English

OPERATING MANUAL

Infrared Hot Plates

SLK1 / SLK2 / SLK2-T

WIGGENS
THE MAGIC MOTION

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Congratulations!

You have made an excellent choice.

WIGGENS thanks you for the trust you have placed in us.

This operating manual has been designed to help you gain an understanding of the operation and possible applications of our instruments. For optimal utilization of all functions, we recommend that you thoroughly study this manual prior to beginning operation.

Unpacking and Inspecting

Please unpack the device carefully. Check that the package is right-side-up and then open it. Check that model of the product is one that you ordered. Check that there is no damage. If there is any damage, file a damage claim with the carrier. In the case of any damage a damage report should be requested immediately. These instructions must be followed fully for us to guarantee our full support of your claim for protecting against loss from concealed damage. The form required for filing such a claim will be provided by the carrier.

Important: keep operating manual for future use

Content

1. Intended Use

The SLK1, SLK2 and SLK2-T infrared hot plates are feature an outstanding transmittance of the infrared light so that fast heating and excellent temperature stability can be realized. The smooth and corrosion-resistant glass ceramic top plate, which has great thermal conductivity characteristics, is anti-abrasive and can be easily cleaned. In addition, it can resist up to 700°C thermal shocks. The large LCD screen displays the set and actual temperature. The hot plate also features a timer function of up to 1800 seconds for automatic heating. The SLK1 and SLK2 employ a 24 step temperature regulator and the SLK2-T can be connected to an external temperature sensor for direct and more precise temperature control.

2. Operator Responsibility

Use

- For heating liquids

Range of use

- Laboratories
- Schools
- Pharmacies
- Universities

This device is suitable for use in all areas except:

- Residential areas
- Areas that are connected directly to a low-voltage supply network that also supplies residential areas.

The safety of the user cannot be guaranteed

-if the appliance is operated with accessories that are not supplied or recommended by the manufacturer or if the appliance is operated improperly contrary to the manufacturer's specifications.

The products of WIGGENS ensure safe operation when installed, operated, and maintained according to common safety regulations. This section explains the potential dangers that may arise when operating the instrument and also specifies the most important safety precautions to preclude these dangers as far as possible.

- The operator is responsible for the qualification of the personnel operating the instrument.
- The personnel operating the instrument should be regularly instructed about the dangers involved with their job activities as well as measures to avert these dangers.
- Make sure all persons tasked with operating, installing, and maintaining the instrument have read and understand the safety information and operating instructions.
- When using hazardous materials or materials that could become hazardous, the instrument may be operated only by persons who are absolutely familiar with these materials and the instrument. These persons must be fully aware of possible risks.
- Only qualified personnel are authorized to perform configuration, installation, maintenance and repairs of the

instrument.

- Routine operation can also be carried out by untrained personnel who should however be instructed by trained personnel.

If you have any questions concerning the operation of your instrument or the information in this manual, please contact us!

2.1 Disposal

At the end of its service life the instrument is to be disposed of in accordance with the local regulations specified for the disposal of electronic industry waste in an environmentally friendly manner.

2.2 CE Conformity

The products described in the operating instructions conform to the requirements of the following European guidelines:
Low voltage regulations with respect to legal harmonization of the member countries concerning electric devices for use within certain voltage limits.
EMC guideline with respect to legal harmonization of the member countries concerning electromagnetic compatibility.

APPROVALS European	EN61326-1: 2013, 2014/30/EU EN61010-1: 2010, 2014/35/EU EN50581: 2012, 2011/65/EU

2.3. Technical Specifications

Model	SLK1	SLK2	SLK2-T
Display Mode	LCD		
Electrical Output	220 V, 50 Hz	220 V, 50 Hz	220 V, 50 Hz
Heating Capacity	1.2kW	1.8 kW	1.8 kW
Max. Hot Plate Temperature	550°C		
Min. Time to Boiling Point for 1L H_2O	10 min	7 min	7 min
Top Plate Area	285*285 mm		
Heating Zone	Φ155 mm	Φ190 mm	Φ190 mm
Temperature Sensor Connector	-	-	Available
Top Plate Material	Glass Ceramic		
Dimensions (D x L x H)	395 x 295 x 110 mm		
Maximum Capacity	25L		
Admissible Ambient Temperature	10-40°C		
Admissible Ambient Temperature	85%		
Protection Category	IP20		
Order No.	285416616	285416324	285416398

All measurements have been carried out at the stated voltage, frequency, and an ambient temperature of 25°C.
Technical changes without prior notification reserved.

