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Maestro Phase Selectable Dimmer Advanced Programming Mode

Maestro Phase Selectable Models
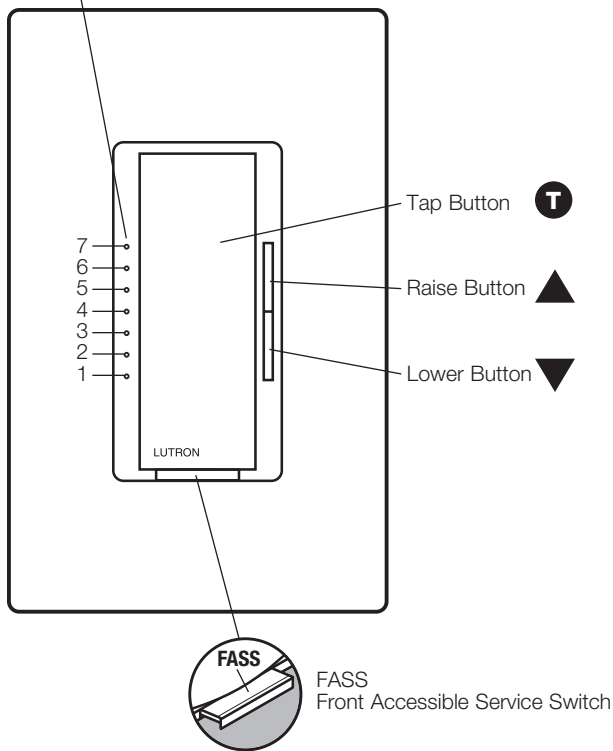
MA-PRO

Overview

The Maestro Phase Selectable dimmer features an *Advanced Programming Mode* (*APM*) that allows the user to customize their dimmer 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

Indicator Lights (IL) 1–7

Tap Button **T**

Raise Button ▲

Lower Button ▼

7 6 5 4 3 2 1

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FASS
FASS
Front Accessible Service Switch

Notes:
- To replace fixture bulb(s), power may be temporarily disconnected at the light fixture by pulling the FASS out on the dimmer.
- For any procedure other than routine bulb replacement, power MUST be disconnected at the main electrical panel.
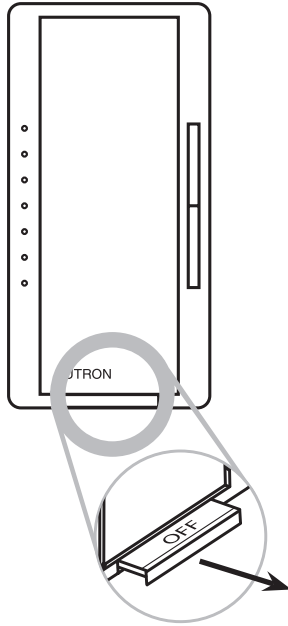
Glossary

Load . . . . The light bulb(s) that the dimmer is controlling.

FASS . . . . The Front Accessible Service Switch tab at bottom of dimmer switch, 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 dimmer switch (ON/OFF, Raise/Lower); indicator lights will not be blinking.

Slow Blink . . . . Indication of entering *APM*, indicator lights (ILs) blink slowly at a rate of 4 flashes per second.

Fast Blink . . . . Indication of entering *Programming* options, indicator lights (ILs) blink quickly at a rate of 8 flashes per second.

Unlocked Preset . . . . A light level setting that allows the dimmer to turn ON to the last dimmed setting.

Locked Preset . . . . A programmable light level setting to which the dimmer will always initially illuminate.

High-End Trim . . . . This setting allows changing the highest dimmer light level to obtain the best bulb performance.

Low-End Trim . . . . This setting allows changing the lowest dimmer light level to obtain the best bulb performance.

Default Setting . . . . Original preset programming options to which the dimmer is programmed upon initial use, indicated by ☀.

Factory Default . . . . Original preset programming options set up as a starting point for users who wish to customize settings; also known as *Default Setting*.

Phase Select Mode . . . . . . Allows for selection of forward-, auto, or reverse- dimming phase. The Phase Selectable dimmer default powers up in reverse-phase.
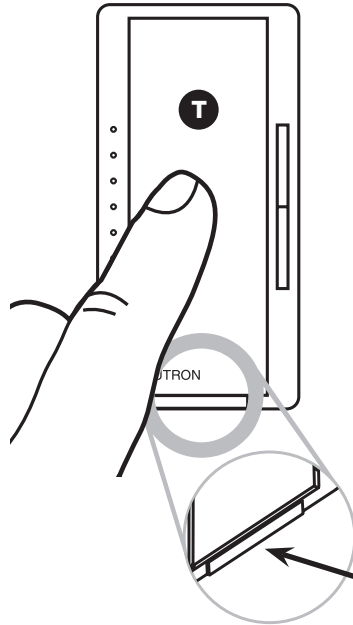
How to Enter Advanced Programming Mode (APM)

APM can only be accessed from a main dimmer (will not work from an accessory dimmer).

