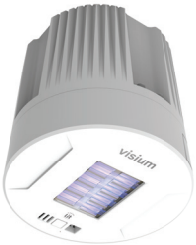
visium 1™

Installation Guide



Scan QR Code for product information
and other helpful resources.

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Safety Information

IMPORTANT SAFEGUARDS

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

UV Radiation Safety

This equipment is designed for use with germicidal UV radiation sources and must be installed in compliance with competent technical directions to prevent risk of personal injury from UV radiation.

UV radiation can pose a risk of personal injury. Overexposure can result in damage to eyes and bare skin. To reduce the risk of overexposure this equipment must be installed in accordance with the manufacturer's site planning recommendations. This may include instructions on the relative location of each germicidal system component, the minimum distances between UV-generating devices and other objects or surfaces, and protection from line-of-sight exposure to UV radiation in occupied spaces located above the equipment mounting area (e.g. upper floor balconies, open staircases, etc.).

UV and optical radiation can be reflected by surrounding surfaces such as ceilings and walls. Since the reflective properties of surfaces can vary widely, it should be considered as part of site planning. Follow the manufacturer's recommendations for selecting appropriate ceiling and wall finishes.

IT IS THE RESPONSIBILITY OF THE INSTALLER TO ENSURE THAT PERSONS WILL NOT BE EXPOSED TO EXCESSIVE UV OR OPTICAL RADIATION DURING EQUIPMENT OPERATION. THIS WILL REQUIRE THE INSTALLER TO CONDUCT AN ASSESSMENT OF IRRADIANCE OR ILLUMINANCE LEVELS IN THE SURROUNDING OCCUPIED SPACES PRIOR TO OCCUPANCY.

Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.

Maintenance and servicing of this UV generating equipment shall be performed by authorized personnel.

When replacing UV light source, replace them only with the UV light source for which the equipment is marked and intended.

The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.

Do not use this equipment for other than intended use.

Electrical Safety

WARNING: Risk of electric shock. Disconnect power at the fuse or circuit breaker before installing or servicing.

WARNING: Risk of fire or electric shock. This product installation requires knowledge of luminaries electrical systems. Installation should be performed only by a qualified electrician in accordance with the National Electrical Code and local building codes.

WARNING: Risk of fire or electric shock. The input voltage rating of this product is 120–277VAC. AC line voltage must meet the product input voltage rating before installation.

WARNING: Risk of fire or electric shock. ONLY install this product in ceilings that have the construction features and dimensions shown in the product documents and/or drawings.

WARNING: Risk of fire or electric shock. Do not make or alter any open holes in an enclosure of wiring or electrical components. Only those open holes indicated in the photographs and/or drawings may be used during installation.

WARNING: Risk of electric shock. To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.

WARNING: Risk of electric shock. Do not use or proceed with installation when enclosure is broken.

Installation Safety and Disclaimer

Installation and servicing of this product should be performed only by a qualified service personnel.

DO NOT INSTALL THIS EQUIPMENT IN A DWELLING.

WARNING: Risk of personal injury. Never touch or clean glass surface of Far-UVC Lamp when the device is energized. Always turn off power and allow device to cool for 15 minutes before touching, cleaning, or servicing Far-UVC lamp.

CAUTION: Do not use abrasive materials, harsh cleaning agents, chemical cleaners, or other solvents on cover plate or lens. Use of these substances may cause the damage to the product. For cleaning purpose, use a mild window cleaning agent such as Windex and a soft non-abrasive anti-static microfiber cloth to gently wipe down the glass surface.

CAUTION: RISK OF PERSONAL INJURY. THIS EQUIPMENT IS DESIGNED FOR USE WITH GERMICIDAL LAMPS OR UV SOURCES AND MUST BE INSTALLED IN COMPLIANCE WITH COMPETENT TECHNICAL DIRECTIONS TO PREVENT THE USER'S EYE AND BARE SKIN FROM OVEREXPOSURE TO HARMFUL UV OR OPTICAL RADIATION.

Continued...

This equipment emits UV radiation at wavelengths less than 250 nm which can generate ozone. Take precautions to ensure that the concentration of ozone in the installation is limited to a value that is within applicable permissible exposure limits.

Verify acceptable ozone concentrations in the installation taking into account the number of products in a given volume of space, the characteristics of the ventilation system, access, and other factors. Permissible exposure limits vary based on the place of ozone application, the length of exposure, and other factors and are publicly available.

When replacing equipment, replace only with the lamps for which the equipment is marked and intended. USE ONLY Lit Part Number: LIT UVC222 Module B1.5 DO for Visium 1 with Diffused Optics and LIT UVC222 Module B1.0 CO for Visium 1 with Clear Optics.

For Visium 1 EMC Models Only: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The equipment is an EPA regulated pesticide device intended to reduce bioburden in air and on surfaces. Bioburden reduction is a function various factors (including device run time, distance to the Far-UVC light, airflow, room size, and/or other factors) and the level of reduction can and will vary within a specific space.

