

K-Systems®

G95 Portable Incubator User Manual

+45 46 79 02 02 | sales@coopersurgical.com | fertility.coopersurgical.com



 **CooperSurgical, Inc.**
95 Corporate Drive, Trumbull, CT 06611, USA
Document K33087UM(2) | DRF 5391 | 29 October 2020

CooperSurgical®

CONTENTS

SECTION 1 – PREFACE	1
Copyright	1
SECTION 2 - SAFETY WARNINGS	2
Glossary of Safety/Information Symbols	2
SECTION 3 - PRODUCT OVERVIEW	3
Unpacking and Inspection	3
Accessories	3
Gas connector	3
Silicone tube	3
Optional Equipment	4
Warming blocks for tubes	4
Warming blocks for dishes	4
Supplementary equipment	5
Intended Use	5
General Description	5
Unit Performance	6
Connections	6
General Care	6
SECTION 4 - BASIC OPERATION	7
Features and Operation	7
Assembling the G95	7
Connection to the Mains	7
Start of Apparatus	7
Operating the Heated Compartment	7
Keyboard Functions	7
Temperature Setting and Control	8
Combination Keys	8
Temperature Alarm	9
Warming Up	9
Warming Blocks	9

CONTENTS

SECTION 5 - MENU FUNCTION 10

Overview of Options	11
Unit	12
RS232	12
Tune	13
INT.T	14
TI.St	14
St.St	15
Heat	16
A-ST	17
Hour	18
Rest	19

SECTION 6 - BATTERY FUNCTIONS 20

Charging the Battery	20
Battery Indications	20

SECTION 7 - THE USE OF TUBES OR DISHES 21

Loading with Tubes	21
Loading with Dishes	22

SECTION 8 - GASSING OF CO² INCUBATORS 23

Why Gassing?	23
Gas Supply	23
Gas Pressure	23
Humidifying the Gas Mixture	23
Gas Flow Rate	23
Purging	24

SECTION 9 - CARE AND MAINTENANCE 25

Cleaning	25
Preparation at the Point of Use	25
Periodic Cleaning	25
Disinfection	25

CONTENTS

Drying	25
Calibration	25
Disposal of electrical and electronic equipment.	26
SECTION 10 - TROUBLESHOOTING	27
SECTION 11 - TECHNICAL DATA	28
SECTION 12 - SPARE PARTS	29
List of Spare Parts	29
Spare Parts - Explorer Viewer	30
SECTION 13 - WARRANTY INFORMATION AND LIMITS ON LIABILITY	31
SECTION 14 - RETURNING PRODUCT	32
Returned Goods Policy	32
Customer Service Contact Details:	33
US Only Customers Contact Details:	33
SECTION 15 - CUSTOMER SERVICE CONTACT INFORMATION	34
European Service Representatives	34
US Service Representatives	34

SECTION 1 – PREFACE

Copyright

This manual contains information that is subject to copyright. All rights reserved. This manual should not be photocopied, otherwise copied or distributed, completely or in part, without the approval of CooperSurgical, Inc.

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

CooperSurgical, Inc.

Phone: +1 (203)601-9818

International Phone: +45 46 79 02 02

sales@coopersurgical.com

fertility.coopersurgical.com



CooperSurgical, Inc.
95 Corporate Drive
Trumbull, CT 06611, USA















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.

SECTION 2 - SAFETY WARNINGS**Glossary of Safety/Information Symbols**

Source: ISO 15223-1 and ISO 60601-1

2

Symbol	Meaning
	In accordance with Low Voltage Directive 2014-35-EU
	Consult instructions for use - coopersurgical.com Hard copies available on request
	Indicates the need for the user to consult the instructions for use for important cautionary information such as warnings and precautions that cannot, for a variety of reasons, be presented on the medical device itself.
	Manufacturer
	Date of manufacture
	Catalogue or Part number
	Serial number
	Do not dispose of product with normal waste. Dispose of in accordance with the EU WEEE Directive. (See Care and Maintenance section.)
	This way up
	Fragile, handle with care
	Stacking limited to 3 units
	Keep dry

SECTION 3 - PRODUCT OVERVIEW

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.