WIGGENS Order Numbers consist of the Basic Order Number (BON) and the Order Number Addition (ONA) which explains different characteristics of the product that can vary from country to country. Order Numbers as stated on the product label and box label are stated as Full Order Numbers (FON), consisting of the BON followed by the ONA. For a full explanation of the ONA of your product, please ask your local WIGGENS support or refer to the Order Number Guide in the *WIGGENS* General Catalog.

3. Safety Instructions

3.1. Explanation of Safety Notes

In addition to the safety warnings listed, warnings are posted throughout the operating manual. These warnings are designated by an exclamation mark inside an equilateral triangle. "Warning of a dangerous situation (Attention! Please follow the documentation)."

Symbol	Additional term / Description
Warning signs 	The danger is classified using a signal word. Read and follow these important instructions for averting dangers.
	Warning! Describes a **possibly** highly dangerous situation. If these instructions are not followed, serious injury and danger to life could result.
	Caution! Describes a **possibly** dangerous situation. If this is not avoided, slight or minor injuries could result. A warning of possible property damage may also be contained in the text.
	Notice! Describes a **possibly** harmful situation. If this is not avoided, the product or anything in its surroundings can be damaged.
	**Note!** Draws attention to something special.
	**Important!** Indicates usage tips and other useful information.

3.2. For your protection

- Make sure you read and understand all instructions and safety precautions listed in this manual before installing or operating your instrument.
- Keep the operation instructions in a place where they can be accessed by everyone.
- Make sure the product is checked for proper condition regularly (depending on the conditions of use). Regularly check (at least every 2 months) the proper condition of the mandatory, warning, prohibition and safety labels.
- Connect the instrument to a power socket with earthing contact (PE-protective earth)!
- The power supply plug serves as a safe disconnecting device from the line and must always be easily accessible.
- Do not stay in the area below the instrument.
- Never operate damaged equipment.
- Never operate instruments with damaged mains power cables.
- Observe all warning labels.
- Never remove warning labels.
- Be aware of tripping! Never route the connection cable in highly frequented areas!
- Be aware of possible cable damage! Keep the connection cable away from the heating zone!
- Repairs are to be carried out only by qualified service personnel
- Always turn off the instrument and disconnect the mains cable from the power source before performing any service or maintenance procedures, or before moving the instrument.
-  **Warning !** This is not an explosion proof instrument. Do not use with any highly flammable or explosive materials.
- The Infrared hot plate must only be operated in the presence of an exhaust system! (When heating with volatile samples, e.g. silicone oil)
- Never operate the hot plate in wet areas!
- Be aware of the danger of electric shocks!
-  **Warning !** Be aware of the potential danger of a fire outbreak due to overheating!
-  **Warning !** Wear your personal protective equipment in accordance with the hazard category of the media to be processed. Otherwise there is a risk from:
  - Splashing and evaporation of liquids
  - Ejection of parts
  -Release of toxic or combustible gases.
-  Warning ! When in an emergency, disconnect the main power plug.
- Beware of hazards due to:
  - Flammable materials

- Combustible media with a low boiling temperature
- Glass breakage
- Incorrect container size
- Overfilling of media
- Unsafe condition of container.

- Process pathogenic materials only in closed vessels under a suitable extractor hood.
- Only process media that will not react dangerously to the extra energy produced through processing. This also applies to any extra energy produced in other ways, e.g. through light irradiation.
- Please observe the operating instructions for any accessories used.
- Never operate the infrared hot plates on home furniture!
- For safety reasons place the infrared hot plates at least 50 cm from any inflammable material!
- Never operate the hot plate on home furniture!
- Appropriate safety clothing, glasses, gloves and coats should be worn when operating hot plates. Always use appropriate hand and eye protection when handling hazardous chemicals.
- Do not use with flammable or combustible chemicals; the top surface and elements can reach the flash point temperature of many chemicals
- Do not plug or unplug power cord with wet hands. Such action can cause electric shock.
- Be aware of possible cable damage! Keep the connection cable away from the heating zone!

