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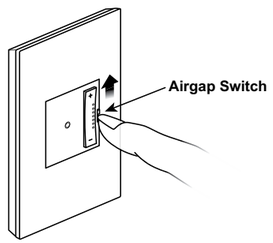
WIRELESS LIGHTING SPECIFICATION GUIDE

Table of Contents

Safety Considerations

Lamp Replacement

It is a safety requirement that lighting loads be electrically isolated for relamping. To do this, use the air-gap switch to the right of the adorne device as shown and move the switch upwards. When the LED goes out, the load is safely isolated for relamping. To restore normal operation, move the switch back to the down position.



Dimmer Derating

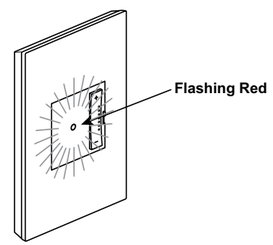
For multi-gang installations, use pliers to break off the specified heat sink fins.

De-rate the maximum load according to the following table.

	Rated Load	2-Gang Installation	3-Gang Installation
Incandescent/Halogen	700W	600W/600W	600W/500W/600W
MLV	700VA	600VA/600VA	600VA/500VA/600VA
EFL	5.5A	5.5A/5.5A	5A/5A/5A
ELV	700W	600W/600W	600W/500W/600W

Overload Protection

adorne Wireless Lighting dimmers and switches feature overload and short-circuit protection. In the event of an overload condition, the device will stop working, and the status LED will be rapidly flashing red at 2 Hz. Set the dimmer to off, disconnect loads in excess of the dimmer's rating, and try again.



adorne Whole-House Wireless

System range:

- More than 100 feet (up to 300 feet with use of repeater MRR2-G)
- Supports up to 100 loads

The Whole-House system provides unrivaled convenience, security, and energy-savings for both remodel projects and new construction. The ability to set scenes allows you to create the perfect lighting environment in multiple rooms or the entire house, all at the touch of a single button.

Convenience

- Coordinated control of lights, lamps, ceiling fans, and small appliances
- One-touch scene selection
- Easy grouping of dimmers and switches for flexible control
- Smart phone, tablet, and computer control options to give you access to your home's lighting from anywhere in the world

Security and Safety

- Control as many lights in the home as desired from anywhere in the home or with your smart phone
- One-touch whole-house on/off
- Welcome home scenes that illuminate pathways and garages for a safe arrival
- Timed events make the home look occupied, even when you are away
- Easily integrates with alarm and fire systems*
- Turns off fans in the event of a fire*

		SOFTAP	TOUCH
Switch		●	●
Dimmer		●	●
	Incandescent/Halogen	●	●
	CFL/LED	●	●
	Fluorescent	●	●
	Forward-Phase Electronic Low Voltage	●	●
	Reverse-Phase Electronic Low Voltage	●	●
	Magnetic Low Voltage	●	●

*Requires integration of RS232 to RF Interface device (MR232).

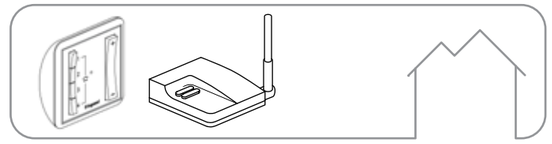
adorne Wireless Lighting Control Design

adorne Wireless Lighting System's unique hierarchal structure provides three levels of control for unprecedented convenience and flexibility.

HOUSE

A HOUSE may contain practically any number of adorne Wireless Lighting devices, GROUPS and/or ROOMS.

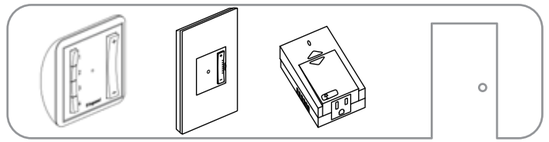
Whole-House Remote Controls and Repeaters are HOUSE level devices.



ROOM

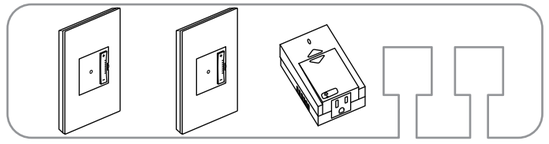
A ROOM may contain one or more Room Remote Controls to operate a combination of any number of adorne Wireless Lighting devices and/or GROUPS.

Room remote controls, master switches & dimmers, and plug-in modules can operate a combination of any number of adorne Wireless Lighting devices and/or GROUPS.



GROUP

GROUP any number of master switches & dimmers, plug-in modules, and remote switches & dimmers into an "intelligent" three-way or four-way switch circuit.



Configuring an adorne Wireless Lighting System

In order to function, adorne Wireless Lighting devices have to be "bound" together into a simple wireless network. This is very easy to do, but it helps to understand how and why it works.

1. All adorne Wireless Lighting devices must obtain a unique House ID to prevent interference with neighboring systems.
2. In addition, adorne Wireless Lighting devices may be bound together in GROUPS, usually one or more remote switches & dimmers with a master switch, dimmer, or plug-in module.
3. All adorne Wireless Lighting devices and GROUPS in a room may be bound together with one or more Room Remote Control(s) to provide simple control of multiple recorded lighting scenes.

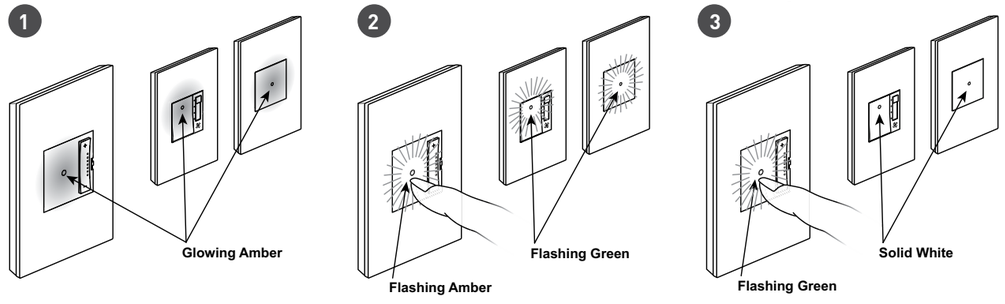
Every programming process in an adorne Wireless Lighting system consists of placing the devices into a "learn" or "program" mode by pressing and holding the on/off button. Once this has been done, any configuration, from establishing a House ID to creating GROUPS, is accomplished by pressing the buttons on the faces of the devices.

