Advanced Programming Mode (APM) for manually programmed systems

Overview

RadioRA® 2 dimmers, keypads, Visor Control Receivers, Hybrid keypads, and GRAFIK Eye® QS Wireless control units contain Advanced Programming Mode (APM) which allows the user to customize their devices according to their specific needs. APM is not available for switches or remote dimmers / switches. This document serves as a supplement to the installation instructions provided with the products and the system Setup Guide.

If the devices in a system have been PC programmed, then the features mentioned below must be modified through the PC program and can not be modified through APM. PC programming a system will override all previously programmed APM settings.

Before entering APM, it is important to have a good understanding of the features included. For a summary of these features please see **Advanced Features Summary** in each section.

Table of Contents

Dimmer

Advanced Features Summary

Feature	Description	Default
High End Trim	Select the maximum available light limit.	90%
Low End Trim	Select the minimum available light limit.	5%
LED Brightness	Select the brightness of the LEDs when the dimmer is off.	100%
Delayed Long Fade to Off	Set the length of time to wait before entering a long fade to off.	30 seconds
Fade Off Rate	Control the rate at which the dimmer fades from full intensity to off when the tapswitch is pressed.	2.5 seconds on to off
Fade On Time	Set the amount of time the dimmer takes to fade from off to preset intensity when the tapswitch is pressed.	0.75 seconds off to preset
Protected Preset	Set the intensity that the dimmer will always turn on to when the tapswitch is pressed once.	Disabled (off)
Load Type (Secondary APM)	Select the type of load that the dimmer will be controlling. This feature is only available on RRD-6NA.	Auto Load Detect
Blip Option (Secondary APM)	This feature is only available on RRD-6NE and improves performance with some ELV loads.	Blip On
Dimmer/Switch Mode (Secondary APM)	Configure the dimmer to function as a dimmer or a switch.	Dimmer
Vacancy Light Level Preset	Select the light level of the dimmer during vacancy.	Dimmer goes to the OFF state
Overriding Daylighting Timers*	The user has the option to override the normal operation of daylighting in the system when using a daylight sensor. By default when this option is disabled the override period is two hours for which the daylight sensor will have no impact. When this option is enabled the daylight sensor will continuously impact the lighting level regardless of user interaction.	Disabled
Daylight Sensor Turns Lights On*	Allow the daylight sensor the to turn lights on when in the OFF state	Disabled

* Wireless daylight sensors can only be used with RadioRA® 2 dimmers in manually programmed systems. Once a dimmer is added to a repeater, the daylight sensor cannot be used.

Enter APM
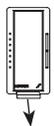
1. **Pull** the FASS™ out.
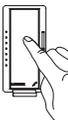
2. **Press and hold** the tapswitch.

3. While continuing to hold the tapswitch, **push the FASS™ in** and continue to hold the tapswitch for 5 seconds until the bottom LED begins to normal flash (once per second).

Note: If the dimmer has already been PC programmed, the LEDs will normal flash for 10 seconds and return to normal operation instead of entering APM.

Dimmer

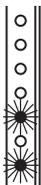## Main Menu

1. Navigate the main menu.

a. Primary APM:
i. **Tap the raise / lower rocker** to change the LED position to indicate which feature to modify.

```
○ ◄──────── High End Trim
○ ◄──────── Low End Trim
○ ◄──────── LED Brightness
○ ◄──────── Delayed Long Fade to Off
○ ◄──────── Fade Off Rate
○ ◄──────── Fade On Time
○ ◄──────── Protected Preset
```

b. Secondary APM:

i. To access the secondary APM, **Tap the raise rocker** until the top LED is blinking.

ii. Press and hold the raise rocker for 3 seconds until LEDs 1 & 3 flash.

```
○
○
○
○
✳
○
✳
```

iii. Press the tapswitch to select Secondary APM. LED 7 and the LED selected by the user will blink.

iv. **Tap the raise / lower rocker** to change the LED position to indicate which feature to modify.

