MONORAIL

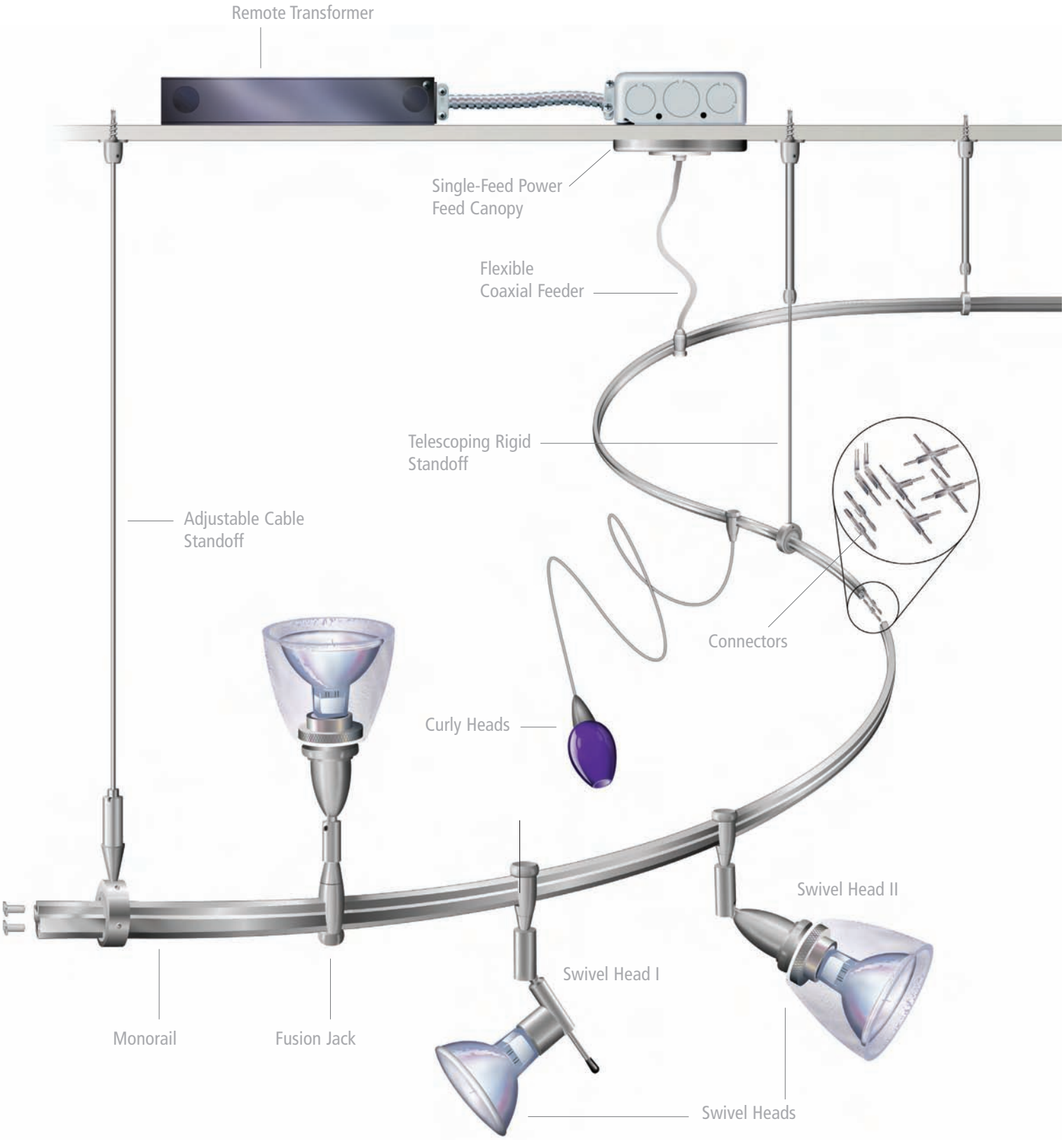
LBL Lighting's unique solution to low-voltage Monorail lighting is recognized for its quality, functionality and our vast selection of refreshing rail element designs.

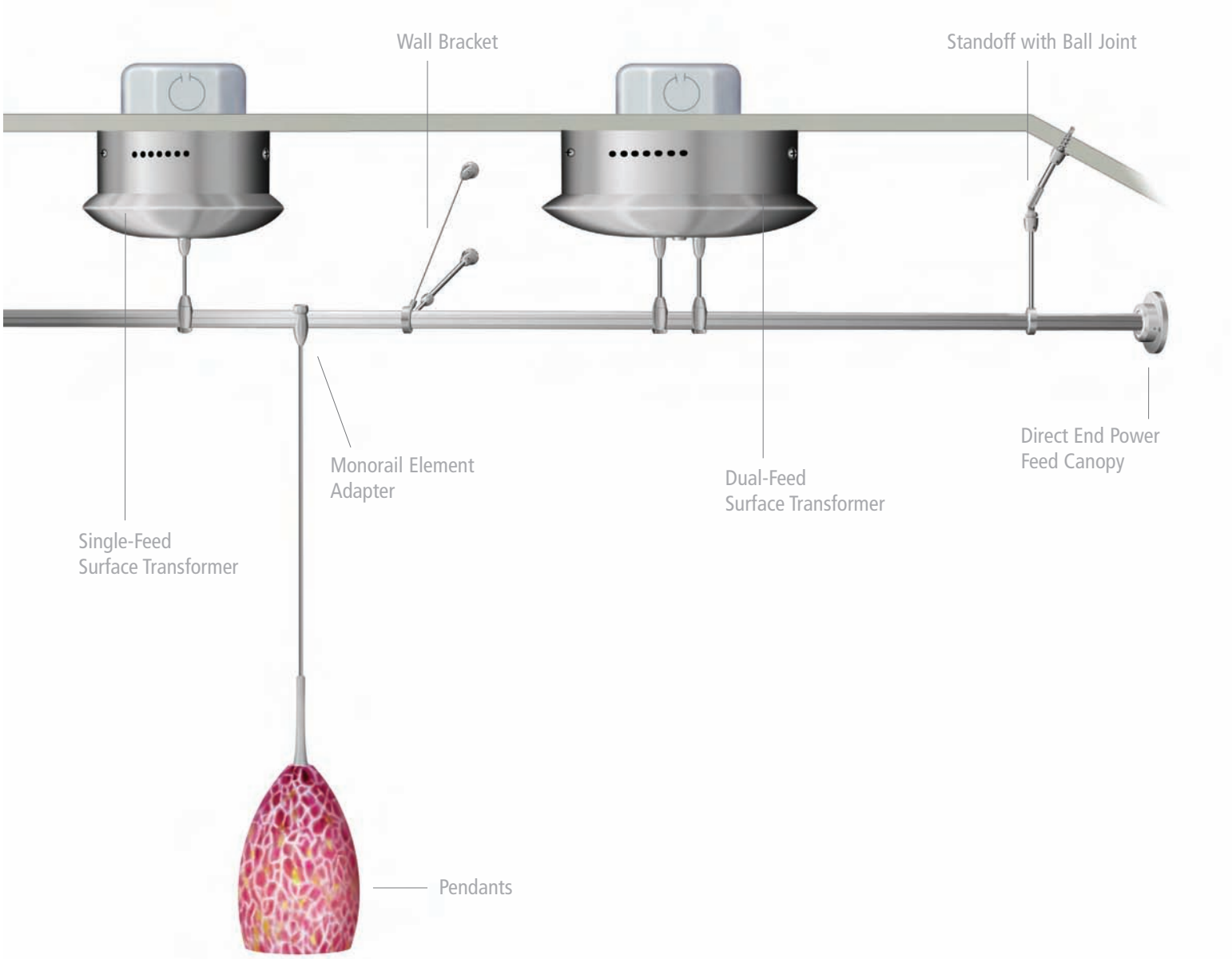
In this section, you will find the most commonly requested components, configuration choices, finishes and pre-curved rails. To simplify your lighting design, specification and installation, we have organized this section to include a comprehensive specifier's guide.

