

# PRECISION LIGHTING

## instruction manual

### Basis Track

US RATING - Class 2

LV Rating: 300W 25A at 12V AC

LED Rating: 600W 25A at 24V DC\*

RoW RATING

LV Rating: 500W 42A at 12 V AC

LED Rating: 1000W 42A at 24V DC

\*Maximum PSU available 120W

Standard cable size: 4mm diameter

Low voltage transformers should be located as close to track systems as possible.

Always use at least the minimum power feed cable size detailed on the transformer spec sheet. As standard 4mm diameter cable can be used for Basis Track systems. Although cable sizes have been suggested calculate the voltage drop for each individual system and if necessary use larger cable size.



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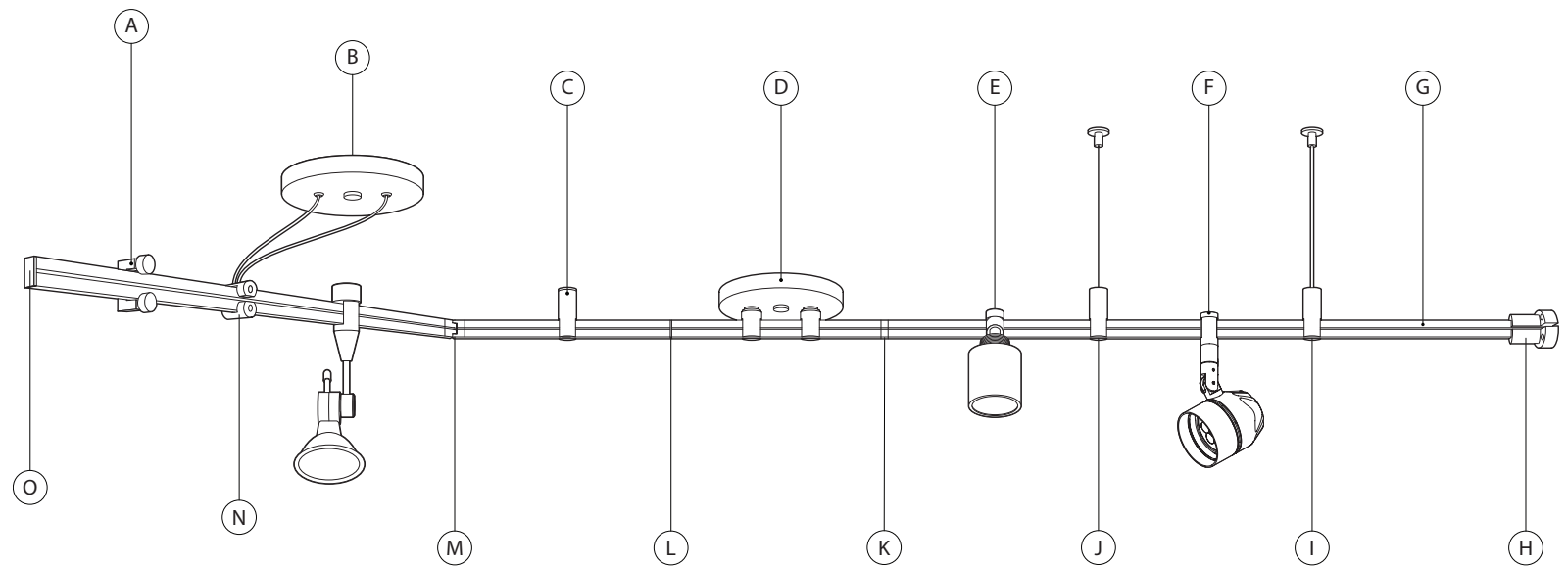
## IMPORTANT SAFETY INFORMATION

READ ALL INSTRUCTIONS BEFORE USING THESE PRODUCTS. SAVE THESE INSTRUCTIONS FOR LATER REFERENCE.

