Resuscitation Cabinet

Operators Manual

Viamed

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Version 1.0 (03/02/99)

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Introduction

Thank you for purchasing a Viamed Resuscitation Cabinet, if maintained correctly this unit should give many years of trouble free service.

This Manual contains instructions for the operation and maintenance to be carried out by the operator. Viamed is not liable for the proper functioning of any part of this product if it is not operated according to the instructions, if the maintenance recommendations in this Manual are not followed or if repairs are carried out using non-approved components.

Calibration and repairs should be performed only by trained personnel. Maintenance documents are obtainable through your local dealer or direct from Viamed.

The personnel who work with this equipment should read this Manual carefully and should fully understand all instructions contained therein. The Manual should be kept so that it can be easily inspected; it is advisable to store it in an easily accessible place. If you do not understand any function or part of this manual please contact Viamed or a Viamed distributor in order to obtain further information or clarification.

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NUFER MEDICAL

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ADRESSEN UNSERER TECHNISCHEN VERKAUFSBÜROS

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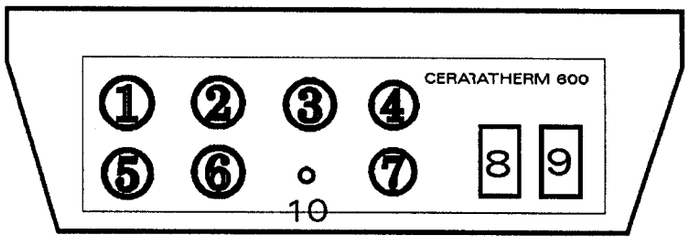
4.5 Controllers, displays and connections

This part describes the controllers, displays and connections of the Ceratherm 600-2 thermal radiator.

Front



Rear

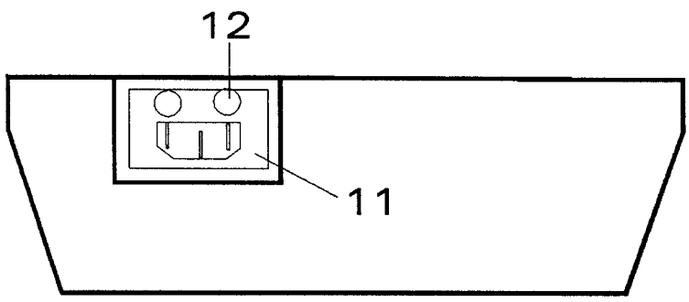


Table B

Part no.	Designation	Function
1-4	LED yellow	Display of selected output setting
5+6	Forward/reverse button	Button for selecting output setting
7	Alarm button	Display and reset button for alarm
8	Lighting switch	Switching on halogen lamp
9	Main switch	Switching unit on and off
10	LED heating monitor	Display indicating that heating active
11	Unit supply socket	Socket for 220-240V / 50Hz connection
12	Fuses	Main fuse 2 x 3,15 Ampère
5 / 6 /7	Buttons	These buttons are used together for programming the individual output settings

Alarm monitoring

When the unit is switched on, a time interval begins which after 15 minutes triggers an audible alarm and a visual alarm in the form of a flashing LED.

The alarm is cancelled with the red button, causing the red LED to extinguish and the audible signal to stop. The alarm flashing generator is deactivated. If the alarm is not cancelled within 8 seconds, the heating output set is reduced to a preset value (20%) (safety setting). The audible signal stops and the flashing red LED lights continuously.

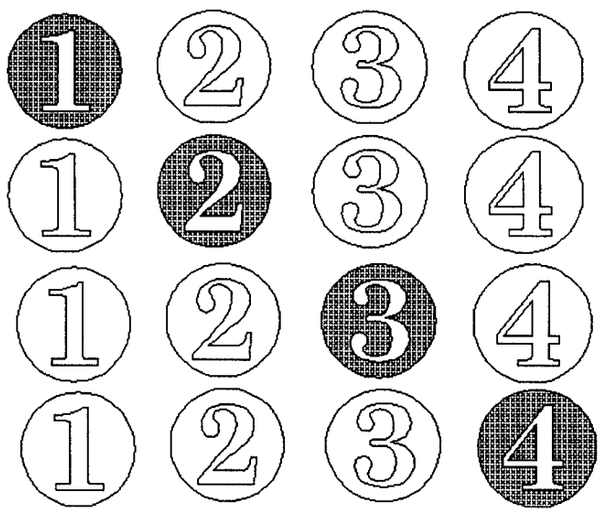
WARNING!
The child must not be left unattended on the bed with the radiator switched on.

