

Maestro LED+ Dimmer/Switch and Dimmer/Timer Advanced Programming Mode

Maestro LED+ Models

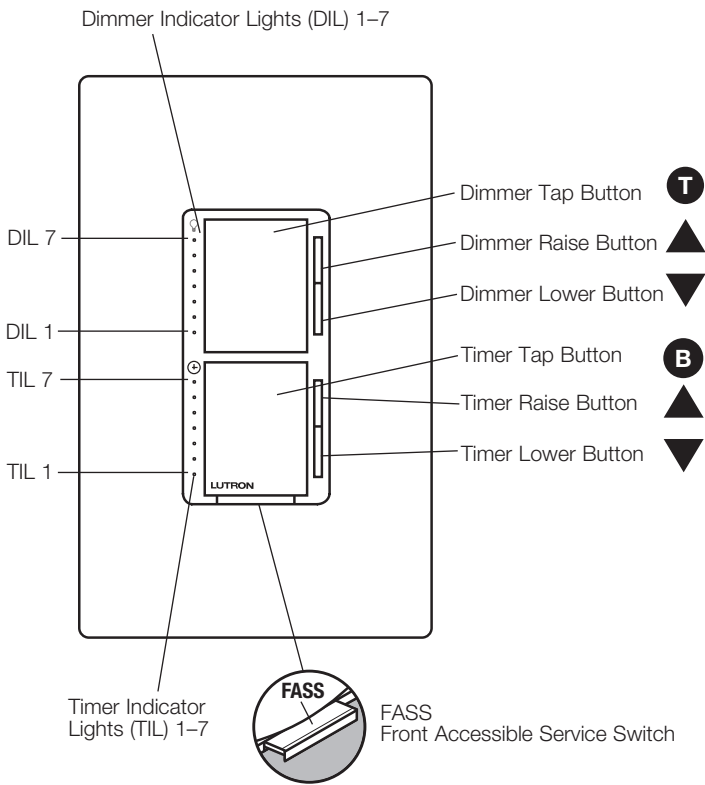
MACL-L3T251 (dimmer/timer)

MACL-L3S25 (dimmer/switch)

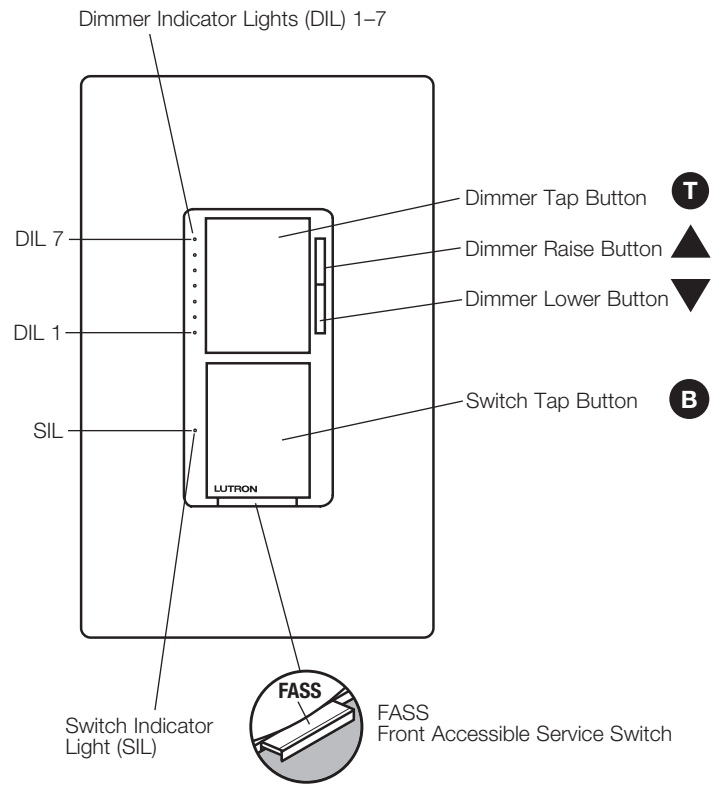
Overview

The Maestro LED+ dimmer/timer and dimmer/switch feature 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-L3T251)



Dimmer/switch (MACL-L3S25)



Notes:

