

# LUTRON®

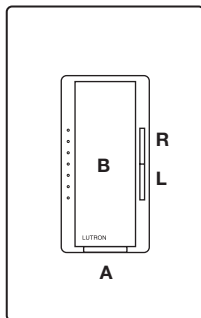
## For Your Information ...



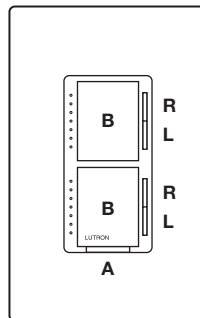
### Maestro® Advanced Programming Mode

Maestro® dimmers and timers contain Advanced Programming Mode [APM] features that allow the user to customize their control to meet their specific needs. This document serves as a supplement to the instruction sheet. Before entering Advanced Programming Mode, it is important to have a good understanding of the features included. For a summary of these features and further instructions, see the pages corresponding to your product.

**Dimmer**



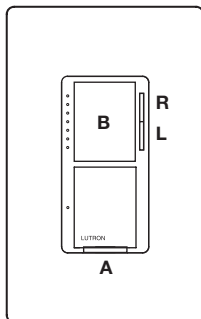
**Dual Dimmer**



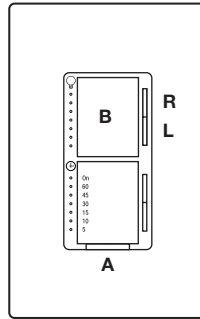
**Key**

- B** = Tap Button
- R** = Raise Rocker
- L** = Lower Rocker
- A** = Air Gap (FASS™)  
Pull OFF/Push ON

**Dimmer/Switch**

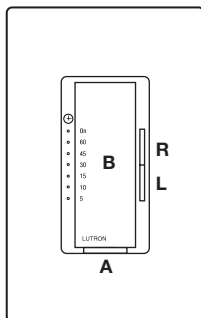


**Dimmer/Timer**

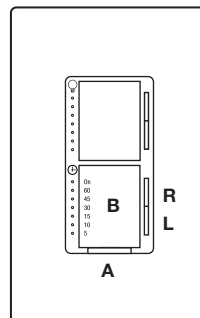


For **Dimmer** Products,  
see pages 2 through 6.

**Timer**



**Dimmer/Timer**



For **Timer** Products,  
see pages 7 through 11.

## Dimmer Advanced Programming Mode

This section applies to the Maestro® Dimmer and individual dimmers on the Dual Dimmer, Dimmer/Timer, and Dimmer/Switch. If you want to set the dimmer advanced features on the Dual Dimmer, use either the top or bottom set of Tap Buttons and Raise/Lower Rockers corresponding to the dimmer you wish to program. If you want to set the dimmer advanced features on the Dimmer/Timer or Dimmer/Switch, use the top set of Tap Buttons and Raise/Lower Rockers as described in the following pages.

## Explanation of Advanced Dimmer Features

**Preset Options:** The user has two options for the preset light level on the Dimmer: Locked Preset and Unlocked Preset.

**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 the Tap Button.

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

### What do I want?

If you always want the dimmer to come on to the same light level anytime you turn it on, choose the locked preset option. Remember, that you can always double tap the Tap Button when you want the lights to come on to full intensity. If it is important that the light return to the light level previously used, select the unlocked preset option.

**“On” Fade Time:** The user has options for how quickly the lights fade up when the dimmer is turned on. These options include fade times from off to maximum light output in as fast as 0.5 seconds and as slow as 5 seconds.

### What do I want?

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 rate so that the room is immediately illuminated. Art lighting or other accent lighting is often more pleasing with a slow fade time.

**“Off” Fade Time:** The user has options for how quickly the lights fade down when the dimmer is turned off. These options include fade times from maximum light output to “Off” as fast as 1.5 seconds and as slow as 15 seconds.