Accessories

Standard Accessories

24 volts main adapter (PSU)

Order code: K51122



Mains Cable

Standard Schuko Order code: 52768

UK Order code: 53886

US Order code: 52773



Connection cable for 12 volt car cigarette lighter socket.

Order code: 51016



Two plastic blocks for holding the warming blocks in place.

Plastic insulation

White Order code: 50004

Black Order code: 52772



Gas connector

Order code: 52156

Order code: 52192

Silicone tube

Order code: 11066



Optional Equipment

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

Warming blocks for tubes

Warming block B06

Holds twelve tubes of Ø12mm
Falcon 352003
Order code: 26006

**Warming block B08**

Holds ten tubes of Ø17 mm
Falcon 352001
Order code: 26008



Warming blocks for dishes

Warming block B16

Holds two culture dishes
B16-Falcon 353001
Order code: 26059



B16N-NUNC 150318
Order code: 26060

Warming block B24

Holds one centre well dish
Falcon 353653
Order code: 260027

**Warming block B25**

Holds one 60mm culture dish
Falcon 353002
NUNC 150288
Order code: 26028

**Warming block B26**

Holds one 4-well Falcon dish with lid
Falcon 353654
Order code: 26031

**Warming block B28**

Holds on 4-well dish
NUNC 176740
Order code: 26029

**Warming block B29**

Holds on 5-well dish
MiniTüb 19021/0005
Order code: 26030



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.

GH01

Standalone gas warmer, humidifier and flow regulator.”

Order code: 31059



G73

Dry Bath Incubator for heating samples in test tubes.

Order code: 22065



Intended Use

The K-SYSTEMS CooperSurgical G95 Portable incubator is designed to provide a short-term environment with controlled temperature at or near body temperature and gas levels (CO₂, O₂) for gametes and embryos during transit for assisted reproductive technology (ART) treatments.

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

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 stabilize.

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

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).

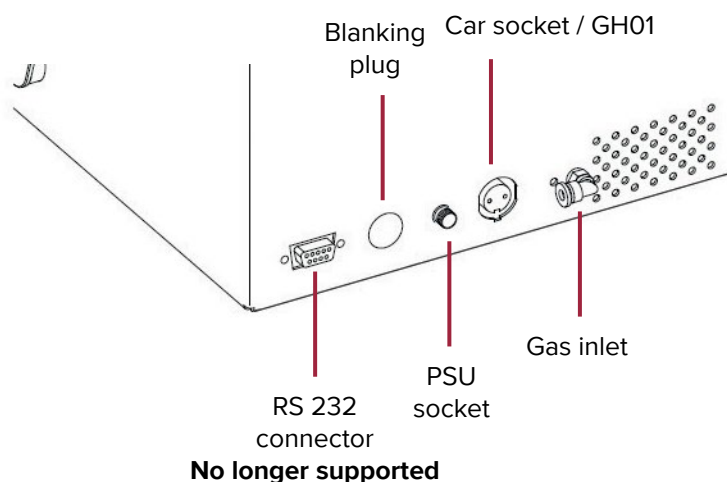
A built-in battery maintains the temperature for 4 to 5 hours depending on ambient temperature. The battery will be charged when the incubator is connected to the mains adapter.



Caution: additional heat can be generated whilst charging the battery. Do not place samples in the incubator whilst connected to the mains adapter.

The incubator can be connected to a 12V car cigarette lighter socket during transport and whilst incubating samples. This provides power to maintain the temperature but does not charge the battery.

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 plastic block.



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 page 24)

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

Connections

Should the transport time exceed the 4 to 5-hour battery time the unit can be connected to the 12V cigarette lighter socket found in most automobiles.

When not in use the unit should be connected to the mains power supply but should not be used for incubating samples.

The unit can only be heated up from ambient using the mains adapter. The battery is designed only to maintain the temperature once warmed up.

The car adaptor can only be used to extend the transport time. It will not charge the battery.

