

6300 DENTAL LIGHT

Track-Mount Installation Guide

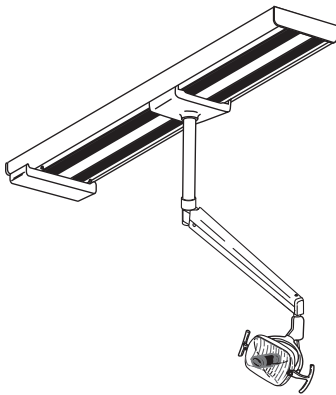


Figure 1. 6300 Track light

Recommended Tools

- Utility knife
- Phillips screwdriver
- Rubber mallet
- Socket and ratchet - 7/16"
- Level
- Hex key set
- Drill and bit - 3/16"
- Plumb bob

Before You Begin

NOTE: A data line has been included with the dental light for use with A-dec 500[®] products. If the light is not being used with an A-dec 500 products, disregard the data line. The data line should never be plugged into a telephone jack.

Do not remove the track from the ceiling pallet.

WARNING: Two people are required to install the track light to prevent injury.

Requirements for Electrical Wiring and Power

Electrical wiring must be installed by a licensed electrician according to local building codes and must meet the following additional requirements. Installation must comply with prevailing codes. A-dec recommends installation of a wall switch between the power source and the dental light transformer. A wall switch provides safety and convenience during installation and service. For transformer wiring information, refer to page 7. Electrical power/transformer and data lines are available above the head of the chair (see Figure 2 and box template) at a point 13-3/4" (349.2 mm) from the edge of the chair baseplate.

- Allow a stub of at least 6" (152 mm) of wiring for connection to the light transformer.
- Use wiring suitable for at least 90°C (194°F).
- Ensure that all wiring is properly grounded.
- Protect the circuit with a circuit breaker.

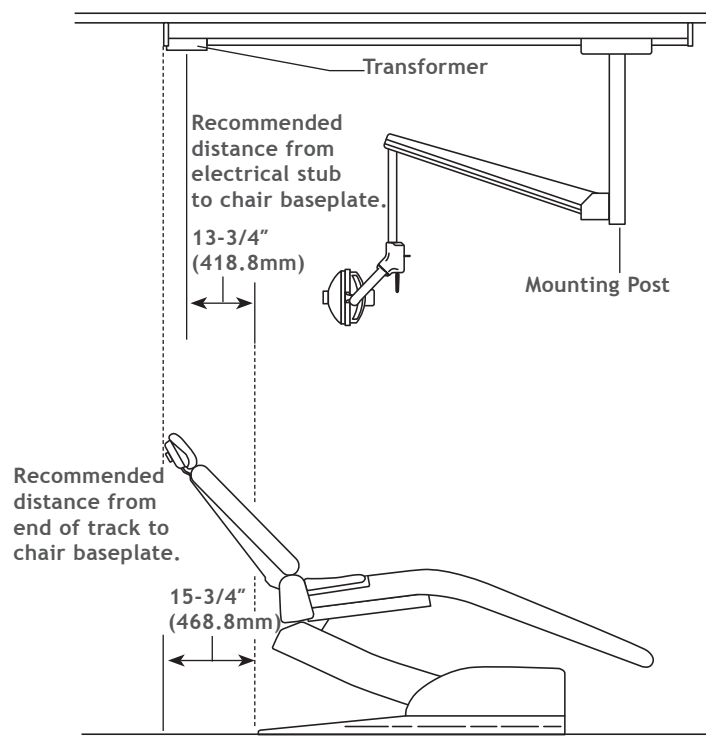


Figure 2. Recommended distances for positioning

How to Prepare the Ceiling

The track light can be installed to a variety of ceiling constructions. Check local and state code authorities about installation requirements for this product.

CAUTION: Be sure the ceiling sub-structure supports a minimum of 200 lb (90kg).

