

Generating a Bill of Materials For Low-Voltage LBL Lighting Systems



LBL Lighting
7400 Linder Ave.
Skokie, IL 60077

**CUSTOMER SUPPORT
AND QUOTATIONS:**
800.323.3226

FAX:
847.626.6350

WEBSITE:
www.lblighting.com



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921LBLBOM09

 **LBL Lighting**

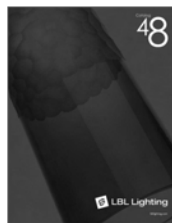
A bill of materials is the list of product item numbers that are required to accurately price and supply a lighting system.

Before you begin, you will need a rough plan of the lighting required for your project or a list of the pieces your client has requested.

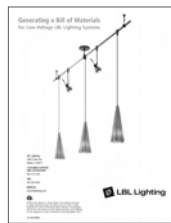
Process overview

1. Use the catalog to help you select the appropriate system, decorative elements, and options for your design.
2. Use the detailed steps in this booklet to determine the exact item numbers of the products required for the project.

Tools



LBL Lighting
Full Line Catalog



This Booklet

Additional resources

Your local LBL Lighting sales representative can provide you with product information and pricing. For the name and phone number of your local rep., visit our website www.lblighting.com.

Also visit our website for technical and product information, including spec sheets and installation instructions.

Our toll-free Quotation and Customer Support Hotline 800.323.3226 is available Monday-Friday 8:30 a.m.-5:00 p.m. Central Standard Time.

LED Illuminated Monorail *pp. 4-7*



LED Illuminated Wall Monorail *pp. 8-11*



Monorail *pp. 12-15*



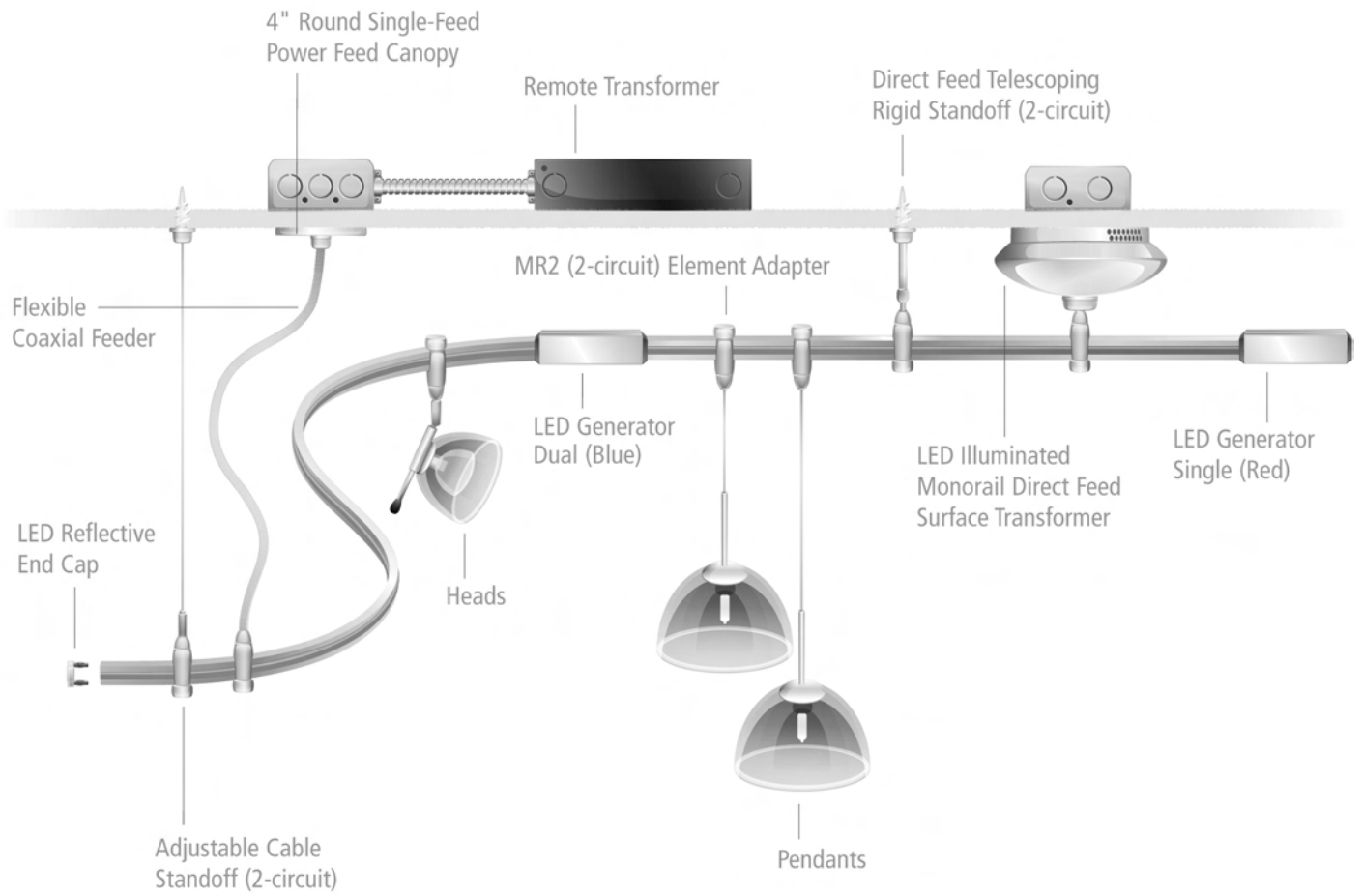
2-Circuit Monorail *pp. 16-19*



Wall Monorail *pp. 20-23*



LED ILLUMINATED MONORAIL SYSTEM



LED ILLUMINATED MONORAIL SYSTEM

Page numbers below reference the LBL Lighting Full Line Catalog (921LBLFLCAT09)

Step One: Choose your decorative elements

Choose finish of system and make sure all components are specified as such.

(BZ) Bronze or (SC) Satin Nickel



Choose elements (Pendants, Heads and Chandelier Heads) from decorative elements (pp. 6-11).

Determine item numbers. Specify with an MR2 suffix. (pp. 68-173).

QTY. ITEM NUMBER

- H _____ MR2
- H _____ MR2
- H _____ MR2

Add up total lamp wattage on system, 3 watts for each single generator, and 6 watts for each dual generator, to confirm wattage does not exceed transformer capacity.

_____ watts

Step Two: Choose your rail



Measure length of LED Illuminated Monorail run; determine quantity and length of LED Illuminated Monorail sections required (p. 21).

