

Safety

- Do not cover the ground contact.
- Do not place any material over the lens or LED diode/chip.
- Do not insert objects into the luminaire.
- Do not clean using any solvent based abrasive or aggressive product.
- Do not pull any cables connected to the product.
- Do not direct the luminaire into a persons eyes, as this unit may have an intense light output, which if incorrectly used may cause eye damage.
- Light engines/LEDs and other light sources may heat up, please take care when handling the products.
- The manufacturer will not be deemed liable or held responsible for any damages caused by faults or manufacturing defects that may be present in any of its products or the misuse or incorrect installation of this device. Please refer to our troubleshooting guide for further information.
- The manufacturer will not be held liable for any death(s) or injuries caused by misuse or poor installation or any unreported faults of this product version or versions thereof.
- LEDs are sensitive to electrostatic discharge. Do not touch the surface of the LED module.
- Do not connect to a temporary electricity supply, this may damage the electronics.
- Light fittings with an integrated emergency option are with a separate installation and wiring leaflet. Please refer to this manual for further details. If the manual is unavailable please contact an ALL LED representative for assistance.

Returns & Faulty Items

- If any problem is encountered during or after installation, please call the ALL LED technical department to get the problem resolved as soon as possible.
- Please do not just return the item to the outlet you purchased it from, as you are only entitled to a replacement or refund after the unit has undergone testing and the unit has been confirmed as having a manufacturing defect/fault. Your statutory rights are not affected.
- The manufacturer will not be deemed liable or held responsible for any damages caused by faults or manufacturing defects that may be present in any of its products or the misuse or incorrect installation of this device. Please refer to our troubleshooting guide for further information.
- All goods are supplied under the terms and conditions of ALL LED LTD, a copy of which may be obtained upon written request.



INSTALLATION GUIDE & USER MANUAL AST020 RANGE



ENSURE POWER SUPPLY IS OFF WHEN HANDLING ANY ELECTRICAL EQUIPMENT.

- This product may need to be installed by a qualified electrical installer.
- Please read this guide in its entirety to fully understand the products before attempting any install.
- All electrical work should be completed in accordance with the latest IET regulations, and/or any other relevant rules, regulations or laws of the country in which it is being installed.
- The item must be installed in isolation from any insulating material and is adequately ventilated to prevent premature failure.
- Ensure power supply is isolated prior to installation, maintenance or performing any other form of electrical work.
- In the event of incorrect or improper function with specific regard to any of ALL LED's products and contact ALL LED for further advice.

Technical Specifications

Product Code	AST020/30.	AST020/40.
CCT (Kelvin)	3000K	4000K
Useful Luminous Flux (LM)	2200lm	2100lm
Beam Angle (°)	120	120
SDCM	<6	<6
CRI	>90	>90
Peak Intensity (cd)	594	595
Operating Voltage (V)	24Vdc	24Vdc
Max Output Power (W)	20W	20W
Operating Current (A max)	0.83A	0.83A
Class	III	III
Cut Points	50MM	50MM
LED/M	160 LEDs	160 LEDs
Reel Length	40M	40M
Switching Cycles	>15,000	>15,000
Ingress Protection	IP20	IP20
Ambient Operating Temperature (°C)	-20°C ~ +40°C	-20°C ~ +40°C
Guarantee	2 Years	2 Years
Dimming Mode (Trailing or Leading)	Yes*	Yes*
Life Time (L70 B50)	30,000H	30,000H
R9 Colour Rendering Index Value	>50	>50
Survival Factor	0.9	0.9
Lumen Maintenance Factor	0.96	0.96
Flicker Metric (PstLM)	0	0
Stroboscopic Effect Metric (SVM)	0.7	0.7



ALL LED LTD
42 Sedgwick Road,
Luton, LU4 9DT

www.allledgroup.com
sales@allledgroup.com
Tel: +44 (0)208 841 9000



Environmental Protection
Waste electrical products should
not be disposed of with household
waste. Please recycle where
facilities exist. Check with your
Local Authority or retailer for
recycling advice

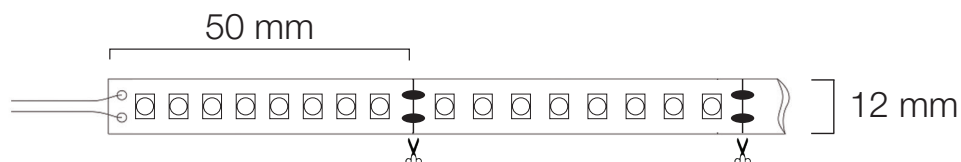
The manufacturer will not be deemed liable or held responsible for any damages caused by faults or manufacturing defects that may be present in any of its products or the misuse or incorrect installation of this device
Your statutory rights are not affected.



Installation Instructions

1. Ensure surface where LED strip intends to be installed is cleaned smooth, adequately cleaned and free of oil and dust.
2. Ensure there are no sharp bends where the strip is being installed. If there are please cut and rejoin the strip either with appropriate cabling or LED strip quick-connectors. Cut the strip at the marked cut-points if necessary.
3. Remove the protective backing from the tape, revealing the adhesive.
4. Firmly press the LED strip onto the cleaned surface ensuring that you have applied even pressure along the length of the strip to ensure adhesion.

Dimensions



Notes

- Should you encounter any difficulties, please refer to the troubleshooting guide on the opposite page.
- Should you encounter any further difficulties with this product, please contact the ALL LED technical team.
- Should this product cease working, a replacement drive unit will be dispatched to try to solve the issue.
- Do not hold this product by the trailing lead, it may damage the integrity of the product.

Troubleshooting Guide

PROBLEM	CAUSE(S)	SOLUTION(S)
No Light Coming From LEDs	No power to drive components.	A qualified installer/electrician should check the primary voltage side of the product to check the input voltage.
	Loose connection on primary side.	Ensure continuous and correct connection between terminals.
	Loose or switched connection/polarity on secondary side.	Ensure continuous and correct connection between terminals. Ensure the polarity is correct; (Red = +, Black = -).
	No output from the driver.	Driver may be faulty and require replacement.
	Over voltage may have caused damage to the sensitive LED drive components.	These cases are rare and the item may need replacement and/or investigation as to the cause of failure.
LEDs Flashing	Unstable or incorrect input voltage.	Please only use a stable voltage supply as stipulated earlier for this product. Failure to do so will void the warranty.
	LED driver may be connected to a dimmer switch	Please remove the dimmer switch. Use of this product on a dimmer will void the warranty. This product is supplied non-dimmable as standard.
	Loose connection on primary side.	Ensure continuous and correct connection between the terminals.
	Loose connection on secondary side.	Ensure continuous and correct connection between terminals. Ensure the polarity is correct; (Red = +, Black = -).
LEDs Brightness Inconsistent	Incorrect cable being used to carry power.	Use thicker cable on any DC power.
	Distance between power supply and LED strip too far, causing volt drop	Move the power supply closer to the location of the LED strip.



ATTENTION
IF ANY PROBLEMS PERSIST, PLEASE CALL THE ALL LED TECHNICAL DEPARTMENT FOR FURTHER ASSISTANCE.