1. Consult your operatory floor plan, and the dimensions shown in Figure 2 and Figure 3 to determine the track light location.
2. Mount the ceiling pallet (the wooden panel the dental light track is mounted on) with a minimum of four 1/4" (6.4mm) x 3" (76.2mm) long lag screws and flat washers, provided in the install kit. The screws must mount into a minimum of 2-1/2" (63.5mm) of solid wood.
3. Use the box template for locating and drilling the mounting holes for the light.

Use a 3/16" bit to drill the pilot holes previously located with the installation template.

4. Determine the location of the ceiling joists. Locate the mounting holes using the template. If the installation requires different mounting hole locations, or additional bolts or screws, drill holes as needed. You may need to remove the inside trim panels.

NOTE: After reassembling, clean debris from tracks.

5. Modify the ceiling sub-structure to accommodate the light installation. See Figure 4 for cross bracing a variety of sub-structures. The holes in the mounting pallet correspond with the holes marked by using the template.

IMPORTANT: If the track opposite the transformer is closer than 9-1/2" (241.3 mm) from a wall, the trolley and post assembly must be installed before the track is installed on the ceiling.

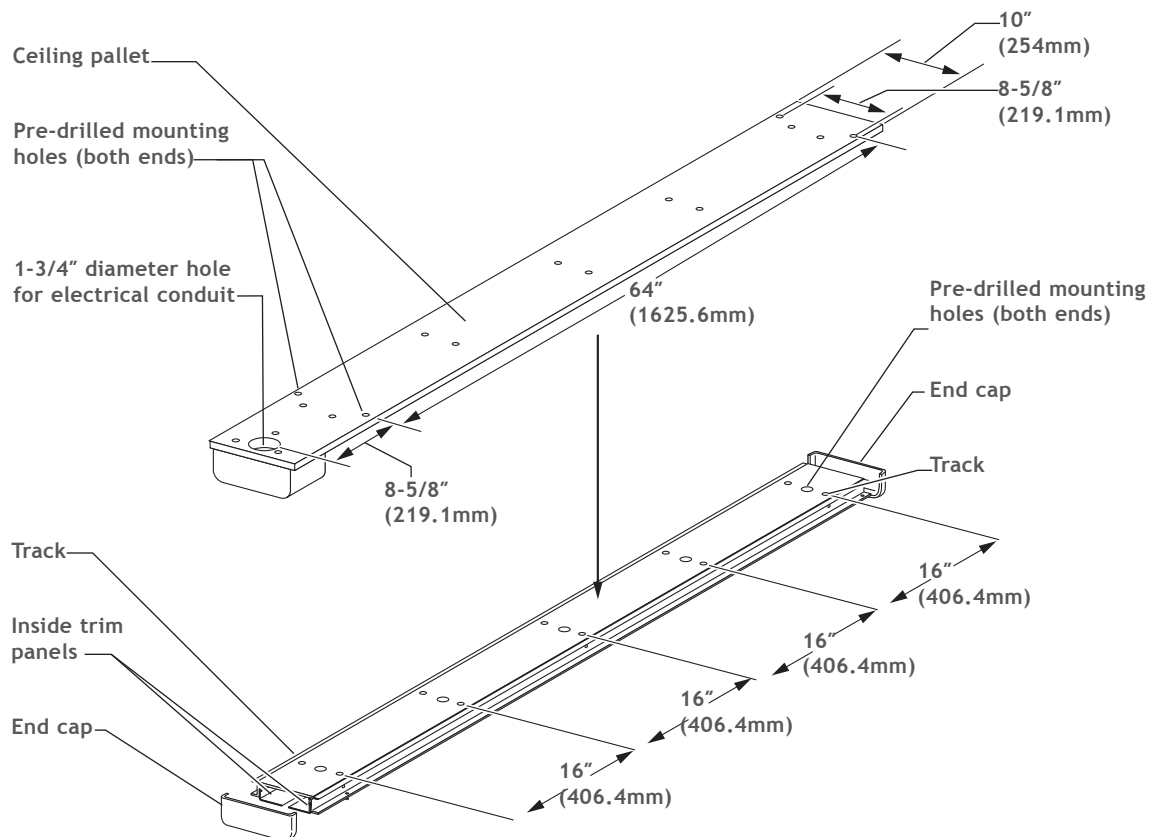


Figure 3. Removing the inside trim panel

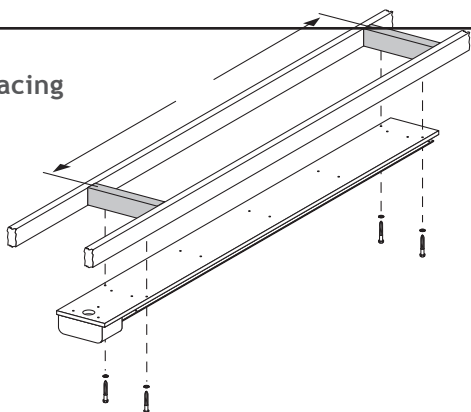
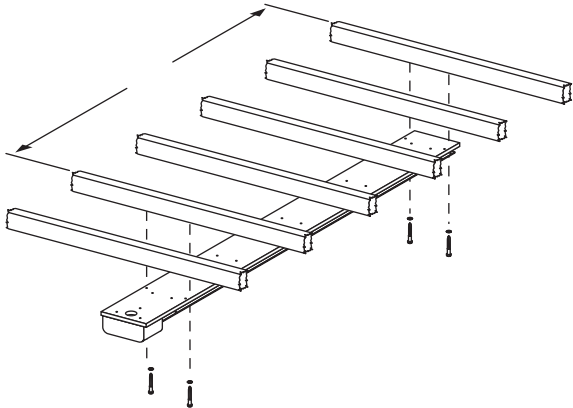
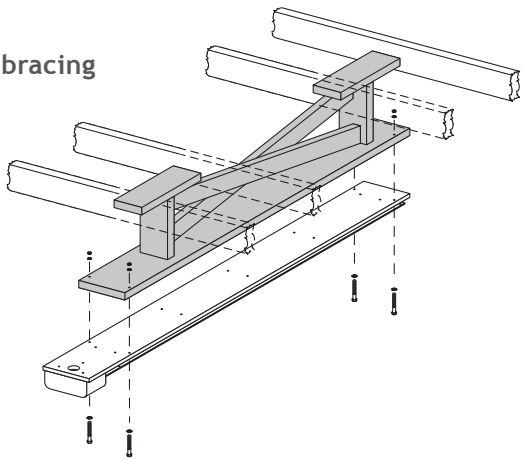
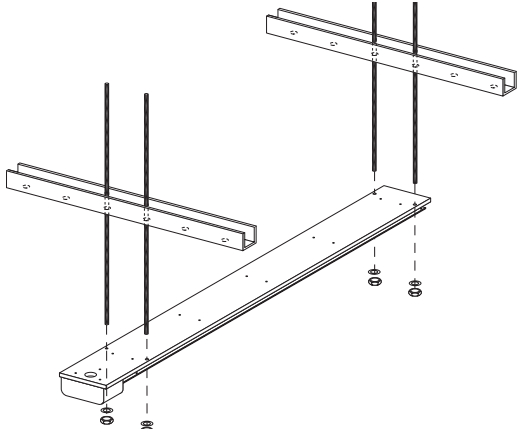
New Construction	■ = Added bracing 
Existing Construction	
Suspended Ceiling, Wood Structure	■ = Added bracing 
Suspended Ceiling, Metal Structure	

Figure 4. Preparing the ceiling for installation

How to Install the Track

1. Position the track on the ceiling with the transformer over the electrical supply stub above the head of the chair. Route the power cord through the large hole and the data line through the small hole.
2. Remove the end cap by removing the two screws securing it to the track assembly. Remove the outside trim panels and remove the transformer cover.

