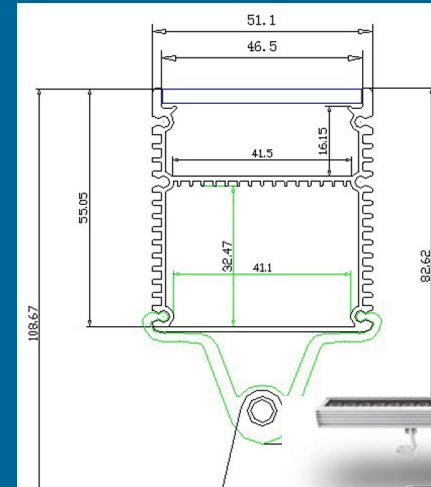


PRECAUTIONS

- Prior to proceeding apply all ESD procedures and Anti static precautions
- Before touching this product, touch an appropriate grounded metal part so that any static electricity in your body will be discharged. Failure to do so will risk damaging the electronic components.
- LED luminaire eye safety is classified as RG2 (Risk Group 2) with a Moderate Risk, however LEDRAYS Inc. strongly recommends proper protection when handling & viewing LED luminaires while in operation. Please refer to document "Eye safety with LED Components".
- Follow all wiring instructions and only use approved drivers as supplied.
- When installing, servicing, or replacing parts for this product please refer to LEDRAYS Inc. service procedures.
- Do not apply excessive force to hardware, cables or connectors. Protect from vibration, do not disassemble product. electrical shock, fire, or malfunction may result.
- Use only the provided connectors and accessories with the LED luminaire. Using any other connectors or accessories may create a safety hazard.
- Handle the product with care. Subjecting it to physical shock (by dropping or creating impacts) may cause damage or malfunctions.
- Please use supplied original packaging for protection when handling & transporting LED luminaire.
- Do not operate LED luminaire in packing carton.
- Please follow any additional install procedures such as specific wiring diagrams provided with the product.
- The manufacturer makes no warranties regarding possible malfunctions or damage that may result from incorrect install, improper use or product modification.



SPECIFICATIONS TB Series LINEAR LED LUMINAIRE	
Operating Voltage range	24VDC
Operating Current (24.0VDC)	1.10A
Operating Power	26.4W
Luminous Flux	1600-2400lm
Efficacy	65-100lm/w
CCT	3500K
CRI	80-90Ra
Lens	Narrow (~12°)
Internal Regulator	DC Constant Current
Ext Driver Type	AC/DC Constant Voltage
Ambient Operating Temperature	-30 °C & +35 °C/-22 °F & +95 °F
Cable Type SJOW 105°C	2 COND. 14 or 16AWG

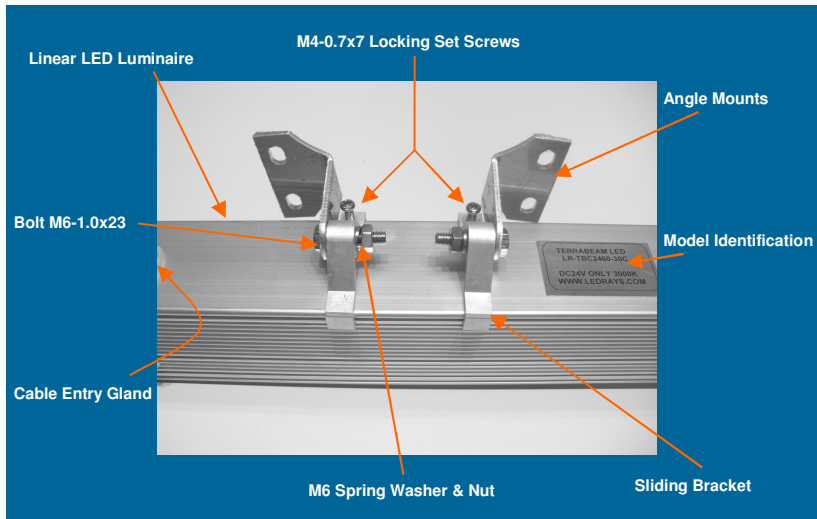
MECHANICAL	
Materials	T6 6066 AL, & 5053AL safety glass, reflective type B silicone, 316 ss hardware
Mounting Positions	All
Assembly Weight	2.10kg/4.15lbs
Ingress Rating	IP65
PRODUCT RESOURCES	
Engineering	Prosper Assayag x120
Project Manager	Julian Picman x130
Technical Support	Andre H .Silva x160
Logistics	Veronica Sarah Avon x140
Technical email	info@ledrays.com