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

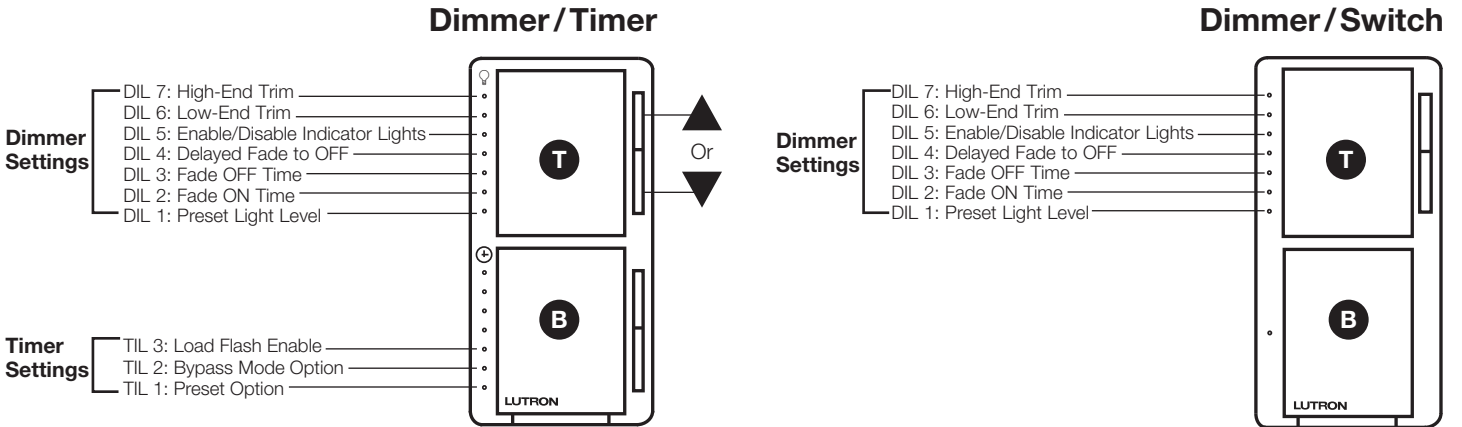
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Glossary

- 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** 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.
- 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*.
- High-End Trim** The highest achievable light level to which the device can be adjusted.
- 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 14, **press ▲ or ▼ to select** the desired programming setting. The **slow** blinking DIL or TIL/SIL will indicate which setting you have selected.

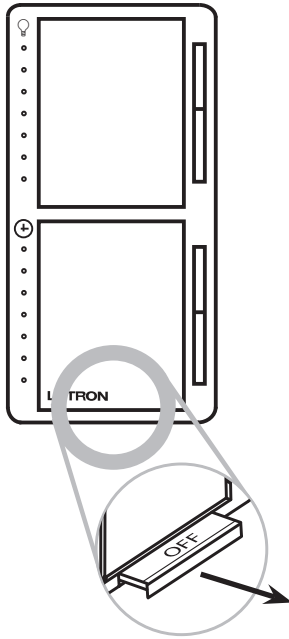


2. Proceed to the specific programming setting page to view programming instructions for the desired setting.

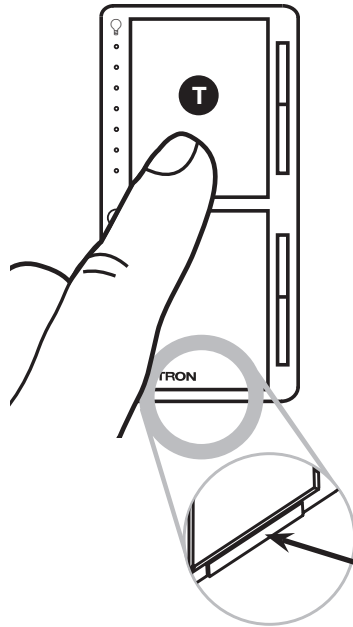
Note:

- 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 (DIL 1) 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 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.

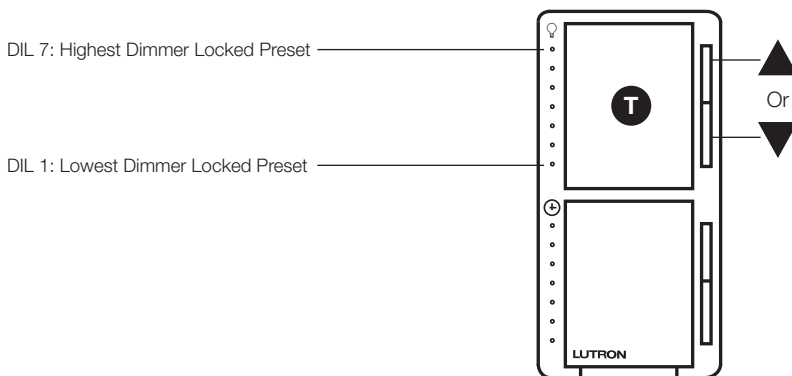
Directions

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 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* will blink rapidly.

