kadision PN2X4-50D-50K

kadision 2x4 LED Flat Panel Light Instruction Manual

Model: PN2X4-50D-50K

1. INTRODUCTION

Thank you for choosing the kadision 2x4 LED Flat Panel Light. This manual provides essential information for the safe installation, operation, and maintenance of your new lighting fixture. Please read these instructions thoroughly before installation and retain them for future reference.

This LED flat panel light is designed for various indoor applications, offering adjustable wattage and color temperature to suit different environments and preferences. Its energy-efficient design and versatile mounting options make it an ideal lighting solution for commercial and residential spaces.
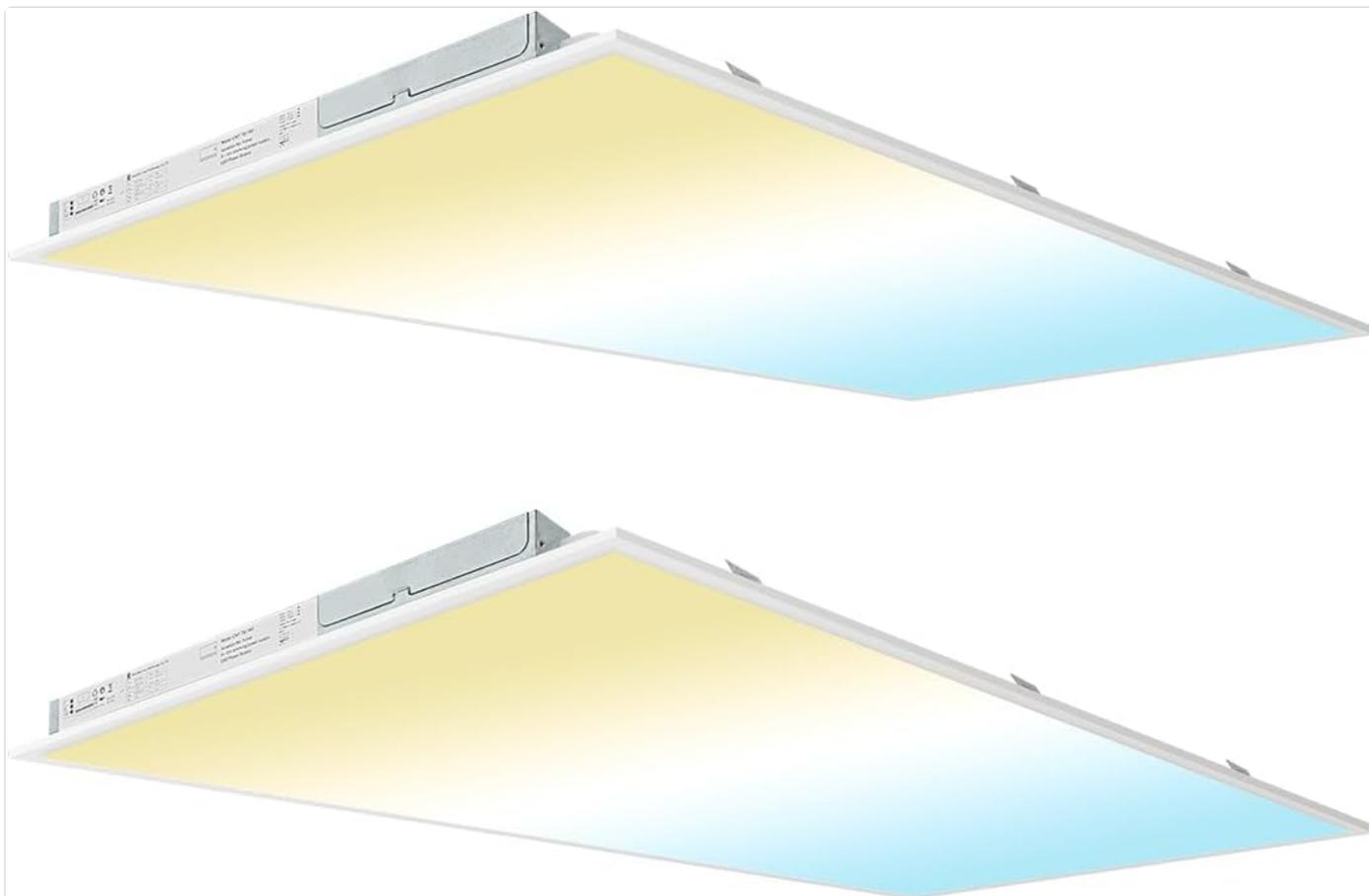