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 catch, 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

SECTION 4 - BASIC OPERATION

Features and Operation
Assembling the G95

No assembly needed. Just follow the directions below and the unit is ready for use.

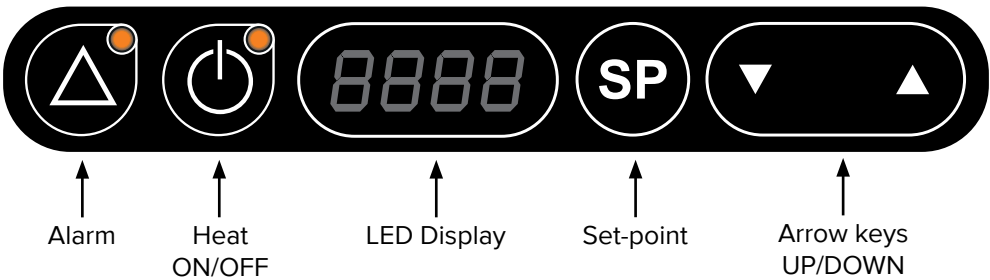
Connection to the Mains

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.



4

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/Off button on the keyboard. The display will indicate the current temperature.



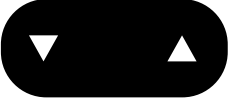


Operating the Heated Compartment
Keyboard Functions

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









Temperature Setting and Control

The display indicates the average temperature of the surface.

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.

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: Powersave 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.

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 stabilizes to the set-point level

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 stabilize, depending on the thermal mass of the object and the initial temperature. It is recommended to pre-warm warming blocks before they are placed in the incubator.

Always let the unit stabilize before use.




Caution: Check the temperature at the base of the incubator chamber with a calibrated thermometer before placing the samples inside.

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.

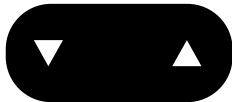

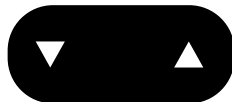


A selection of different tubes and dishes can be transported. Either tubes or dishes can be transported at one time, not a combination of both.



Warning: Warming blocks should always be pre-heated before usage.