Note: Once you are in Secondary APM mode you can't return to main menu mode, unless you exit APM by pressing and holding the toggle button or power cycling.

```
○
○ ◄──────── Daylight Sensor Turns Lights On
○ ◄──────── Overriding Daylighting Timers
○ ◄──────── Vacancy Light Level Preset
○ ◄──────── Dimmer / Switch Mode
○ ◄──────── Blip Option (RRD-6NE only)
○ ◄──────── Load Type (RRD-6NA only)
```

2. **Press and release the tapswitch** to select the feature for modification. Once the feature is selected the corresponding LED will flash.

Note: If a menu item does not pertain to a device, the menu option will be unavailable and will not be able to be selected.

Note: If the LED normal flashes (1x per second), the dimmer is currently in Primary APM; but if the LED rapid flashes (10x per second), the dimmer is currently in Secondary APM.

3. **Tap the raise / lower rocker** to select the desired setting for the selected feature.

a. High End Trim:

Adjust the load to the desired high end limit (top 3 LEDs only) between 95% and 67%. Load will illuminate to corresponding percentage.

```
✳ ◄──────── 95% (Default)
○
○ ◄──────── 67%
○
○
○
○
```
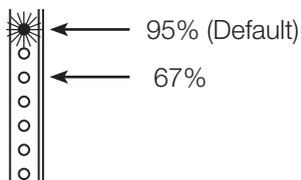
Dimmer

Main Menu (continued)

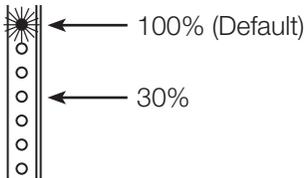### b. Low End Trim:

Adjust the load to the desired low end limit (bottom 3 LEDs only) between 1% and 34%. Load will illuminate to corresponding percentage.
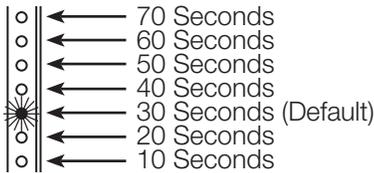
←——— 34%

←——— 1% (Default)

c. LED Brightness:

Chose the desired LED brightness of 100% (top LED) or 30% (middle LED).

←——— 100% (Default)

←——— 30%

d. Delayed Long Fade to Off:

Select the LED that represents the desired waiting period before entering a long fade to off.

←——— 70 Seconds
←——— 60 Seconds
←——— 50 Seconds
←——— 40 Seconds
←——— 30 Seconds (Default)
←——— 20 Seconds
←——— 10 Seconds

e. Fade Off Rate:

Select the LED that represents the desired fade rate from full intensity to off (bottom 5 LEDs only).

←——— 15 Seconds
←——— 5 Seconds
←——— 3 seconds
←——— 2.5 Seconds (Default)
←——— 0.75 Seconds

f. Fade On Time:

Select the LED that represents the desired fade time from off to preset intensity (bottom 5 LEDs only).

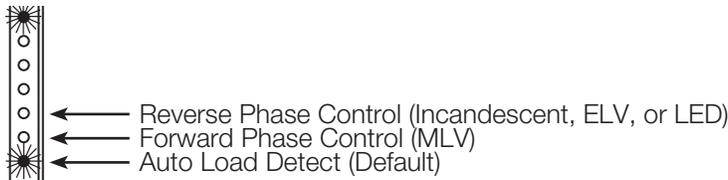|	Single Tap	Double Tap
←———	15 Seconds	5 Seconds
←———	5 Seconds	3 seconds
←———	3 seconds	2.5 Seconds
←———	2.5 Seconds	0.75 Seconds
←———	0.75 Seconds (Default)	0.75 Seconds

Dimmer

Main Menu (continued)

g. Protected Preset:

Hold the lower rocker at the lowest light intensity for 3 seconds, until the bottom 3 LEDs scroll to toggle the protected preset feature between disabled (default) or enabled. Use the raise/lower rocker to adjust the load to the desired preset level.
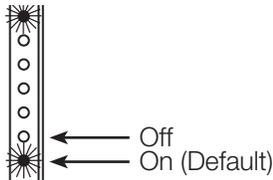
3 LEDs scrolling:
Disabled (Default)