Specify a length, in feet, of fiber optic cable equal to the run length, plus one additional foot (p. 48).

RAIL-ST- _____ 96-LED

FIBER OPTIC CABLE LENGTH ____FT

For custom bent LED Illuminated Monorail, please provide the degree and radius of each curve and/or a scaled drawing, by fax, to the quotes department, 847-626-6325, for a quotation.

Step Three: Choose your LED generators



Use a single generator every 16'.

LEDMRLE _____



Use a dual generator for runs over 16' or to change the LED color mid-run (p. 21).

LEDMRLC _____

LED ILLUMINATED MONORAIL SYSTEM

Page numbers below reference the LBL Lighting Full Line Catalog (921LBLFLCAT09)

Step Four: Choose your connectors



Use a Straight Conductive Connector for joining multiple pieces of rail. Pair. (p. 21)



Straight Isolating Connectors join sections of LED Illuminated Monorail and must be used when isolating one powered section from another. Typically they are used to separate 2x300 watt sections when using a 12 volt, 600 watt surface transformer or dual feed canopy. They must also be used when multiple surface transformers or canopies are used on a continuous run. Pair. (p. 21)



Add a LED End Cap to finish off one end of a run 16' or less where one LED single generator is used (p. 21).

QTY. ITEM NUMBER

SCONNECTOR _____

ISOCONNECTORCL-M

ENDCAPS- _____-M-LED

Step Five: Choose your supports

Recommended every 3'.



Use Telescoping Rigid standoffs for curvy runs or if you want the ability to fine-tune the drop from the ceiling without any cutting. Add "-BJ" suffix for sloped ceiling mounting (p. 22).

HANGER-ADJ- _____-2



Use Adjustable Cable Standoffs for a minimal appearance (p. 22).

HANGER-CBL- _____-2



Use Direct Feed Telescoping Rigid Standoffs with Direct Feed Surface Transformers or Remote Power Feed Canopies for a close-to-ceiling appearance (p. 22).

HANGERDIRADJ _____-2

Step Six: Choose your transformer + canopy*



Use a surface mounted transformer for installations over an existing junction box where re-wiring is impractical. Choose magnetic or electronic (p. 23-24).

TRANS-SF _____-LED



Use a direct feed surface transformer for installations over an existing junction box where re-wiring is impractical and for a close-to-ceiling appearance. Choose magnetic or electronic (p. 25).

TRANSDIR-SF _____-LED



Use a remote transformer and power feed canopy for a minimal appearance. Choose magnetic or electronic (pp. 26-27).

TRANS-RMTE- _____



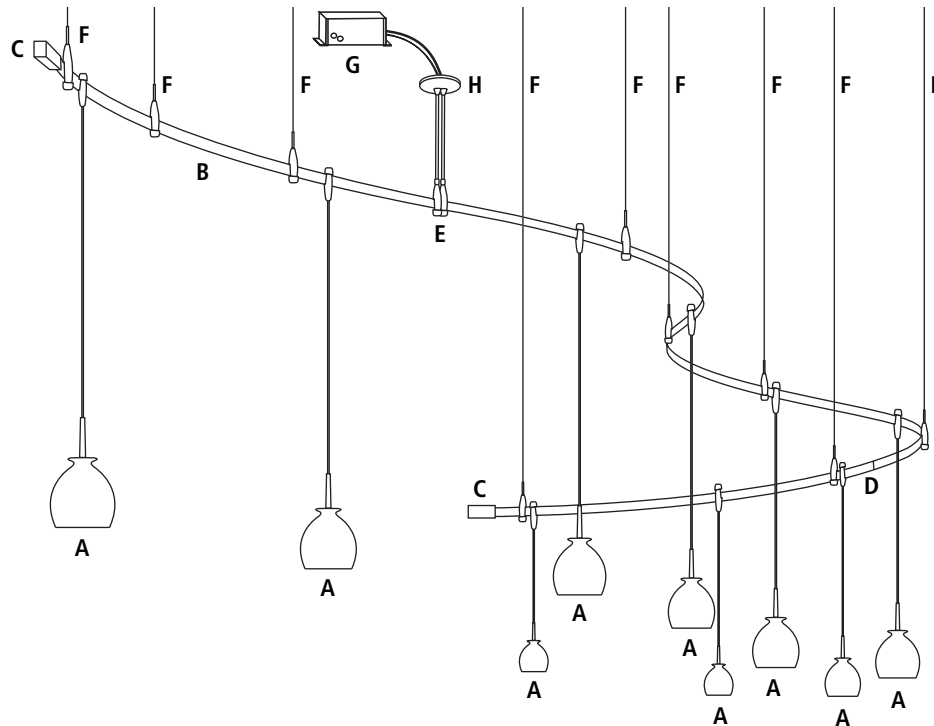
*If using LED heads or pendants, be sure to choose a transformer that is compatible with LED fixtures.

REMOTECPN _____-LED

LED ILLUMINATED MONORAIL SYSTEM

SAMPLE BILL OF MATERIALS - As seen on pp. 18-19 of the LBL Lighting Full Line Catalog

Page numbers below reference the LBL Lighting Full Line Catalog (921LBLFLCAT09)



