



# **T5 CONVERSION KIT**

KT5C060 / KT5C120 / KT5C240

## **OPERATING MANUAL**

REV. C December 20, 2012

### **FOR MODELS**

KT5C060 (bi-pin) – 1 x 14W T5 Lamp KT5C120 (bi-pin) – 1 x 28W T5 Lamp KT5C240 (single pin) – 2 x 28W T5 Lamps or 2 x 25W T5 Lamps



### KT5C060 / KT5C120

☐ (1) T5 Lamp Adapter

### KT5C240

☐ (2) T5 Lamp Adapter ☐ (1) Metal Brace

### **TECHNICAL SPECIFICATIONS**

KT5C060:120V, 0.117A, 0.95PF, 50-60Hz, 14W277V, 0.053A, 0.95PF, 50-60Hz, 14WKT5C120:120V, 0.234A, 0.95PF, 50-60Hz, 28W277V, 0.106A, 0.95PF, 50-60Hz, 28WKT5C240:120V, 0.468A, 0.95PF, 50-60Hz, 2x28W277V, 0.212A, 0.95PF, 50-60Hz, 2X28W

### **OPERATING ENVIRONMENT**

SUITABLE FOR DRY LOCATIONS.

WARNING: DO NOT USE WITH DIMMERS.

**WARNING:** THIS LAMP ADAPTER CANNOT BE USED TO REPLACE FIXTURES WITH MORE THAN 4 LAMPS.

#### WARNINGS

**WARNING:** TO AVOID RISK OF FIRE OR SHOCK FOLLOW INSTALLATION INSTRUCTIONS STRICTLY.

**WARNING:** ALWAYS ENSURE POWER SOURCE IS TURNED OFF OR DISCONNECTED BEFORE ATTEMPTING TO CHANGE OR MODIFY LUMINAIRE.

**WARNING:** RISK OF FIRE OR ELECTRIC SHOCK: INSTALL THIS KIT ONLY IN THE LUMINAIRES THAT HAVE THE CONSTRUCTION FEATURES AND DIMENSIONS SHOWN IN THE DIAGRAMS AND/OR DRAWINGS.

**WARNING:** ONLY THOSE OPEN HOLES INDICATED IN THE DIAGRAMS OR DRAWINGS MAY BE MADE OR ALTERED AS A RESULT OF KIT INSTALLATION. DO NOT LEAVE ANY OTHER OPEN HOLES IN AN ENCLOSURE OF WIRING OR ELECTRICAL COMPONENTS.

**WARNING:** DO NOT MAKE OR ALTER ANY OPEN HOLES IN AN ENCLOSURE OF WIRING OR ELECTRICAL COMPONENTS DURING KIT INSTALLATION.

**WARNING:** TO PREVENT WIRING DAMAGE OR ABRASION, DO NOT EXPOSE WIRING TO EDGES OF SHEET METAL OR OTHER SHARP OBJECTS.

**WARNING:** LUMINAIRE CONVERSION, RETROFIT WITH RESPECT ONLY TO RISK OF FIRE OR RISK OF SHOCK FOR USE ONLY WITH UL, CUL LISTED FLUORESCENT LUMINAIRES.

**WARNING:** AFTER LUMINAIRE HAS BEEN MODIFIED, IT CAN NO LONGER ACCEPT ORIGINAL LAMP(S). HAVE A LABEL AFFIXED (PROVIDED BY RETROFIT MANUFACTURER) INDICATING THE LUMINAIRE HAS BEEN MODIFIED AND CAN NO LONGER OPERATE THE ORIGINAL INTENDED LAMP(S).

**WARNING:** RISK OF FIRE OR ELECTRIC SHOCK. KIT INSTALLATION REQUIRES KNOWLEDGE OF FLUORESCENT LIGHTING LUMINAIRE ELECTRICAL SYSTEM. IF NOT QUALIFIED, DO NOT ATTEMPT INSTALLATION. CONTACT A QUALIFIED ELECTRICIAN.