OR

95%
84%
67%
50%
34%
17%
1%
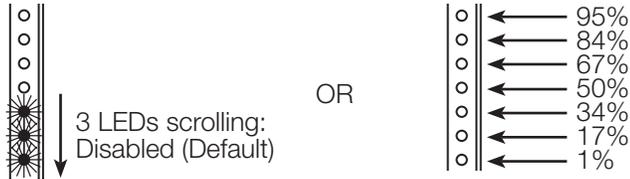
h. Load Type (Secondary APM):

Select the load type that the dimmer will be controlling. Only available on RRD-6NA.

Reverse Phase Control (Incandescent, ELV, or LED)
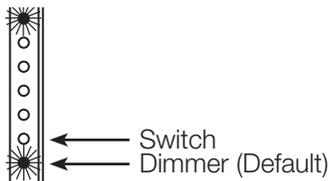Forward Phase Control (MLV)
Auto Load Detect (Default)

i. Blip Option (Secondary APM):

Choose the desired blip option. Only available on RRD-6NE.

Off
On (Default)

j. Dimmer/Switch Mode (Secondary APM):

Choose the LED that represents the desired operation mode.

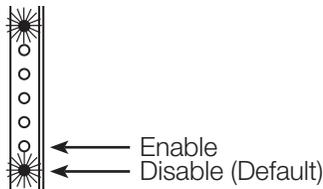Switch
Dimmer (Default)

Dimmer

Main Menu (continued)

k. Vacancy Light Level Preset :

Choose the LED that represents the desired vacancy light level. Both the LEDs and lights will adjust when the rocker is pressed. To set the vacancy level to the OFF state, use the lower rocker to select LED 1. Press the lower rocker for 5 seconds until LED 5 and 7 blink to indicate that Off state is selected.
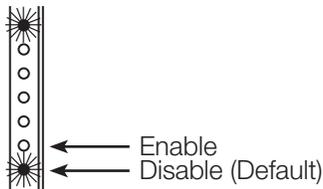
OFF State (Default)

OR

50%
34%
17%
1%
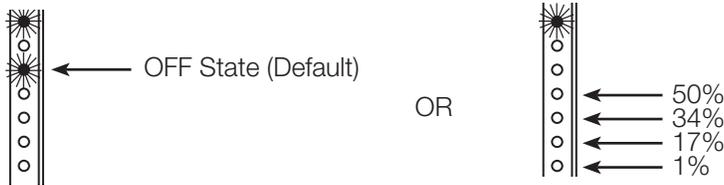
l. Overriding Daylighting Timers:

Enable or disable daylight sensor override.

Enable
Disable (Default)

m. Daylight Sensor Turns Lights On:

Enable or disable the daylight sensor to affect light levels when in the OFF state.

Enable
Disable (Default)

4. Press and release the tapswitch to save the current setting and return to the previous menu.

5. Press and hold the tapswitch for 3 seconds until the LEDs stop flashing to exit APM.

Note: If there is no activity for 1 minute or the FASS™ is pulled out, the dimmer will automatically exit APM without saving the recent changes.
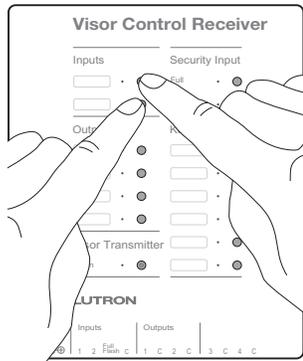
Visor Control Receiver

Advanced Features Summary

| Feature	Description	Default
Input 1 Settings	Toggle Input 1 between momentary or maintained.	Momentary
Input 2 Settings	Toggle Input 2 between momentary or maintained.	Momentary

Enter APM for Inputs

1. **Press and hold** both "Inputs" buttons for 10 seconds until the "Inputs" LEDs flash rapidly (10 times per second).

Note: If the Receiver has already been PC programmed it will return to normal operation after the LEDs flash rapidly for 10 seconds instead of entering APM.