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

2. **Press and hold 🌑**. While **continuing to hold 🌑**, **push** the *FASS* to the *ON* position (in) and **continue to hold 🌑** for approximately 5 seconds.
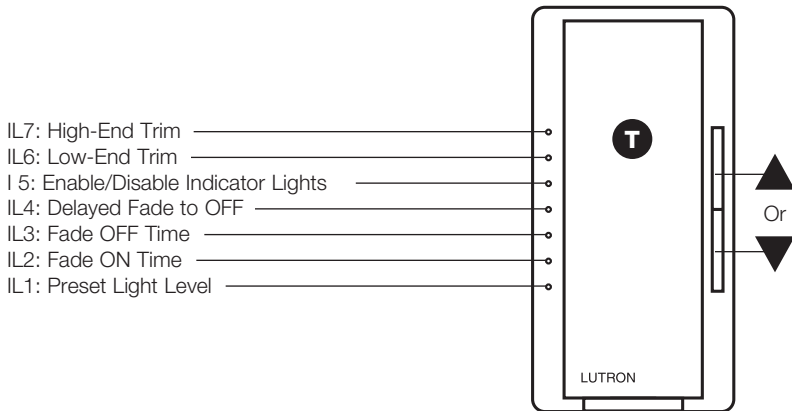

3. The bottom indicator light (IL1) will begin to slowly blink indicating that you have entered *Advanced Programming Mode (APM)*, **release 🌑**.

Note:
• If there is no button activity for 1 minute or the power is interrupted, the dimmer will automatically exit *APM* and return to *Normal Operation*, without saving your selections.

How to Enter a Programming Option

1. While in Advanced Programming Mode (APM) as shown on page 3, **press ▲ or ▼ to select** the desired programming option. The slow blinking IL will indicate which option you have selected.

IL7: High-End Trim
IL6: Low-End Trim
I 5: Enable/Disable Indicator Lights
IL4: Delayed Fade to OFF
IL3: Fade OFF Time
IL2: Fade ON Time
IL1: Preset Light Level

T

▲
Or
▼

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2. **To enter** the desired option, **press** 🅣. Proceed to the specific programming option page to view programming instructions for desired option.

Note:
- If there is no button activity for 1 minute or the power is interrupted, the dimmer will automatically exit *APM* and return to *Normal Operation*, without saving your selections.
- **To save and exit immediately** out of *APM* to *Normal Operation*, press and hold 🅣 until the ILs stop blinking.

APM Programming Options

Option 1: Preset Light Level

What Does It Do

If it is preferred that the dimmer turns ON to the same light level every time you turn it on (single-tap), choose the *Locked Preset*. Double-tapping **T** in *Normal Operation* mode will always bring the light level to maximum intensity.

If it is preferred that the dimmer turns ON to the light level previously used (single-tap), choose the *Unlocked Preset*.

Settings

There are two settings in *Option 1: Preset Light Level*:

- **Locked preset:** When programmed for a *Locked* preset, the dimmer will always turn ON to the predetermined "locked" level anytime the dimmer is turned on with a single tap of **T**.

- **Unlocked preset:** When programmed for an *Unlocked* preset, the dimmer will turn ON to the light level to which it was adjusted the previous time that the light was on.

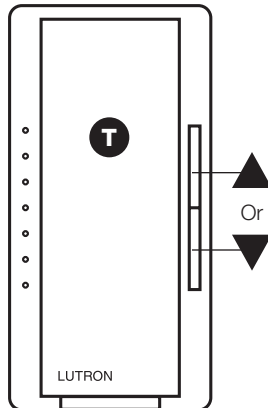   **Note:** Default setting is *Unlocked* preset.

Directions

Selecting Locked Preset

1. While in *APM*, **press ▲ or ▼ to select** IL1, *Programming Option 1: Preset Light Level*. Once IL1 is blinking, **press T**. The IL will then switch to the current setting and begin blinking rapidly, indicating the Locked Preset option, or the bottom 3 ILs will begin scrolling, indicating that the *Unlocked Preset* has been entered.

2. When entering the *Preset Light Level* option for the first time upon installing, the default setting is "Unlocked."

    Note: *Unlocked* preset is indicated by the bottom 3 ILs scrolling while in *Programming Option 1: Preset Light Level*.

    Press ▲ or ▼ to choose desired light intensity. The light will become brighter or dim, reflecting the *Locked* preset level as the feature is adjusted.
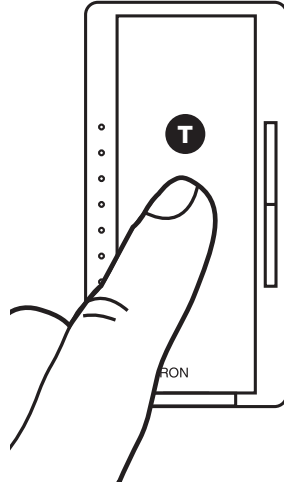

Notes:
- If there is no button activity for 1 minute or the power is interrupted, the dimmer will automatically exit *APM* and return to *Normal Operation*, without saving your selections.
- **To save and exit immediately** out of *APM* to *Normal Operation*, **press and hold T** until ILs stop blinking.

