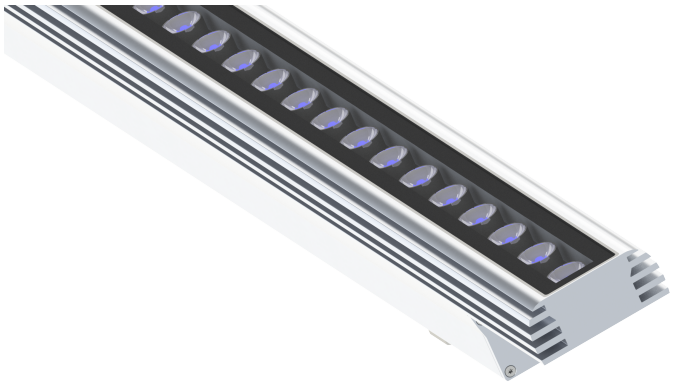


linea m eco
pureColor
Operation Manual

Dear customer,

Thank you for choosing our product.

Please read this user manual carefully before using the product. This manual is part of the product and should be kept in a safe place for future reference If you pass the product on to third parties, please also pass on this operation manual.

Safety Instructions

sales@biontechnologies.com
www.biontechnologies.com
Phone:
(DE) +49 8231 95787 0

All information without guarantee. Errors, changes and misprints excepted.

linea m eco

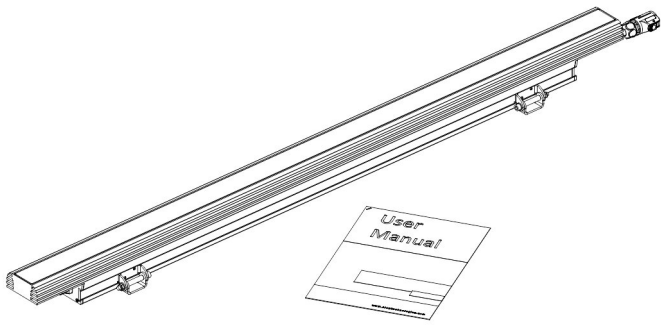
SCOPE OF DELIVERY

1× Bion Technologies linea m, as specified
(Note: The actual specification may differ from the image shown on the right.)

2× Mounting components, as specified
(Note: The actual specification may differ from the image shown on the right.)

1× User manual

If you notice any transport damage or discrepancies between the specified delivery contents and the packaging contents, please notify your point of sale immediately.



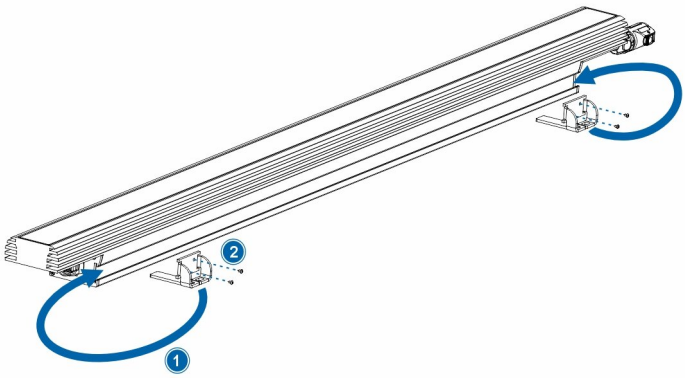
INSTALLATION

1

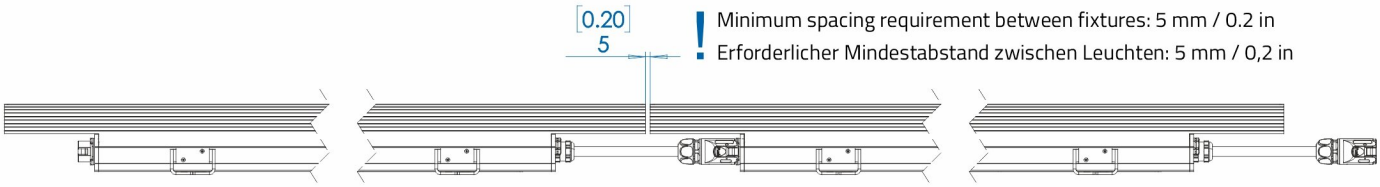
Torque Step 2: 2 Nm

Mount the luminaires exclusively using the optionally available accessories.

IMPORTANT:
Fastening screws used in façade installations must additionally be secured with a chemical thread locker.