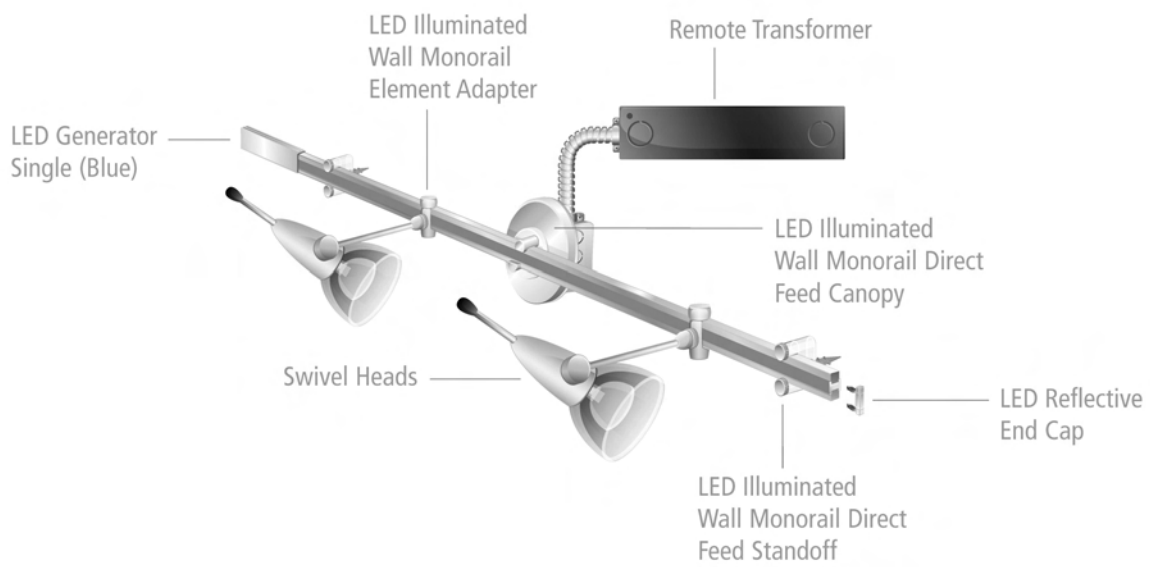
Item	Quantity	Item Number	Description
A	9	HS271BUSC1B50MR2	Gelato Pendant Blue, Satin Nickel
B	3	RAIL-ST-SC96-LED	LED Illuminated Monorail 96", Satin Nickel
-	25'	LEDMRLFIBER	Fiber Optic Cable
C	2	LEDMRLBUSC	LED Generator, Single Blue, Satin Nickel
D	1	SCONNECTORSC-M	Straight Conductive Connectors, Satin Nickel
E	1	ISOCONNECTORCL-M	Straight isolating Connectors
F	9	HANGER-CBL-SC-8-2	Adjustable Cable Standoff, 96", Satin Nickel
G	1	TRANS-RMTE-600M	600w Remote Magnetic Transformer
H	1	REMOTECNPY-DF-SC-LED	4" Round Dual Feed Canopy

CHECKLIST

Make sure your Bill of Materials Includes:

- Decorative Elements (make sure item numbers end in MR2; pp. 68-173)
- LED Illuminated Monorail (p. 21)
- Fiber Optic Cable (p. 21)
- End Cap (if necessary; p. 21)
- LED Generators (p. 21)
- Straight Conductive Connectors (if necessary; p. 21)
- Isolating Connectors (if necessary; p. 21)
- Supports (Standoffs; p. 22)
- Transformer (pp. 23-26)
- Power Feed Canopy (for remote transformer; p. 27)
- Make sure that all finishes match and item numbers have BZ or SC based on the chosen finish

LED ILLUMINATED WALL MONORAIL SYSTEM



LED ILLUMINATED WALL MONORAIL SYSTEM

Page numbers below reference the LBL Lighting Full Line Catalog (921LBLFLCAT09)

Step One: Choose your decorative elements

Choose finish of system and make sure all components are specified as such.

(BZ) Bronze or (SC) Satin Nickel



Choose elements (Heads) from decorative elements (pp. 9-10).

H _____ FSJ

Determine item numbers (pp. 138-167).

H _____ FSJ



Specify one LED Illuminated Wall Monorail Element Adapter for each element (p. 29).

H _____ FSJ

RAILADAP-WALL _____ -LED

Add up total lamp wattage on system (3 watts for each single generator and 6 watts for each dual generator) to confirm wattage does not exceed transformer capacity.

_____ watts

Step Two: Choose your rail



Measure the length of LED Illuminated Wall Monorail Run; determine quantity and length of LED Illuminated Wall Monorail sections required (p. 21).

RAIL-ST- _____ 96-LED

Specify a length, in feet, of fiber optic cable equal to the run length plus one additional foot (p. 21).

FIBER OPTIC CABLE LENGTH _____ FT

Step Three: Choose your LED generators



Use a single generator every 16'.

LEDMRLE _____



Use a dual generator for runs over 16' or to changed the LED color mid-run (p. 21).

LEDMRLC _____

LED ILLUMINATED WALL MONORAIL SYSTEM

Page numbers below reference the LBL Lighting Full Line Catalog (921LBLFLCAT09)

Step Four: Choose your connectors



Use a Straight Conductive Connector for joining multiple pieces of LED Illuminated Monorail. Pair. (p. 21)

QTY. ITEM NUMBER

SCONNECTOR _____



Straight Isolating Connectors join sections of LED Illuminated Monorail and must be used when isolating one powered section from another. Typically they are used to separate 2x300 watt sections when using a 12 volt, 600 watt surface transformer or dual feed canopy. They must also be used when multiple surface transformers or canopies are used on a continuous run. Pair. (p. 21)

ISOCONNECTORCL-M



Add an LED End Cap to finish off one end of a run 16' or less where one LED single generator is used (p. 21).

ENDCAPS- _____ -M-LED

Step Five: Choose your supports



Recommended every 3' (p. 29).

HANGERDIRW- _____ -LED

Step Six: Choose your transformer + canopy*



Use a remote transformer and LED Illuminated Wall Monorail direct feed canopy. Choose magnetic or electronic (pp. 26-27,29).

TRANS-RMTE _____



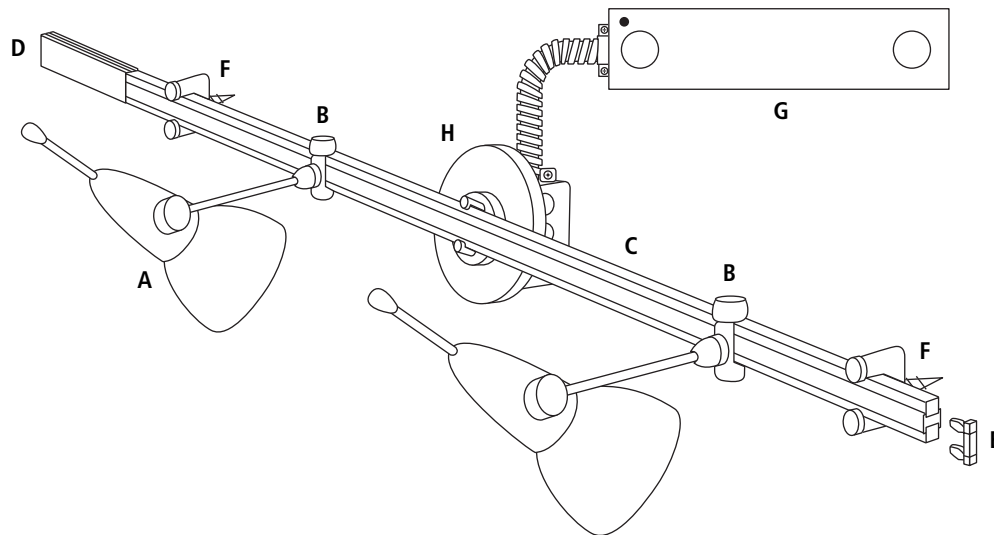
REMOTECNPDIRW- _____ -LED

*If using LED heads or pendants, be sure to choose a transformer that is compatible with LED fixtures.

