

# RETROFIT TUBE INSTALLATION GUIDE

READ THE INSTRUCTIONS CAREFULLY BEFORE MOUNTING

## G13 SOCKET

1. Turn off the power.
2. Insert the LED tube into the G13 socket.
3. Secure the position by turning the tube 90°.
4. Turn on the power.

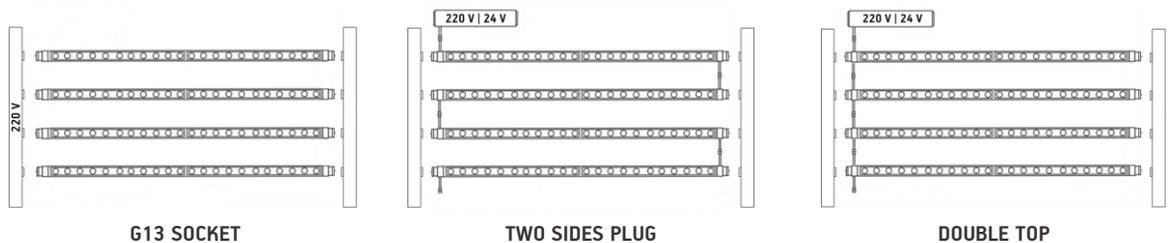
## TWO SIDES PLUG | DOUBLE TOP

1. Turn off the power.
2. Attach the end cap to the LED tube.
3. Insert the LED tube into the G13 socket.
4. Secure the position by turning the tube 90°.

5. Connect the tubes by connecting female connector with male connector.
6. Secure the connection by tightening up the connector cap.
7. Connect extension cable with power wires to the LED tube-set.

8. Secure the connection by tightening up the connector cap.
9. Cap the unused connector with blank connector. Secure the connection by tightening up the connector cap.
10. Connect the power wires to the incoming power line or external power supply.

## CONNECTION SCHEME



G13 SOCKET

TWO SIDES PLUG

DOUBLE TOP

# RETROFIT TUBE INSTALLATION GUIDE

## MOUNTING AND USING RECOMENDATIONS

- Before installing make sure, that the fixing area can bear the total weight of the retrofit tubes.
- Please install retrofit tubes with appropriate cables. There is a possibility, that cables may get disconnected due to contractions, caused by temperature changes.
- Please check that sulfur constituent is not contained in used components when the retrofit tubes are installed.
- Make sure to install retrofit tubes in a place with sufficient breathability in order to prevent lifetime reduction by heat. The operating temperature should not exceed +40 °C.
- When installing the retrofit tubes in a fixture (signboard), make sure to provide ventilation for constituent sulfur, drainage for rainwater to prevent aged deteriorations.
- When fixing cables of retrofit tubes do not use metal cable stop. The tunic of the cable may be damaged and therefore lead to short-circuit.
- Be sure to install the retrofit tubes at a maintainable place.
- Do not push the retrofit tubes through force if they do not fit in a fixture (signboard).
- In order to prevent LEDs from breaking down caused by static electricity, make sure not to touch the metal parts of the cable directly with bare hands.
- If any signs of smoke or the smell of burning plastic occurs, turn off the retrofit tubes immediately and investigate the power supply and the wiring carefully.
- Make sure to record and keep the product lot and installation date of the retrofit tubes.

## STORAGE AND MAINTANANCE CONDITIONS

- Before the maintenance, turn off the power and maintain the retrofit tubes after tubes cool down. Otherwise, electric shock or burn may occur.
- Do not pull the wiring while removing the retrofit tubes to prevent possible disconnections.
- Make sure to store the retrofit tubes at dry places, avoid elevated temperatures, high pressures, vibrations, corrosive or combusive gas, direct sunlight.
- Do not wipe or spray retrofit tubes with inflammable products such as alcohol, benzine, or paint thinner as it may lead to combustion and malfunctioning.
- Retrofit tubes cannot operate at the presence of materials containing sulfur components or where sulfur-containing gas is generated as it leads to changes in light color and malfunctioning.

## GENERAL CONDITIONS

- Installation of the retrofit tubes must be carried out by a qualified technician according to handling standards of electrical equipment.
- Retrofit tubes and power supply have an absolute maximum rating. Comply with the specifications to avoid failures or combustion.
- Avoid placing any high-temperature objects around the retrofit tubes, also avoid putting cloth or paper on the retrofit tubes. It may lead to combustion, burnout, overheat, failure, deformation.
- Retrofit tubes cannot be used in high-temperature environments, also they must not be subjected to vibration, shock, particles, corrosive or combusive gas. If not followed, it may cause fire, burnouts, bad insulation, failures, overheating, and injuries.
- Do not insert or remove power plugs with wet hands to avoid electrical shock.
- While connecting or disconnecting electrical cords avoid being close to any heating equipment. It may lead to the melting of the cords cause electrical shock.
- Do not cut, bend, or modify in any way the retrofit tubes. This may lead to electrical shock, failure, burnout, changes in retrofit tube color.
- Do not install the retrofit tubes under direct sunlight or falling water. This may lead to electrical shock, burnouts, overheat, even combustion.
- Retrofit tubes cannot be used in combination with other types of retrofit tubes, as this may lead to failure.
- Retrofit tubes can be used at ambient temperatures ranging from -20 °C to +40 °C.