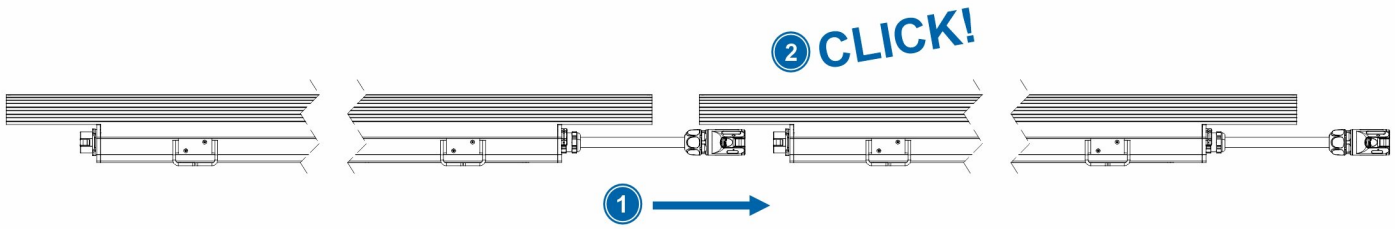
2 Minimum spacing of luminaires in linear installation



! Minimum spacing requirement between fixtures: 5 mm / 0.2 in
Erforderlicher Mindestabstand zwischen Leuchten: 5 mm / 0,2 in

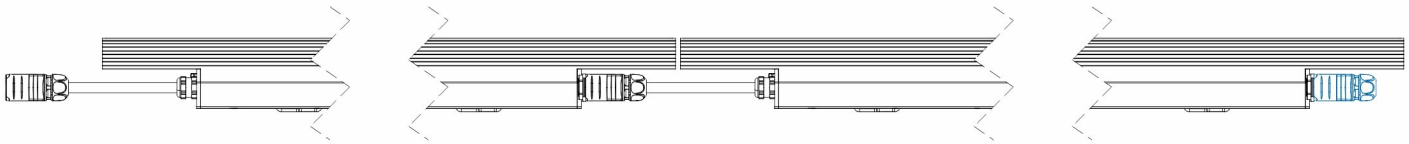
All information without guarantee. Errors, changes and misprints excepted.

3 Checking the connection between the luminaires



The connection between the luminaires is correctly sealed if a clearly audible "click" sound is heard when the connector and socket are plugged together.

4 Mounting end plug / Ingress protection IP66



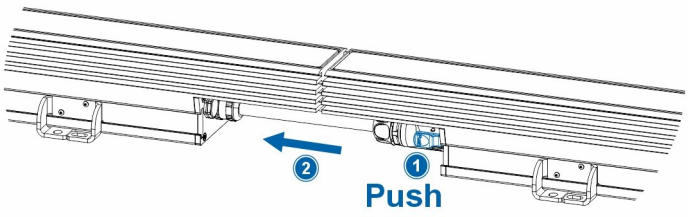
Only with a plugged-in end connector from the linea m leader cable set, protection class IP66 is achieved.

Nur mit gestecktem Endstecker aus dem linea m Anschluss-Set wird die Schutzart IP66 erreicht.

The end cap on the socket only achieves IP44 protection. The end cap can be carefully separated from the luminaire with a side cutter after mounting.

5 Disconnecting the mating connection

First press the silver release button, then pull the plug out of the socket.



All information without guarantee. Errors, changes and misprints excepted.

COMMISSIONING

TECHNICAL DATA

Electrical data

Non dimmable
Integrated interface(s) / control: NDIMtc, 0-10 V, DALI, DMX, IoT

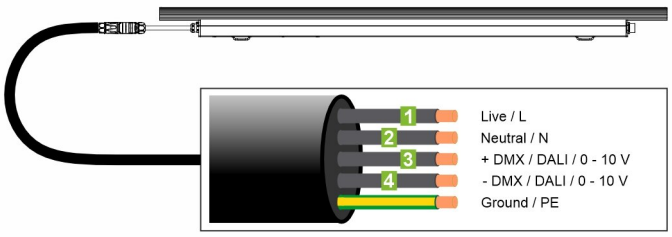
Internal power supply	100 - 240, 277 VAC (50 - 60 Hz)
Power Consumption	
	629 mm | 24.77 in → 26 W 934 mm | 36.78 in → 39 W 1239 mm | 48.78 in → 42 W
Protection class	I
Inrush @ 230 V	
	629 mm / 24.76 in → 50 A (Coldstart, t_{Width} = 210 µs measured at 50% I_{peak})
	934 mm / 36.77 in → 55 A (Coldstart, t_{Width} = 270 µs measured at 50% I_{peak})
	1239 mm / 48.78 in → 55 A (Coldstart, t_{Width} = 270 µs measured at 50% I_{peak})
Power factor correction @ 230 V	
	629 mm / 24.76 in → 0.95 934 mm / 36.77 in → 0.95 1239 mm / 48.78 in → 0.95
Max. fixtures per breaker @ 230 V	
	629 mm / 24.76 in → B16: 12 | C16: 20 934 mm / 36.77 in → B16: 8 | C16: 14 1239 mm / 48.78 in → B16: 8 | C16: 14

Designed and Developed in Bavaria.
Made in Germany.

WIRING DMX / DALI / 0-10V

Power + Data:

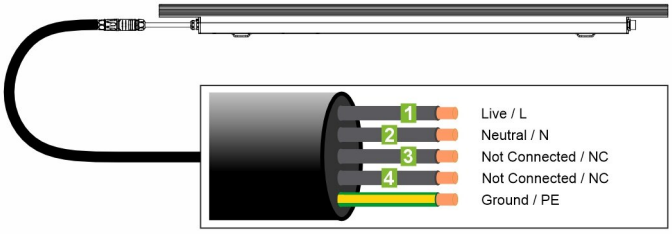
1 => Live / L
2 => Neutral / N
3 => DMX + / DALI + / 0 -10 V +
4 => DMX - / DALI - / 0 -10 V -
Ground / PE



WIRING IOT / NDIM

Power:

1 => Live / L
2 => Neutral / N
3 => Not Connected / NC
4 => Not Connected / NC
Ground / PE



All information without guarantee. Errors, changes and misprints excepted.