LED ILLUMINATED WALL MONORAIL SYSTEM

SAMPLE BILL OF MATERIALS

Page numbers below reference the LBL Lighting Full Line Catalog (921LBLFLCAT09)



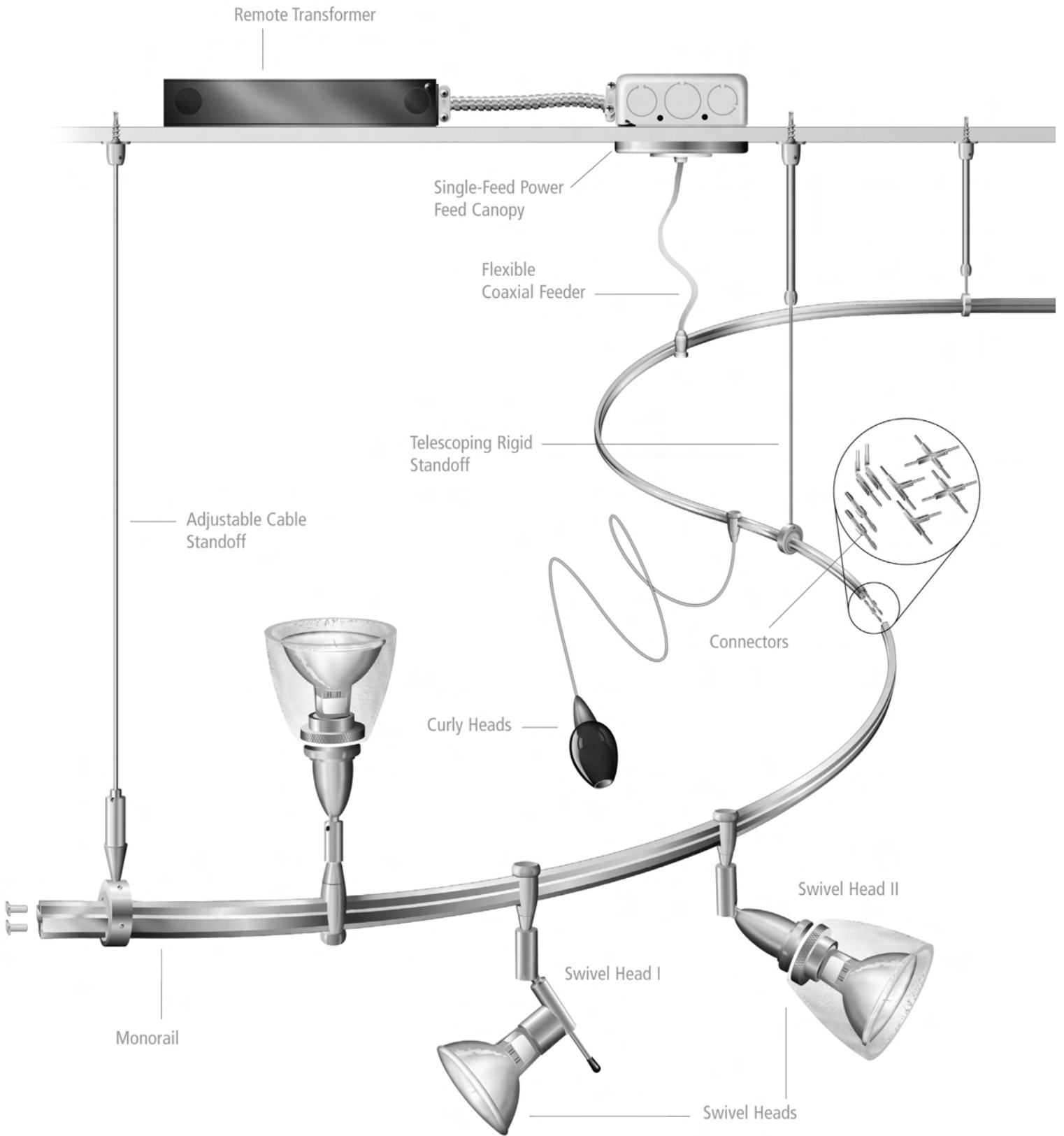
Item	Quantity	Item Number	Description
A	2	HG325AMSC061A35FSJ	FSJ Mini-Dome I Apollo Swivel II Head 6", Amber, Satin Nickel
B	2	RAILADAP-WALLSC-LED	LED Illuminated Monorail Element Adapter, Satin Nickel
C	1	RAIL-ST-SC96-LED	LED Illuminated Monorail, Satin Nickel
-	9'	LEDMRLFIBER	Fiber Optic Cable
D	1	LEDMRLBUSC	Led Generator, Single Blue, Satin Nickel
E	1	ENDCAPS-SC-M-LED	LED End Cap, Satin Nickel
F	2	HANGERDIRW-SC-LED	Direct Feed Standoff, Satin Nickel
G	1	TRANS-RMTE-301	300w Remote Electronic Transformer
H	1	REMOTECNPDIRW-SC-LED	4" Round Direct Feed Canopy, Satin Nickel

CHECKLIST

Make sure your Bill of Materials Includes:

- Decorative Elements
 - Make sure item numbers end in FSJ (pp. 68-173)
 - Make sure to order one LED Illuminated Monorail Element Adapter for each Element (p. 29)
- LED Illuminated Monorail (p. 21)
- Fiber Optic Cable (p. 21)
- End Cap (if necessary; p. 21)
- LED Generators (p. 21)
- Straight Conductive Connectors (if necessary; p. 21)
- Isolating Connectors (if necessary; p. 21)
- Supports (Standoffs; p. 22)
- Transformer (p. 26)
- Power Feed Canopy (p. 29)
- Make sure that all finishes match and item numbers have BZ or SC based on the chosen finish

MONORAIL SYSTEM



Page numbers below reference the LBL Lighting Full Line Catalog (921LBLFLCAT09)

Step One: Choose your decorative elements

Choose finish of system and make sure all components are specified as such.



Choose elements (Pendants, Heads and Chandelier Heads) from decorative elements (pp. 6-11).

Determine item numbers. If using with a 24 volt transformer, specify "-24" at the end of each element item number (pp. 68-173).

Add up total lamp wattage on system to confirm wattage does not exceed transformer capacity.

QTY. ITEM NUMBER

(BZ) Bronze or (SC) Satin Nickel

H _____ MRL

H _____ MRL

H _____ MRL

_____ watts

Step Two: Choose your rail



Measure length of Monorail run; determine quantity and length of Monorail sections required (p. 40).