### What do I want?

Having the lights fade off slowly can be very useful, allowing you to exit the room while the lights are still on. How quickly they should fade off is typically a question of personal preference. Keep in mind that it may appear that the light is not turning off as expected if a fade time of 6 seconds or longer is selected. This could be confusing to a visitor or guest.

**Note:** On the Dual Dimmer and Dimmer/Timer, the dimmers have their own settings independent of the other dimmer or timer.

## Using Dimmer Advanced Programming Mode

Advanced Programming Mode consists of two modes of operation that the user can interact with. The Main Menu Mode allows the user to select which feature they would like to modify. The Selection Mode allows the user to change the setting of the feature they selected in the Main Menu Mode. **Note: Once a feature is modified, that modification is immediately saved.**

There is a step by step example on page 6.

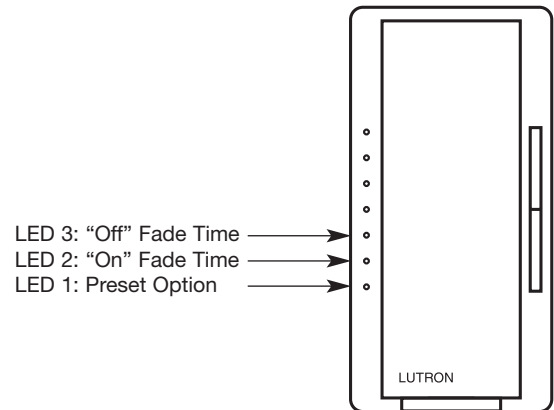
### Entering Main Menu Mode (refer to picture on first page)

1. **Pull** the Air Gap (FASS™) into the “Off” Position.
2. **Press and Hold** the Tap Button of the product you are programming.
3. **Push** the Air Gap to the “On” Position while continuing to hold the Tap Button for approximately 5 seconds. *The bottom LED will begin to blink to indicate that you have entered Advanced Programming Mode.*

**Note:** If there is no activity for 1 minute, the dimmer will automatically exit Advanced Programming Mode.

### Entering Selection Menu Mode

1. **Press the Raise/Lower Rocker** to change the LED Level to indicate which feature you would like to modify (refer to picture at right).
  - LED #3 – “Off” Fade Time
  - LED #2 – “On” Fade Time
  - LED #1 – Preset Option
2. **Press the Tap Button** once and the feature will be selected for modification.



### Selecting a Preset Option

1. While in Main Menu Mode, **press the Raise/Lower Rocker** until LED 1 is blinking.
2. **Press the Tap Button** once.

#### To select Locked Preset:

1. **Press the Raise/Lower Rocker** to adjust the light level to the desired Locked Preset. The quickly flashing LED will move up and down as the preset is changed. Your light will get brighter or dimmer to reflect the Locked Preset level as you adjust this feature.
2. **Press the Tap Button** once to return to the Main Menu.

#### To select Unlocked Preset:

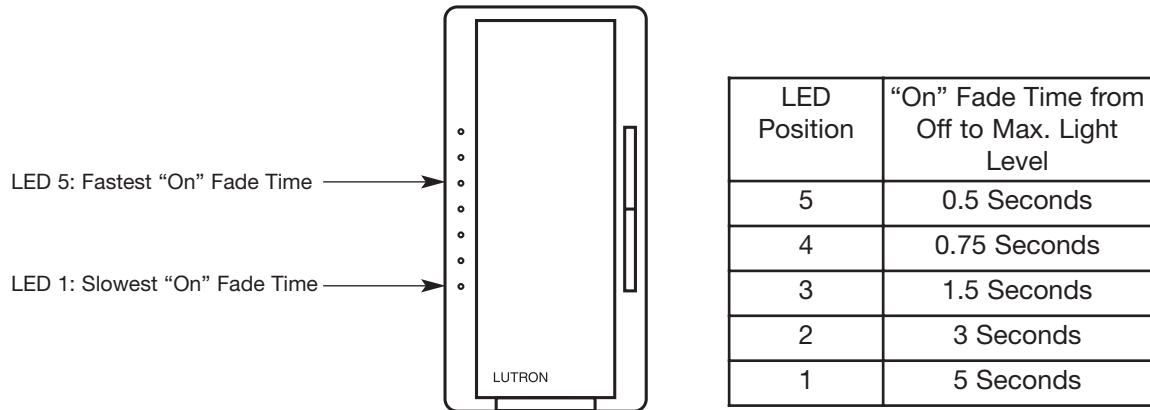
1. **Press the Lower Rocker** until the quickly flashing LED disappears. Please note that the light will remain at its minimum output when you perform this action.
2. **Press the Tap Button** once to return to the Main Menu.

