

Solaira SMaRT Timer On/Off Control

SMRTTIM60 and SMRTTIM40

Installation & User Manual

KEEP THESE INSTRUCTIONS FOR FUTURE REFERENCE



SAFETY WARNING



ALL INSTALLATIONS/SERVICE MUST ONLY BE PERFORMED BY A LICENSED/CERTIFIED ELECTRICIAN TO LOCAL AND NATIONAL ELECTRICAL CODE (NEC).



WARNING: SHOCK AND FIRE HAZARD:



- Serious injury or death could occur
- Disconnect ALL power sources before removing back panel. Power should only be re-connected after electrical installations are complete and back cover replaced
- Be certain the power source conforms to specifications outlined on heater label
- Assure to connect green wire from heater to ground connection from electrical supply, not to a live or “hot” conductor
- Engineer/Electrician/Installer to determine suitability of this appliance in intended application and compliance with all local, state/provincial and National electrical Code (NEC) requirements
- Do not use in locations containing hazardous or explosive atmospheres.

ELECTRICAL RATING

SMRTTIM40 208 - 240VAC 50/60HZ, 16.6A MAX CURRENT, 4000W max load

SMRTTIM60 208 - 240VAC 50/60HZ, 25A MAX CURRENT, 6000W max load



WARNING SERIOUS INJURY OR DEATH COULD OCCUR, DISCONNECT ALL POWER PRIOR TO SERVICE



Intertek

SPE-1000 CANADA INSPECTED

Due to ongoing product improvements, specifications and dimensions are subject to change without notice and without incurring obligations.

Introduction

The SMRTTIM60 and SMRTTIM40 are part of a family of standalone controllers designed to provide energy saving when used with quartz infrared halogen lamps or other heating and lighting products. These TIMER model switch the lamps on for a predetermined time period of between 1 and 60 minutes. The microcontroller-based unit incorporates zero-voltage switching and a soft-start function to eliminate the lamps' initial high inrush current – potentially increasing lamp life by as much as 30%. Installation of the unit is simple and once installed is relatively maintenance-free.

Product Features

- Energy saving – provides heat for a pre-determined time period.
- Extends lamp Life.
- Soft-start/zero-voltage switch-off.
- Low-cost.

Applications: Bus stops, patio areas, smoking shelters, restaurants, warehouses, workshops, warehouses.

Installation

Important: Read carefully the following information before installing the unit.

The SMRTTIM60 and SMRTTIM40 should be fixed securely using the four mounting holes accessible from the front of the unit. Remove the lid to access the mounting holes. To ease installation, a mounting template is provided opposite to locate the 4 mounting hole centres.

IMPORTANT! The unit must be orientated with the cable glands facing down.

Wiring

SAFETY FIRST

The Solaira SMaRT Timer is a high-power electrical device and **MUST ONLY BE INSTALLED BY A CERTIFIED ELECTRICIAN WITH REFERENCE TO LOCAL, STATE/PROVINCAL AND FEDERAL NEX XODES AND ELECTRICAL REQUIREMENTS.**



Warning! Isolate the mains supply before commencing any work on this unit. Ensure all earth wires are connected to maintain earth continuity to the lamp fittings.



Warning! Disconnect the power supply before commencing any work on the unit. Failure to do so could result in serious injury or fatality.

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Wiring SMRTTIM60

The unit is fitted with three cable glands. Only one cable should be fitted per strain relief to prevent degrading the unit's water resistant IP rating. To connect 4 lamps, refer to the **Wiring Diagram** on the next page for an alternative configuration using two junction boxes.

The power supply connects to the terminal block marked 'LINE'. Connect the supply **LIVE** to the 'L' terminal, **NEUTRAL or LINE 2** to the 'N' terminal and **GROUND** to the 'E' terminal.

The heaters connect to the terminal block marked 'LOAD'. Connect the load **LIVE** to the 'L' terminal, **NEUTRAL or LINE 2** to the 'N' terminal and Ground to the 'E' terminal.

Important! Ensure all ground wires are connected to maintain ground continuity to the heater fittings.