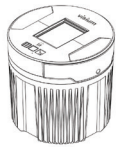
FDA DISCLAIMER – FOOD AND DRUG ADMINISTRATION STATEMENT: The statements made within this manual have not been evaluated by the U.S. Food and Drug Administration. This product is not intended to diagnose, treat, cure or prevent any disease.

Visium 1 are NOT for sale or distribution in Colorado, Hawaii, Indiana, or Wyoming.

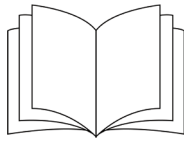
*Save These Instructions

Package Contents

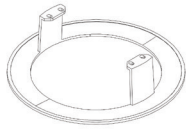
1. Visium 1



2. Installation Manual

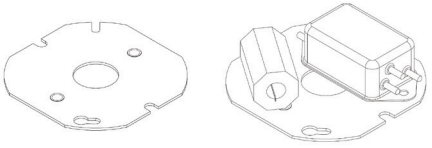


3. Recessed Trim Ring
(Recessed Model Only)

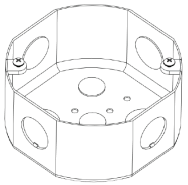


4. Surface Mount Bracket Plate

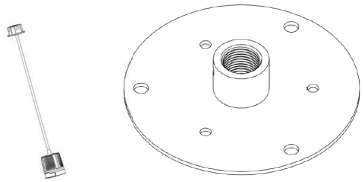
(for Standard Models) *(for EMC Models)*



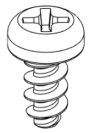
5. J-Box with Screws



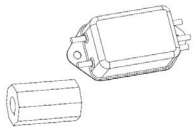
6. Pendant Mount Kit & Bracket
(Pendant Mount Only)



7. (3x) M4 Screws
(Pendant Mount Only)



8. EMC Components
(Recessed EMC Model Only)



Preinstallation & General Guidelines

Preinstallation Notes

- Please properly plan the placement of your Visium 1 before drilling or cutting any holes.
- Installation should be performed by a licensed electrician.
- All electrical connections must be in accordance with local electrical codes, ordinances, or comply with National Electrical Code (NEC).
- Make sure POWER is turned off at the main circuit breaker box to the location that you are installing the device.
- Refer to the proper section of the guide that corresponds to the mounting option.
- Consult with Lit Thinking Customer Service with any questions.
- Refer to device mounting guideline diagram to ensure proper safety and regulatory compliance.
- Installation of Visium 1 Far-UVC device is a way to enhance air safety in well-ventilated spaces. It is not intended to be a replacement for number of air changes per hour (ACH), proper air ventilation, or proper air flow.
- Visium 1 are intended to be used in spaces with greater than 2 air changes per hour (>2 ACH).
- Installers should note and record each device's serial number and its corresponding location prior to installation.

Visium 1 with Diffused Optics

Mounting Height: Illuminating surface must always be installed at least 7ft 4in above finished floor (refer to diagram on p. 10).
Device Spacing: When installing multiple devices, they must be installed with minimum of 48in on center spacing.

Visium 1 with Clear Optics

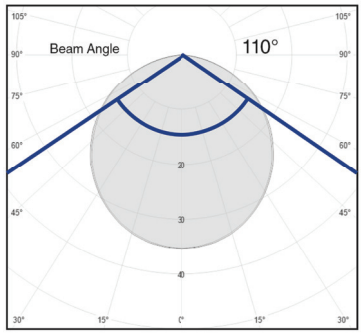
Mounting Height: Illuminating surface must always be installed at least 9ft 4in above finished floor (refer to diagram on p. 10).
Device Spacing: When installing multiple devices, they must be installed with minimum of 48in on center spacing.

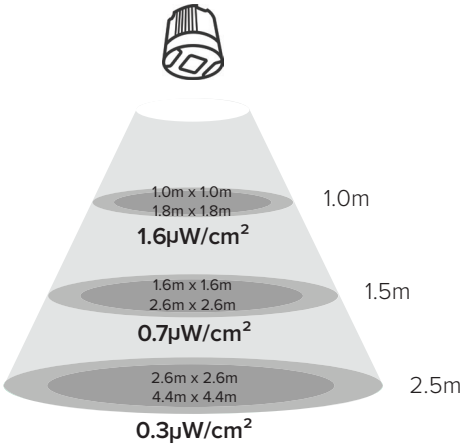
To ensure compliance with regulatory and UVC exposure threshold limit values (TLV) set forth by the American Conference of Governmental Industrial Hygienists (ACGIH) and recommended by OSHA, do not install below the minimum height specified in these installation instructions. Please see diagram for reference on p. 10.

Keep at least 3ft of distance between lamp emitting surface to any object or structure in the space, which includes walls, cabinets, columns, or any objects hanging from the ceiling.

