

Maestro LED+ Dimmer/Timer Advanced Programming Mode

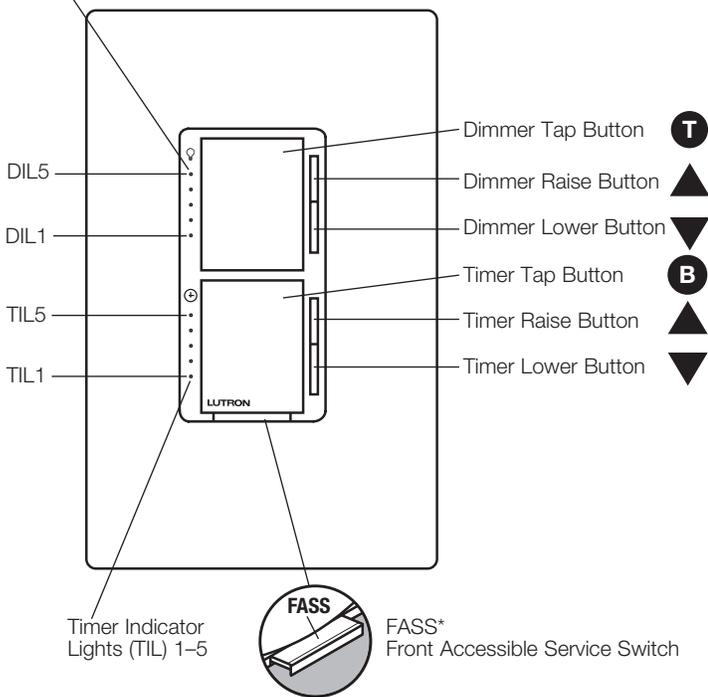
Maestro LED+ Model: MACL-L3T251B (dimmer/timer)

Overview

The Maestro LED+ dimmer/timer features an Advanced Programming Mode (APM) that allows the user to customize their control to meet their specific needs. This document serves as a supplement to the instruction sheet. Before entering APM, it is important to have a good understanding of the features included.

Dimmer/timer (MACL-L3T251B)

Dimmer Indicator Lights (DIL) 1-5



* To replace fixture bulb(s), power may be temporarily disconnected at the light fixture by pulling out the FASS.

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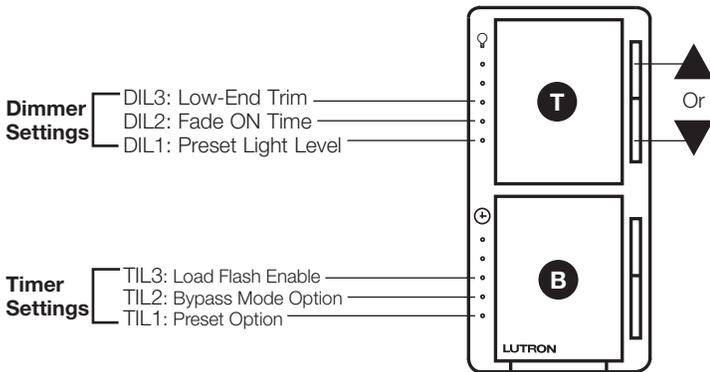
Glossary

- Dimmer Load** The light bulb(s) that the dimmer is controlling.
- Fan Load** The fan or light that the switch or timer is controlling.
- FASS** Front Accessible Service Switch. Tab at bottom of the product, required to be pulled out for light bulb(s) replacement and entering Advanced Programming Mode (APM); also known as Air Gap.
- Normal Operation** Standard use of dimmers or switch/timers (ON/OFF, Raise/Lower); indicator lights will not be blinking. Note that during a 30-second delayed fade-to-off, the dimmer indicator lights (DILs) will blink in accordance with the remaining time:
 30-20 seconds remaining: DIL3 blinks
 20-10 seconds remaining: DIL2 blinks
 10-1 second remaining: DIL1 blinks
- Slow Blink** Indication of entering APM, dimmer indicator lights (DILs) or Timer Indicator Lights (TILs) blink slowly at a rate of 4 flashes per second.
- Fast Blink** Indication of entering Programming settings, dimmer indicator lights (DILs) or Timer Indicator Lights (TILs) blink quickly at a rate of 8 flashes per second.
- Unlocked Preset** A light level that allows the device to turn ON to the last selected setting.
- Locked Preset** A programmable light level to which the device will turn ON.
- Low-End Trim** The lowest achievable light level to which the device can be adjusted.
- Default Setting** Original preset programming settings to which the device is programmed upon initial use, indicated by *.
- Factory Default** Original preset programming settings set up as a starting point for users; also known as Default Setting.