**Note:** The default setting is an Unlocked Preset.

## Selecting the “On” Fade Time

1. While in Main Menu Mode, **press the Raise/Lower Rocker** until LED 2 is blinking.
2. **Press the Tap Button** once. A quickly flashing LED will indicate which fade time has been selected (refer to picture below).
3. **Press the Raise/Lower Rocker** to adjust the quickly blinking LED to the position that represents the desired fade time.
4. **Press the Tap Button** once to return to the Main Menu.

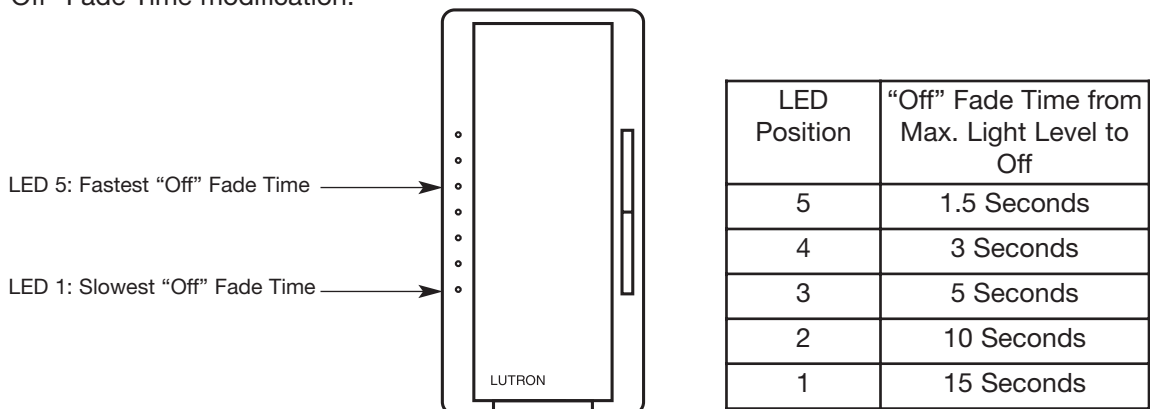
**Note:** The default “On” Fade Time is 3 seconds. The fade speed for Raise and Lower operations are unaffected by any “On” Fade Time modification.



## Selecting the “Off” Fade Time

1. While in Main Menu Mode, **press the Raise/Lower Rocker** until LED 3 is blinking.
2. **Press the Tap Button** once. A quickly flashing LED will indicate which fade time has been selected (refer to picture below).
3. **Press the Raise/Lower Rocker** to adjust the quickly blinking LED to the position that represents the desired fade time.
4. **Press the Tap Button** once to return to the Main Menu.

**Note:** The default “Off” Fade Time is 3 seconds. The fade speed for Raise and Lower operations are unaffected by any “Off” Fade Time modification.



## Exiting Main Menu Mode

1. **Press and Hold the Tap Button** for 4 seconds to exit the Main Menu. Alternatively, wait 1 minute or pull the Air Gap and the dimmer will automatically exit from Advanced Programming Mode.

