

# MONORAIL KITS

## INSTALLATION INSTRUCTIONS

### SPOTS



# JESCO

LIGHTING GROUP

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# IMPORTANT SAFETY INSTRUCTIONS

Be sure to read and understand the following instructions completely before installation.

1. All electrical power must be turned off before installation or modification of an existing system
2. The Monorail system cannot be installed in a damp or wet location
3. Monorail fixtures cannot be installed within 6" of combustible materials
4. Monorail cannot be concealed or extended through a building wall

**We recommend that the Monorail System be installed by qualified, licensed electrician**

## INSTALLING MONORAIL

**1.** Start by placing the system on the floor, to roughly indicate the positions of the transformer, connectors, and standoffs.

**2.** Install Supplied Surface Mounted Transformer:

### If Surface Mounted Transformer is installed

- The standard Surface Mounted Transformer is compatible with 3" standoffs.
- For longer drops, install the POWER FEED CABLE EXTENDER now.
- Mount transformer to the junction box.

### If optional Remote Transformer is installed

- Determine location of transformer, J-box and canopy.
- Pull the appropriate THHN wire from the transformer to the canopy – refer to the Voltage Drop Chart below. If using a SINGLE POWER FEED CANOPY, you will require two leads; if using a DUAL POWER FEED CANOPY, four leads are required.
- If using a POWER FEED EXTENSION, install it now. You will need one POWER FEED EXTENSION for a SINGLE POWER FEED CANOPY, or two POWER FEED EXTENSIONS for a DUAL POWER FEED CANOPY.
- Install canopy at the junction box.

**3.** Design bends and assemble rail on the floor.

- Bend Rail to desired shape. A BENDING TOOL may be used for more precise bends.

- Connect sections of Rail with connectors, ensuring tight connections.
- Where power is to be isolated, use non-conductive connectors.
- For a finished look, insert end caps over the ends of the Rail.

**4.** Install Standoff Supports

- Mark the ceiling locations where the standoff supports are to be installed.
- Standoffs should be placed about three feet apart, with more frequent suspensions on tight curves. The Surface Mounted Transformer itself is a standoff.
- Install Standoff supports.

**5.** Install Rail

- Install Rail to the Standoffs and Surface Mounted Transformers.
- Ensure that all power connections are tight and secure.
- Turn the power on. Using a Voltmeter, be sure that the Rail is supplying the proper voltage.
- Turn the power off.

**6.** Install Quick Adapt Pendants or Quick Adapt Spots

- Install the MA-FA (FIXTURE ADAPTER) on to the Rail where the Pendants or Spots are to be positioned. You will need one per Pendant or Spot.
- Install Pendants or Spots onto the MA-FA (FIXTURE ADAPTER).

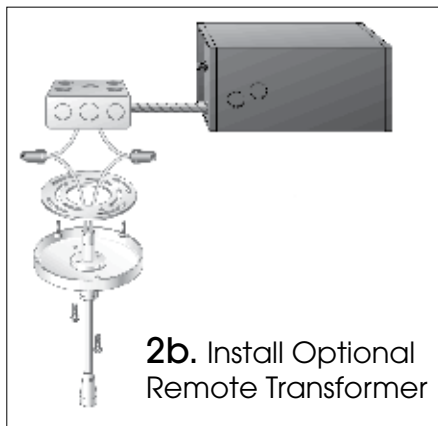
- Be sure that the power connections are tight and secure.
- Note: When using a 24V transformer, 24V lamps are required.

- Check for any connections that are hot to the touch. (Warm to the touch is not a problem). If any part of the system is hot, the connections must be re-tightened.

**7. Test the Monorail System**

- Turn the power on for 20 minutes.