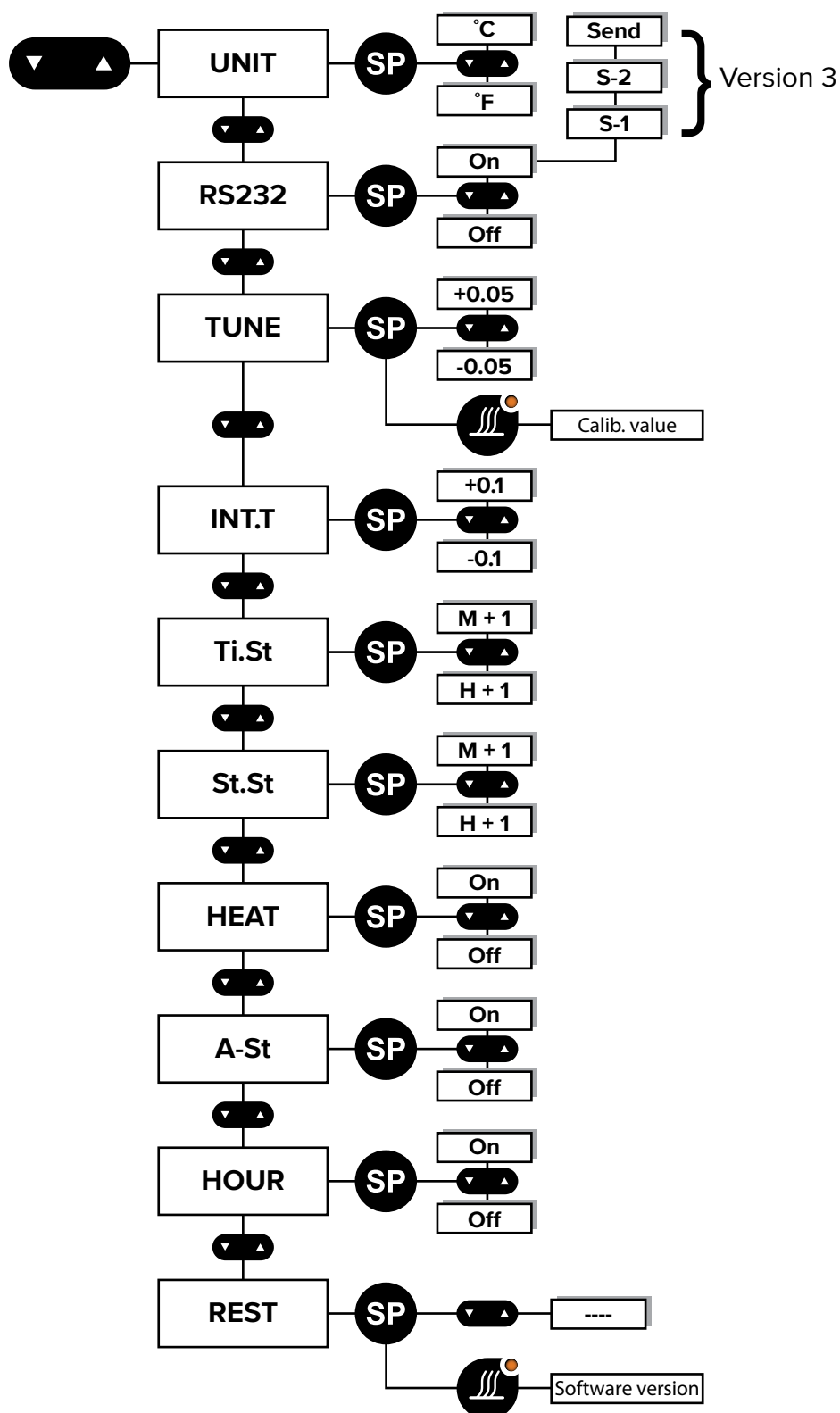
SECTION 5 - MENU FUNCTION

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.




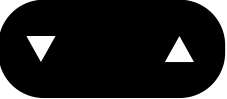

Overview of Options



Unit

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

Follow these steps to navigate in the UNIT option.

Action	Key	Display
Press and hold UP+DOWN key for 3 seconds to enter the menu. The menu “UNIT” will appear 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 required type of unit. When the required type has been selected let go of the set-point key.		
Press and hold UP+DOWN key for 3 seconds to exit the menu.		

RS232

The RS232 port is only for service purposes.








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, with temperature control 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 menu "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 temperature. 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.		

To see the calibration value

Action	Key	Display
Press and hold set point key. While holding the set point key in, press the HEAT Key.	 + 	The calibration value is shown



Caution: Any change in the factory set calibration should always be based on very accurate temperature measurements. CooperSurgical only recommends the use of a high quality PT-100 sensor that is calibrated with the precision instrument used for measuring according to the manufacturers specifications. Also 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 CooperSurgical distributor.

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 can't 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

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 to change minutes 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.		







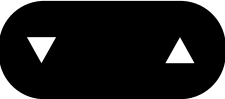
St.St

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 work 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 menu "UNIT" will appear in the display.		
Press key DOWN 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 either the arrow UP to change minutes 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.		

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, (see page 16)










Warning: Always make sure when the timer function is being used, that the heated area is clear of any objects that might be damaged by the heat or adversely affected in way. Caution should always be exercised when a heated area is turned on without any supervision.

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 menu.






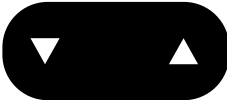

Action	Key	Display
Press and hold UP+DOWN key for 3 seconds to enter the menu. The option "UNIT" will appear in the display.		
Press DOWN key once until the option "HEAT" appears in the display.		
Press and hold set-point key to change values.		
While holding the set-point key in, press either arrow 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.		

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 A-st option.








Action	Key	Display
Press and hold UP+DOWN key for 3 seconds to enter the menu. The first menu "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 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.




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 first menu "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 key in, press either 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 turned on then 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.		



