



USER'S GUIDE

SIRHC402 -1

DIMMER WITH TIMER FOR INFRARED RADIATOR





WARNING

Before installing and operating this product, the owner and/or installer must read, understand and follow these instructions and keep them handy for future reference. If these instructions are not followed, the warranty will be considered null and void and the manufacturer deems no further responsibility for this product. Moreover, the following instructions must be adhered to in order to avoid personal injuries or property damages, serious injuries and potentially fatal electric shocks. All electric connections must be made by a **qualified electrician**, according to the **electric and building codes** effective in your region. **Do NOT connect this product to a supply source other than 120 VAC, 208 VAC or 240 VAC**, and do not exceed the load limits specified. Protect the heating system with the appropriate circuit breaker or fuse. You must regularly clean dirt accumulations on the unit. Do NOT use fluid to clean the dimmer with timer air vents.

To reduce the risk of overheating and possible damage to other equipment, do not install to control a receptacle, a motor-operated appliance or a transformer-supplied appliance.

This product has to be installed indoors in a controlled environment.

Note:

This handling description is printed prior to product development. When a part of the product specification must be changed to improve operability or other functions, priority is given to the product specification itself. In such instances, the instruction manual may not entirely match all the functions of the actual product.

Therefore, the actual product and packaging, as well as the name and illustration, may differ from the manual.

The screen/LCD display shown as an example in this manual may be different from the actual screen/LCD display.

DESCRIPTION

The SIRHC402 dimmer with timer can be used to control an infrared radiator (SIRH). It lets you warm the temperature in an outdoor area in cold weather. This product is designed for installations with electrical current — with a resistive load — of a maximum of 16.7 A (2000 W @ 120 VAC, 3300 W @ 208 VAC, and 4000 W @ 240 VAC).

This dimmer with timer is not compatible with the following installations:

- electrical current higher than 16.7 A with a resistive load (2000 W @ 120 VAC, 3300 W @ 208 VAC and 4000 W @ 240 VAC);
- electrical current lower than 1.2 A with a resistive load (150 W @ 120 VAC, 260 W @ 208 VAC and 300 W @ 240 VAC);
- inductive load (presence of a contactor or a relay); and
- electric heating system.


Parts supplied:

- one (1) dimmer with timer;
- two (2) mounting screws; and
- two (2) solderless connectors suitable for copper wires.

Selection of dimmer location

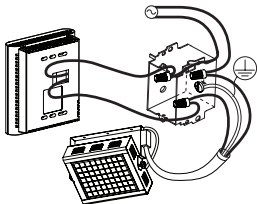
The dimmer must be mounted on a connection box on a wall at around 1.5 m (5 feet) above the floor level, on a section of the wall exempt from pipes or air ducts.

Dimmer mounting and connection

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Cut off power supply on lead wires at the electrical panel in order to avoid any risk of electric shock.
- Ensure that the air vents of the dimmer are clean and clear of any obstruction.
- Make the required connections using the solderless connectors. Refer to the following diagram. For connections with aluminum wires, you must use CO/ALR connectors. Please note that the dimmer wires have no polarity, which means that any wire can be connected to the other.

Make sure that line voltage (120 VAC, 208 VAC, or 240 VAC) is present. No other device may be installed between this dimmer and the power supply (such as a thermostat).

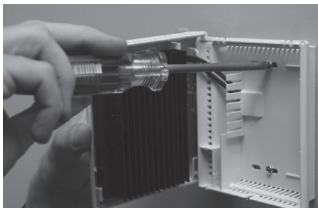
2-WIRE INSTALLATION



- Using a screwdriver, loosen the screw at the bottom of the dimmer. Separate the two parts of the dimmer by lifting up the bottom.