INSTALLATION GUIDE

LINEAR LED LUMINAIRE LR-TB Series

WARNINGS

- Verify contents please do not proceed with the installation if damage is found.
- To avoid the risk of fire, explosion or electric shock, this product should be installed, inspected and maintained only by a qualified electrician or technical professional with proper training, in accordance with all applicable codes and regulations.
- Be certain electrical power is OFF before and during installation and maintenance.
- Continuous row luminaires must be supplied by a wiring system with correctly sized conductors.
- Make sure that the supply voltage is the same as the LED luminaire voltage.
- Do not install or operate in ambient temperatures exceeding the recommended temperature of the LED luminaire.
- Do not modify or operate with dimmers or other non approved control circuits unless the LED luminaire is equipped with that option.
- The LED luminaire is designed to operate in a free air environment. Do not operate in an enclosed space with limited airflow.
- **WARNING** This Linear LED luminaire is not rated for operation in a submersible application.
- Do not hot or cold pressure wash.



USAGE PRECAUTIONS

For maximum product reliability and long life end user must inspect the cooling fins on the luminaire periodically to ensure that they are free of any contamination (i.e. excessive dust or other particulate build-up). All recommended precautions and warnings in this guide apply to the end user. Please refer to LEDRAYS Inc. warranty documents for further details.

MOUNTING ASSEMBLY

- 

Support Brackets

 - LUMINAIRE IS PROVIDED WITH 2 X SLIDE BRACKETS AND 2 X RIGHT ANGLE MOUNTS WHICH MUST BE ASSEMBLED.
 - 2 X **M4-0.7X7** PHILIPS STAINLESS STEEL SET SCREWS ARE USED TO LOCK THE SLIDING RACKET HORIZONTALLY ACROSS LUMINAIRE
 - SLIDE BRACKETS ARE PERMANENTLY CAPTIVE WITHIN LUMINAIRE HEATSINK AND CANNOT BE REMOVED
 - TIGHTEN SLIDE BRACKET SET SCREWS TO DESIRED LOCATION TO A MAX. OF 45 IN-LBS/5NM OF TORQUE
 - ANGLE MOUNTS ARE ADJUSTABLE PROVIDING 180 DEGREES RANGE
 - LOCKING THE ANGLE MOUNT IS VIA **M6-1.0X23 HEX** STAINLESS STEEL BOLTS, M6 SPRING WASHERS AND NUTS FOR A MAX OF 65 IN-LB/7.35NM OF TORQUE
- 

NEG -

POS +

Flying Lead Female Connector Cable

USE APPROPRIATE GAUGE WIRES FROM DC POWER SUPPLY TO FLYING LEAD FEMALE INPUT CONNECTOR. USE A "LUMINAIRE DISCONNECT" TYPE CONNECTOR.

WARNING:
BLACK LEAD IS POSITIVE (+VE)
WHITE LEAD IS NEGATIVE (-VE)
- 

Male

Female

Luminaire Connectors

LUMINAIRES DESIGNED FOR CONTINUOUS ROW ARE EQUIPPED WITH BOTH A MALE AND A FEMALE INPUT CONNECTOR.

DC POWER INPUT IS WIRED TO THE LUMINAIRE MALE CONNECTOR AT THE START OF A ROW. USE FLYING LEAD CONNECTOR FROM STEP #2
- 

Keyed Guide

ALIGN BOTH MALE & FEMALE INPUT POWER CONNECTORS PAYING ATTENTION TO KEYED GUIDE.
- 

JOIN MALE & FEMALE CONNECTORS UNTIL HOUSING STOPS ARE ENGAGED
- 

THREAD LOCKING NUT AND SECURE OVER OPPOSITE CONNECTOR.

APPLY NORMAL FINGER TORQUE. DO NOT USE MANUAL OR POWER TOOLS.
- 

INSTALL LUMINAIRE ON VERTICAL OR HORIZONTAL SURFACE.