Level 1 = 25%

Level 2 = 50%

Level 3 = 75%

Level 4 = 99%

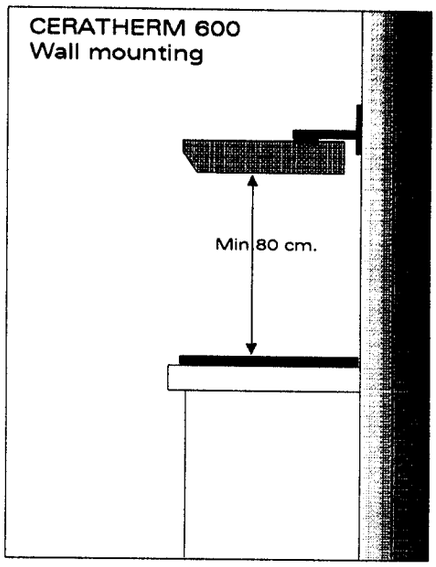


The various power levels can be used as follows:

Level 1	is used for keeping the support surface warm and for continuous operation
Level 2	is for normal operation on changing and examination area
Level 3	provides additional warmth for resuscitation, for the labour room or for the operating theatre
Level 4	is for increased heat requirement in the operating theatre, during anaesthesia or for adults

WARNING

The distance between the surface on which the patient lies and the lower edge of the radiator must not be less than 80cm. If this instruction is not observed, prolonged exposure to heat radiation may cause burns.



Mounting possibilities

Wall mounting with fixed holder
Wall mounting with movable arm
Ceiling stand with rotatable extension arm
Wall stand with pivotable extension arm
Special version

4.3 Start-up

1. Switch main heater switch to ON. The ceramic heating element is now switched on.

2. Using the adjusting knob, set the desired heating power to level 1-4. The particular setting is displayed on the four LED bars. After about 5-10 minutes, the support surface has been preheated.

3. Set main switch LIGHT to ON. The non-dazzling halogen lamp is used for illuminating the treatmentarea

4.4 Setting the heating power

The heating output can be set in accordance with actual requirements using the four-step regulation. The factory adjustment corresponds to the following local settings:

The heating output of the individual steps 1-4 can be individually adjusted for special applications, e.g.:

Level 1= 20% Level 2= 40% Level 3= 60% Level 4= 80%

4. Operating Instructions

4.0 Structure and use

The radiator is intended for warming baby changing tables and for maintaining the body temperature of infants. The built-in ceramic radiator has very good radiation properties and generates invisible infrared radiation in the region of 3 micro/M. This radiation spectrum is very readily absorbed by the skin, and the child's skin colour is not altered.

4.1 General description

The Ceratherm 600-2 unit has 4 output settings which can be set individually (20-99%). These output settings are indicated by the yellow LED's (1-4), in which only one can be active during operation. (*The numbers in ( ) are shown in Table B on Page 7.*) The choice of output setting is made by pressing the reverse button (5) or the forward button (6). The heater LED (10) indicates when heating is active. When the unit is switched on, a time interval starts, which after 15 minutes triggers an audible alarm for about 5 seconds and a visual flashing LED alarm (red LED 7). 8 seconds later, a reduction in output to a preset value takes place (safety setting), until this is cancelled with button (7), whereupon the time interval is started again. The cancellation also deactivates the flashing alarm.
Switch (8) switches the halogen lamp lighting on and off, while switch (9) switches the entire system on and off.

4.2 Wall mounting

After removing the packaging, compare the instrument data on the type plate with the available connection data. Electrical connection is via a 220V AC 50/60 Hz mains socket and a 6A connected load.

The wall holder (fixed or movable) must be fastened in solid masonry (chalky sandstone, brickwork or concrete) with suitable wall plungs and screws.

Mount the radiator in such a way that there is a distance of at least 80cm and not more than 100cm between the surface on which the patient lies and the lower edge of the radiator.

3. General

3.0 Introduction

This Manual contains instructions for the erection, use and maintenance by the operator . Nufer Medical is not liable for the proper functioning of the heat radiator if it is not operated according to the instructions, if the maintenance recommendations in this Manual are not followed or if repairs are carried out using non-approved components.

Calibration and repairs should be performed only by trained personnel. Maintenance documents are obtainable through your local dealer or from Nufer Medical.

The personnel who work with this heat radiator should read this Manual carefully and should fully understand all instructions contained therein. The Manual should be kept so that it can be easily inspected; it is advisable to store it in an easily accessible place. If you do not understand something, contact a Nufer Medical agent in order to obtain further information.

3.1 Technical data

The technical data of the Ceratherm heat radiant are shown in Table A. All technical data may be changed without prior notice.

Table A

Current requirement	220-240 V AC 50/60 Hz 630W
Protection class	I
Degreee of protection	B IP 20
Test provision	IEC 601-2 TUV / CE
Size	Width 21cm Length 55cm Height 90cm
Weight	4,9kg heat radiator
Trolley	Width 61cm Lenght 82cm Height 10cm
Upright tube	170 / 195 max. Height
Height adjustment	25cm
Swivelarm	45°

2. Definitions and Symbols

Note, Important, Caution and Warning

Note: The ramark „Note“ is used in the text to indicate procedures or conditions which might otherwise be overlooked or incorrectly understood. A note may also be used to clarify apparently contradictory or confusing situations.

Important: Similar to Note, but used when greater emphasis is necessary.

Caution: The remark „Caution“ is used to draw attention to a procedure which must be followed exactly in order to avoid damaging or destroying the instrument.

Warning: The remark „Warning“ is used in the text to draw attention to dangerous situations in connection with the operation, cleaning or maintenance of the instrument if there is a possibility of injury or danger of death to the operator or to the patient.

Attention: consult accompanying documents.

Danger! High Voltage!