- Mains supply to driver must be OFF before connecting or disconnecting the fittings.
- Must be installed by a suitably qualified professional only. Installations must conform with standard accepted electrical installation practices, local codes and ordinances.
- Do not install any fixture closer than 150mm (6 inches) from any combustible material. Do not install this system in a damp or wet location.
- To reduce the risk of fire and burns, do not install this system where exposed bare conductors can be shorted or contact any conductive materials. Do not conceal or extend exposed conductors through a building wall.
- No part of the secondary circuit should be earthed.
- All electrical connections must be tight, especially those on the secondary side of the power supply (low voltage side). Bad connections can cause overheating, arcing and a potential fire risk.
- Install only as described in this Precision Lighting manual. Appropriate fixings will need to be used depending on surface material at the installer's discretion.
- Connect only Precision Lighting luminaires fitted with Basis Track adaptor.
- Ensure that the system is switched off at mains supply before touching.
- Connected luminaires may be extremely hot, allow to cool before touching.
- This is a low voltage system, it must be connected to an appropriate constant voltage PSU. See data sheets for maximum luminaires per driver wattage
- Regular cleaning of this product is important. Switch off at mains supply and allow to cool before touching. Clean fittings with a microfibre cloth. Then reconnect the power supply.
- Wire supply connections must be made with U.L or compatible testing agency-approved connectors.

## SYSTEM COMPONENTS

Access to track adaptors and serviceable electrical components should be possible at all times for maintenance purposes.



Representational diagram. Actual setup may differ.

A.	wall anchor [BT-312]	I.	ceiling mount rod [BT-316]
B.	power canopy [BT-509]	J.	ceiling mount cable [BT-315]
C.	ceiling anchor [BT-311]	K.	coupler [BT-512]
D.	direct feed canopy [BT-519]	L.	isolator [BT-511]
E.	BTW connector [BTW-01]	M.	adjustable coupler [BT-513]
F.	BT connector [BT-01]	N.	power bolt [BT-507]
G.	basis track [BT-505]	O.	end cap [BT-808]
H.	power anchor [BT-514]		

	Compatible Power Supply	Order Code	Max Distance
LED	Relco 20W PSU	PSCA-20-24-A-RE	ECG - Furthest Luminaire 3m
	Osram 120W PSU	PSCV-120-24-A-OS	ECG - Furthest Luminaire 10m
	Osram 80W PSU	PSCV-80-24-A-OS	ECG - Furthest Luminaire 10m
	Meanwell 100W	PSCV-100-24-N-MW	ECG - Furthest Luminaire 10m
HALOGEN	Toroidal Transformer	PSXXXT	ECG - Furthest Luminaire 10m
	Mode Transformer	PSXXXE-M	ECG - Furthest Luminaire 2m
	Mode Transformer	PSXXXE-M	ECG - Furthest Luminaire 2m

### 1. Ceiling Anchor.

- i. Attach Ceiling Anchor to ceiling. Minimum spacing 1.2m (48 inches).
- ii. Insert Basis Track and secure with Allen key.

### 2, 3. Ceiling Mount Rod/Cable.

- i. Fasten disc base to ceiling with threaded screw.
- ii. Attach Ceiling Mount Rod/Cable to disc base.
- iii. Cable height can be adjusted: To raise, pull cable through connector and cut. To lower press and hold catch on top of connector and slide cable through then cut.
- iv. Insert Basis Track and secure with Allen key.

### 4. Power Anchor.

- i. Connect wire to bottom component using Allen key and fix to wall using screws.
- ii. Insert Basis Track and secure in place using two set screws.
- iii. Repeat process for top component.

### 5. Wall Anchor.

- i. Attach Wall Anchor to wall.
- ii. Unscrew retaining screws to loosen.
- iii. Insert Basis Track and secure in place.

### 6. Direct Feed Canopy.

- i. Attach ceiling plate in place using screws provided and wire up Direct Feed Canopy.
- ii. Affix to ceiling by screwing in centre finial.
- iii. Insert Basis Track and secure using both connectors.