APM Programming Options (continued)
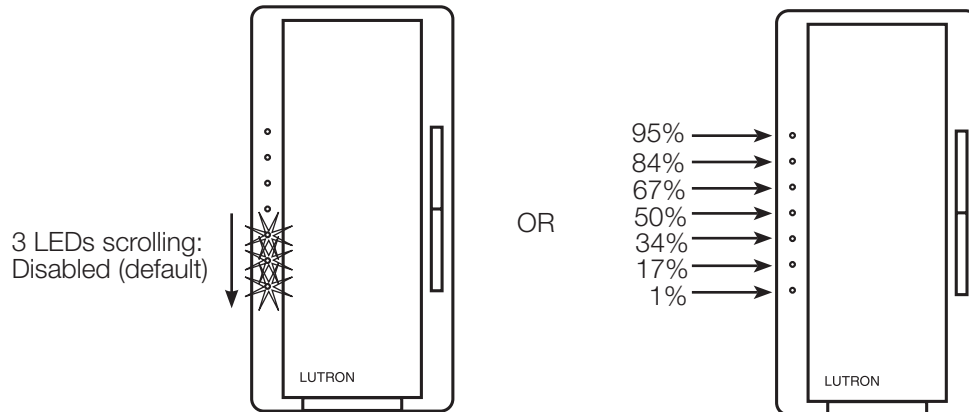
Option 1: Preset Light Level (continued)

3. **To save** the desired light intensity, **press T**. This will exit out of the *Programming Option 1: Preset Light Level* and return to *APM* main menu.

The 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 so that the dimmer will turn ON to the light level to which it was last set while in *Normal Operation*, the *Unlocked* preset must be activated.

   While in *Programming Option 1: Preset Light Level*, **press** the ▼ until the bottom IL (IL1) is quickly flashing. **Release** the ▼ and **press and hold** ▼ again for approximately 3 seconds or until the bottom 3 ILs begin scrolling.

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

2. **To save** the *Unlocked* preset, **press T**. This will exit out of the *Programming Option 1: Preset Light Level* and return to the *APM* main menu.

3 LEDs scrolling: Disabled (default)

OR

95% · 84% · 67% · 50% · 34% · 17% · 1%

Notes:
- If there is no button activity for 1 minute or the power is interrupted, the dimmer will automatically exit *APM* and return to *Normal Operation*, without saving your selections.
- **To save and exit immediately** out of *APM* to *Normal Operation*, **press and hold T** until ILs stop blinking.

APM Programming Options (continued)

Option 2: Fade ON Time

What Does It Do
Quicker fade times are more practical and slower fade times are thought to be more elegant. If the light that is controlled by the dimmer is the first or only light that will be turned ON in a particular room, most people find it advantageous to use a faster time so that the room is immediately illuminated. Art lighting or other accent lighting is often more pleasing with a slower fade time.
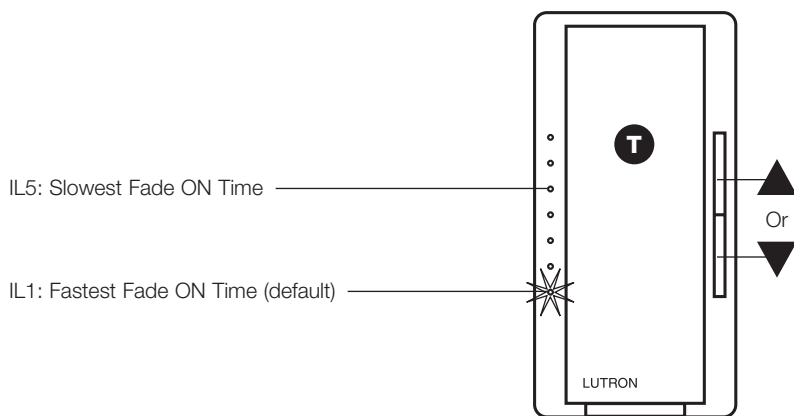
Settings
Fade ON Time allows for control over how quickly the lights will fade up when the dimmer is turned ON. These settings include fade times from OFF to Maximum Light Output as quickly as 0.75 seconds and as slowly as 15 seconds.

Note: Default setting is 0.75 seconds (IL1).

Directions

Selecting a Fade ON Time

1. While in *APM*, **press** the ▲ or ▼ **to select** the IL2, *Programming Option 2: Fade ON Time*. Once IL 2 is blinking, **press** 🅣. The IL will then switch to the current setting and begin to blink rapidly, indicating that the *Programming Option* has been entered.

2. Upon entering the *Fade ON Time* programming option by pressing 🅣 and observing the IL changing to a fast blink, **press** the ▲ or ▼ **to select** the desired *Fade ON Time*. ILs 1–5 represent the different *Fade ON Time* settings. Refer to the table below to determine which time is best suited to your needs.