Programming Example: Setting a unique HOUSE ID in a new installation

1. First make sure all status LEDs on all devices are solid AMBER.

2. Press the on/off button of any switch or dimmer for five seconds. Its status LED will flash AMBER, and all other devices' status LEDs will flash GREEN.

3. Press the on/off button of the same switch or dimmer that is flashing amber for another five seconds. All status LEDs will flash GREEN for two seconds and then turn solid WHITE.



Find step-by-step how-to videos at **www.adornemyhome.com/install.**

GROUP Level Control

A GROUP is two or more devices bound together so that each device controls itself and other devices in the same way. For example, double-tapping the on/off button will turn all devices on.

A GROUP usually comprises a master switch or dimmer with one or more remote switches and dimmers. GROUPs may also contain multiple master switches or dimmers, such as in a large area lit by several ceiling downlights.

ROOM and HOUSE level devices (i.e., remote controls and repeaters) cannot be included in GROUPs.

Like all adorne Wireless Lighting system elements, all GROUP members must first be bound to the same house ID. GROUPS may be included in ROOMS, but they may also stand alone. adorne Wireless Lighting GROUPS are commonly used as a substitute for a four-way circuit with multiple control points, particularly in retrofits where adding wiring may be an issue.

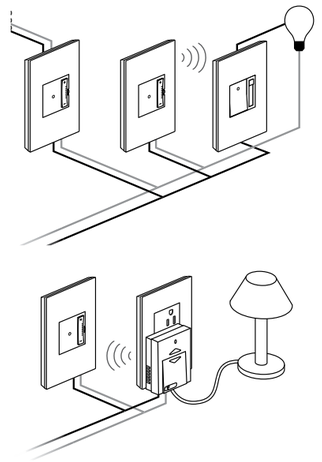
Please note that when a GROUP is bound into a ROOM, it is not necessary to also bind each GROUP member into the ROOM; one in, all in is the rule.

All three GROUPED devices provide seamless dimming control from three locations.

Note that each device may be fed from a different circuit – even a different phase. adorne Wireless Lighting's RF communications are independent of AC wiring.

Plug-in lamp modules are often placed behind furniture. GROUPing them with a remote dimmer or switch provides control where you want it. Coordinate control of non-dimmable loads (such as kinetic sculptures and fountains) using Plug-in Appliance Modules.

Any number of Plug-in Lamp or Appliance Modules may be GROUPED in this way to provided control of several devices around the room from a single remote switch or dimmer.



GROUP Level Control

Creating a New Group

1. Ensure all potential group members' status LEDs are solid WHITE.
2. Press and hold the on/off button of one device that you want to include in the GROUP until the LED flashes AMBER.
3. For each device that you would like to add to the GROUP, press and hold the on/off button for five seconds until the LED turns from GREEN to AMBER.
4. Repeat for all devices that you wish to add to the GROUP.
5. Press and hold the first item's on/off button for five seconds and release.
6. All device LEDs should return to a solid WHITE.

Adding or Removing a Device from a Group

1. Ensure all potential group members' status LEDs are solid WHITE.
2. Press and hold one device's on/off button until the LED flashes AMBER.
3. All GROUP members' LEDS should now be flashing AMBER, while un-included devices' LEDs should flash GREEN.
4. Press and hold any item's on/off button to include it in the GROUP (if it is flashing GREEN) or to remove it from the GROUP (if it is flashing AMBER).
5. Press and hold the first item's on/off button for five seconds and release.
6. All devices should flash GREEN for two seconds and then turn a solid WHITE.

Find step-by-step how-to videos at **www.adornemyhome.com/install.**

Setting Up Remote Controls

A ROOM is a number of adorne Wireless Lighting devices (expect HOUSE level devices or repeaters) bound together under the control of one or more remote controls. Room remote controls allow users to set, modify, and recall up to four lighting scenes. They also enable ROOM on/off and proportionally lower or raise overall room brightness. Any number of room remote controls may be used.

Scenes

A ROOM scene is a configuration of light level information for every adorne Wireless Lighting device bound to the ROOM. ROOM scenes have a default fade time of two seconds. Scene information is stored in the device connected to the load (master dimmers or switches), NOT in the room remote control.

Location

Typically, users place room remote controls on their included cradles at room entrances. They may also wish to lift the room remote control off its cradle for portability.

Setting up a Remote Control

1. Ensure all status LEDs are solid WHITE.
2. Press and hold the +/- paddle on the remote control for five seconds and release. The LED should be flashing AMBER.
3. All device LEDs should now be flashing GREEN, unless they have already been bound to the remote control.
4. Press and hold any device's on/off button to include it in the GROUP (if it is flashing GREEN) or to remove it from the GROUP (if it is flashing AMBER).
5. Please note - if you have bound one device from a GROUP to the remote, then all GROUP members will be bound to the remote.
6. Press and hold the remote's +/- paddle for five seconds and release.
7. All devices should flash GREEN for two seconds and then turn a solid WHITE.

HOUSE Level Control

With adorne Wireless Lighting, users can control their entire home with a single touch using HOUSE scenes. Other important HOUSE level functions include occupancy emulation and Panic mode.

House Remote Controls

House remote controls look like room remote controls but include a house icon on the face. Typically, users place house remote controls on their cradles inside exterior doorways and inside the doorway to the garage. They may also wish to lift the house remote control off its cradle for portability, for example at bedside in the master suite.

House Scenes

adorne Wireless Lighting supports up to four HOUSE scenes. Commonly used scenes include:

- Pathway lighting (e.g., from the master bedroom to the kitchen)
- Balanced whole HOUSE look for entertaining, including patio and landscape lighting
- HOUSE sleep scene at night, in which desired general lighting is off and low level pathway lighting is on
- HOUSE off scene when leaving, which can include occupancy emulation (see page 23)
- HOUSE arrival scene in which desired lighting throughout the house is on upon arrival

HOUSE scenes differ from ROOM scenes because:

- They may include any or all adorne Wireless Lighting devices and GROUPS in the house
- They may include a Repeater for occupancy emulation (page 23)
- Every device in the scene must be individually bound to that scene.

Devices may be toggled in and out of a HOUSE scene using a simple binding process.

