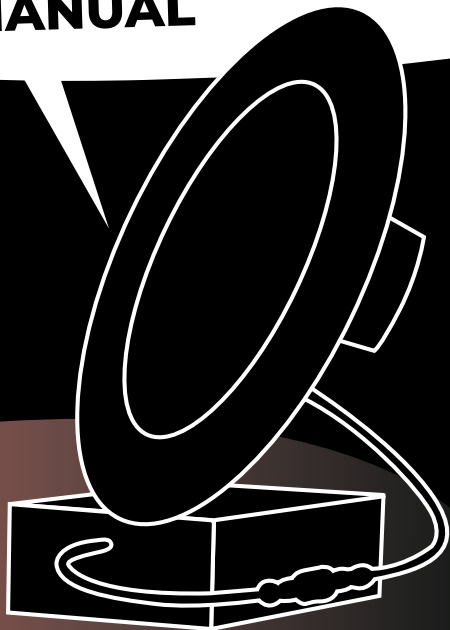


SEHNLICH

ULTRA-THIN PANEL LIGHT USER MANUAL



Product: Recessed Lights

Troubleshooting:

At Sehnlich™, we are dedicated to providing a hassle — free experience for all customers. Our data shows that most problems are related to the installation process and the use of dimmers. Usually, these issues can be resolved fairly easy. To save you time, we have created this quick guide to help you identify the root cause of any problems you may encounter.

Be sure to use the lights in accordance with the following specifications:

- 1 Our recessed lights are NOT to be used with external junction boxes:** While other brands' junction boxes may have a similar appearance, their technical parameters are not compatible with ours. Do not mix junction boxes of our lights with different sizes either, as their parameters will not match even if they look the same.
- 2 Use only the dimmers from the list of compatible models:** The dimmable LED lights were invented not too long ago, and their compatibility with dimmers has been a challenge since then. Unlike traditional incandescent lights or halogen lamps, dimmable LED lights are more complicated and have no uniform dimming standards. The dimmers on the list have been tested and proven to be compatible with our lights. Please only use a dimmer from the list of the recommended models.

- 3 The total power in the circuit should not exceed the rated power of the dimmer:** Each dimmer has a specific maximal rated power. To avoid overloading the dimmer, please ensure that the total power in the circuit (the sum of lighting power and dimmer power) does not exceed this value.
- 4 The circuit must not include any other external devices:** It is not recommended to have high — power devices (such as air conditioners, refrigerators, hair dryers, etc.) in the same circuit as recessed lights. This is because the startup of these devices can cause an unstable lighting voltage, which will reduce the lifespan of the lights and cause other problems, like flickering and noises.

Problems you may encounter:

1 Buzzing noises in the junction box:

The driver with galvanic isolation that we use for our LED lights is designed to completely isolate the input and output circuits, which prevents electric shock and fire incidents caused by temporary high voltage. This makes our lights safer and more durable. Our driver is FCC and EMC compliant and doesn't produce any humming noises. However, the buzzing issue could appear if an incompatible dimmer is installed in the circuit.

- a. Use only the dimmers from the list of compatible models. This ensures that you can enjoy a peaceful and comfortable environment.
- b. If you're finding that the noise from your recessed lights is too disruptive, please check the specifications (1) — (4). If the problem persists, please don't hesitate to reach out to us. We'll be more than happy to help you find a solution.

2 The dimming range is too small:

- a. Different LED drivers have different dimming ranges, which means the default setting on LED dimmers may not be suitable for every LED light. To solve this issue, many dimmer manufacturers offer a function to adjust the dimming range. For example, Lutron Electronics

company has an adjustment dial on the side of the dimmer or button — press programming. With this, you can press the button to set the desired dimming range. If you're unsure about how to operate a particular dimmer, consult the manufacturer or read the introduction manual.

- b. To ensure that your dimmer will work properly, please check the Dimmer Compatibility List. This will allow you to find out which dimmers have been tested and found to be compatible.

3 The light turns off before reaching the minimum brightness:

- a. If your light turns off before it reaches the minimum brightness, it's likely because the standard minimum brightness of your dimmer is too high. This exceeds the dimming range of the light, causing it to shut off. The solution is the same as in (2): which is to adjust the dimming range of the dimmer. This will allow the light to stay on at the minimum brightness.

- b. To ensure compatibility, please check the Dimmer Compatibility List to see if your dimmer has been tested.