For custom bent Monorail, please provide the degree and radius of each curve and/or a scaled drawing, by fax, to the quotes department, 847-626-6325, for a quotation.

RAIL _____

Step Three: Choose your connectors



Use Straight Conductive Connectors for joining multiple pieces of rail. Pair. (p. 41)

SCONNECTOR _____



Use a "T" Conductive or "X" Conductive Connector for joining pieces of rail into a "T" or "X" shape. Pair. (p. 41)

TCONNECTOR _____



Straight Isolating Connectors join sections of Monorail and must be used when isolating one powered section from another. Typically they are used to separate 2x300 watt sections when using a 12 volt, 600 watt surface transformer or dual feed canopy. They must also be used when multiple surface transformers or canopies are used on a continuous run. Pair. (p. 41)

ISOCONNECTORCL-M



Use an Adjustable Angle Conductive Connector if the run includes a sharp angle or turn. Pair. (p. 41)

ACONNECTOR _____



Add End Caps to finish off the ends of the run. 4 pc. set. (p. 41)

ENDCAPS- _____

Page numbers below reference the LBL Lighting Full Line Catalog (921LBLFLCAT09)

Step Four: Choose your supports

Recommended every 3'.



Use Telescoping Rigid standoffs for curvy runs or if you want the ability to fine-tune the drop from the ceiling without any cutting. Add "-BJ" suffix for sloped ceiling mounting or add "-WB" for cantelievered wall mount (p. 42).

HANGER-ADJ _____



Use Adjustable Cable Standoffs for a minimal appearance (p. 42).

HANGER-CBL _____



Use Direct Feed Telescoping Rigid Standoffs with Direct Feed Surface Transformers or Direct Power Feed Canopies for a close-to-ceiling appearance (p. 42).

HANGERDIRADJ _____

Step Five: Choose your transformer + canopy*



Use a surface mounted transformer for installations over an existing junction box where re-wiring is impractical. Choose magnetic or electronic (pp. 43-44).

TRANS-SF _____



Use a direct feed surface transformer for installations over an existing junction box where re-wiring is impractical and for a close-to-ceiling appearance. Choose magnetic or electronic (p. 45).

TRANSDIR-SF _____



Use a remote transformer and power feed canopy for a minimal appearance. Choose magnetic or electronic (pp. 47-48).

TRANS-RMTE _____



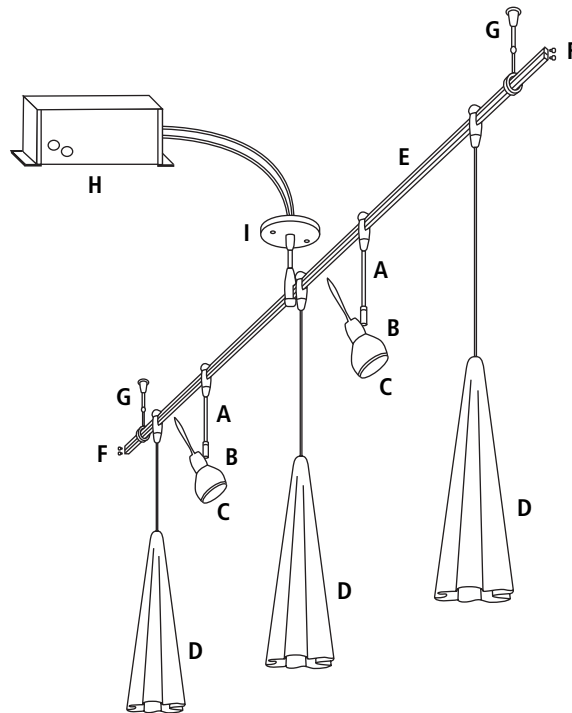
REMOTECNP _____

*If using LED heads or pendants, be sure to choose a transformer that is compatible with LED fixtures.

MONORAIL SYSTEM

Sample Bill of Materials - As seen on p. 142 of the LBL Lighting Full Line Catalog

Page numbers below reference the LBL Lighting Full Line Catalog (921LBLFLCAT09)



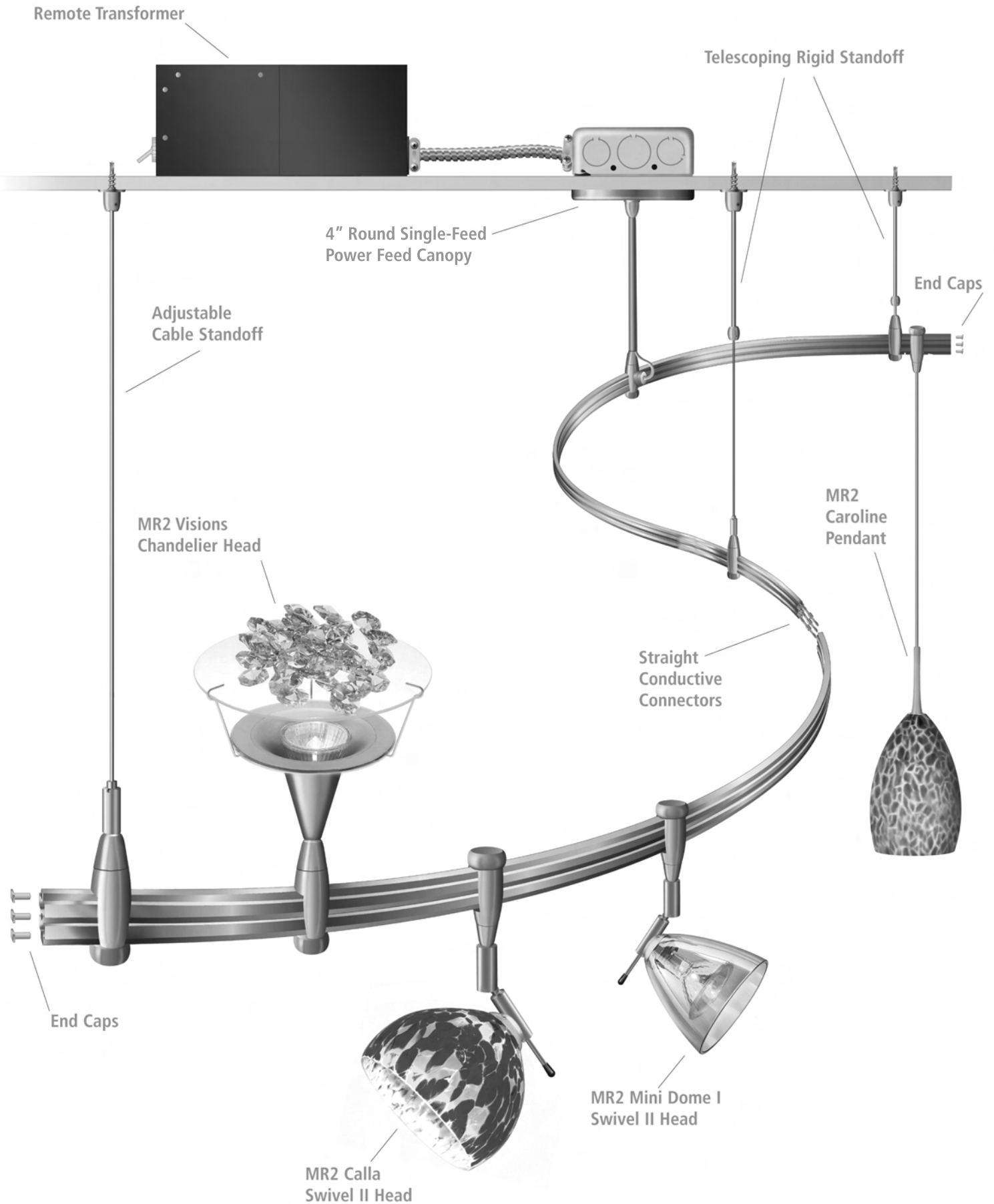
Item	Quantity	Item Number	Description
A	2	HD475SC061A50MRL	MRL Vent Head 6", Satin Nickel
B	2	HAC482FRSC	Voti Accessory, Frost, Satin Nickel
C	2	H870W-C	12v 50w 38° MR16 Lamp
D	3	HS4090PSC1B50MRL	Monna Pendants, Opal, Xenon Lamp, Satin Nickel
E	1	RAIL-ST-SC48	Monorail 48", Satin Nickel
F	1	ENDCAPS-SC-M	End Caps, Set of 4, Satin Nickel
G	2	HANGER-ADJ-SC-1	Telescoping Rigid Standoff, 2.5-4", Satin Nickel
H	1	TRANS-RMTE-300M	300w Remote Magnetic Transformer
I	1	REMOTECNPY-SC	4" Round Single-Feed Power Feed Canopy, Satin Nickel