SECTION FEATURES:

Specifier's guide to help you design and custom-configure a Monorail system. pp40-49

Kits simplify ordering by selecting one of our preconfigured kits. pp50-51


Remote Transformer
Single-Feed Power
Feed Canopy
Flexible
Coaxial Feeder
Telescoping Rigid
Standoff
Adjustable Cable
Standoff
Connectors
Curly Heads
Swivel Head II
Swivel Head I
Monorail
Fusion Jack
Swivel Heads

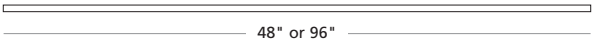

Wall Bracket
Standoff with Ball Joint
Monorail Element Adapter
Dual-Feed Surface Transformer
Direct End Power Feed Canopy
Single-Feed Surface Transformer
Pendants

SPECIFIERS GUIDE *Single Circuit Monorail*

Step 1. Choose your decorative elements (see pp. 6-11 for compatible elements)

Step 2. Choose your rails Create your own size and shape. All pieces are field-cuttable and bendable to a horizontal radius as small as 6 inches. Please consult factory for custom pre-bent options.

STRAIGHT RAIL

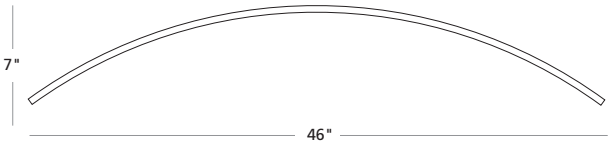


☐ RAIL-ST-(**BZ**,SC)48 – 48" Straight Qty ____

☐ RAIL-ST-(**BZ**,SC)96 – 96" Straight Qty ____

SOFT CURVE

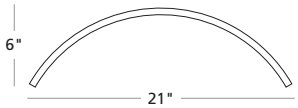
78" Diameter, 1/5 Round, Radius 39". Order five pieces to create a 78" diameter circle.



☐ RAILCV1-(**BZ**,SC)117 – 46" 1/5 Round Curve Qty ____

24" DIAMETER CIRCLE

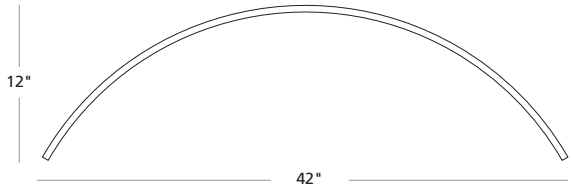
1/3 Round, Radius 12". Order three pieces to create a 24" diameter circle, or use our 24". Circle Kit on page 51.



☐ RAILCV3-(**BZ**,SC)62.5 – 20.5" 1/3 Round Curve Qty ____

48" DIAMETER CIRCLE

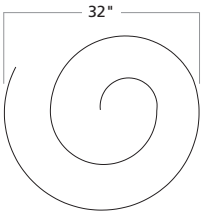
1/3 Round, Radius 24". Order three pieces to create a 48" diameter circle, or use our 48". Circle Kit on page 51.



☐ RAILCV2-(**BZ**,SC)125 – 40.5" 1/3 Round Curve Qty ____

32" MONORAIL SPIRAL

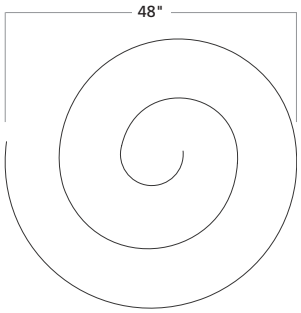
Kit includes: Custom bent Monorail, Straight Conductive Connectors and End caps. (5) Standoffs required (sold separately).



☐ RAILCVSPRL-(**BZ**,SC)32 – 32" Spiral Qty ____

48" MONORAIL SPIRAL

Kit includes: Custom bent Monorail, Straight Conductive Connectors and End caps. (7) Standoffs required (sold separately).



