

User manual

Portable Incubator
G95



33087 ver. 1.0

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1 General Information & Service

1.1 COPYRIGHT

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Users of K-SYSTEMS Kivex Biotec products should not hesitate to contact us if there are any unclear points or ambiguities in this manual.

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This manual is subject to changes without further notice

33087 version 1.0 01/2016

Service address:

Please contact your local K-SYSTEMS Kivex Biotec distributor for details of your nearest authorized service agent.




***CAUTION** If the equipment is used in a manner not specified by this manual, the safety of the user may be at risk and the equipment may be damaged. Always use the equipment as outlined in this instruction manual.*



2 Unpacking and inspection

- Unpack the equipment.
- Check the packing list to insure all accessories are there.
- Examine the packing material carefully for separately packed items.
- Check the incubator for external surface damage.
- Check that the display is not broken or damaged.
- Check that the lid and locking mechanism operate correctly without any hindrance.

3 Accessories

3.1 Standard accessories



<p>24 volts main adapter (PSU)</p> <p>Order code: 51122</p>	
<p>Mains cable</p> <p>Standard Schuko – Order code: 52768 UK – Order code: 53886 US – Order code: 52773</p>	
<p>Connection cable for 12-volt car cigarette lighter socket.</p> <p>Order code: 51016</p>	

<p>Two plastic blocks for holding the warming blocks in place.</p> <p>Plastic insulation, white Order code: 50004</p> <p>Plastic insulation, black Order code: 52772</p>	
<p>Gas connector. Order code: 52156, 52192</p> <p>Silicone tube. Order code: 11066</p>	




3.2 Optional equipment

Optional equipment consists of a range of warming blocks, flowmeters and gas humidifiers. K-SYSTEMS recommend that the GH01 is used for supplying gas to the portable incubator. (See section 3.3 *Supplementary equipment*)

Warming blocks for tubes



<p>Warming block B06 Holds twelve tubes of Ø12 mm</p> <p>Falcon 352003</p> <p>Order code: 26006</p>	 A grey rectangular warming block with 12 circular wells. Six clear plastic tubes are inserted into the right half of the block.
<p>Warming block B08 Holds ten tubes of Ø17 mm</p> <p>Falcon 352001</p> <p>Order code: 26008</p>	 A grey rectangular warming block with 10 circular wells. Five clear plastic tubes are inserted into the right half of the block.

Warming blocks for dishes

<p>Warming block B16 Holds two culture dishes</p> <p>B16 – Falcon 353001 Order code: 26059</p> <p>B16N – NUNC 150318 Order code: 26060</p>	
<p>Warming block B24 Holds one centre well dish</p> <p>Falcon 353653</p> <p>Order code: 260027</p>	
<p>Warming block B25 Holds one 60 mm culture dish</p> <p>Falcon 353002 NUNC 150288</p> <p>Order code: 26028</p>	
<p>Warming block B26 Holds one 4-well Falcon dish with lid</p> <p>Falcon 353654</p> <p>Order code: 26031</p>	
<p>Warming block B28 Holds on 4-well dish</p> <p>NUNC 176740</p> <p>Order code: 26029</p>	
<p>Warming block B29 Holds on 5-well dish</p> <p>MiniTüb 19021/0005</p> <p>Order code: 26030</p>	

3.3 Supplementary equipment

The G95 is designed as a transport device, and not as a block warmer. It can be used in conjunction with the following K-SYSTEMS products.

<p>GH01</p> <p>Standalone humidifier to obtain correct and warm gas.</p> <p>Order code: 31059</p>	
<p>G73</p> <p>Dry bath incubator for heating samples in test tubes.</p> <p>Order code: 22065</p>	

4 User manual

4.1 Definition of use

The K-SYSTEMS Kivex Biotec G95 Portable incubator is designed for transporting gametes and embryos, which require protection from fluctuations in temperature, pH levels and light.

The warming blocks should be pre warmed to the desired temperature and allowed to stabilise before placing inside the G95 transport incubator.

The incubator is designed to maintain a stable temperature for the transportation of pre warmed warming blocks.

The temperature indication on the display is that of the maintaining temperature. If cool blocks are placed within the incubator, sufficient time is required for the temperature to stabilise.

When the unit is not in use, it is recommended that it is left on charge.

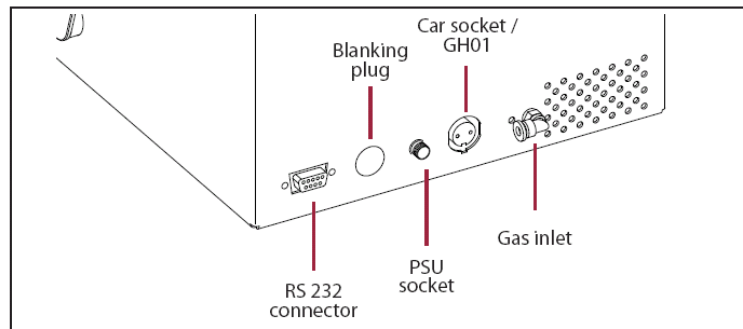
4.2 General description

The compartment and aluminium warming blocks maintain a preset temperature in the range of ambient to 49.9° C. The temperature is electronically controlled and can be read on the display in increments of 0.1°C resolution. An alarm system provides both visual and audible alarm, if the temperature should be out of range or in case of low battery (when the mains adapter is not connected).