Find step-by-step how-to videos at **www.adornemyhome.com/install.**

SETTING UP A WHOLE-HOUSE REMOTE CONTROL

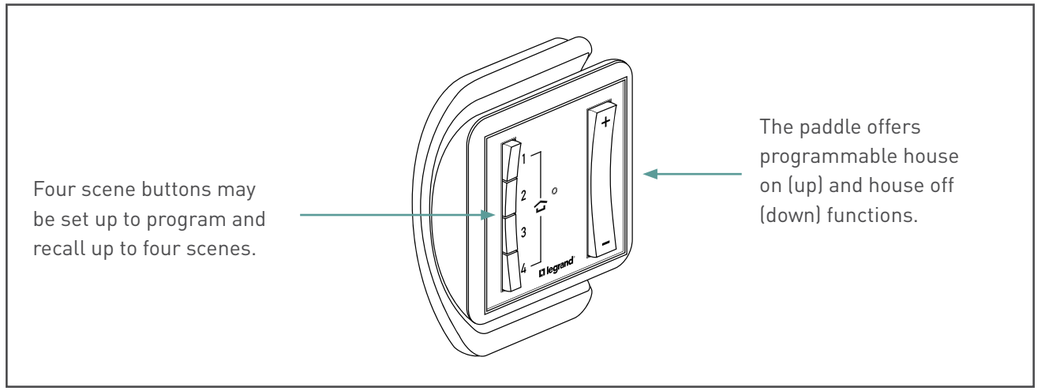
HOUSE Level Control

Creating a New Scene

1. Adjust the light levels throughout the house (or room) to the desired settings for the scene.
2. Press and hold any of the four numbered buttons on the remote for five seconds and release.
3. The remote's LED should flash GREEN for two seconds and then turn a solid WHITE.

Removing a Device from a Scene

1. Press and hold the +/- paddle on the remote for five seconds and release. The LED should be flashing AMBER.
2. All room or house members' LEDs will now be flashing AMBER.
3. Press and release the desired scene button (1, 2, 3, or 4) on the remote.
4. Press and hold the on/off button on the device you would like to remove. Release after five seconds. The LED should now be flashing GREEN.
5. Press and hold the +/- paddle on the remote for five seconds and release.
6. All LEDs should flash GREEN for two seconds and then turn a solid WHITE.



adorne Wireless Lighting Custom Settings

adorne Whole-House dimmers and switches include several custom features that allow you to easily adjust system settings.

Custom Settings: Dimmers

To enter the dimmer's Custom Setting mode, first ensure that the status LEDs on all devices are solid WHITE. Then, press and hold the dimmer's on/off button for 10 seconds until the LED blinks GREEN. Your dimmer is now at Setting #1. To select another setting, tap the dimmer's on/off button the desired number of times. The LED will blink the appropriate number of times, indicating which setting number you've selected (e.g., two taps = two blinks = Setting #2, three taps = three blinks = Setting #3, etc.).

LED Blinks	Setting	Default	Button Operation
1x	1. Locator Light On/Off	On	Press Up once to turn indicator light on. Press Down once to turn indicator light off.
2x	2. Minimum Dimmer Level	2%	Press/hold Up to increase minimum dimmer level. Press/hold Down to decrease minimum dimmer level.
3x	3. Maximum Dimmer Level	100%	Press/hold Up to increase maximum dimmer level. Press/hold Down to decrease maximum dimmer level.
4x	4. Dimmer/Switch Mode	Dimmer	Press Up once to enable Switch mode. Press Down once to enable Dimmer mode.
5x	5. Forward/Reverse Phase Mode (Tru-Universal Dimmer versions only)	Forward	Press Up once to enable Reverse Phase mode. Press Down once to enable Forward Phase mode.
6x	6. No Load Indicator	On	Press Up once to disable the Load Indicator. Press Down once to enable the Load Indicator.

Find step-by-step how-to videos at **www.adornemyhome.com/install.**

adorne Wireless Lighting Custom Settings

Custom Settings: Switches

To enter the switch's Custom Setting mode, first ensure that the status LEDs on all devices are solid WHITE. Then, press and hold the switch's on/off button for 10 seconds until its LED flashes GREEN or RED. The color will depend on the switch's existing setting status.

Setting	Default	Button Operation
1. Locator Light On/Off status:	On	Press/hold the on/off button to change setting Locator Light status is ON when LED is GREEN. Locator Light status is OFF when LED is RED.

Exiting Custom Settings Mode

After you've configured all settings press and hold the device's on/off button until the light stays a steady white. Or, wait 60 seconds for the device to time out.

Expanding an adorne Wireless Lighting System

An adorne Wireless Lighting System may be expanded in a number of ways:

- Increase RF (radio frequency) range with a Repeater
- Interface with external systems and devices via:
  - RS232 Network Controller
  - Scene Interface
  - IR Interface

Note: Due to differences in construction and other factors, some trial and error in Repeater positioning may be required for optimum coverage.

Increasing RF Range via Repeaters

We recommend including a Repeater in all whole-house systems for the following reasons:

- Increases transmit/receive range of an RF network
- Provides occupancy emulation (see P. 18)

Additional range ensures effective operation in any setting, while occupancy emulation is a significant feature for homeowners.

The Repeater has a large antenna which allows it to receive and retransmit transmissions from other devices up to 100 feet away. When the Repeater picks up a message including its own House ID, it retransmits it.

When a single Repeater is being used, users should locate it close to the center of the building, remembering that the building is a three-dimensional space. Identify a place near the vertical and horizontal center line. The Repeater uses an external power supply that needs to plug into any 120-volt outlet.

Up to two Repeaters may be used in very large buildings. There is no benefit to using a second Repeater unless actually necessary.

EXPANDING THE SYSTEM AND INTERFACING WITH OTHER PROGRAMS

About RF and RF Range

adorne Wireless Lighting uses the 900MHz band for license-free, high-speed control communication. These products use multiple channels simultaneously in this band, ensuring reliable communications without interference from other wireless devices.

RF Range

In an open field, adorne devices will reliably communicate over several hundred feet.

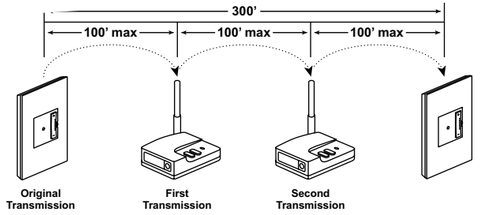
In a conventional wood or steel frame building, communications typically range up to 100 feet, which is more than adequate for most homes.