4 The light flickers during dimming:

There are three primary reasons why your recessed lights may flicker when dimmed.



a. The first reason is that the standard dimming range of the dimmer is smaller than the specified range of the light. If the standard minimum brightness is slightly smaller than the specified minimum brightness of the light, then the light will not work as intended, and flicker unstably. The solution is the same as in (2) which is to set the dimming range.

b. The second reason is that there are other devices in the same circuit that are causing the lighting voltage to be unstable. Please check and turn off the other devices to see if that resolves the flickering issue.

c. To ensure your dimmer will work properly, please consult the Dimmer Compatibility List. This will help you to determine whether or not your dimmer has been tested and found to be compatible.

5

The light is not on when the switch turns on:

a. If you find that your recessed lights are not turning on when you switch them on, it could be due to the dimmer range being set too low. In this case, you will need to adjust the dimmer range to a normal value. For more information on how to do this, please see the adjustments that need to be done above in (2)

b. Please check if the wires are loose in the terminals. This may be the reason for the bad connection.

6

The light turns off accidentally:

If your recessed lights are flickering or turning off unexpectedly, it could be due to voltage fluctuations. Other devices in the circuit can affect the input voltage of the lights. To troubleshoot this issue, check and turn off other devices.

Troubleshooting Table:

Possible Cause:	Solution:
Using lights with external junction boxes	The junction box used must be Sehnlich™ and have the correct output parameters.
Not using a compatible dimmer	Select a compatible dimmer from our list of recommended dimmers.
The total power in the circuit is greater than the rated power of the dimmer	The total power in the circuit should be less than the maximum allowed power load of the dimmer.
There are external devices in the circuit	Ensure that there are no external devices in the circuit.

Problem 1: Buzzing noises in the junction box:

Problem 2: The dimming range is too small

Possible Cause:

Solution:

Different LED drivers have different dimming ranges

Dimmer manufacturers offer a function to adjust the dimming range.

Not using a compatible dimmer

Select a compatible dimmer from our list of recommended dimmers.

Problem 3: The light turns off before reaching the minimum brightness

Possible Cause:

Solution:

The standard minimum brightness of the dimmer is too high — This exceeds the dimming range of the light

Adjust the dimming range of the dimmer using an adjustment dial or button — press programming

Not using a compatible dimmer

Select a compatible dimmer from our list of recommended dimmers.

Possible Cause:

Solution:

Problem 4: The light flickers during dimming

The standard dimming range of the dimmer is smaller than the specified range of the light.

Set the dimming range.

Other devices in the same circuit are causing the lighting voltage to be unstable.

Check and turn off the other devices.

Not using a compatible dimmer

Select a compatible dimmer from our list of recommended dimmers.

Problem 5: The light is not on when the switch turns on

Possible Cause:

Solution:

Dimmer range set is too low

Adjust dimmer range to a normal value using an adjustment dial or button — press programming

Wires are loose in the terminals

Check the connection

Possible Cause:

Solution:

Problem 6: The light turns off accidentally

Voltage fluctuations

Check other devices in the circuit



	4"	6"
Specifications		
Power	9W	12W
Incandescent equivalent	75W	100W
Voltage	120V	
Power Factor	0.9	
Total harmonic distortion	<15%	
Materials	Housing: die — casting aluminium Shade: Polycarbonate	
Span Life	50000H	
Estimated Yearly Energy Cost	\$1.18*	\$1.58*
Dimensions and weights		
Fixture size	D4.72*0.9" (D120*22.9mm)	D6.69*0.9" (D150*22.9mm)
Junction box size	4.1*2.7*1.4" (105*68*35mm)	
Fixture weight	4 Oz (113.4g)	7.36 Oz (208.7g)
Junction box weight	7.15 Oz (202.6g)	7.2 Oz (204.1g)



Cutting hole diameter	4 — 1/8" (105mm)	6 — 1/8" (155mm)
Lighting parameters		
Luminous flux	750Lm	1050Lm
Efficiency	84Lm/W	88Lm/W
Dimming	Please refer to Compatibility List	
Color Temperature (CCT)	2700/3000/3500/4000/5000K	
Color Rendering Index (CRI)	≥85	
Beam angle	120°	

*Based on 3 hrs/day, 12 C /kwh. Cost depends on rates and use

WARNING

- 1 Prior to installation, make sure to turn off the power supply at the fuse box or circuit breaker to avoid any possible electrical shock.
- 2 Installation or servicing of the luminaire wiring and electrical parts may pose a risk of fire or electric shock. If you are not qualified, do not attempt the installation. Please contact a qualified electrician.
- 3 Always connect the fixture only to a 120 volt, 60 Hz power source to avoid voiding the warranty.
- 4 Be cautious when looking into the light source as LEDs emit bright light and too much exposure can damage your eyesight.
- 5 Handle the junction box with care as the edges may be sharp — it is advised to wear gloves while handling.



