

# MONORAIL TRANSFORMER INFORMATION

## SELECTING A TRANSFORMER

Low voltage systems require transformers that convert line voltage into low voltage 12V or 24V which is safe to touch. Transformers are available in different versions based on mounting, transformer type, wattage or voltage. Lamps should not exceed the transformer's total rated wattage on the section of system that the transformer is powering. A simple example: up to three 50 watt lamps can be used with a 150 watt transformer. LED 12V AC lamps can be used with 12V 150, 300, or 600 (dual 300) watts magnetic or 12V 60 or 150 watt LED electronic transformers. Understanding the basics will help guide you to the right type of transformer for your particular installation. For Dimming **LED's**, visit [www.edgelighting.com](http://www.edgelighting.com).

## MOUNTING

### REMOTE TRANSFORMERS

OR

### SURFACE MOUNT TRANSFORMERS



Remote Transformers provide a cleaner look because they are hidden from view, installed in accessible locations such as above the ceiling or in a closet. Install the Remote Transformer as close as possible (within 20 ft.) to the power feed canopy (sold separately). Run the proper gauge wire from the transformer to the electrical box where the power feed canopy is installed (see "Low Voltage Wire Size Chart" on next page). Remote transformers come with multi-tap outputs allowing proper output selection based on a range of input voltages (105-125 VAC).

Surface Mount Transformers use an existing electrical box within the range of the system run to power the system. The transformer is enclosed in a decorative housing matching the system's finish. Monorail can be mounted as close as 1 inch from the ceiling with all size transformers thanks to our patent-pending side feed rail mount system. Surface Mount Transformers are also available in versions extended up to 96" from the ceiling.

## TRANSFORMER TYPE

### MAGNETIC

OR

### ELECTRONIC



Magnetic Transformers offer reliability and a wide range of output wattages. They are dimmable with low voltage magnetic dimmers. A fast acting circuit breaker is housed on the transformer; it will shut the system off in case of short or overload, and can be easily reset once the problem is corrected. Dimming coil is enclosed to minimize any buzzing that can occur.

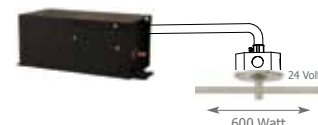
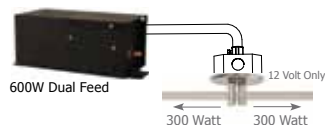
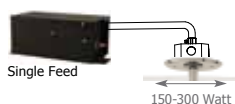
Electronic Transformers are compact and much lighter than magnetic ones, and can be reset at the wall switch in the event of a short or overload. They are dimmable with low voltage electronic dimmers. For Dimming **LEDs** visit [www.edgelighting.com](http://www.edgelighting.com).

## VOLTAGE

### 12 VOLT

OR

### 24 VOLT



12 Volt Transformers are the industry "standard" and are most commonly used. 12V lamps offer the widest variety of wattages and beam spreads on the market. At 12V, you can run on a single feed canopy up to 300 watts on a system; on a dual-feed canopy up to 600 watts (300 watts each way).

Using 24 Volt Transformers allows you have less voltage drop on the low voltage feed wire from the transformer to the canopy. For larger installations, you can use more lamps and longer rail runs, with up to 600 watts on a single circuit Monorail system (single circuit only). Ideal for commercial jobs.

# MONORAIL VS. 2 CIRCUIT MONORAIL

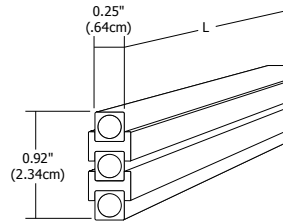
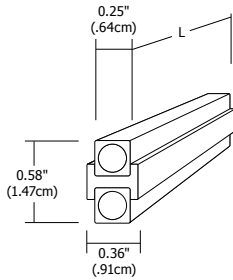
## GENERAL INSTALLATION CONSIDERATIONS

### MONORAIL

OR

### 2 CIRCUIT MONORAIL

12 Volt Only

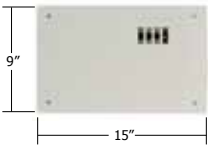


Hand-bendable Monorail Single Circuit can be powered by either 12V or 24V transformers. A variety of transformers and fixtures are available for the Monorail Single Circuit. This system can also be used on wall applications; with its dedicated hardware and fixtures it is known as Monorail Wall system.

