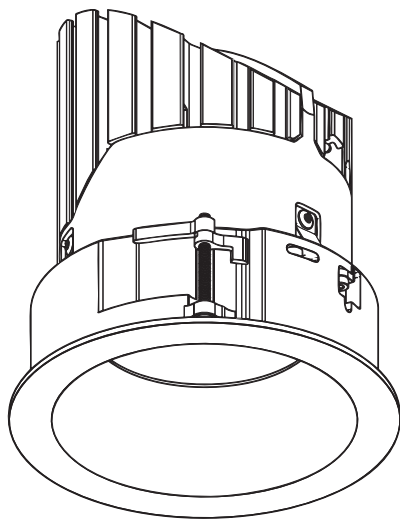


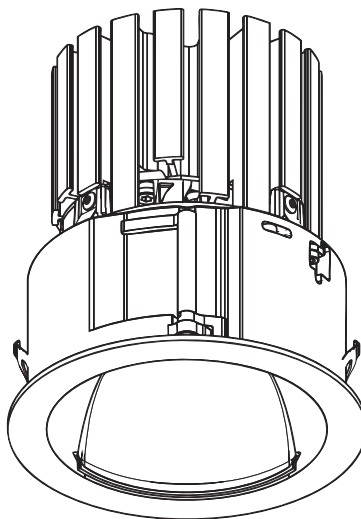


D2 Remodeler

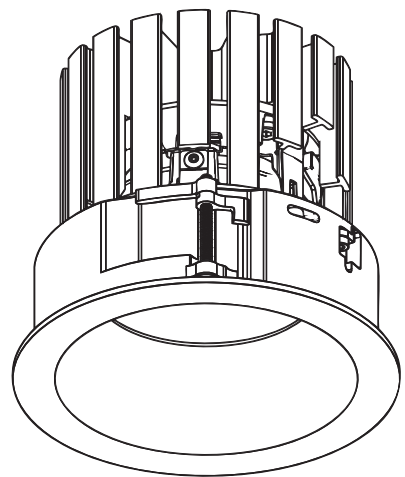
Installation Guide



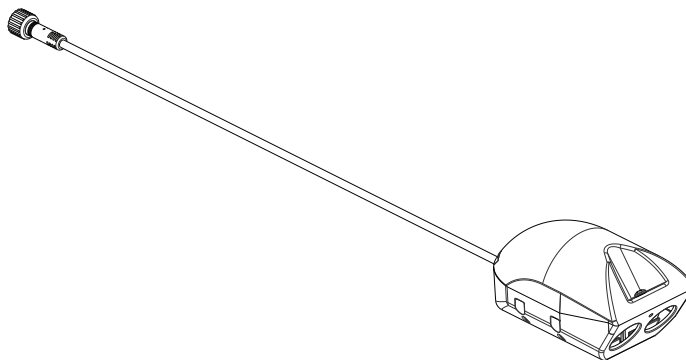
Adjustable



Wall Wash



Fixed



Models

Ketra LED Module: HW-D2RFSX18XXX11

Rania LED Module: HW-D2RTWX18XXX11

Power Supply: D2R-PS-120

Flanged Mount: UN-D2R-XX-F-X

Mud-in Mount: UN-D2R-XX-X-X

Millwork Mount: UN-D2R-XX-M

Wall Wash Flanged Mount: UN-D2R-XXWW-F-X

Wall Wash Mud-in Mount: UN-D2R-XXWW-X-X

Wall Wash Millwork Mount: UN-D2R-XXWW-M

WARNING

Risk of electric shock. Use in dry locations only.

Turn power OFF at circuit breaker or remove fuse. Damage to this product caused by wiring with power on voids the warranty.

For use in non-fire rated installation only.

This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This equipment complies with FCC/ISED radiation exposure limits set for an uncontrolled environment. The user should avoid prolonged exposure within 7.9 in (20 cm) of the antenna, which may exceed the FCC/ISED radio frequency exposure limits.



Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

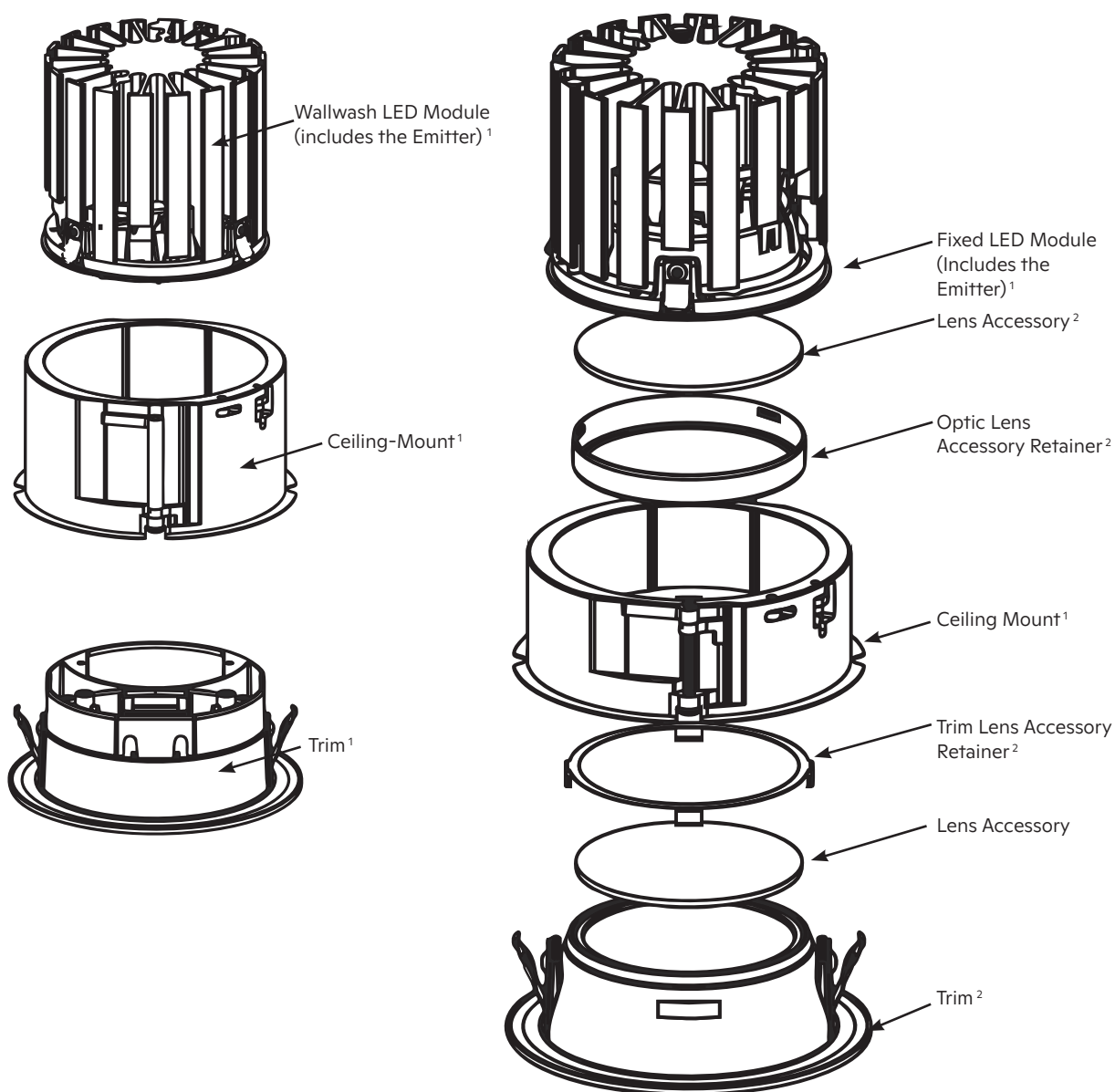
This Class B digital apparatus complies with Canadian ICES-005.

Product Overview

Lutron's D2R family includes fixed, adjustable, and wall wash downlights. The adjustable model features a 3.97 in (100.8 mm) tall LED module with ceiling mount, while the wall-wash sits at 3.95 in (100.3 mm) and fixed is a low-profile 3.17 in (69.3 mm) height.

All models include wireless communication, field changeable optics, and field replaceable electronics. With an abundance of trim and optic accessories, the D2R is ideal for a large variety of applications. The D2R family includes two different light sources:

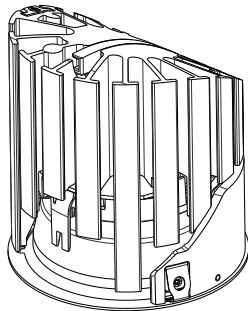
1. Ketra, which features a fully-tunable spectrum capable of delivering high quality white, saturated, and pastel light.
2. Rania, which features a wide range of tunable white light.



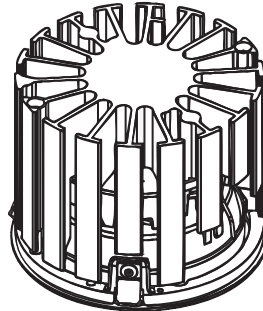
¹ Required for Installation

² Optional

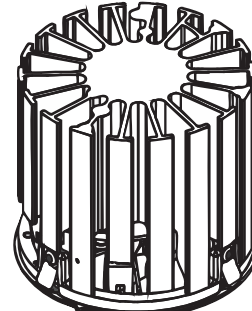
LED Modules



Adjustable LED Module

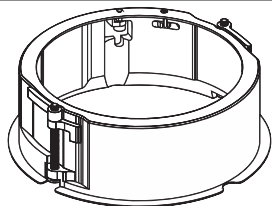
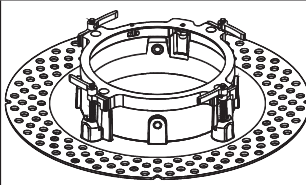
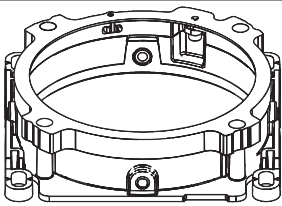
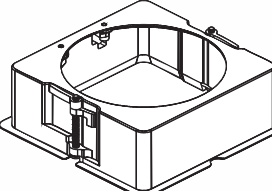
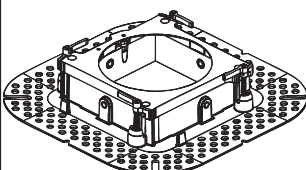
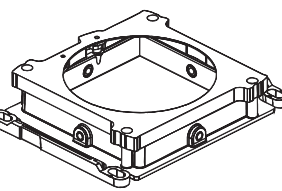
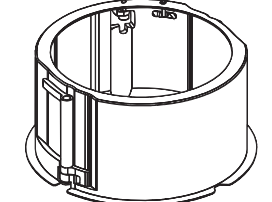
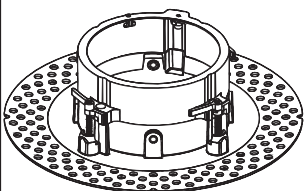
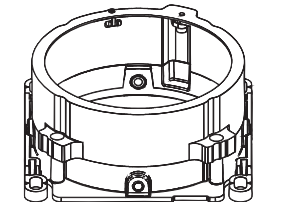
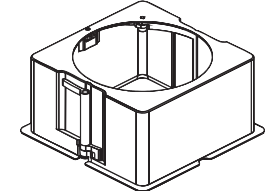
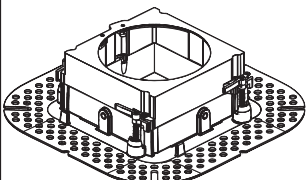
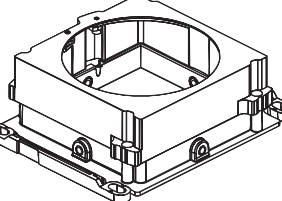