How to Enter a Programming Setting

1. While in Advanced Programming Mode (APM) as shown on pages 4 and 9, **press ▲ or ▼ to select** the desired programming setting. The **slow** blinking DIL or TIL will indicate which setting you have selected.

Dimmer/Timer

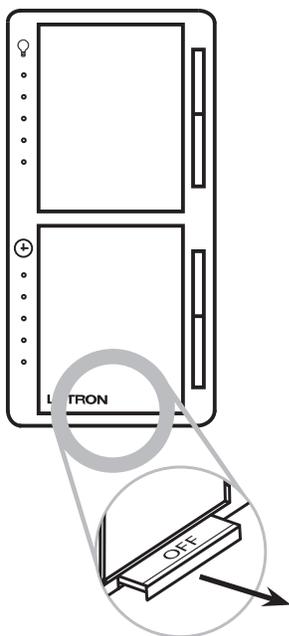


2. Proceed to the specific programming setting page to view programming instructions for the desired setting.

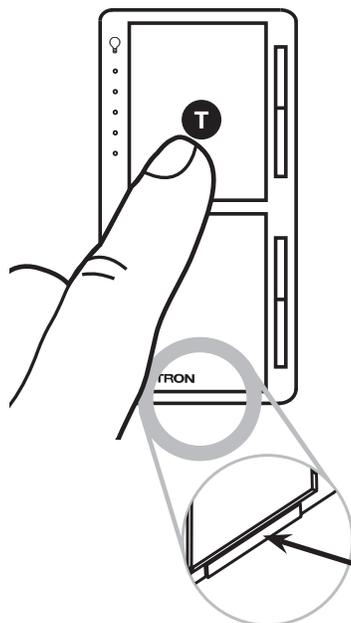
Note:

- If there is no button activity for 1 minute, the device will automatically save, exit APM and return to Normal Operation.
- **To save and exit immediately** out of APM to Normal Operation, **press and hold T** until the DILs stop blinking.

How to Enter Dimmer Advanced Programming Mode (APM)



1. **Pull** the FASS into the OFF position (out), and **wait** 5 seconds.
2. **Press and hold** **T**. While **continuing to hold** **T**, **push** the FASS to the ON position (in) and **continue to hold** **T** for approximately 5 seconds.



3. Once the bottom Dimmer Indicator Light (DIL1) begins to slowly blink indicating that you have entered Advanced Programming Mode (APM), **release** **T**.

Note:

- If there is no button activity for 1 minute, the dimmer will automatically save, exit APM, and return to Normal Operation.

Dimmer APM Programming Settings (continued)

Setting 1: Preset Light Level

What Does It Do?

There are 2 settings available.

Locked Preset: Tap **T** once to turn light on to a predetermined level.

Unlocked Preset: Tap **T** once to turn light on to the previous level.

Default setting: Unlocked Preset.

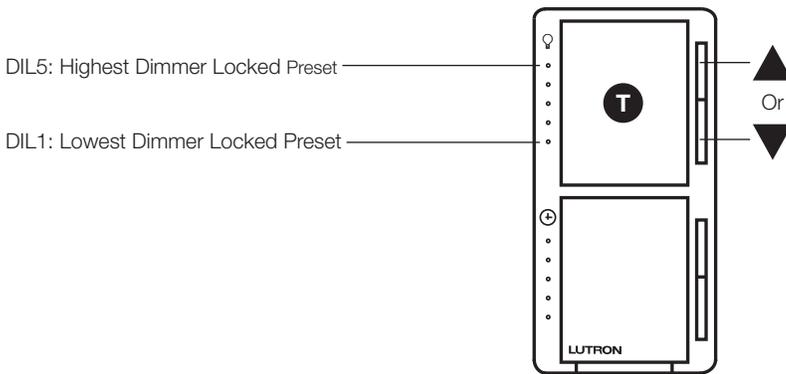
Directions

1. While in APM, **press ▲** or **▼** to select Dimmer Indicator Light 1 (DIL1). Once DIL1 is in slow blink mode, **press T**. The DIL corresponding to the currently stored Locked Preset will begin to blink rapidly or if all indicator lights turn off, this indicates that Unlocked Preset is selected. Note: When entering preset light level for the first time after installing, the default setting is "Unlocked."