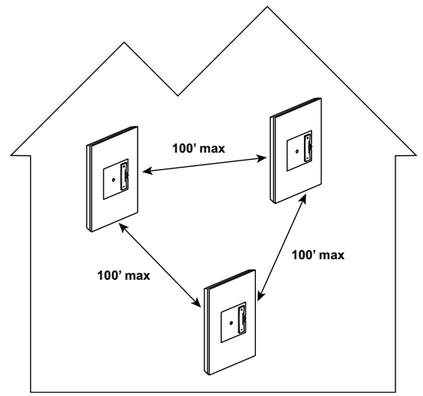
Some factors may reduce transmitting range, such as solid concrete walls and slabs. Another factor is the use of metal wall plates – particularly if they are used in combination with metal back-boxes.

When possible, install wireless products in plastic boxes to maximize RF range. Metal boxes diminish RF signals.

These factors are unlikely to be relevant in apartment buildings, as each application is usually within a concrete shell. Where multifloor apartments exist, there will probably be a stairwell opening in the slab, enabling communications between floors.

In applications where these factors may be an issue or in very large applications, one or two Repeaters may be used to increase the effective communication range of adorne devices.



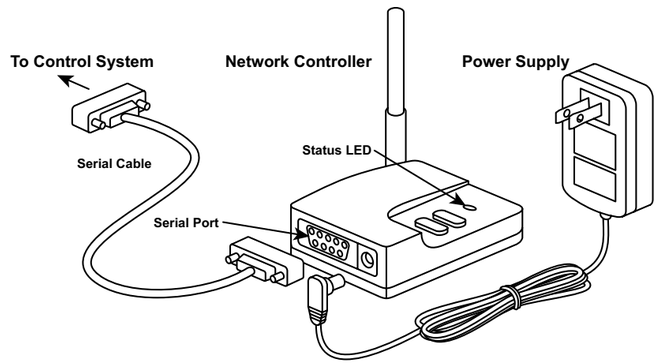


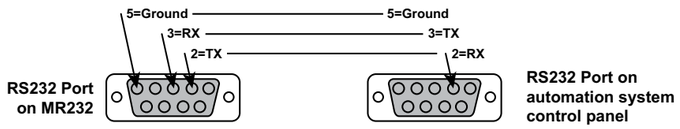
Interfacing with Other Automation Systems via the RS232 Network Controller

Users can connect their adorne Wireless Lighting with external automation systems for expanded functionality by using the RS232 Network Controller (MR232-G). The RS232 communicates control commands to adorne Wireless Lighting components using the controllers of other home systems.

Common applications include:

- Home automation systems
- Home theater systems and whole-house audio/video
- Control of lighting scenes for television or movie viewing using a home theater controller



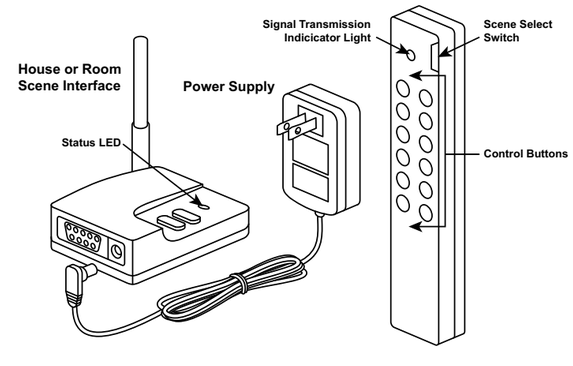


EXPANDING THE SYSTEM AND INTERFACING WITH OTHER PROGRAMS

Interfacing with External Devices via IR Interface

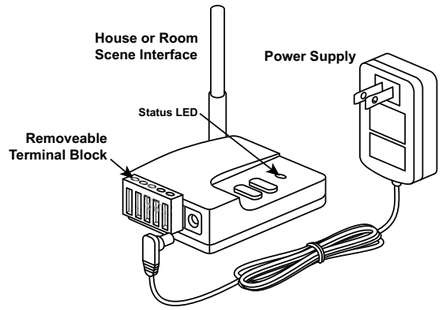
In an adorne Wireless Lighting system, the optional IR to RF Interface (MRIR1) is used as a house or room remote control that works with external IR systems or components to integrate lighting control with other home automation systems (i.e., whole house audio or home theater systems).

The MRIR1 accepts IR data via an internal IR sensor or an external IR sensor connected to a 3.5mm jack, and then transmits control signals to the appropriate devices on the adorne Wireless Lighting System network. The interface is supplied with an external 12V power supply as well as a programming remote.



Interfacing with External Devices via Scene Interfaces

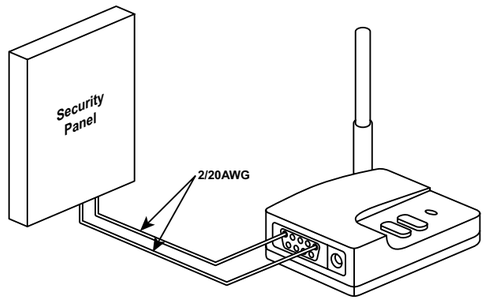
Using the House Scene Interface (MRHC3-G) or Room Scene Interface (MRRC3-G) to connect an adorne Wireless Lighting Control system with common external devices provides increased functionality. The Scene Interfaces can be set up to accept either momentary or maintained inputs. The scene assignments are fixed and cannot be changed. Mode A is typically used with momentary control signals while Mode B is typically used with maintained control signals.



Common Device Applications

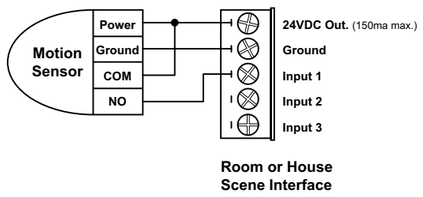
Security Systems

Connect adorne Scene Interfaces and security systems using a two-wire connection between a maintained or momentary output relay at the alarm panel and the desired input on the scene interface. Common applications include switching on or flashing house lighting when an alarm event occurs or recalling a scene when the homeowner deactivates the alarm system upon arrival.



Occupancy or Vacancy Sensor

An occupancy sensor application could use either Mode A or Mode B. Most applications would use Mode B. In this configuration, a scene executes when the sensor initially detects motion; a second scene executes when the sensor determines that the space is unoccupied. Mode A allows auto-on, manual-off, and manual-on/auto-off functions. A manual-on/auto-off application requires the input to be wired to a NC contact and the scene stored to turn the appropriate lighting off.