Attention Hot surface

AC POWER

Type B equipment with an F-type isolated (floating) applied part.

| **Power ON**

0 **Power OFF**

1. Precautions

The heat radiator must not be used in rooms where there is a risk of explosion, i.e. in the immediate vicinity of anaestheticgases.

The distance between the surface at which the patient lies and the lower edge of the radiator must not be less than 80cm. If this instruction is not followed, prolonged exposure to the heat radiation may cause burns.

Contact with the protective grating and the reflector should be avoided:
„Danger of burns“

The protective grating on the upper side of the radiator must always be free in order to ensure adequate removal of heat. Do not place sheets or flammable materials on the protective grating.
„Danger of fire“

If the underlay is changed, for example by the use of dark sheets, heating cushions, etc., the support surface may reach excessively high temperatures and thus influence the body temperature of the infant or patient.

After the radiator has been switched on, an acoustic and visual alarm is given after 15 minutes. This can be reset for a further 15 minutes with the red button.

The infant or patient must never be left unattended under the operating heat radiator.

When using the heat radiator over incubators, care must be taken to ensure that there is sufficient space between the lower edge of the radiator and heat-sensitivematerial, such as perspex or acrylic glass. The distance must not be less than 50cm. Set the heating power to max. level 3.

If the radiator housing is removed, there is a danger of an electric shock. Maintenance and service work must be carried out only by trained personnel.

Cabinet

The cabinet has been designed to conceal the internal products when closed and then provide easy access when open.

Excessive weight should not be applied to the drop down front platform.

It is strongly recommended the while in use the patient should be under close observation at all times.

Suction Controller

The Oxylitre S700 series suction controllers are designed specifically for Medical use.
It is available in high Suction-High Flow or Low Suction-High Flow models with either direct or remote (rail or "V"male) fittings.
The Suction Controllers comply to ISO 10079-3 1992, BS7259 Pt 2 1993.

Vacuum Source Connector

The S700 series suction controller is available with either a British Standard (BS5682) probe or a 9/16unf L/H fitting. The 9/16 unf L/H connection can be attached to various types of remote fittings i.e. Rail or "V" male mounted, with remote hose assemblies

Patient Inlet Connection

The inlet connection is an integral part of a detachable filter cartridge, which is infact a Disposable Hydrophobic Filtration Unit.

This filtration unit has been designed to prevent the ingress of fluids in to the controller and the pipeline system. (it is a multi-fit unit, designed to fit other manufacturers suction products).

Once the filter has been used for patient therapy or if wetted, for any reason, it must be changed. The unit has been designed so that a chemical coating on the filter membrane will prevent fluid passing through it, and may restrict the flow of suction once wetted.

Vacuum Gauge

The controller is fitted with a easy to read, dual scale colour coded gauge
Scale Readings:
High Suction 0 to 760mmHg (0 to 100kpa)
Low Suction 0 to 200mmHg (0 to 25kpa)

Safety Valve:

The units are fitted with an internal safety valve system. This will protect the suction controller from being damaged in the event of the unit being connected to a positive pressure source.

Suction Control and Safety:

To Increase/Decrease Suction

The control knob is graduated from a positive "OFF" to a maximum "MAX" vacuum position, within a approximatley two thirds rotation of the control knob. This has a safety aspect of gaining instant suction at a controlled level of all emergency situations.

A further safety feature is that the vacuum source can be turned off immediately by turning the control knob to the OFF position. This will automatically drain off all the remaining suction source from the suction tubing and receiver jar.

Also unlike some units with the ON/OFF flag/switch system, when the controller is turned ON to the gradients, the suction will increase as slowly or as quickly as the user requires, and not at the point where it was last set, as with the flag type.

Maintenance

A medical suction controller forms part of an essential life supporting system. All suction controllers must be treated with care and serviced on a regular basis (ie Preventative Maintenance) to ensure the units reliability and quality conformance for the purpose that it is intended for.

For service enquiries and information please contact Viamed to arrange a quotation etc.

NEVER USE FAULTY EQUIPMENT
Preventative maintenance ensures safety for the patient and user.