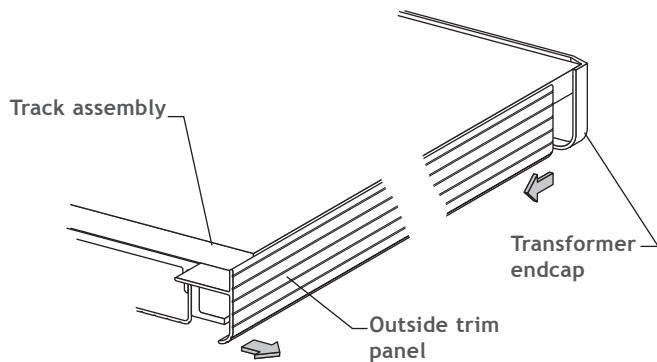


Figure 5. Recommended distances for positioning

3. Attach the track mounting pallet to the ceiling by using either the four 1/4" (6.4mm) x 3" (76.2mm) long lag screws and flat washers provided in the install kit, or bolts, washers, and nuts.

NOTE: Be sure the pallet is level so the trolley does not drift. Level the pallet with shims on each end as necessary.

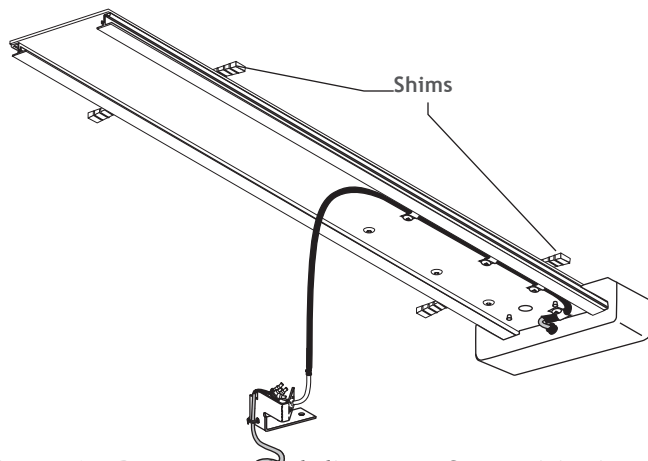


Figure 6. Recommended distances for positioning

Install the Trolley

Attach the Post

1. Route the light cable through the trolley and attach the bracket to the trolley with two screws.

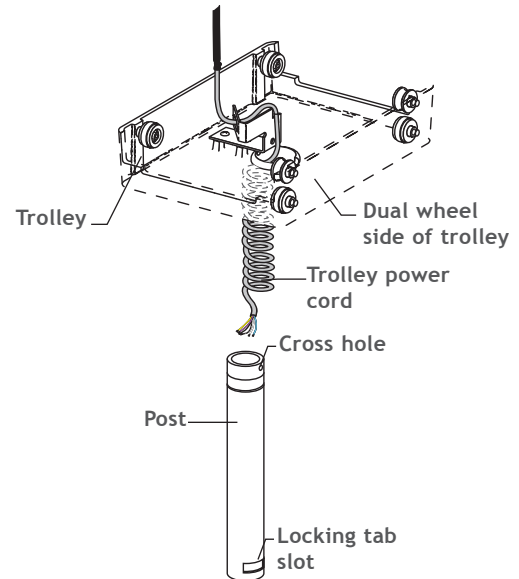


Figure 7. Recommended distances for positioning

2. Hold the end of the post with the cross hole toward the trolley base (see Figure 7), then pull the trolley power cord down through the post.

3. Push the post through the hole in the trolley. Orient the post locking tab slot directly underneath the dual wheel side of the trolley. Install the post cross pin through the hole. Orient the drilled hole to the side opposite the power cord restraint bracket, and insert cross pin retainer.