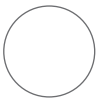
☐ RAILCVSPRL-(**BZ**,SC)48 – 48" Spiral Qty ____

COMMON CONFIGURATIONS:

(4) RAIL-ST-(BZ,SC)(48,96)
(1) XCONNECTORSC(BZ,SC)M

(3) RAIL-ST-(BZ,SC)(48,96)
(3) ACONNECTOR(BZ,SC)-M

(4) RAIL-ST-(BZ,SC)(48,96)
(4) ACONNECTOR(BZ,SC)-M

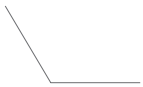


24" diameter:
(3) RAIL-CV-(BZ,SC)62.5
(3) SCONNECTOR(BZ,SC)-M

48" diameter:
(3) RAIL-CV-(BZ,SC)125
(3) SCONNECTOR(BZ,SC)-M

78" diameter:
(5) RAIL-CV-(BZ,SC)117
(5) SCONNECTOR(BZ,SC)-M

(2) RAIL-CV-1-(BZ,SC)117 or
RAIL-CV-2-(BZ,SC)62.5
(2) ACONNECTOR(BZ,SC)-M



(2) RAIL-ST-(BZ,SC)(48,96)
(1) ACONNECTOR(BZ,SC)-M

(6) RAIL-ST-(BZ,SC)(48,96)
(4) ACONNECTOR(BZ,SC)-M
(4) TCONNECTOR(BZ,SC)-M
(1) XCONNECTOR(BZ,SC)-M

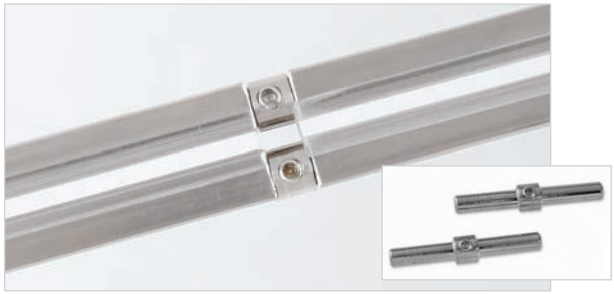
See Monorail Chandeliers (page 234-247) for more configuration options. You are limited only by your imagination!

SPECIFIERS GUIDE *Connectors*

Step 3. Choose your connectors There are many options for joining sections of Monorail into unique shapes and designs.

STRAIGHT CONDUCTIVE

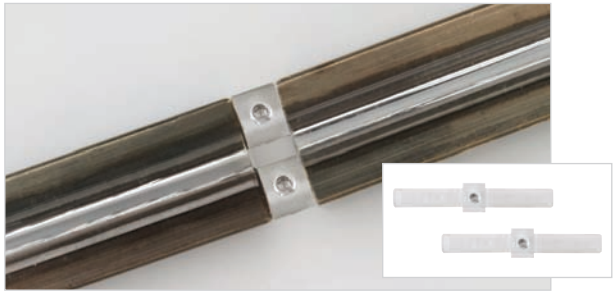
Straight conductive connectors join sections of Monorail together. (Pair.)



☐ SCONNECTOR(**BZ**,SC)-M – Straight Conductive (Pair)
Qty ____

STRAIGHT ISOLATING

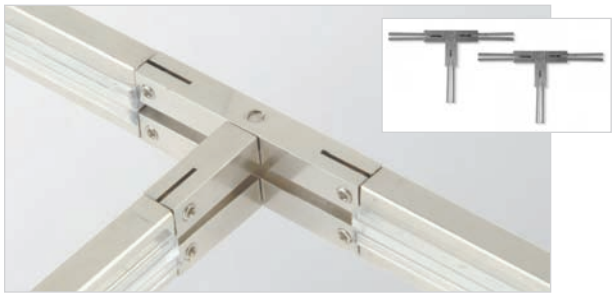
Straight isolating connectors join sections of rail and isolate one powered run from another. (Pair.) These are typically used to separate one circuit from the other circuit when using surface or remote dual-feed transformers and to separate multiple transformers on a continuous run. Included with dual-feed surface transformers and power feed canopies. (See pp. 43-48.)



☐ ISOCONNECTORCL-M – Straight Isolating (Pair) Qty ____

"T" CONDUCTIVE

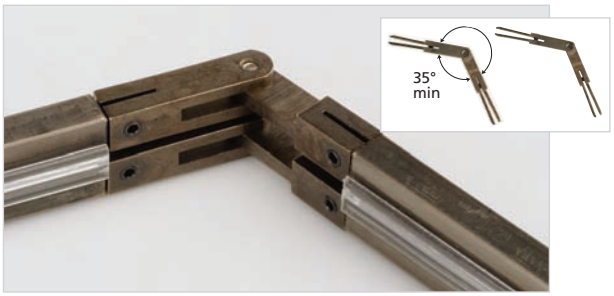
These conductive connectors join three sections of Monorail together to create a "T". (Pair.)



☐ TCONNECTOR(**BZ**,SC)-M – "T" Conductive (Pair) Qty ____

ADJUSTABLE ANGLE CONDUCTIVE

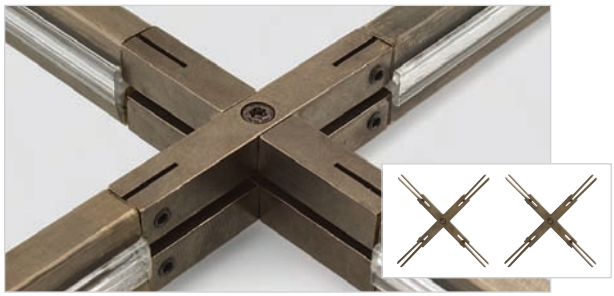
These connectors join sections of rail together allowing subtle to sharp horizontal angles. (Pair.)



☐ ACONNECTOR(**BZ**,SC)-M – Adj Angle Conductive (Pair)
Qty ____

"X" CONDUCTIVE

These conductive connectors join four sections of Monorail together to create a four-way intersection. (Pair.)



☐ XCONNECTOR(**BZ**,SC)-M – "X" Conductive (Pair) Qty ____

END CAPS

Decorative metal cap to give finished look to the ends of Monorail. (4 pc. set.)

☐ ENDCAPS(**BZ**,SC)-M – End Caps (Set-4 pcs) Qty ____

Step 4. Choose your Monorail supports Recommended every 3 feet.

Versatile, telescoping standoffs allow you to choose your hanging method and height.