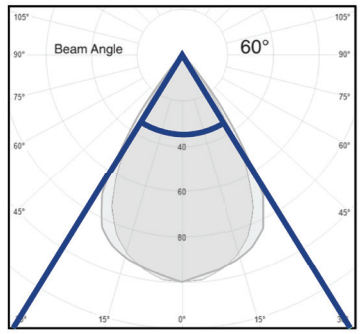
Visium 1 Far-UVC Irradiance Profile

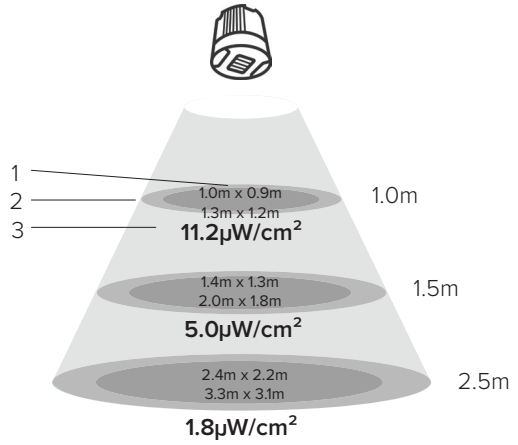
Visium 1 with Diffused Optics*





Visium 1 with Clear Optics*





1 = Area of >60% Peak Irradiance
2 = Area of >30% Peak Irradiance
3 = Peak Irradiance

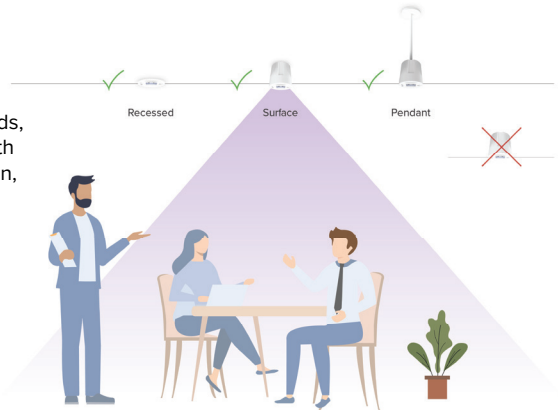
Irradiance and other technical information are for reference only and are subject to change. This is not a formal specification and does not indicate any warrantied values. Please refer to the UVC lamp's formal specification sheet for complete details and specification.

Mounting Guidelines

Visium 1 - Diffused Optics

7ft 4in Plane

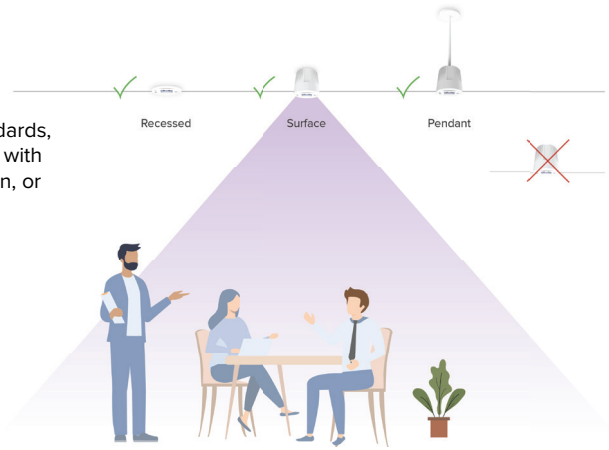
For compliance with UL safety standards, illuminating surface of the Visium 1 with Diffused Optics is required to be 7ft 4in, or higher, above the floor.



Visium 1 - Clear Optics

9ft 4in Plane

For compliance with UL safety standards, illuminating surface of the Visium 1 with Clear Optics is required tobe 9ft 4in, or higher, above the floor.



Technical Specifications

Far-UVC Light Source	
Peak Wavelength	222nm
Type	Ushio Care222
UVC Lifetime	>10,000 Hrs
Band-Pass Filter	Yes
UVC Irradiance (at 5cm away)	Diffused Optics: 0.55 ± 0.15 mW/cm^2; Clear Optics: 2.5 ± 0.7 mW/cm^2
UVC Emission Angle	Diffused Optics: 110° - Clear Optics: 60°
Device Coverage	Up to 200 sq. ft.
Visible Light Lumen Output	Diffused Optics: 0.51Lm; Clear Optics: 1.35Lm
Electrical	
Input Voltage	120-277V
Frequency	50-60Hz
Power Consumption	14W
Device Control	via Lit Thinking App
Sensors	Motion, IAQ (via Bosch BME688 sensor)
Mechanical	
Housing	ABS/Polycarbonate Housing
Finish	Matte White Finish
Dimensions (øD x H)	5.79in x 6.12in (147mm x 156mm)
Weight	2.4lb (1,089g)
Operating Temperature	0 to 40°C (32 to 104°F)
Installation	Recessed, Surface Mount, Pendant Mount (with optional Kit)
Mounting Height	Diffused Optics: 7ft 4in Above Finished Floor (AFF), Clear Optics: 9ft 4in AFF
Device Spacing	Minimum of 48in on center spacing required between all devices
Serviceability	Yes, Far-UVC Lamp is field replaceable
Indication	Multi-Color Configurable LED Indicator
Warranty & Regulatory	
Warranty	1 Year Limited on Visium Device
Compliance	• Certified to UL 8802 - Safety standards for Ultraviolet Germicidal Products • Classified as Risk Exempt - Risk Group 0 under UL8802 Photobiological test • Certified to meet California ozone emissions limits - CARB Certified • Certified to UL 2998, classified as zero ozone emissions (Diffused Optic Models Only) • Certified to FCC Part 15 Class A Standards (EMC Model Only) • Complies with ACGIH Threshold Limit Values (TLV) for UVC Exposure • Visium is manufactured at an EPA registered facility
Environment	Suitable for Damp Locations