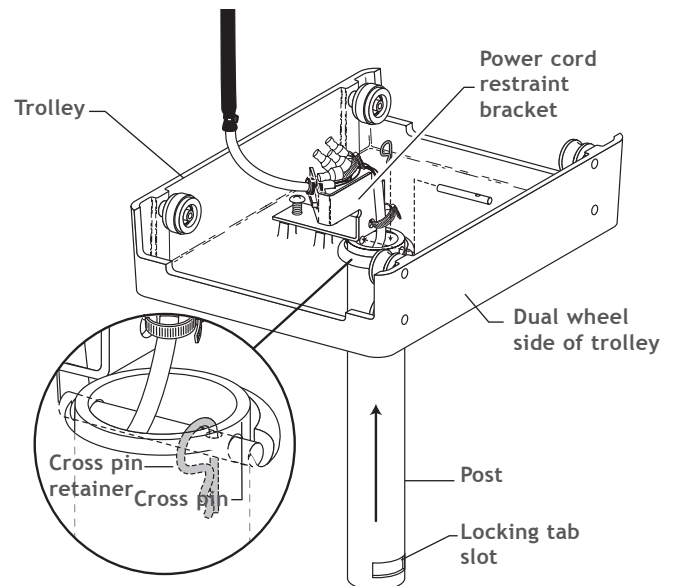


Figure 8. Recommended distances for positioning

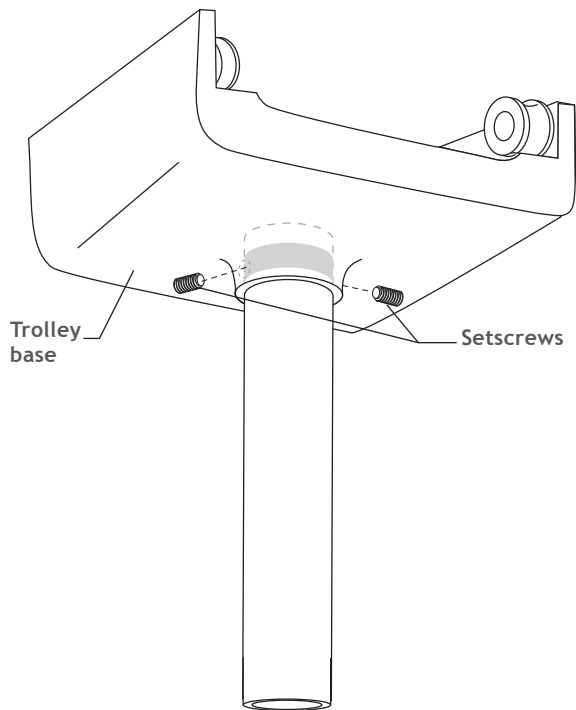


Figure 9. Recommended distances for positioning

4. Secure the post to the trolley by tightening the setscrew (see Figure 9).

Attach Trolley Assembly

1. Partially insert the trolley assembly on the track at the end opposite the transformer. The trolley goes on the track only one way.