CHECKLIST

Make sure your Bill of Materials Includes:

- Decorative Elements (pp. 68-173)
- Monorail (p. 40)
- Straight, "T", or "X" Conductive Connectors (if necessary; p. 41)
- End Caps (p. 41)
- Isolating Connectors (if necessary; p. 41)
- Supports (Standoffs; p. 42)
- Transformer (pp. 43-47)
- Power Feed Canopy (for remote transformer; pp. 43-47)
- Make sure that all finishes match and item numbers have BZ or SC based on the chosen finish

2-CIRCUIT MONORAIL SYSTEM



2-CIRCUIT MONORAIL SYSTEM

Page numbers below reference the LBL Lighting Full Line Catalog (921LBLFLCAT09)

Step One: Choose your decorative elements

Choose finish of system and make sure all components are specified as such.



Choose elements (Pendants, Heads and Chandelier Heads) from decorative elements (pp. 6-11).

Determine item numbers (pp. 68-173).

Add up total lamp wattage on system to confirm wattage does not exceed transformer capacity.

QTY. ITEM NUMBER

(BZ) Bronze or (SC) Satin Nickel

H _____ MR2

H _____ MR2

H _____ MR2

_____ watts

Step Two: Choose your rail



Measure length of 2-Circuit Monorail run; determine quantity and length of 2-Circuit Monorail sections required (p. 56).

For custom bent 2-Circuit Monorail, please provide the degree and radius of each curve and/or a scaled drawing, by fax, to the quotes department, 847-626-6325, for a quotation.

RAIL _____-2

Step Three: Choose your connectors



Use a Straight Conductive Connector for joining multiple pieces of rail. Set of three. (p. 57)

SCONNECTOR _____-2



Use a "T" Conductive or "X" Conductive Connector for joining pieces of rail into a "T" or "X" shape. Set of three. (p. 57)

TCONNECTOR _____-2



Straight Isolating Connectors join sections of 2-Circuit Monorail and must be used when isolating one powered section from another. Typically they are used to separate powered sections when using a dual feed canopy. They must also be used when multiple surface transformers or canopies are used on a continuous run. Set of three. (p. 57)

ISOCONNECTORCL-M-2



Use an Adjustable Angle Conductive Connector if the run includes a sharp angle or turn. Set of three. (p. 57)

ACONNECTOR _____-2



Add End Caps to finish off the ends of the run. 6 pc. set. (p. 57)

ENDCAPS _____-2

2-CIRCUIT MONORAIL SYSTEM

Page numbers below reference the LBL Lighting Full Line Catalog (921LBLFLCAT09)

QTY. ITEM NUMBER

Step Four: Choose your supports

Recommended every 3'.



Use Telescoping Rigid standoffs for curvy runs or if you want the ability to fine-tune the drop from the ceiling without any cutting. Add "-BJ" suffix for sloped ceiling mounting (p. 57).

HANGER-ADJ _____-2



Use Adjustable Cable Standoffs for a minimal appearance (p. 57).

HANGER-CBL- _____-2



Use Direct Feed Telescoping Rigid Standoffs with Direct Feed Surface Transformers or Direct Power Feed Canopies for a close-to-ceiling appearance (p. 57).

HANGERDIRADJ _____-2

Step Five: Choose your transformer + canopy



Use a surface mounted transformer for installations over an existing junction box where re-wiring is impractical. Choose magnetic or electronic (p. 59).

TRANS-SF _____-2



Use a direct feed surface transformer for installations over an existing junction box where re-wiring is impractical and for a close-to-ceiling appearance. Choose magnetic or electronic (p. 59).

TRANSDIR-SF _____-2



Use a remote transformer and power feed canopy for a minimal appearance (pp. 60-61).