3.3. For protection of the equipment

- You have received a product designed for industrial and experimental use. Nevertheless, avoid strikes to the housing, vibrations, damage to the operating-element panel, and contamination.
- Make sure that the mains power supply has low impedance to avoid any negative effects on instruments being operated on the same mains.
- Do not expose the unit to sunlight
- Sudden drops may cause damage in the interior of the instrument.
- Transport the instrument with care.
- The device can be damaged when sucking in aggressive gases or vapor through the installed ventilator!
- Press the power button to interrupt the hot plate, rather than disconnect the main power plug directly.
- Ensure that the base plate is kept clean
- Never operate the infrared hot plates in wet areas!
- Be aware of the potential danger of a fire outbreak due to overheating!
- Observe the minimum distances between devices, between the device and the wall and above the assembly (min. 800 mm).
- Protect the appliance and accessories from bumps and impacts.

4. Operating Procedures

4.1. Environmental Operating Conditions

The infrared hot plates must operate in the following conditions:

- Indoors
- Altitudes up to 2000 meters
- Temperatures from+5°C to +40°C
- Maximum relative humidity 80% for temperatures up to +31°C, linear decrease down to 50% relative humidity at a temperature of +40°C
- Max. mains fluctuation of ±10 % are permissible
- Protection class according to EN 60 529: IP20
- The unit corresponds to Class I
- Overvoltage category II

4.2. Installation

4.2.1. Installing the Infrared hot plate (only for SLK2-T)

Place the hot plate on a stable, flat surface and proper environment for operation.

- If a PT100 temperature sensor package was ordered:

Install the sensor holder into the screw inlet on the back of the Infrared hot plate

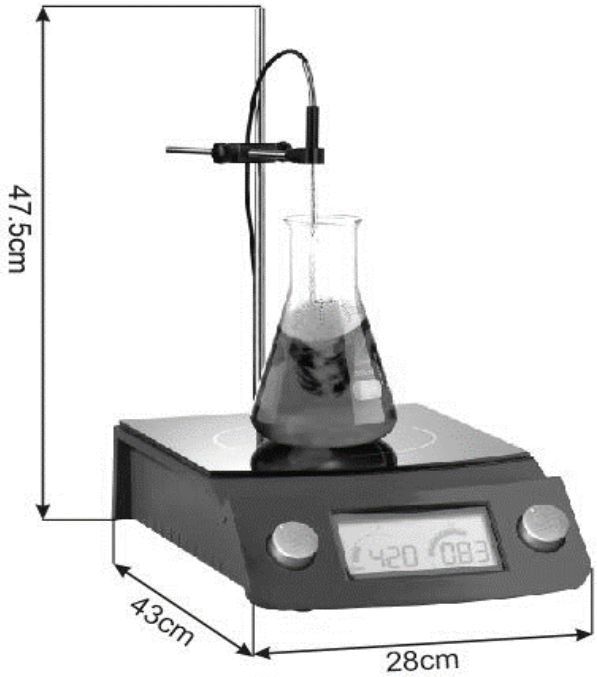
Place the clamp onto the holder and tighten the screw connecting the holder and the clamp

Mount the Pt100 temperature sensor on clamp and tighten the screw connecting the temperature sensor and the clamp

Connect the PT100 temperature sensor cable to the corresponding connector in the back of the Infrared hot plate

- Connect the stirrer to the power supply. The power supply voltage, frequency and current are respectively AC 220-230V、60Hz、10A.
- Connect the power supply to a power socket with earthing contact.

4.2.2.The dimensions of the infrared hot plates （after connect PT100Teperature sensor, Only For SLK2-T）



Caution!