Selecting Locked Preset

If all indicator lights are off, indicating it is in Unlocked Preset, press the **▲** to change to Locked Preset. The DIL corresponding to the current Locked Preset with blink rapidly.

Press ▲ or **▼** to choose desired light intensity. Select the DIL which responds to the desired light level for locked preset. If all DILs are off, then the timer is in the Unlocked Preset state.



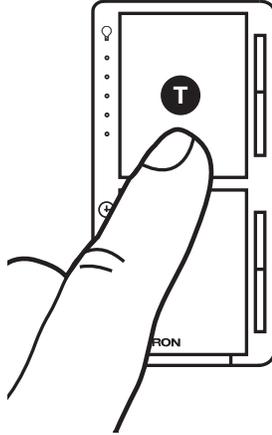
Notes:

- If there is no button activity for 1 minute, the dimmer will automatically save, exit APM, and return to Normal Operation.
- **To save and exit immediately** out of APM to Normal Operation, **press and hold T** until the DILs stop blinking.

Dimmer APM Programming Settings (continued)

Setting 1: Preset Light Level (continued)

2. To **save** the desired light intensity, **press** **T**. This will immediately exit out of Preset Light Level and return to APM main menu.



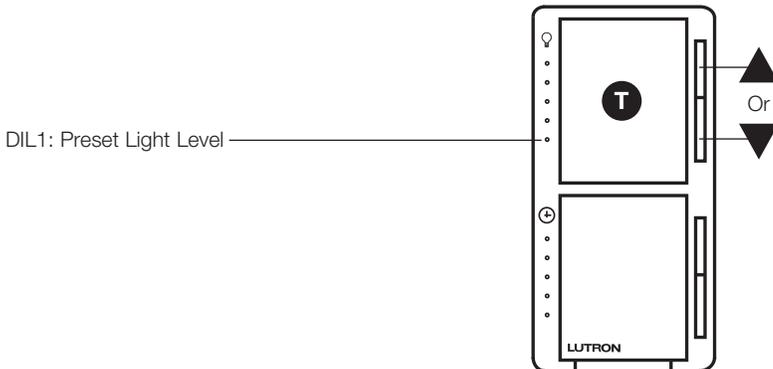
Your default light setting has now been redefined. A **single tap** of **T** (when in Normal Operation, not APM) will now always return the dimmer to this selected light setting until preset is deactivated or reset. A **double tap** will always bring the lights to full intensity.

Selecting Unlocked Preset

1. To **deactivate** a Locked Preset setting, **press** ▼ until DIL1 is quickly flashing. Release ▼ and **press and hold** ▼ again for approximately 3 seconds or until all Indicator Lights (ILs) turn OFF.

Note: The light will remain at its minimum output when you perform this action.

2. To **save** the Unlocked Preset, **press** **T**. This will immediately exit out of Preset Light Level and return to APM main menu.



Notes:

- If there is no button activity for 1 minute, the dimmer will automatically save, exit APM, and return to Normal Operation.
- To **save and exit immediately** out of APM to Normal Operation, **press and hold** **T** until ILs stop blinking.

Dimmer APM Programming Settings (continued)

Setting 2: Fade ON Time

What Does It Do?

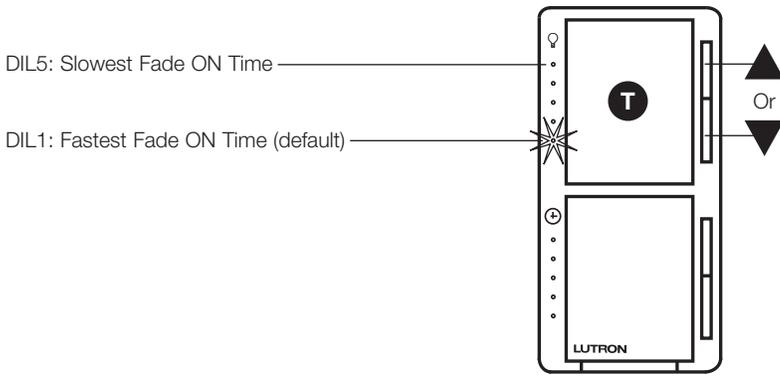
This setting allows control over how quickly the lights will fade up when the dimmer is turned ON. These settings include fade times from OFF to a maximum light output as quickly as 0.75 seconds and as slowly as 15 seconds.