### 7. Power Canopy.

- i. Attach ceiling plate in place using screws provided and wire up Direct Feed Canopy.
- ii. Affix to ceiling by screwing in centre finial.
- iii. Connect cables to power bolts and attach to basis track.

### 8, 9. Coupler & Adjustable Coupler.

- i. Insert between basis track sections.
- ii. Secure with Allen key.

### 10. Isolator

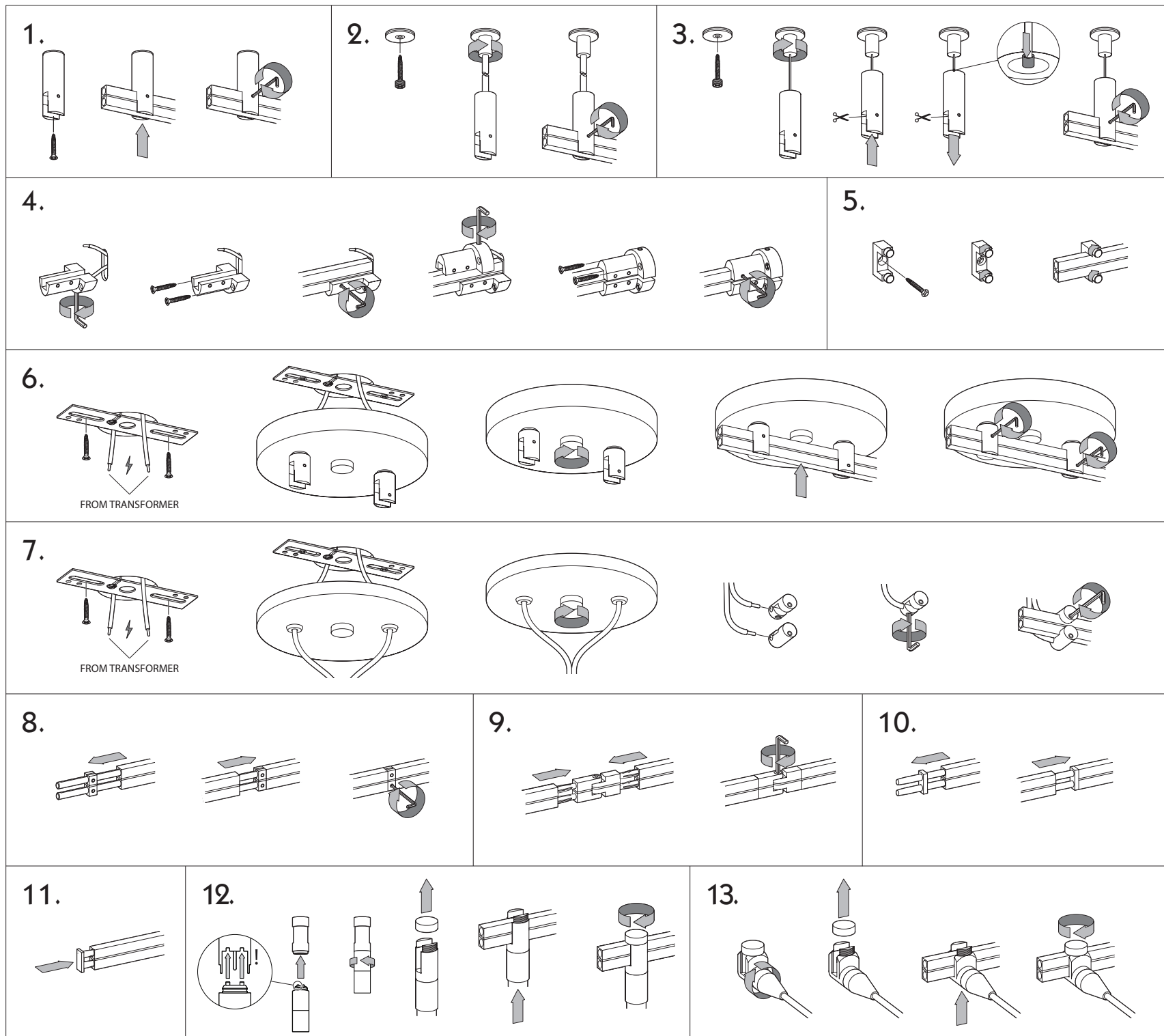
- i. Insert between basis track sections.
- NOTE: When using Couplers and Isolators it is recommended that a Ceiling or Wall Anchor be positioned in close proximity for additional structural support.