TRANS-RMTE- _____-2

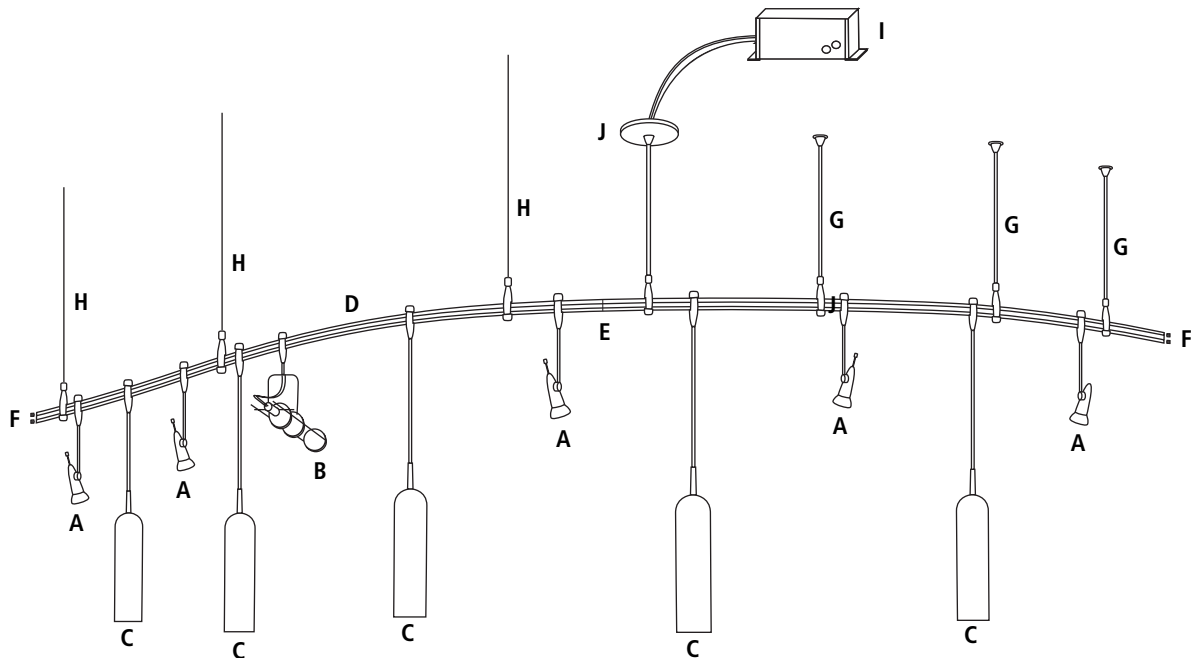


REMOTECNP _____-2C

2-CIRCUIT MONORAIL SYSTEM

SAMPLE BILL OF MATERIALS - As seen on p. 55 of the LBL Lighting Full Line Catalog

Page numbers below reference the LBL Lighting Full Line Catalog (921LBLFLCAT09)



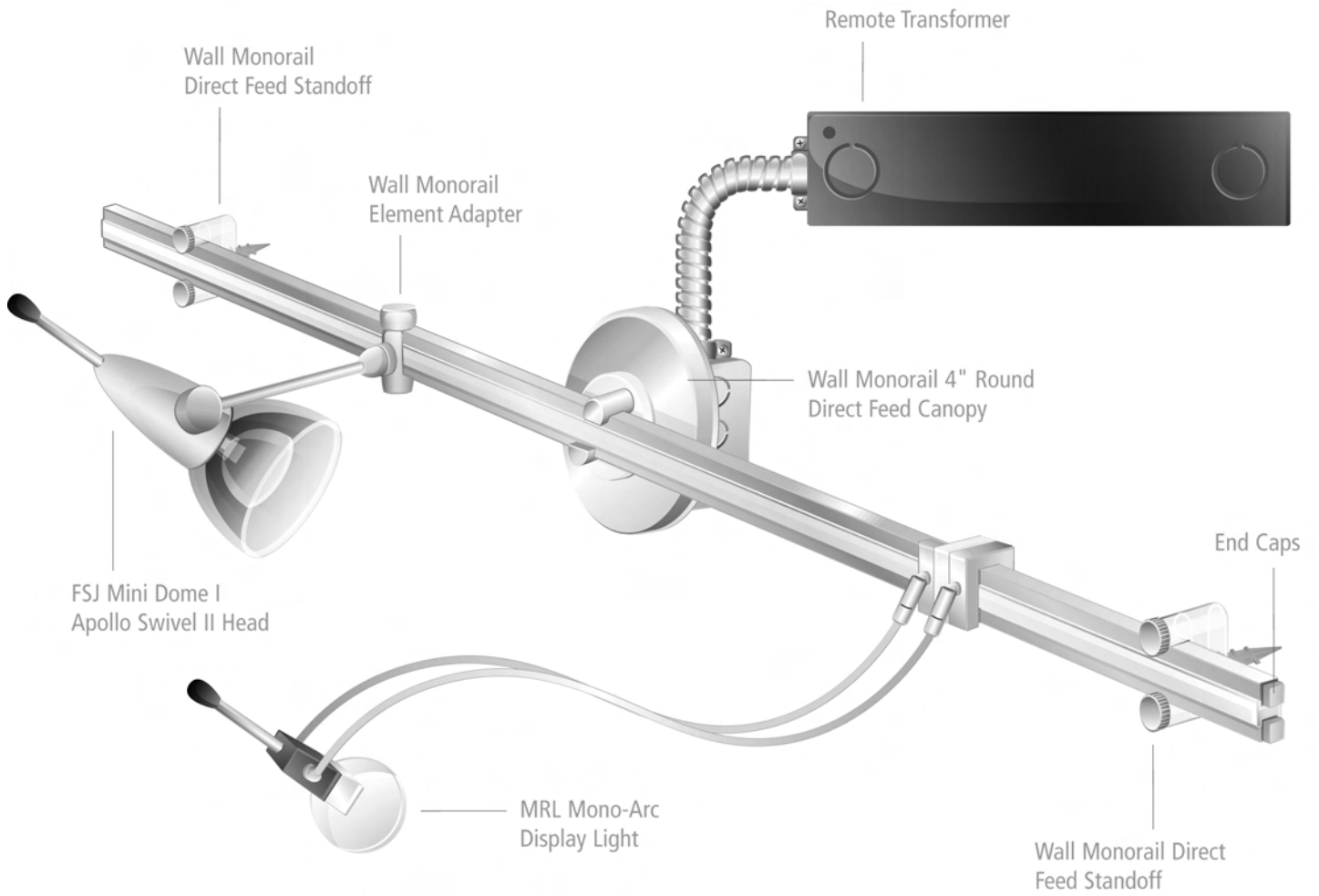
Item	Quantity	Item Number	Description
A	5	HDMR16SC061A50MR2	Bare Head Apollo Swivel I 6", Satin Nickel
B	1	HD432SC011A50MR2	F/X Swivel 1", Satin Nickel
C	5	HS182OPSC1B50MR2	Brandy Pendant, Ivory Frit, Satin Nickel
D	2	RAIL-ST-SC96-2	2-Circuit Monorail 96", Satin Nickel
E	1	SCONNECTORSC-M-2	Straight Conductive Connectors, Satin Nickel
F	1	ENDCAPSSC-M-2	End Caps, Set of 6, Satin Nickel
G	3	HANGER-ADJ-SC-5-2	Telescoping Rigid Standoff, 48-96", Satin Nickel
H	3	HANGER-CBL-SC-8-2	Adjustable Cable Standoff, 96", Satin Nickel
I	1	TRANS-RMTE-600M-2	600w Remote Magnetic Transformer
J	1	REMOTECNPY-SC-2C	4" Round Power Feed Canopy, Satin Nickel