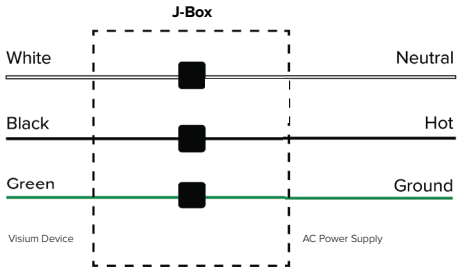
Visium is manufactured in an EPA-registered facility number 102522-FL-1.
For information, contact Lit Thinking at 321-299-0100 or CustomerService@LitThinking.com.

All data shown is nominal.

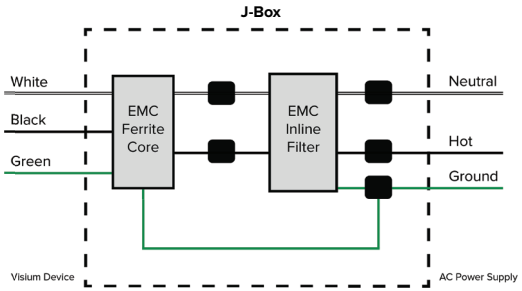
Recessed
INSTALLATION GUIDE

RECESSED MOUNT WIRING:

Standard Model



EMC Model

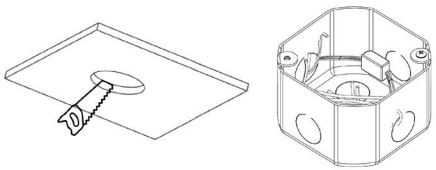


Note: Must loop device wires through EMC Ferrite Core for 1 full loop before any wiring connection.

RECESSED INSTALLATION STEPS:

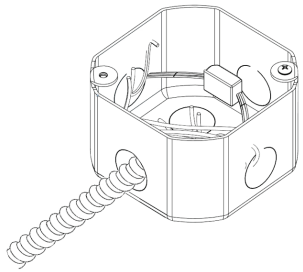
1 Prepare the Area

Shut off power to installation area from circuit breaker. Cut a 6" hole in the ceiling where device is being installed. Per local electrical codes, prepare a J-Box and run AC power to it.



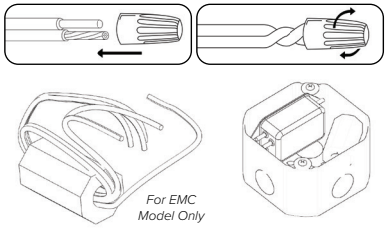
2 Run Wires Through J-Box

Trim device wires in preparation for wiring. Strip wire ends and run device conduit through one of the knockout holes of the J-Box.



3 Make All Electrical Connections

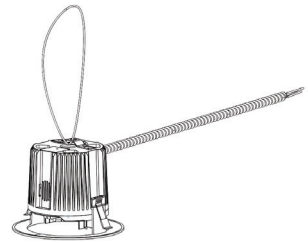
See Wiring Diagram for appropriate wiring depending on the device model (EMC vs Standard Models). Make the electrical wire connections from device to AC power line using provided wire nuts.



Note: For EMC Model, must use provided Ferrite Core and Inline Filter and wire accordingly. Must loop device wires through EMC Ferrite Core for 1 full loop before any wiring connection are made.

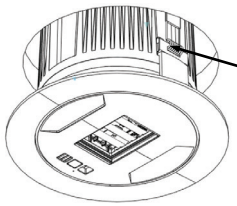
4 Attach Hanger Cables

In accordance with local building and safety code requirements, attach hanger cable wires from the building ceiling structure to the hanger bracket on the back of the Visium to ensure device is fully secured.



5 Insert Device Into Ceiling

Compress the 2 mounting clips, insert device into the 6in opening in ceiling, and allow the mounting clips to engage with the ceiling, securing the device in place.