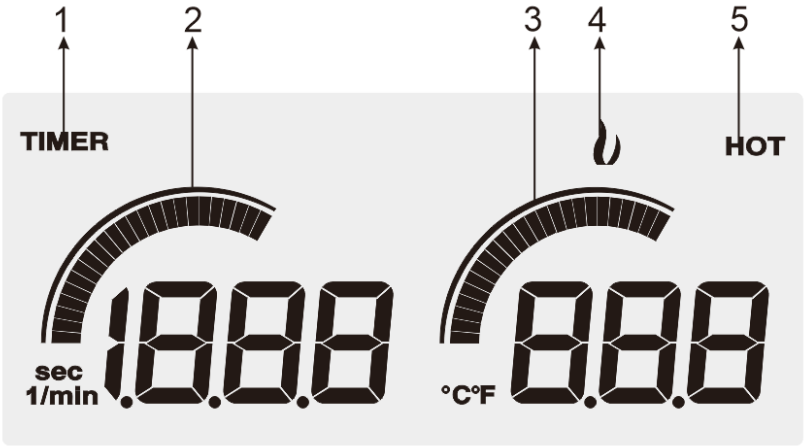
- Do not use voltages that are higher or lower than 10% of the voltage specified on the label, which is on the backside of the instrument.
- Keep the power cord and temperature sensor cable off of the hot plate while heating.
- Put the solution on the top plate before operating the instrument.
- Heating corrosive liquids under poor ventilation hoods will shorten the life of the electronic components inside the instrument.
- Upon the first heating operation, a particular smell and white smoke can appear. This is normal. Put the instrument under a fume hood and moderately heat for about one hour until the smell and smoke fully disappear.
- If toxic gases are released, air circulation must be kept.
- The safe temperature limit must always be set to at least 25^{O}C lower than the fire point of the media used.

4.3. Operation

4.3.1. Overview of the Infrared hot plate

No.	Description
1	Heating Top Plate
2	Right Control Knob
3	LCD Digital Display
4	Instrument Housing
5	Left Control Knob

4.3.2. Indicators and Functional Elements



No	Icon	Description
1	TIMER	**Timer Indicator** Indicates the timer function.
2		**Left side Bar graph** Indicates the Timing state of the TIMER function,
3		**Right side Bar graph** Indicates the control activity of the heating function,
4		**Heater symbol** Indicates that the stirrer is ready for operation.
5	HOT	**Residual-heat indicator** Warning sign to inform the user that the heating zone is still hot.

Caution!

- Do not use voltages that are higher or lower than 10% of the voltage specified on the label, which is on the backside of the instrument.
- Keep the power cord and temperature sensor cable off of the hot plate while heating.
- Put the solution on the top plate before operating the instrument.
- Heating corrosive liquids under poor ventilation hoods will shorten the life of the electronic components inside the instrument.
- Upon the first heating operation, a particular smell and white smoke can appear. This is normal. Put the instrument under a fume hood and moderately heat for about one hour until the smell and smoke fully disappear.

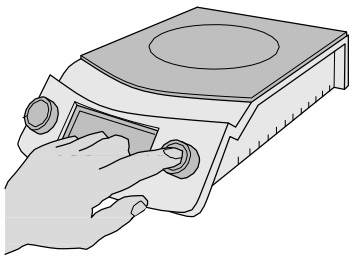
4.3.3. Operation of the Heater without a Temperature Sensor

1.Switching the Heater on

e.g. the software version

Display during self-test

- Plug in power
- Switch the Infrared hot plater on by pressing the main switch on the right side of the instrument
- The hot plater performs a self-test which is indicated on the display followed by information on the software version

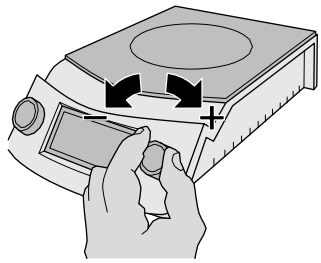


- Press and hold the Right Control Knob for approximately 2 seconds until the Heater Indicator appears

e.g. The initial heating stage is always "0"

- The display shows the heating stage is always "0" (zero).
- Select your desired heating stage within 30 seconds
- If no heating stage is selected, the heater switches off again after 30 seconds

2.Selecting a Heating Stage



- Select the desired heating stage using the Right Control Knob (turn clockwise to set a higher heating stage turn anti-clockwise to set a lower heating stage). There are 24 heating stages available.
- The heater starts immediately after a heating stage other than "0" is selected

e.g. the heating stage is "24"

- The selected heating stage is shown on the display (e.g. Set to 24 stage), after complete the setting the display will show the heater symbols.
- Now the heating power will be controlled automatically.
- The bar graph indicates the heating activity of the heater.
- The heating element heats up until the selected temperature stage is

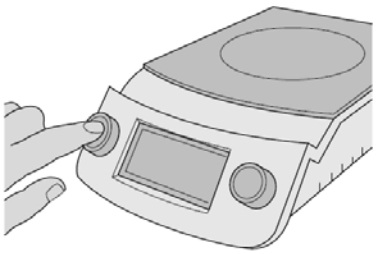
achieved.