There are two options of supplying the portable incubator with electric power. Either the incubator can be connected to the wall socket using the 24 V external power supply or the incubator can be connected to a 12 V car cigarette lighter socket.

A built-in battery maintains the temperature for 4 to 5 hours depending on ambient temperature. The battery is automatically charged when the incubator is connected to the 24-volt adapter. When the portable incubator is connected to the car cigarette lighter socket the battery is not charging.

The atmosphere is controlled by flushing with a gas mixture. The gas valve is automatically closed when the quick connector is disconnected. Interchangeable aluminium warming blocks, holding a variety of culture dishes and test tubes, are available. The blocks are held in position during transport by a removable POM block.



4.3 Unit performance

The unit is connected and allowed to stabilise to the set point.

Culture dishes and/or test tubes are placed in the interchangeable warming blocks, which are held in secure positions during transport.

The chamber is purged with the desired gas mixture (regulated for example by the GH01). During purging, the door is closed, but only sealed after purging. (See chapter 9).

The gas supply is disconnected from the (quick release) valve at the back of the unit.

4.4 Connections

Should the transport time exceed the battery time the unit can be connected to the cigarette lighter socket found in most automobiles.

Note that the voltage from the car must be 12V, which is standard for cars.

When not in use the unit should be connected to the mains power supply.

The unit can only be heated up using the mains supply.

The car adaptor can only be used to hold the battery power, IT IS NOT A CHARGER.

4.5 General care

Do not obstruct or block the ventilation holes at the back of the unit.

Excessive force or pressure should not be put on the front door when it is fully opened.

Ensure that the door hinges are clean and free of any obstructions.

When closing the door, ensure that there are no objects preventing it from closing, as too much force will damage the closing catches, thereby degrading its performance.

WARNING *This incubator is designed to transport pre-warmed blocks and does not have the capability of warming the blocks in a short period of time.*

5 Features and operation

5.1 Assembling the G95

No assembly needed. Just follow directions in section 5.2 and the unit is now ready for use.







5.2 Connection to the mains

The mains voltage is automatically regulated to the correct level by the main adapter (PSU). Connect the G95 to the mains supply using the enclosed PSU. For safety reasons the unit has an external PSU which operates at a low voltage.

5.2.1 Start of apparatus

Connect the unit to the PSU and the PSU to the mains wall socket. To power up the unit, press the heat on button on the keyboard. The display will indicate the current temperature.



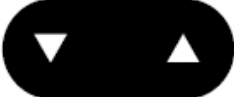
5.3 Keyboard functions

	
Alarm	
Heat ON/OFF	
LED Display	
Set point	
Arrow keys UP/DOWN	

5.4 Operating the heated compartment









Action	Key	Display
Press heat ON/OFF key to show the actual temperature.		

5.5 Temperature setting and control

Action	Key
Press set point key until set temperature is shown.	
Press and hold set point key.	
While holding the set point key in, press either the arrow UP or arrow DOWN key to raise or lower the set temperature. When the desired temperature is reached, let go of the set point key.	

Note The set point can be adjusted to a reading between ambient and 49,9° C.

5.6 Combination keys

Action	Key	Display
Press alarm and UP key.	 + 	The keyboard is locked.
Press alarm and UP key.	 + 	The keyboard is unlocked.
Press Heat ON/OFF and set point key.	 + 	Switches between temperature and time.
Press alarm and set point key to go into power save mode.	 + 	Switches off the display.



Note **Power save mode:**
Now only a small LED will light, showing when the heat is active. All other functions are kept normal. By switching off the display the energy is conserved and the battery charge holding time prolonged.

5.7 Temperature alarm

The temperature alarm indicates too high or too low temperature.

The alarm will be activated if the temperature rises or falls more than 0.5° C from the set point.

There will be an acoustic signal and the red LED light in the alarm key will be activated.

Action	Key
Press alarm key to mute the acoustic signal.	
Press alarm key once again to bring the signal back on.	

Note The red LED light and the acoustic signal will turn off when the temperature stabilises to the set point level.

5.8 Warming up

Warming up from 20.0 to 39.0° C takes less than 15 minutes under normal conditions.

When a cold item is placed in the chamber, it may need up to 30 minutes to stabilise, depending on the thermal mass of the object and the initial temperature.

Always let the unit stabilise before use.

5.9 Warming blocks






It is necessary to use warming blocks. Please contact your local distributor or K-SYSTEMS for details about the full range of warming blocks.