Press ▲ or **▼** to choose desired light intensity. The light will brighten or dim, reflecting the *Locked Preset* level as the this feature is adjusted.



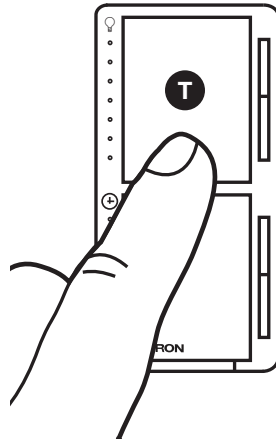
Notes:

- If there is no button activity for 1 minute, the dimmer will automatically 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)

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



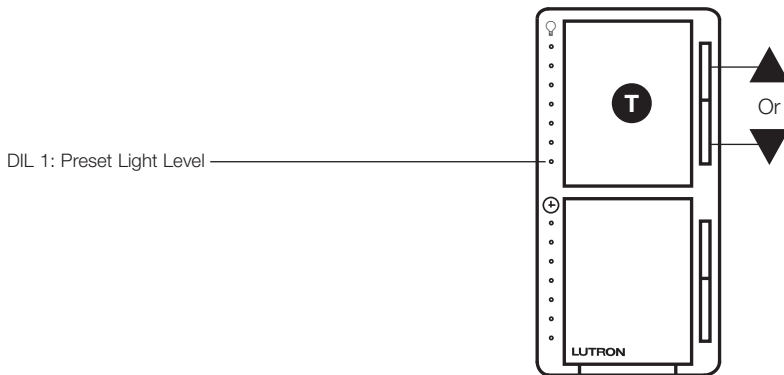
Your default light setting has now been redefined. A **single tap** of **T** (when in *Normal Operation*, not *APM*) will now always return the dimmer to this selected light setting until preset is deactivated or reset. A **double tap** will always bring the lights to full intensity.

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 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?

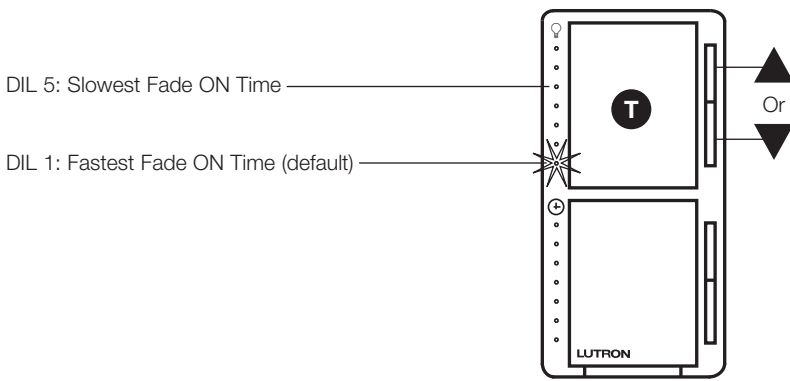
This setting allows control over how quickly the lights will fade up when the dimmer is turned *ON*. These settings include fade times from *OFF* to a maximum light output as quickly as 0.75 seconds and as slowly as 15 seconds.

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 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: Fade OFF Time

What Does It Do?

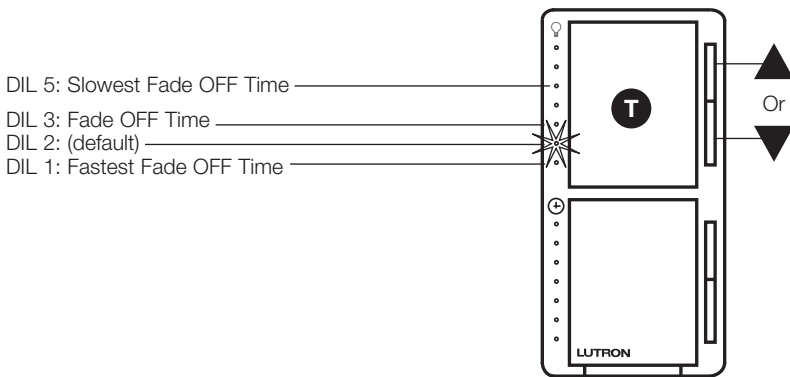
This setting allows control over how quickly the lights will fade down when the dimmer is turned *OFF*. These settings include fade times from a maximum light output to *OFF* as quickly as 0.75 seconds and as slowly as 15 seconds.