- If no heating stage is selected, the heater switches off again after 30 seconds
- After having operated in the heating stages19-24
- for 2 hours, the heater switches back to the heating stage 18 as a safety function

3. Operation of the Timer Function

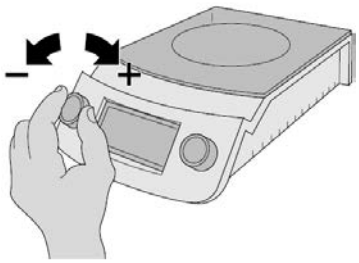
The differences about the timer function:

- For SLK1, SLK2 without temperature sensor connected: The heater will turn on and the timer will start when the residual time is set to a value other than zero.
- For SLK2-T with the temperature sensor connected, the timer will start the count-down only when the difference between measured and set temperature is 2°C or less.

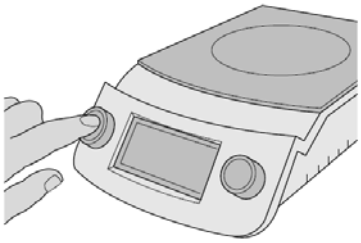


e.g. Switching the Timer On

- Press and hold the Left Control Knob for approximately 2 seconds until the timer display of the hot plate appears.
- The display shows the residual time which is always "0" (zero)
- The residual time can be adjusted between 100 and 1800 seconds in increments of 10 seconds. The timer function will be only available when both the timer and the heating control are turned on. To set the residual time use the left control knob (turn clockwise to increase the residual time).



e.g. Set your required time



e.g. Switching the Timer Off

- Press and hold the left control knob for approximately2 seconds until the timer display disappears.
- The timer function will turn off automatically if the heating function is set to “0” or the timer without any operation in 30 seconds,

4.Switching the heating off

- Press and hold the two Control Knob respectively for approximately 2 seconds until the Heating and timer Indicator disappears.
- The heating now switched off
- The Residual Heat Indicator continues to light up as long as the glass-ceramics heating zone is still hot
- The installed ventilator continues to operate until the heating zone has cooled down completely.

CAUTION!

This equipment provides a timer function to heat an object / solution with a given stage or set temperature over a set period of time. The timer is controlled by the knob on the left, which is separated to the heating control switch. When the timer is turned on, the timer takes control over the heating process. Therefore, the heating will not start if the timer is set to "0" (zero) even if the heating stage is not zero or the actual temperature is lower than the set temperature.

CAUTION!

Risk of overheating! When switching off the timer, the hot plate is NOT switched off. Instead, the set heating stage is set to "0" (zero) no matter what stage it was before. The heating stage has to be set again with the right control knob, if further heating is desired after the timer has ended.

CAUTION!

Do not unplug and turn off the mains of the hot plate before the heating zone has completely cooled down, then turn off the mains switch and pull out mains plug.

CAUTION!

- Residual heat! Do not touch the heating zone!
- Risk of overheating! Do not pull out the mains plug!
- Do not unplug and turn off the mains of the hot plate before the heating zone has completely

cooled down, then turn off the mains switch and pull out the mains plug.

- Do not unplug and turn off the mains of the hot plate before the heating zone has completely cooled down, then turn off the mains switch and pull out the mains plug.

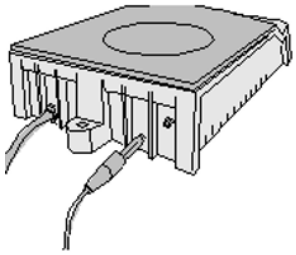
4.3.4. Operation of the Heater with a Temperature Sensor (Only For SLK2-T)

Note!