Fixed LED Module

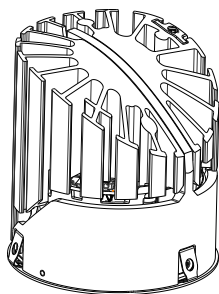


Wall Wash LED Module

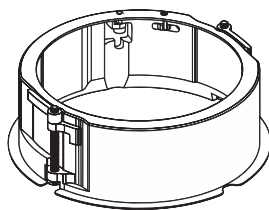
Mounts

	Flanged	Mud-in	Millwork
Round			
Square			
Round Wall Wash			
Square Wall Wash			

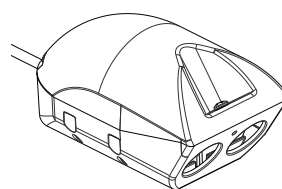
Included Components



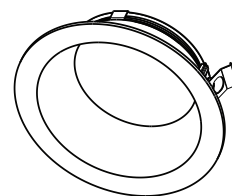
LED Module



Ceiling Mount



Power Supply



Trim

Recommended Tools

Mounting:

- #1 Phillips head screwdriver
- Pliers
- Power drill
- Wire stripper
- Mud-in: 4 in hole saw (100 mm also acceptable)
- Flanged: 3 1/8 in or 3 1/4 in hole saw (80 mm also acceptable)
- Millwork: plunge router
- Drywall saw

Adjustments:

- 1.5 mm ball-ended hex tool
- Suction tool (PU0950)
- Small flathead screwdriver

Electrical Specifications

	Specifications
Power Supply	120 V~ 60 Hz, 18 W 150 mA (max rating)
LED Module	20 V== 0.9 mA

Installation Requirements

Title 24 Requirements

All products in the D2R family are Title 24 JA8 compliant when installed with a trim accessory lens on the trim. For more information, please contact Lighting Technical Support at lightingsupport@lutron.com or 1.844.LUTRON1 (1.844.588.7661).

Communication Requirements

The D2R downlight, a Clear Connect - Type X device, communicates with the system in the 2.4 GHz frequency band. A Clear Connect - Type X system is comprised of a wireless processor/gateway and several other Clear Connect - Type X devices (e.g., D2 downlights, Ketra lamps, X96 Ketra controllers for Lightbar Slim, Sunnata wall controls) to form a robust mesh network.

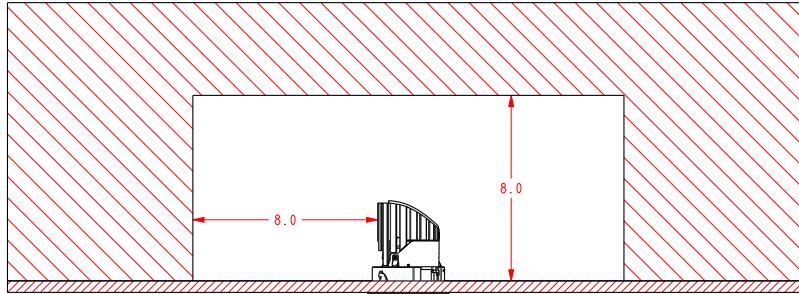
For optimal wireless communication performance, the following guidelines must be followed:

- The wireless processor/gateway must be centrally located amongst the Clear Connect - Type X devices that are assigned to its subnet.
- The D2R downlight must be mounted within 75 ft (22.8 m) of its assigned wireless processor/gateway.
- The D2R downlight and its assigned wireless processor/gateway must be on the same floor.
- Each D2R downlight must have at least two other non-battery powered Clear Connect - Type X devices within 25 ft (7.6 m).
- The D2R downlight must be mounted a minimum of 3 ft (1.0 m) away from interference sources in the 2.4 GHz band, including but not limited to microwaves, wireless access points, hotspots, baby monitors, thermostats, and voice recognizing control devices.

Best practices for designing and implementing a system utilizing Clear Connect - Type X are detailed in App Note #745 (P/N 048745) at www.lutron.com

Insulation Keepout

The D2R is a Non-IC product. If installed in a location with insulation, the insulation will need to be pushed back and maintained a distance of 8 in (203.2 mm) from the LED Module and 8 in (203.2 mm) above the top of the ceiling (see reference image below).



Ceiling Cavity

When in a Non-IC environment a keep out is required to be met to achieve appropriate product performance.

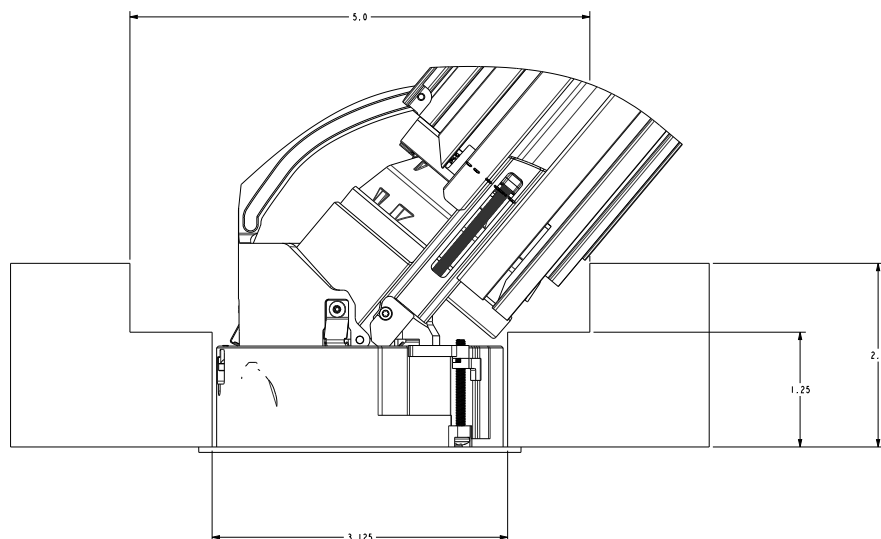
Fixed LED modules: Maintain 1.5 in (38.1 mm) of space above the product.

Wall wash LED modules: Maintain 0.75 in (19.1 mm) of space above the product.

Adjustable LED modules: Maintain 0.75 in (19.1 mm) of space above the product. Provide clearance diameter of 8 in (200 mm) for full 361° of rotation at 40° tilt.

Ceiling Thickness

For ceilings thicker than 1.25 in (31.8 mm), Adjustable LED modules will have limited tilt. To achieve full tilt and rotation the ceiling material will need to be reduced down to 1.25 in (31.8 mm) at a diameter of 5 in (127 mm). See Flanged install reference image below



INSTALLATION

Reference the table for sizes and see the type specific sections in the install guide for more details.

Type	Hole shape and size
Flangeless mud-in square aperture	Square with 4 in (101.6 mm) length/width
Flangeless mud-in round aperture	Circle with 4 in (101.6 mm) diameter
Flanged with square aperture	Square with 3.1 in (79.4 mm) length/width. Hole must be between 3.13 - 3.25 in (79.4 - 82.6 mm)
Flanged with round aperture	Circle with 3.13 in (79.4 mm) diameter. Hole must be between 3.13 - 3.25 in (79.4 - 82.6 mm)
Flangeless millwork with square aperture	<p><u>Material above wooden ceiling (if applicable):</u> Square with 8 in (203.2 mm) length/width</p> <p><u>Wood dimensions:</u> Counterbore: Rectangle with 4.75 in (120.7 mm) length / 3.75 in (95.3 mm) width, rounded corners with a radius of 0.5 in (12.7 mm). Plunge router is set to leave $\frac{5}{16}$ in (7.9 mm) of material</p> <p><u>Thru hole:</u> Square with 2.83 in (71.9 mm) length/width</p>
Flangeless millwork with round aperture	<p><u>Material above wooden ceiling (if applicable):</u> Circle with 8 in (203.2 mm) diameter</p> <p><u>Wood dimensions:</u> Counterbore: Square with 3.75 in (95.3 mm) length/width, rounded corners with a radius of 0.5 in (12.7 mm). Plunge router is set to leave 0.31 in (7.9 mm) of material</p> <p><u>Thru hole:</u> Circle with 2.83 in (71.9 mm) diameter</p>

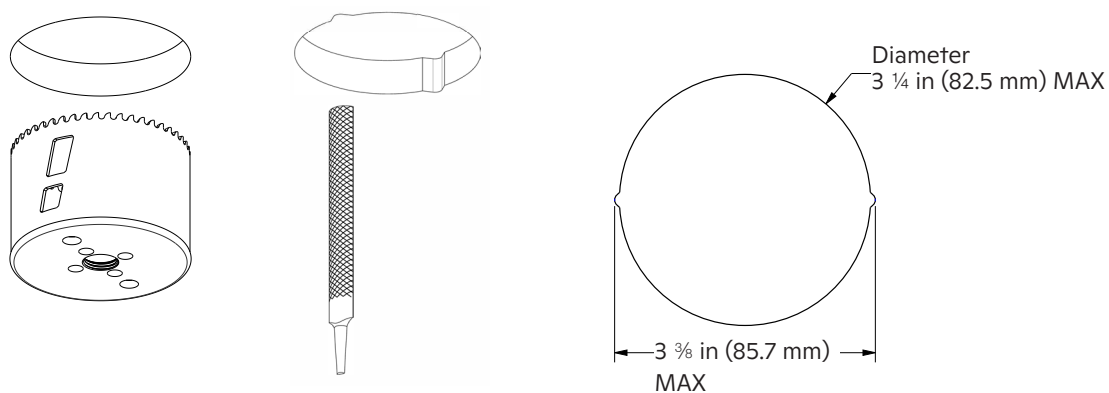
The table below shows which ceiling mount type should be selected based on the ceiling thickness and type.