Default setting: 0.75 seconds (DIL1).

Directions

Selecting a Fade ON Time

1. While in APM, **press ▲ or ▼ to select** Dimmer Indicator Light 2 (DIL2). Once DIL2 is in slow blink mode, **press T**. The DIL corresponding to the currently stored Fade ON Time will begin to blink rapidly, indicating that the setting has been entered.
2. Upon entering Fade ON Time, **press ▲ or ▼ to select** the desired Fade ON Time. DILs 1–5 represent the different Fade ON Time settings. Refer to the table below to determine which time is best suited to your needs.
3. **To save** the desired Fade ON Time, **press T**. This will exit out of Fade ON Time and return to APM main menu.



DIL Position	Fade ON Time*
5	15 seconds
4	5 seconds
3	3 seconds
2	2.5 seconds
1	0.75 seconds (default)

* Time from OFF to maximum light level.

Notes:

- The fade time while using ▲ or ▼ during Normal Operation is not affected by any Fade ON Time modification. These speeds are constant.
- If there is no button activity for 1 minute, the dimmer will automatically save, exit APM, and return to Normal Operation.
- **To save and exit immediately** out of APM to Normal Operation, **press and hold T** until DILs stop blinking.

Dimmer APM Programming Settings (continued)

Setting 3: Low-End Trim

What Does It Do?

This setting changes the lowest dimmer light level to obtain best bulb performance.

Default setting: DIL2

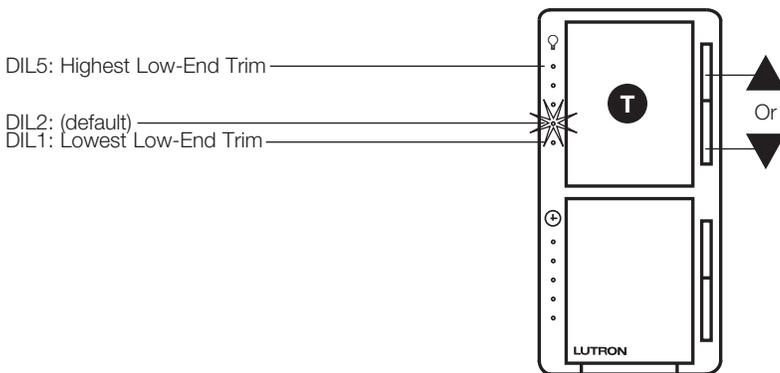
Directions

Setting Low-End Trim

1. While in APM, **press** ▲ or ▼ to select Dimmer Indicator Light 3 (DIL3). Once DIL3 is in slow blink mode, **press** T. DIL6 will turn off and the DIL corresponding to the currently stored Low-End Trim level will begin to blink rapidly, indicating that the setting has been entered.
2. Upon entering Low-End Trim, **press** ▲ or ▼ to select the desired Low-End Trim level.

Note: While setting the Low-End Trim, it is advised that the programmer observe the actual light (load) and not the DILs on the dimmer to determine the optimum setting. Incremental levels of light intensity exist between each DIL setting and the programmer may have to **press** ▲ or ▼ several times to proceed to the next highest/lowest setting.

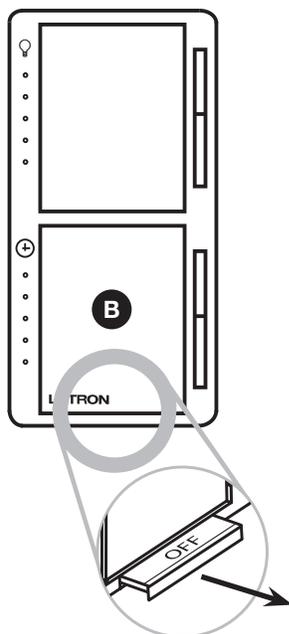
3. **To save** the desired Low-End Trim setting, **press** T. This will exit out of Low-End Trim and return to APM main menu.
4. Press and release T to turn load OFF, then press ▲ once. If load does not turn ON or remains unstable, repeat steps 1-3, increasing light with ▲ until the light turns on and remains stable.