6 Proceed to Device Setup

Hardware installation is complete. Proceed to device setup by using the Lit Thinking Connect App that can be downloaded from Apple App Store or Google Play Store.

lit THINKING Connect

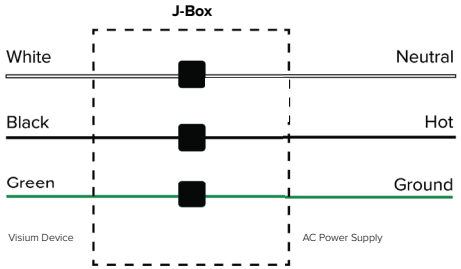
Google Play

App Store

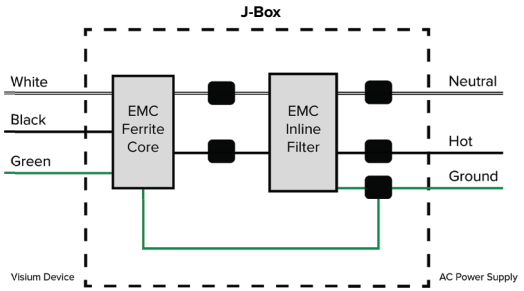
Surface
INSTALLATION GUIDE

SURFACE MOUNT WIRING:

Standard Model



EMC Model

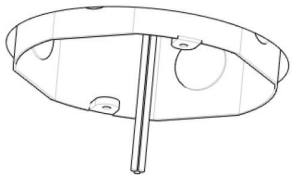


Note: Must loop device wires through EMC Ferrite Core for 1 full loop before any wiring connection.

SURFACE INSTALLATION STEPS:

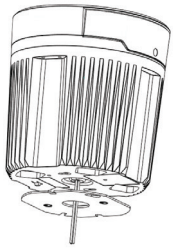
1 Install the J-Box

Shut off power to installation area from circuit breaker. In accordance with local codes and NEC standards, install provided J-Box into ceiling and run AC power line through the knockout holes of the J-Box ensuring AC power lines are exposed and ready for wiring. *NOTE: If installing onto T-grid ceilings, a 3rd party T-Bar Hanger can be purchased and installed prior to device installation.*

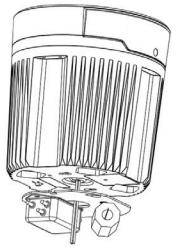


2 Run Wires Through Bracket

Trim device wires keeping only ~4 inches for wiring. Strip wire ends and run wire through mounting bracket while ensuring retention studs are on device side.



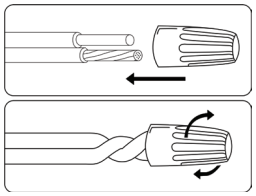
Standard Model

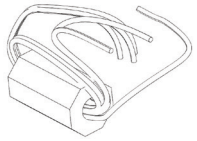


EMC Model

3 Make All Electrical Connections

See Wiring Diagram for appropriate wiring depending on the device model (EMC vs Standard Model). Make the electrical wire connections from device to AC power line using provided wire nuts.





For EMC Model Only

Note: For EMC models, must loop device wires through EMC Ferrite Core for 1 full loop before any wiring connection.

4 Install Mounting Bracket

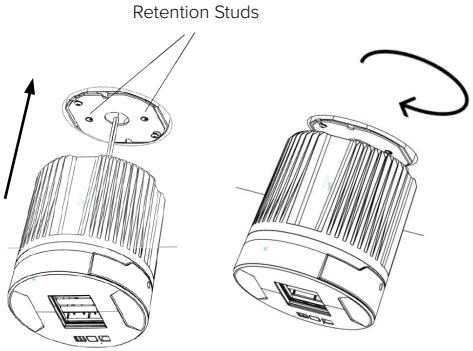
Push all connected wires into the J-Box. With screws already on J-Box, angle and attach mounting bracket onto J-Box and fasten the screws to secure.

Standard Model

EMC Model

5 Mount the Device

Mount Visium 1™ by inserting the retention studs on the mounting bracket into hole of the device. Rotate clockwise until device is locked and secure in place.



6 Proceed to Device Setup

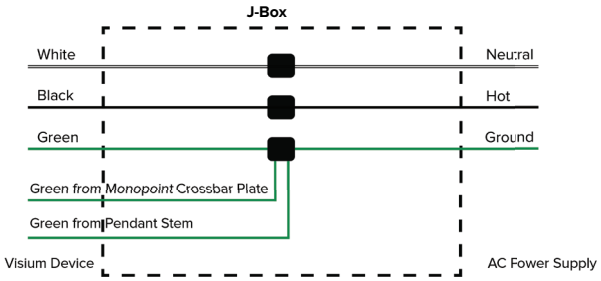
Hardware installation is complete. Proceed to device setup by using the Lit Thinking Connect App that can be downloaded from Apple App Store or Google Play Store.

Lit THINKING Connect

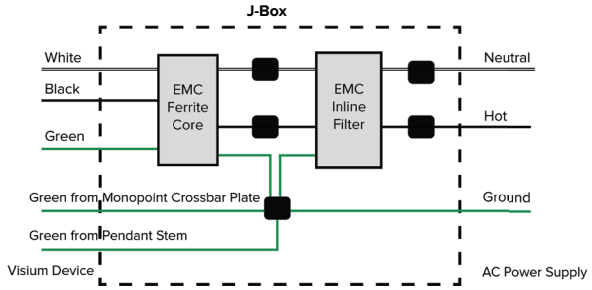
Google Play App Store

Pendant
INSTALLATION GUIDE

PENDANT MOUNT WIRING:



Standard Model



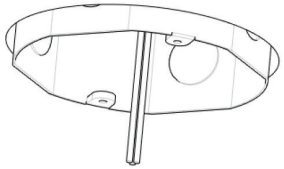
EMC Model

Note: Must loop device wires through EMC Ferrite Core for 1 full loop before any wiring connection.