Ceiling Type	Dimensions: in (mm)	Ceiling Thickness
Flanged/Flangeless Mud In	0.5-1 (12.7-25.4)	Standard (S)
	>1-1.5 (25.4-38.1)	Thick (T)
	>1.5-2 (38.1-50.8)	Deep (D)
Flangeless Millwork	0.5-2.0 (12.7-50.8)	No selection required

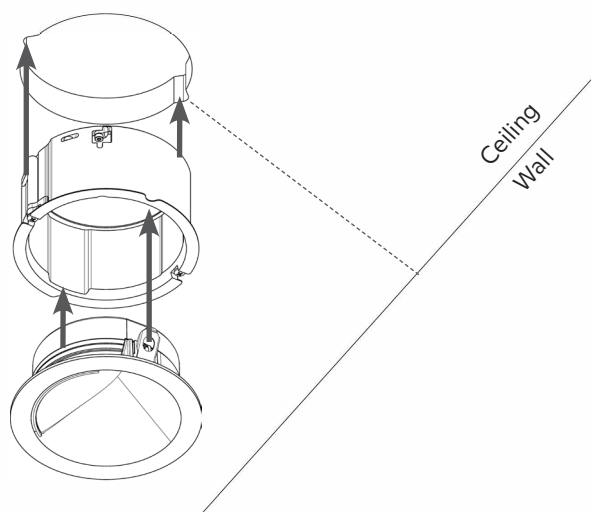
INSTALL THE CEILING MOUNT

Note: This section is specifically for flanged trim install cases. For Flangeless, see page 12.

1. Drill hole in ceiling
 - a. Using a drill and hole saw, drill a hole into ceiling with a diameter of $3\frac{1}{8}$ in (79.4 mm). For square trims, use a Roto-Zip or otherwise file a square with side length $3\frac{1}{8}$ in (79.4 mm). Some filing of the drywall may be necessary at the screw boss locations. If installing Wallwash, see 1.b.



- b. If installing wall-wash mounts or to align all mounts using laser or chalk line, rotate mount in ceiling hole such that the screw boss notches in bottom flange are perpendicular to nearest wall (reference mounting diagram below)



INSTALLATION

2. Install mount into ceiling

- Remove shipping tape from flags. Ensure mount flags and flag nuts are in install position (Tight to mount body- see Fig. 1 for reference. It should not look like Fig. 2). Allow screws to hang from the mount.

Note: For thicker ceilings, repositioning of mount flags might be required prior to installing.

See Fig. 3. Hold flag nuts while loosening flag screws to increase flag height.

- Push mount assembly through ceiling hole.
- When bottom flange of mount is firmly against ceiling, use Phillips screwdriver to tighten mount screw (clockwise rotation). Mount flag will swing outwards and begin traveling downwards above the ceiling (Fig. 2).
- Tighten until mount flag contacts drywall and there is a slight but noticeable increase in torque required to turn mount screw.
- Repeat step (d) on second mount screw, then ensure mount is securely fastened to ceiling. This can be done by gently pulling on the mount to ensure no movement occurs. Mount is now installed.

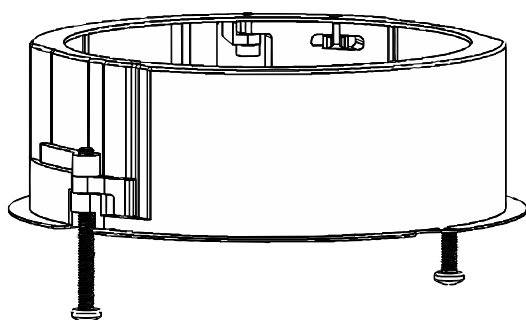


fig 1: Mount with flags at install position

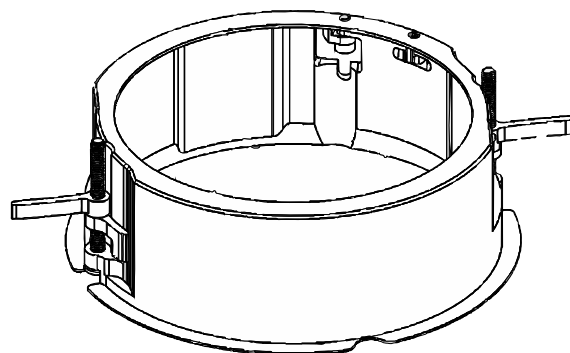


fig 2: Mount with flags at incorrect position

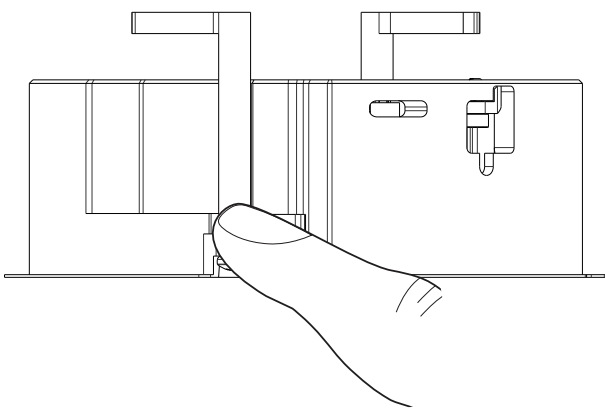


fig 3

Image of mount as shipped
- how customer will receive mount

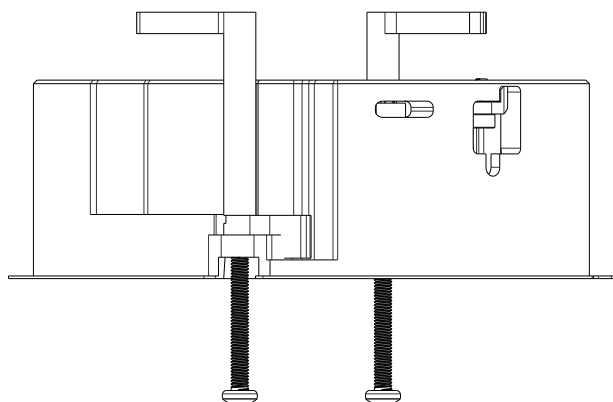


fig 4

Image of screw all the way backed out
- how mount should look prior to putting into ceiling

INSTALL CEILING MOUNT- FLANGELESS MUD-IN

1. Drill hole in ceiling
 - a. Drill a hole into ceiling at desired location of diameter 4 in (101.6 mm). For square trim installations, use a Roto-Zip or otherwise file a square with side length 4 in (101.6 mm). If installing a square wallwash mount, ensure the edges are parallel with the wall being illuminated.
2. Install mount into ceiling
 - a. Remove shipping tape from flags. Ensure mount flags and flag nuts are in install position (Tight to mount body- see Fig. 5 for reference. It should not look like Fig. 6). Allow screws to hang from the mount.

Note: For thicker ceilings, repositioning of mount flags might be required prior to installing. Reference Flanged install figure 3. Hold flag nuts in a similar fashion while loosening flag screws to increase flag height.
 - b. Push mount assembly through ceiling hole. Loosen the 4 mount screws until the flag nears the top of the screw (if your ceiling is at the edge of the ceiling thickness range, you may need to get the flag flush with the top of the screw).
 - c. When bottom flange of mount is firmly against ceiling, use Phillips screwdriver to tighten mount screw (clockwise rotation). Mount flag will swing outwards and begin traveling downwards above the ceiling.
 - d. Tighten until mount flag contacts drywall and there is a slight but noticeable increase in torque required to turn mount screw.
 - e. Repeat step (d) on remaining mount screws, then ensure mount is securely fastened to ceiling. This can be done by gently pulling on the mount to ensure no movement occurs. Mount is now installed.

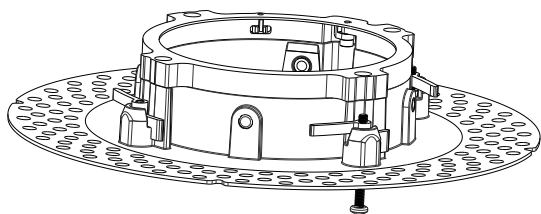


fig 5: Mount with flags at install position

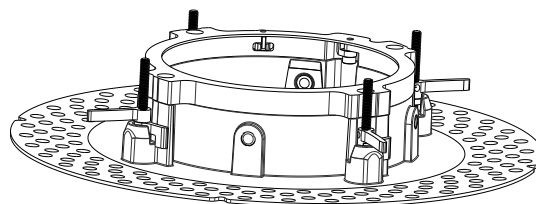
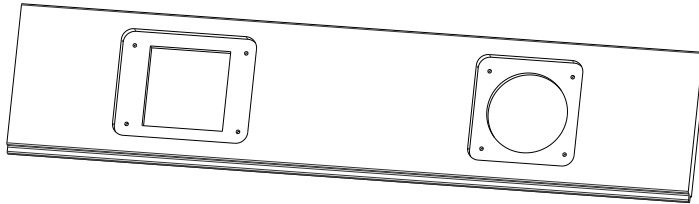


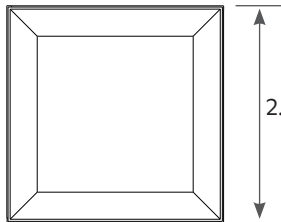
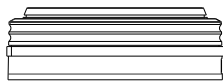
fig 6: Mount with flags at incorrect position

INSTALL CEILING MOUNT- FLANGELESS MILLWORK

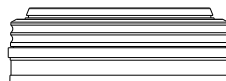
1. Flangeless millwork mounts are installed on the back side of the millwork. Precise holes must be cut for the trims, and the millwork thickness at the location of the mount must be reduced to 5/16 in. (7.9 mm). Router templates are available to assist in the woodworking.
2. Review the drawings below for important dimensions.
 - a. A millwork board with typical modifications required for round and square trims:



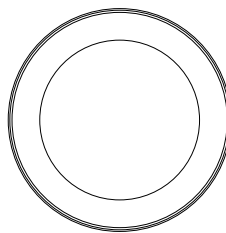
- b. Flangeless trim dimensions:



2.8 in (203.2 mm)

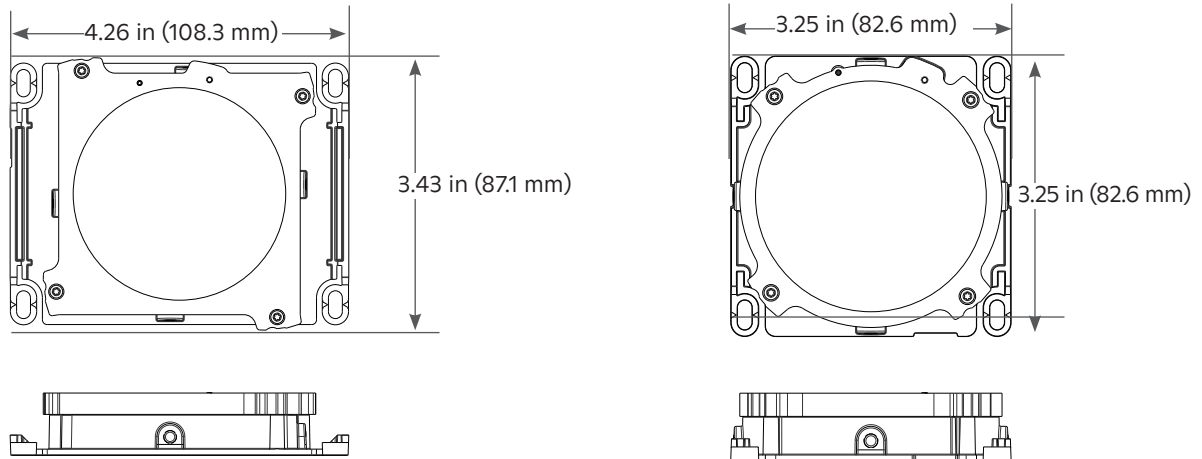


Diameter
2.8 in (203.2 mm)

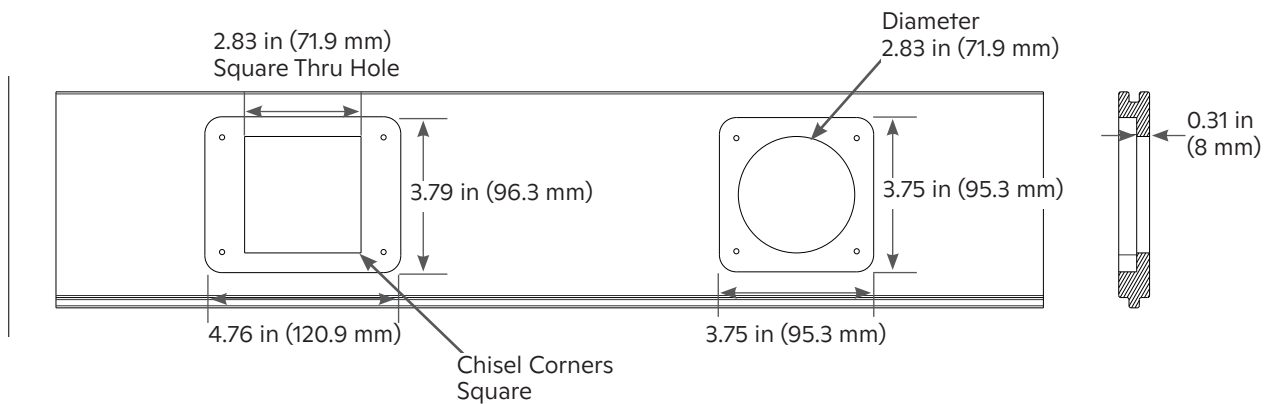


INSTALL CEILING MOUNT- FLANGELESS MILLWORK (CONTINUED)

c. Millwork Mount dimensions:

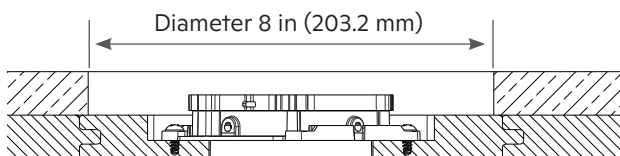


d. Millwork dimensions:



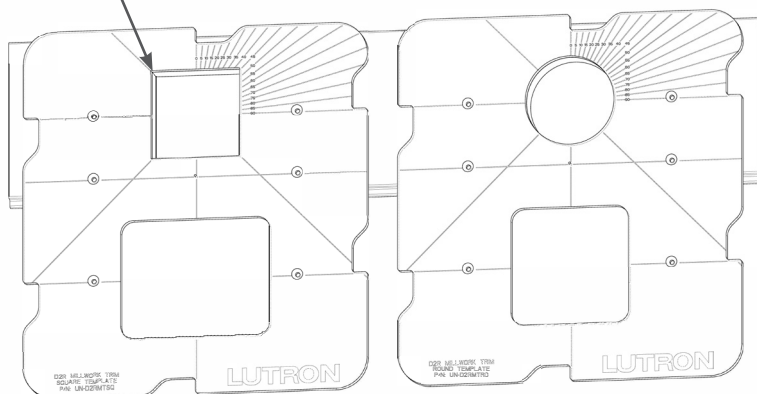
INSTALL CEILING MOUNT- FLANGELESS MILLWORK (CONTINUED)

- e. Removal of underlying ceiling material for full tilt range of adjustable LED module with underlying ceiling material above 2 in (50.8 mm):



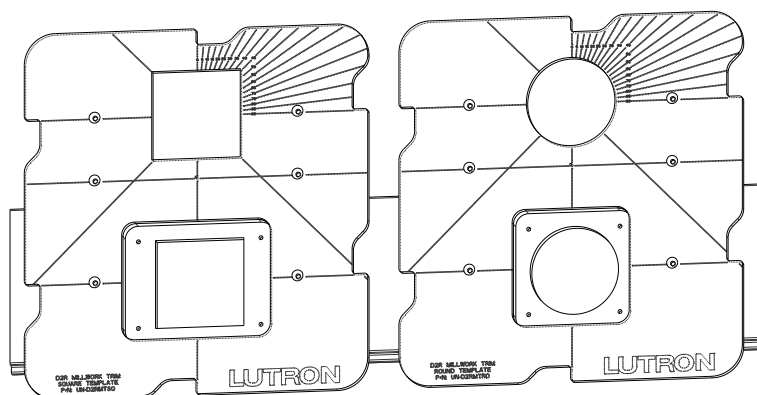
3. Plan the millwork butt joints to allow room to mount the router template and to avoid partial holes on end cuts. If a luminaire location must span multiple boards, fasten the adjacent boards together prior to routing.
4. Fasten the template to the millwork with screws, double-sided tape or clamps. It is possible to use the template from the front or back face of the millwork depending on preference. The template includes reference marks to help with alignment. Drilling a small pilot hole at the center of the trim location can help transfer marks from the front to the back.
5. Using a router and template following bit, route the millwork to the correct thickness and opening size. Wood is a natural material that shrinks and swells with changes in moisture. Wood should be kiln dried and acclimated to the environment before routing.
 - a. Use the template to route the thru holes.

Chisel required for square trim

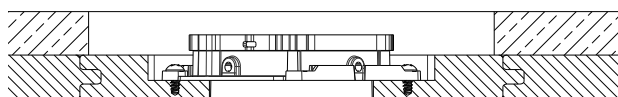


INSTALL CEILING MOUNT- FLANGELESS MILLWORK (CONTINUED)

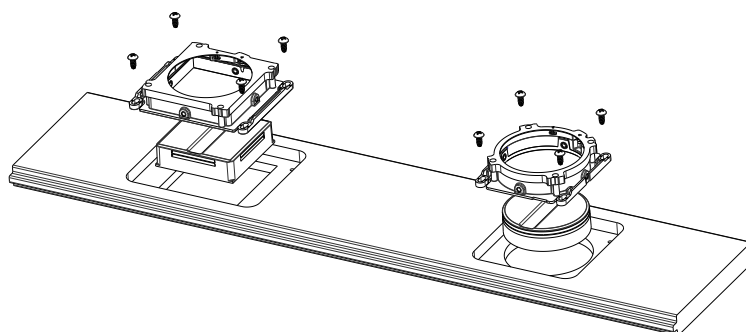
- b. Use the template to route the pockets, bringing the millwork to a final thickness of 0.31 in (7.9 mm) under the mount.



6. Test fit the mount. Ensure the mud plug is installed in the mount and use the mud plug to center the mount on the opening. Some clearance should be present between the opening and the mud plug to account for small changes in wood dimensions that may occur after the millwork is installed.
7. Drill pilot holes for the retainer screws. Use a depth stop to prevent the bit from breaking through. Use caution when installing the screws to avoid overtightening and stripping the screw holes in the millwork. Only a light torque is required. The mount should not be installed in the ceiling if the millwork screw holes are stripped. When installed properly, the mount should not move.