A selection of different tubes and dishes can be transported. Either tubes or dishes can be transported at one time, not a combination of both.

WARNING Warming blocks should always be pre-heated before usage.

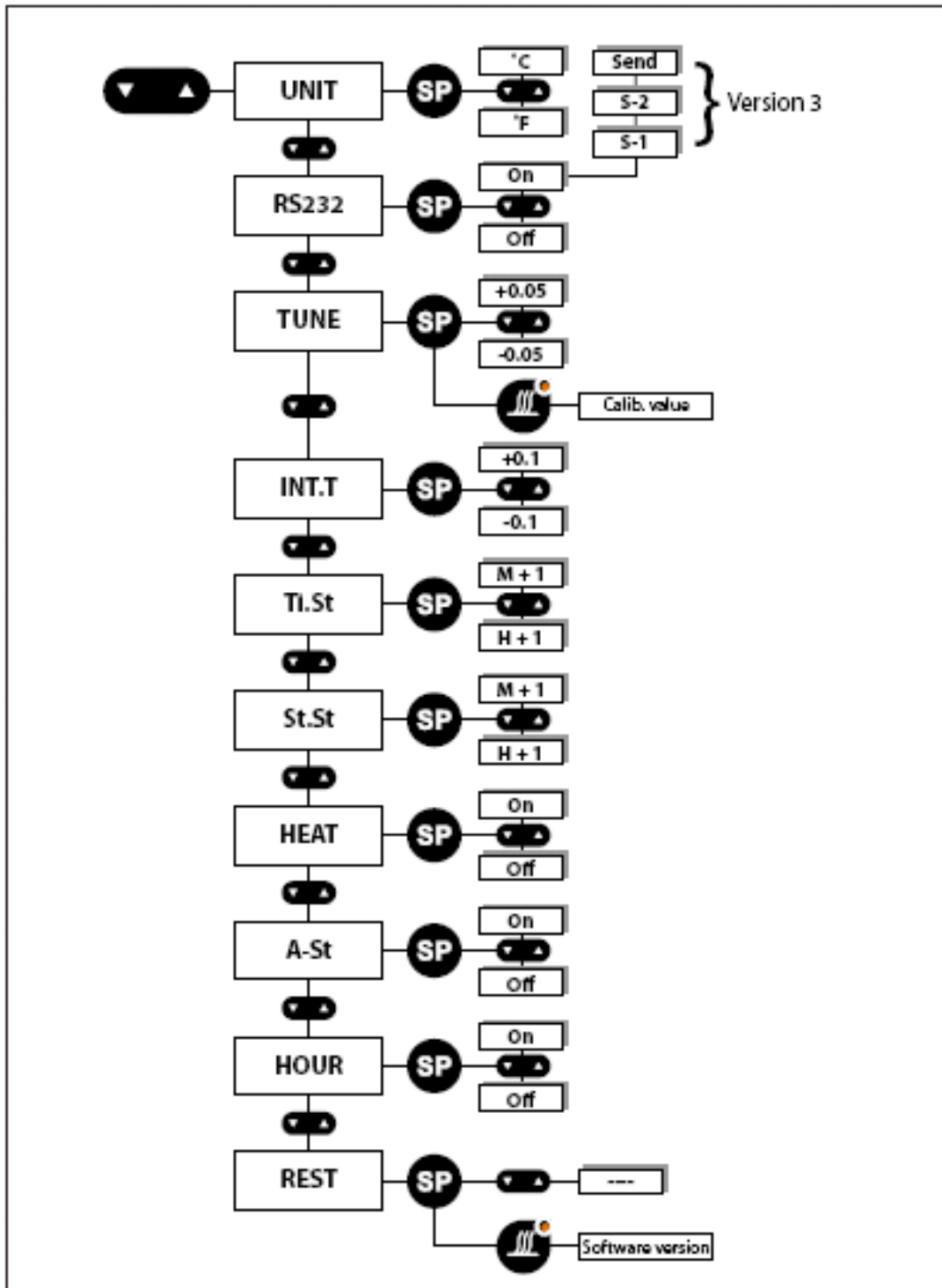
6 Menu function

The user can access a number of advanced functions via the menu.

Action	Key	Display
Press and hold UP+DOWN key for 3 seconds to enter the menu. The first option "UNIT" will appear in the display.		
Press UP/DOWN key to navigate within the Menu.		
While holding the set point key in, press either the arrow UP or arrow DOWN key to change values within the options.		
Press and hold UP+DOWN key for 3 seconds again to exit the menu.		

The menu consists of the 10 options listed below.
For further detail, see the description on the following pages.






6.1 Overview of options



6.2 Unit

In the UNIT option, the **displayed temperature** unit can be selected to be either degrees **Celsius** or **Fahrenheit**.

Follow these steps to navigate in the UNIT option.

