# MONORAIL KITS INSTALLATION INSTRUCTIONS PENDANTS



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# **IMPORTANT SAFETY INSTRUCTIONS**

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

- 1. All electrical power must be turned off before installation or modification of an exixting 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.

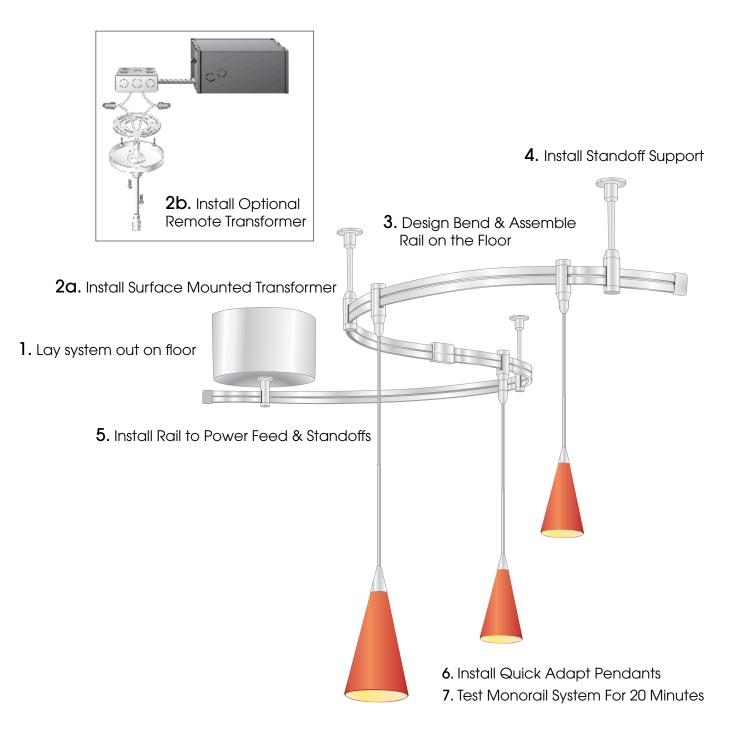
**6.** Install Quick Adapt Pendants or Quick Adapt Spots

- 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.
- 7. Test the Monorail System
- Turn the power on for 20 minutes.

• 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.

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



# 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.
$\begin{array}{c} 12 \text{ volt} \\ 300 \text{ watt} \end{array}$	12 ga.	8 ga.	6 ga.	4 ga.	2 ga.	1 ga.
	10 ga.	6 ga.	4 ga.	1 ga.	1/0 ga.	3/0 ga.
<b>24 VOLT</b> 300 watt 600 watt	14 ga.	12 ga.	10 ga.	6 ga.	6 ga.	4 ga.
	12 ga.	8 ga.	6 ga.	4 ga.	2 ga.	1 ga.

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