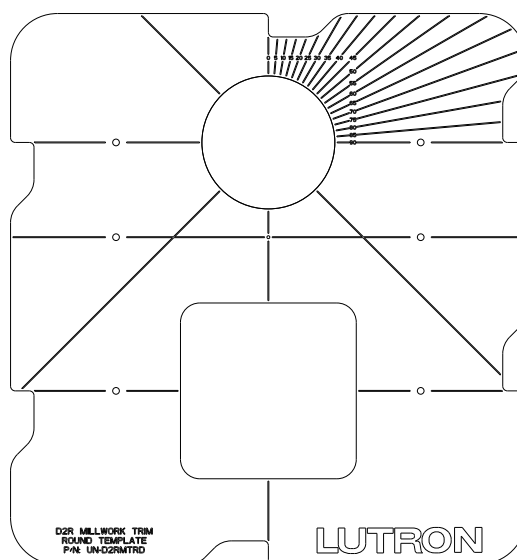
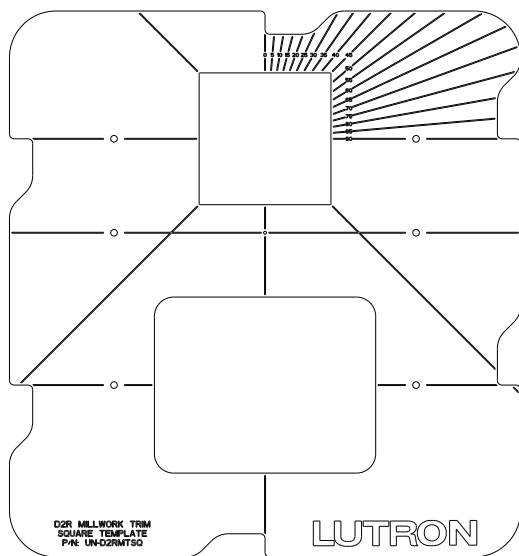


Drill blind pilot holes Mud plug locates mount while marking pilot holes



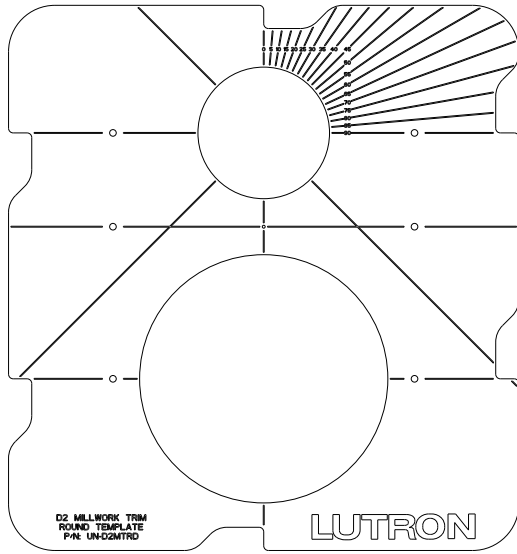
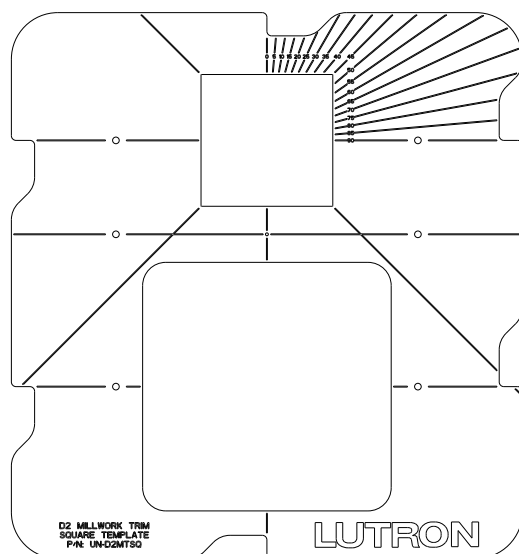
Millwork Templates

Square (UN-D2RMTSQ) and round (UN-D2RMTRD) acrylic routing templates will soon be available to order through your myLutron account at www.mylutron.com. For more information, please contact Lighting Technical Support at lightingsupport@lutron.com or call 1.844.LUTRON1.



D2 Templates can still be utilized for D2R, with the width of the counterbore being larger than D2R. 5 in (127 mm) instead of the new square 4.76 in x 3.79 in (120.9 mm x 96.3 mm) or round 3.75 in (95.3 mm).

Square (UN-D2MTSQ) and round (UN-D2MTRD) acrylic routing templates are available to order through your account at www.mylutron.com. For more information, please contact Lighting Technical Support at lighting@lutron.com or call 1.844.LUTRON1.

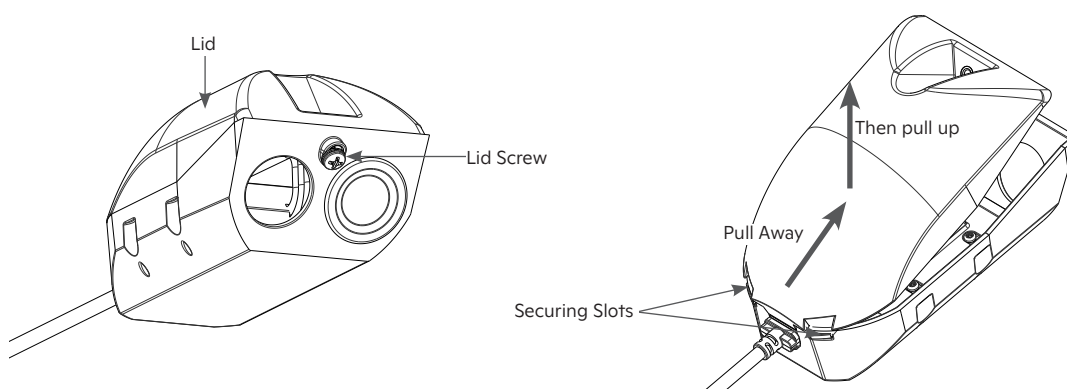


For printable square D2 millwork template, download P/N 3663122 from www.lutron.com

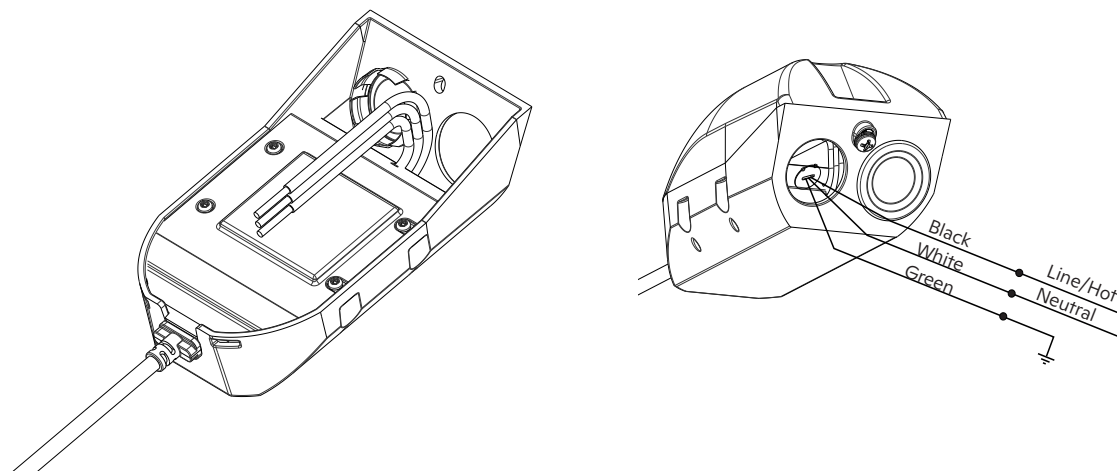
For printable round D2 millwork template, download P/N 3663121 from www.lutron.com

Wire the Fixture (Non-Emergency Operation)

1. Gently pull building's power lines from above ceiling through ceiling mount.
Note: A licensed electrician should perform all wiring tasks. All electrical connections must be made within the power supply.
2. Connect power supply to building power
 - a. Using Phillips screwdriver, remove the lid screw and then remove the lid by pulling the lid away from the securing slots on the opposite end and then up.
 - b. If using conduit or cable grommet, install in the open enclosure hole.
 - c. Using the provided connectors, splice the flying leads of the power supply into the building's power.



3. Re-assembly power supply enclosure
 - a. Re-install power supply lid by first hooking the lid securing hooks back into the securing slots in the power supply body, then pivot lid down until able to reinstall the lid screw removed in the previous step. Be careful not to pinch the wires between the lid and power supply body. Once complete, push power supply enclosure through ceiling mount and leave luminaire input connector dangling through hole.

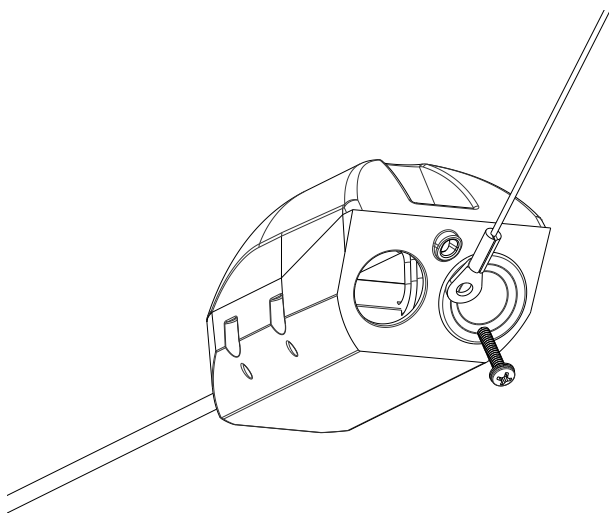


* Lutron lighting products should not be connected to, or directly controlled by, AC mains line voltage dimmers. These types of dimmers may also be referred to as phase cut, triac, forward-phase, reverse-phase, ELV, or MLV dimmers. Lutron's lighting products should only be controlled via our digital control architecture. Lutron does not recommend switching power on/off to Lutron lighting products via relays, contactors, or manual toggle switches. When the lighting products are disconnected from power they cannot respond to digital commands from control devices. This could confuse end users as the lighting may be in a state that is inconsistent with the control devices. Please refer to the product installation guides for more information.

Wire the Fixture (Non-Emergency Operation)

⚠ WARNING: ELECTRIC SHOCK HAZARD. May result in Serious Injury or Death. Turn off power at circuit breaker or fuse before installing.

4. Optional Tether
 - a. A steel mounting tether is provided with each power supply to allow for mounting to a substrate within the ceiling or attic space. When mounting the power supply, capture one loop of the tether between the lid screw and the power supply as shown, then affix the other loop of the tether to the mounting surface with appropriate hardware. If needed, the tether can be mounted after the housing is re-assembled. The provided nut can be used to capture the tether on the exposed threads of the screw.



* Lutron lighting products should not be connected to, or directly controlled by, AC mains line voltage dimmers. These types of dimmers may also be referred to as phase cut, triac, forward-phase, reverse-phase, ELV, or MLV dimmers. Lutron's lighting products should only be controlled via our digital control architecture. Lutron does not recommend switching power on/off to Lutron lighting products via relays, contactors, or manual toggle switches. When the lighting products are disconnected from power they cannot respond to digital commands from control devices. This could confuse end users as the lighting may be in a state that is inconsistent with the control devices. Please refer to the product installation guides for more information.

Wire the Fixture (Emergency Operation)

The commercial Clear Connect - Type X Ketra D2R and LVS LUT-SHUNT-A-TD, when installed together, form an approved emergency lighting system in accordance with NEC® Article 700 and NFPA101. Monthly and annual testing, in accordance with NFPA101, is required to maintain this compliance.