Action	Key	Display
<p>Press and hold UP+DOWN key for 3 seconds to enter the menu.</p> <p>The option "UNIT" will appear in the display.</p>		
<p>Press and hold set point key to change values.</p>		
<p>While holding the set point key in, press either the arrow UP or arrow DOWN key to select the required type of unit.</p> <p>When the required type has been selected let go of the set point key.</p>		
<p>Press and hold UP+DOWN key for 3 seconds to exit the menu.</p>		

6.3 RS232

The RS232 port are only for service purposos.








6.4 TUNE

The TUNE option is for **calibration** of the **displayed temperature**.

If there is an offset between the value on the display and any measurements made with a high precision external temperature sensor, this can be corrected.

The new temperature reading will be kept as the displayed value, and temperature controlling conducted on this basis.

Follow these steps to navigate in the TUNE option.

Action	Key	Display
Press and hold UP+DOWN key for 3 seconds to enter the menu. The option "UNIT" will appear in the display.		
Press DOWN key until the option "TUNE" appears in the display.		
Press and hold set point key to change values.		
While holding the set point key in, press either the arrow UP or arrow DOWN key to select the value of temperature. When the required temperature has been selected let go of the set point key.		
Press and hold UP+DOWN key for 3 seconds to exit the menu.		

To see the calibrate value

Press and hold set point key. While holding the set point key in, press the HEAT key.		The calibrate value is shown
------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------	------------------------------

CAUTION Any change in the factory set calibration should always be based on very accurate temperature measurements. K-SYSTEMS recommend the use of a high quality PT-100 sensor that is calibrated according to manufactures specifications. Ensure an optimal contact between the sensor and the place measured. Use only a sensor type that is correct for the purpose and of correct size. If in doubt, contact your local distributor or K-SYSTEMS.

6.5 INT.T

The INT.T (Integral Time) option is for changing the **base value** for the **PID controller**.

This should not be attempted by unauthorised persons. If set at a different level the controlling principle will be affected.








From the factory, it is set to a closely calculated value specific for the model. In version 3, this value is locked and cannot be changed.

CAUTION Do not change the value here. If by mistake any changes are made or doubts occur if the value are correct please see the REST function in the menu for the restore of the defaults.

6.6 TI.ST

The Ti.St (Time Set) option is for **setting the time**.

Follow these steps to navigate in the Ti.St option.

Action	Key	Display
Press and hold UP+DOWN key for 3 seconds to enter the menu. The option "UNIT" will appear in the display.		
Press DOWN key until the option "Ti.St" appears in the display.		
Press and hold set point key to change values.		
While holding the set point key in, press either the arrow UP or arrow DOWN key to change the hour. When the time is set, let go of the set point key.		
Press and hold UP+DOWN key for 3 seconds to exit the menu.		








6.7 St.St

The St.St (Start Set) option is the **timer function** for the **heat**.

By using this option, time can be saved, as the G95 can be ready for use before procedures start in the morning.

Note This function will only be working correctly if the clock is set.

Follow these steps to navigate in the St.St option.

Action	Key	Display
Press and hold UP+DOWN key for 3 seconds to enter the menu. The option "UNIT" will appear in the display.		
Press DOWN key until the option "St.St" appears in the display.		
Press and hold set point key to change values.		
While holding the set point key in, press the arrow UP to change the minutes and arrow DOWN key to change the hour. When the time is set, let go of the set point key.		
Press and hold UP+DOWN key for 3 seconds to exit the menu.		

Note If the function Heat is set, a dot will light up in the right side of display.

St.St is connected with HEAT. It must be chosen when the timer starts.

To turn the heater on, please see section 6.8.

WARNING Always make sure when the timer function is being used, that the heated area is clear of any object that might be damaged by the heat or adversely affected in any way.








Caution should always be exercised when a heated area is turned on without any supervision.

6.8 HEAT

The HEAT option is used for the heater to **turn on at a present time**.

Note *This function only works in conjunction with St.St.
If St.St is set to 8.00 and heat function is on, the heater will automatically
Turn on at 8.00 using 24-hour clock.*

Follow these steps to navigate in the HEAT option.








Action	Key	Display
Press and hold UP+DOWN key for 3 seconds to enter the menu. The option "UNIT" will appear in the display.		
Press DOWN key until the option "HEAT" appears in the display.		
Press and hold set point key to change values.		
While holding the set point key in, press either the arrow UP or arrow DOWN key to select between "ON" and "OFF". When the required setting is activated, let go of the set point key.		
Press and hold UP+DOWN key for 3 seconds to exit the menu.		

6.9 A-St

The A-st (Automatic Start) option is used to **repeat the timer (St.St) function every day of the week.**

Note This function works in conjunction with St.St and HEAT.
 If St.St is set to 8.00 and heat function is on, the heater will automatically turn on at 8.00 every day.

Follow these steps to navigate in the As-t option.