2. **Tap the "Inputs" button** to be modified until the desired setting is represented by either a solid or flashing LED.
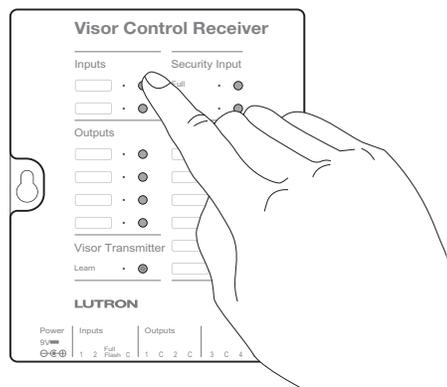
Feature	LED Flashing Once per Second (Default)	LED on Solid
Input 1	Momentary	Maintained
Input 2	Momentary	Maintained

3. Press and hold both "Inputs" buttons for 3 seconds until the "Input" LEDs flash rapidly again to exit APM.

Note: If there is no activity for 1 minute, the Receiver will automatically exit APM without saving the recent changes.

Note: The security input on the Receiver is a maintained input. It cannot be changed through APM.

Note: The outputs on the Receiver are pulsed outputs. They cannot be changed through APM.
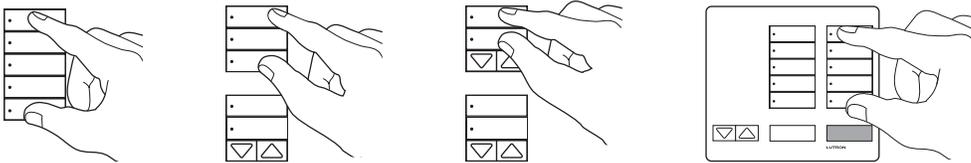
Keypad

Advanced Features Summary

Feature	Description	Default
Column Type	Select the desired column type for each column on a keypad.	Toggle
Raise/Lower Type	Choose the method that selects which assigned zones will be affected by the raise/lower buttons.	Last button pressed
Backlight Intensity	Select the brightness of the backlights.	100%
Scene Save	Enable or disable the ability to save new light levels or shade/drapery positions.	Enabled
Wake-up Method[1]	Chose the method by which a tabletop keypad "wakes up" when battery powered.	Wake-up and activate
IR Functionality[2]	Enable or disable the Infrared (IR) receiver on a keypad.	Enabled

[1]Tabletop keypads only.

[2]IR wall keypads only.

Enter APM

1. **Press and hold the top and bottom buttons** of the top right column of the desired keypad for 10 seconds until the LEDs flash rapidly (10 times per second). Do not release the buttons when the top LED starts to flash after 3 seconds.
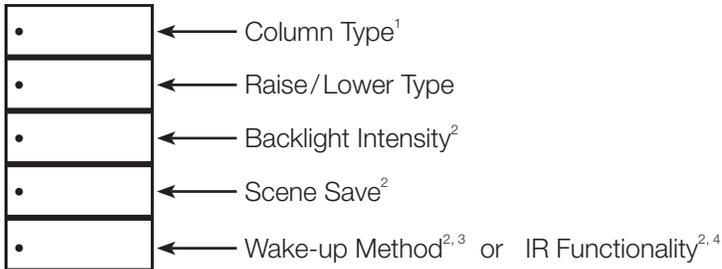

Note: If the keypad column has already been PC programmed, it will return to normal operation after the LEDs flash rapidly instead of entering APM.

Continued on next page...

Keypad

Enter APM (continued)

2. **Tap the button** that corresponds to the feature to be modified, until the desired setting is represented by either a solid or flashing LED.