1. Run the building's power line wires* into the power supply.

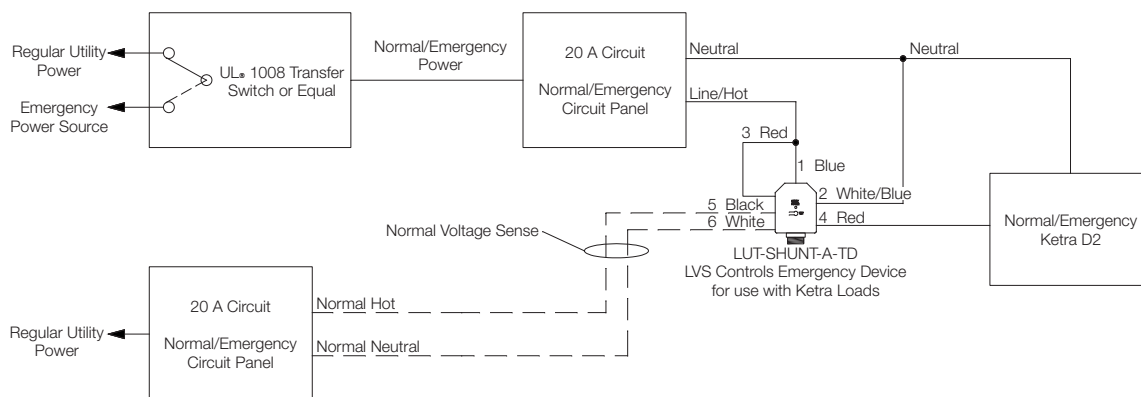
Note: A licensed electrician should perform all wiring tasks. All electrical connections must be made within the housing.

Note: Maximum of (8) 12 AWG (4.0 mm²) through branch circuit conductors suitable for 165 °F (75 °C) are permitted in the housing.

 - a. Run the building's power line wires* into the housing.
2. Install the LUT-SHUNT-A-TD in accordance to LVS installation instructions wired to the circuit feeding the Ketra D2R
3. Splice the wires
 - a. Using the provided connectors, wire the D2R's flying leads according to the diagram below.

Note: The power supply's hot (black) will connect to the red #4 on the LUT-SHUNT-A-TD according to the diagram below.

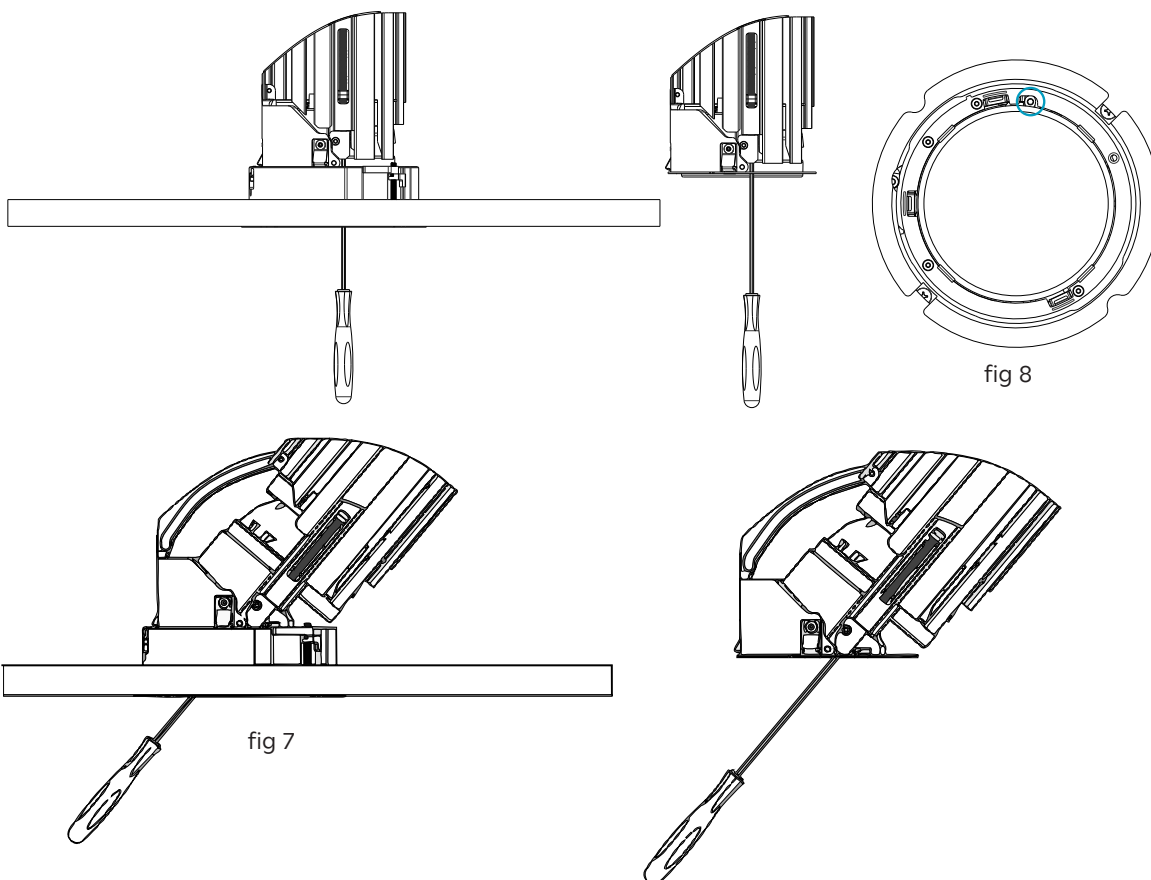
Note: The power supply's neutral (white) will connect to the emergency neutral and white/blue #2 on the LUT-SHUNT-A-TD according to the diagram below.
 - b. Make sure the housing is installed and grounded in accordance with all national and local codes.
4. Test the wiring
 - a. Apply power to the power supply. The emitter should immediately come on to 3000 K (warm white).
 - b. After verifying a successful installation, remove power and continue to Part 3.



* Ketra lighting products should not be connected to, or directly controlled by, AC mains line voltage dimmers. These types of dimmers may also be referred to as phase cut, triac, forward-phase, reverse-phase, ELV, or MLV dimmers. Ketra's lighting products should only be controlled via our digital control architecture. Ketra does not recommend switching power on/off to Ketra lighting products via relays, contactors, or manual toggle switches. When the lighting products are disconnected from power they cannot respond to digital commands from control devices. This could confuse end users as the lighting may be in a state that is inconsistent with the control devices. Please refer to the product installation guides for more information.

Install LED Module in Ceiling Mount

1. Connect LED Module to Power Supply
 - a. Connect LED module electrical whip to power supply connector dangling through ceiling hole by pushing male and female connectors together, then screw on threaded connector collar for secure connection.
2. Install LED Module into Ceiling Mount
 - a. Align LED module with mount hole and gently push up until all three frame springs on LED module are through hole and above ceiling mount (if installing adjustable LED module, ensure heatsink is not in tilted position before installing). Spring engagement with mount should be audible and tactile.
 - b. Ensure LED module is installed into ceiling mount by visibly inspecting frame spring engagement with ceiling mount and gently wiggling LED module.
3. Adjusting Luminaire
 - a. To lock rotation of unit: Unit can be rotated by utilizing suction cup on primary optic or gently spinning luminaire by hand. *Locate rotation lock feature inside ceiling mount. Using 1.5 mm ball-end hex tool, slowly loosen the rotation lock screw until rotation lock component is below the bottom metal flange of the luminaire. Then slowly tighten lock screw until rotation lock component clamps metal flange of luminaire. Unit is now locked. To unlock rotation, reverse the previous step.
 - b. To tilt the unit (adjustable only): Locate the emitter tilt screw (reference figure 8 below). Using a 1.5 mm hex key, rotate clockwise until desired tilt angle is achieved. While tilting, the tool will tilt along with the device, reference Fig 7. Rotation lock may need to be engaged during tilting to achieve desired light output positioning. Unit can be brought back to zero position by reversing rotation of emitter tilt screw. Force required to tilt should not exceed 2.5 in/lbs (25.4 mm/lbs), if exceeding this force, check for obstructions in your ceiling cavity.



Install LED Module in Ceiling Mount (continued...)

Note: Fixed and Adjustable LED Modules have the ability to adjust the optic height away from its factory height setting. This feature allows the user to lower the optic height and close the gap between the optic and the top of the trim, resulting in a different appearance and slightly more lumens. For adjustable units, this is managed by using the same adjustment as tilt shown in fig 10. For fixed units, it is its own adjustment screw shown in Fig. 9. From the factory setting this is achieved by tightening the adjustment screw clockwise. This should only be done by a designer that is aware of the consequences.

- This will increase glare
- This will prevent the use of optic or trim accessories, and could introduce an interference when placing a trim if accessories are utilized.
- This could introduce non-consistent ceiling appearance if only some are adjusted.