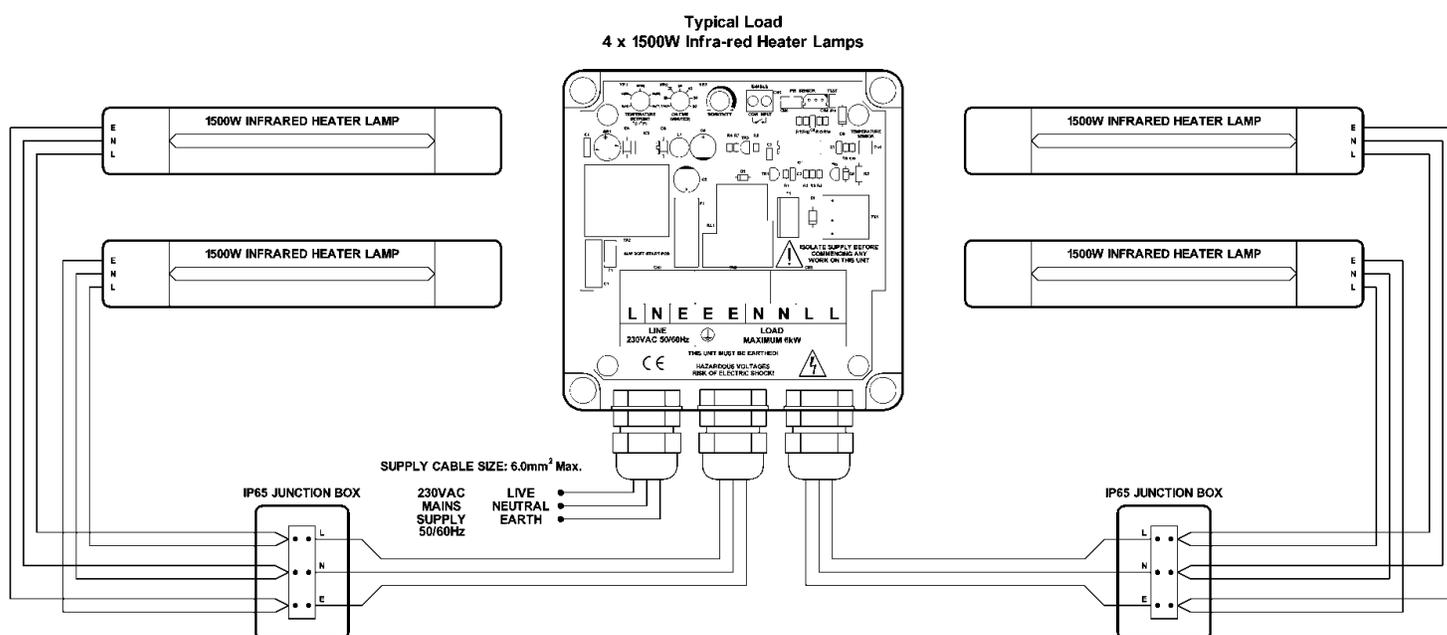
Check all wiring and make sure the cable glands are tightened.

Illustrative Wiring Diagram SMRTTIM60*

*Connection diagram is for illustrative purpose only. Installation must be carried out by certified electrician to local, state/provincial and National Electric Code (NEC) requirements. In foresight Consumer Products Inc. assumes no responsibility for the heaters or controller electrical plan or installation.