Default setting: 2.5 seconds (DIL2).

Directions

Selecting a Fade OFF Time

1. While in *APM*, **press ▲ or ▼ to select** Dimmer Indicator Light 3 (DIL3). Once DIL3 is in slow blink mode, **press T**. DIL3 will turn off and the DIL corresponding to the currently stored delayed *Fade OFF Time* will begin to blink rapidly, indicating that the setting has been entered.
2. Upon entering *Fade OFF Time*, **press ▲ or ▼ to select** the desired *Fade OFF Time*. DILs 1–5 represent the different *Fade OFF Time* settings. Refer to the table below to determine which time is best suited to your needs.
3. **To save** the desired *Fade OFF Time*, **press T**. This will exit out of *Fade OFF Time* and return to *APM* main menu.



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

* Time from maximum light level to OFF.

Notes:

- The fade time while using ▲ or ▼ during *Normal Operation* is not affected by any *Fade OFF Time* modification. These speeds are constant.
- If there is no button activity for 1 minute, the dimmer will automatically 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 4: Delayed Fade to OFF

What Does It Do?

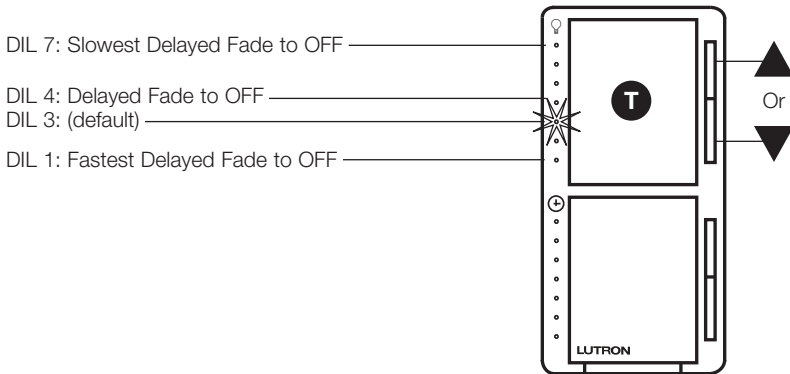
This setting allows control over how quickly/delayed the lights begin to start the dimming sequence. This setting delays the time between when **T** is pressed (*Normal Operation*) and when the lights actually begin the *Fade to OFF* process. To use this feature in *Normal Operation*, while the light is ON, **press and hold T** for 2 seconds and **release**. The *Delayed Fade to OFF* will then initiate.

Default setting: 30 seconds (DIL3).

Directions

Setting Delayed Fade to OFF

1. While in *APM*, **press ▲** or **▼** to select Dimmer Indicator Light 4 (DIL4). Once DIL4 is in slow blink mode, **press T**. DIL4 will turn off and Dimmer Indicator Light 3 (DIL3) will begin to blink rapidly or remain *OFF*, indicating that the setting has been entered.
2. Upon entering *Delayed Fade to OFF*, **press ▲** or **▼** to select the desired *Delayed Fade to OFF* time. DILs 1–7 represent the different *Delayed Fade to OFF* times. Refer to the table below to determine which time is best suited to your needs.
3. **To save** the desired *Delayed Fade to OFF*, **press T**. This will exit out of *Delayed Fade to OFF* and return to *APM* main menu.



DIL Position	Delayed Fade to OFF
7	70 seconds
6	60 seconds
5	50 seconds
4	40 seconds
3	30 seconds (default)
2	20 seconds
1	10 seconds

Notes:

- If there is no button activity for 1 minute, the dimmer will automatically 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 5: Enable/Disable Indicator Lights for Entire Device

What Does It Do?

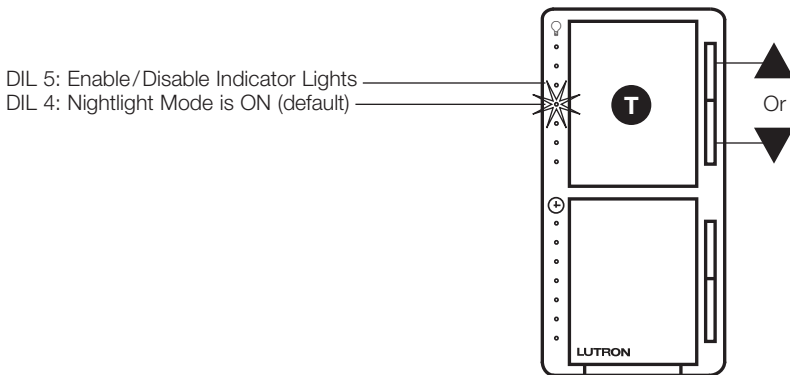
Enable/Disable Indicator Lights allows enabling/disabling of the DILs and TILs when the dimmer is turned *OFF*.