IL5: Slowest Fade ON Time

IL1: Fastest Fade ON Time (default)

Or

Single Tap	
IL 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.

3. **To save** the desired *Fade ON Time*, **press** 🅣. This will exit out of the *Fade ON Time Option* and return to the *APM* main menu.

Notes:
- The fade time while using ▲ or ▼ during normal operation is not affected by any *Fade ON time* modification. These speeds are constant.
- The *Fade ON* times will be seen only when the lights are toggled from a Maestro PRO or a companion dimmer.
- If there is no button activity for 1 minute or the power is interrupted, the dimmer will automatically exit *APM* and return to *Normal Operation*, without saving your selections.
- **To save and exit immediately** out of *APM* to *Normal Operation*, **press and hold** 🅣 until ILs stop blinking.

APM Programming Options (continued)

Option 3: Fade OFF Time

What Does It Do
A slower light *Fade OFF Time* is suggested for rooms where the user wishes to leave while the lights are still providing illumination. Please be aware that the light dimming may not be immediately noticeable for settings of 5 seconds or longer.
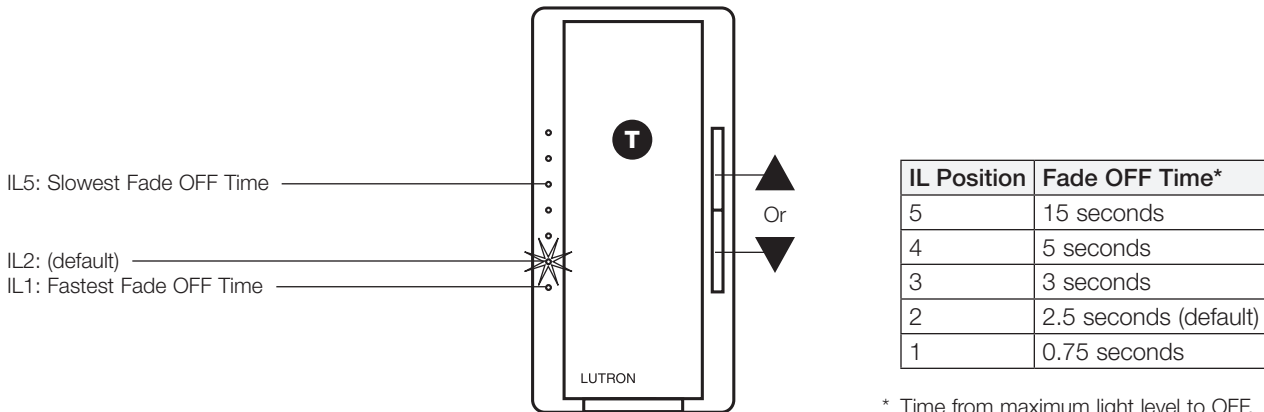
Settings
Fade OFF Time allows for control over how quickly the lights will fade down when the dimmer is turned OFF. These settings include fade times from *Maximum Light Output* to OFF as quickly as 0.75 seconds and as slowly as 15 seconds.

Note: Default setting is 2.5 seconds (IL2).

Directions

Selecting a Fade OFF Time

1. While in *APM*, **press** the ▲ or ▼ **to select** IL3, *Programming Option 3: Fade OFF Time*. Once IL3 is blinking, **press** 🅣. The IL will then switch to the current setting and begin to blink rapidly, indicating that the *Programming Option* has been entered.

2. Upon entering the *Fade OFF Time* programming option by pressing 🅣 and observing the IL changing to a fast blink, **press** ▲ or ▼ **to select** the desired *Fade OFF Time*. ILs 1–5 represent the different *Fade OFF Time* settings. Refer to the table below to determine which time is best suited to your needs.

IL5: Slowest Fade OFF Time

IL2: (default)
IL1: Fastest Fade OFF Time

Or

IL 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.

3. **To save** the desired *Fade OFF Time*, **press** 🅣. This will exit out of the *Fade OFF Time Option* and return to the *APM* main menu.

Notes:
- The fade time while using ▲ or ▼ during normal operation is not affected by any *Fade ON* time modification. These speeds are constant.
- The *Fade OFF* Times will be seen only when the lights are toggled from a Maestro PRO or a companion dimmer.
- If there is no button activity for 1 minute or the power is interrupted, the dimmer will automatically exit *APM* and return to *Normal Operation*, without saving your selections.
- **To save and exit immediately** out of *APM* to *Normal Operation*, **press and hold** 🅣 until ILs stop blinking.