WARNING: SERIOUS INJURY OR DEATH COULD OCCUR, DISCONNECT ALL POWER PRIOR TO SERVICE

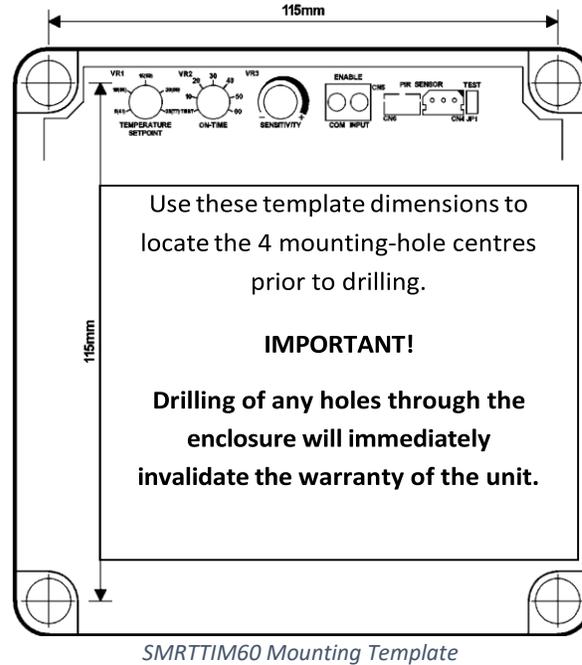


Commissioning SMRTTIM60

Set the on-time pre-set (VR2) to a time period of between 1 and 60 minutes, Replace the lid and switch on the mains supply to the unit. Press the push-button on the front of the unit to switch the lamps on.

IMPORTANT! When wall mounting, the unit must be orientated with the cable glands facing down.

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Wiring SMRTTIM40

The unit is fitted with two cable glands. Only one cable should be fitted per gland to prevent degrading the unit's IP rating. When fitting two lamps, refer to 'Wiring Diagram' for an alternative wiring configuration using a junction box.

The power supply connects to the terminal block marked 'LINE'. Connect the supply **LIVE** to the 'L' terminal, **NEUTRAL** to the 'N' terminal and **EARTH** to the 'E' terminal.

The heaters connect to the terminal block marked 'LOAD'. Connect the load **LIVE** to the 'L' terminal, **NEUTRAL** to the 'N' terminal and **EARTH** to the 'E' terminal. If two lamps are to be fitted they must be wired in parallel.

Check all wiring and make sure the cable glands are tightened.