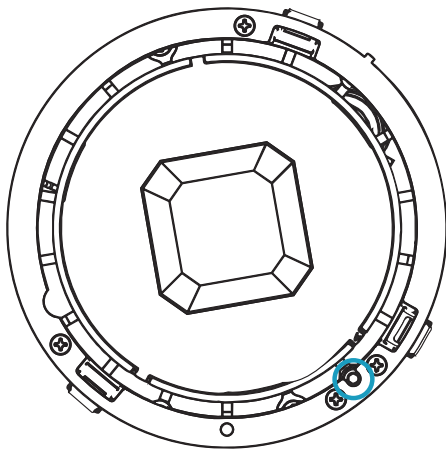


Fig. 9 Fixed LED Module

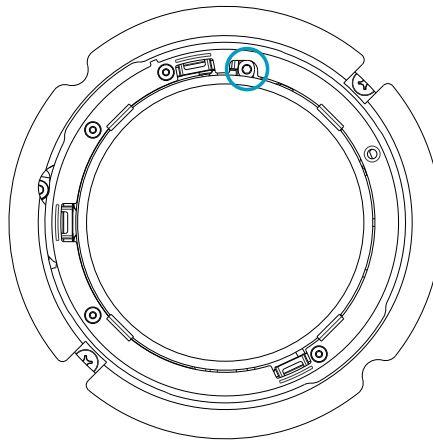
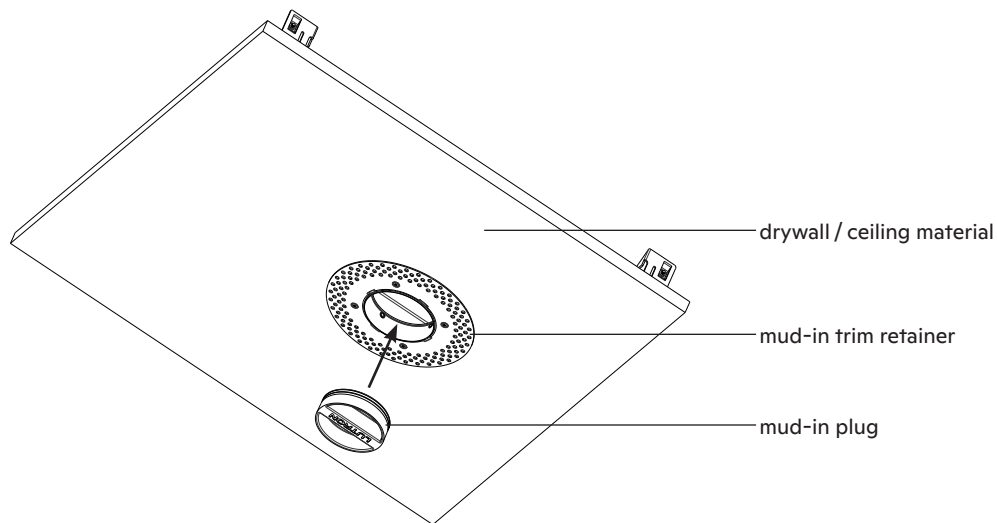


Fig. 10 Adjustable LED Module

Apply Joint Compound

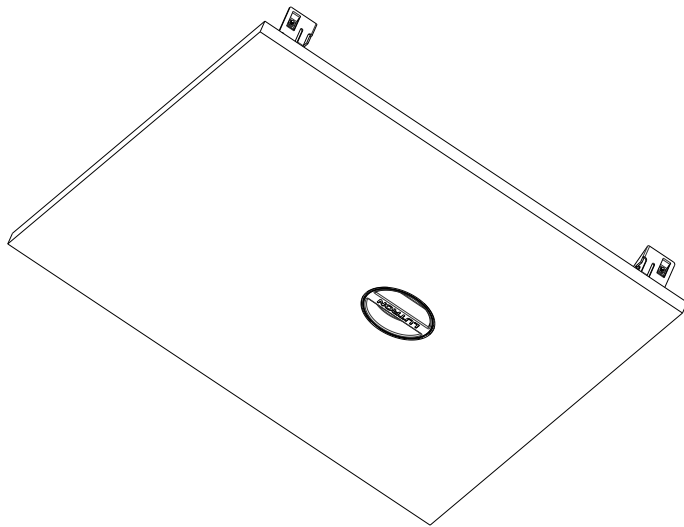
Note: This section applies to flangeless mud-in installations only.

1. Make sure the mud-in plug is installed prior to applying the joint compound (reference image below).
2. Apply skim coat up to the aperture rim using a joint compound. For best results, use a full ceiling float coat.



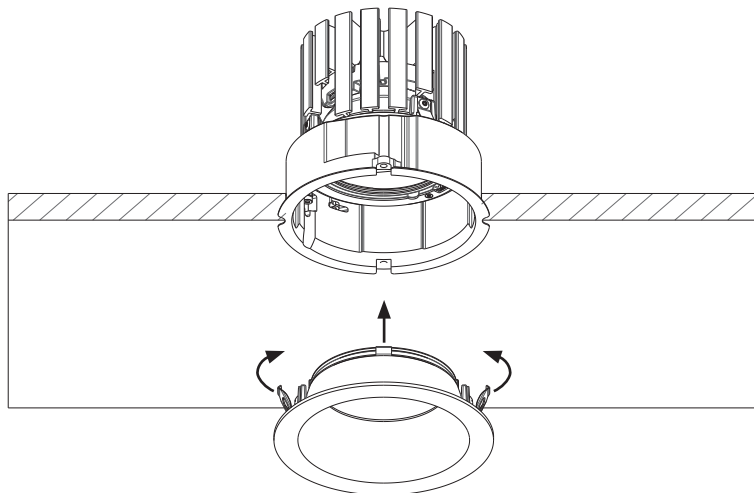
3. Sand and finish the final surface to be flush with the mount rim **before removing** the mud plug. Clean the internal surfaces of the trim retainer with a clean rag and isopropyl alcohol.

Note: It is critical to make sure that the mud-in plug is installed prior to applying the joint compound and finishing the surface. After finishing, ensure the internal surface of the trim retainer is completely free of joint compound, paint, and debris.



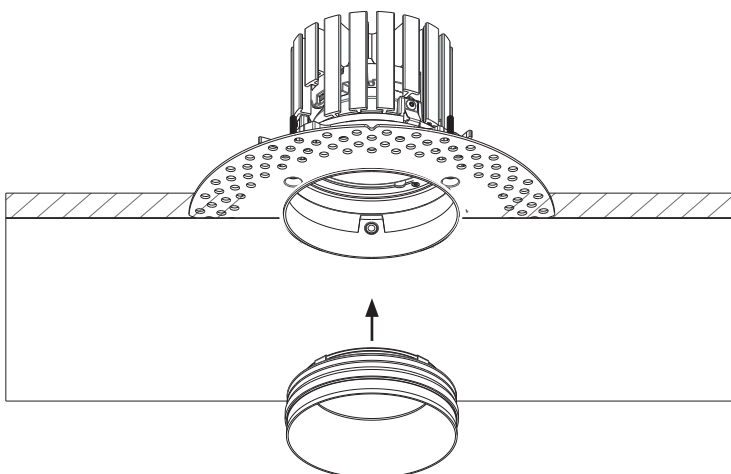
Apply Trim

1. For flanged trim, align springs on trim with alignment/trim notches on bottom flange of ceiling mount (reference image below). Once aligned, push trim upwards until the trim flange contacts the ceiling. Finish trim is now installed.



2. For flangeless trim, first remove the mud-blocker if it is currently installed. This can be done by gently pulling on the handle until the spring ball detents have disengaged. Push the trim into the mount hole until two tactile clicks are felt and/or heard, indicating that the spring ball detents have been engaged. The trim should now be flush with the bottom edge of the ceiling mount. Finish trim is now installed.

Note: For wallwash trims, ensure that the opening on the back of the trim is aligned with the optic on the luminaire to avoid suboptimal performance.



INSTALLATION

Installing or replacing the optic

1. To remove an optic:
 - a. Remove any optic accessories present by pulling the accessory retainer directly down from the optic. Set the accessory lenses aside. Please refer to the **Trim & Optic Accessory Lenses** section starting on page 28 for more information.
 - b. By hand or with the suction tool (PU0950), gently twist counterclockwise to un-snap the optic and remove it from the LED module.
2. To install an optic:
 - a. By hand or with the suction tool (PU0950), carefully insert the optic into the LED module, using caution to not touch any exposed components on the light engine, **especially the silicone dome**.
 - b. Gently twist the optic clockwise until it snaps into place.
3. If using an accessory lens:
 - a. By hand or with the suction tool (PU0950), gently push the optic lens retainer onto the optic until the retainer snaps into place.

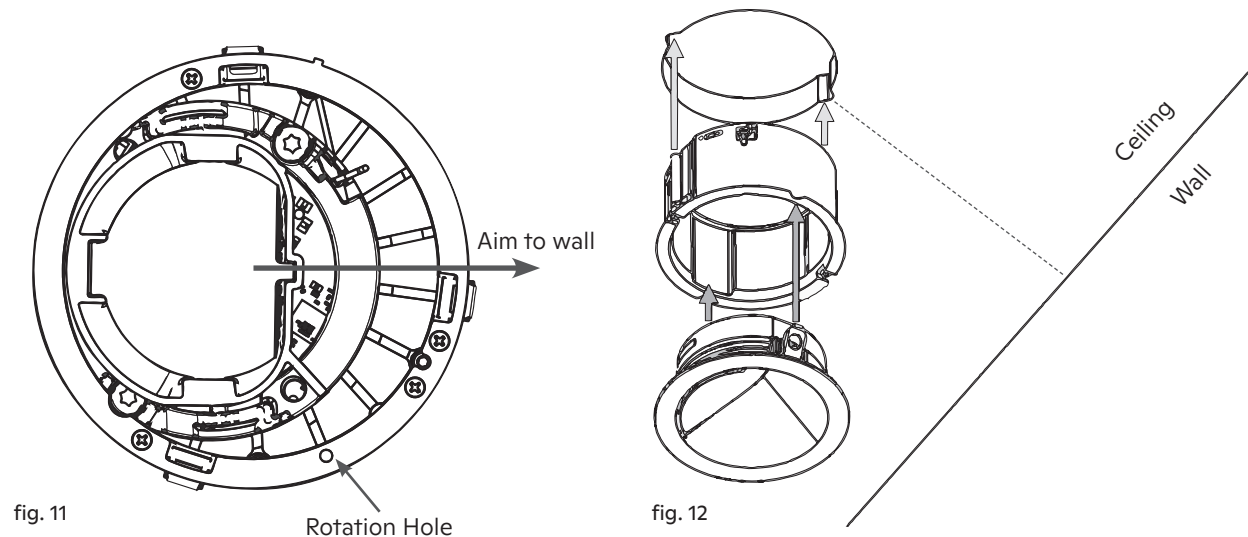
Note: For Ketra full spectrum light engines, the spot beam angle (15°) optic must be used with a compatible spot light engine. Narrow flood (25°), flood (40°), and wide flood (60°) optics are interchangeable with the standard light engine.

Wall Wash Configurations

AIMING THE OPTIC

1. Remove the trim by pulling it directly away from the housing.
2. Insert the 1.5 mm hex tool into the rotation hole shown in (see fig. 11).
3. Rotate the light engine to the desired position. Use the optic to point towards the wall as shown in Fig 12.
4. Reinstall the trim.