In contrast to operation without temperature sensor, the laboratory hot plate now features:

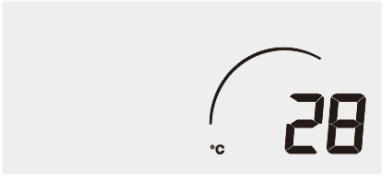
- Automatic temperature control instead of fixed heating stages controlled by the heating power.
- Temperature display alternating between set temperature and actual temperature instead of showing the heating stage

1.Connecting the Temperature Sensor



- Make sure that the Infrared hot plater is completely switched off
- Be sure to use the correct temperature sensor
- Connect the temperature sensor at the rear of the Infrared hot plate
- Make sure that the cable of the temperature sensor is routed so that it cannot touch the heating zone.
- Immerse the temperature sensor into the liquid min.30 mm in depth.

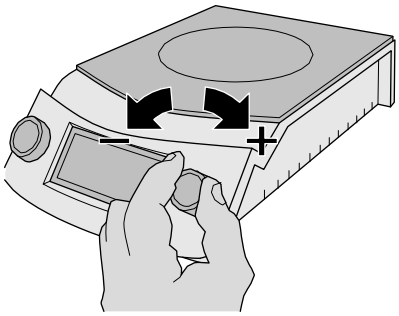
2.Switching the Heater on



e.g. The solution temperature is "28"

- Refer to 4.3.3 for how to set the temperature, except for the following one points.
- Now the instrument will enter the external temperature control mode(to measure and control the temperature of the solution accurately) The maximum set temperature is 300°C

3.Setting the Temperature



Using the Right Control Knob (turn clockwise to increase the set value, turn anti-clockwise to decrease the set value).

e.g. The setting temperature is 150℃

- The bar graph indicates the heating activity of the heater
- The heater heats up and maintains the selected temperature

e.g. The actual temperature is 140℃

The display now alternates between the set temperature (with dots between figures) and the actual temperature (no dots between figures) every 5 seconds.

4. Operation of the Timer Function	**Please refer to 4.3.3**
5.Switching the Heater off	**Please refer to 4.3.3**

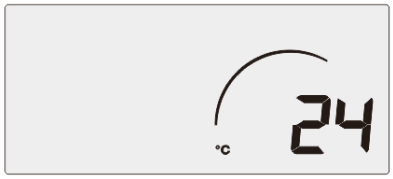
CAUTION!

Use a support frame to prevent the stirrer vessel from slipping off the heating zone, if required.

4.4. Pt100 Temperature Sensor Calibration （Only For SLK2-T）

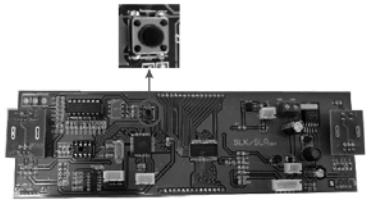
The Pt100 temperature sensor can be connected to measure and control the heated liquid temperature. The sensor has been initially calibrated in the factory. If the measured temperature is slightly different from the temperature standard you are using, a follow-up calibration is also possible with the following steps.

Calibration Procedure



e.g. the measured temperature "T1" is 24 ℃

- Loosen the retaining screw of the instrument and remove the bottom shell (totally 10 pieces) Place the instrument at side view, and remain the switch side.
- Plug the PT100 temperature sensor into the designated input and turn on the main power switch
- Put the PT100 sensor and third-party thermometer in the temperature environment of T1, (e.g. 300 ml silicone oil, the temperature stability at 24 degree, this value should be measured and read by the third-party thermometer)



e.g. The contact switch on processor board

- Find the processor board in instrument and press the contact switch 5 times to enter the calibration procedure;

e.g. display shows "S1" and it's corresponding AD read value

- Then LCD screen light up and the right side digital display shows "S1", "S1" means Set 1(The first setting temperature for calibration).
- the left side display shows its corresponding AD read value T1

e.g. set "SI" to"T1"(24℃)