### 11. End Cap.

- i. Insert into end of Basis Track.

### 12, 13. BT Connector & BTW Connector.

- i. Attach luminaire to connector using Jack Plug. Ensure Luminaire pins are aligned with the corresponding adapter indents.
- ii. Remove connector cap and slot onto track.
- iii. Replace cap tightly to secure.

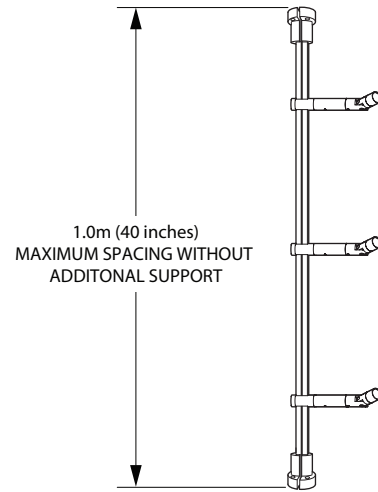


#### 14. Vertical Mounting

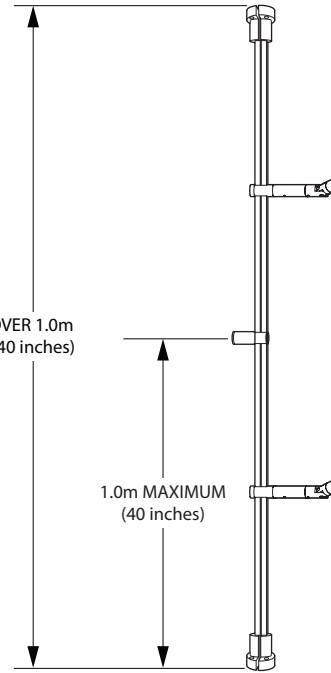
- i. When using Power Anchors in a vertical system, over 1.0m in height, it is recommended that wall mounted Ceiling Anchors are used for support using a maximum spacing of 1.0m.
- ii. The recommended minimum spacing between ceiling anchor mounting points is 1.0m, for both brushed aluminium and rubbed bronze components.

NOTE: When using Couplers and Isolators it is recommended that a Ceiling Anchor be positioned in close proximity for additional structural support. The Ceiling Anchor should be positioned below the coupler or isolator.

14i.



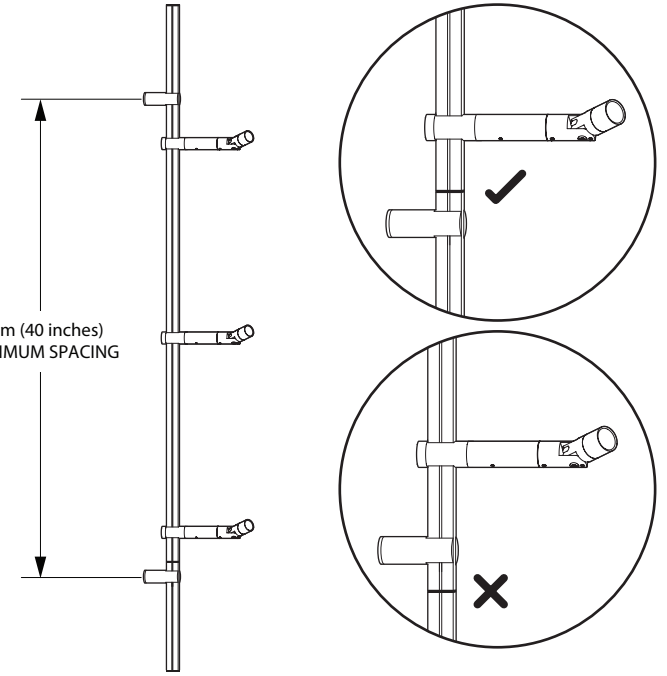
OVER 1.0m  
(40 inches)