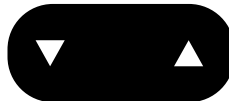


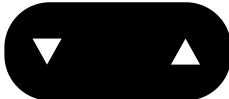

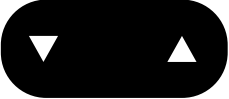
To change back to temperature.

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.

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 first menu "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.*

.


SECTION 6 - BATTERY FUNCTIONS

Charging the Battery

The built-in battery is charged whenever the incubator is connected to the mains adapter.

The charging time to 100% capacity depends on how much the battery is discharged. 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 underneath.





Caution: additional heat can be generated whilst charging the battery. Do not place the samples in the incubator whilst connected to the mains adapter.



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 the mains adapter.

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 unit is being charged.	
A constant light in the HEAT key indicates the unit is fully charged.	

The LED light will be off when the G95 is operating only on the internal battery.

Section 7

SECTION 7 - 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.

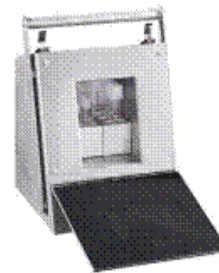
Please contact your local distributor or CooperSurgical distributor for details about the full range of warming blocks.

The empty compartment.
Note the small metal stop in the back.

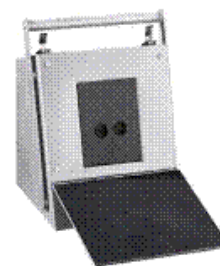


Loading with Tubes

Put the two warming blocks in the compartment.
The metal stop will keep them in place.








Put the plastic insulation in place and the blocks are fixated.
Then the lid can be closed and locked.



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

Loading with Dishes

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

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

SECTION 8 - GASSING OF CO₂ INCUBATORS

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 an atmosphere of 5% or 6% CO₂.

Gas Supply

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

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).

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 must be connected between the regulator and the G95 portable incubator.

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.

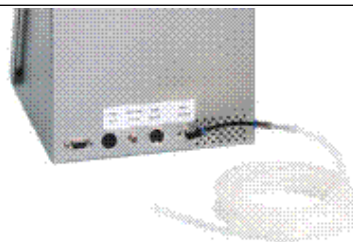
The flow rate should not be higher than necessary in order to reduce the risks of changing the osmolarity of the culture media.

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 approximately 15 minutes.

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

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 gas supply.

When gassing, the lid should be closed but not secured with 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, CooperSurgical recommends the GH01.

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



SECTION 9 - CARE AND MAINTENANCE

Cleaning

Periodic cleaning is recommended as part of routine maintenance. Disinfection is also recommended for media spills, visual accumulation of dust, and other evidence of contamination.

Clean and disinfect the surfaces when necessary and immediately after any media spills.

Cleaning and disinfection should be performed with the equipment switched off.

Gloves should be worn during cleaning, disinfecting and sterilizing.

Preparation at the Point of Use

After every patient procedure, wipe down the surfaces immediately after use to prevent soil from drying on the device by performing the following steps:

1. Moisten a clean lint-free cloth with warm tap water (38°C to 49°C)
2. Use the moistened clean, lint-free cloth and wipe off any visual soil.

Periodic Cleaning

1. Apply a laboratory detergent evenly to all surfaces.
2. Moisten a sterile non-linting cloth with purified or sterile water and wipe all surfaces. If needed, use additional cloths if cloths become visibly soiled.
3. Allow to air dry.
4. Visually inspect for the absence or presence of remaining soil. While inspecting, give particular attention to verifying soil has been removed from the hard-to-clean areas. If soil is present, then repeat the manual cleaning steps until all visible soil is removed.

Disinfection

After the surface is clean and all visual soil has been removed, proceed with the following instructions to disinfect the surfaces as follows:

1. Apply evenly to all surfaces using a laboratory disinfectant spray. Wait a minimum of 15 minutes for the surfaces to dry for best results.
2. Moisten a sterile non-linting cloth with purified or sterile water and wipe all disinfected surfaces for a minimum of one (1) minute.