KOJIN assumes no responsibility for claims arising out of improper or careless installation or handling of this product. This equipment must be installed by a qualified person familiar with the construction and operation of this product and any hazards involved.

### PRE-INSTALLATION ASSEMBLY

# IMPORTANT: PEEL OFF THE TRANSPARENT FILM FROM THE REFLECTOR BEFORE INSTALLING LAMPS!

KT5C060 and KT5C120 do not require assembly and are ready to install out of the box.

KT5C240 comes in three sections that fit together to form a single unit. Connect the two T5 Lamp Holders by matching the white connector caps together. They should fit together easily. Snap on the metal brace and slide it to center to keep the two sections firmly together.

### INSTALLATIONS WITH ELECTRONIC BALLASTS

**WARNING:** TURN OFF POWER TO EXISTING FIXTURE. ELECTRICAL SHOCK CAN OCCUR DURING INSTALLATION IF POWER IS NOT TURNED OFF.

**WARNING:** ENSURE YOUR LINE VOLTAGE IS SUPPORTED BY THE LUMINAIRE BEING INSTALLED.

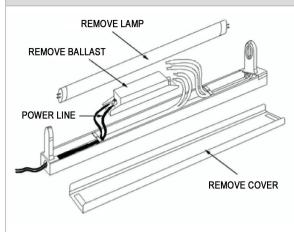
**WARNING:** DO NOT MAKE OR ALTER ANY OPENING IN THE WIRING COMPARTMENT OR TO THE ELECTRICAL COMPONENTS DURING INSTALLATION.

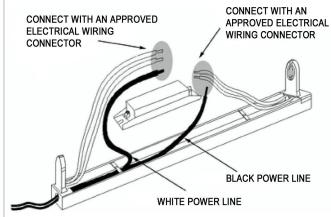
### 1. Remove old ballast

Cut off power to the existing fixture, remove the lamp and disconnect the existing electronic ballast.

## 2. Re-wiring

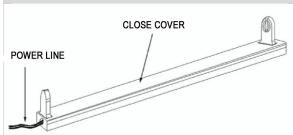
Re-connect the wires to complete the electrical circuit of the fixture.





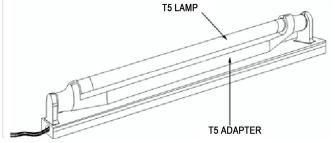
## 3. Close unit casing

Wrap the connecting wires layup with an approved electrical wiring connector, and close the cover.



### 4. Install T5 Conversion Kit

Install the self-ballasted T5 adaptor into the end connectors, and rotate the tube by 90 degrees. Reconnect power to the luminaire.



### **INSTALLATIONS WITH MAGNETIC OR REACTANCE BALLASTS**

Follow the same instructions as with electronic ballasts. If your fixture has a starter, follow the instructions below:

- 1. Disconnect power to luminaire.
- 2. Remove existing lamp.
- 3. Remove the starter.
- 4. Remove the ballast.
- 5. Remove PFC capacitor and associated wires.
- 6. Follow Steps 2-3 above under heading "INSTALLATIONS WITH ELECTRONIC BALLASTS"
- 7. Insert the standard T5 lamp to the retrofit lamp adapter.
- 8. Insert completed lamp adapter into luminaire. Ensure complete unit fits properly.
- 9. Plug the hole left from the removal of starter with starter plug.
- 10. Reconnect power to the luminaire.

### **ATTENTION: Special note for magnetic or reactance ballasts**

The "hole" left by the removal of the starter <u>must be plugged</u> to ensure electrical safety. The plug could be metallic or polymeric. The metallic plug should be minimum 0.51mm thick. The polymeric material should be minimum 5VA flame rating.

### **COMMON PROBLEMS AND SOLUTIONS**

**PROBLEM:** The T5 lighting does not work

Cause	Solution
Wiring issue	Use multimeter resistance gears to check the wiring.
Light tube	Ensure the T5 light tube is not burnt out or defective.
Incorrect connection	Please study the installation instructions and ensure you have followed all the steps correctly.