Using adorne Wireless Lighting Dimmers, Switches, and Plug-In Modules

Dimmers

Setting	Default	Button Operation
On/Off	Tap once	Fade the circuit to its last-used level
On/Off	Tap twice	Full bright
On/Off	Press and hold	Fade the circuit to off
+ or upper-right	Tap once	From Off, fade the circuit to its last-used level
+ or upper-right	Tap once	From On, increase level 2% per tap
+ or upper-right	Tap twice	From Off, full bright
+ or upper-right	Tap twice	From On, increase level 4%
+ or upper-right	Press and hold	Continually increase the light level
- or lower-right	Tap once	Decrease level by 2% per tap
- or lower-right	Tap twice	Decrease level by 4%
- or lower-right	Press and hold	Continually decrease the light level

Plug-in Lamp Modules

Setting	Default	Button Operation
↑	Tap once	Fade the circuit to its last-used level
↑ ↑	Tap twice	Full bright
↑	Press and hold	Continually increase the light level
↓	Tap once	Fades the circuit to off
↓	Press and hold	Continually decrease the light level

Switches

Setting	Default	Button Operation
On/Off	Tap once	From Off, turn circuit on
On/Off	Tap once	From On, turn circuit off

Plug-in Appliance Modules

Setting	Default	Button Operation
↑	Tap once	Turn circuit on
↑	Press and hold	Turn circuit on
↓	Tap once	Turn circuit off
↓	Press and hold	Turn circuit off

Using adorne Wireless Lighting Room and House Remote Controls

Room and House Remote Controls have a paddle on the right and four scene buttons on the left. House Remote Controls look like Room Remote Controls, with the difference being the house icon on the face.

SCENE BUTTONS

Default operation

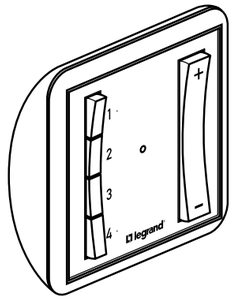
Tap Button 1 once:	Dimmers to 100% / Switches to On
Tap Button 2 once:	Dimmers to 75% / Switches to On
Tap Button 3 once:	Dimmers to 50% / Switches to On
Tap Button 4 once:	Dimmers to 25% / Switches to On

User-defined scenes

Press and hold: Saves the current device settings as the scene that is recalled the next time you tap this button.

Paddle

+ Tap once: Raise all devices to 100% (ON)
+ Press and hold: Raise the current scene's level
- Press and hold: Lower the current scene's level
- Tap once: Lower all room devices to 0% (OFF)



Room Remote Controls

Room Remote Controls allow you to control all adorne Wireless Lighting devices or GROUPS in a room, adjust light levels, and turn devices on or off. Use the Plus (+) and Minus (-) on the paddle to control the device, or use Scene buttons for 25% (Button 4, bottom), 50% (Button 3), 75% (Button 2), and 100% (Button 1, top) levels.

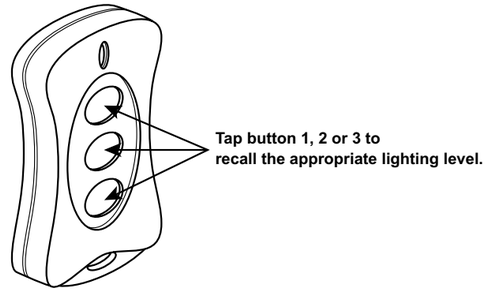
House Remote Controls

House Remote Controls provide the same functionality as Room Remote Controls but affect lights throughout the house versus in a single room.

Operating an adorne Wireless Lighting System

RF Lighting Control Key Fob

When pressed by the user, the Key Fob buttons recall room or house scenes or activate the panic feature (flashing lights). Specific button functions are defined during system setup. The device may be locked to prevent inadvertent reset to factory defaults. No auxiliary interfaces are required. An unlimited number of Key Fobs can be added to any existing adorne Wireless Lighting installation.



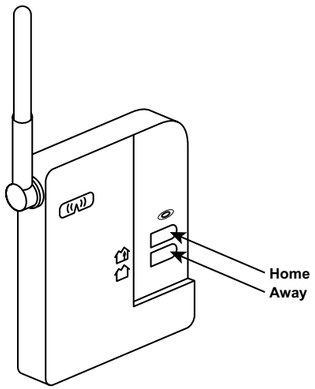
	MODE 1	MODE 2	MODE 3
Button 1	HOUSE Scene 1	HOUSE Scene 1	HOUSE Scene 1
Button 2	HOUSE Scene 5 (default is off)	HOUSE Scene 5 (default is off)	HOUSE Scene 5 (default is off)
Button 3	HOUSE off	Panic	HOUSE Scene 5 (default is off)

Using Occupancy Emulation/Vacation Mode

The Repeater monitors all adorne Wireless Lighting network traffic, and records a seven-day "loop" of network events. When activated, it "replays" the recorded loop, providing a highly realistic emulation of occupancy – a great security feature when homeowners are away.

Users can activate occupancy emulation in two ways:

- Press the "away" button on the Repeater
- Include a Repeater in a house scene



When the Repeater is included in a house scene, the user presses the relevant scene button to activate emulation when leaving the premises. The system begins occupancy emulation after a one-minute interval Upon an occupant's return, as soon as a user presses any device, the Repeater stops playback and starts updating its loop for the next occasion.

Designing an adorne Wireless Lighting System

Designing an adorne Wireless Lighting system involves significant advance planning, particularly in identifying what the residents want from their lighting on a daily, weekly, and occasional basis as well as at different times of the day.

The basic steps involved in designing an adorne Wireless Lighting project include:

1. Determining the project scope

Projects can range from controlling a few lights to controlling all interior and exterior lighting, selected appliances, and interfacing to other home automation systems.

2. Determining the type of all lighting loads

Determine the type (incandescent, fluorescent, low voltage, CFL, LED, etc.) of all lighting loads to be controlled and the location of all control devices. Also determine whether a neutral is present, as **all adorne Wireless Lighting devices (except incandescent dimmers) require a neutral.**

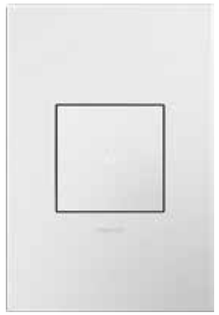
3. Determining and specifying the devices needed to provide the desired level of control

- Power devices (i.e., dimmers, switches, and plug-in modules) are required for every load on the wireless network.
- Control devices (i.e., remote controls) provide additional control points or scene control capability.
- Interface accessories (i.e., RS232 Network Controller or Scene Interface) enable integration with home automation systems (i.e., alarm systems, time clocks).
- Repeaters are for installations requiring greater RF range or where occupancy emulation is desired.
- Plug-in appliance and lamp modules allow coordinated control of lamps and appliances.