TELESCOPING RIGID STANDOFFS

Rigid standoffs offer multifunction ceiling mounting in one part. Unique telescoping height adjustment and rotational head insert simplifies and perfects your installation. Self-drilling drywall anchor included with all standoffs.
NOTE: When mounting on concrete ceiling or wall, order one SCW-MASONARY-A per standoff.

☐ HANGER-ADJ-(**BZ**,SC)-1* Qty ____
Offers 2.5-4" telescoping rigid hanging.

☐ HANGER-ADJ-(**BZ**,SC)-2 Qty ____
Offers 6-10" telescoping rigid hanging.

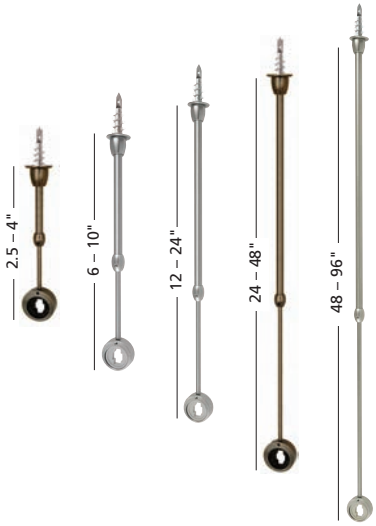
☐ HANGER-ADJ-(**BZ**,SC)-3 Qty ____
Offers 12-24" telescoping rigid hanging.

☐ HANGER-ADJ-(**BZ**,SC)-4 Qty ____
Offers 24-48" telescoping rigid hanging.

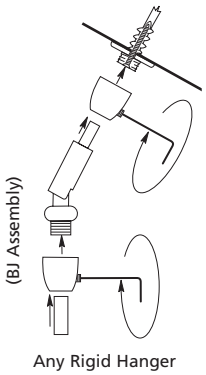
☐ HANGER-ADJ-(**BZ**,SC)-5 Qty ____
Offers 48-96" telescoping rigid hanging.

* When using with any 600w surface transformer, rail cannot be installed directly below the transformer.

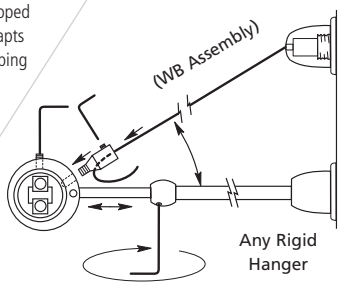
Rotating head insert allows fine tuning of rail axis position and fixture orientation.



Options To order add suffix **-BJ** or **-WB** to Telescoping Rigid Standoff part number.



BALL JOINT (-BJ) attachment allows sloped ceiling mounting. Adapts simply to any telescoping rigid standoff.



WALL BRACKET (-WB) with cable support allows for extended, cantelievered wall mount. Available only for 2.5-4", 6-10" and 12-24" standoffs.

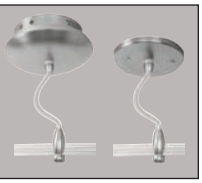
BALL JOINT

☐ HANGER-ADJ-(**BZ**,SC)-(1,2,3,4,5)-BJ Qty ____

WALL BRACKET

☐ HANGER-ADJ-(**BZ**,SC)-(1,2,3)-WB Qty ____

Specify Surface Mounted Transformer or non-Direct Power Feed Canopy with Telescoping Rigid Standoffs. Refer to page 43-44.



ADJUSTABLE CABLE STANDOFFS

Clean looking and fully adjustable cable standoff for ceiling mounting. Griplock allows for easy one-touch shortening or lengthening in the field. Offered in four stock lengths. Additional custom length cable can be specified. Self-drilling drywall anchor included with all standoffs.

☐ HANGER-CBL-(**BZ**,SC)-6 Qty ____
Offers 6' of cable.

☐ HANGER-CBL-(**BZ**,SC)-8 Qty ____
Offers 8' of cable.

☐ HANGER-CBL-(**BZ**,SC)-18 Qty ____
Offers 18' of cable.

☐ HANGER-CBL-(**BZ**,SC)-25 Qty ____
Offers 25' of cable.

Specify Surface Mounted Transformer or non-Direct Power Feed Canopy with Adjustable Cable Standoffs. Refer to page 43-44.

DIRECT FEED TELESCOPING RIGID STANDOFFS

Universal telescoping standoffs offer adjustability and simplified ordering.

Universal for **all** single-circuit direct feed surface transformers except 60w electronic flush.

☐ HANGERDIRADJ(**BZ**,SC)1 Qty ____

Universal for **all** single-circuit direct power feed canopies and 60w electronic flush direct feed surface transformer.

☐ HANGERDIRRC(**BZ**,SC)1 Qty ____

Specify Direct Feed Surface Transformer or Direct Power Feed Canopy with Direct Feed Telescoping Rigid Standoffs. Refer to page 45.

T-GRID CLIP

Allows adaptation of any standoff to an inverted T-Grid ceiling rail. To be used with $^{15}/_{16}$" or $^{9}/_{16}$" T-Grid.

☐ CLIP-TB/MONO-1 $^{15}/_{16}$"

☐ CLIP-TB/MONO-2 $^{9}/_{16}$"

SPECIFIERS GUIDE *Surface Transformers*

Step 4. Choose your transformer + canopy (see page 349 for transformer technical info)

TRANSFORMERS

All Monorail lighting systems require a transformer to convert standard 120 voltage to a safe-to-touch 12 or 24 volts. Monorail can be powered with surface mounted transformers or with remote transformers.

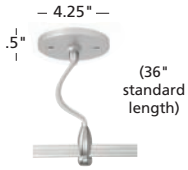
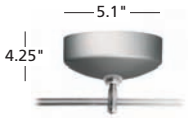
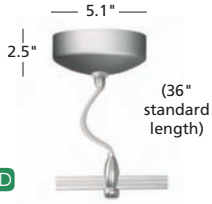
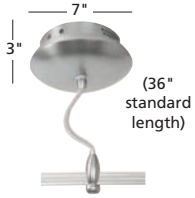
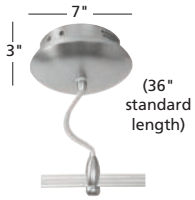
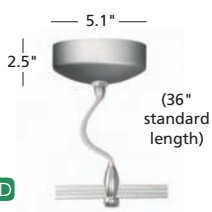
Surface Mounted Transformers

All Surface Mounted Transformers are encased in a finished metal housing and mount to any standard ceiling electrical box. Typically, you use a surface transformer when an accessible location above the ceiling or in a utility closet is unavailable for installing a remote transformer. Please refer to the technical info on page 349 for important transformer information and performance specs.