Figure 1: kadision 2x4 LED Flat Panel Lights

This image displays two kadision 2x4 LED Flat Panel Lights. The top panel shows a gradient from warm white to cool white light, while the

bottom panel shows a gradient from cool white to warm white light, illustrating the selectable color temperature feature.

2. PRODUCT FEATURES

- **Adjustable Wattage:** Selectable power output of 25W, 30W, 40W, 50W, or 60W to control brightness.
- **Selectable Color Temperature:** Choose between 3500K (Warm White), 4000K (Bright White), and 5000K (Daylight).
- **0-10V Dimmable:** Compatible with 0-10V dimmers for smooth brightness adjustment.
- **High Lumen Output:** Up to 6600 lumens at maximum wattage.
- **Energy Efficient:** LED technology provides significant energy savings.
- **Durable Construction:** Features a sturdy metal frame, frosted PMMA lens for glare reduction, and a durable metal back plate for heat dissipation.
- **Integrated Junction Box:** Includes 1/2" knockouts for easy wire connection.
- **ETL Listed:** Ensures high standards of safety and quality.
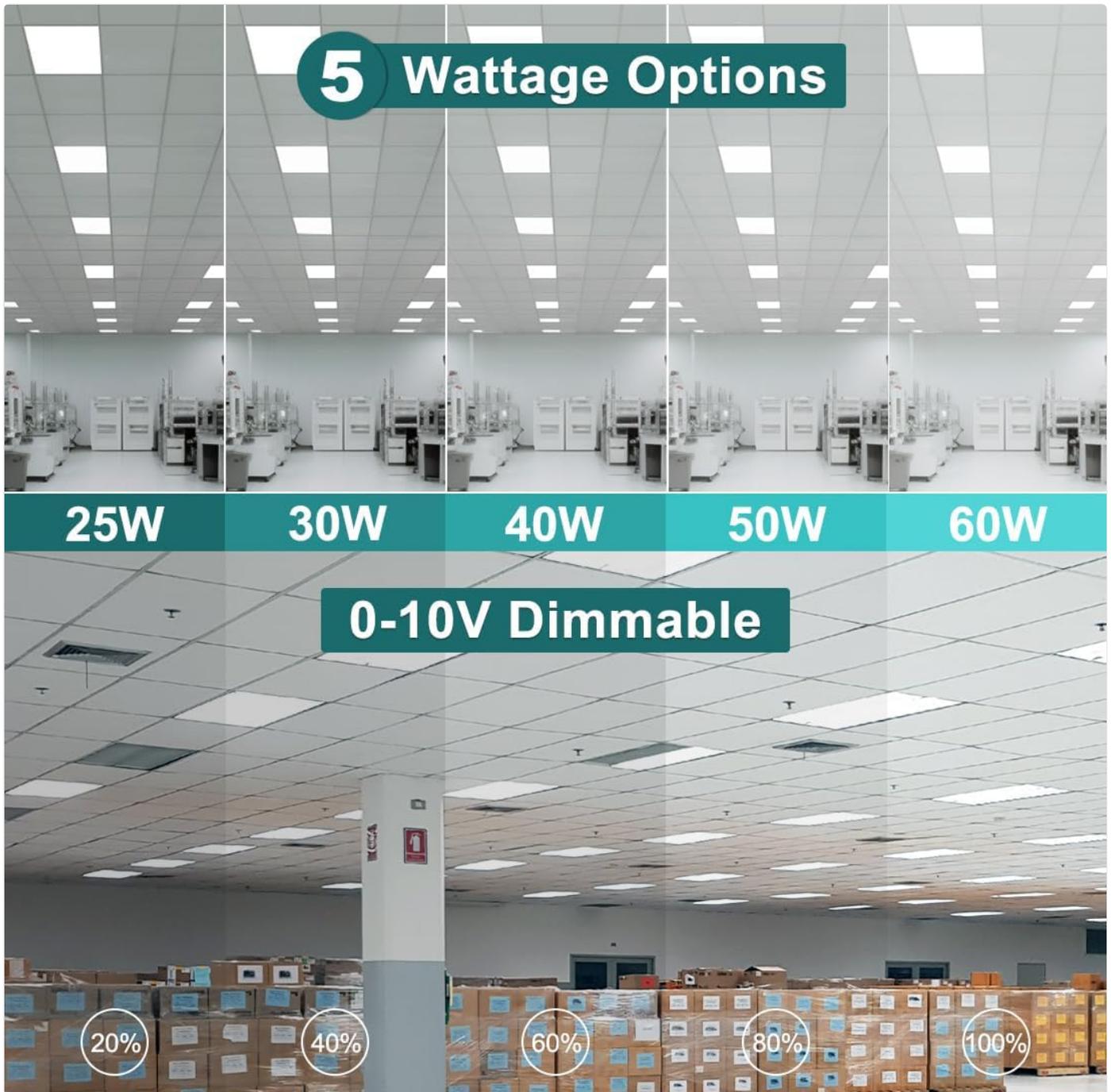- **Ultra-thin Design:** With a thickness of only 1.38 inches (3.5 cm).