APM Programming Options (continued)

Option 4: Delayed Fade to OFF

What Does It Do
Suggested for use in large rooms where the light control is opposite the exit and immediate dimming is not wanted.
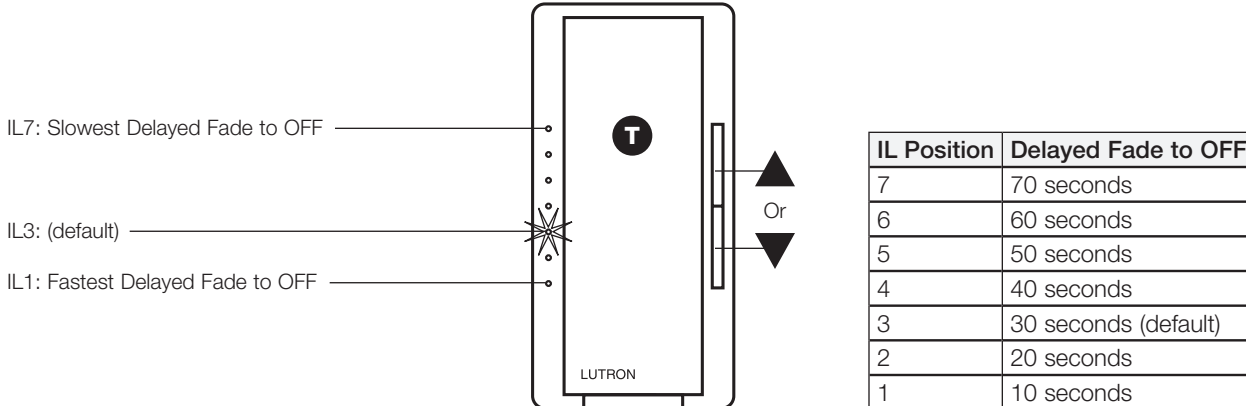
Settings
Delayed Fade to OFF allows for control over how quickly/delayed the lights begin to start the dimming sequence. This setting delays the time between when **T** is pressed (*Normal Operation*) and when the lights actually begin the *Fade to OFF* process.

Note: Default setting is 30 seconds (IL3).

Directions

Setting Delayed Fade to OFF

1. While in *APM*, **press** ▲ or ▼ to select IL4, *Programming Option 4: Delayed Fade to OFF*. Once IL 4 is blinking, **press T**. The IL will then switch to the current setting and begin to blink rapidly, indicating that the *Programming Option* has been entered.

2. Upon entering the *Delayed Fade to OFF* programming option by pressing **T** and observing the IL changing to a fast blink, **press** ▲ or ▼ **to select** the desired *Delayed Fade to OFF* time. ILs 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.

IL7: Slowest Delayed Fade to OFF

IL3: (default)

IL1: Fastest Delayed Fade to OFF

Or

IL 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

3. **To save** the desired *Delayed Fade to OFF*, **press T**. This will exit out of the *Delayed Fade to OFF* option and return to *APM* main menu.

4. 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.

Notes:
• If there is no button activity for 1 minute or the power is interrupted, the dimmer will automatically exit *APM* and return to *Normal Operation*, without saving your selections.
• **To save and exit immediately** out of *APM* to *Normal Operation*, **press and hold T** until ILs stop blinking.

APM Programming Options (continued)

Option 5: Enable/Disable Indicator Lights

What Does It Do
When the dimmer is turned OFF and the light goes out, the ILs remain ON at a dim glow state also known as *nightlight mode*. Disabling *nightlight mode* is an energy-saving practice and also allows the dimmer to be compatible with a broader range of CFLs and LEDs. Enabling *nightlight mode* provides a soft glow for easy location of the dimmer in a dark room.

Settings
Enable/Disable Indicator Lights allows enabling/disabling of the ILs when the dimmer is turned OFF.
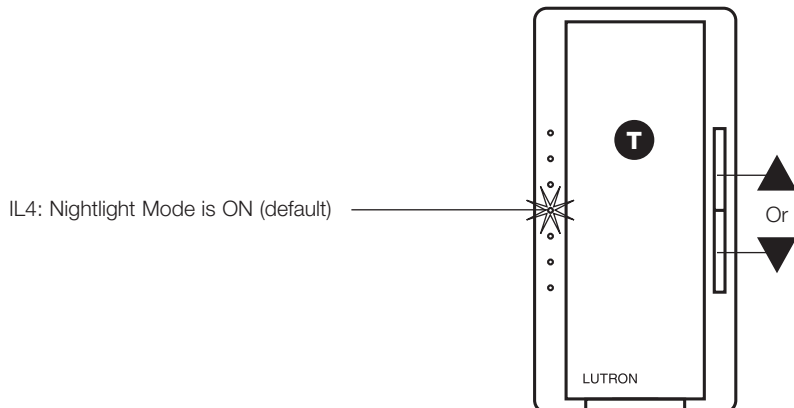
Note: Default setting is Indicator Lights (nightlight mode): ON (IL4).

Directions
Enable/Disable Indicator Lights

1. While in *APM*, **press ▲ or ▼ to select** the fifth option, *Programming Option 5: Enable/Disable Indicator Lights*. Once IL5 is blinking, **press 🔵**. The IL will then switch to the current setting and begin blinking rapidly or turn OFF, indicating that the *Programming Option* has been entered.