Drying

Thoroughly dry all surfaces using a sterile, lint-free wipe or cloth, changing wipes/ cloths when necessary to ensure the surfaces are completely dry. Visually inspect the surfaces to ensure all surfaces are clean and dry. Repeating drying steps if any moisture is visible.

Note: If water gets inside the equipment, contact your CooperSurgical representative to check electrical safety.

Calibration

For optimal performance the unit should be calibrated once a year by authorized CooperSurgical Service provider.

Disposal of electrical and electronic equipment.

CooperSurgical have taken the necessary steps to comply with the EC directive 2012/19/EU on waste electrical and electronic equipment (WEEE).



Environmental implications: WEEE contains materials that are potentially hazardous to the environment and to human health. Therefore, when this instrument has reached its end of life it must be collected and recycled separately from other waste according to national requirements. Please contact a local CooperSurgical distributor for instructions. Do not dispose of with 'normal' waste.

SECTION 10 - TROUBLESHOOTING

Symptom	Cause	Action
Temperature alarm is on.	Temperature more than $\pm 0.5^{\circ}\text{C}$ 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

SECTION 11 - TECHNICAL DATA

Material of cabinet and compartment	Stainless steel
Weight (without PSU and BLOCK)	5.68kg
Overall dimensions incl. handle (WxDxH)	245 x 220 x 315mm
Chamber dimensions (WxDxH)	101x117x125mm
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
Changing 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
CO₂ holding time	1 % drop per 3 hours
Power supply car	12 V-15 V
PSU	AC input 100-240V 50-60Hz 1.6A MAX DC output 24V / 5A