This image demonstrates the five selectable wattage options (25W, 30W, 40W, 50W, 60W) for the LED panel light, illustrating how different wattages result in varying brightness levels within a room setting.
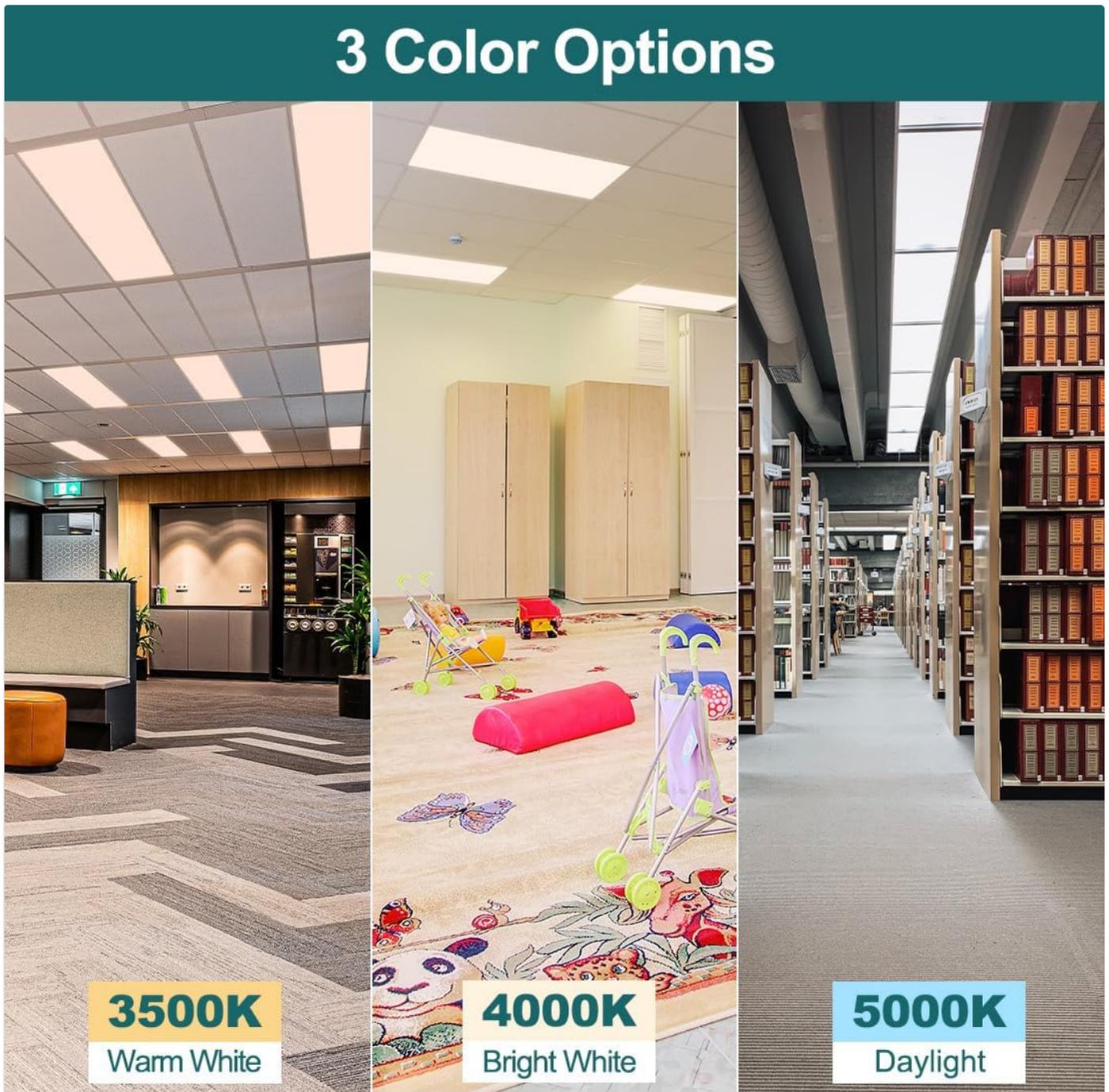

