# PRECISION LIGHTING

# instruction manual RetracTrack

Class 2

LV Rating: 300W 25A at 12V AC LED Rating: 600W 25A at 24V DC\* \*Maximum PSU available 120W Standard cable size: 4 mm diameter

Low voltage transformers should be located as close to the 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 Retrac 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

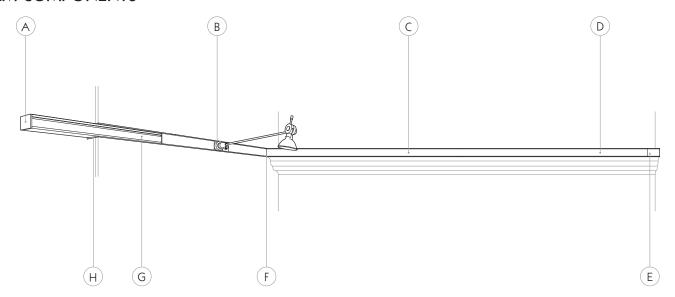
## READ ALL INSTRUCTIONS BEFORE USING THESE PRODUCTS. SAVE THESE INSTRUCTIONS FOR LATER REFERENCE.

- 1. Mains supply to driver must be OFF before connecting or disconnecting the fittings.
- 2. Must be installed by a suitably qualified professional only. Installations must conform with standard accepted electrical installation practices, local codes and ordinances.
- 3. 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.
- 4. 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.
- 5. 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.
- 8. Connect only Precision Lighting luminaires fitted with Basis Track adaptor.
- 9. Ensure that the system is switched off at mains supply before touching.
- 10. Connected luminaires may be extremely hot, allow to cool before touching.
- 11. 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.
- 13. 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. end cap [RT-808]
- B. retrac connector [RT-02]
- C. straight coupler [RT-512]
- D. cover strip [RT-504]
- E. power feed [RT-507]
- F. adjustable coupler [RT-513]
- G. inner track [RT-505]
- H. mounting channel [RT-506B] suitable for both surface and recessed mounting

	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 Cutting the track to length.

IMPORTANT Consider End Caps and Power feeds when cutting the Inner Track to length.

- i. Cut the Inner Track to length ensuring the ends are cut straight and remain square.
- ii. Deburr the outer edges.
- iii. Ensure the conductors and isolators end flush with eachother. Conduct a continuity test to check for shorts.
- iv. Cut the Mounting Channel to length ensuring the ends are cut straight and remain square.
- v. Deburr the outer edges.

# 2 Installing the Mounting Channel.

**IMPORTANT** Use all fixing points available to ensure channel is fully secured.

#### 2a. RECESSED

i. Fix the Mounting Channel into the trough using all the fixing points available.

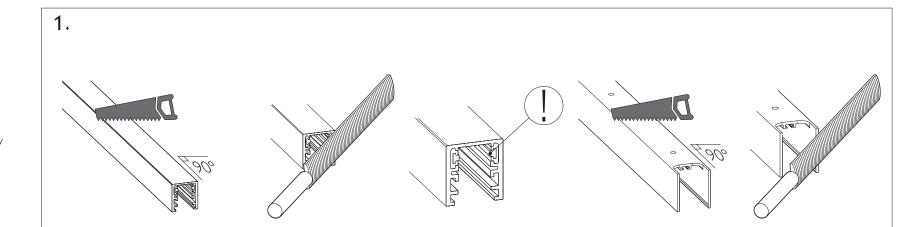
**Note:** Consider the power feed location. Connection can be made from the rear or side of the track. Do not obstruct the power feed hole. Cut an indent in the Mounting Channel base to allow rear power feed to be fed through.

ii. Using plaster mesh plaster up to the edge of the Mounting Channel.

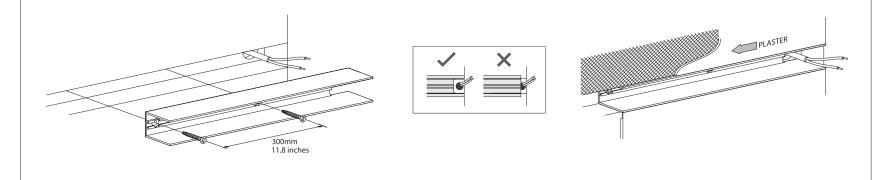
#### 2b. SURFACE

i. Fix the Mounting Channel to the ceiling using all available fixing points.