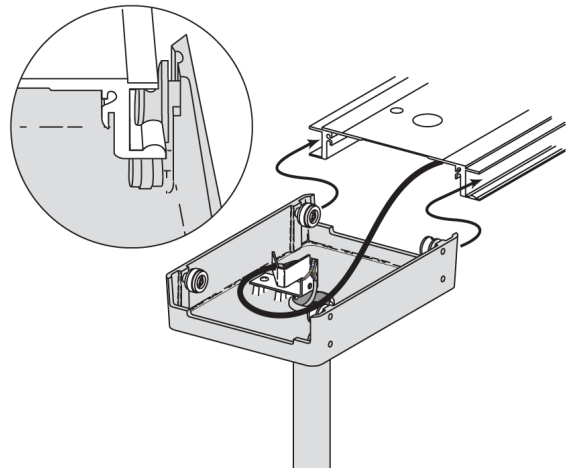


Figure 10. Recommended distances for positioning

2. Route the cable through the right side of the trolley.

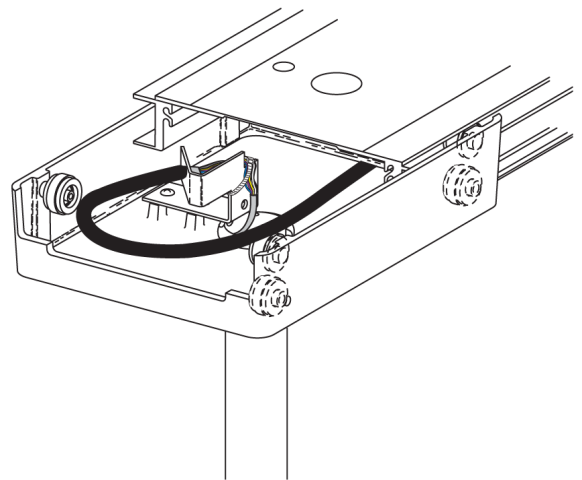


Figure 11. Recommended distances for positioning

3. Slide the trolley on the track.

4. Install and tighten the stops in the track. Use a hex key to tighten the stops. Install the rubber bumpers.

How to Install the Flexarm and Light Head Assembly

For left-hand usage, remove the stop screw and flexarm cover, then install stop screw directly above the flexarm.

1. Slide the retaining collar onto the light post with the collar setscrew towards the bottom of the post then use a 1/16" hex key to lightly tighten the setscrew.

Caution: Do not over tighten the setscrew. Doing so will mar the post.

2. Lubricate the flexarm hub. Do not lubricate the locking tab groove.

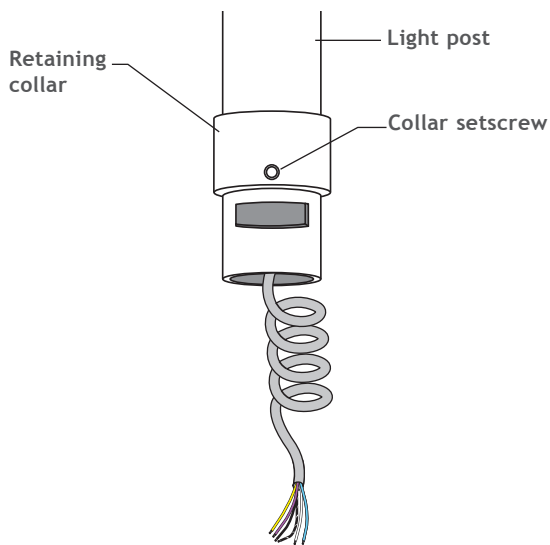


Figure 12. Recommended distances for positioning

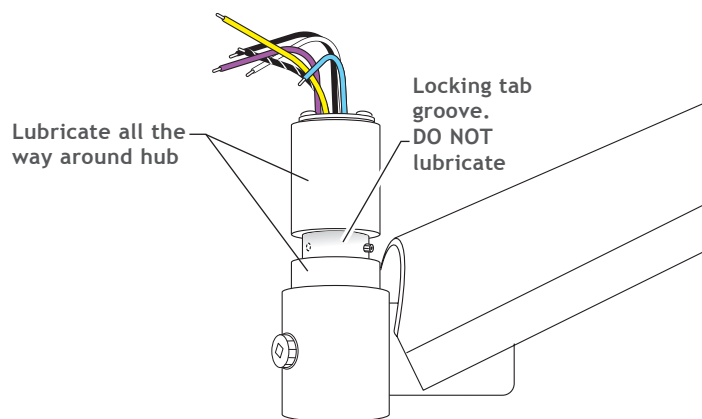


Figure 13. Recommended distances for positioning

3. While holding the flexarm and light head assembly, join the electrical connectors, then slip the mounting hub into the post. If the hub does not slip easily into the post, check that the stop screw is tight.