1.0m MAXIMUM  
(40 inches)

14ii.

1.0m (40 inches)  
MAXIMUM SPACING

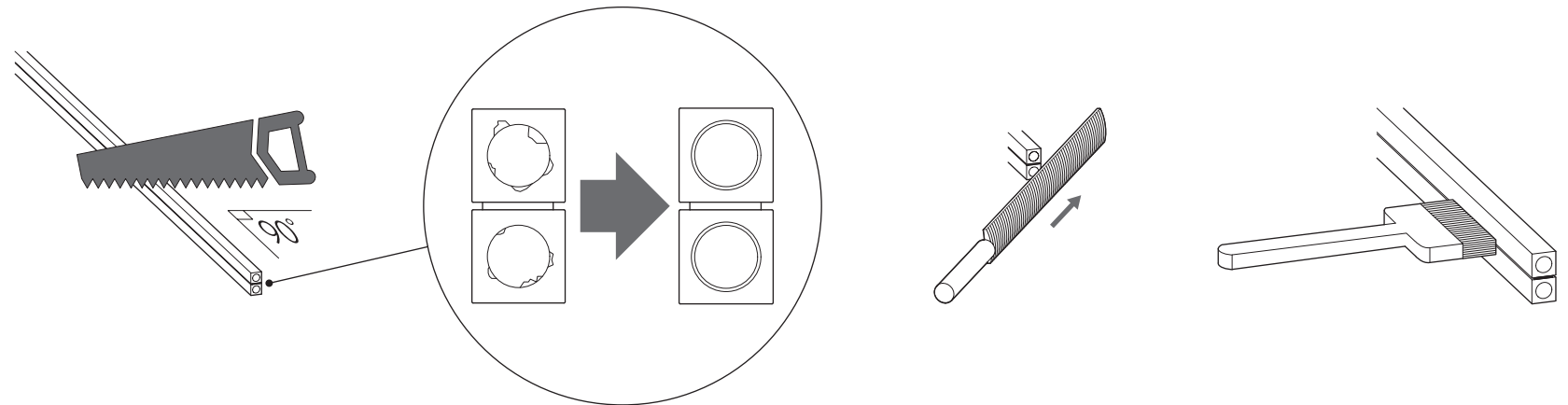


#### 15. Cutting the track

- i. Cut the track to length ensuring the ends are cut straight and remain square. We recommend using a fine tooth saw.
- ii. Deburr the edges of the two circular holes.
- iii. File the edges of the newly cut face of the track to remove burrs.
- iv. Remove any debris that has adhered to the surface of the black isolator layer. This can be done using a brush or compressed air.

**WARNING** improperly cut track may result in a short across the two conductors. Track must be cut as per these instructions to ensure this does not occur.

15.