Figure 3: 3 Color Temperature Options (3500K, 4000K, 5000K)

This image illustrates the three selectable color temperature options: 3500K Warm White, 4000K Bright White, and 5000K Daylight. Each color temperature is depicted in a different room setting to show its effect on the ambiance.

3. PACKAGE CONTENTS

The kadision 2x4 LED Flat Panel Light package typically includes:

- kadision 2x4 LED Flat Panel Light (2 units for 2-Pack)
- Mounting clips for T-bar ceiling grid (pre-installed or included)
- Instruction Manual

Note: Suspension mounting kits and surface mounting frames are not included and must be purchased separately if those

installation methods are desired.

4. SAFETY INSTRUCTIONS

Please read and understand all safety instructions before installing or operating this fixture. Failure to follow these instructions may result in electric shock, fire, or other hazards.

- **WARNING:** Risk of electric shock. Disconnect power at the fuse or circuit breaker before installation or servicing.
- Installation should be performed by a qualified electrician in accordance with all national and local electrical codes.
- Ensure the supply voltage is compatible with the fixture's requirements (100-277V).
- Do not install in wet or damp locations. This fixture is designed for indoor use only.
- Do not handle the fixture with wet hands.
- Do not modify the fixture in any way. Any modifications may void the warranty and create safety hazards.
- Ensure the fixture is securely mounted to prevent it from falling.
- Keep flammable materials away from the fixture during operation.
- Do not look directly into the LED light source when the fixture is powered on, as this may cause eye strain or damage.

5. INSTALLATION

The kadision 2x4 LED Flat Panel Light offers multiple mounting options. This section details the recessed mounting method for T-bar ceiling grids. For suspension or surface mounting, additional kits (not included) are required.