Default setting: Indicator Lights (nightlight mode): ON (DIL4).

Directions

Enable/Disable Indicator Lights

1. While in *APM*, press ▲ or ▼ to select Dimmer Indicator Light 5 (DIL5). Once DIL5 is in slow blink mode, press **T**. DIL5 will turn off and Dimmer Indicator Light 4 (DIL4) will begin to blink rapidly or remain *OFF*, indicating that the setting has been entered.
2. Upon entering *Enable/Disable Indicator Lights*, press ▲ or ▼ to enable/disable the nightlight mode (*ON/OFF*.)
Note: When pressing any option other than DIL 4, all other DILs will remain *OFF*. This represents the *Disabled* setting.
3. To save the desired *Enable/Disable Indicator Lights* setting, press **T**. This will exit out of *Enable/Disable Indicator Lights* and return to *APM* main menu.



Note: This setting applies to both the dimmer and the timer.

Notes:

- It may be necessary to *Disable the Indicator Lights* (nightlight mode) when using certain CFL and LED bulbs to achieve best bulb performance.
- If there is no button activity for 1 minute, the dimmer will automatically 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 6: Low-End Trim

What Does It Do?

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

Default setting: DIL 3

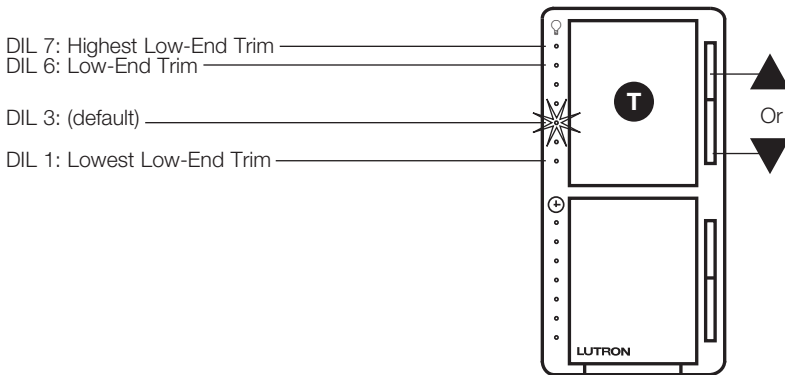
Directions

Setting Low-End Trim

1. While in *APM*, **press** ▲ or ▼ to select Dimmer Indicator Light 6 (DIL6). Once DIL6 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.



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 18.
- If there is no button activity for 1 minute, the dimmer will automatically 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 7: High-End Trim

What Does It Do?

This setting changes the highest achievable light levels.

Default setting: DIL7

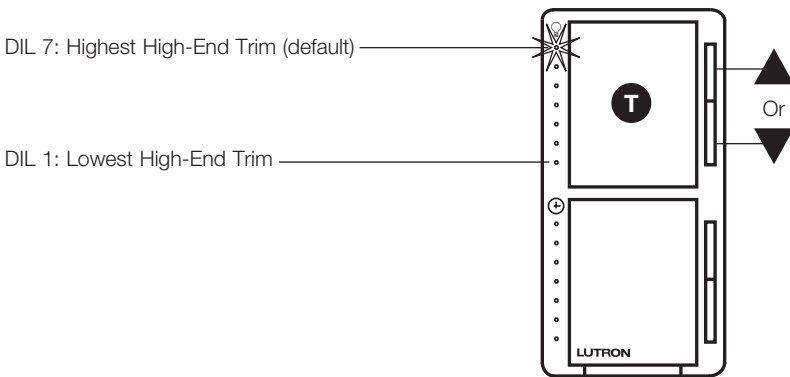
Directions

Setting High-End Trim

1. While in *APM*, **press** ▲ or ▼ to select Dimmer Indicator Light 7 (DIL7). Once DIL7 is in slow blink mode, **press** T. The DIL corresponding to the currently stored *High-End Trim* level will begin to blink rapidly, indicating that the setting has been entered.
2. Upon entering *High-End Trim*, **press** ▲ or ▼ to select the desired *High-End Trim* level.