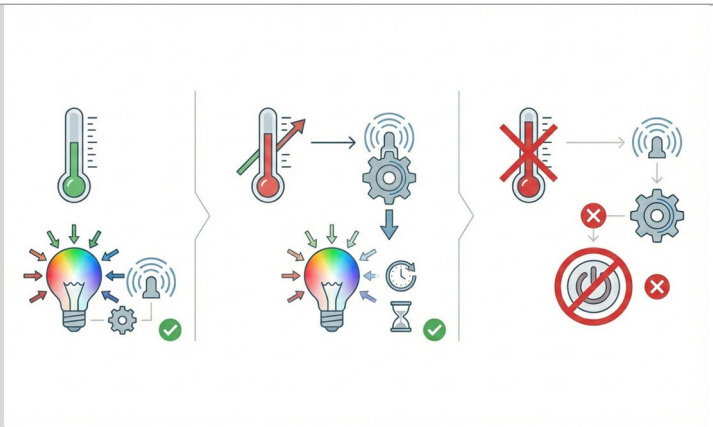
OPERATION

INFO Temperature Management

BION Technologies linea m generation 3 luminaires are equipped with an active thermal management system that protects the luminaire from overheating. Integrated sensors continuously monitor the operating condition and automatically adjust the light output as required. Power adjustments are distributed proportionally across all channels by an internal algorithm to maintain the desired light color for as long as possible.

If the power reduction is no longer sufficient to prevent permanent thermal damage, the luminaire will switch off automatically.

IMPORTANT:
The shutdown occurs only when the admissible ambient or surface temperature during operation is exceeded.



DMX / RDM DMX - Modes of operation and DMX-Footprints

Product name	Modes + DMX Footprints		
	Modes	Resolution	DMX
linea m eco - pureWhite linea m eco - pureColor linea m hp - pureWhite linea m hp - pureColor linea m hpc - pureWhite linea m hpc - pureColor	per fixture per fixture per fixture per fixture per fixture per fixture	8bit 16bit	1 2
linea m eco - tunableWhite linea m hp - tunableWhite linea m hpc - tunableWhite	per fixture per fixture per fixture	8bit 16bit	2 4
linea m eco - Color Changing linea m hp - Color Changing linea m hpc - Color Changing	per fixture per fixture per fixture	8bit 16bit	4 8
linea m hpc - pureWhite linea m hpc - pureColor	per fixture segment per fixture segment	8bit 16bit	1 2
linea m hpc - tunableWhite	per fixture segment	8bit 16bit	2 4
linea m hpc - Color Changing	per fixture segment	8bit 16bit	4 8

DMX / RDM RDM - Remote Device Management Protocol

BION Technologies luminaires integrate seamlessly with DMX512 networks, utilizing the RDM protocol defined by ANSI E1.20.

The RDM protocol enables effortless discovery, configuration, monitoring, and management of your luminaires. RDM elevates lighting control by providing real-time fixture monitoring, customizable settings adjustments, and fast fault diagnosis. BION luminaires support a comprehensive range of RDM Parameter IDs.

The following parameters can be read and set via RDM.

Parameter IDs	GET	SET
DISC_UNIQUE_BRANCH	☑	
DISC_MUTE	☑	

All information without guarantee. Errors, changes and misprints excepted.

Parameter IDs	GET	SET
DISC_UN_MUTE	☑	
SUPPORTED_PARAMETERS	☑	
DEVICE_INFO	☑	
DEVICE_MODEL_DESCRIPTION	☑	
MANUFACTURER_LABEL	☑	
DEVICE_LABEL	☑	☑
SOFTWARE_VERSION_LABEL	☑	
DMX_PERSONALITY	☑	☑
DMX_PERSONALITY_DESCRIPTION	☑	
DMX_START_ADDRESS	☑	☑
SENSOR_DEFINITION	☑	
SENSOR_VALUE	☑	
DEVICE_HOURS	☑	
DEVICE_POWER_CYCLES	☑	

GENERAL

MAINTENANCE

Clean the device regularly to remove dirt and residue.

Use solvent-free cleaning agents only, and do not use aggressive chemicals or high-pressure cleaners.

Operate the device only after it has completely dried.



APPROBATION(S): CE, ETL, FCC

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe A est conform à la norme NMB-003 du Canada.

All information without guarantee. Errors, changes and misprints excepted.

MANUFACTURER

Bion Technologies GmbH
Lindberghstrasse 15
86343 Koenigsbrunn

Tel: +49 (0)8231/95787-0
Fax: +49 (0)8231/95787-29

www.biontechnologies.com
info@biontechnologies.com

All rights reserved / Subject to change /
Specifications may change without notice

All information without guarantee. Errors, changes and misprints excepted.