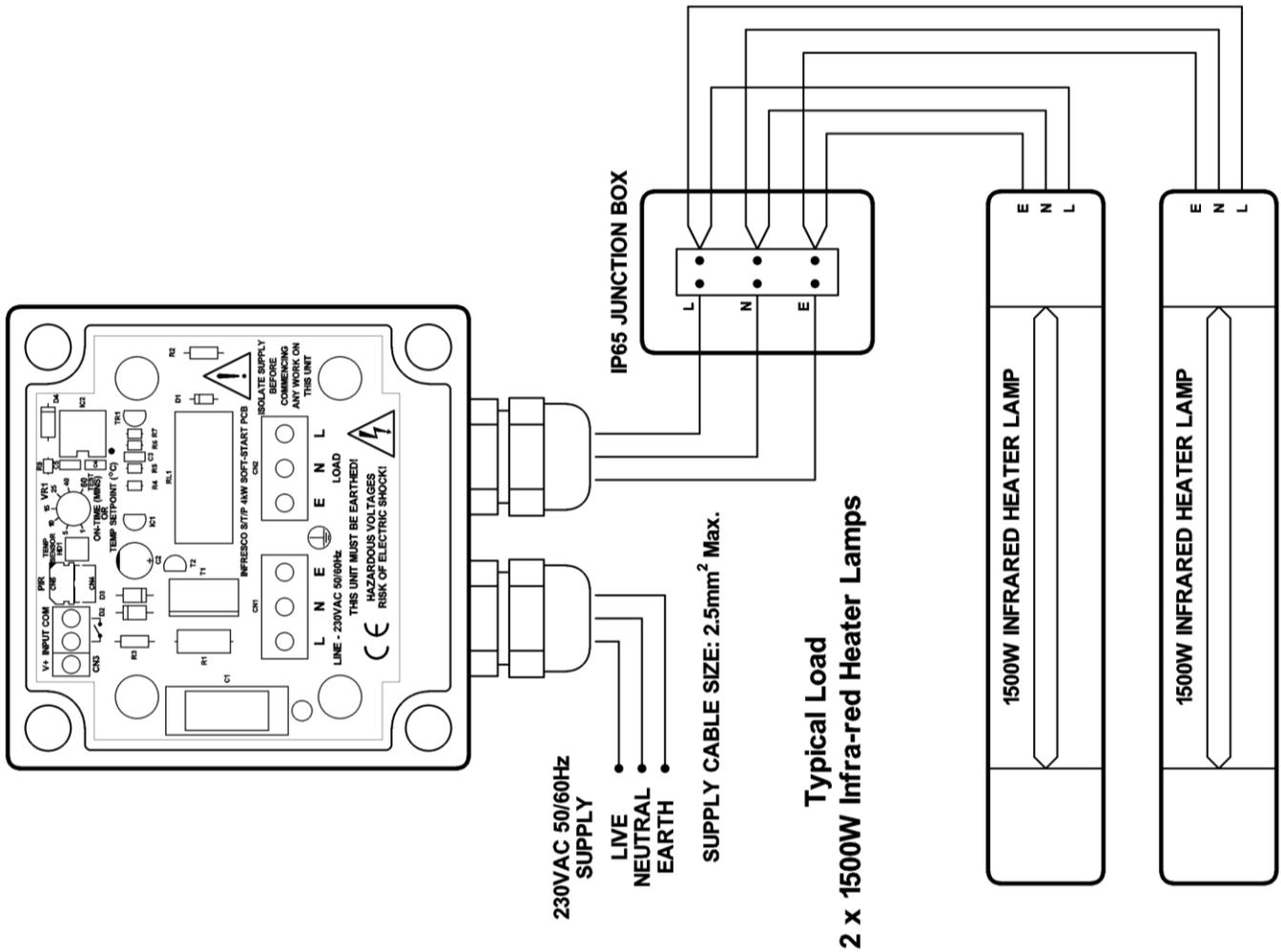
Illustrative Wiring Diagram SMRTTIM40*

*Connection diagram is for illustrative purpose only. Installation must be carried out by certified electrician to local, state/provincial and National Electric Code (NEC) requirements. Inforesight Consumer Products Inc. assumes no responsibility for the heaters or controller electrical plan or installation.



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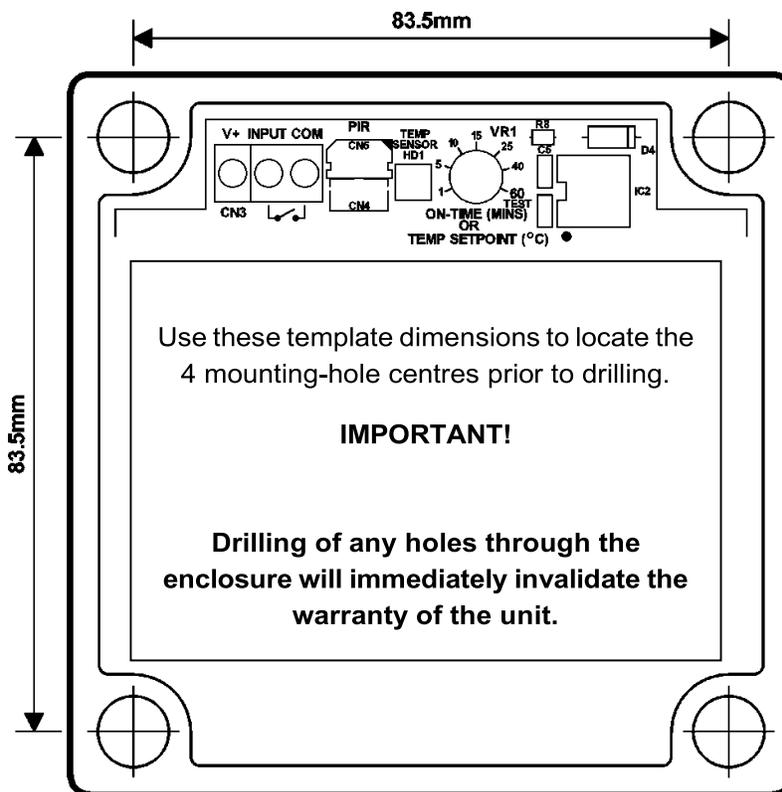
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Commissioning SMRTTIM40

Set the on-time pre-set (VR1) (Shown Below) to a time period of between 1 and 60 minutes. Replace the lid and switch on the main power supply to the unit. Press the push-button on the front of the unit to switch the lamps on.