Note: While setting the *High-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 before the next DIL will illuminate.

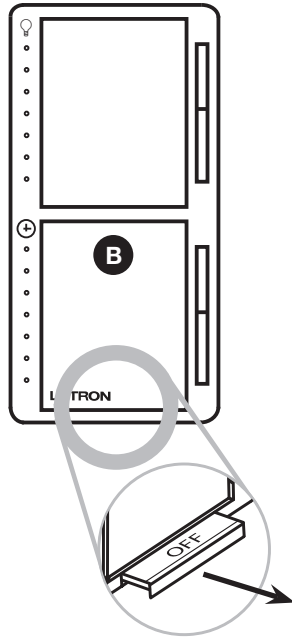
3. **To save** the desired *High-End Trim* setting, **press** T. This will exit out of *High-End Trim* and return to *APM* main menu.



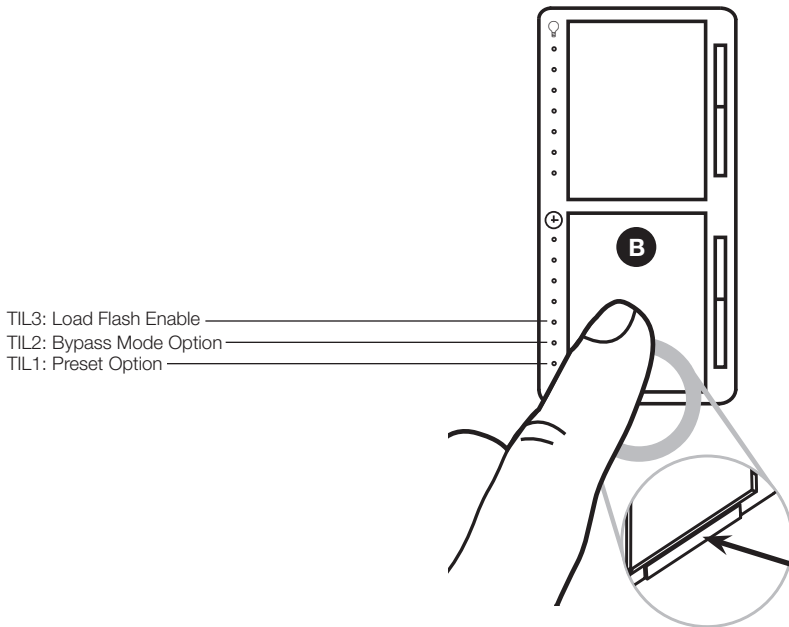
Notes:

- If there is no button activity for 1 minute, the dimmer will automatically 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.



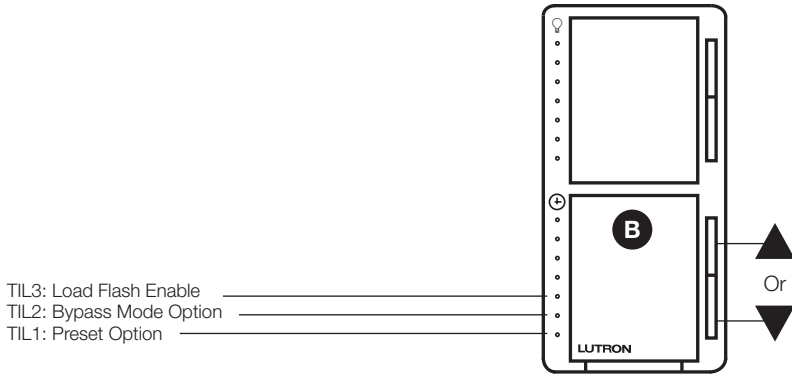
3. The bottom LED will begin to blink slowly to indicate that you have entered *Advanced Programming Mode*. Additionally, the load will be on while in *Advanced Programming Mode*.

Timer APM Programming Settings

Entering Selection Menu Mode

Directions

1. Press the ▲ or ▼ to change the LED position to indicate which feature you would like to modify:
 - LED 3 – Load flash enable
 - LED 2 – Bypass mode option
 - LED 1 – 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

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.