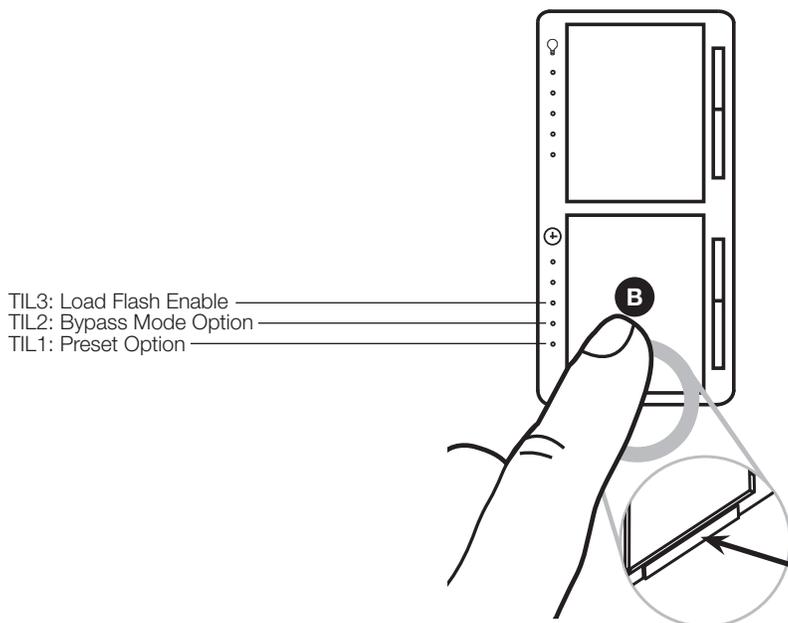
Notes:

- Low-End Trim adjustment is required for LEDs and CFLs; if not performed, the life of the LED/CFL bulb may be reduced.
- A quick method to adjust low-end trim is explained on page 14.
- If there is no button activity for 1 minute, the dimmer will automatically save, exit APM, and return to Normal Operation.
- **To save and exit immediately** out of APM to Normal Operation, **press and hold** T until DILs stop blinking.

How to Enter Timer Advanced Programming Mode (APM)



1. **Pull** the FASS into the OFF position (out), and **wait** 5 seconds.
2. **Press and hold** **B**. While **continuing to hold** **B**, **push** the FASS to the ON position (in) and **continue to hold** **B** for approximately 5 seconds.



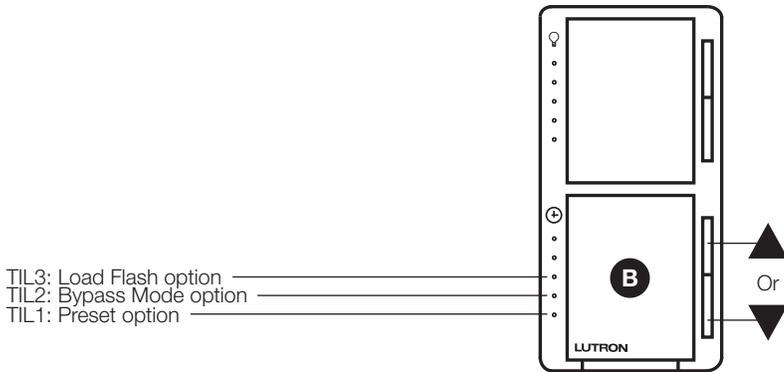
3. The bottom TIL will begin to blink slowly to indicate that you have entered Advanced Programming Mode. Additionally, the load will be on while in Advanced Programming Mode.

Timer APM Programming Settings

Entering Selection Menu Mode

Directions

1. Press the ▲ or ▼ to change the TIL position to indicate which feature you would like to modify:
 - TIL3 – Load flash option
 - TIL2 – Bypass Mode option
 - TIL1 – Preset option
2. Press the **B** button one time and the feature will be selected for modification.



Timer APM Programming Settings (continued)

Setting 1: Selecting a Preset Option

What Does It Do?

Preset option determines what timeout setting the timer turns on to when the Tap button is pressed. The user has two options for the preset time setting on the timer: Locked Preset and Unlocked Preset.

Locked Preset: When programmed for a Locked Preset, the timer will always return to the predetermined “locked” setting anytime it turns off with either a single tap of the Tap button or an expiration of the countdown.