2. Upon entering the *Enable/Disable Indicator Lights* programming option by pressing 🔵 and observing the IL changing to a fast blink on IL4 or turning OFF, **press ▲ or ▼ to enable/disable** the nightlight mode (ON/OFF.)

   Note: When pressing any option other than IL4, all other ILs will remain OFF. This represents the *Disabled* setting.

IL4: Nightlight Mode is ON (default)

Or

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3. **To save** the desired *Enable/Disable Indicator Lights* setting, **press 🔵**. This will exit out of the *Enable/Disable Indicator Lights* option and return to the *APM* main menu.

Notes:
- If there is no button activity for 1 minute or the power is interrupted, the dimmer will automatically exit *APM* and return to *Normal Operation*, without saving your selections.
- **To save and exit immediately** out of *APM* to *Normal Operation*, **press and hold 🔵** until ILs stop blinking.

APM Programming Options (continued)

Option 6: Low-End Trim

What Does It Do
Some LED and CFL bulbs require a higher *Low-End Trim* than others. This feature will eliminate flickering and strobing when the dimmer is turned ON to its lowest setting. This feature can also be used as a personal preference for incandescent or halogen bulbs.

Settings
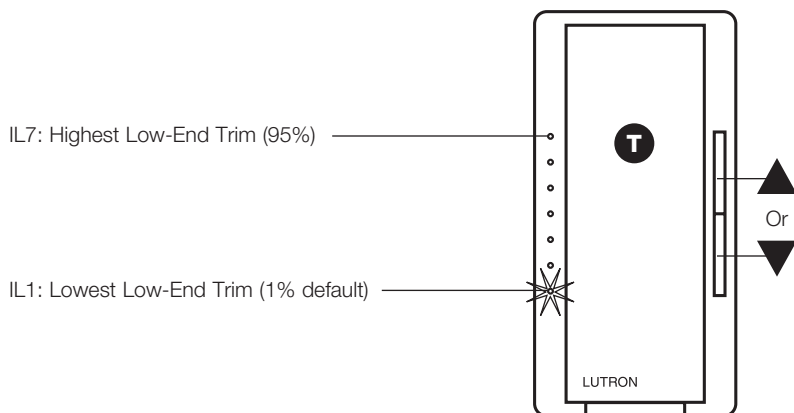*Low-End Trim* allows changing the lowest dimmer light level to obtain best bulb performance.

Note: Default setting is IL2.

Directions

Setting Low-End Trim

1. While in *APM*, **press** ▲ or ▼ **to select** IL6, *Programming Option 6: Low-End Trim*. Once IL6 is blinking, **press** 🅣. The IL will then switch to the current setting and begin to blink rapidly, indicating that the *Programming Option* has been entered.

2. Upon entering the *Low-End Trim* programming option by pressing 🅣 and observing the IL changing to a fast blink, **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 ILs on the dimmer to determine the optimum setting. Incremental levels of light intensity exist between each IL setting and the programmer may have to **press** ▲ or ▼ several times to proceed to the next highest/lowest setting.

IL7: Highest Low-End Trim (95%)

Or

IL1: Lowest Low-End Trim (1% default)

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3. **To save** the desired *Low-End Trim* setting, **press** 🅣. This will exit out of the *Low-End Trim* option and return to the *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 13.
- If there is no button activity for 1 minute or the power is interrupted, the dimmer will automatically exit *APM* and return to *Normal Operation*, without saving your selections.
- **To save and exit immediately** out of *APM* to *Normal Operation*, **press and hold** 🅣 until ILs stop blinking.

APM Programming Options (continued)

Option 7: High-End Trim

What Does It Do
Some lamps/situations require a lower *High-End Trim* than others. This feature allows the user to determine the maximum light level and adjust the settings accordingly.

Settings
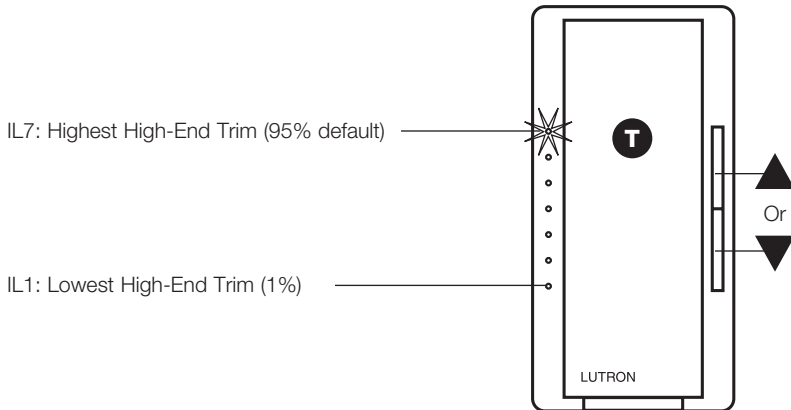*High-End Trim* allows changing the highest achievable light levels.

Note: Default setting is IL7.