CHECKLIST

Make sure your Bill of Materials Includes:

- Decorative Elements (pp. 68-173)
- 2-Circuit Monorail (p. 56)
- Straight, "T", or "X" Conductive Connectors (if necessary; p. 57)
- End Caps (p. 57)
- Isolating Connectors (if necessary; p. 57)
- Supports (Standoffs; p. 57)
- Transformer (pp. 59-60)
- Power Feed Canopy (for remote transformer; p. 61)
- Make sure that all finishes match and item numbers have BZ or SC based on the chosen finish

WALL MONORAIL SYSTEM



Page numbers below reference the LBL Lighting Full Line Catalog (921LBLFLCAT09)

QTY. ITEM NUMBER

Step One: Choose your decorative elements

Choose finish of system and make sure all components are specified as such.

(BZ) Bronze or (SC) Satin Nickel



Choose elements (Heads) from decorative elements (pp. 9-10).

H _____ FSJ

Determine item numbers. If using with a 24 volt transformer, specify "-24" at the end of each element item number (pp. 138-169).

H _____ FSJ

H _____ FSJ



Specify one Wall Monorail Rail Adapter for each element (not required for Mono-Arc and Mono-Tel Display Lights).

RAILADAP-WALL _____

Add up total lamp wattage on system to confirm wattage does not exceed transformer capacity.

_____ watts

Step Two: Choose your rail



Measure length of Wall Monorail run; determine quantity and length of Wall Monorail sections required (p. 65).

RAIL _____

Step Three: Choose your connectors



Use a Straight Conductive Connector for joining multiple pieces of rail. Pair. (p. 65)

SCONNECTOR _____



Straight Isolating Connectors join sections of Wall Monorail and must be used when isolating one powered section from another. Typically they are used to separate 2x300 watt sections when using a 12 volt, 600 watt surface transformer. They must also be used when multiple surface transformers or canopies are used on a continuous run. Pair. (p. 65)

ISOCONNECTORCL-M



Use an Adjustable Angle Conductive Connector if the run includes a sharp angle or turn. Pair. (p. 65)

ACONNECTOR _____



Add End Caps to finish off the ends of the run. 4 pc. set. (p. 65)

ENDCAPS- _____

Page numbers below reference the LBL Lighting Full Line Catalog (921LBLFLCAT09)

Step Four: Choose your supports



Recommended every 3' (p. 65).

QTY. ITEM NUMBER

HANGERDIRW _____

Step Five: Choose your transformer + canopy*



Use a remote transformer and Wall Monorail direct feed canopy. Choose magnetic or electronic (p. 66-67).

TRANS-RMTE _____



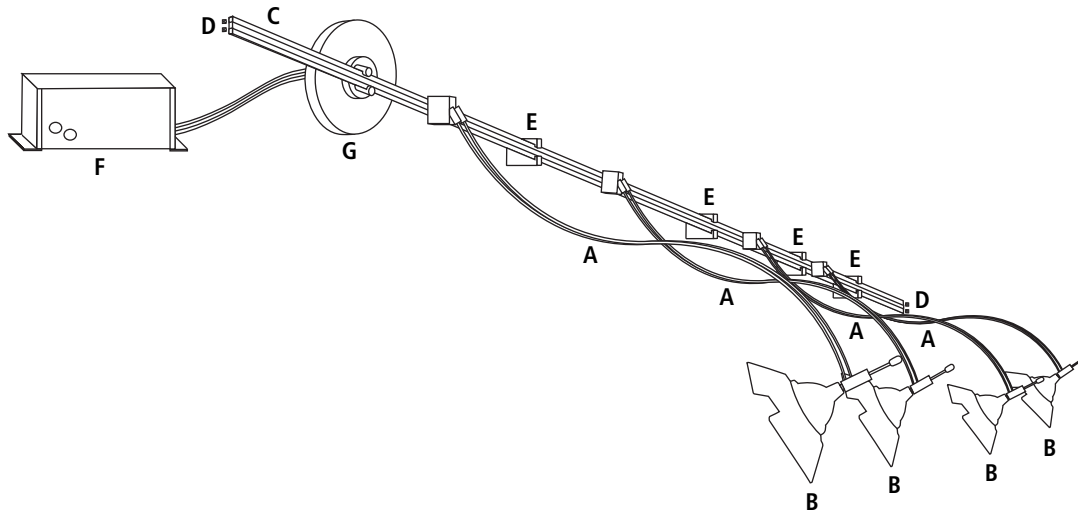
REMOTECNPDIRW _____

*If using LED heads or pendants, be sure to choose a transformer that is compatible with LED fixtures.

WALL MONORAIL SYSTEM

SAMPLE BILL OF MATERIALS - As seen on p. 62 of the LBL Lighting Full Line Catalog

Page numbers below reference the LBL Lighting Full Line Catalog (921LBLFLCAT09)



Item	Quantity	Item Number	Description
A	4	HPARC1A50MRL	Mono-Arc Picture Light, Satin Nickel
B	4	A13SI	Barn-door clips, double, Silver
C	1	RAIL-ST-SC96	Monorail 96", Satin Nickel
D	1	ENDCAPSSC-M	End Caps, Set of 4, Satin Nickel
E	4	HANGERDIRW-SC	Direct Feed Standoff, Satin Nickel
F	1	TRANS-RMTE-300M	300w Remote Electronic Transformer
G	1	REMOTECNPDIRW-SC	4" Round Direct Feed Canopy, Satin Nickel

CHECKLIST

Make sure your Bill of Materials Includes:

- Decorative Elements (pp. 68-173)
- Monorail (p. 65)
- Straight Conductive Connectors (if necessary; p. 65)
- End Caps (p. 65)
- Isolating Connectors (if necessary; p. 65)
- Supports (Standoffs; p. 65)
- Transformer (p. 66)
- Direct Feed Canopy (p. 67)
- Wall Monorail Element Adapters (p. 65)
- Make sure that all finishes match and item numbers have BZ or SC based on the chosen finish