Don't Forget the Plug-in Modules!

- An application may require more than a designer initially anticipates.
- Over time, homeowners will find more uses for them (Christmas lights, coffee machines, TVs, and more).
- Include at least one extra Plug-in Lamp Module and one extra Plug-in Appliance Module in any bill of materials.

PRODUCT OVERVIEW



Wireless Whole-House Lighting Controls

The adorne Whole-House lighting system provides unrivaled convenience, security, and energy-savings for both remodel projects and new construction. The ability to set scenes allows you to create the perfect lighting environment in multiple rooms or the entire house, all at the touch of a single button.

For more details on setting up and pairing whole-house controls, visit www.adornemyhome.com/install to access system instruction sheets or check out our how-to videos.

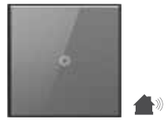
sofTap™

NAME	SPECIFICATIONS	RATING	COMPATIBLE LOADS	COMPLIANCE	FINISH OPTIONS	PART NUMBER
sofTap Switch, Whole-House Wireless 	Wireless Master, Whole-House		All Loads	cULus LISTED	White Magnesium	ASTP155RMW1 ASTP155RMM1
	Wireless Remote, Whole-House			cULus LISTED	White Magnesium	ASTPRRW1 ASTPRRM1
sofTap Dimmer, Whole-House Wireless 	Wireless Master, Whole-House (3-Wire) **Tru-Universal**	6W - 700W 6W - 450W	Incandescent, Halogen, Forward-Phase ELV, MLV, Fluorescent CFL, LED, Reverse-Phase ELV	cULus LISTED	White Magnesium	ADTP700RMTUW1 ADTP700RMTUM1
	Wireless Master, Whole-House (2-Wire)	60W - 600W	Incandescent, Halogen	cULus LISTED	White Magnesium	ADTP600RMHW1 ADTP600RMHM1
	Wireless Remote, Whole-House					ADTPRRW1 ADTPRRM1

We're here to help!

We have a dedicated project services team on staff to help you plan your projects, including supplying a full takeoff based on your floor plans.**Give us a call at 315.468.8413 or email us your project info at adornemyproject@legrand.us.**

Touch™

NAME	SPECIFICATIONS	RATING	COMPATIBLE LOADS	COMPLIANCE	FINISH OPTIONS	PART NUMBER
Touch Switch, Whole-House Wireless 	Wireless Master, Whole-House		All Loads	cULus LISTED	White Magnesium	ASTH155RMW1 ASTH155RMM1
	Wireless Remote, Whole-House			cULus LISTED	White Magnesium	ASTHRRW1 ASTHRRM1
Touch Dimmer, Whole-House Wireless 	Wireless Master, Whole-House (3-Wire) **True Universal**	6W - 700W 6W - 450W	Incandescent, Halogen, Forward-Phase ELV, MLV, Fluorescent CFL, LED, Reverse-Phase ELV	cULus LISTED	White Magnesium	ADTH700RMTUW1 ADTH700RMTUM1
	Wireless Master, Whole-House (2-Wire)	60W - 600W	Incandescent, Halogen	cULus LISTED	White Magnesium	ADTH600RMHW1 ADTH600RMHM1
	Wireless Remote, Whole-House					ADTHRRW1 ADTHRRM1

Wireless Lighting Remote Control

This unique remote allows you to control your wireless switches and dimmers from anywhere in the home as well as create lighting scenes.

The remote is easy to program and is compatible with adorne whole-house wireless lighting controls. It allows up to four lighting scenes, as well as one-touch dimming or brightening of your lights. Remote includes a magnetic wall-mount cradle for easy storage.

NAME	PART NUMBER
Wireless Lighting Remote Control 	ADWHRM4

Whole-House Mobile Interface Controller

The adorne Mobile Interface Controller allows you to program and select home lighting scenes from your smart phone, tablet, or PC. In addition, it allows you to schedule lighting events based on time-of-day, such as turning on the exterior lights at sunset.

Simply place this box anywhere in the home and follow instructions to pair it with your adorne wireless lighting devices. Controller is compatible with adorne whole-house lighting devices, as well as Legrand Miro, LightSense, Enspire, and RF Lighting Control devices.

Compatible with iPhone, iPad, Android, and Blackberry 6 devices.

NAME	PART NUMBER
Whole-House Mobile Interface Controller 	LC6001

Accessories

NAME	COLOR	SPECIFICATIONS	PART NUMBER
Plug-In Lamp Module 	White	Allows remote control of table or floor lamps up to 300W when used with the adorne Whole-House Lighting System. Simply plug the module into any grounded, 120V outlet and then plug the lamp into the module.	MRP6-W
Plug-In Small Appliance Module 	White	Allows remote control of small appliances such as coffeemakers, radios, and TVS when used with the adorne Whole-House Lighting System. Simply plug the module into any grounded, 120V outlet and then plug the appliance into the module.	MRP7-W
Wireless Key Fob 	Black	Access lighting scenes from a remote location, such as the driveway. Keyfob includes a mounting holster for in-car storage. Must be paired with the adorne Whole-House Lighting System.	MKFOB
RS232 to RF Interface 	Black	Enables integration of a third party control system with the adorne Whole-House Lighting System. Features a two-wire interface from other control systems and two operating modes (maintained or momentary type inputs). Includes power supply.	MR232-G
Event Controller Plug-In Kit 	Black	Kit includes the Mobile Interface Controller and a pair of Plug-In Lamp Modules.	LC6401
In-Wall 2000W Box Dimmer 	Black	Supports the addition of large lighting loads to the adorne Whole-House Lighting System.	MR2000