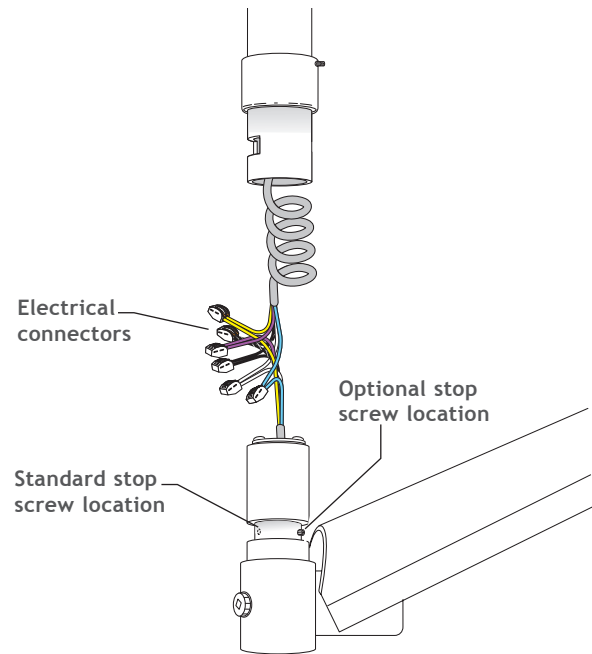


Figure 14. Recommended distances for positioning

4. Install the locking tab securely into the slot. Loosen the retaining collar setscrew. Lower the collar over the locking tab and firmly tighten the setscrew. Be sure the setscrew is not over the locking tab.

5. Rotate the flexarm to ensure that it rotates the desired span and stops. If not, remove the stop screw and reinstall it on the opposite side.

6. Move the light along the track to make sure it rolls smoothly. Wipe the track and wheels if necessary to remove any debris which might have fallen from the ceiling during installation.

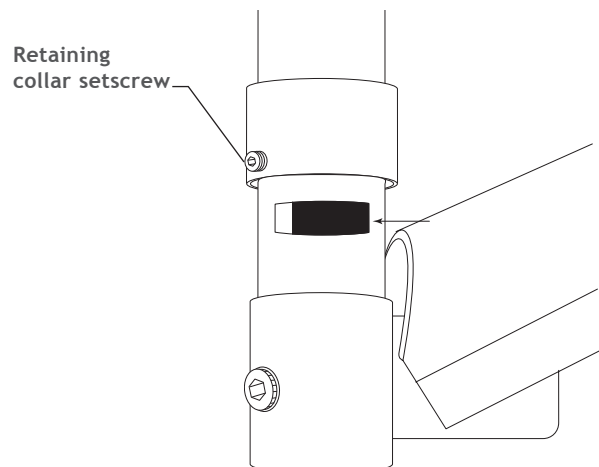


Figure 15. Recommended distances for positioning

How to Connect the Transformer

Using twist-on wire nuts, connect the track light transformer to the electrical stub for a single light. If using with A-dec 500 products, connect the data line to the three-way data connector.

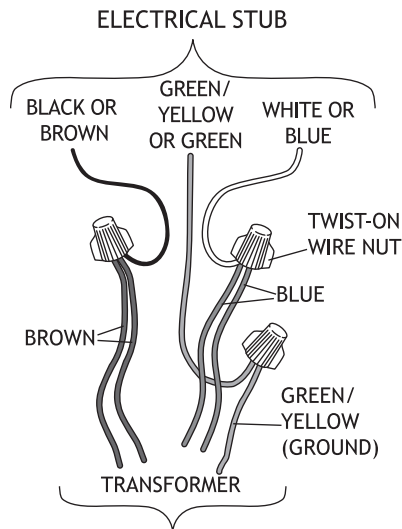


Figure 16. Recommended distances for positioning

Warning: Electrical power to the wiring stub must be OFF to prevent injury from electrical shock.

How to Install the Transformer Cover, Trim Panels, and End Cap

Install the transformer cover and outside trim panels. Be sure each trim panel is aligned with the end of the track. Install the end caps.