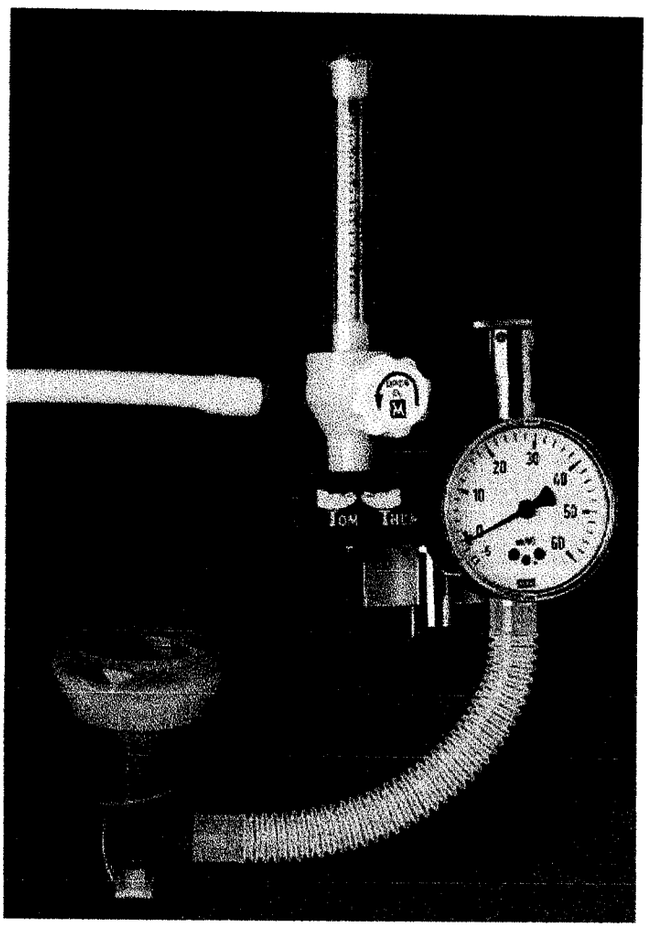
Replacement Filters

Ref: S750 per box of 30 units.

Timer Model (NS 22G Seconds Timer)

1. Press the red button (stop).
2. Ensure that the time is fully wound by using the key provided for this purpose at the back of the case.
3. Bring both hands to the 60 position by pressing the black button (zero fly back).
4. The timer is now ready for use.
5. To start the timer press the green button; to stop the timer press the red button; for zero fly back press the black button.
6. It is recommended that the zero fly back button (black) should only be pressed if the red button (stop) is pressed beforehand. When the green button (start) is pressed, the zero fly back button (black) should not be used.
7. Special "Stop and Goon" feature:
   the timer can be stopped and restarted at any reading to give a cumulative timing. The timer should be fully wound once each day.

Tom Thumb Instructions for use



Tom Thumb User Sheet

Instructions

Disconnect Tom Thumb from all inlet & outlet Hoses & tubes

1. Check that the pressure gauge reads Zero If it does not then Tom Thumb needs servicing
2. Attach Flowmeter inlet to the hospital oxygen supply
3. Set flowmeter to read 4-6 L/Minute
4. Adjust blow off valve to mininum (fully counter clockwise)
5. Connect Patient tubing (INT 6181) to Tom Thumb but NOT THE PATIENT
6. Occlude mask and open port of T piece --- adjust blow off valve until you reach the required pressure
7. **Tom Thumb is now ready for use**

Care of the Tom Thumb

Cleaning
Wipe over the unit with a damp cloth.
Do Not let moisture or foreign matter into either of the blow off valves

General Care
The Tom Thumb has been designed to give a lifetime of service if used correctly. However the gauge will be damaged if the unit is subjected to severe mechanical shock or if the unit is dropped.Tom Thumb should be checked for accuracy every 12 months minimum or when ever the pointer reads outside the black band at zero flow

Choosing a location
The rail bracket on the Tom Thumb is designed to fit most medical rails. However a problem may arise if the rail is mounted very close to a wall or the side of an incubator particularly if the gauge is mounted on the top or end pieces of the Tom Thumb.
A spacer kit Pt No. 9901-22 is available upon request

Service Contracts Resuscitation Unit

Instruments returned to Viamed:
All instruments should be returned to Viamed in good working order
Units not in good working order may incur extra charges

Instruments serviced on site:
All units to be serviced should be available and in good working order for the engineer
Units not in good working order may incur extra charges

Travel
Travel will be charged at the current rate per hour.

Tom Thumb
Check the unit mechanically
Complete a full function test
Complete a full calibration test and make adjustments if found necessary
Incorporate any upgrades found suitable
Any minor parts used will be included in the price
"O" rings will be replaced when necessary or every 2 years
Any minor parts will be included in the price

Radiant warmer Ceratherm 600
Check the unit mechanically
Check the electrical specification
Complete a full functional check
Complete a full specification test
Complete a safety check to BS5754 and provide certification
Incorporate any upgrades found suitable

Cabinet and accessories
Check all parts mechanically
Check specifications where necessary

Timer
Requires no service

Suction Unit
Check the unit mechanically
Check the electrical specification
Complete a full functional check
Complete a full specification test
Complete a safety check to BS5754 and provide certification
Incorporate any upgrades found suitable

Multiple units which are all available on one visit are subject to a discount on the service price:

5 or more units 10%
10 or more units 25%

Warranty

All parts of this resuscitation cabinet are hereby guaranteed for a period of 12 months from the date of purchase. The best materials and workmanship have been employed throughout every stage of manufacture and every part is thoroughly tested before despatch. This warranty covers any defect in material and manufacture but excludes damage caused by accident, misuse or neglect. Should any component develop a defect within this period it will be repaired or replaced at our option. In the event of a complaint regarding this product purchased outside the UK please contact your local distributor

The service under this guarantee does not affect your statutory rights against your supplier if any component is faulty.

Ceratherm 600-2
Radiant Warmer

Part number 0310040

Operators Manual

CE 0123

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Version 2.0 (22/02/2000)
Part number 0390005

Ceratherm 600-2

Operators Manual

This page only

Superceeded by V2.0

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INDEX

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When using the heat radiator over incubators, care must be taken to ensure that there is sufficient space between the lower edge of the radiator and heat-sensitivematerial, such as perspex or acrylic glass. The distance must not be less than 50cm. Set the heating power to max. level 3.

If the radiator housing is removed, there is a danger of an electric shock. Maintenance and service work must be carried out only by trained personnel.