Accessories

NAME	COLOR	SPECIFICATIONS	PART NUMBER
Repeater & Away Emulator 	Black	Provides extra security when you're on vacation. Records the normal usage of lights throughout a 24-hour period and then plays them back when you're not at home. Also expands the range of the wireless system from 100' to 300'.	MRR2-G
Room Scene Interface 	Black	Connects the adorne Whole-House Lighting System with other devices, such as sensors or a security system, at a room level.	MRRC3-G
Home Scene Interface 	Black	Connects the adorne Whole-House Lighting System with other whole-house devices, such as sensors or a security system.	MRHC3-G
IR to RF Interface 	Black	Enables control of lighting and audio/video products via universal remotes. Includes IR Programming Remote.	MRIR1
Handheld Room Scene Controller 	Black	Convenient remote control enables selection of up to ten lighting scenes and control of individual loads. Single room control only.	MRH6-G
Whole-House Scene Controller 	Black	Convenient remote control enables selection of up to ten lighting scenes and control of individual loads throughout the home. Also includes a panic button to turn all lights on or flash them in a desired sequence.	MRH5-G
In-Wall/Ceiling Wireless Access Point 	White	With connection speeds of up to 300Mbps, this wireless access point flawlessly supports even the most bandwidth-intensive applications, such as streaming video services and online gaming. Unique design enables in-ceiling or in-wall mounting. Includes power supply and Power over Ethernet (POE) injector	DA1011

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Specifications

Physical

All wireless devices and accessories shall be UL listed and FCC approved as required.

All wireless devices for installation in standard NEMA electrical wall boxes shall incorporate heavy duty plated steel or aluminum straps, with auto-alignment snaps designed to locate accurately on a plated steel subframe.

Devices shall be available in adorne white or magnesium. Thermoset materials shall not be acceptable.

Devices shall mount to an adorne wall plate that requires a maximum of two screws per gang to mount the device and its wall plate or its portion of a multi-gang wall plate. No screws shall be visible from the front of the wall plate.

Switches

Single pole, 3-way and 4-way switches with pilot lights shall incorporate multicolor light emitting diodes. The pilot light shall be on when the circuit is off in white with the option to turn this feature off.

Switches shall incorporate pressure plate backwire terminals.

Dimmers

All Tru-Universal dimmers shall incorporate automatic load sensing firmware causing the dimmer to close down and signal an error condition to the user in the event that the dimmer is energized with an overload or load side short circuit condition, without causing damage to the dimmer, and without the use of integral fuses or current trips. The dimmer FW shall be configurable via the user to provide Forward Phase or Reverse Phase dimming.

All dimmers shall be controlled using an on/off button and paddle covering the whole of the front of the device, with no surrounding rim.

- Tapping the on/off button once shall cause the dimmer to return to its last used non-zero level.
- Tapping the on/off twice shall cause the dimmer to go to full bright.
- Tapping and holding the on/off for about 2 seconds will cause the dimmer to fade the circuit to off over 30 seconds.

- Tapping + once from off will cause the dimmer to return to its last used non-zero level.
- Tapping + once from ON will increase the lighting level 2% per tap.
- Tapping + twice from off will go to full bright.
- Tapping+ twice from on will increase the lighting level 2% (2% for each tap).
- Pressing and holding + will gradually increase the level until released.

- Tapping – once from on will decrease the level by 2%.
- Tapping – twice from on will decrease the level by 4% (2% for each tap).
- Pressing and holding – from on will decrease the light level.

All dimmers shall incorporate a status LED, providing indication of correct function and various fault conditions.

All permanently-installed dimmers shall incorporate a means to isolate the load for relamping, without any switches or other controls visible from the front of the dimmer, and without requiring tools.

Incandescent Dimmers

Dimmers designated as incandescent dimmers shall be rated for use with incandescent loads only. Incandescent dimmers shall be designed to be inserted in series with a resistive load and shall not require a neutral connection.

SPECIFICATIONS

Specifications

Dimmers and Switches for Permanent Installation

Dimmers shall incorporate all the dimmer features indicated above with the exception of wireless remote control.

Switches shall incorporate an air-gap relay providing zero-crossing switching of any loads up to 1500 watts. The switch shall be controlled manually by pressing the on/off button.

Plug-in Lamp and Appliance Modules

The Plug-in Lamp and Appliance Modules shall function exactly as described above for the Tru-Universal Dimmer and the Switch.

The Plug-in Modules shall plug into any grounded 120 volt 15 amp or 20 amp receptacle, and shall pass the ground connection through to the load, which shall connect to a grounded 15 amp receptacle embodied into the Plug-in Module.

The Plug-in Lamp Module shall function as a Universal Dimmer, with a maximum load of 300 watts. The Plug-in Appliance Module shall function as a switch, with a maximum load of 800 watts.

The Plug-in Lamp Module shall sense the load connected to it and switch on if it senses that the load circuit is being opened and closed (i.e., person turning switch on or off). It shall be possible to configure the Plug-in Appliance Module to do the same, for use with non-dimmable floor and table lamps.

The Wireless Network

It shall be possible to construct a distributed peer-to-peer network of dimmers, controllers, and other devices, using the unlicensed 900MHz radio band. Each device in the network shall have an RF range of not less than 100' in a timber construction building. It shall be possible to increase this range to 300' by the use of two Repeaters.

It shall not be necessary to apply filters or bridges to the building's power supply to correctly operate the wireless network.

All communications across the wireless network shall be bi-directional, at a speed (baud rate) not less than 9600 baud. The wireless network shall incorporate means to avoid message contention and shall operate dynamically over at least five channels in the permitted band to avoid interference with other 900MHz devices.

The wireless network shall automatically establish a system (House) ID, and shall provide that ID to each member of the network. It shall not be possible for neighboring systems to interfere with or to be influenced by other similar systems.

The use of special tools or computers to configure or program the wireless network shall not be a requirement.

The wireless network shall support, within system range, at least 255 discrete House IDs, 127 rooms per house, 1023 devices/groups per house. The recommended maximum load capacity is 100. Beyond this please contact Legrand support.

Wireless Groups

It shall be possible to GROUP two or more wireless dimmers, switches, Plug-in Lamp Modules,

Plug-in Appliance Modules, or wireless remote controls together without the use of tools or coding devices. When so grouped, the devices shall act as one.

Specifications

Wireless Room Control

It shall be possible to assign one or more remote controls with a number of other wireless devices in a room, without the use of tools or coding devices. When so assigned, it shall be possible to record up to fifteen lighting scenes per room.

The remote control shall incorporate four buttons, each of which shall be assigned to a room scene.

Each room scene shall include a level (or on/off) for all of the dimming or non-dimmable devices in the room. It shall be possible to record and recall a room scene with a single

touch, and without the use of tools or coding devices. It shall be possible to increase or decrease light levels in the room by pressing a paddle incorporated in the face of the remote control.