How to Test the Light

Turn on power to the light transformer, then move the On/Off switch to the ON position (see below). If the light does not work, verify there is power to the transformer and check all connections.

Check the three light intensity settings with the intensity switch (see Figure 17).

Intensity Switch Positions

Up	High intensity
Middle	Medium intensity
Down	Composite intensity

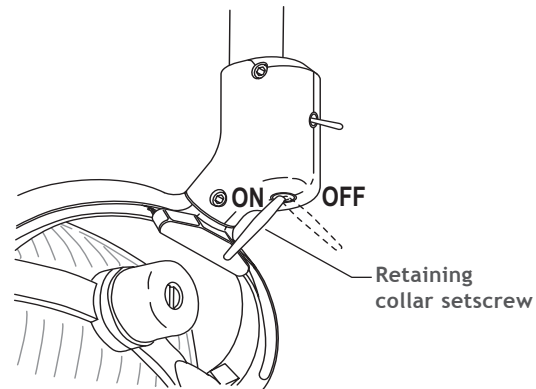


Figure 17. Recommended distances for positioning

Before Leaving the Facility

Distribute the Owner's Guide and instruct the dental team in light operation and maintenance.

Symbols and Classifications

Identification of Symbols

Symbol	Description
	Recognized by Underwriters Laboratories Inc. with respect to electric shock, fire and mechanical hazards only in accordance with UL 60601-1 (2601-1) and under mutual recognition agreement with CAN/CSA C22.2, No. 601.1.
	Classified by Underwriters Laboratories Inc. with respect to electric shock, fire and mechanical hazards only in accordance with UL 60601-1 (2601-1) and under mutual recognition agreement with CAN/CSA C22.2, No. 601.1.
	UL listed to UL 61010A-1, BS EN 61010-2-010 and Canadian (CAN/CSA C22.2, No. 1010.1-92) safety standards.
	Conforms to applicable European Directives (refer to Declaration of Conformity).
	Protective earth (ground).
	Functional earth (ground).
	Attention, consult accompanying documents. No user serviceable parts. Attention, line voltage. Only licensed electrician should remove cover.
	Type B applied part.
	Class II equipment.
	Caution: Metal surfaces can be hot during and following the dry cycle.

Classification of Equipment (EN-60601-1)

Type/Mode	Classification
Types of shock protection	CLASS I EQUIPMENT: Dental chairs, dental lights, and power supplies CLASS II EQUIPMENT: Chair, wall, and cart-mounted delivery systems
Degree of shock protection	TYPE B APPLIED PART: Delivery systems only
Degree of protection against water ingress	ORDINARY EQUIPMENT: All products
Mode of operation	CONTINUOUS OPERATION: All models except dental chairs CONTINUOUS OPERATION WITH INTERMITTENT LOADING: Dental chairs - 5% duty cycle
Flammable Gasses:	Not suitable for use in the presence of a flammable anesthetic mixture with air, oxygen, or nitrous oxide, where such gasses may accumulate in concentration (closed space).

Electrical Rating

Type	Specification
Volts:	100/110-120/220-240 VAC
Frequency:	50-60 Hz
Current:	As configured and specified in equipment manual (products labeled 15A or greater require dedicated circuit, identified in distribution panel).

Environmental Specifications

Temperature/ Humidity	Specification
Storage/ Transportation Temperature:	-29°C to 50°C (-20°F to 122°F) - Relative humidity: 80% for up to 31°C, decreasing linearly to 50% at 40°C.
Operating Temperature:	10°C to 40°C (40°F to 104°F) - Relative humidity: 80% for up to 31°C, decreasing linearly to 50% at 40°C.
Indoor Use:	Altitude up to 2,000M (6,563 ft.), installation category II, pollution degree 2. (UL 61010A-1 and CAN/CSA C22.2, No. 1010.1-92 only)