Section 12

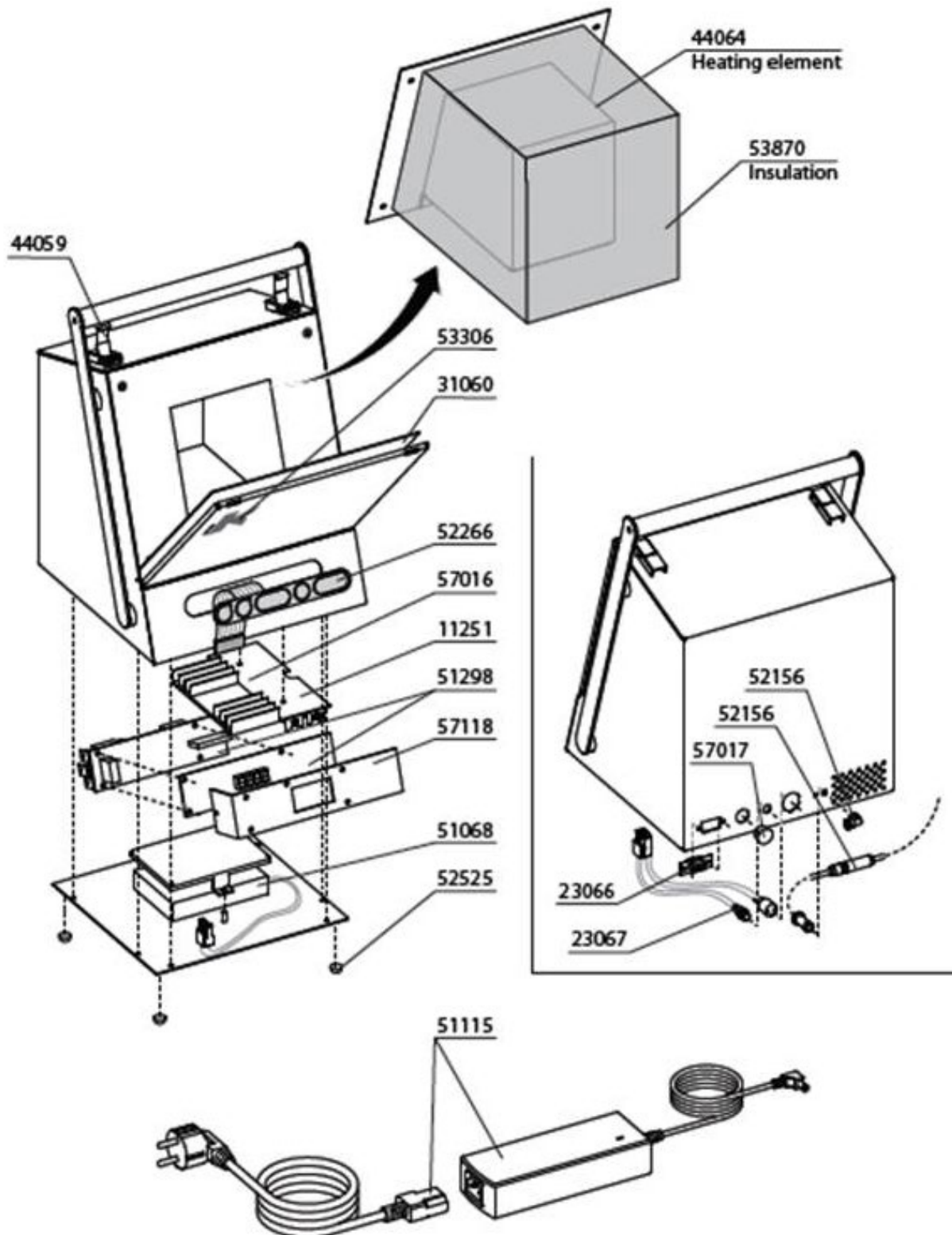
SECTION 12 - SPARE PARTS

List of Spare Parts

Internal parts are not user-serviceable and must be replaced by an authorised service technician.

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	K51122
Sticker K-SYSTEMS	53306
Sealing rubber for lid	31060
Gas connector	52156
Cooling Plate	57016

Spare Parts - Explorer Viewer



SECTION 13 - WARRANTY INFORMATION AND LIMITS ON LIABILITY

CooperSurgical, Inc. warrants the operational safety and correct system operation of the whole unit under the condition that:

- The device is operated as described in the manuals
- The device has not been modified
- All service intervals are kept according to manuals
- Only original spare parts and accessories that have been approved by CooperSurgical are used

CooperSurgical warrants that the G95 will be free from defects in materials and workmanship for one year from the date of initial purchase. If CooperSurgical determines that a workstation fails to conform to that warranty during the one-year warranty period, CooperSurgical will, as the sole remedy for that failure to conform, repair or replace that workstation, at CooperSurgical's discretion, free of charge.

To return a workstation to CooperSurgical, a customer must comply with CooperSurgical's Returned Goods Policy described in this manual. A customer will not have any remedy if a workstation does not conform to the warranty for that workstation unless that workstation is returned to CooperSurgical in accordance with that Returned Goods Policy. CooperSurgical will ship returned products that it repaired or replaced under warranty to the customer who returned those products, at CooperSurgical's expense F.O.B. the customer's facility. Under all other circumstances, CooperSurgical will ship returned products to the customer who returned those products at the customer's expense F.O.B. CooperSurgical's facility.

CooperSurgical's warranties do not cover damage caused by misuse, improper care, improper use of chemicals or cleaning methods, loss, theft, servicing by non-authorized personnel or negligent or intentional conduct on the part of the owner or user of the workstation, nor do they cover normal wear and tear or general maintenance. Any modifications or changes to a workstation will void that workstation's warranty. CooperSurgical's warranties do not apply to any single- or limited-use, disposable or consumable components or items.

CooperSurgical is not responsible for, and the owner and operator of the workstation shall defend, indemnify and hold harmless CooperSurgical from and against, any claims, damages, and other losses resulting from the improper servicing, maintenance, repair use or operation of the workstation or the owner or operator's negligence or willful misconduct.