PENDANT INSTALLATION STEPS:

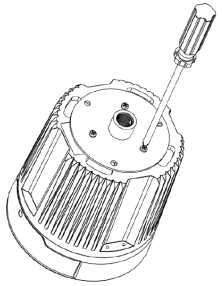
1 Prepare Area for Installation

Shut off power to installation area from circuit breaker. In accordance with local codes and NEC standards, install provided J-Box into ceiling and run AC power line through the knockout holes of the J-Box ensuring AC power lines are exposed and ready for wiring. *NOTE: If installing onto T-grid ceilings, a 3rd party T-Bar Hanger can be purchased and installed prior to device installation.*



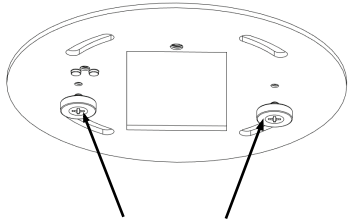
2 Install Pendant Mount Bracket

Run device wires through center hole of pendant mount brack and install bracket by using the three (3) provided M4 screws.



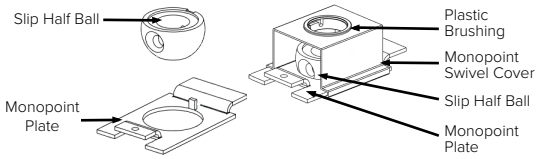
3 Prep Monopoint Crossbar Plate

Install provided magnets onto Monopoint Crossbar Plate with provided 6/32” screws.



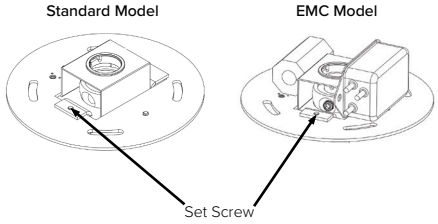
4 Assemble Half Ball Swivel Subassembly

Place Slip Half Ball onto the center hole of the Monopoint Plate. Attach Plastic Bushing onto Monopoint Swivel Cover. Slide Swivel Cover onto the Monopoint Plate.



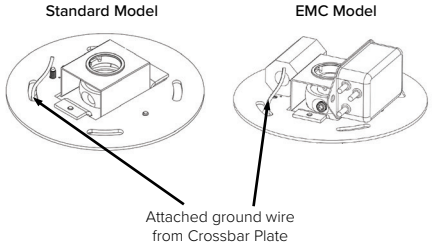
5 Attach onto Monopoint Crossbar Plate

With magnets facing down, attach Swivel Subassembly onto Crossbar Plate. Secure onto Crossbar Plate with provided 8/32” x ¼” screw.



6 Attach Grounding Screw and Wire

Attach green ground wire with grounding screw to Crossbar Plate. Insert wire lead through one of the J-Box mounting locations on plate as shown.

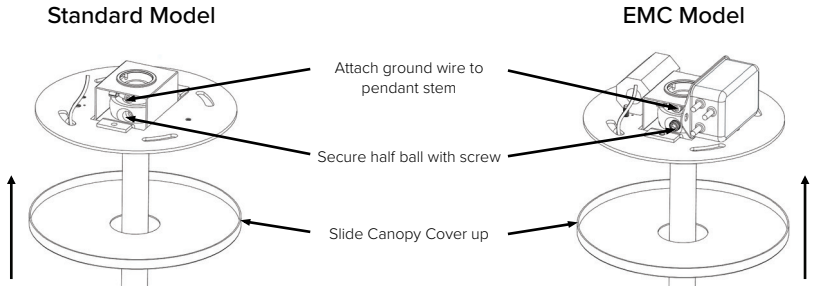


Continued...

Pendant
INSTALLATION GUIDE

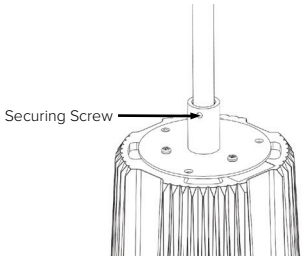
7 Install and Secure Pendant Stem

Insert non-threaded end of pendant stem through half ball ensuring stem's grounding screw hole is visible but just below the swivel cover. Attach green ground wire to stem with provided ground screw. Slide Canopy Cover up the stem but do not attach yet.