Action	Key	Display
Press and hold UP+DOWN key for 3 seconds to enter the menu. The option "UNIT" will appear in the display.		
Press DOWN key until the option "A-st" appears in the display.		
Press and hold set point key to change values.		
While holding the set point key in, press either the arrow UP or arrow DOWN key to select between "ON" and "OFF". When the required setting is activated, let go of the set point key.		
Press and hold UP+DOWN key for 3 seconds to exit the menu.		

Note If this function is set to 'on' the heat function will be repeated every day, but if A-St function is set to "off" the heat function will only be activated one time.




6.10 HOUR

The HOUR option gives the opportunity to **show the time** on the display when the **heat is off**.




Follow these steps to navigate in the HOUR option.

Action	Key	Display
Press and hold UP+DOWN key for 3 seconds to enter the menu. The option "UNIT" will appear in the display.		
Press DOWN key until the option "HOUR" appears in the display.		
Press and hold set point key to change values.		
While holding the Set Point, press either the arrow UP or arrow DOWN key to select between "ON" and "OFF". When the required setting is activated, let go of the set point key.		
Press and hold UP+DOWN key for 3 seconds to exit the menu.		

If you want to see the time on the display when the heater is on.
Follow these steps to switch between time and temperature.

Action	Key	Display
Press and hold set point key.		
Press the HEAT key on time, then let go of the set point key. The display now shows the time.		

To change back to temperature

Action	Key	Display
Press and hold set point key.		
Press the HEAT key one time, then let go of the set point key. The display now shows the temperature.		

Note The time is shown as a 24 hour clock e.g. 19.30 not 7.30 PM.









6.11 REST

The REST function will **restore all factory set values**.

Any changes made to the displayed temperature, unit readings and controller value will be reset.

Note Calibration value in the TUNE option will remain and not be reset.

Follow these steps to navigate in the REST option.

Action	Key	Display
Press and hold UP+DOWN key for 3 seconds to enter the menu. The option "UNIT" will appear in the display.		
Press DOWN key until the option "REST" appears in the display.		
Press and hold set point key to change values.		
While holding the set point key in, press either the arrow UP or arrow DOWN key. When the display shows "----", *let go of the set point key.		
Press and hold UP+DOWN key for 3 seconds to exit the menu.		

*This means all factory values have now been restored.

7 Battery functions

7.1 Charging the battery



The built-in battery is charged whenever the incubator is connected to a main power source through the 24-volt adapter.

The charging time to 100% capacity depends on how much the battery is discharged. A battery discharged to 50% of the normal capacity takes approximately 3 hours to recharge. If the battery has been fully discharged, it takes 6 hours to recharge it. When charging the battery, the portable incubator should be placed on a hard, smooth surface to ensure adequate air circulation under the portable incubator.



Note *The battery cannot be charged from the 12-volt car cigarette lighter socket. Recharging can only be done when the unit is connected to a mains power source.*

7.2 Battery Indications

When the unit runs on battery:

Action	Key	Display
Press UP+DOWN key to see the charge percent of the battery.		

When the unit is connected to mains power:

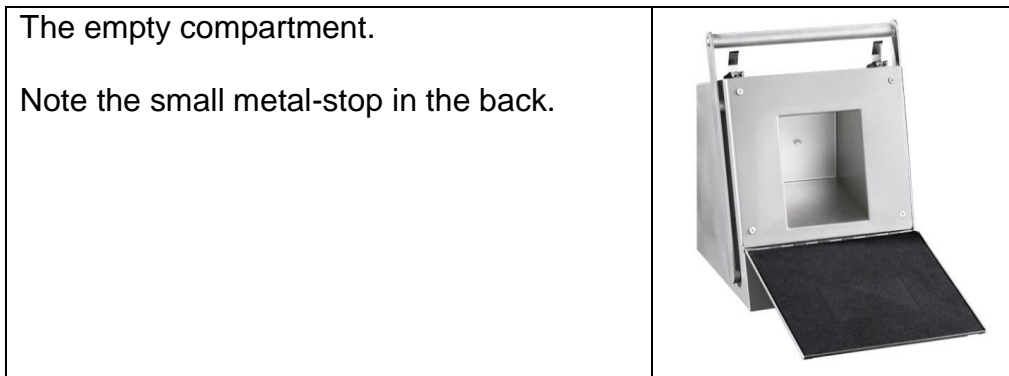
Action	Key
A flashing light in the HEAT key indicates that the unit is being charged.	
A constant light in the HEAT key indicates the unit is fully charged.	

The LED light will not be activated when the G95 is operating only on the internal battery.