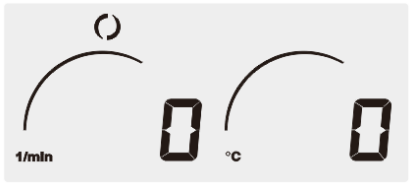
- Wait for the temperature to reach and equilibrium 24℃. (measured by the third-party thermometer)
- refer to the shows value on third-party thermometer and twist the right side control knob to set the actual value of T1 (e.g. Set to 24)

e.g. display shows "S2" and it's corresponding AD read value

- Put the PT100 temperature sensor and third-party thermometer in temperature environment of T2, (e.g. 300 ml silicone oil, the temperature stability at 151℃，(this value should be measured and read by the third-party thermometer)
- Press the contact switch again, the display shows "S2" "S2" means Set 2(The second setting temperature for calibration).
- the left side display shows its corresponding AD read value of T2

e.g. set "S2" to"T2"(151℃)

- Wait for the temperature to reach an equilibrium
- refer to the shows value on third-party thermometer and twist the right side control knob to set the actual value of T2 (e.g. Set to 151℃)



- Press the contact switch to complete the calibration.

4.5. The RS-232 interface (Only for SLK2-T)

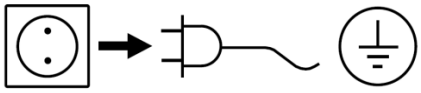
The Infrared hot plate provides a RS-232 connection for temperature monitoring. The actual temperature data will be sent through the RS-232 interface every 3 seconds. The data can be read with any software which can acquire data with from an RS-232 connection.

5. Cleaning and Maintenance

5.1. Routine Cleaning

The device is maintenance-free.

Cleaning



For cleaning disconnect the main plug.

Only use cleansing agents which have been recommended by *WIGGENS*

Use to remove:

Dyes isopropyl alcohol

Construction materials isopropyl alcohol/water containing surfactant

Cosmetics isopropyl alcohol/water containing surfactant

Foodstuffs water containing surfactant

Fuels water containing surfactant

- After each use, wipe the unit with a soft cloth. Do not immerse or pour liquid over the unit as electrical shock may occur. Clean up any spills immediately. If required, the attachment may be removed.
- Wear protective gloves when cleaning the devices

Before using another than the recommended method for cleaningor decontamination, the user must ascertain with WIGG ENS that this method does not destroy the instrument

Note:

Do not use chlorine bleach, chlorine-based cleanser, abrasives, ammonia, steel wool or scouring pads with metal content or similar harsh solvents or abrasives. These may damage the surface of the instrument.

5.2. Maintenance

Do not attempt to service or repair a *WIGGENS* Infrared hot plate. If the Infrared hot plate housing is opened the warranty becomes void. Contact *WIGGENS* for return authorization and return instructions.

Ordering spare parts

When ordering spare parts, please give:

- Machine type
- Manufacturing number, see type plate
- Item number and designation of the spare part.

Repair

Please only send devices in for repair that have been cleaned and are free of materials which might present health hazards. For this, use the "certificate of compliance" form which you can obtain from *WIGGENS*. If your appliance requires repair, return it in its original packaging. Storage packaging is not sufficient when sending the device - also use appropriate transport packaging.

6. Transport and Storage

- Clean the Infrared hot plate so that it is free from any materials which may be harmful to the health. Provide a material safety data sheet where appropriate.
- Place the Infrared hot plate unit and its parts into the original packing or a container with necessary protection to prevent damage during transport. Seal the original packing or container with packing tape.
- Store the packed unit in a dry place.

CAUTION!

Failure to clean, maintenance, and handle the Infrared hot plate as outlined can lead to damages or be harmful to the health.

7. Accessories and Spare Parts

7.1 Temperature Sensor and Holder

Model	Description	Order No.
PT100 Temperature sensor, Type I	Length: 170 mm; Diameter: 4 mm; Material: Stainless steel; Admissible temperature: -30 ~ +300°C	PT100-01
PT100 Temperature sensor, Type II	Length: 300 mm; Material: Stainless steel	PT100-02
PT100 Temperature sensor, Type III	Length: 150 mm; Material: Stainless steel, PTFE coated	PT100-03
PT100 Temperature sensor, Type IV	Length: 300 mm; Material: Stainless steel, PTFE coated	PT100-04
PT100 Temperature Sensor, Type VI	Length: 250 mm; Diameter: 4 mm; Material: Glass; Admissible temperature: -30 ~ +300°C	PT100-06
Holder for Temperature Sensor	Holder and clamp for PT100 temperature sensor;	PT100-05

Note!