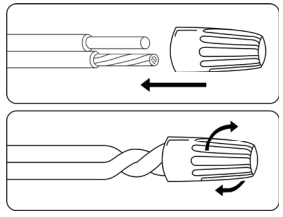
8 Attach Pendant Stem onto Visium

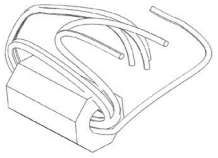
Insert device wires through pendant stem. Attach stem onto the device and secure with provided securing screw. Trim device wires keeping only ~6 inches and strip wire ends for wiring connections.



9 Make All Electrical Connections

See Wiring Diagram for appropriate wiring depending on the device model (EMC vs Standard Model). While holding up device, make the electrical wire connections from device to AC power line using provided wire nuts. Make sure ground wires from Crossbar Plate and Pendant Stem are probably wired.

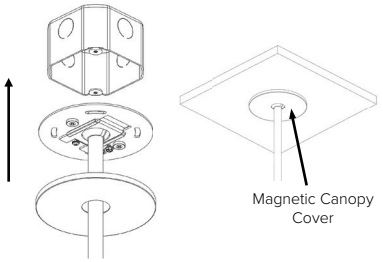




Note: For EMC models, must loop device wires through EMC Ferrite Core for 1 full loop before any wiring connection.

10 Attach Device to J-Box

With device supported, push all wire connections. Push all wire connections into J-Box and install Monopoint Crossbar Plate onto the J-Box with provided screws. Attach canopy cover to Monopoint Crossbar Plate (magnetically).



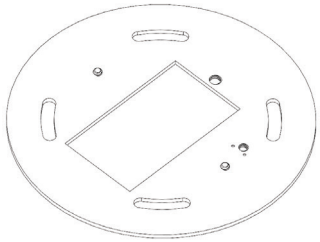
11 Proceed to Device Setup

Hardware installation is complete. Proceed to device setup by using the Lit Thinking Connect App that can be downloaded from Apple App Store or Google Play Store.

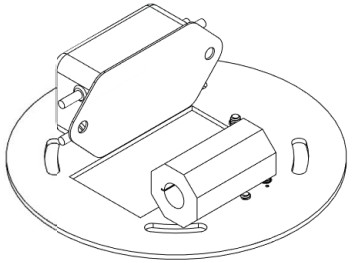
Lit THINKING Connect

Google Play App Store

Reference Image:



Monopoint Crossbar Plate for Standard Model



Monopoint Crossbar Plate for EMC Models

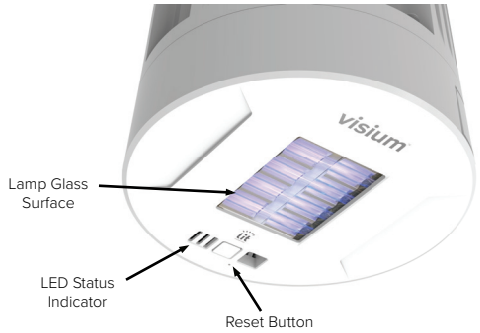
Service and Maintenance

Cleaning:

Routine cleaning is highly recommended to maintain optimal performance. Accumulation of dust or other organic contaminants on the front glass of the Far-UVC lamp may impact overall performance of your Visium 1.

If front glass of the device appears to be dirty, use mild window cleaning agent such as Windex and a soft non-abrasive anti-static microfiber cloth to gently wipe down the glass surface.

NOTE: Never clean the lamp when the device is on. Always turn off device and wait 15 minutes to cool before cleaning. Please be mindful when cleaning.



LED Status Indication:

LED Color	Device Status
Solid Green	Device online and operating normally
Solid Red	Far-UVC lamp at end of life
Solid Blue	WiFi is not connected
Solid Yellow	Far-UVC approaching end of life
Solid White	Device is commissioning. Device in access point mode and not connected to WiFi
Flashing Light Blue	Firmware updating in process

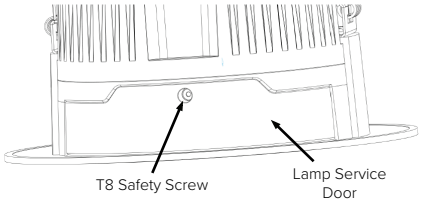
When to Replace Lamp:

The integral Far-UVC lamp within Visium 1 has an operating life of up to 10,000 hours. When the LED status light on the face of the device turns solid yellow ( ), it indicates the Far-UVC lamp is near the end of its life and will require replacement soon. When the LED status light turns solid red ( ), it indicates the Far-UVC lamp is at the end of its life and the lamp must be replaced to resume proper operations.

Replacing Far-UVC 222 Lamp:

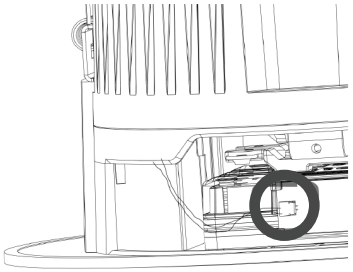
1 Turn Off Power, Locate and Remove Service Door

Before service, shut off power to the device and allow device to cool off. Locate service door on the side of the device. Using a T8 Torx screwdriver, unscrew the T8 safety screw and remove service door.