·	←——— Column Type[1]
·	←——— Raise / Lower Type
·	←——— Backlight Intensity[2]
·	←——— Scene Save[2]
·	←——— Wake-up Method[2,3] or IR Functionality[2,4]

Feature	LED on Solid (Default)	LED Flashing Once per Second
Column Type[1]	Individual toggle buttons (for on/off and scene status).	Wireless shade / drapery column of buttons.
Raise / Lower	Zones assigned to the last button pressed will be affected by a raise / lower.	Zones assigned to the last button double tapped will be affected by a raise / lower.
Backlight Intensity[2]	Tap to cycle through 4 backlight intensities.	Backlights off.
Scene Save[2]	Enabled (can save new levels / positions).	Disabled (can not save new levels / positions).
Wake-up Method[2,3]	Wake-up and activate the button pressed.	Wake-up and show the current status of lights and shades / draperies.
IR Functionality[2,4]	Enabled.	Disabled

[1] The column type can be modified for each column on a keypad.

[2] If a keypad column only has 2 or 3 buttons, then only the first 2 or 3 options are available.

[3] Battery powered tabletop seeTouch® keypads only.

[4] Wall seeTouch® keypads only.

3. **Press and hold the top and bottom buttons** of the top right column on the selected keypad for 3 seconds until the LEDs stop flashing to exit APM.

   Note: If there is no activity for 1 minute, the keypad will automatically exit APM without saving the recent changes.

GRAFIK Eye® QS Wireless Control Unit

Advanced Features Summary

Feature	Description	Default
Column Type	Select the desired column type for each column on a keypad.	Toggle[1]
Raise/Lower Type	Choose the method that selects which assigned zones will be affected by the raise/lower buttons.	Last button pressed
Backlight Intensity	Select the brightness of the backlights.	100%
Scene Save	Enable or disable the ability to save new light levels or shade/drapery positions.	Enabled
Wake-up Method	Chose the method by which a tabletop keypad "wakes up" when battery powered.	Wake-up and activate
IR Functionality	Enable or disable the Infrared (IR) receiver on a keypad.	Enabled

[1]On a GRAFIK Eye® QS wireless panel, the right column defaults to a local scene column and the other columns default to shade columns.
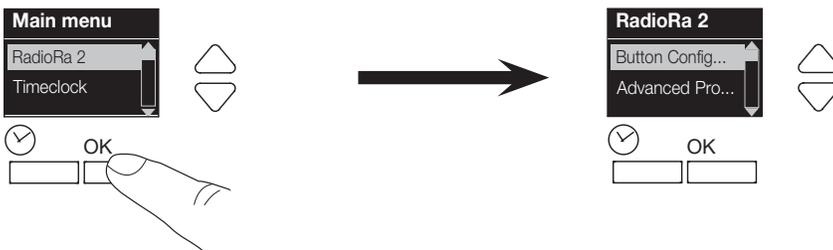
Enter APM

1. **Press and hold the top and bottom buttons** of the right column for 6 seconds until the LEDs begin to scroll and the Main menu appears on the display.
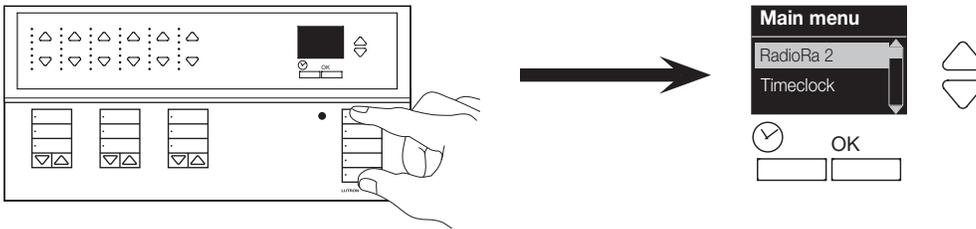
2. **Press the "OK" button** to select the "RadioRA 2" menu on the display.

