

Risk of Fire To be installed only by a licensed professional electrician

Risk of Electric Shock: Disconnect power at fuse or circuit breaker before installing or servicing.

Always wear protective equipment installing this product including Goggles and gloves.

Mechanical Installation:

(If assembled with Doorframe) Remove doorframe by firmly pulling on one side of door until it moves an inch or so from the plaster flange (PF). Pull remaining sides until they are equal. Continue pulling whole frame until it stops about 4 inches from the PF. Squeeze springs to clear the spring slots and seal doorframe in a plastic bag to prevent dust entrance until final assembly.

Flanged/Drywall Installation: (NEMA type "F" ceilings)

Find center line of fixture location. Install hanger bars in housing and slide hanger bar clips over bars. Four total, two per bar. Locate fixture aperture so that the plaster ring opening is flush vertically with finished ceiling and fixture aperture is located horizontally in the correct location. Please note that the doorframe seal to the ceiling is contingent on the PF being flush or slightly recessed before doorframe installation. Secure hanger bar clips to joists using screws or nails. Tighten screws on hanger bar clips. If the hanger bars are longer than will fit between joists, trim to length. To affix final fixture position, tighten screws on fixture body so that they lock it in place.

Cut drywall ceiling cutout for fixture, matching the plaster frame size carefully (8-3/8" diameter). Do not oversize the hole or gaps will need to be filled. **Ceiling Cutting Notes:**(Doorframe is oversized by only 3/8 inch to allow a tight seal.) Note: Do not cut ceiling to can size. Spring slots must be kept clear for Doorframe installation.

(Continue with Electrical Installation)

T-Bar Grid (NEMA type "G", "NFG" or "SS" ceilings)

Find center line of fixture location. Install hanger bars in housing and slide hanger bar clips over bars. Four total with two per bar. Cut ceiling panel for fixture, matching the plaster frame size carefully (8-3/8" diameter). Do not oversize the hole. Locate fixture aperture so that the plaster ring opening is flush vertically with finished ceiling and fixture aperture is located horizontally in the correct location. Please note that the doorframe seal to the ceiling is contingent on the PF being flush or slightly recessed above room-side surface of panel before doorframe installation. Secure hanger bar clips to T-bar using screws. Use hanger wires for providing additional seismic support according to local code. Tighten screws on hanger bar clips. To affix final fixture position, tighten screws on fixture body so that they lock it in place.

Panel Cutting Notes: (Doorframe is oversized by only 3/8 inch to allow a tight seal.) Note: Do not cut ceiling to can size. Spring slots must be kept clear for Doorframe installation.

(Continue with Electrical Installation)

Install Doorframe:

Remove any debris from inside fixture can. This should be dust free before continuing. Remove doorframe from sealed packaging. Secure suction cup opening tool to doorframe lens. Compress two springs, one in each hand and slip ends of springs into slots found inside plaster frame. Release springs just after the cut ends enter slots. Compress remaining third spring and insert it into remaining slot as before. While holding doorframe horizontal, push it into the fixture body until it begins to close on its own.

Caution: This doorframe is secured with a high pressure seal and therefore may close with high speed and pressure. Keep fingers outside of doorframe perimeter. Use suction cup opening tool for closing to prevent ceiling damage or injury.

Electrical Installation

Electrical System:

Install Driver Wiring: (one per fixture)

Select a location outside of the faraday cage of the MRI suite to secure the driver. Attach the driver or driver panel to the wall or ceiling of the utility space using approved method. Do not penetrate the Faraday cage wall. The correct space should be unaffected by and shielded from the nearby magnetic field. (Warning: The driver and its enclosure is magnetic and must not be placed within the room where the MRI equipment operates.) The driver should have access to the Entrance Filter "Line In" knockout(s).

(An Entrance filter is often required for filtering all RF energy from wires entering the faraday cage. This filter must be able to pass DC voltages and currents in excess of 62vdc and 1.0 amps with minimal impedance. [Most standard entrance filters will work but communications type filters will not.] Consider using multi-line filters to save space on the wall and simplify conduit and wiring work.)

Connect the low voltage DC black (+) and Yellow (-) wires directly to each fixture through the correct filter so that the length of wire does not exceed 50 feet. Connect the supply wiring to the driver line side black and white wires, keeping them separated from the low voltage side. Connect the Ground connection in the driver box to

the building ground according to code. Be sure the fixture and filter are also grounded per code through wire or conduit system. Supply wire insulation must be rated for at least 90°C.

Install Fixture Wiring:

Rough-in electrical conduit using site approved non-magnetic conduit systems. Pull insulated non-plated copper wire rated at least 18 AWG (meeting NEC and Local codes) to fixture junction box and connect with fixture wires using UL listed non-magnetic wire connectors. Supply wire insulation must be rated for at least 90°C.

Dimming Control:

Wire dimming control to a compatible 0-10vdc dimmer (provided by others) to the grey and violet wires. Keep all control wiring polarized throughout the system (Grey to grey and violet to violet) and connect all drivers together on the control side that will be controlled by the same dimmer. Make sure to keep separate the control wiring from the line voltage wiring. They are not allowed to share the same raceway or conduit. Consult local codes for rules involving class 2 wiring.

Use a compatible 0-10vdc dimming control like those compatible with the Philips Advance Mark 7™ control systems. (These are available from Lutron™, Hunt, Legrand™, Leviton™, Sensor Switch™ and Wattstopper™ as well as many others.) See the chart below for a small list of one brand of controls.

| Lutron Dimmer Family | Lutron Dimmer Model Number |
|--------------------------------|---|
| Nova® | NFTV-* dimmer plus PP-120H/PP-277H relay pack(s) |
| Nova T*® | NTFTV-* dimmer plus PP-120H/PP-277H relay pack(s) |
| Diva® | DVTV-1 dimmer DVSCV-1 dimmer plus PP-120H/PP-277H relay pack(s) |
| RadioTouch® | RTA-RX-F |
| GRAFIK Eye® 3000 | GRX-300X**T-* plus GRX-TVI 0-10v interface |
| GRAFIK Eye® QS | QSGRJ-X ^{††} P ^{††} plus GRX-TVI 0-10v interface |
| GRAFIK Eye® QS with EcoSystem® | QSGRJ-X ^{††} E ^{††} QSGR-X ^{††} E ^{††} plus GRX-TVI 0-10v interface |

Servicing:

The LED is intended for extended use with a useful life expected to exceed 50,000 hours. The LED and driver are field replaceable from Kurtzon stocking locations and other distributors.

To Service Fixtures:

1. Disconnect power and lock out circuit for safety.
2. Remove Doorframe using provided opening tool or a tight grip on doorframe using the method above.
3. Remove internal beauty ring and three plastic clips.
4. Remove four screws in LED module and disconnect harness from module. Pull while twisting the module from the heat sink.
5. Installation is the reverse of these instructions except a small amount of heat sink grease must be present between surfaces of module and heat sink.

Tighten module screws to eight (8) inch pounds. (Double check torque after first tightening.)