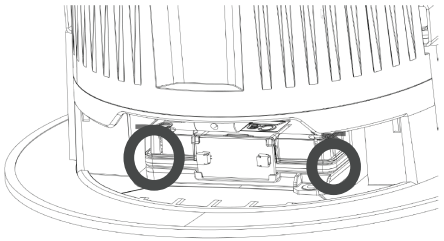
2 Disengage Connector

Disengage the 2-pin quick connector and disconnect Far-UVC Lamp from UVLED board.



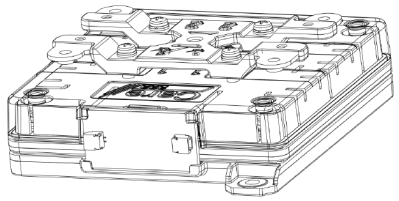
3 Remove Old Lamp

Pull out the old lamp by holding onto the 2 sides of the orange lamp plastic housing.



4 Orient New Lamp

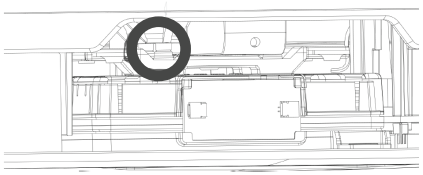
Orient the new Far-UVC Lamp with the small printed circuit board facing out and insert into the device.



Continued...

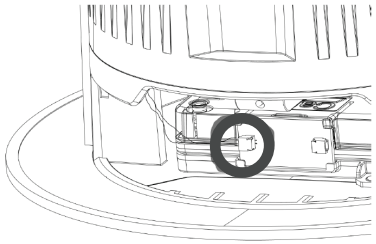
5 Install New Lamp

Insert the new lamp, ensure proper alignment by checking that the contact pins are touching the screws on electrode plate.



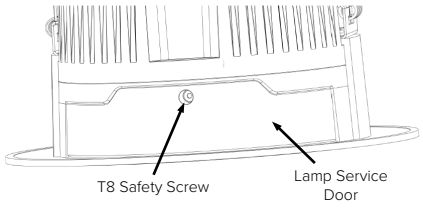
6 Reconnect Lamp Connector

Connect the 2-pin quick connector to the UVLED board of the new lamp ensuring it is fully seated.



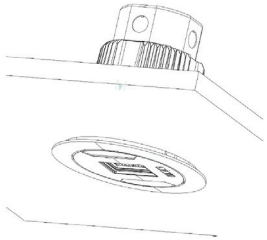
7 Reinstall Service Door

Use T8 Torx screwdriver and screw the T8 safety screw to secure service door onto device.



8 Reinstall Fixture

Reinstall device into place and turn power back on.

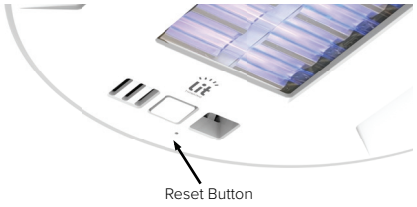


9 Resetting Lamp Life Counter

Insert a paper clip to depress and hold the reset button for 3-5 seconds (but no more than 8 seconds). The LED indicator will change from

Green ▸ Pink/Purple ▸ Yellow

Once LED is yellow, let go of the reset button. LED will return to Green (●) and lamp life counter is reset.



Troubleshooting & Warranty

Troubleshooting

If you encounter any issues when using the device, refer to the table below. If problems persist, cut-off the power supply and contact the manufacturer.

Failure Mode	Cause	Solution
Device is unresponsive	Unexpected error or failure	Power cycle device. Turn off, wait 10s, then turn on power. If device is still unresponsive, perform a factory reset
The LED Indicator is OFF	There is no power to the device	Verify power is properly supplied to the device
The LED Indicator is 'Solid Blue'	Wifi is not connected or network configurations may have changed	Visium device is in discovery state. Verify WiFi connection is availabile and confirm Wifi SSID/password. Open Lit Thinking Connect App to reconnect device to WiFi.
The LED Indicator is 'Solid Yellow'	Far-UVC lamp life less than 10%	Refer to the Visium installation guide for detail instructions on how to replace the Far-UVC lamp
The LED Indicator is 'Solid Red'	Far-UVC lamp at end of life	Refer to the Visium installation guide for detail instructions on how to replace the Far-UVC lamp

Factory Reset

To perform a factory reset, insert a paper clip to depress and hold the reset button on the device for about 10 seconds. LED will change from Green, Pink/Purple, Yellow, and Blue. Once LED is Blue, release the reset button.

Press Reset ● Green ▸ ● Pink/Purple ▸ ● Yellow ▸ ● Blue Release Button

Upon completion of factory reset, LED will then change to White (○) and is now ready for commissioning.

Warranty

1 year limited warranty on Visium 1 device / 1 year limited warranty on Far-UVC Lamp and lamp electronics.

Resources

Scan QR Code for product information and other helpful resources.

Visium 1 Installation Guide