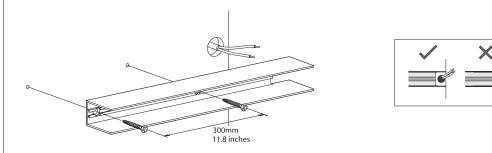
**Note:** Consider the power feed location. Connection can be made from the rear or side of the track. Do not obstruct the power feed hole. Cut an indent in the Mounting Channel base to allow rear power feed to be fed through.



# 2a. RECESSED



# **2b. SURFACE MOUNTED**



# 3. Wiring the Power Feed.

- i. Unscrew back plate from Power Feed and remove
- ii. Insert wires into connection holes and secure using Allen key.
- iii. Replace Power Feed back plate.

# 4. Connecting the Power Feed.

- i. Make sure that the connection screw is loose and insert Power Feed into Inner Track.
- ii. Secure Power Feed in place by tightening connection screw.

## 5. Connecting the End Cap.

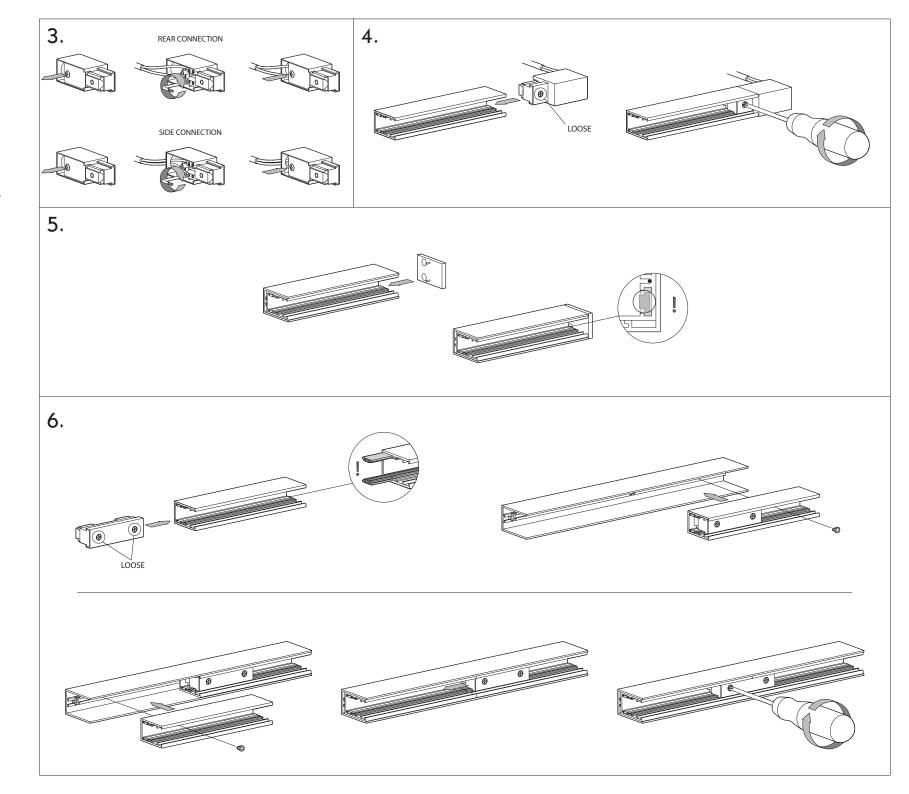
i. Insert End Cap pins into corresponding slots on inner track and push to join.

**NOTE** ensure the End Cap is orientated correctly so that the isolator discs cover the conducting rails of the inner track.

# Connecting tracks using Straight Coupler.

- i. Make sure connection screws are loose and insert into first piece of Inner Track.
- ii. Secure Inner Track into Outer Channel using locking screws.
- iii. Install second piece of Inner Track into Outer Channel positioning Straight Coupler between both pieces of Inner Track.
- iv. Tighten connection screws to secure Straight Coupler in place.