For more information about Accessories please contact your local supplier

CAUTION !

For safety and guarantee reasons only original accessory parts are to be used!

8. Service

8.1. Trouble-Shooting

Failure Note on the Display	Description and Possible Cause	Solution
The device does not react to any input.	• The light on the mains switch is not on • The power cable is damaged or the mains plug socket has no power.	Check connection to the mains grid.
E1 (For SLK2-T)	The temperature sensor or its connection cable has been damaged.	• Make sure that the cause of failure cannot reoccur in the future(e.g. cable touching the heating zone) • Replace the temperature sensor • Contact an authorized distributor or the manufacturer
E2 (For SLK2-T)	Temperature sensor has caused a short circuit.	Replace the temperature sensor
E3	Error in internal data storage unit	Contact an authorized distributor or the manufacturer.
-	The laboratory hot plate fails to start again automatically after power failure.	Check connection to the mains! Switch the device on manually.
Residual-heat indicator "HOT" went out although the heating zone is still hot.	The hot plate was or is disconnected from the mains. This caused resetting of the residual-heat indicator function (as is the case with all other functions of the device)	Switch off heater by pressing the right control knob, and turn off the mains switch, but never by pulling the mains plug in order to minimize the risk of burns.
The heating and timer function work fine but the display has a failure or is completely dark	This is caused by a failure in the electronics.	Contact an authorized distributor or the manufacturer to have it checked and repaired!

WIGGENS reserves the right to carry out technical modifications with repairs for providing improved performance of the instrument.

8.2. Warranty

In accordance with *WIGGENS* warranty conditions, the warranty period is 24 months. For claims under the warranty please contact your local dealer. You may also send the machine direct to our works, enclosing the delivery invoice and giving reasons for the claim. You will be liable for freight costs. The warranty does not cover wearing parts, nor does it apply to faults resulting from improper use or insufficient care and maintenance contrary to the instructions in this operating manual.

WIGGENS reserves the right to decide the validity of any warranty claim. In case of faults arising either due to faulty materials or workmanship, parts will be repaired or replaced free of charge.

Any other compensation claims, such as consumables, damages caused by corrosion or accidental breakage, are excluded from this guarantee.

This warranty may only be altered by a specifically published amendment. No individual has authorization to alter the provisions of this warranty policy or its amendments.

8.3. Contact /Technical Service

If your device is not working properly:

⇨ Please inform *WIGGENS* Instruments by using our contact information.

You have contacted *WIGGENS* Instruments?

⇨ Copy and complete the Conformation of condition of unit from these operating instructions.

⇨ Please repack the device appropriately for transport and send to *WIGGENS* Instruments together with the Confirmation of condition of unit.

Our contact details

WIGGENS GmbH

Add：Gässlesweg 22-24, 75334 Straubenhardt, Germany

Tel.: 0049 7248 4529088

Wiggens Co., Ltd.

Room 426, Hall A, Office Building M8, No.1 Jiuxianqiao East Road, Chaoyang District, Beijing 100015, China

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Fax: +86 400-809-2068-112

info@ wiggens.com

service@wiggens.com

www.wiggens.com

Confirmation of condition of unit

In the case of repair, copy and complete the Conformation of condition of unit and send it to *WIGGENS* Instruments.

1. **Details about the unit**

   Product number

   Serial number

   Reason for repair

2. **Has the device been cleaned, decontaminated/sterilized?**

   Yes ☐ No ☐

3. **Is the unit in a condition which does not represent any health threats for the staff of our service department?**

   Yes ☐ No ☐

   If not, which substances has the unit come into contact with?

4. **Legally binding declaration**

   The customer is aware of being legally liable to *WIGGENS* Instruments for any damages arising from incomplete and incorrect information.

Date	Signature
Company stamp	

Please Note

The shipper is responsible for the return of the goods in well-packed condition, suitable for the mode of transport.

Sender information

Name
Company
Department, research group Street
Zip code, city
Country
Phone
E-mail

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