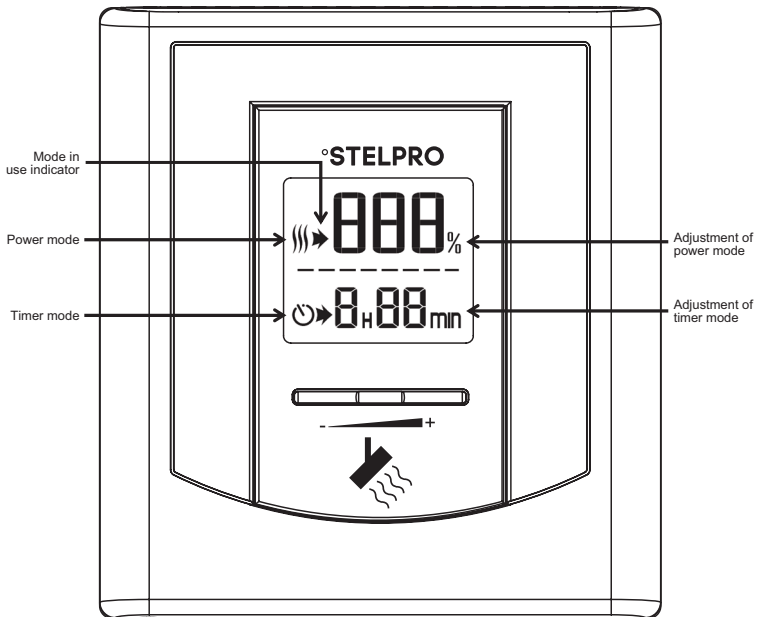
- Align and secure the back of the dimmer to the connection box using the two screws supplied.



6. Replace the front part of the dimmer on the mounting base and tighten the screw at the bottom of the unit.



7. Turn on the power.
8. Set the dimmer to the desired setting (see the following section).



Principal features of the timer

Frequency: 50/60Hz

Operation

Phase control at startup controls the inrush current and preheats the lamp. The duration of this operation will not exceed 14 seconds. During this operation, the Power mode and Timer mode icons will be displayed, either as a fixed display or as blinking icons.

Adjusting the power and the timer

The "+" and "-" buttons let you adjust the power of the lamp in Power mode and the duration of time in Timer mode. Power can be adjusted in units of 10% (from 0% to 100%), and the timer can be adjusted in units of 15 minutes (0H00MIN to 9H45MIN). To set the power or the timer, the dimmer must be set to the corresponding mode, meaning that the mode in use indicator arrow (▶) must point toward the mode in use. Adjustments can be made in units of 10% (Power mode) or in units of 15 minutes (Timer mode) by pressing the "+" or "-" buttons successively. To scroll through the settings, press and hold either the "+" or "-" button.

Switching between the Power mode and Timer mode

To switch from one mode to the other, press the two buttons simultaneously and release them within three seconds.

The mode in use indicator arrow (▶) will be displayed next to the mode currently in use.

Power mode (⏻)

In Power mode, the power symbol will be displayed and the mode in use indicator arrow (▶) will point to the three figures at the top of the digital screen. These three figures display the power level (expressed as a percentage).

Power mode with inactive timer

When the timer is inactive (0H and 00MIN), the three figures at the top of the digital screen will indicate the power level of the lamp. The letters H and MIN, and the clock icon will continue to be displayed at the bottom of the screen, but the figures will be not be displayed. When the power level is at 0%, the dimmer will turn the lamp off. "—" will be displayed on the three-figure display at the top of the screen.

Power mode with active timer

When the timer is active, (time set to more than 0H00MIN), the three figures at the top of the digital screen will indicate the power level of the lamp, and the three figures on the bottom will display the time remaining on the timer (descending in 1-minute units). Note that when switching from Power mode to Timer mode, if the Timer mode was previously inactive, the timer figures will indicate 0H00MIN (the clock will not blink) to indicate that the Timer mode has been activated. When the timer reaches 0H00MIN, the lamp will turn off (---), the mode will switch automatically to Timer mode. At that moment, the clock icon will blink (setting the timer to any increment above 0H00MIN or switching to Power mode will stop the blinking). If at this point you increase the time on the timer without switching modes, the lamp power level will correspond to the last level entered (if no power level was previously entered, the power will be 100%). If, however, you switch to Power mode, the Power mode with inactive timer will be activated and the last power level entered will no longer be taken into account.