2. Definitions and Symbols

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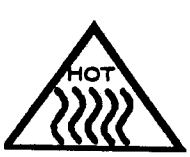
Type B equipment with an F-type isolated (floating) applied part.



Attention Hot surface

I **Power ON**

O **Power OFF**

3. General

3.0 Introduction

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3.1 Technical data

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Table A

Current requirement	220-240 V AC 50/60 Hz 630W
Protection class	I
Degreee of protection	B IP 20
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Size	Width 21cm Length 55cm Height 90cm
Weight	4,9kg heat radiator
Trolley	Width 61cm Lenght 82cm Height 10cm
Upright tube	170 / 195 max. Height
Height adjustment	25cm
Swivelarm	45°

4. Operating Instructions

4.0 Structure and use

The radiator is intended for warming baby changing tables and for maintaining the body temperature of infants. The built-in ceramic radiator has very good radiation properties and generates invisible infrared radiation in the region of 3 micro/M. This radiation spectrum is very readily absorbed by the skin, and the child's skin colour is not altered.

4.1 General description

The Ceratherm 600-2 unit has 4 output settings which can be set individually (20-99%). These output settings are indicated by the yellow LED's (1-4), in which only one can be active during operation. (*The numbers in ( ) are shown in Table B on Page 7.*) The choice of output setting is made by pressing the reverse button (5) or the forward button (6). The heater LED (10) indicates when heating is active. When the unit is switched on, a time interval starts, which after 15 minutes triggers an audible alarm for about 5 seconds and a visual flashing LED alarm (red LED 7). 8 seconds later, a reduction in output to a preset value takes place (safety setting), until this is cancelled with button (7), whereupon the time interval is started again. The cancellation also deactivates the flashing alarm.
Switch (8) switches the halogen lamp lighting on and off, while switch (9) switches the entire system on and off.

4.2 Wall mounting

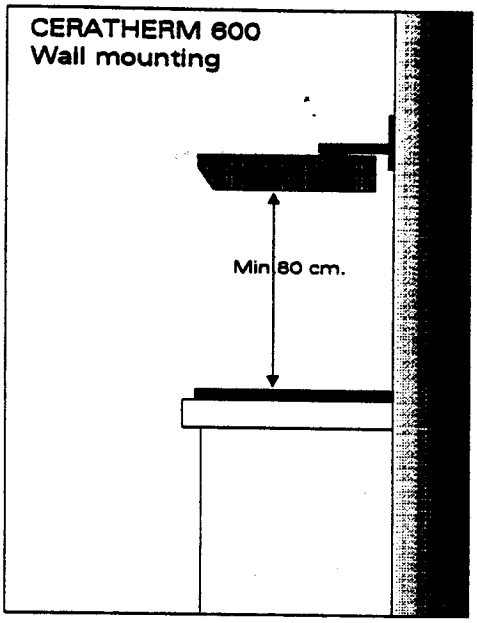
After removing the packaging, compare the instrument data on the type plate with the available connection data. Electrical connection is via a 220V AC 50/60 Hz mains socket and a 6A connected load.

The wall holder (fixed or movable) must be fastened in solid masonry (chalky sandstone, brickwork or concrete) with suitable wall plungs and screws.

Mount the radiator in such a way that there is a distance of at least 80cm and not more than 100cm between the surface on which the patient lies and the lower edge of the radiator.

WARNING

The distance between the surface on which the patient lies and the lower edge of the radiator must not be less than 80cm. If this instruction is not observed, prolonged exposure to heat radiation may cause burns.



Mounting possibilities

Wall mounting with fixed holder
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Special version

4.3 Start-up

1. Switch main heater switch to ON. The ceramic heating element is now switched on.

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3. Set main switch LIGHT to ON. The non-dazzling halogen lamp is used for illuminating the treatmentarea

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Level 1= 20% Level 2= 40% Level 3= 60% Level 4= 80%

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When the unit is switched on, a time interval begins which after 15 minutes triggers an audible alarm and a visual alarm in the form of a flashing LED.

The alarm is cancelled with the red button, causing the red LED to extinguish and the audible signal to stop. The alarm flashing generator is deactivated. If the alarm is not cancelled within 8 seconds, the heating output set is reduced to a preset value (20%) (safety setting). The audible signal stops and the flashing red LED lights continuously.

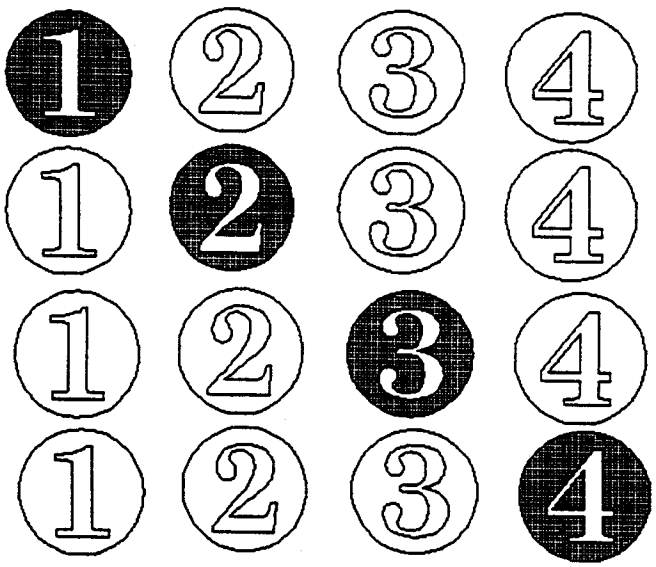
WARNING!
The child must not be left unattended on the bed with the radiator switched on.