5.1 Recessed Mounting (for T-bar Ceiling Grid)

1. **Prepare the Ceiling:** Ensure the T-bar ceiling grid opening is appropriate for a 2x4ft panel. Remove the existing ceiling tile or fixture.
2. **Disconnect Power:** Turn off the main power supply at the circuit breaker before beginning installation.
3. **Prepare Mounting Clips:** Locate the flexible mounting clips on the back of the panel. Bend each clip upwards, then turn the clip head 90 degrees so the hook faces outwards.
4. **Wire Connection:** Open the integrated junction box on the back of the panel. Connect the electrical wiring (Live, Neutral, Ground) from the building's power supply to the corresponding wires inside the junction box. Ensure all connections are secure and comply with local electrical codes. If using 0-10V dimming, connect the dimmer wires (purple and gray) to the appropriate dimmer control (dimmer not included).
5. **Insert Panel:** Carefully lift the LED panel and insert it into the T-bar ceiling grid opening. Ensure the panel rests securely on the T-bars.
6. **Secure Clips:** Make sure all mounting clips are well fastened to the T-bars to prevent accidental dislodgement.
7. **Restore Power:** Once installation is complete and all connections are secure, restore power to the circuit.

Flexible Mounting Clips
For standard T-bar ceiling grid

Durable Metal Back Plate
Aid in fast heat dissipation

60W/50W/40W/30W/25W

Wattage & CCT Switch
Easy to change between 5 wattages and 3 light colors

3500K/4000K/5000K

Integrated Junction Box
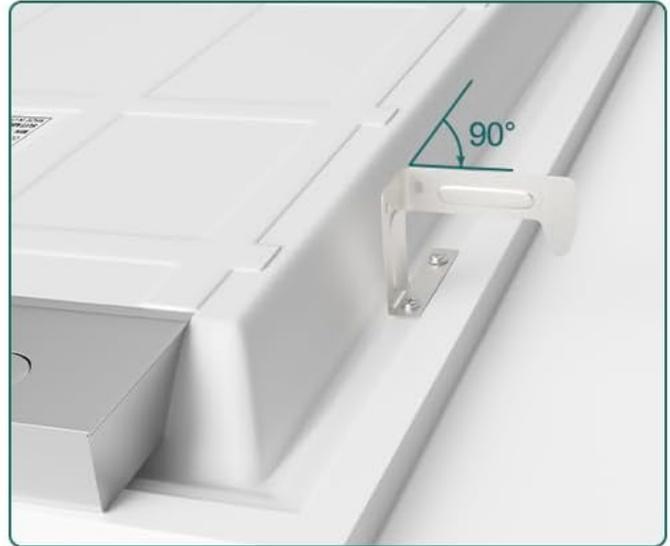1/2" knockouts for wire connection

Figure 4: Back Panel Features and Switches

This image provides a detailed view of the back of the LED panel light, showcasing its key components: flexible mounting clips for easy installation, a durable metal back plate for heat dissipation, switches for adjusting wattage and color temperature (CCT), and an integrated junction box for secure wire connections.
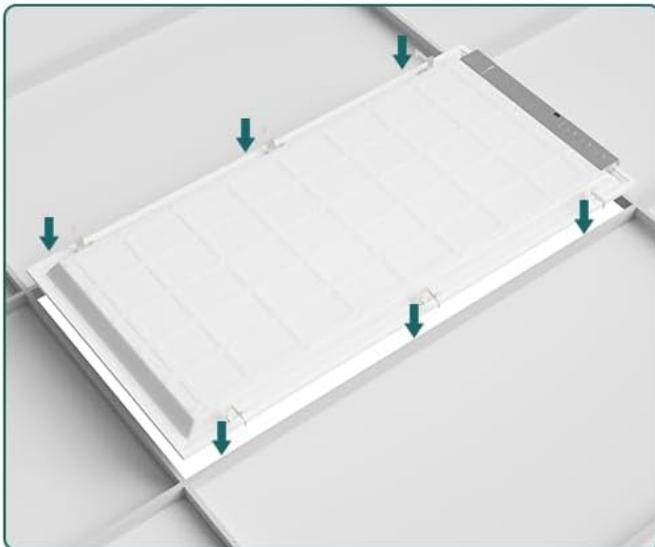
Recessed Mounting for T-bar Ceiling Grid