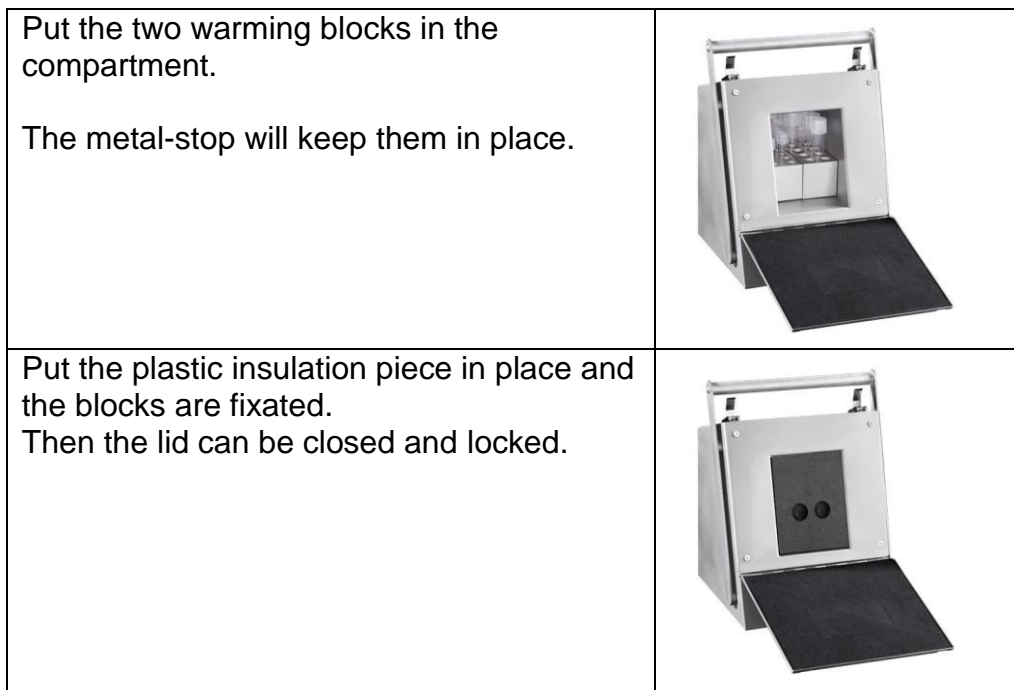
8 The use of tubes or dishes

A selection of different tubes and dishes can be transported. Either tubes or dishes can be transported at one time, not a combination of both.

Please contact your local distributor or K-SYSTEMS for details about the full range of warming blocks.








8.1 Loading with tubes



Note *Always use two blocks at a time in order to have a level temperature and keep the blocks from moving around.*

8.2 Loading with dishes

<p>Put the white plastic insulation piece in the bottom.</p>	
<p>There is a groove in the back that must fit over the metal-stop</p>	
<p>Stack the warming blocks with the dishes in.</p>	
	
<p>Put the black plastic insulation piece in place and the blocks are fixated. Then the lid can be closed and locked.</p>	

Note *Always fill up the compartment so the blocks do not slide around.*

9 Gassing the CO₂ incubators

9.1 Why gassing?

Most of the culture media which are used in assisted reproduction techniques are sensitive to changes in pH. Culture media must be maintained at a pH about 7.4. This can be obtained by gassing with atmosphere of 5% or 6% CO₂.

9.2 Gas supply

Gas mixtures are typically supplied in 50 litre steel tanks with a pressure of 150 bar (2000 PSI), however smaller tanks are also available.

9.3 Gas pressure

The gas pressure must be reduced by using a two-stage regulator. The output pressure from the two stage regulator must be set between 0.5 and 1.0 bar (4-10 PSI).

9.4 Humidifying the gas mixture

In order to reduce evaporation from the culture media, humidification of the gas mixture may be necessary.

We recommend the K-SYSTEMS GH01, which can be connected between the regulator and the G95 portable incubator.

9.5 Gas flow rate

In general, the flow rate should be between 5 - 20 litres per hour, depending on the application and how often the lid of the portable incubator is opened.

The flow rate should not be higher than necessary in order to reduce the risks of changing the osmolality of the culture media.

To quickly establish the correct CO₂ concentration, it is recommended to gas with 6 litres of 5% CO₂ in air for instance, with the K-SYSTEMS GH01 flowmeter set at 29 l/h gas for approx. 15 minutes.

Higher flow rates can be used if the flow meter has a flush-flow valve for rapid purging.

9.6 Purging

Attach the gas supply to the rear of the incubator, where the gas connector is situated.



Note *Make sure to read all instructions regarding the gas supply.*

When gassing, the lid should be closed but not secured with the locks, in order for the air to exit the incubator.



When frequent openings of the portable incubator are required, it may be necessary to use a flowmeter with a flush-flow valve for rapid purging. In this case, K-SYSTEMS recommend the GH01.

After gassing, the lid should then be secured with the two locks and the incubator is ready for transport.



10 User maintenance

10.1 Cleaning

The G95 is a low maintenance unit designed to be easy to use and clean.

10.1.1 Daily maintenance

In case of spillage, moisten a cloth with sterile water and wipe internal surfaces of the Incubator. If smudges are difficult to clean, wipe them with a soft cloth slightly moistened with a diluted neutral detergent followed by wiping with a cloth moisten with sterile water.