The remote control shall incorporate the same RF technology as the wireless network, and it shall not be required to aim the remote at a device in order to function.

Wireless House Control

It shall be possible to record and play back up to 10 house scenes per network, including every load-connected wireless device in the house.

It shall be possible to record actual wireless network usage for a period not less than seven days, and to play it back through the touch of a single button to emulate occupancy when the building is unoccupied.

It is possible to handle 4 of these house scenes with the adorne remote control.

Scene Interface/Contact Closure

The Scene Interfaces shall include house level and room level devices incorporating a 2-wire interface from other control devices. It shall provide two operating modes for maintained and momentary type outputs respectively. It shall contain three inputs providing access for up to six functions.

RS232 Interface

The RS232 Network Controller shall be compatible with the RS232 standard. It shall communicate with standard ASCII communication protocol and shall utilize a 38.4 Kbd baud rate. It shall provide two user interfaces and be accessible via any PC running a terminal emulator.

FAQs

Q: Is adorne Wireless Lighting's Top Dog protocol the same as or compatible with Zigbee or Zensys (Z-Wave) RF protocol?

A: No. Top Dog is a frequency-agile platform designed specifically for Legrand wirless lighting systems. It is used for adorne Wireless Lighting as well as the legacy Legrand RF Lighting Control system.

Q: Can I interface adorne Wireless Lighting with other home automation systems like time clocks, occupancy sensors, and touch screens?

A: Yes. adorne Wireless Lighting includes two primary means of interfacing with other home automation systems. For systems utilizing an RS232 protocol, users can select the Legrand MR232 Network Controller. For systems requiring a contact closure output, Legrand offers Room and House Scene interfaces (MRRC3 and MRHC3). In a home theater application, an IR to RF interface can also be used to invoke scenes with your favorite learning remote.

Q: Since adorne Wireless Lighting operates on the 900 Mz band, can an adorne Wireless Lighting system cause interference with my WiFi network or be interfered with by other RF products?

A: The Legrand technology uses the 900 MHz unlicensed space and will not in any way interfere with 2.4GHz products. Additionally the system is frequency agile and broadcasts its message over five channels simultaneously for robust and instantaneous communication.

Q: Can multiple adorne Wireless Lighting systems within RF range interfere with one another?

A: No. Each adorne Wireless Lighting system automatically assigns a unique ID ensuring that one system cannot interfere with another.

Q: If each adorne Wireless Lighting System has a unique ID, can I expand my system?

A: Yes. Just install the new device(s) and they will receive a broadcast of the previously assigned house ID.

Q: What is the capacity of a system installation and how does this compare to other commercially available RF systems?

A: The system can support up to 100 load-controlling devices. If your system requires more than that, please consult with our technical support professionals for assistance.

Q: Do I need to use a repeater?

A: A repeater is typically not necessary for partial home lighting control or smaller homes; however, it is recommended for homes greater than 2,500 square feet or where there is obstructing material such as concrete walls or floors. You may use up to two repeaters for very large homes. It is recommended to specify at least one repeater per house as a best practice. See page 10 for more information on repeaters.

Q: What other functions does the repeater provide?

A: In addition to increasing the RF range, the repeater features an away mode that will emulate the last seven days that the house was in use. This is especially helpful if you go on vacation and want the house to appear occupied. See page 10 for more information on repeaters.

Q: What is the typical RF range?

A: There is no precise way to measure RF range, since it can be affected by any number of application-specific factors (i.e., wall composition, amount and placement of windows/mirrors, metal electrical boxes etc). That being said, the average range for effective RF transmission is up to 100 feet without a repeater. An additional 100 feet per repeater may be obtained, with up three repeaters for 300-foot coverage (see page 11 for more detail). Please note that installing a wireless product in a metal box is not an optimal configuration due to the fact that the metal box will significantly block large areas of the wireless signal and thus impact the range of the product.

FAQs

Q: How is system programming accomplished?

A: All programming is accomplished by simply pressing and holding the on/off button for 5 seconds. This sends an RF broadcast message throughout the system, which allows devices to be bound into the desired groups and room configurations. A full how-to video library with step-by-step instructions can be found on our website at www.adornemyhome.com, in the Install section.

Q: What happens in the event of a power failure?

A: adorne Wireless Lighting has a non-volatile memory, which maintains all system setup and programming. Upon return of power, the memory restores the lighting exactly as it was when the power failed.

Q: What is underload and overload protection?

A: These are convenience and safety features that alert a user (via a flashing red LED) to the fact that there is an issue that needs to be resolved.

Q: When should I specify an incandescent dimmer?

A: Specify an incandescent dimmer ONLY when you have at least 60W of line voltage incandescent loads and no neutral wire is available in the wallbox.

Q: How can one dimmer dim practically all dimmable loads?

A: adorne Tru-Universal dimmers incorporate a high-performance microcontroller that actively monitors the load's behavior and adapts the dimmer's operation to match. The smooth and accurate level transitions made by these dimmers let them control most dimmable load types flawlessly. In addition, because the microcontroller can be instructed to change its dimming curve, one model is able to meet the needs of both standard and two-wire fluorescent applications.

Q: Are neutrals required?

A: Yes. All adorne Wireless Lighting products except the incandescent dimmer require a neutral.

Q: Can adorne Wireless Lighting devices be clustered together (e.g., placing all dimmers in an electrical closet) rather than distributing the devices throughout the application?

A: Yes. However for optimum RF performance and user convenience (especially in residential applications), it is recommended that the devices be distributed throughout the application. If clustering of devices is preferred, it is recommended that an adorne repeater (MRR2-G) be placed approximately six feet from the devices and that other precautions be taken. Please consult with Technical Support prior to specifying and installing this type of installation.

Q: What is the difference between room level scenes/scene controllers and house level scene/scene controllers?

A: House scene controllers are typically used for creating whole house scenes – such as setting lights throughout the house for entertaining, or creating pathways of lights. Room scene controllers are used for specific rooms or areas. By specifying room scene controllers and house scene controllers you can create a layering effect. Functionally, house scenes are additive (piled on), while room scenes are transitional (one scene will replace the previous scene). However, each device can create and recall scenes in either fashion.

Q: Is it simple to handle multi-way dimming?

A: adorne dimmers provide seamless three and four way dimming without the issues often associated with combining dimmers and 3-way switches. The user has exactly the same control over any dimmer, whichever location is chosen.