   Note: If "RadioRa 2" does not appear in the Main menu then the control unit has not been added to a RadioRA® 2 *system. Assign the control unit to a Main Repeater according to the system Setup Guide.*
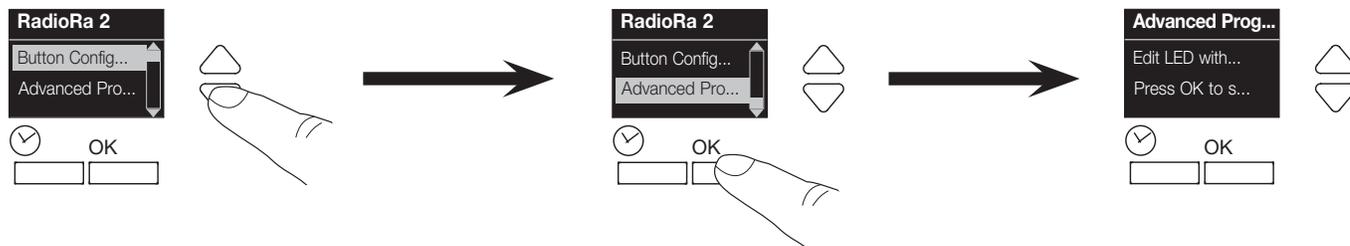

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GRAFIK Eye® QS Wireless Control Unit

Enter APM (continued)

3. **Use the Master Lower button** to select "Advanced Programming", then press the "OK" button to confirm the selection.

Note: If the control unit has already been PC programmed, the display will say "PC Programmed" and the control unit will return to normal operation instead of entering APM.

4. **Tap the button** that corresponds to the feature to be modified until the desired setting is represented by either a solid or flashing LED.


Column Type[1]

Raise/Lower Type[2]
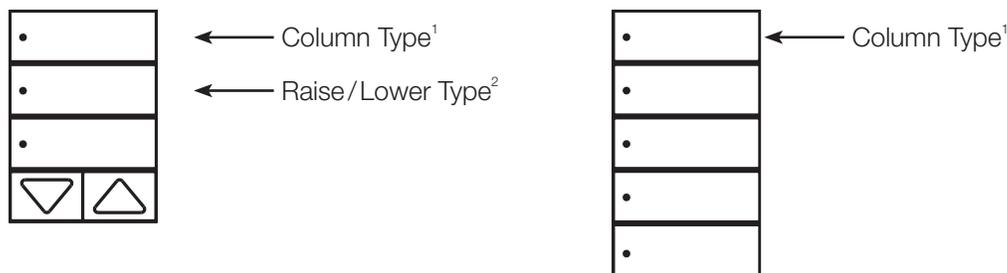
Column Type[1]

| Feature	LED on Solid (Default)	LED Flashing Once per Second
Column Type[1]	Individual toggle buttons (for on/off and scene status).	Wireless shade/drapery (except for right column, which is a local scene column).
Raise/Lower[2]	Zones assigned to the last button pressed will be affected by a raise/lower.	Zones assigned to the last button double tapped will be affected by a raise/lower.

[1] The column type can be modified for each column.

[2] Shade columns only.

5. **Press the "OK" button** to save settings.

Saved
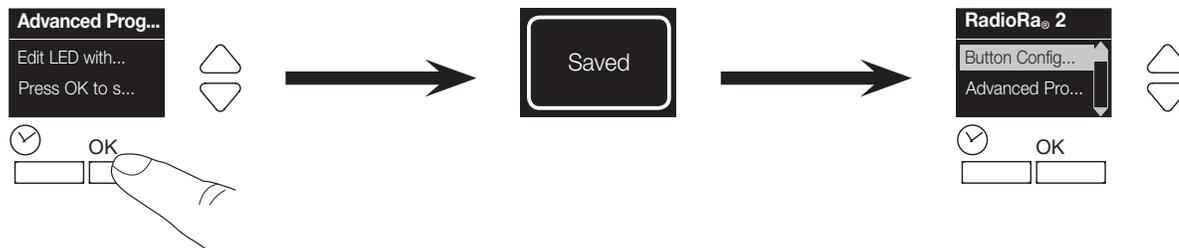
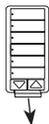6. **Press and hold the top and bottom buttons** of the right column until the LEDs stop scrolling to exit APM.
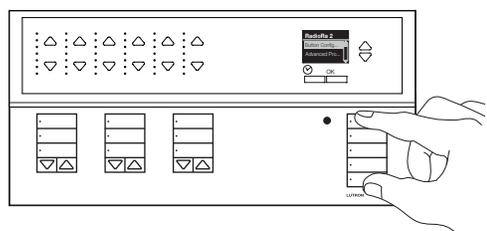
Hybrid Keypad (Dimmer APM)

Advanced Features Summary

Feature	Description	Default
High End Trim	Select the maximum available light limit.	90%
Low End Trim	Select the minimum available light limit.	5%

Enter Dimmer APM

1. **Pull** the FASS_{TM} out.

