remembering the brightness setting you selected, even after a power outage.

See **Figure 2** for a graphic representation of the pushbutton LED brightness customization process.

Commanding a turnout change without the pushbutton, using the magnet.

Hold a magnet over the controller (as confirmed by the pushbutton LED shimmering) for about ten seconds, until you see the turnout position indication on the IntuiSwitch™ controller change. Then move the magnet away from the controller.

Synchronizing the State of Two Connected Controllers

If using two IntuiSwitch™ controllers to control the same turnout, one actually drives the turnout, and the other drives a dummy load resistor. Both controllers change their current track position display to reflect activity on whichever pushbutton(s) are enabled by the current operating modes the controllers are set to. It is possible (due to disconnected wires, or wrong initial setting) for the two controllers to be out of synchronization as to the current track state. You can fix this by using the procedure listed above to command the turnout without the pushbutton. Change made using the magnet does not affect the paired controller, so if they were showing opposite positions before the change, they will now be showing the same position as each other.

Check www.intuiswitch.com/support.html for updates. Questions? email info@intuiswitch.com.

Figure 1: Graphic Representation of the Operating Mode Customization Process

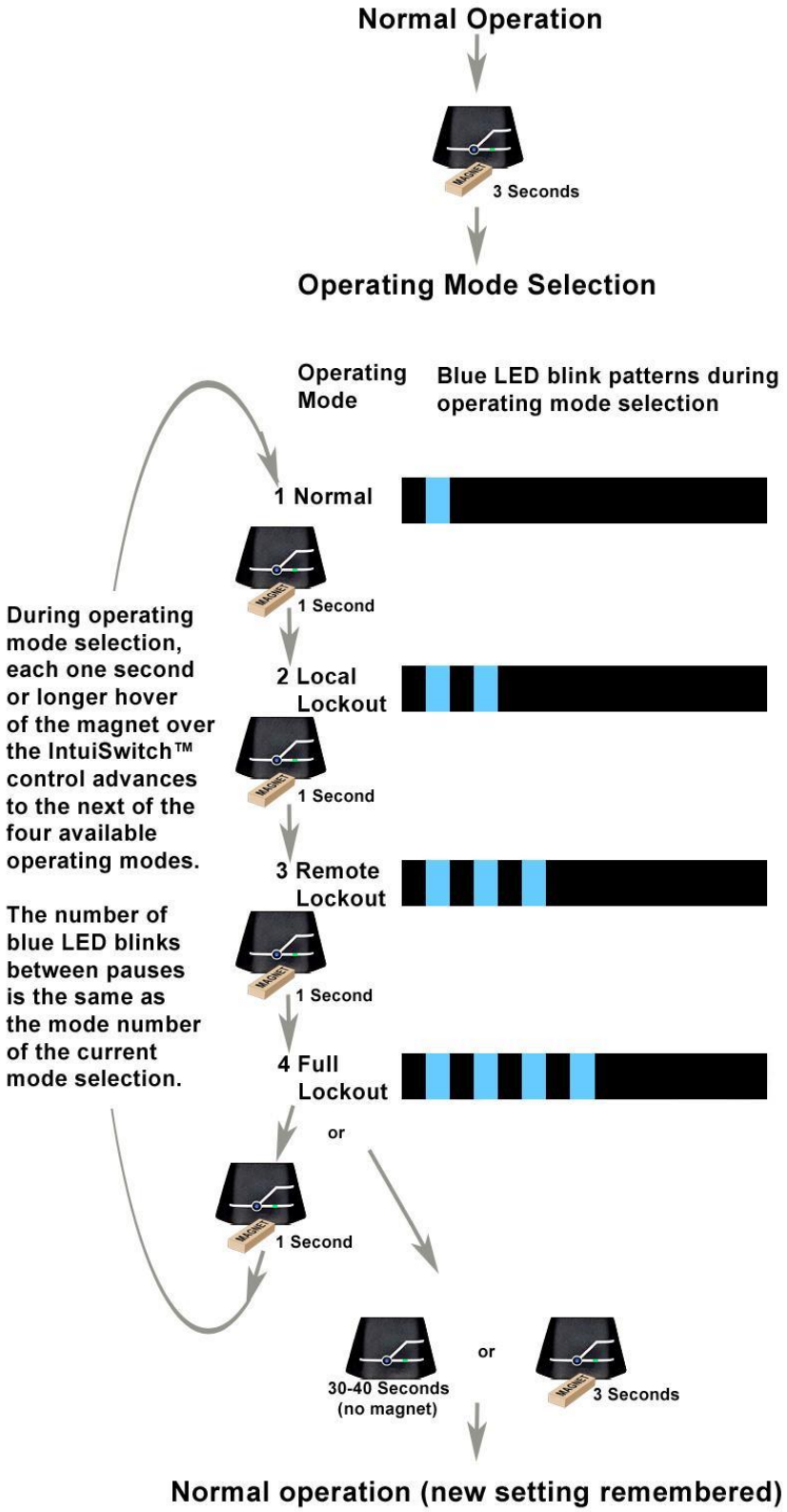
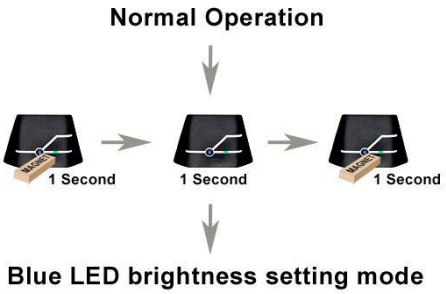


Figure 2: Graphic Representation of the Blue LED Brightness Customization Process



Once in the blue LED brightness setting mode, the LED will display a two-second pattern. This pattern shows you the current brightness setting, then the full brightness level, followed by a brief off-time before repeating the pattern.