1. Bend the mounting clip on back of panel up.

2. Turn the clip head 90° with hook facing outside.

3. Insert the panel into T-bar ceiling grid.

4. Make sure all clips well fastened to the T-bars.

Also suitable for **Suspended & Surface Mount** (mounting kit not included)

Figure 5: Recessed Mounting Steps

This image illustrates the four steps for recessed mounting of the LED panel light into a T-bar ceiling grid. It shows bending the mounting clips, turning the clip head, inserting the panel, and ensuring clips are fastened.

5.2 Other Mounting Options

- **Suspension Mounting:** Requires a suspension kit (not included). The panel can be hung from the ceiling using cables.
- **Surface Mounting:** Requires a surface frame kit (not included). The frame is mounted to the ceiling, and the panel is then installed within the frame.
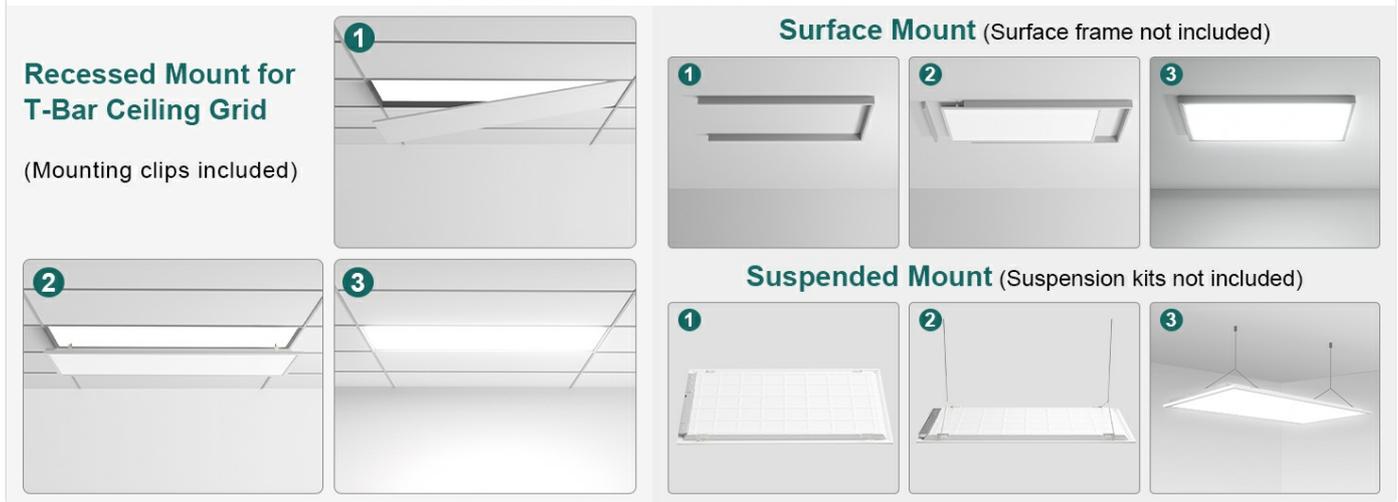
Figure 6: Multiple Mounting Options

This diagram visually explains the three primary mounting methods for the LED panel light: recessed mounting for T-bar ceiling grids, surface mounting using an optional frame, and suspended mounting with an optional kit.

6. OPERATION

The kadision LED Flat Panel Light features adjustable wattage and color temperature settings, allowing customization of the lighting output to suit specific needs.