2. **Press and hold** the top button.

3. While continuing to hold the top button, **push the FASS_{TM} in** and continue to hold the button for 5 seconds, until the top LED begins to normal flash (once per second).

Note: If the Hybrid keypad has already been PC programmed, the LEDs will normal flash for 10 seconds and return to normal operation instead of entering APM.

Navigate the Main Menu

1. **Tap the button** that corresponds to the feature to be modified.

   High End Trim
   Low End Trim
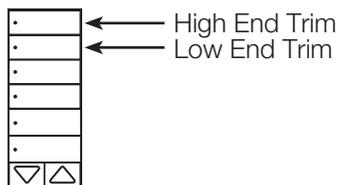
2. **Tap the raise/lower buttons** to adjust the load to the desired setting.

   a. High End Trim:

   Adjust the load to the desired high end limit between 100% and 64%. Load will illuminate to corresponding percentage.

   b. Low End Trim:

   Adjust the load to the desired low end limit between 1% and 34%. Load will illuminate to corresponding percentage..

3. **Press and hold the top button** for 3 seconds until the LEDs stop flashing to exit APM.

   Note: If there is no activity for 1 minute or the FASS_{TM} is pulled out, the Hybrid keypad will automatically exit APM without saving the recent changes.

Hybrid Keypad (Keypad APM)

Advanced Features Summary

| Feature	Description	Default
Column Type	Select the desired column type for each column on a keypad.	Toggle
Raise / Lower Type	Choose the method that selects which assigned zones will be affected by the raise / lower buttons.	Last button pressed
Backlight Intensity	Select the brightness of the backlights.	100%
Scene Save	Enable or disable the ability to save new light levels or shade / drapery positions.	Enabled

Enter Keypad APM

1. **Press and hold the top and bottom buttons** for 10 seconds until the LEDs flash rapidly (10 times per second). Do not release the buttons when the top LED starts to flash after 3 seconds.

Note: If the Hybrid keypad has already been PC programmed it will return to normal operation after the LEDs flash rapidly instead of entering APM.

2. **Tap the button** that corresponds to the feature to be modified until the desired setting is represented by either a solid or flashing LED.

← Column Type

← Raise / Lower Type

← Backlight Intensity

← Scene Save
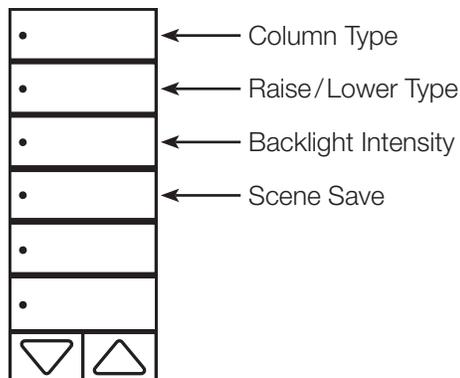
Feature	LED on Solid (Default)	LED Flashing Once per Second
Column Type	Always solid. Column is programmed by individual toggle buttons.	Cannot be changed. Flashes rapidly if pressed.
Raise / Lower	Zones assigned to the last button pressed will be affected by a raise / lower.	Zones assigned to the last button double tapped will be affected by a raise / lower.
Backlight Intensity	Tap to cycle through 4 backlight intensities.	Backlights off.
Scene Save	Enabled (can save new levels / positions).	Disabled (can not save new levels / positions).

3. **Press and hold the top and bottom buttons** for 3 seconds until the LEDs stop flashing to exit APM.

Note: If there is no activity for 1 minute or the FASS™ is pulled out, the Hybrid keypad will automatically exit APM without saving the recent changes.

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