Wako Flexible Light Strip (KOKI / EF Series)

Installation Guide

PRODUCT CARE AND HANDLING

- WAKO products are packed in a protected form and delivered to the installation sites.
- Inspect the products carefully before installation. Do not proceed to install any products that may have been damaged in transportations, storage or handling.
- Keep the products in their protected form before installation.
- As the Flexible Light Strips are delicate electronics, ensure a good handling of the Light Strips to avoid excessive bends, drops and pressure applied to them.
- Keep away from dusty and wet areas. Clean up the area if necessary as dusts affect the lighting effects and water could lead to short circuit.

INSTALLATION

- Installation should only be carried out by qualified professions in accordance to the local codes, safety and regulations.
- Products should be installed in areas appropriate to their specified IP rating, operating temperature and humidity range.
- Work out the installation plan carefully with the physical layout and power source. Provide enough wiring, power supplies and control gears.
- Ensure the correct polarity connections are observed at all times during installation as reverse polarity could have damaged the products.
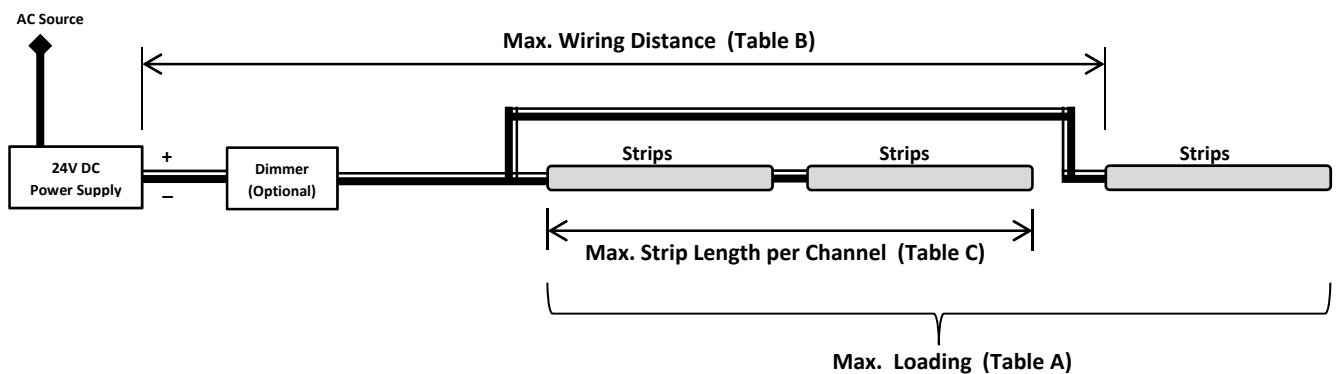
INTALLATION (MOUNTING)

- WAKO Flexible Light Strips could come in with many different formats: Bare Light Strips with Mounting Tape, Light Strips in Silicon Tube, Light Strips in Aluminum Profiles, and Light Strips in Silicon Tube that's installed in Aluminum Profiles. Light Diffuser could have also come in with the Products. Mounting Kits and/or Accessories might be an option and not come with the products; and installers may have to prepare themselves.
- For Mounting Tape applications, ensure the surface is free of dust and smooth.

- For Silicon Tube applications, ensure the silicon brackets are screwed in securely and spaced apart properly to keep up with the curvature design and not blocking the LEDs.
- Corners or sharp angel placement should be avoided with single strip installation; use multi-strip installation instead.
- For Aluminum Profile applications, mark the positions for all the metal or plastic mounting brackets accordingly and drilling shall be completed before installing the Aluminum Profiles into the brackets. Position the Aluminum Profiles in the brackets and minimize the gaps in between in order to provide continuous linear lighting effects.

INSTALLATION (WIRING)

- All WAKO Flexible Light Strips use 24V Constant Voltage DC Power Supply. Ensure the power rating of the Power Supply is adequate to drive the appropriate lengths/segments of the Strips. (See Table A for recommendations.)
- Ensure correct polarity to be correct at all times. The wires could be (Red + / Black -) or (White + / Black -).
- When connecting the Strips to the Power Supply, ensure the correct cable thickness used that could carry the required amperage; and that the length of this cable cannot exceed the maximum specified in Table B1 and Table B2.
- When connecting the Strips end to end, ensure the maximum length of the total Strips from the particular series does not exceed the limits specified in Table C.
- Check all wiring before applying power to the installation.

Wiring Diagram - Limits

NOTE: MAKE SURE NOT TO EXCEED THE MAXIMUM LIMITS DURING INSTALLATION.

Series	Power Supply		
	50W	**100W**	**150W**
EF020	7m	15m	22m
EF030	4m	8m	12m
EF031	3m	6m	9m
KK072	3m	6m	9m
KK075	4m	8m	12m
	Total Strip Length		

TABLE A. Maximum Loading

Loading	Wire Gauge			
	0.5mm^2 / 20AWG	**0.75mm^2 / 18AWG**	**1.5mm^2 / 15AWG**	**4mm^2 / 12AWG**
50W	15m	25m	50m	100m
100W	8m	12m	25m	50m
150W	5m	8m	17m	35m
	Maximum Wiring Distance			

TABLE B1. Maximum Wiring Distance - EF Series

Loading	Wire Gauge			
	0.5mm^2 / 20AWG	**0.75mm^2 / 18AWG**	**1.5mm^2 / 15AWG**	**4mm^2 / 12AWG**
50W	10m	16m	32m	66m
100W	5m	8m	16m	33m
150W	3m	5m	10m	22m
	Maximum Wiring Distance			

TABLE B2. Maximum Wiring Distance - KOKI Series

Series	Maximum Strip Length per Channel
EF020	7m
EF030	4m
EF031	3m
KK072	3m
KK075	5m

TABLE C. Maximum Strip Length per Channel