6.1 Adjusting Wattage

Before or during installation, locate the wattage select switch on the back of the fixture (refer to Figure 4). Use this switch to choose your desired power output:

- 25W
- 30W
- 40W
- 50W
- 60W

Note: Adjusting the wattage will change the brightness level of the light.

6.2 Adjusting Color Temperature (CCT)

Similarly, locate the color temperature select switch on the back of the fixture (refer to Figure 4). Use this switch to choose your preferred light color:

- 3500K (Warm White)
- 4000K (Bright White)
- 5000K (Daylight)

Note: The color temperature can be adjusted to create different ambiances in your space.

6.3 0-10V Dimming

This fixture is compatible with 0-10V dimmers (not included). Connect the purple and gray dimming wires from the fixture to a compatible 0-10V dimmer control. This allows for smooth adjustment of the light's brightness from 10% to 100%.

Figure 7: Smooth Dimming Demonstration

This animated image illustrates the smooth dimming function of the kadision LED Flat Panel Light. It visually transitions the light from 10% to 100% brightness, demonstrating the fine-tuning capability when connected to a 0-10V dimmer.

7. MAINTENANCE

The kadision LED Flat Panel Light requires minimal maintenance. Follow these guidelines to ensure optimal performance and longevity:

- **Cleaning:** Ensure the power is disconnected before cleaning. Use a soft, dry, or slightly damp cloth to wipe the surface of the fixture. Do not use abrasive cleaners, solvents, or harsh chemicals, as these can damage the finish or optical components.
- **Inspection:** Periodically inspect the fixture for any signs of damage, loose connections, or wear. If any issues are found, disconnect power and consult a qualified electrician.
- **No User-Serviceable Parts:** This fixture contains no user-serviceable parts. Do not attempt to open or repair the unit yourself. Refer all servicing to qualified personnel.

8. TROUBLESHOOTING

If you encounter issues with your kadision LED Flat Panel Light, refer to the following troubleshooting guide:

Problem	Possible Cause	Solution
Light does not turn on.	No power supply; loose wiring; faulty switch or circuit breaker.	Check power supply at the circuit breaker. Verify all wire connections are secure. Test the switch. Consult a qualified electrician if the problem persists.
Light flickers or dims unexpectedly.	Incompatible dimmer; loose dimming wires; unstable power supply.	Ensure a compatible 0-10V dimmer is used. Check dimming wire connections (purple and gray). Verify stable power supply.
Incorrect wattage or color temperature.	Wattage/CCT switch set incorrectly.	Verify the position of the wattage and color temperature select switches on the back of the fixture. Adjust as needed (ensure power is off before adjusting).
Light output is lower than expected.	Wattage set too low; dimming level set too low.	Increase the wattage setting using the switch. Adjust the dimmer to a higher brightness level.

If troubleshooting steps do not resolve the issue, please contact kadision customer support for assistance.

9. SPECIFICATIONS

Model Number	PN2X4-50D-50K
Dimensions (L x W x H)	47.76" x 23.78" x 1.38" (121.3 cm x 60.4 cm x 3.5 cm)
Wattage	Selectable: 25W, 30W, 40W, 50W, 60W
Lumen Output	Up to 6600 Lumens (at 60W)
Color Temperature (CCT)	Selectable: 3500K, 4000K, 5000K
Voltage	100-277V AC
Dimmability	0-10V Dimmable
Color Rendering Index (CRI)	>80
Average Life	50,000 Hours
Material	Metal, Polycarbonate
Installation Type	Recessed (T-bar ceiling mount), Suspension (kit not included), Surface (kit not included)
Certifications	ETL Listed
Indoor/Outdoor Usage	Indoor

2x4 LED Flat Panel Light

47.76 in / 121.3 cm

23.78 in / 60.4 cm

Ultra-thin

1.38 in / 3.5 cm

Figure 8: Product Dimensions

This diagram provides the precise dimensions of the 2x4 LED Flat Panel Light, indicating its length of 47.76 inches, width of 23.78 inches, and an ultra-thin profile of 1.38 inches.