## Restoring Factory Defaults

If you would like to return the dimmer to its original factory settings, please do the following:

1. **Pull** the Air Gap (FASS™) to the “Off” Position.
2. **Press and Hold** the Tap Button of the product you wish to reset.
3. **Push** the Air Gap to the “On” Position while continuing to hold the Tap Button for approximately 5 seconds.
4. The unit will enter Advanced Programming Mode – **Continue to Hold** the Tap Button for another 8 seconds.
5. When the dimmer appears to Reset and Fade to the Maximum Light Level, the unit has been successfully restored to its factory defaults.

### What are the factory defaults for the dimmer?

Locked Preset is disabled

“On” Fade Time from Off to the Maximum Light Level is 3 seconds

“Off” Fade Time from the Maximum Light Level to Off is 3 seconds

## Dimmer Step by Step Example:

Let's assume we want to program a dimmer with the following settings:

A locked preset at 50% light level

The lights fade on to the Maximum Light Level from Off in 0.75 seconds

The lights take 10 seconds to fade Off from the Maximum Light Level

### Step 1: Entering Advanced Programming Mode

1. **Pull** the Air Gap (FASS™) to the “Off” Position.
2. **Press and Hold** the Tap Button of the dimmer you wish to program.
3. **Push** the Air Gap to the “On” Position while **continuing to hold** the Tap Button for approximately 5 seconds.
4. After holding the Tap Button for 5 seconds, an LED should start to blink. Once you see a blinking LED, release the Tap Button.

### Step 2: Select Preset Option as the feature you would like to modify

1. The bottom LED should be blinking. If not, **Press** the Lower Rocker until LED #1 is blinking.
2. **Press** the Tap Button once to enter Selection Mode.

### Step 3: Adjusting the Locked Preset light level

*LED blinks at a faster rate to indicate you have entered Selection Mode*

1. **Press** the Raise Rocker once to ensure the preset will be locked (you should see a blinking LED).
2. **Press** the Raise/Lower Rocker until the light is at mid-level (LED #4 should be blinking) to set the locked preset at 50% light level.
3. **Press** the Tap Button once to return to Main Menu Mode.

### Step 4: Select “On” Fade Time as the feature you would like to modify

*LED blinks at a slower rate to indicate you have entered Main Menu Mode*

1. **Press** the Raise Rocker once to make LED #2 start blinking.
2. **Press** the Tap Button once to enter Selection Mode.

### Step 5: Adjusting the “On” Fade Time

*LED blinks at a faster rate to indicate you have entered Selection Mode*

1. **Press and Hold** the Raise/Lower Rocker until LED #4 is blinking to make your lights fade from off to the maximum light level in 0.75 seconds.
2. **Press** the Tap Button once to return to Main Menu Mode.

### Step 6: Select “Off” Fade Time as the feature you would like to modify

*LED blinks at a slower rate to indicate you have entered Main Menu Mode*

1. **Press** the Raise/Lower Rocker once to make LED #3 start blinking.
2. **Press** the Tap Button once to enter Selection Mode.

### Step 7: Adjusting the “Off” Fade Time

*LED blinks at a faster rate to indicate you have entered Selection Mode*

1. **Press and Hold** the Raise/Lower Rocker until LED #2 is blinking to make your lights take 10 seconds to fade to off from the maximum light level.

### Step 8: Exiting Advanced Programming Mode

1. **Press and Hold** the Tap Button for approximately 4 seconds.

Once the LED has stopped blinking, the dimmer has returned to its normal operating mode and all of your settings have been saved.

## Timer Advanced Programming Mode

This section applies to the Maestro® Timer and the individual timer on the Dimmer/Timer. If you want to use the timer advanced features on the Dimmer/Timer, use the bottom set of Tap Buttons and Raise/Lower Rockers as described in the following pages.

## Explanation of Advanced Timer Features

**Preset Options:** 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.

**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.

**Bypass Mode Options:** The user has two options for the maximum level of the timer: the “On” setting (Enable Bypass) and the 60-minute setting (Disable Bypass).