Level 1 = 25%

Level 2 = 50%

Level 3 = 75%

Level 4 = 99%



The various power levels can be used as follows:

Level 1	is used for keeping the support surface warm and for continuous operation
Level 2	is for normal operation on changing and examination area
Level 3	provides additional warmth for resuscitation, for the labour room or for the operating theatre
Level 4	is for increased heat requirement in the operating theatre, during anaesthesia or for adults

4.5 Controllers, displays and connections

This part describes the controllers, displays and connections of the Ceratherm 600-2 thermal radiator.

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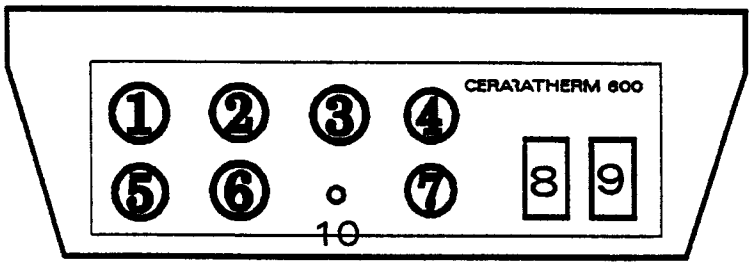

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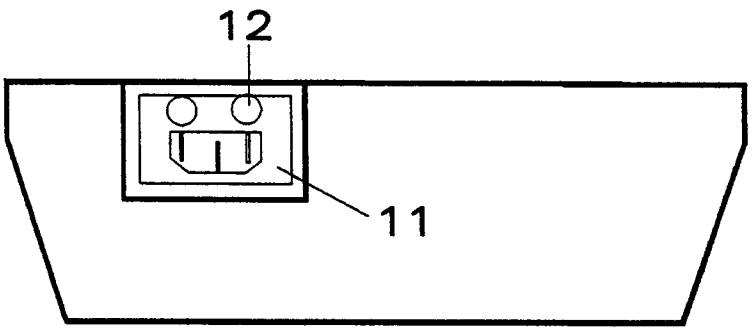

Table B

Part no.	Designation	Function
1-4	LED yellow	Display of selected output setting
5+6	Forward/reverse button	Button for selecting output setting
7	Alarm button	Display and reset button for alarm
8	Lighting switch	Switching on halogen lamp
9	Main switch	Switching unit on and off
10	LED heating monitor	Display indicating that heating active
11	Unit supply socket	Socket for 220-240V / 50Hz connection
12	Fuses-	Main fuse 2 x 3,15 Ampère
5 / 6 /7	Buttons	These buttons are used together for programming the individual output settings

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Ceratherm 600-2

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Version 1.0 (03/02/99)
Part number 0390005

INDEX

1. Precautions

The heat radiator must not be used in rooms where there is a risk of explosion, i.e. in the immediate vicinity of anaestheticgases.

The distance between the surface at which the patient lies and the lower edge of the radiator must not be less than 80cm. If this instruction is not followed, prolonged exposure to the heat radiation may cause burns.

Contact with the protective grating and the reflector should be avoided:
„Danger of burns"

The protective grating on the upper side of the radiator must always be free in order to ensure adequate removal of heat. Do not place sheets or flammable materials on the protective grating.
„Danger of fire"

If the underlay is changed, for example by the use of dark sheets, heating cushions, etc., the support surface may reach excessively high temperatures and thus influence the body temperature of the infant or patient.

After the radiator has been switched on, an acoustic and visual alarm is given after 15 minutes. This can be reset for a further 15 minutes with the red button.

The infant or patient must never be left unattended under the operating heat radiator.

When using the heat radiator over incubators, care must be taken to ensure that there is sufficient space between the lower edge of the radiator and heat-sensitivematerial, such as perspex or acrylic glass. The distance must not be less than 50cm. Set the heating power to max. level 3.

If the radiator housing is removed, there is a danger of an electric shock. Maintenance and service work must be carried out only by trained personnel.

2. Definitions and Symbols

Note, Important, Caution and Warning

Note: The ramark „Note" is used in the text to indicate procedures or conditions which might otherwise be overlooked or incorrectly understood. A note may also be used to clarify apparently contradictory or confusing situations.

Important: Similar to Note, but used when greater emphasis is necessary.

Caution: The remark „Caution" is used to draw attention to a procedure which must be followed exactly in order to avoid damaging or destroying the instrument.

Warning: The remark „Warning" is used in the text to draw attention to dangerous situations in connection with the operation, cleaning or maintenance of the instrument if there is a possibility of injury or danger of death to the operator or to the patient.

Attention: consult accompanying documents.

AC POWER

Danger! High Voltage!

Type B equipment with an F-type isolated (floating) applied part.