**NOTE** failure to tighten connection screws will lead to a poor connection between tracks and possible failure.



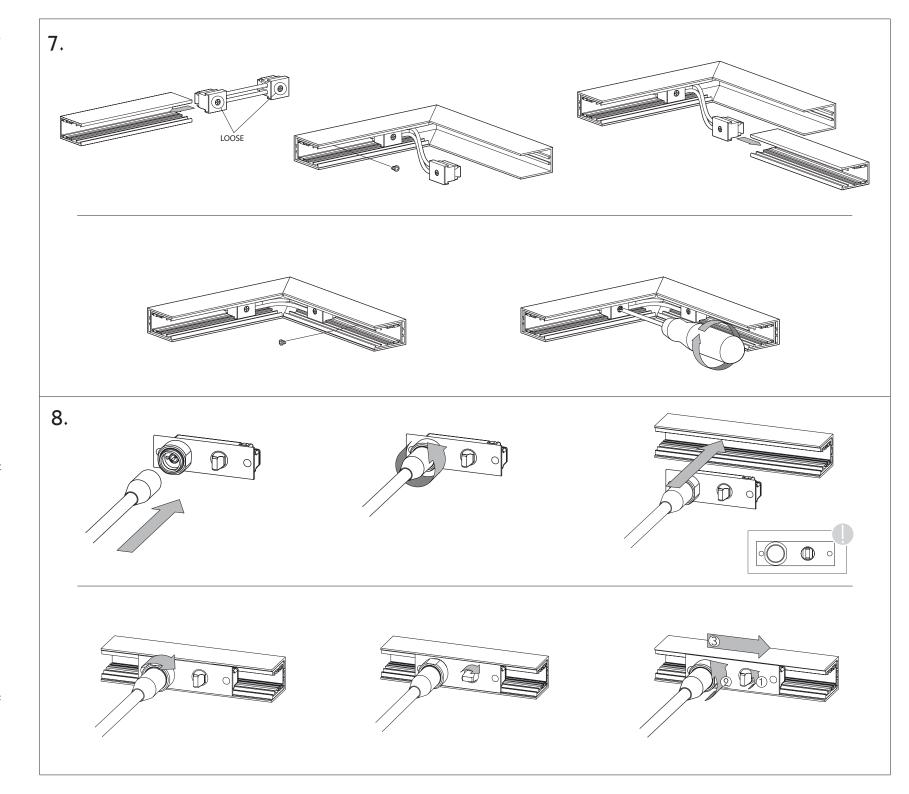
# 7. Connecting tracks using the Adjustable Coupler.

- i. Make sure connection screws are loose and insert into first piece of Inner Track.
- ii. Secure the first section of Inner Track into Outer Channel using locking screws.
- iii. Install second piece of Inner Track into Outer Channel.
- iv. Tighten both connection screws to secure Adjustable Coupler in place. Ensure all connections are done

**NOTE** for best results we recommend mitering the Outer Channel. The Adjustable Coupler can be used to connect track in vertical or horizontal orientations.

## 8. Connecting the RT Connector.

- i. Insert luminaire into RT Connector firmly and screw clockwise to secure.
- ii. Before connecting RT Connector, you must install Inner Track to outer channel (see section 3 iii).
- iii. Slide RT Connector into Inner Track. At this point all locking mechanisms should be disengaged with their curved edges turned toward the track, see diagram 3.
- iv. Locking screw can be repositioned in locking slot if it's blocking the desired RT Connector position.
- v. To secure RT Connector in place, turn locking ring clockwise 90°. The flat edge will now be parallel to the track.
- vi. To connect the RT Connector electrically turn the power switch 90° until the flat edge is parallel to the track.
- vii. To reposition ensure both rings are unlocked, with their curved edges facing the track, and move along the track before relocking.



# 9. Fitting the Cover Strip.

- Only insert Cover Stirp after all other components have been positioned. Starting at one end, click Cover Strip in place pushing hard to secure.
- ii. To cut the cover strip to length use a knife, cutting from the back face of the strip.
  Ensure the Cover strip is cut straight and remains square.
- remains square.

  iii. To neaten the cut edges file the edges of the new face or use sand paper.