Unlocked Preset: When programmed for an Unlocked Preset, the timer will return to the time setting it was adjusted to the previous time that the timer was on.

Default setting: Unlocked Preset (no TILs are flashing)

What Do I Want?

If you frequently use the same time setting and don't want to adjust it each time you use the timer, choose the Locked Preset option. If you frequently use different time settings, select the Unlocked Preset option.

Note: When entering preset option for the first time after installing, the default setting is “Unlocked.” If all TILs are off, then the timer is in the Unlocked Preset state.

1. While in main menu mode, **press ▲ or ▼** until TIL1 is in slow blink mode.
2. **Press B** button one time.

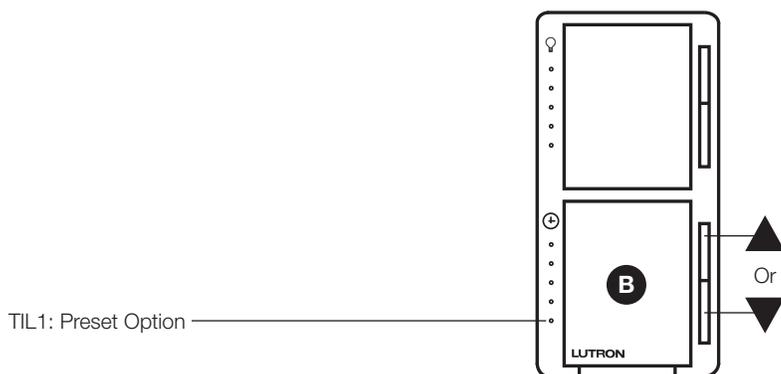
Directions

Selecting Locked Preset

1. **Press ▲ or ▼** until TIL1-5 lights up to adjust the time level to the desired Locked Preset. Select the TIL which corresponds to the desired timeout for locked preset. If all TILs are off, then the timer is in the Unlocked Preset state.
2. **Press B** button **one time** to return to the main menu.

Selecting Unlocked Preset

1. **Press ▼** until the quickly flashing TIL1 disappears.
2. **Press B** button **one time** to save selection and to return to the main menu.



Notes:

- If there is no button activity for 1 minute, the timer will automatically save, exit APM, and return to Normal Operation.
- **To save and exit immediately** out of APM to Normal Operation, **press and hold B** until TILs stop blinking.

Timer APM Programming Settings (continued)

Setting 2: Selecting a Bypass Mode Option

What Does It Do?

This setting sets the timer level you go to on a **B** button double tap. The user has two options for the maximum level of the timer: the “On” setting (enable bypass) and the 45-minute setting (disable bypass).

Default setting: “On” (Enabled)

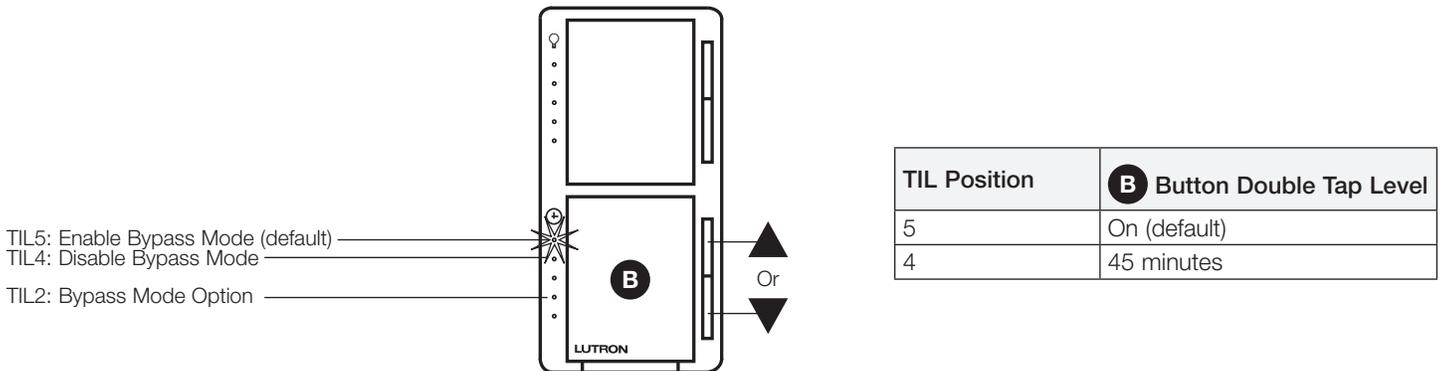
What Do I Want?