Note: For full performance, the trim must be aligned with the primary optic as shown fig. 12

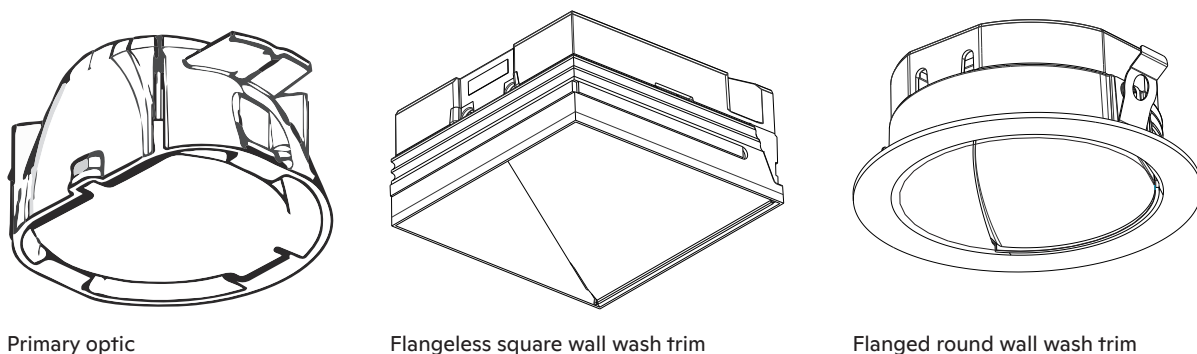


UNIQUE COMPONENTS OF WALL WASH CONFIGURATIONS

The optical components of wall wash configurations are unique and cannot be interchanged with other D2 optical components. This includes:

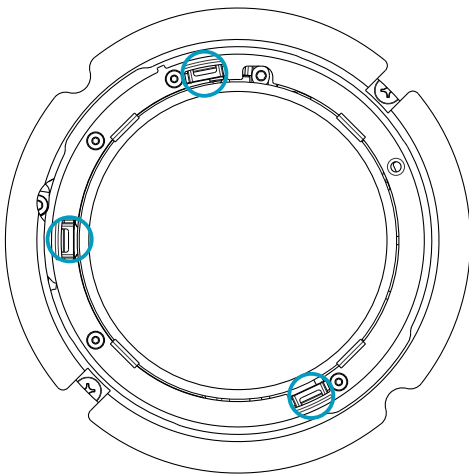
- Primary optic
- Trim
- Trim lens

Note: These parts can only be used for wall wash applications and cannot be interchanged with other beam angles, trims, or optic / trim accessories.



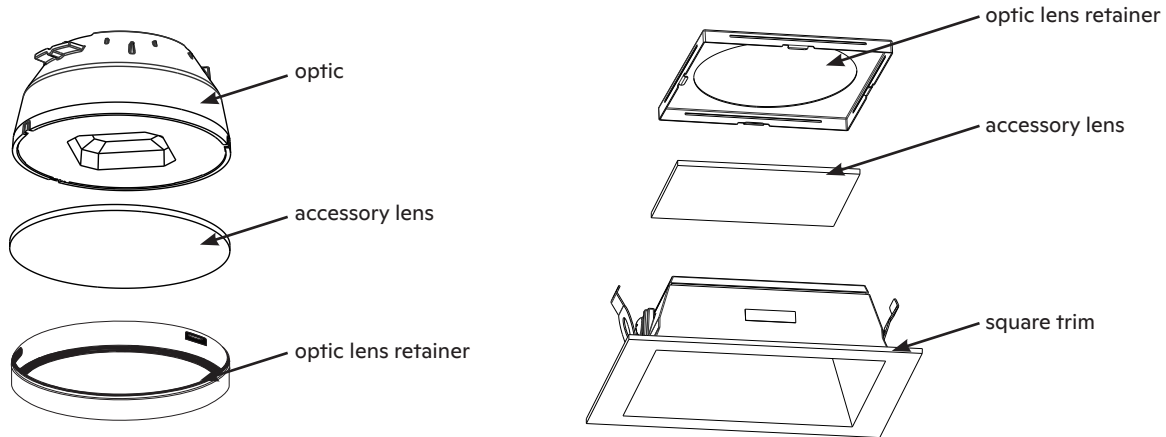
Replacing the LED Module

1. Remove the trim by pulling it directly down from the housing.
Note: For flangeless trims with a lens, use the suction tool (PU0950) to remove.
2. Remove the lens accessory by using the suction tool (PU0950).
Note: For adjustable only, tilt the LED module to nadir (0°) prior to the next step.
3. Use a small flathead screwdriver to disengage the 3 mounting springs, one at a time. The suction tool can be used to aid in unit removal (reference image below).
4. Carefully lower the light engine from the ceiling.
5. Disconnect the LED module wire connector.
6. Connect the new LED module wire connector.
7. Insert the new LED module into the ceiling mount and push up by hand or with the suction tool until a loud click is heard.
8. Reinstall the lens accessory by hand or with the suction tool (PU0950).
9. Reinstall the trim.



Trim & Optic Accessory Lenses

1. Preparing a replacement accessory lens
 - a. If the lens was purchased separately, a protective film and identifying label will be present on the lens.
 - b. Gently peel back the protective film adhered to the lens. This film is on the same side as the identifying label.
 - c. If the lens needs to be cleaned, use a lint free microfiber cloth and water. Do not use chemicals to clean the lenses.



2. Replacing an accessory lens on the primary optic
 - a. Using the suction tool (PU0950), gently remove any existing lenses on the optic. If none are present, skip this step.
Note: This is also necessary for replacing the optic. See the "Installing or replacing the optic" section on page 25 for more information.
 - b. Place the new accessory into the optic lens retainer.
Note: For soft focus accessory lenses, it is recommended to orient the lens with the textured side facing towards the room for best optical results. See the D2 Design Guide at <https://support.lutron.com/us/en/product/lighting/documents/installation-guide> for more information.
 - c. Gently push the optic lens retainer onto the optic until the retainer snaps into place.

INSTALLATION

3. Installing or replacing an accessory lens on the trim

- Using the suction tool (PU0950), remove the trim. If no trim lens is present, remove the trim by hand.
- Remove the trim lens retainer (if present) from the trim by pressing on the side of the clip and pulling away from the trim (reference images below).

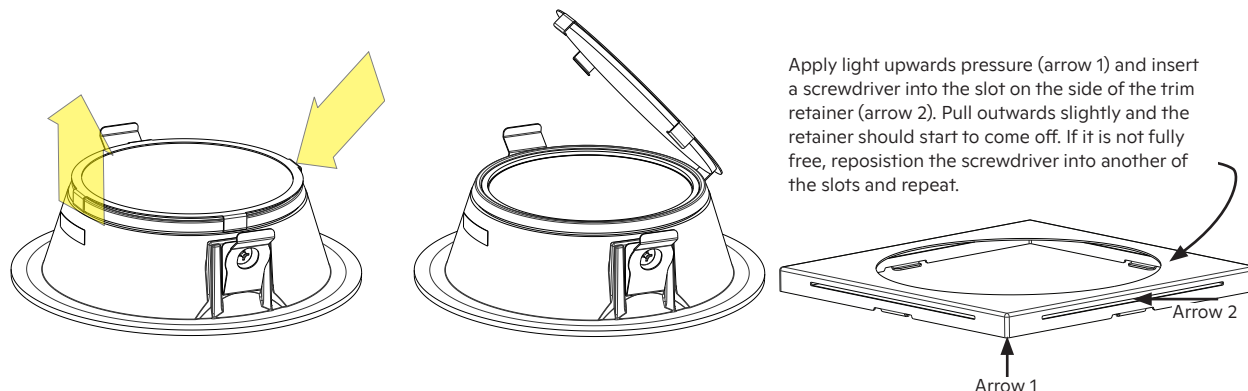
Note: For square trims see figure X and " include the text in the image added below.

- Place the new lens onto the trim, ensuring it is fully seated in the trim.

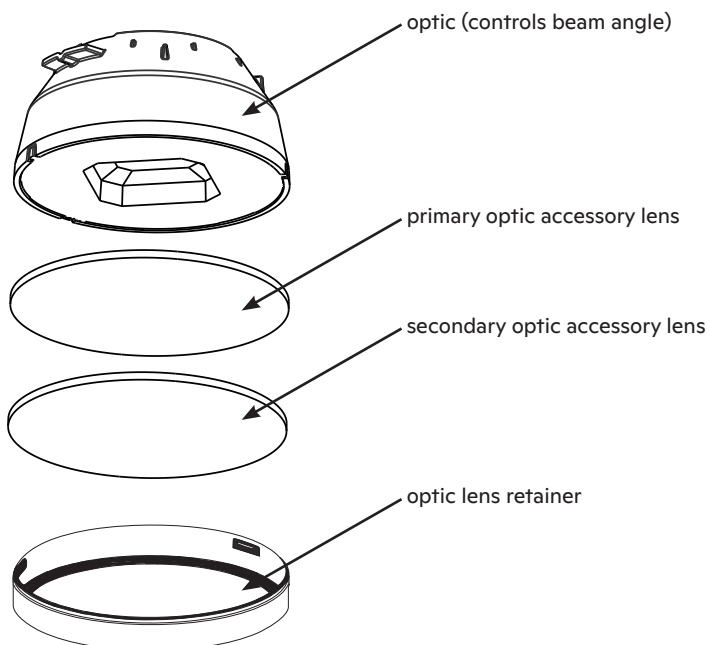
Note: For soft focus accessory lenses, it is recommended to orient the lens with the textured side facing towards the room for best optical results. See the D2 Design Guide at <https://support.lutron.com/us/en/product/lighting/documents/installation-guide> for more information.

- Clip the trim lens retainer onto the trim and then reinstall the trim.

Note: Ensure that all four tabs on the lens retainer are fully seated in the trim retainer groove on the trim.



Note: The optic lens retainer can accommodate up to two accessory lenses on the primary optic.



Warranty & Tech Support

Limited Warranty: www.lutron.com/warranty or call 1.844.LUTRON1 (USA/Canada) or +1.610.282.3800 (Others) for a printed copy.

For questions and technical support please contact:

lightingsupport@lutron.com

1.844.LUTRON1 (1.844.588.7661)



6231 E. Stassney Ln.
Bldg. 13, Suite 400
Austin, TX 78744

www.lutron.com
1.844.LUTRON1 (1.844.588.7661)

P/N 3663301 Rev A

Lutron, Clear Connect, Ketra, Sunnata, and any related trade dress and logos are trademarks or registered trademarks of Lutron Electronics Co., Inc. in the US and/or other countries.

All other product names, logos, and brands are property of their respective owners.