Transformer and flexible coaxial feeder cleanly and attractively send power to your system. 36" length is standard for our coaxial feeder. It is easily shortened in the field. Consult factory for longer lengths.

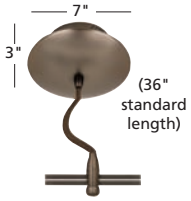
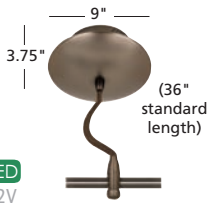
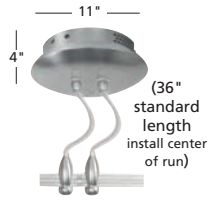
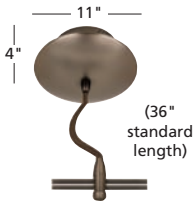
Our unique **COAXIAL FEEDER** mimics a solid stem when straight. The braided steel outer jacket and the rail adapter beautifully complement the entire system!

Specify Telescoping Rigid Standoffs or Adjustable Cable Standoffs with Surface Mounted Transformer. Refer to page 42.

Choices	Watt & Type	Model #	Input	Output	Compatible Dimmer
 LED	12 volt/60W Electronic Flush Single-Feed	TRANS-SFE60-(**BZ**,SC) TRANS-SFE60-(**BZ**,SC)/277	1x120VAC/.5A 1x277VAC/.22A	1x60W	Electronic Low-voltage Dimmer 600W
 LED	12 volt/60W Electronic Single-Feed	TRANS-SFE61-(**BZ**,SC) TRANS-SFE61-(**BZ**,SC)/277	1x120VAC/.5A 1x277VAC/.22A	1x60W	Electronic Low-voltage Dimmer 600W
 LED	12 volt/100W Electronic Single-Feed	TRANS-SFE100-(**BZ**,SC) TRANS-SFE100-(**BZ**,SC)/277	1x120VAC/.9A 1x277VAC/.4A	1x100W	Electronic Low-voltage Dimmer 600W
	12 volt/150W Electronic Single-Feed	TRANS-SFE150-(**BZ**,SC)	1x120VAC/1.25A	1x150W	Electronic Low-voltage Dimmer 600W
	12 volt/300W Electronic Single-Feed	TRANS-SFE300-(**BZ**,SC)	1x120VAC/2.5A	1x300W	Electronic Low-voltage Dimmer 600W
 LED	12 volt/75W Magnetic Single-Feed	TRANS-SFM75-(**BZ**,SC) TRANS-SFM75-(**BZ**,SC)/277	1x120VAC/.7A 1x277VAC/.3A	1x75W	Magnetic Low-voltage Dimmer 600W

LED These transformers are compatible with LED Heads and Pendants.

Surface Mounted Transformers (continued)

Choices	Watt & Type	Model #	Input	Output	Compatible Dimmer
 LED	12 volt/150W Magnetic Single-Feed	TRANS-SFM150-(**BZ**,SC)	1x120VAC/1.25A	1x150W	Magnetic Low-voltage Dimmer, 600W
 LED 12V ONLY	12 volt/300W Magnetic Single-Feed	TRANS-SFM300-(**BZ**,SC)	1x120VAC/2.5A	1x300W	Magnetic Low-voltage Dimmer, 600W
	12 volt/300W Magnetic Single-Feed	TRANS-SFM300-(**BZ**,SC)/277	1X277VAC/1.1A	1x300W	Magnetic Low-voltage Dimmer, 600W
	24 volt/300W Magnetic Single-Feed	TRANS-SFM300-(**BZ**,SC)/24V	1X120VAC/2.5A	1x300W	Magnetic Low-voltage Dimmer, 600W
 LED	12 volt/600W Magnetic Dual-Feed	TRANS-SFM600-(**BZ**,SC)	1x120VAC/5A	2x300W	Magnetic Low-voltage Dimmer, 1000W
	12 volt/600W Magnetic Dual-Feed	TRANS-SFM600-(**BZ**,SC)/277	1X277VAC/1.1A	2x300W	Magnetic Low-voltage Dimmer, 1000W
	24 volt/600W Magnetic Single-Feed	TRANS-SFM600-(**BZ**,SC)/24V)	1X120VAC/5A	1x600W	Magnetic Low-voltage Dimmer, 1000W

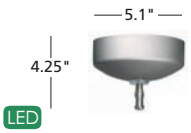
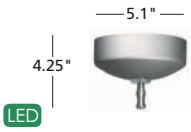
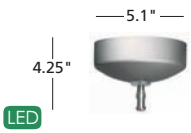
LED These transformers are compatible with LED Heads and Pendants.

SPECIFIERS GUIDE *Surface Transformers continued*

Direct Feed Surface Transformers

Allows for the closest possible mounting of Monorail to the ceiling. Each mounts to a standard 4" junction box with round plaster ring.

Specify Direct Feed Telescoping Rigid Standoffs with Direct Feed Surface Transformer. Refer to page 42.