The hand-bendable Monorail Two Circuit allows twice as many fixtures to be used on the same run, with the capability of each circuit being controlled by individual switch/dimmer. This 12V system is ideal for multitask or layers of lighting that require independent light control, like pendants on one circuit and heads on the other (up to four 300 watt with transformer and dual feed canopy, for a total of 1200 watts).

## TRANSFORMERS RECESSED IN WALL

Recessed remote magnetic transformers are best suited for remodel construction or cement ceilings. They are available in 12V and 24V 300 and 600 watt. Power can be drawn from a wall outlet. Use with feed-end power canopies (sold separately on p. 57 or in kit below). For more information on transformers and kits, visit [www.edgelighting.com](http://www.edgelighting.com).

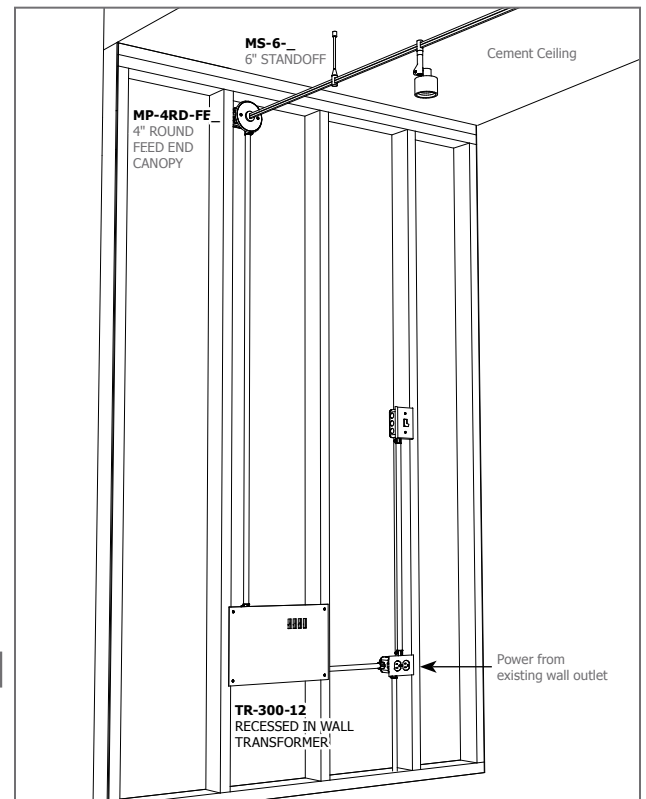


ORDERING CODE	SYSTEM	POWER/VOLTAGE OUTPUT
<b>TR</b>	Transformer Recessed	<b>300-12</b>
		300-12 300 watt 12 volt
		600-D12 600 watt (Dual 300) 12 volt
		300-24 300 watt 24 volt
		600-24 600 watt 24 volt

## MONORAIL - END FEED KITS (shown at right)

Easy-to-use kits combine everything needed for a complete Monorail Wall system. Kits include Recessed Wall Transformer (above) 4 inch Round (shown right) or 2 inch Square Canopy, End Feed, Hand Bendable Rail, Joiner, End Caps and 6 or 4 inch Standoffs.

SYSTEM	POWER/VOLTAGE OUTPUT	CANOPY	LENGTH	FINISH
<b>TR</b>	<b>300-12</b>	<b>4FE</b>	<b>K12</b>	<b>SN</b>
TR Transformer Recessed	300 watt 12 volt	4FE 4" round feed end 2FE 2" square feed end	K4 Kit with 4' Monorail K8 Kit with 8' Monorail K12 Kit with 12' Monorail K16 Kit with 16' Monorail K20 Kit with 20' Monorail K24 Kit with 24' Monorail K28 Kit with 28' Monorail K32 Kit with 32' Monorail	SN Satin Nickel PN Polished Nickel BZ Antique Bronze



Lamp and Technical Info

## LOW VOLTAGE FEED WIRE SIZE CHART

Determine the correct THHN wire sizes for a recommended 3% or less drop in voltage for each circuit based on the specified wattage. Lengths are the distance from the remote transformer to the system power feed connector, or power supply.

12 VOLT					24 VOLT									
5 ft.	6-15 ft.	16-20 ft.	21-40 ft.	5 ft.	6-15 ft.	16-20 ft.	21-40 ft.	5 ft.	6-15 ft.	16-20 ft.	21-40 ft.			
150 watt	#12 GA	#8 GA	#6 GA	#4 GA	300 watt	#12 GA	#12 GA	#10 GA	#6 GA	600 watt	#10 GA	#8 GA	#6 GA	#4 GA