Attention Hot surface

| **Power ON**

0 **Power OFF**

3. General

3.0 Introduction

This Manual contains instructions for the erection, use and maintenance by the operator . Nufer Medical is not liable for the proper functioning of the heat radiator if it is not operated according to the instructions, if the maintenance recommendations in this Manual are not followed or if repairs are carried out using non-approved components.

Calibration and repairs should be performed only by trained personnel. Maintenance documents are obtainable through your local dealer or from Nufer Medical.

The personnel who work with this heat radiator should read this Manual carefully and should fully understand all instructions contained therein. The Manual should be kept so that it can be easily inspected; it is advisable to store it in an easily accessible place. If you do not understand something, contact a Nufer Medical agent in order to obtain further information.

3.1 Technical data

The technical data of the Ceratherm heat radiant are shown in Table A. All technical data may be changed without prior notice.

Table A

Current requirement	220-240 V AC 50/60 Hz 630W
Protection class	I
Degreee of protection	B IP 20
Test provision	IEC 601-2 TUV / CE
Size	Width 21cm Length 55cm Height 90cm
Weight	4,9kg heat radiator
Trolley	Width 61cm Lenght 82cm Height 10cm
Upright tube	170 / 195 max. Height
Height adjustment	25cm
Swivelarm	45°

4. Operating Instructions

4.0 Structure and use

The radiator is intended for warming baby changing tables and for maintaining the body temperature of infants. The built-in ceramic radiator has very good radiation properties and generates invisible infrared radiation in the region of 3 micro/M. This radiation spectrum is very readily absorbed by the skin, and the child's skin colour is not altered.

4.1 General description

The Ceratherm 600-2 unit has 4 output settings which can be set individually (20-99%). These output settings are indicated by the yellow LED's (1-4), in which only one can be active during operation. (*The numbers in ( ) are shown in Table B on Page 7.*) The choice of output setting is made by pressing the reverse button (5) or the forward button (6). The heater LED (10) indicates when heating is active. When the unit is switched on, a time interval starts, which after 15 minutes triggers an audible alarm for about 5 seconds and a visual flashing LED alarm (red LED 7). 8 seconds later, a reduction in output to a preset value takes place (safety setting), until this is cancelled with button (7), whereupon the time interval is started again. The cancellation also deactivates the flashing alarm.
Switch (8) switches the halogen lamp lighting on and off, while switch (9) switches the entire system on and off.

4.2 Wall mounting

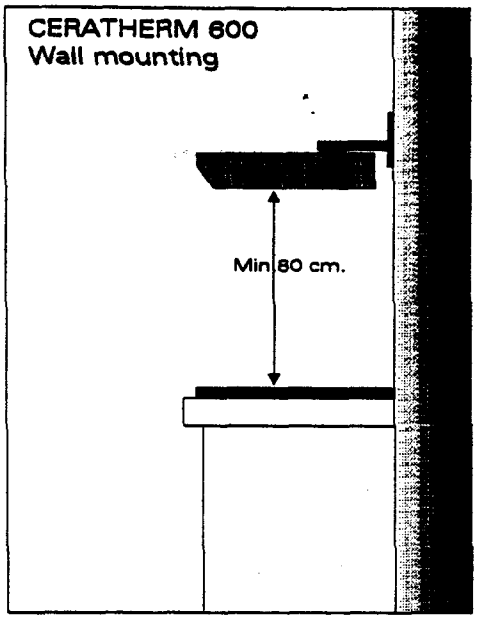
After removing the packaging, compare the instrument data on the type plate with the available connection data. Electrical connection is via a 220V AC 50/60 Hz mains socket and a 6A connected load.

The wall holder (fixed or movable) must be fastened in solid masonry (chalky sandstone, brickwork or concrete) with suitable wall plungs and screws.

Mount the radiator in such a way that there is a distance of at least 80cm and not more than 100cm between the surface on which the patient lies and the lower edge of the radiator.

WARNING

The distance between the surface on which the patient lies and the lower edge of the radiator must not be less than 80cm. If this instruction is not observed, prolonged exposure to heat radiation may cause burns.



Mounting possibilities

Wall mounting with fixed holder
Wall mounting with movable arm
Ceiling stand with rotatable extension arm
Wall stand with pivotable extension arm
Special version

4.3 Start-up

1. Switch main heater switch to ON. The ceramic heating element is now switched on.

2. Using the adjusting knob, set the desired heating power to level 1-4. The particular setting is displayed on the four LED bars. After about 5-10 minutes, the support surface has been preheated.

3. Set main switch LIGHT to ON. The non-dazzling halogen lamp is used for illuminating the treatmentarea

4.4 Setting the heating power

The heating output can be set in accordance with actual requirements using the four-step regulation. The factory adjustment corresponds to the following local settings:

The heating output of the individual steps 1-4 can be individually adjusted for special applications, e.g.:

Level 1= 20% Level 2= 40% Level 3= 60% Level 4= 80%

Alarm monitoring

When the unit is switched on, a time interval begins which after 15 minutes triggers an audible alarm and a visual alarm in the form of a flashing LED.

The alarm is cancelled with the red button, causing the red LED to extinguish and the audible signal to stop. The alarm flashing generator is deactivated. If the alarm is not cancelled within 8 seconds, the heating output set is reduced to a preset value (20%) (safety setting). The audible signal stops and the flashing red LED lights continuously.