## 16. Power supply location

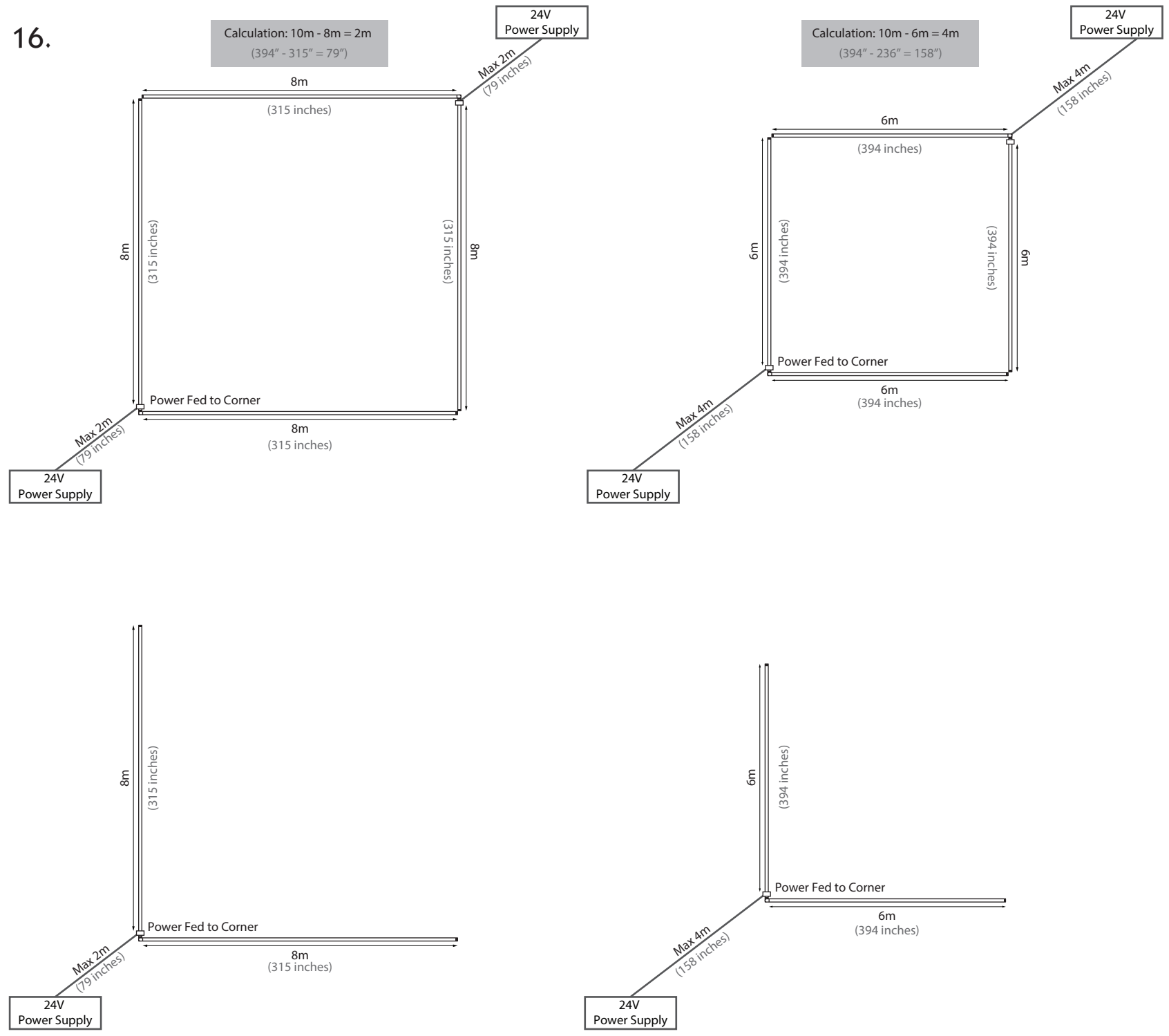
- i. To maximise track length feed power at the corners of track assemblies. A single power supply can be split to run 2 sides of a square if fed to the corner.

Power supply Location:

10 metres - Longest side = Power supply distance from track

See diagram for example calculation.

16.



**17. Power supply location - Closed track assemblies**

- i. For closed track sections, if the diameter or side length is short enough, the entire track can be fed from one Power Supply.

Power supply location:

Squares

10 metres - (Half the system length) =  
Power supply distance from track

Circles

10 metres - (Circumference / 2) = Power  
supply distance from track.

See diagram for example calculation

17.