**Note: All halogens lamps generate heat.  
Do not touch lamps with bare hands.**



**2a. Install Surface Mounted Transformer**

**1. Lay system out on floor**

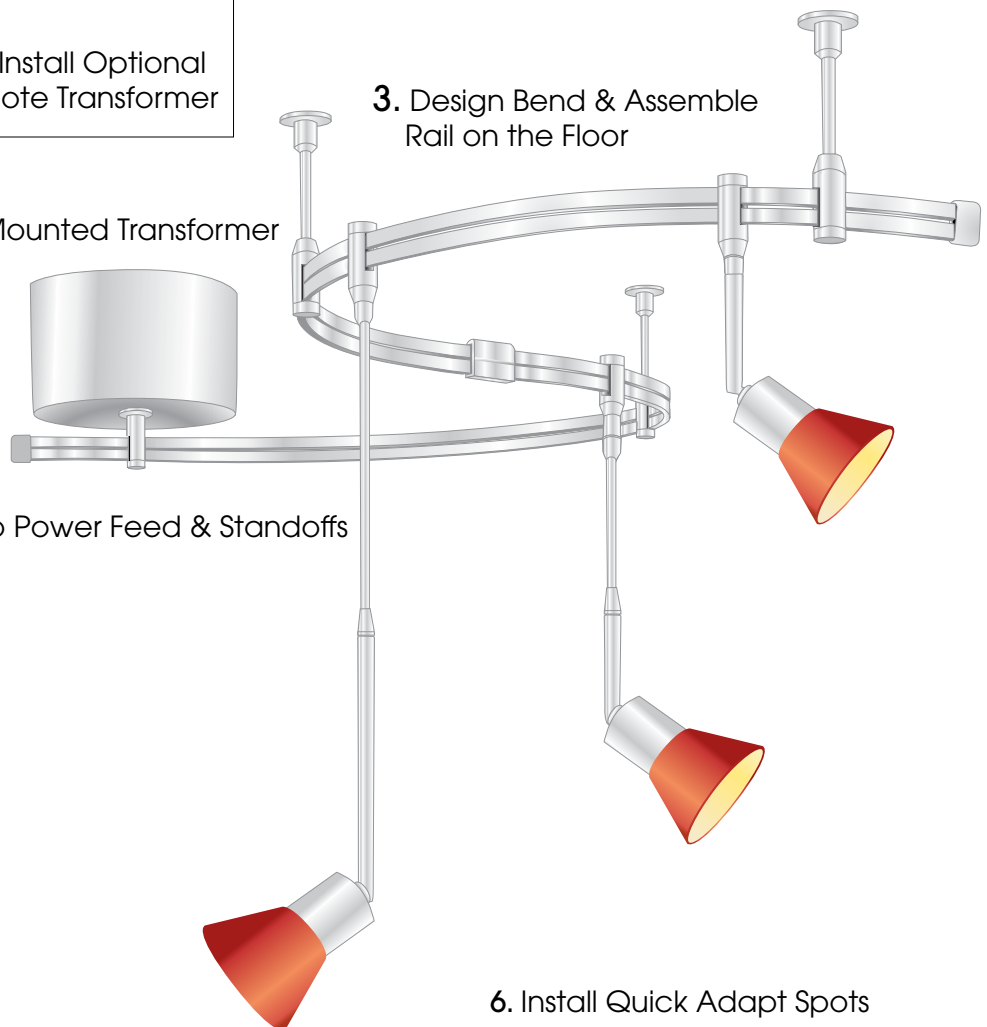
**5. Install Rail to Power Feed & Standoffs**

**3. Design Bend & Assemble Rail on the Floor**

**4. Install Standoff Support**

**6. Install Quick Adapt Spots**

**7. Test Monorail System For 20 Minutes**



# TROUBLESHOOTING

## Is a Quick Adapt Pendant or Quick Adapt Spot not functioning properly?

- Make sure the lamp is installed properly.
- Make sure the lamp is not burned out.
- Make sure the MA-FA (Fixture Adapter) is tightly connected.

## Did the breaker on the main panel trip?

- Verify that the circuit is not overloaded.

## Is the system still not working?

- Make sure the light switch is turned on.
- Make sure the transformer has a secure connection to the power feed and is properly and securely connected.
- Make sure all connections do not have any loose wire nuts.
- Make sure the input wire in the transformer is connected to the 120V.

## Dimming

- All JESCO Lighting electronic transformers may be dimmed with the appropriate dimmer.
- When using a low voltage electronic transformer, a low voltage electronic dimmer is

required. When using an optional remote low voltage magnetic transformer, a low voltage magnetic dimmer is required.

- Make sure that dimmer's rated capacity is not exceeded.
- The dimmer is installed to the 120V side, before the transformer.
- Using an incorrect dimmer will significantly reduce the life of the transformer.

## Noise Reduction

Dimming a transformer can sometimes cause a slight buzzing noise. In some applications, this may not be an issue. Following are some recommendations to reduce the buzzing noise:

- Make sure a compatible dimmer is being used.
- Install a debuzzing coil.
- Power the system up to 80% of capacity, for example, for a 300 watt transformer, do not load more than 240 watts.

## VOLTAGE DROP CHART

Using this chart to determine the correct THHN size for an acceptable 3 percent drop in voltage at the specified wattage. The length shown is the length of wire from the remote transformer to the electrical J-box.

		5 ft.	6-15 ft.	16-20 ft.	21-40 ft.	41-60 ft.	61-90 ft.
<b>12 VOLT</b>	150 watt	12 ga.	8 ga.	6 ga.	4 ga.	2 ga.	1 ga.
	300 watt	10 ga.	6 ga.	4 ga.	1 ga.	1/0 ga.	3/0 ga.
<b>24 VOLT</b>	300 watt	14 ga.	12 ga.	10 ga.	6 ga.	6 ga.	4 ga.
	600 watt	12 ga.	8 ga.	6 ga.	4 ga.	2 ga.	1 ga.

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