FOLLOW PROCEDURES # 4-6 FOR CONTINUOUS ROW APPLICATIONS.

WIRING

- The LR-TB LED luminaires should only be connected to approved CV series drivers/supplies.
- The controller and driver/power supply must operate in a ventilated & dry environment.
- Do not block fan operation (if present) on drivers/supplies or install in conditions where high particulate matter is present.
- Verify load on the driver/supply secondary. Voltage drop at fixture should not exceed 10% of rated voltage when driver/supply is fully loaded.
- Consider inrush current of the drivers/supplies when selecting protection circuit. Refer to the driver/supply specifications for maximum inrush current.
- Do not operate drivers/supplies on AC347V or higher voltage circuits unless indicated on driver. Refer to wiring color chart below.
- Do not put excessive force on driver/supply terminal strips, connections or converter boxes.
- Do not attach more than 2 cables per driver/supply terminal position. Should install require additional wiring use a secondary terminal block or distribution panel.
- Use only the screws, supports, attachments and accessories provided. Do not allow provided attachment screws to enter driver/power supply housing more than 0.8cm (8mm).

For all exterior applications protect the power cable with a rigid or semi rigid conduit or jacket sealed at both ends.

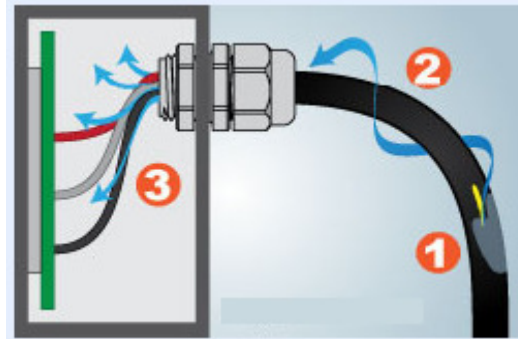


PRECAUTIONS

HOW MICRO CRACKS CAN CAUSE MAJOR PROBLEMS

WICKING is one of the most common causes for electrical devices to fail when operating in moist environments.

Often confused with just a crack in the outer casing or leakage into the housing of a machine, this simple yet complex phenomenon can mean the difference between long term reliability and short term failures and frequent servicing.



WHAT IS WICKING?

Wicking is caused by moisture entering a crack in the outer jacket of a cable (common with age, stress and temperature variations) or through the wire strands.

Wicking is most common when the equipment and wires cool down after operation. Any air that expanded with heat now condenses and creates a vacuum. Much like an oil lamp or pocket lighter draws fuel from a reservoir, this vacuum causes moisture to be pulled up through the strands of wire into the housing or assembly causing rapid failure.

FOR EXTERIOR APPLICATIONS IT IS THE RESPONSIBILITY OF THE INSTALLER TO VERIFY THAT ALL CONNECTION POINTS ARE PROTECTED FROM MOISTURE.

LR-TB LINEAR LED LUMINAIRES ARE NOT DESIGNED TO ACCOMMODATE CONTINUOUS WATER EXPOSURE, ICE DAMS, SNOW ACCUMULATION OR HIGH PRESSURE JETS.

PLEASE REFER TO LEDRAYS WARRANTY STATEMENT FOR MORE INFORMATION

**DO NOT ATTEMPT TO ADJUST DRIVER/POWER SUPPLY OUTPUT !
DRIVER/POWER SUPPLY OUTPUT IS PREADJUSTED PRIOR TO DELIVERY**

DRIVER WIRING COLOR CODES			
WIRING TO MAINS	EXTERIOR & INTERIOR TYPE		
	A	B	C
LINE	BLACK	BROWN	RED
NEUTRAL	WHITE	BLUE	BLACK
GROUND	GREEN	YELLOW OR YELLOW/GREEN	YELLOW

POST ASSEMBLY

MECHANICALLY CHECK THAT ALL PARTS ARE PROPERLY ASSEMBLED. PERFORM VISUAL, ELECTRICAL, AND MECHANICAL INSPECTION. APPLY POWER.

FOR TECHNICAL ASSISTANCE WITH THIS PRODUCT PLEASE CALL 514 484-8462

LEDRAYS INC. 1320 STATE ROUTE 9, CHMAPLAIN, NY 12919