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SMRTTIM40 Mounting Plate

Technical Specification

SMRTTIM60

Supply Voltage	230VAC +/- 10% 50/60 Hz
Switching Capacity	6000W Max.
Lamp On-Time	1 to 60 minutes
Current Consumption (control circuit)	20mA
Terminals	6.0mm ² Rising Clamp
Operating Temperature	-20 to 40°C
Protection Rating	IP65
Gland Diameter	Max Cable Entry 2.5mm ²
Enclosure Dimensions (WxLxH)	130x130x75 (mm)

SMRTTIM40

Supply Voltage	230VAC +/- 10% 50/60 Hz
Switching Capacity	4000W Max.
Lamp On-Time	1 to 60 minutes
Current Consumption (control circuit)	50mA
Terminals	2.5mm ² Rising Clamp
Operating Temperature	-20 to 40°C
Protection Rating	IP65
Gland Diameter	Max Cable Entry 2.5mm ²

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Enclosure Dimensions (WxLxH)

100x100x60 (mm)

Troubleshooting

Warning! Isolate the mains supply before commencing any work on the unit. Failure to do so could result in serious injury or fatality.

Problem: Lamps do not switch on.

Solution:

- Check the mains supply to the unit is switched on.
- Check the LINE and LOAD wiring connections to the unit 7& lamps. Fit a lamp that you know is in working order.
- Contact your supplier.

Problem: Lamps do not switch off.

Solution:

- Check the on-time pre-set (VR2) is set correctly.
- Contact your supplier.

LIMITATION OF LIABILITY

It is understood and agreed that seller's liability whether in contract, in tort, under any warranty, in negligence or otherwise shall not exceed the return of the amount of the purchase price paid by purchaser and under no circumstances shall seller be liable for special, indirect, or consequential damages. The price stated for the equipment is a consideration in limiting seller's liability. No action, regardless of form, arising out of the transactions may be brought by purchaser more than one year after the cause of action has accrued.

WARRANTY

1. SOLAIRA CONTROL products are guaranteed to be free from mechanical and electrical defects for a period of one year from date of shipment under normal use and service provided installation is made in accordance with manufacturers' recommendations.

2. Parts deemed defective shall be repaired or replaced at manufacturers option and at manufacturers expense but shall not include foreign or federal excise taxes, state or municipal sale or use taxes, all such taxes not limited to the foregoing being responsibility of the purchaser.

3. No charge for travel and/or mileage will be allowed to purchaser.

4. SOLAIRA reserves the right to make changes in design or make any improvements on any products. The right is always reserved to modify our equipment because of new technology, underwriter's requirements and/or government regulations.

5. The following are not covered under warranty:

- a. INSTALLATION OF CONTROL BY NON-CERTIFIED ELECTRICIAN.
- b. Failure from neglect, abuse, careless handling and mis-application of unit.
- c. Failure to observe guidelines for installation or improper voltage hook-up.
- d. Failure caused by improper installation and not following local, state/provincial and federal electrical guidelines
- e. Unless specifically allowed by SOLAIRA CONTROLS, no other charges may be included under warranty.

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Notice: Inforesight Consumer Products Inc. website, product information and products can be accessed from Canada and other countries around the world. Customer understands that some or all products provided by Inforesight Consumer Products Inc. may not be available for purchase or installation in certain jurisdictions or geographical areas. Inforesight Consumer Products Inc. reserves the right, in its sole discretion, to exclude or otherwise limit the provision of any product to a person or entity residing in any jurisdiction or geographical area outside of Canada. Inforesight Consumer Products Inc. provides general product information, installation guidelines and procedures and Customer understands that Customer is solely and exclusively responsible for installation of the product and ascertaining all applicable local municipal, provincial, state, and federal NEC (National Electrical Code) rules, by-law, ordinances and guidelines applicable to the installation of any Inforesight Consumer Products Inc. products. Customer must strictly adhere to and be compliant with the local rules, laws, ordinances and legal requirements for the safe installation and use of any Inforesight Consumer Products Inc. products. Instruction manuals are included with the product packaging and copies of our instruction manuals are available upon request. Under no circumstances shall Inforesight Consumer Products Inc. or its affiliated entities, employees, agents, shareholders, officers or directors be liable to Customer or any third party for any product installations and Customer releases Inforesight Consumer Products Inc. from any and all losses, death, personal injury, property damage, other damages, rights, claims, demands and actions of any kind arising from the Customer's installation and use of the product, whether the installation was or was not in accord with the provided instruction manual and/or in compliance with applicable local laws.

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