Directions

Setting High-End Trim

1. While in *APM*, **press ▲ or ▼ to select** IL7, *Programming Option 7: High-End Trim*. Once IL7 is blinking, **press ❶**. The IL will then switch to the current setting and begin to blink rapidly, indicating that the *Programming Option* has been entered.

2. Upon entering the *High-End Trim* programming option by pressing ❶ and observing the IL changing to a fast blink, **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 ILs on the dimmer to determine the optimum setting. Incremental levels of light intensity exist between each IL setting and the programmer may have to **press ▲ or ▼** several times before the next IL will illuminate.

IL7: Highest High-End Trim (95% default)

Or

IL1: Lowest High-End Trim (1%)

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3. **To save** the desired *High-End Trim* setting, **press ❶**. This will exit out of the *High-End Trim* option and return to the *APM* main menu.
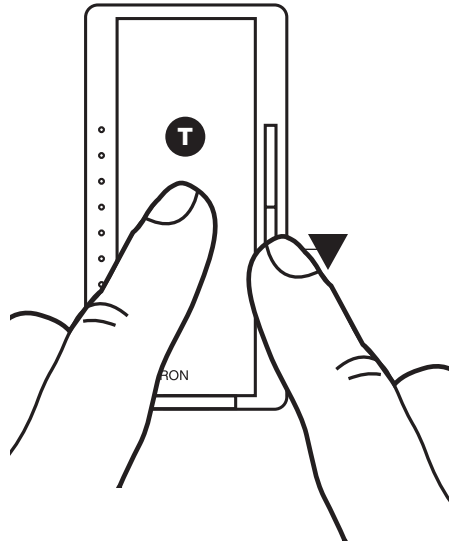
Notes:
• In some applications using LED and CFL bulbs, it may be necessary to lower the *High-End Trim* to achieve an optimum dim range.
• If there is no button activity for 1 minute or the power is interrupted, the dimmer will automatically exit *APM* and return to *Normal Operation*, without saving your selections.
• **To save and exit immediately** out of *APM* to *Normal Operation*, **press and hold ❶** until ILs stop blinking.

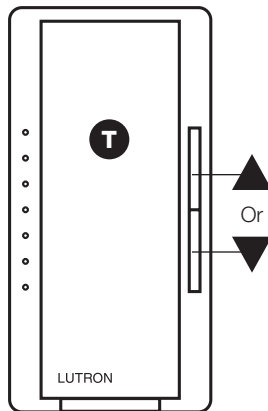# Shortcuts and Additional Features

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*.
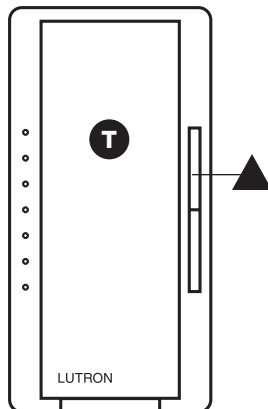
1. **Press and hold** 🅣 and ▼ until an IL blinks. The load will turn OFF and then turn ON to *Low-End*.

2. **Press** ▲ or ▼ to adjust light output until stable and not flickering. **Press and release** 🅣 **to save** setting.

3. **Press and release** 🅣 to turn load OFF, then **press** ▲ **once**. If load does not turn ON or remains unstable, **repeat** Step 1 and in Step 2, increase light with ▲.
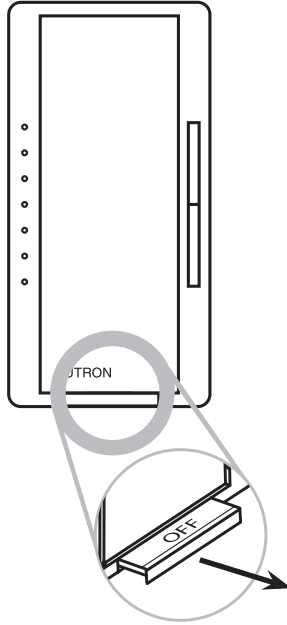

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Shortcuts and Additional Features (continued)

Phase Select Mode (Entry into *APM* is not required)
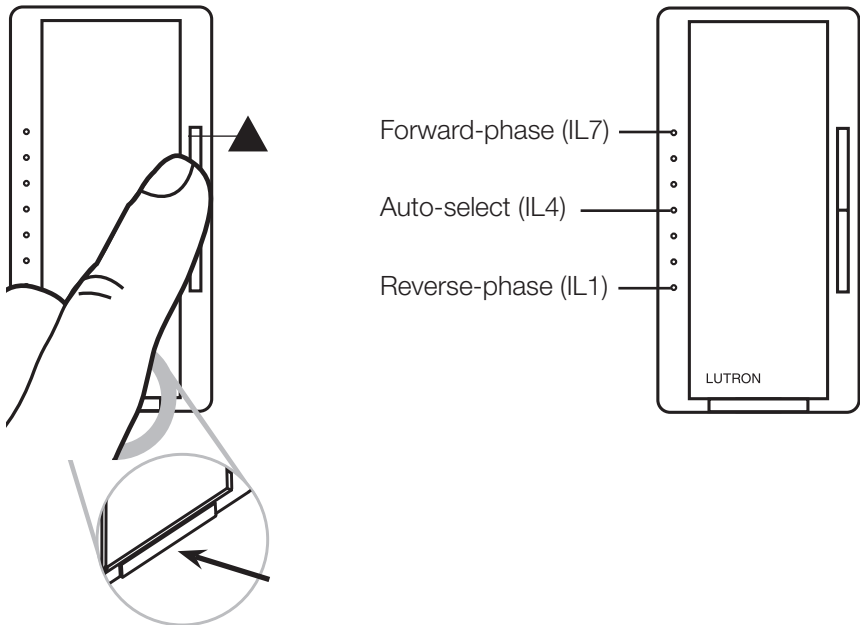
Instructions for selecting phase:

1. **Open the FASS.**

2. **Press and hold ▲. Close the FASS** and **continue to hold ▲** for 5 seconds.

    Note: The current phase selection will illuminate IL7 (top, forward-phase), IL4 (middle, phase auto-select - default with no neutral)* or IL1 (bottom, reverse-phase - default with neutral).

Forward-phase (IL7)

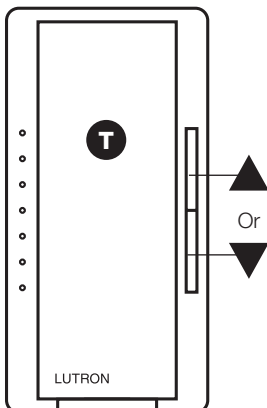Auto-select (IL4)

Reverse-phase (IL1)

* Phase auto-select defaults to reverse-phase unless the LED load cannot operate correctly. It will then switch to forward-phase automatically. Phase auto-select is only available when no neutral wire is connected.
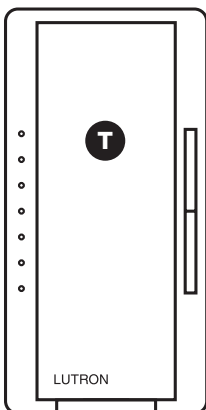
Shortcuts and Additional Features (continued)

Phase Select Mode (Entry into *APM* is not required) (continued)

3. **Press the** ▲ **or** ▼ to get the desired selection.

4. **Press** 🅣 to exit Phase Selection mode.

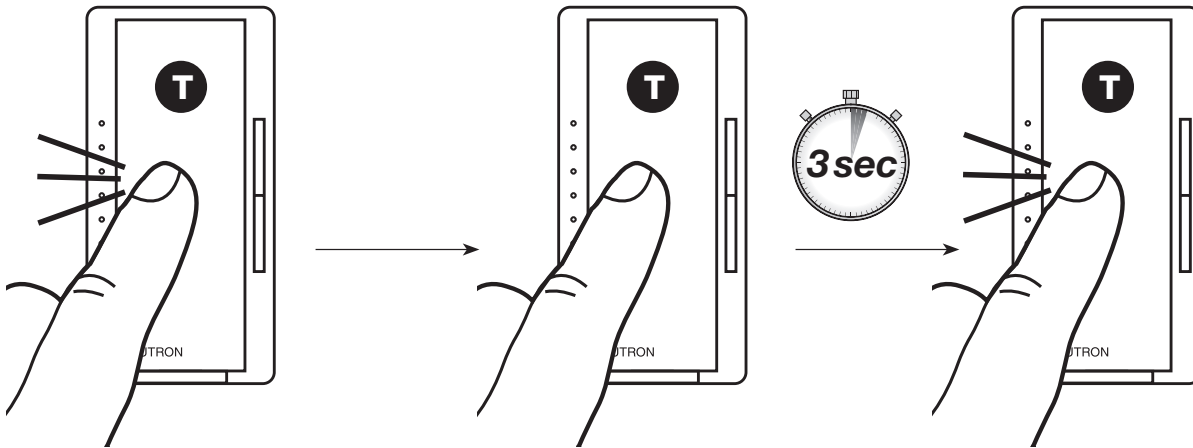## Shortcuts and Additional Features (continued)

Restoring Default Settings

The dimmer can be returned to its original factory settings. This allows the programmer a risk-free experience to try multiple setting styles without worry.

Default settings

Preset Light Level . . . . Unlocked Preset (bottom 3 ILs will be scrolling)
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 IL2
High-End Trim . . . . IL7 (Highest High-End Trim)
Phase Select Mode . . . . IL4 (Phase auto-select) if no neutral wire is connected
IL1 (Reverse-Phase) if neutral wire is connected

To Restore Factory Defaults

1. **Triple tap T**.

2. **Press and hold T**. **Continue to hold T** for approximately 3 seconds.

3. **Triple tap T**. 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 default your *APM* settings and may need to adjust low-end trim settings to accommodate your particular bulbs.

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