10. WARRANTY AND SUPPORT

kadision products are manufactured to high-quality standards and are backed by a manufacturer's warranty. Please refer to the product packaging or the official kadision website for specific warranty terms and conditions.

For technical support, troubleshooting assistance, or warranty claims, please contact kadision customer service. Have your model number (PN2X4-50D-50K) and purchase information ready when contacting support.

Contact Information: Please visit the official kadision website or refer to your purchase documentation for the most current contact details.

11. APPLICATIONS

The kadision 2x4 LED Flat Panel Light is suitable for a wide range of indoor commercial and institutional applications, including but not limited to:

- Offices
- Schools and Classrooms
- Hospitals and Healthcare Centers
- Conference Rooms
- Commercial Buildings
- Industrial Facilities
- Retail Stores

Figure 9: Application in an Office Environment

This image depicts kadision LED panel lights illuminating a contemporary office space, highlighting their suitability for professional work environments.
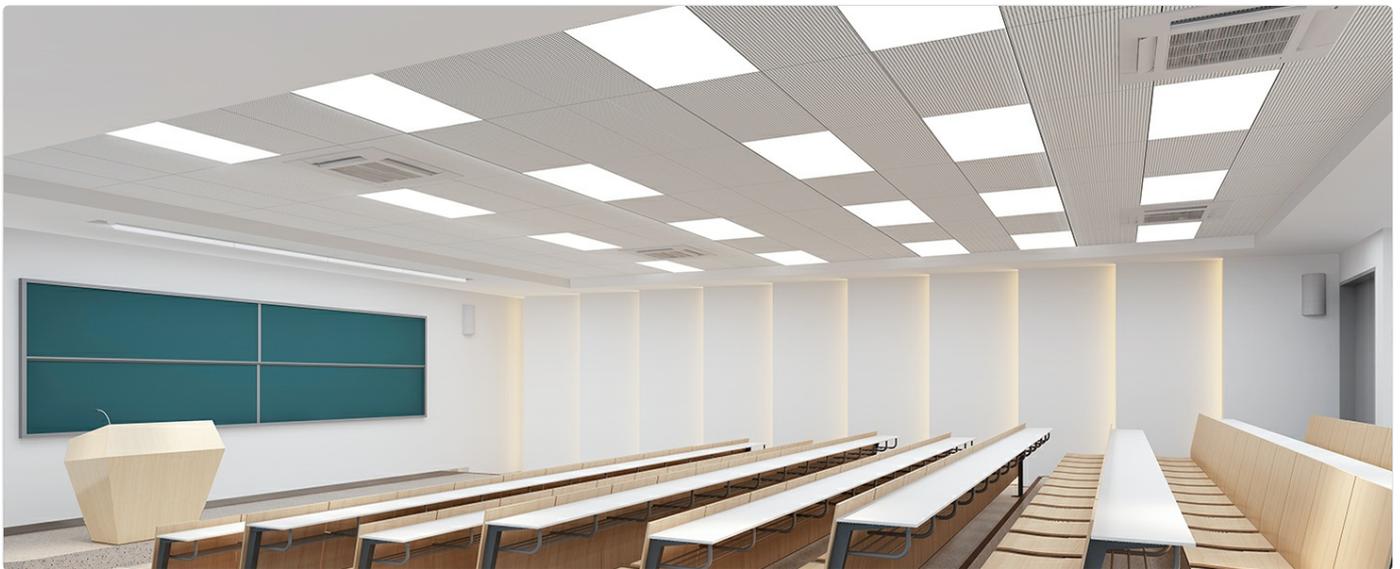

Figure 10: Application in a Classroom

This image shows kadision LED panel lights providing illumination in a classroom setting, demonstrating their effectiveness for educational spaces.