COOPERSURGICAL SHALL NOT UNDER ANY CIRCUMSTANCES BE LIABLE FOR LOST PROFITS, DAMAGES FROM LOSS OF USE OR LOST DATA, OR INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES UNDER ITS WARRANTIES OR OTHERWISE FOR ANY CLAIM RELATED TO COOPERSURGICAL'S PRODUCTS, EVEN IF COOPERSURGICAL HAS BEEN ADVISED, KNEW OR SHOULD HAVE KNOWN OF THE POSSIBILITY OF SUCH DAMAGES. COOPERSURGICAL'S LIABILITY WITH RESPECT TO A PRODUCT

COVERED BY A WARRANTY OR OTHERWISE SHALL BE LIMITED IN ALL CIRCUMSTANCES TO THE PURCHASE PRICE OF THAT PRODUCT. THE ABOVE WARRANTIES ARE IN LIEU OF, AND COOPERSURGICAL HEREBY DISCLAIMS, ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, WRITTEN OR ORAL, WITH RESPECT TO COOPERSURGICAL'S PRODUCTS, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. NO TERMS, CONDITIONS, UNDERSTANDINGS OR AGREEMENTS THAT PURPORT TO MODIFY THE ABOVE WARRANTIES OR THAT MAKE ANY ADDITIONAL WARRANTIES FOR ANY COOPERSURGICAL PRODUCT SHALL HAVE ANY LEGAL EFFECT UNLESS MADE IN WRITING AND SIGNED BY AN AUTHORIZED COOPERSURGICAL CORPORATE OFFICER.

SECTION 14 - RETURNING PRODUCT

Please refer to the 'Troubleshooting' section in this manual before returning product to CSI. If the problem continues, please follow these instructions:

Returned Goods Policy

Goods will be accepted for return for the following reasons:

- If shipment was made without the customer's authorization or order.
- If incorrect items were shipped.
- If defective items were shipped.
- If defective goods are covered by the standard warranty.

To return product, contact Customer Service for a Returned Merchandise Authorization (RMA) number. Items will not be accepted without an RMA number. Please have the following information:

- Reason for returning the goods.
- Quantity, description, part number, serial number of the goods.
- Date of receipt of order.
- Customer's purchase order and the CSI or Origio invoice number.

All used products must be cleaned and sterilized prior to shipment. A signed decontamination declaration may be required.

All products should be carefully and adequately packed, preferably in original packaging. Replacement items or additional repairs will be invoiced.

All packaging should be clearly labeled with the RMA number and statement "Urgent – Returned Items for Repair".

Return Address: Research Instruments Ltd, Bickland Industrial Park, Falmouth, Cornwall, TR11 4TA, UK.

Shipment must be sent prepaid by the customer and insured for their full value during shipping. Freight collect shipments will not be accepted, and goods will be returned to sender.

If Customer intends to return equipment ordered in error, the following restocking charges and terms will apply:

- 25 percent within 60 days from date of shipment.
- Goods must be returned unused, in the original carton, and in marketable condition.
- Refurbishing and replacement charges will be added to the restocking charges for damaged or missing items.
- No return after 60 days.
- No refund on sterile, single-use disposable products.

Section 14

Returning Product

CooperSurgical, Inc.

Customer Service Contact Details:

Tel: +45 46 79 02 02

Fax: +45 46 79 03 02

E-mail: sales@coopersurgical.com

fertility.coopersurgical.com

US Only Customers Contact Details:

Tel: 800-243-2974

Fax: 800-262-0105

fertility.coopersurgical.com

SECTION 15 - CUSTOMER SERVICE CONTACT INFORMATION

15

European Service Representatives

ORIGIO a/s
Knardrupvej 2
2760 Måløv
Denmark
Tel: +45 46 79 02 02
Fax: +45 46 79 03 02

New Purchases:

E-mail: sales@coopersurgical.com

Service Related E-mail:

service@origio.com
fertility.coopersurgical.com

US Service Representatives

CooperSurgical, Inc.
95 Corporate Drive
Trumbull, CT 06611 USA
Phone: 800-243-2974
Fax: 800-262-0105
International Phone: +1 (203) 601-9810
Fax: +1 203 601-4747

Service Related E-mail:

serviceandrepair@coopersurgical.com
fertility.coopersurgical.com

14