If you want the “On” setting with no automatic turn off, select the Enable Bypass Mode option. If you want the 45-minute setting with automatic turn off, select the Disable Bypass Mode option.

Note: On the Dimmer/Timer, the timer has its own settings independent of the dimmer.

Directions

1. While in main menu mode, **press** ▲ or ▼ until TIL2 is in slow blink mode.
2. **Press** **B** button one time. A quickly flashing TIL will indicate the bypass mode option (button double tap level).
3. **Press** ▲ or ▼ to adjust the desired bypass mode option (button double tap level).
4. **Press** **B** button **one time** to return to the main menu.



Notes:

- If there is no button activity for 1 minute, the timer will automatically save, exit APM, and return to Normal Operation.
- **To save and exit immediately** out of APM to Normal Operation, **press and hold** **B** until TILs stop blinking.

Timer APM Programming Settings (continued)

Setting 3: Selecting the Load Flash Option

What Does It Do?

When enabled, this makes the load do a one second flash when the timer counts down to the one minute mark.

Default setting: Disabled

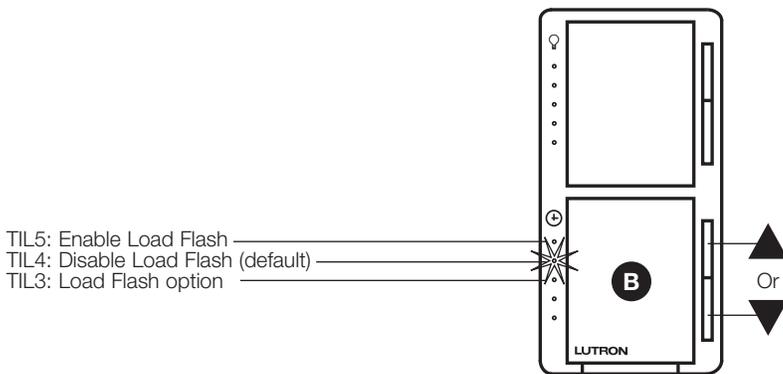
What Do I Want?

If the timer is connected to a lighting load, this provides a more visible indication (connected lighting load will flash) that the countdown timer is down to 1 minute.

Note: Not recommended for a fan load.

Directions

1. While in main menu mode, **press** ▲ or ▼ until TIL3 is in slow blink mode.
2. **Press** **B** button **one time**. A quickly flashing TIL will indicate the load flash setting.
3. **Press** ▲ or ▼ to adjust the desired setting.
4. **Press** **B** button **one time** to return to the main menu.



TIL Position	Load Flash Setting
5	Enable
4	Disable (default)

Notes:

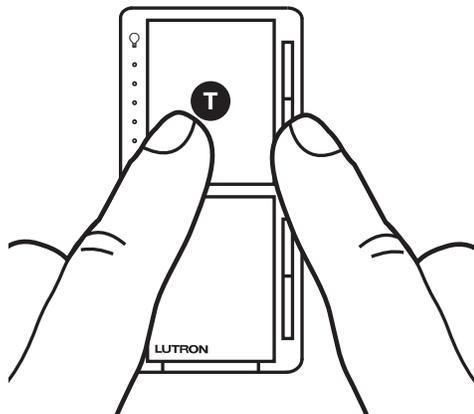
- If there is no button activity for 1 minute, the timer will automatically save, exit APM, and return to Normal Operation.
- **To save and exit immediately** out of APM to Normal Operation, **press and hold** **B** until TILs stop blinking.

Shortcuts and Additional Features

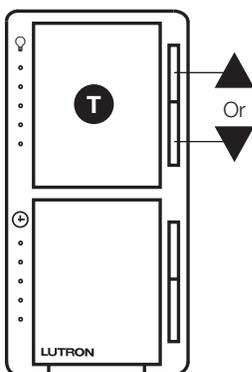
Low-End Trim Shortcut (Entry into *APM* is not required)

For quick changes to the Low-End Trim, a shortcut method has been created that bypasses the APM.

1. **Press and hold** **T** and **▼** until a DIL blinks. The load will turn OFF and then turn ON to Low-End.