Setting the power to off (---) with active timer

Setting the power to off (---) while the timer is active resets the timer. Once the timer has been reset, the Power mode with inactive timer will be activated.

Timer mode(☺)

In Timer mode, the timer symbol will be displayed and the mode in use indicator arrow (symbol) will point to the three figures at the bottom of the digital screen. These three figures display the operating time of the unit. The time on the timer can be adjusted using the "+" or "-" buttons. When the timer displays 0H00MIN (either because the time has run out or because the time has been set to 0H00MIN using the buttons) the lamp will automatically turn off (---) and the clock icon will blink. If the lamp turns off (---) in this manner, if time is then added on the timer, the lamp power level will correspond to the last level entered. However, if at this point you switch to Power mode, the Power mode with inactive timer will be activated and the last power level entered will no longer be taken into account. Any changes made on the timer will take effect automatically when the changes are made. For example, if the time remaining on the time is 5H00MIN and you increase the time to 7H00MIN, the 7H00MIN will take effect the moment you set the new time. Also, it is possible to follow the time remaining in minutes (the countdown is displayed in minutes). The default value (standard factory setting) of the timer is 0H00MIN.

ON-OFF

The unit turns off (---) when the power is set at 0% or when the time on the timer has run out. The three figures at the top of the digital screen will display “---.”

Saving the parameters

The dimmer will not save any parameters. Therefore, in the event of a power failure, the dimmer will return to its default settings (Timer mode inactive — 0H00MIN — and power off).

PROBLEM	DEFECTIVE PART OR PART TO CHECK
The dimmer is hot.	<ul style="list-style-type: none"> Under normal operating conditions, the dimmer housing can reach nearly 40° C at maximum load. This is normal and will not adversely affect the operation of the dimmer.
Heating is always on even if the display reads ---.	<ul style="list-style-type: none"> Check if the dimmer is properly connected. Refer to the installation section.
Heating does not work even though the dimmer indicates it is on.	<ul style="list-style-type: none"> Check if the dimmer is properly connected. Refer to the installation section.
The display does not come on.	<ul style="list-style-type: none"> Check if the dimmer is properly connected. Refer to the installation section. Check the power supply at the electrical panel.
The display is dim when the heating is on.	<ul style="list-style-type: none"> The load is lower than the minimum load. Install a heating unit that is within the load limits of the dimmer.
Weak luminosity of the display.	<ul style="list-style-type: none"> Possibility of a bad contact. Check the dimmer connections. Refer to the installation section.

N.B. If you are unable to solve the problem after having verified these points, please communicate with our customer service. Consult our website for the phone numbers.

Supply voltage:

120 / 208 / 240 VAC, 50/60 Hz

Maximum electrical current with a resistive load:

16.7A

4000W @ 240 VAC

3300W @ 208 VAC

2000W @ 120 VAC

Minimum electrical current with a resistive load:

1.2A

300W @ 240 VAC

260W @ 208 VAC

150W @ 120 VAC

Capacity range:

10% to 100%

Capacity intervals:

10%

Timer display range:

0H0MIN to 9H45MIN

Timer intervals:

0H15MIN

Storage temperature:

-20 °C to 50 °C (-4 °F to 120 °F)

Certification:

cCSAus

LIMITED WARRANTY

This unit has a 3-year warranty. If at any time during this period the unit becomes defective, it must be returned to its place of purchase with the invoice copy, or simply contact our customer service department (with an invoice copy in hand). **In order for the warranty to be valid, the unit must have been installed and used according to instructions.** If the installer or the user modifies the unit, he will be held responsible for any damage resulting from this modification. The warranty is limited to the factory repair or the replacement of the unit, and does not cover the cost of disconnection, transport, and installation.

E-mail: contact@stelpro.com

Web site: www.stelpro.com