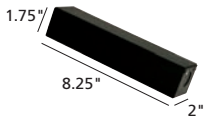
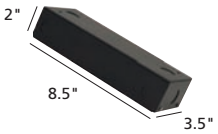
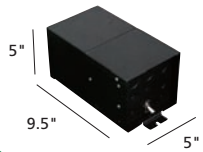
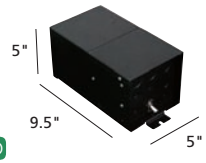
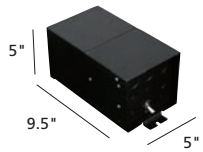
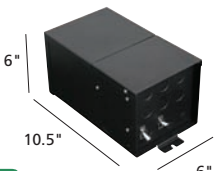
Choices	Watt & Type	Model #	Input	Output	Compatible Dimmer
	12 volt/60W Electronic Flush Single-Feed	TRANSDIR-SFE60(**BZ**,SC) TRANSDIR-SFE60(**BZ**,SC)/277	1x120VAC/.5A 1x277VAC/.22A	1x60W	Electronic Low-voltage Dimmer, 600W
	12 volt/60W Electronic Single-Feed	TRANSDIR-SFE61(**BZ**,SC) TRANSDIR-SFE61(**BZ**,SC)/277	1x120VAC/.5A 1x277VAC/.22A	1x60W	Electronic Low-voltage Dimmer, 600W
	12 volt/100W Electronic Single-Feed	TRANSDIR-SFE100(**BZ**,SC) TRANSDIR-SFE100(**BZ**,SC)/277	1x120VAC/.9A 1x277VAC/.4A	1x100W	Electronic Low-voltage Dimmer, 600W
	12 volt/150W Electronic Single-Feed	TRANSDIR-SFE150(**BZ**,SC)	1x120VAC/1.25A	1x150W	Electronic Low-voltage Dimmer, 600W
	12 volt/300W Electronic Single-Feed	TRANSDIR-SFE300(**BZ**,SC)	1x120VAC/2.5A	1x300W	Electronic Low-voltage Dimmer, 600W
	12 volt/75W Magnetic Single-Feed	TRANSDIR-SFM75(**BZ**,SC) TRANSDIR-SFM75(**BZ**,SC)/277	1x120VAC/.7A 1x277VAC/.3A	1x75W	Magnetic Low-voltage Dimmer, 600W
	12 volt/150W Magnetic Single-Feed	TRANSDIR-SFM150(**BZ**,SC)	1x120VAC/1.25A	1x150W	Magnetic Low-voltage Dimmer, 600W
	12 volt/300W Magnetic Single-Feed	TRANSDIR-SFM300(**BZ**,SC) TRANSDIR-SFM300(**BZ**,SC)/277	1x120VAC/2.5A 1x277VAC/1.1A	1x300W	Magnetic Low-voltage Dimmer, 600W
	24 volt/300W Magnetic Single-Feed	TRANSDIR-SFM300(**BZ**,SC)/24	1x120VAC/2.5A	1x300W	Magnetic Low-voltage Dimmer, 600W
	12 volt/600W Magnetic Dual-Feed	TRANSDIR-SFM600(**BZ**,SC)	1x120VAC/5A	2x300W	Magnetic Low-voltage Dimmer, 1000W
	24 volt/600W Magnetic Single-Feed	TRANSDIR-SFM600(**BZ**,SC)/24	1x120VAC/5A	1x600W	Magnetic Low-voltage Dimmer, 1000W

LED These transformers are compatible with LED Heads and Pendants.

Shown: (2) Monorail Shield Swivel I Heads
(3) Monorail Onyx Dome Pendants

Remote Transformers

All Remote Transformers are encased in metal housings complete with mounting feet and conduit knockouts. Typically, you use a remote transformer when a cleaner installation appearance is desired. A remote transformer must be installed in an accessible remote location, the bulkier ceiling mounted surface transformer is replaced by a power feed canopy with flexible coaxial power feed cable or direct-feed connector. Please refer to the technical info on page 349 for important transformer information and performance specs.

Choices	Watt & Type	Model #	Input	Output	Compatible Dimmer
	12 volt/150W Remote DC Electronic Single-Feed	TRANS-RMTE-150	1x120VAC/1.25A	1x150W	Electronic Low-voltage Dimmer, 600W
	12 volt/300W Remote DC Electronic Single-Feed	TRANS-RMTE-301	1x120VAC/2.5A	1x300W	Electronic Low-voltage Dimmer, 600W
 LED	12 volt/75W Remote Magnetic Single-Feed 12 volt/75W Remote Magnetic Single-Feed	TRANS-RMTE-75M REFER TO PAGE 349 FOR PERFORMANCE SPECIFICATIONS. TRANS-RMTE-75M/277	1x120VAC/.7A 1x277VAC/.3A	1x75W 1x75W	Magnetic Low-voltage Dimmer, 600W Magnetic Low-voltage Dimmer, 600W
 LED	12 volt/150W Remote Magnetic Single-Feed 12 volt/150W Remote Magnetic Single-Feed	TRANS-RMTE-150M REFER TO PAGE 349 FOR PERFORMANCE SPECIFICATIONS. TRANS-RMTE-150M/277	1x120VAC/1.25A 1x277VAC/.55A	1x150W 1x150W	Magnetic Low-voltage Dimmer, 600W Magnetic Low-voltage Dimmer, 600W
 LED -12 volt only	12 volt/300W Remote Magnetic 12 volt/300W Remote Magnetic 24 volt/300W Remote Magnetic	TRANS-RMTE-300M REFER TO PAGE 349 FOR PERFORMANCE SPECIFICATIONS. TRANS-RMTE-300M/277 TRANS-RMTE-300M/24V	1x120VAC/2.5A 1x277VAC/1.1A 1x120VAC/2.5A	1x300W 1x300W 1x300W	Magnetic Low-voltage Dimmer, 600W Magnetic Low-voltage Dimmer, 600W Magnetic Low-voltage Dimmer, 600W
 LED -12 volt only	12 volt/600W Remote Magnetic 12 volt/600W Remote Magnetic 24 volt/600W Remote Magnetic	TRANS-RMTE-600M REFER TO PAGE 349 FOR PERFORMANCE SPECIFICATIONS. TRANS-RMTE-600M/277 TRANS-RMTE-600M/24V	1x120VAC/5A 1x277VAC/2.2A 1x120VAC/5A	2x300W 2x300W 1x600W	Magnetic Low-voltage Dimmer, 1000W Magnetic Low-voltage Dimmer, 1000W Magnetic Low-voltage Dimmer, 1000W

LED These transformers are compatible with LED Heads and Pendants.