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

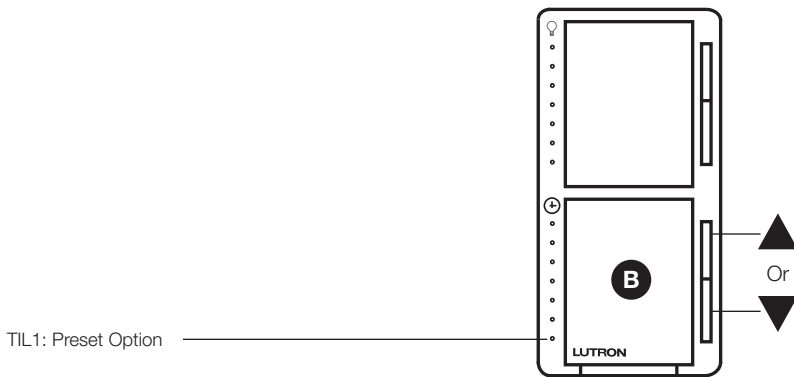
Directions

Selecting Locked Preset

1. **Press** ▲ or ▼ to adjust the time level to the desired *Locked Preset*. The quickly flashing TIL1 will move up and down as the preset is changed.
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 60-minute setting (disable bypass).

Default setting: “On” (Enabled)

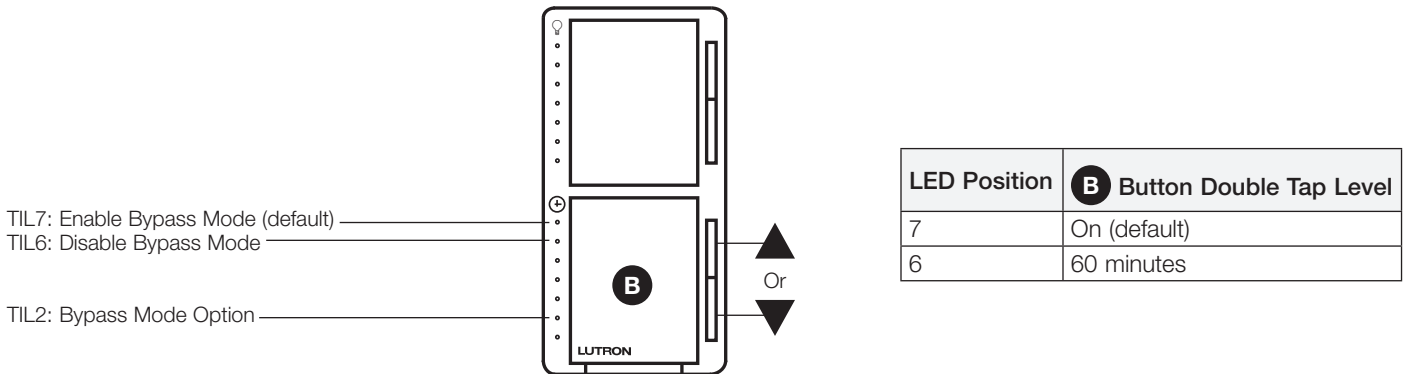
What Do I Want?

If you want the “On” setting with no automatic turn off, select the Enable Bypass Mode option. If you want the 60-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 LED 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

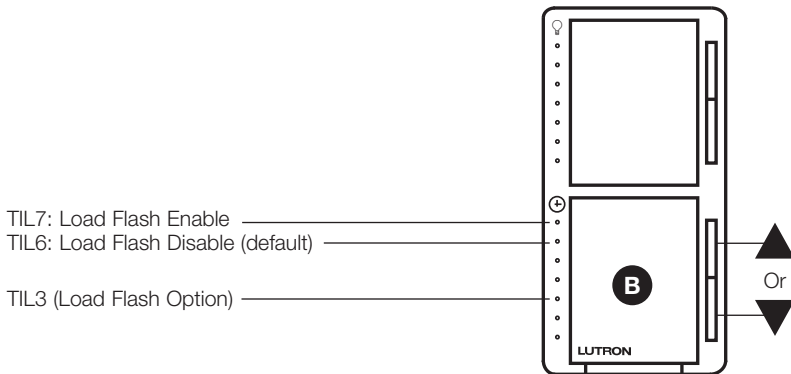
What Does It Do?

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

Default setting: Disabled

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 LED will indicate the load flash setting.
3. **Press ▲** or **▼** to adjust the desired setting.
2. **Press B** button **one time** to return to the main menu.