**What do I want?**

If you always want the timer to time out regardless of how it is turned on, select the Disable Bypass Mode option. This is useful for situations in which you would like the timer to always turn off automatically, even if the user double taps the Tap Button. If you want to be able to access the “On” setting, select the Enable Bypass Mode option.

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

## Using Timer Advanced Programming Mode

Advanced Programming Mode consists of two modes of operation that the user can interact with. The Main Menu Mode allows the user to select which feature they would like to modify. The Selection Mode allows the user to change the setting of the feature they selected in the Main Menu Mode. **Note: Once a feature is modified, that modification is immediately saved.**

There is a step by step example on page 11.

### Entering Main Menu Mode (refer to picture on first page)

1. **Pull** the Air Gap (FASS™) into the “Off” Position.
2. **Press and Hold** the Tap Button of the product you’re programming.
3. **Push** the Air Gap to the “On” Position while continuing to hold the Tap Button for approximately 5 seconds.

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

**Note:** If there is no activity for 1 minute, the timer will automatically exit Advanced Programming Mode.

### Entering Selection Menu Mode

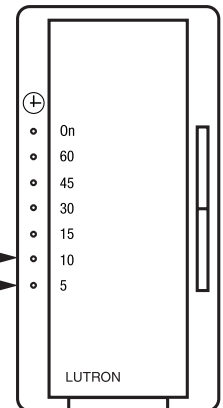
1. **Press the Raise/Lower Rocker** to change the LED Level to indicate which feature you would like to modify (refer to picture at right).

LED #2 – Bypass Mode Option

LED #1 – Preset Option

2. **Press the Tap Button** once and the feature will be selected for modification.

LED 2: Bypass Mode Option →  
LED 1: Preset Option →



### Selecting a Preset Option

1. While in Main Menu Mode, **press the Raise/Lower Rocker** until LED 1 is blinking.
2. **Press the Tap Button** once.

#### To select Locked Preset:

1. **Press the Raise/Lower Rocker** to adjust the time level to the desired Locked Preset. The quickly flashing LED will move up and down as the preset is changed.
2. **Press the Tap Button** once to return to the Main Menu.

#### To select Unlocked Preset:

1. **Press the Lower Rocker** until the quickly flashing LED disappears.
2. **Press the Tap Button** once to return to the Main Menu.

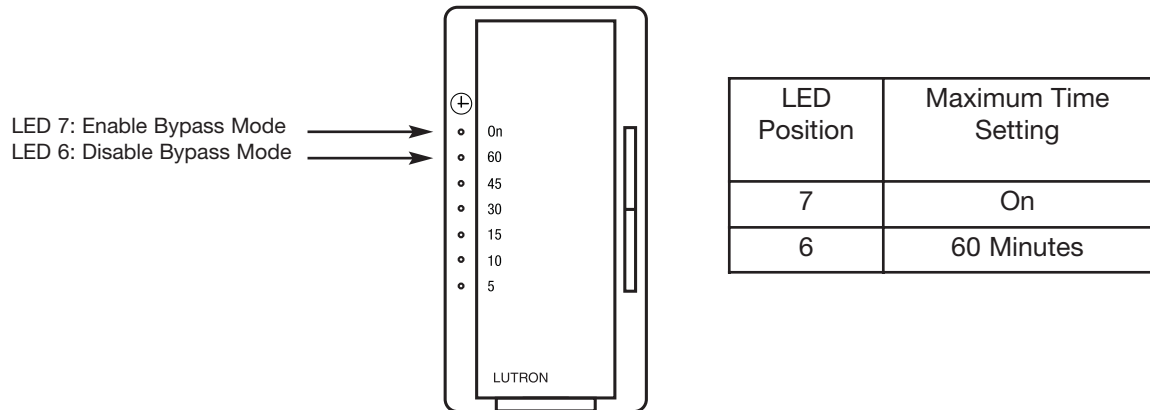
**Note:** The default setting is an Unlocked Preset.