ALL Remote Transformers must be accompanied by a Remote Canopy. The Remote Canopy covers the ceiling/wall electrical box and is equipped with a 36" flexible coaxial power feeder (see page 48).

How to calculate your wattage needs

2.75" and 4" remote canopies are available for ceiling and wall remote transformer applications. To find which is right for your system, add up the total wattage of the pendants or heads you'll be using (the number of pendants or heads x the total lamp wattage per fixture = total wattage). A combination of wattages may be chosen as long as the maximum wattage allowed by the transformer is not exceeded. For example (3) 50 watt, (4) 35 watt or (7) 20 watt elements can be specified per 150 watt transformer. (6) 50 watt, (8) 35 watt or (15) 20 watt elements can be specified per 300 watt transformer. Double a 300 watt limit for 600 watts.

Additional Important Transformer Information: Aside from wattage requirements and accessibility, the other important factor to consider when choosing a transformer is "voltage drop." The further a light source (pendant/head) is located from the transformer, the lower its voltage and brightness. Certain transformers are better suited to handle longer rail runs and distances from the transformer to the furthest light source. Please refer to the technical info page 349 for more transformer information and performance specifics to choose the best model for your application.

SPECIFIERS GUIDE *Canopy Options*

When using a remote transformer, a remote canopy is necessary. Power feed canopies are mounted to the ceiling or wall parallel to a rail run. Location can be anywhere along the rail.

2.75" ROUND CANOPIES mount to a special 2" electrical J-Box (included).
4" ROUND CANOPIES mount to a standard 4" electrical J-Box with round plaster ring (provided by electrician).

Remote canopies include 36" standard length of a 10AWG flexible, plated coaxial power feeder and complementing rail adapter. The coaxial feeder is field-cuttable and easily shortened by the installer. A straight line to the rail, giving the appearance of a solid stem, is easily achievable by the installer. Direct-feed canopies include a complementing rail adapter flush with canopy.

SINGLE-FEED POWER FEED CANOPIES

To be used with any single-feed remote transformer application.

Specify Telescoping Rigid Standoffs or Adjustable Cable Standoffs with Single-Feed Power Feed Canopy. Refer to page 42.

Choices	Model # and Description
	**REMOTECNPY-(BZ,SC)2** 2.75" round canopy with single flexible 10AWG coaxial power feeder and special 2" electrical box (included).  Must install with special 2" electrical box. (See below.)
	**REMOTECNPY-(BZ,SC)** 4" round canopy with single flexible 10AWG coaxial power feeder.

DUAL-FEED POWER FEED CANOPIES

To be used with any dual-feed remote transformer application.

Specify Telescoping Rigid Standoffs or Adjustable Cable Standoffs with Single-Feed Power Feed Canopy. Refer to page 42.

Choices	Model # and Description
	**REMOTECNPY-DF2-(BZ,SC)** 2.75" round canopy with dual flexible 10AWG coaxial power feeds and special 2" electrical box (included).  Must install with special 2" electrical box. (See below.) All dual-feed rail connections are separated by an isolating connector (ISOCONNECTORCL-M, included).
	**REMOTECNPY-DF-(BZ,SC)** 4" round canopy with dual flexible 10AWG coaxial power feeds. All dual-feed rail connections are separated by an isolating connector (ISOCONNECTORCL-M, included).

DIRECT POWER FEED CANOPIES

Allows for closest-to-ceiling possible mounting of Monorail. Specify with Remote Transformers.

Specify Direct Feed Telescoping Rigid Standoffs with Direct Power Feed Canopies. Refer to page 42.

Choices	Model # and Description
	**REMOTECNPYDIR2(BZ,SC)** ø2.75", 2.625" height Single-Feed, Direct Power Feed Canopy with special 2" electrical box (included).  Must install with special 2" electrical box. (See below.)
	**REMOTECNPYDIRDF2(BZ,SC)** ø2.75", 2.625" height Dual-Feed, Direct Power Feed Canopy with special 2" electrical box (included).  Must install with special 2" electrical box. (See below.) All dual-feed rail connections are separated by an isolating connector (ISOCONNECTORCL-M, included).
	**REMOTECNPYDIR(BZ,SC)** ø4.25", 2.625" height Single-Feed, Direct Power Feed Canopy
	**REMOTECNPYDIRDF(BZ,SC)** ø4.25", 2.625" height Dual-Feed, Direct Power Feed Canopy All dual-feed rail connections are separated by an isolating connector (ISOCONNECTORCL-M, included).

2" ELECTRICAL BOX

Shown with canopy. Electrical box comes standard with each 2.75" remote canopy and MUST be installed.

WALL (DIRECT END) POWER FEEDS

For single-feed remote transformer applications, to power the end of a run, from a perpendicular wall. Remote transformer sold separately, see p. 47.

☐ REMOTECNPY-WALL-(**BZ**,SC)

2.75" round power feed canopy (conductive), 2" electrical box and matching isolated wall support (non-conductive; included).

FLEXIBLE END POWER FEED

Used to power a Monorail system from one end of the run. Includes a removable 4" round canopy and 144" of field-cuttable softwire leads. Mounts to a standard 4" junction box with round plaster ring (provided by electrician). Remote transformer sold separately, see p. 47.

☐ REMOTECNPY-FLEX-(**BZ**, PC, SC)-M

COAXIAL FEEDER COVER (Optional)

Field-cuttable .25" diameter cover in plated finish slips over flexible feeder cable to form a solid line from power source to rail. Available in 48" or 96".

☐ FDRCVR-48-(**BZ**,SC) – 48"
☐ FDRCVR-96-(**BZ**,SC) – 96"

Shown: (7) Maraca-SI Coax Pendants on Custom Bent Monorail

Shown: (1) Straight Rail Kit
(4) Monorail Bare Swivel II Heads

PRE-CONFIGURED KITS

Monorail Kits simplify ordering and design. Choose from four different kits that each contain all the hardware needed for a typical Monorail installation. After you decide on the configuration that best suits your needs, simply add your choice of pendants or heads to complete the kit.