10.1.2 Disinfection

In case of contamination follow below procedure

- Moisten a cloth with sterile water and wipe internal surfaces of the Incubator
- Thereafter wipe all internal surfaces of the Incubator with sterile wipes moisten with a 0.12 % active chlorine disinfection solution.
- Leave it for 15 min. The solution will be active even when it is dry.
- Wipe all disinfected surfaces with a sterile cloth moist with purified or sterile water.
- After cleaning, let the workstation/ Incubator ventilate for sufficient time to ensure that all fumes have dissipated.

- The heated compartment is able to withstand some water spills. However, if water is spilled on the surface, unplug the power cord, and wipe immediately. with a dry cloth

Note If water gets inside the unit, contact your K-SYSTEMS representative to check electrical safety.

It is not recommended to use alcohol solutions for the cleaning of the incubator as alcohol contain VOCs.

10.2 Calibration intervals

For optimal performance, the unit should be calibrated once a year by authorized K-SYSTEMS Service provider.

11 Trouble shooting

Symptom	Cause	Action
Temperature alarm is on.	Temperature more than $\pm 0.5^{\circ}$ C from set temperature.	Check the set temperature. Wait for the temperature to stabilize.
No heating.	Set point below ambient.	Change set point (e.g. 37° C).
Display remains off, when "HEAT" key is activated.	No mains supply.	Plug in the power connector.
	Power connector, not connected.	Replace the display PCB.
	Defective "HEAT" key.	Replace the keyboard.
Display read "E-1".	Defect temperature sensor.	Replace temperature sensor.
Shortened battery time during use	Battery has reached life end	Replace battery

12 Technical data

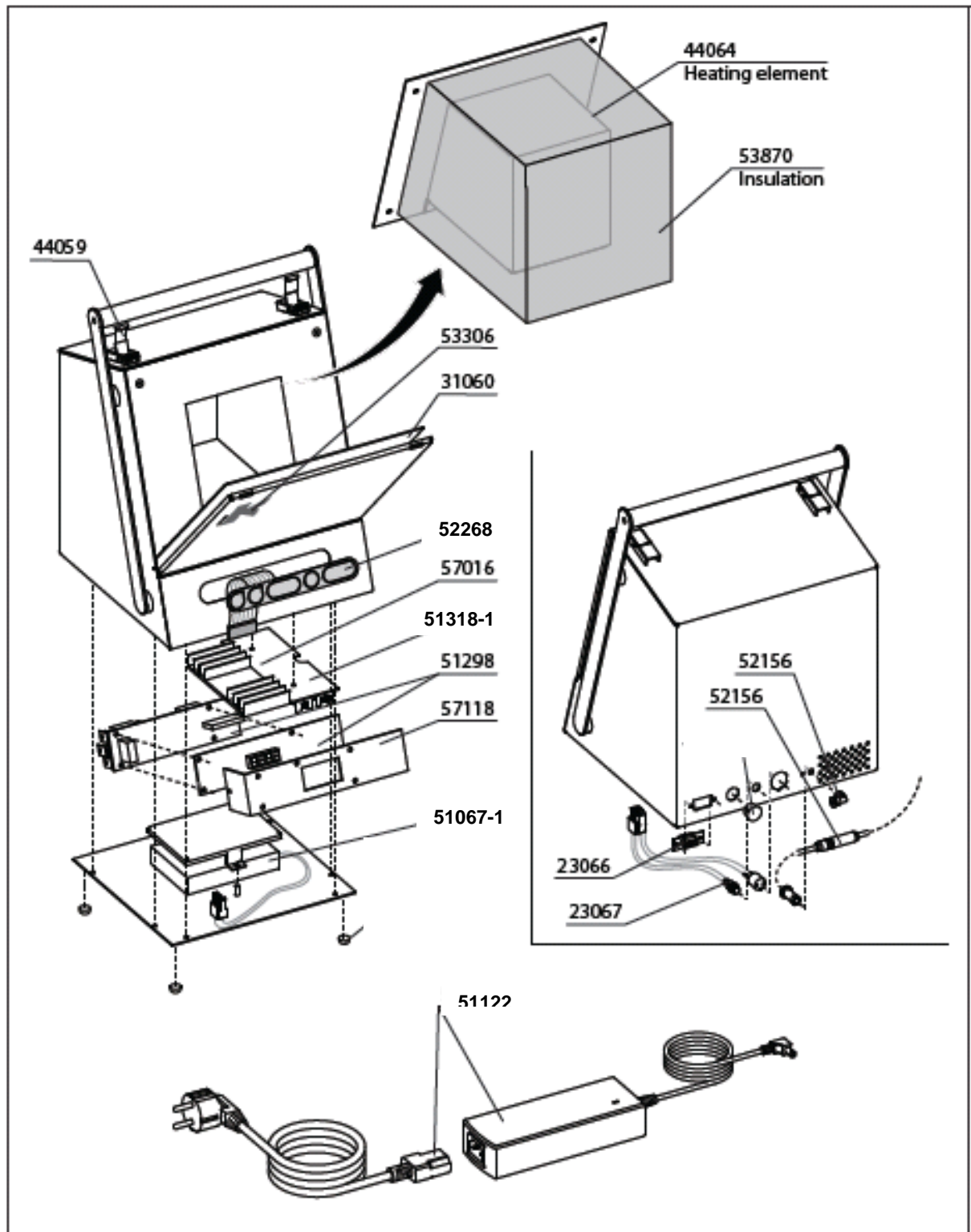
Material of cabinet and compartment	Stainless steel
Weight (without PSU and BLOCK)	5.68 kg
Overall dimensions incl. handle (WxDxH)	245x220x315 mm
Chamber dimensions (WxDxH)	101x117x125 mm
Temperature range	amb to 49.9°C
Temperature accuracy	±0.2°C
Temperature set/read	Digital LED display
Power consumption (when charging)	43W (105W)
Heating	30W
Alarms	Visual and acoustic for out-of-range temperature and battery
Charging time	6 Hours
Battery holding time (ambient temperature 23° C and new battery)	4-5 Hours
Gas consumption flushing	30 litres per Hour
Gas consumption normal	10 litres per Hour
Gas pressure	0.5-1.0 Bar
Gas	5% CO ₂ in air
CO ₂ holding time	1 % drop per 3 Hours
Power supply car	12 V-15 V
PSU	AC input 100-240 V 50-60 Hz 1.6 A MAX DC output 24 V / 5 A