DIMMERS COMPATIBILITY LIST

Lutron

PD — 5NE	Smart dimmer, 250W
RRD — 6NA	Smart dimmer, 150W
PD — 6WCL	Smart dimmer, 150W
MA — PRO	Single pole/multi — location, 250W
RRD — PRO	Single pole/multi — location, 250W
DVRP — 253P	Single pole/3 — way, 250W
CTRP — 253P	Single pole/3 — way, 250W
GT — 5NEM	Single pole/multi — location, 250W
NTRP — 250	Single pole, 250W
MSCL — OP153M	Single Pole/3 — Way/Multi — Location, 150W
MACL — 153M	Single Pole/3 — Way, 150W
AYCL — 153P	Single Pole/3 — Way, 150W
TGCL — 153PH	Single Pole/3 — Way, 150W
DVCL — 153P	Single Pole/3 — Way, 150W
DVCL — 253P	Single Pole/3 — Way, 250W

NOTICE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio TV technician for help.

INSTALLATION GUIDE

Items Required

(Purchase separately)

Gloves
and Safety
Glasses



Ladder



Power Drill
with a hole saw
attachment



Wire
Cutters



Wire
Strippers



Dimmer
from the
Compatibility
List (if needed)



Can be installed in 3/8" to 5/8"
thick ceilings

1



Turn power OFF from
the electrical panel
before the installation.

2



Determine the location for the
installation and cut ceiling hole
in accordance with cut — hole
dimensions. Use the template inside
the box to cut a hole in the ceiling.

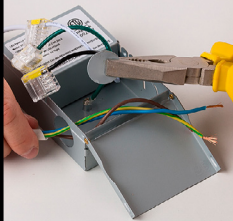
3



Open the junction
box swing cover and
remove the appropriate
knockout(s).



4



Insert the electrical supply cable through the knockout.

5



Using quick — connect push — in terminals, connect the green ground wire to the green wire terminal; black wire to the black wire terminal; white wire to the white wire terminal.

6



Place all wiring and connections back into the box and close the cover. Connect the driver to the light panel.

7



Insert the junction box through the opening.

8



Push mousetrap springs on the fixture upwards and insert the fixture base into the mounting hole. Release the clips and the fixture will be pulled flush to the ceiling. The springs will rotate back into position and hold the LED module tight to the ceiling.



Cleaning and Maintaining your Recessed Lights

To ensure optimal performance and a long lifespan for your recessed lights, regular cleaning and maintenance are necessary. Below are some tips on how to properly care for your fixtures:

- Before cleaning, always disconnect the power to the fixture by turning the breaker off or removing the fuse from the fuse box.

1

Prior to any actions, always shut the power off at the main electrical panel.

2

All electrical connections should be made in compliance with local and national electric code standards.

3

Our recessed lights should be used only in conjunction with junction boxes from Sehnlich™.

4

To avoid overloading the circuit, confirm that the total power in the circuit is less than the rated power of the dimmer.

5

In addition, verify that there are no other external devices in the circuit.

- Use a soft, dry cloth to wipe down the fixture. Avoid using cleaners with chemicals, solvents, or harsh abrasives as these can damage the finish or sensitive parts of the light.

- For LED recessed lights, do not use liquid cleaner on the LEDs, LED driver, or wiring inside the light fixture. Doing so can cause irreparable damage.

By following these simple tips, you can ensure that your recessed lights will provide years of trouble — free operation.

WARNING:



It is important to take the time to read and understand all instructions before beginning your recessed lighting installation. This will help ensure a successful installation and avoid any potential issues



WARRANTY SERVICE

All Sehnlich™ products come with a 8 year warranty. If for any reason, you are unhappy with your purchase, please contact us at:

support@sehnlich.com

Your satisfaction is our top priority!

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