2. **Press** **▲** or **▼** to adjust light output until stable and not flickering. **Press and release** **T** to save setting.
3. **Press and release** **T** to turn load OFF, then **press ▲ once**. If load does not turn ON or remains unstable, **repeat** Steps 1-3, increasing light with **▲** until the light turns on and remains stable.



Shortcuts and Additional Features (continued)

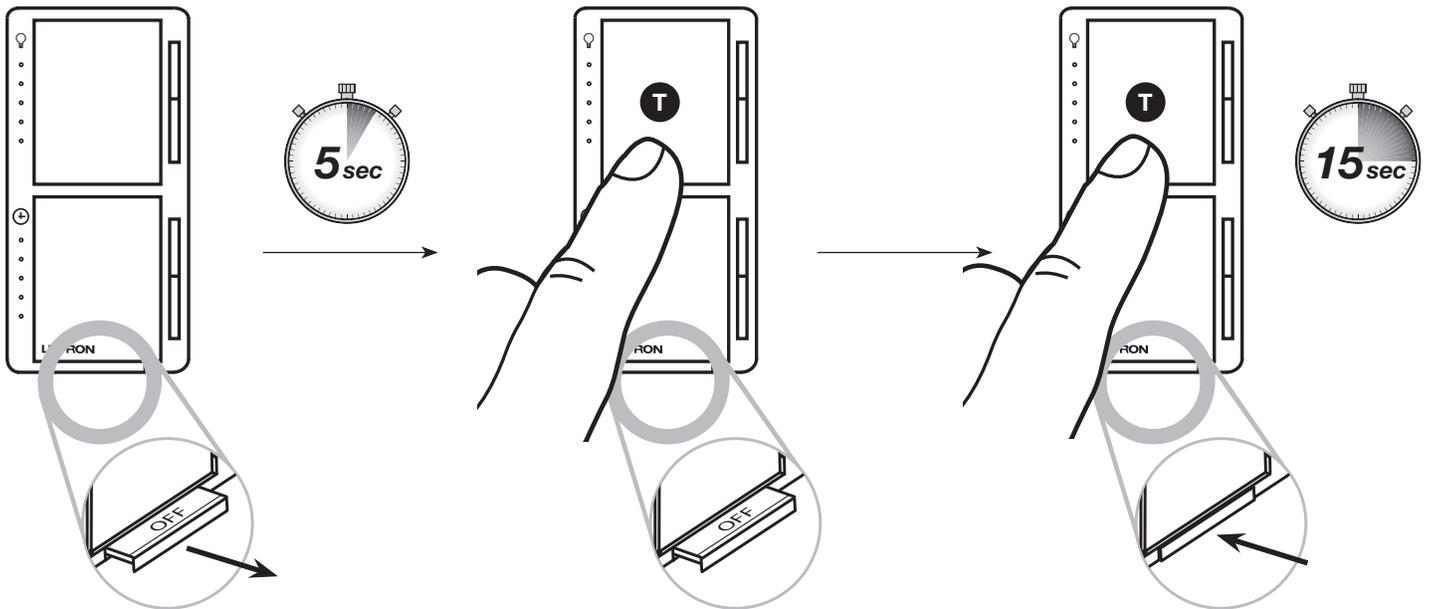
Restoring Default Settings

The dimmer can be returned to its original factory settings. This allows the programmer a risk-free experience to try different settings.

Default settings

Preset Light Level	Unlocked Preset (all DILs turned OFF)
Fade ON Time	0.75 seconds
Low-End Trim.	DIL2
Load Flash	Disabled
Bypass	Enabled
Preset Option.	Unlocked Preset (all TILs are turned off)

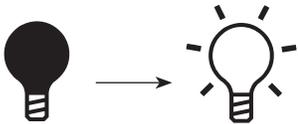
To Restore Factory Defaults



1. **Pull** the FASS into the OFF position (out), and **wait** 5 seconds.

2. **Press and hold** **T**. While continuing to hold **T**, **push** the FASS to the ON position (in) and **continue to hold** **T** for approximately 15 seconds.

Note: The dimmer will enter APM; **continue to hold** **T** for the remainder of the 15 seconds.



3. Load (light) will turn OFF and turn back ON to full intensity. This indicates a successful factory reset.

Note:

- If you perform the factory reset sequence, you will lose your selected APM settings and may need to adjust Low-End Trim settings to accommodate your particular bulbs.

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