13 Spare parts

13.1 List of spare parts

Description	Part number
PCB	51318-1
Battery	51067-1
Lock for lid	44059
Keyboard	52268
Heating element	44064
Power connector	23073
RS-232 connector	23066
PSU and mains cable.	51122
Sticker K-SYSTEMS.	53306
Sealing rubber for lid	31060
Gas connector	52156
Cooling Plate	57016

13.2 Spare parts – Explorer viewer



14 Limited warranty

K-SYSTEMS Kivex Biotec warrants to the purchasers of all devices and products manufactured by K-SYSTEMS Kivex Biotec, the product was prepared and tested in accordance with good manufacturing practices and guidelines and are in compliance to the CE norms issued by the competent authority.

In the event of product failure under normal use, due to defects in material or workmanship. This limited warranty does not apply to products subjected to abnormal use or conditions, improper storage, damaged by accident, misuse or abuse, improper line voltage, products whose serial number has been altered, to products not shipped in accordance with the recommendations of K-SYSTEMS Kivex Biotec, and/or to products altered or serviced by anyone other than K-SYSTEMS Kivex Biotec authorized distributors. Distributor is responsible for the labour and travel costs during this period.

This limited warranty is exclusive and in lieu of all other warranties whether written, oral, expressed or implied. K-SYSTEMS Kivex Biotec does not warrant that the product is suitable for the needs of the purchaser and there are no warranties given as to merchantability or fitness for a particular purpose other than the one specified in K-SYSTEMS Kivex Biotec literature that accompanies every specific product. K-SYSTEMS Kivex Biotec assumes that the Purchaser is experienced in the use of this device and is able to judge from his/her own expertise the suitability or otherwise of the product for the intended use.

K-SYSTEMS Kivex Biotec reserves the right to change or discontinue this product without prior notice.

15 Liability

Because K-SYSTEMS Kivex Biotec has no control or influence over the conditions under which this device is used, over its method of use or administration, or on handling of the product after it leaves its possession, K-SYSTEMS Kivex Biotec takes no responsibility for the results, use and/or performance of the product. K-SYSTEMS Kivex Biotec expects that use of the product will be confined to trained and expert users.

In no event shall K-SYSTEMS Kivex Biotec be liable for any direct or indirect damages including incidental, consequential or special damages, arising out of or in connection with the use or performance of the product.

If K-SYSTEMS Kivex Biotec provides you with technical documentation, this does not authorize you to perform repairs, adjustments or alterations on the device or accessories.

No representative of K-SYSTEMS Kivex Biotec and no vendor of the product is authorized to change any of the foregoing terms and conditions, and the purchaser accepts the product subject to all terms and conditions herein, subject always to any contrary provisions which are necessarily implied by stature or law notwithstanding the within terms and conditions.

16 Replacement

As mentioned in the Limited Warranty, The decision whether to provide any remedy or whether to refund any part of the purchase price shall be at the discretion of K-SYSTEMS Kivex Biotec.

Before returning a product for any reason, please contact your nearest K-SYSTEMS Kivex Biotec distributor for assistance and instructions.

Only for all customers in Denmark, Norway and Sweden, please take direct contact with our head office at:

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