LED Position	Load Flash Setting
7	Enable
6	Disable (default)

Notes:

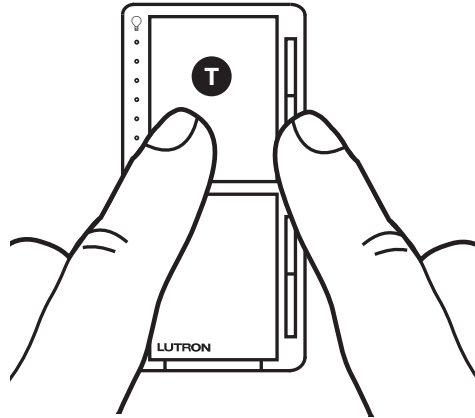
- If there is no button activity for 1 minute, the timer will automatically save, exit *APM*, and return to *Normal Operation*.
- **To save and exit immediately** out of *APM* to *Normal Operation*, **press and hold B** until TILs stop blinking.

Shortcuts and Additional Features

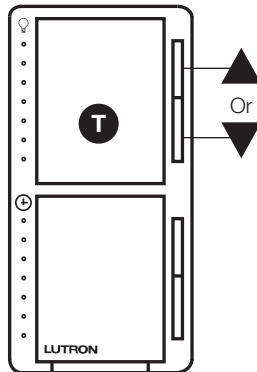
Low-End Trim Shortcut (Entry into *APM* is not required)

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)

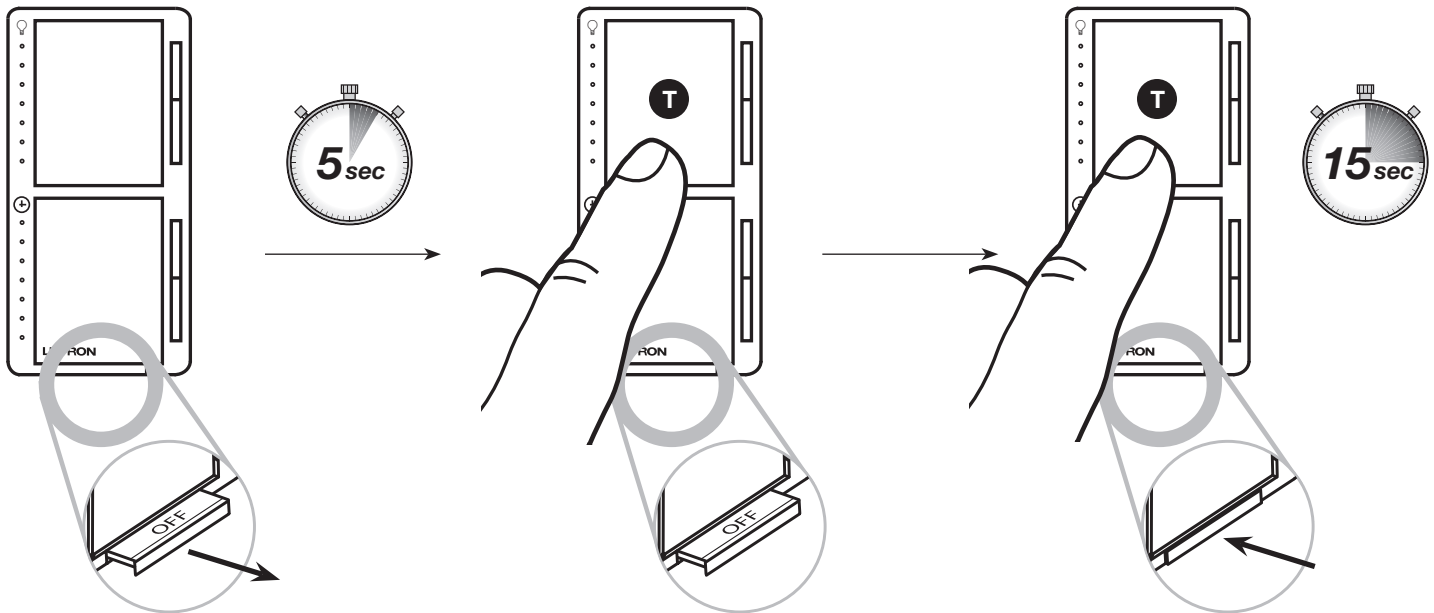
Restoring Default Settings

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
Fade OFF Time	2.5 seconds
Delayed Fade to OFF	30 seconds
Enable/Disable Indicator Lights	ON
Low-End Trim	DIL 2
High-End Trim	DIL 7 (highest level)
Load Flash	Enabled
Bypass	Enabled
Preset Option	Unlocked

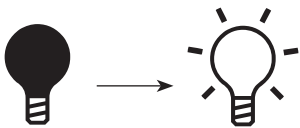
To Restore Factory Defaults



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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