PRE-CONFIGURED KITS**

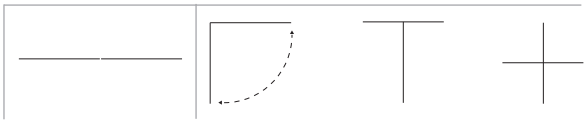
STRAIGHT RAIL KIT FUSIONKIT(BZ,SC)8ST

- (2) 48" straight rails
- (1) set of four end caps
- (1) set straight connectors
- (3) telescoping rigid standoffs (6-10")
- (1) surface mount transformer housing with (1) 300W electronic transformer and 36" flexible coaxial feeder cable

Option: Add a set of adjustable angle, "T" or "X" connectors*

* To create the "T" and "X" shapes shown, rail must be cut. Rail is easily field-cuttable.

STANDARD WITH OPTIONS

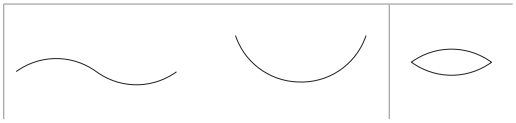


SOFT CURVE KIT FUSIONKIT(BZ,SC)8CV

- (2) 46" soft curve rails (78" diameter, ⅛ round, 39" radius)
- (1) set of four end caps
- (1) set of straight conductive connectors
- (3) telescoping rigid standoffs (6-10")
- (1) surface mount transformer housing with (1) 300W electronic transformer and 36" flexible coaxial feeder cable

Option: Add a set of adjustable angle connectors

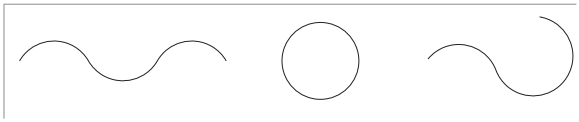
STANDARD WITH OPTIONS



24" DIAMETER CIRCLE KIT FUSIONKIT(BZ,SC)2RD

- (3) 20" curved rails (24" diameter, ⅛ round, 12" radius)
- (1) set of four end caps
- (3) sets of straight conductive connectors
- (3) telescoping rigid standoffs (6-10")
- (1) surface mount transformer housing with (1) 300W electronic transformer and 36" flexible coaxial feeder cable

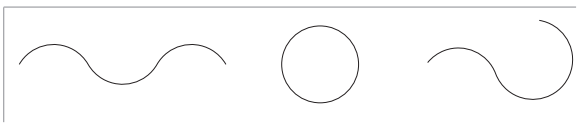
STANDARD



48" DIAMETER CIRCLE KIT FUSIONKIT(BZ,SC)4RD

- (3) 40.5" curved rails (48" diameter, ⅛ round)
- (1) set of four end caps
- (3) sets of straight conductive connectors
- (4) telescoping rigid standoffs (6-10")
- (1) surface mount transformer housing with (1) 300W electronic transformer and 36" flexible coaxial feeder cable

STANDARD



**See Monorail Chandeliers (pp. 234-238) for more configuration options.

Shown: (1) Soft Curve Monorail Kit
(3) Monorail Dome-SI Coax Pendants in Clear
(5) Monorail Mini-Dome II Swivel I Heads

Shown: (1) 24" Diameter Circle Monorail Kit
(5) Monorail Maraca-SI Coax Pendants in Mocha

Transformers

Low-voltage lighting systems use transformers to step down and isolate standard line-voltages (e.g. 120VAC and 277VAC, etc) to safe-to-touch low-voltages such as 12VAC.

There are two categories of transformer styles to choose from: **remote** or **surface mount** transformers.

Remote Transformers are installed at a distance from the lighting system. This allows the transformer to be placed out of view from the aesthetically pleasing lighting system. Since remote transformers are placed at some considerable distance from the lighting system, the installer must be aware of voltage drop. The best approach for achieving optimum lamp voltage at the transformer output is to observe the wiring instructions accompanied with our remote multi-tap transformers in conjunction with the appropriate wire gauge specified in our voltage drop table.

In general, to obtain a minimum voltage drop of 3% from the output of the remote transformer to the power feed canopy, please use the appropriate wire gauge specified in our voltage drop table (below).

Low-Voltage Wire Size Table

Transformer Wattage	Wire Size for 5 ft.	Wire Size for 6-15 ft.	Wire Size for 16-20 ft.	Wire Size for 21-40 ft.	Wire Size for 40-60 ft.	Wire Size for 61-90 ft.
150 watt	#12 GA	#8 GA	#6 GA	#4 GA	#2 GA	#1 GA
250 watt	#10 GA	#6 GA	#4 GA	#2 GA	#1 GA	#2/0 GA
300 watt	#10 GA	#6 GA	#4 GA	#1 GA	#1/0 GA	#3/0 GA

NOTE: The THHN wire sizes are for 3% drop in voltage based on 150, 250, and 300 watt loads. Lengths are the distance from the transformer to the system power feed canopy.

Surface Mount Transformers are installed close to the lighting system usually to a junction box in a ceiling. Since surface mount transformers are visible, we have designed our surface mount transformers to aesthetically complement our lighting systems. Surface mount transformers will not experience voltage drop issues to the degree and severity of remote transformers and hence do not have or need boost taps.

Transformers can further be broken down into two types: **magnetic** or **electronic** transformers.

Magnetic Transformers operate at standard low frequencies (50/60 Hz). They offer very reliable operation and are very durable. Since magnetic transformers operate at low frequencies, they experience much less voltage drop over a long distance compared to high frequency electronic transformers.

Electronic Transformers are very compact and much smaller than their magnetic counterparts. They provide built in protection against electrical shorts applied at the outputs and to the lighting system. In order for electronic transformers to operate properly, the output must be loaded to a minimum of 50% of the rated wattage of the transformer. Any output load below 50% may result in lamps flickering and lamps burning out prematurely. Since electronic transformers operate at much higher frequencies, most standard volt and amp meters intended for 60hz type measurements cannot be used to accurately measure the outputs of these transformers. Consult a qualified electrician for assistance.

Electronic transformers may cause interference with appliances such as TVs and radios. If interference is a problem, a line filter may be installed either at the transformer or at the appliance input. Another option is to use a magnetic transformer, which operates at a lower frequency and will not cause any interference.