## Selecting a Bypass Mode option

1. While in Main Menu Mode, **press the Raise/Lower Rocker** until LED 2 is blinking.
2. **Press the Tap Button** once. A quickly flashing LED will indicate the maximum time setting (refer to picture below).
3. **Press the Raise/Lower Rocker** to adjust the desired maximum time setting.

**Note:** The default Bypass Mode setting is “enabled.”



## Exiting Main Menu Mode

1. **Press and Hold the Tap Button** for 4 seconds to exit the Main Menu. Alternatively, wait 1 minute or pull the Air Gap and the timer will automatically exit from Advanced Programming Mode.

## Restoring Factory Defaults

If you would like to return the timer to its original factory settings, please do the following:

1. **Pull** the Air Gap (FASS™) to the “Off” Position.
2. **Press and Hold** the Tap Button of the product you wish to reset.
3. **Push** the Air Gap to the “On” Position while continuing to hold the Tap Button for approximately 5 seconds.
4. The unit will enter Advanced Programming Mode – **Continue to Hold** the Tap Button for another 8 seconds.
5. When the timer exits Advanced Programming Mode and the LED level is at the “On” setting, the unit has been successfully restored to its factory defaults.

### What are the factory defaults for the timer?

Locked Preset is disabled  
Bypass Mode is enabled

## Timer Step by Step Example:

Let's assume we want to program a timer with the following settings:

- A locked preset at 30 minutes
- Bypass Mode disabled

### Step 1: Entering Advanced Programming Mode

1. **Pull** the Air Gap (FASS™) to the “Off” Position.
2. **Press and Hold** the Tap Button of the timer you wish to program.
3. **Push** the Air Gap to the “On” Position while **continuing to hold** the Tap Button for approximately 5 seconds.
4. After holding the Tap Button for 5 seconds, an LED should start to blink. Once you see a blinking LED, release the Tap Button.

### Step 2: Select Preset Option as the feature you would like to modify

1. The bottom LED should be blinking. If not, **Press** the Lower Rocker until LED #1 is blinking.
2. **Press** the Tap Button once to enter Selection Mode.

### Step 3: Adjusting the Locked Preset time level

*LED blinks at a faster rate to indicate you have entered Selection Mode*

1. **Press** the Raise Rocker once to ensure the preset will be locked (you should see a blinking LED).
2. **Press** the Raise/Lower Rocker until the LED is at mid-level (LED #4 should be blinking) to set the locked preset at 30 minutes.
3. **Press** the Tap Button once to return to Main Menu Mode.

### Step 4: Select the Bypass Mode Option as the feature you would like to modify

*LED blinks at a slower rate to indicate you have entered Main Menu Mode*

1. **Press** the Raise Rocker once to make LED #2 start blinking.
2. **Press** the Tap Button once to enter Selection Mode.

### Step 5: Adjusting the Bypass Mode Option

*LED blinks at a faster rate to indicate you have entered Selection Mode*

1. **Press** the Lower Rocker once to set the Bypass Mode Option at the “60 minute” setting to disable Bypass Mode.
2. **Press** the Tap Button once to return to Main Menu Mode.

### Step 6: Exiting Advanced Programming Mode

1. **Press and Hold** the Tap Button for approximately 4 seconds.

Once the LED has stopped blinking, the timer has returned to its normal operating mode and all of your settings have been saved.

### **Worldwide Technical and Sales Assistance**

If you need assistance call the toll-free **Lutron Technical Support Center**. Please provide exact model number when calling.

24 hours/day + 7 days/week

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Visit us on the web at [www.lutron.com](http://www.lutron.com)

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The products described in this application note may be covered under the following U.S. patent: 7,190,125; and corresponding foreign patents. Other U.S. and foreign patents may be pending.

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