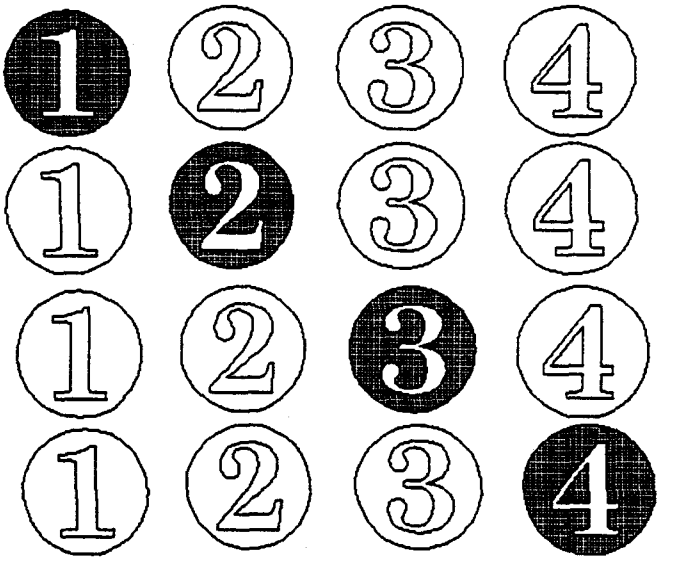
WARNING!
The child must not be left unattended on the bed with the radiator switched on.

Level 1 = 25%

Level 2 = 50%

Level 3 = 75%

Level 4 = 99%



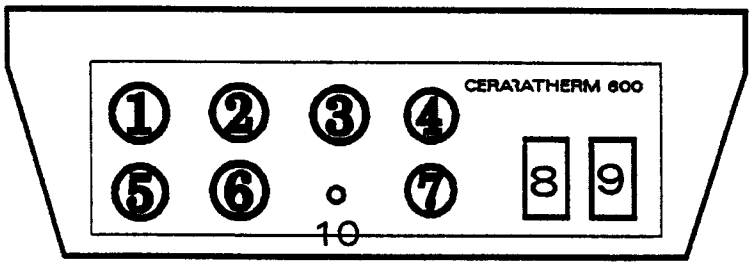
The various power levels can be used as follows:

Level 1	is used for keeping the support surface warm and for continuous operation
Level 2	is for normal operation on changing and examination area
Level 3	provides additional warmth for resuscitation, for the labour room or for the operating theatre
Level 4	is for increased heat requirement in the operating theatre, during anaesthesia or for adults

4.5 Controllers, displays and connections

This part describes the controllers, displays and connections of the Ceratherm 600-2 thermal radiator.

Front



Rear

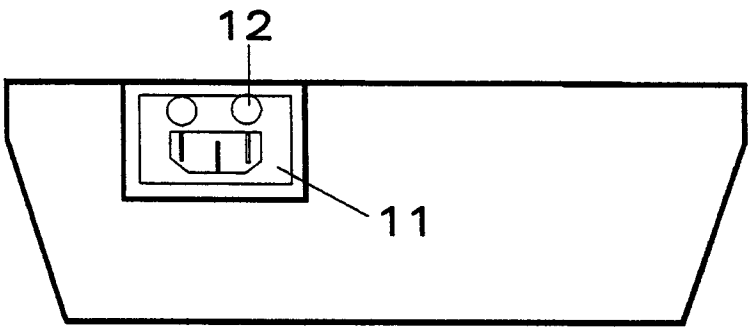


Table B

Part no.	Designation	Function
1-4	LED yellow	Display of selected output setting
5+6	Forward/reverse button	Button for selecting output setting
7	Alarm button	Display and reset button for alarm
8	Lighting switch	Switching on halogen lamp
9	Main switch	Switching unit on and off
10	LED heating monitor	Display indicating that heating active
11	Unit supply socket	Socket for 220-240V / 50Hz connection
12	Fuses-	Main fuse 2 x 3,15 Ampère
5 / 6 /7	Buttons	These buttons are used together for programming the individual output settings

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VIAMED

HEAT RADIATOR
CERATHERM 600-2.

OPERATOR MANUAL.

V4.0 31 October 2001

INDEX.

VIAMED

1. Precautions.

The heat radiator must not be used in rooms where there is a risk of explosion, i.e. in the immediate vicinity of explosive anaesthetic gases or mixtures.

The distance between the surface on which the patient lies and the lower edge of the radiator must not be less than 80cm. If this instruction is not followed, prolonged exposure to the heat radiation may cause burns.

"Danger of burns" : Contact with the protective grating and the reflector should be avoided.

"Danger of fire" : The protective grating on the upper side of the radiator must remain unobstructed at all times in order to ensure adequate heat loss.
Do not place anything on the protective grating.

If the type of cover on the surface is changed for example, the use of a dark sheet or heating cushions, etc., the support surface may reach excessively high temperatures and thus influence the body temperature of the patient.

After the radiator has been switched on, an audio and visual alarm is given after 15 minutes. This can be reset for a further 15 minutes with the red button.

The patient must never be left unattended under the operating heat radiator.

When using the heat radiator over incubators, care must be taken to ensure that there is sufficient space between the lower edge of the radiator and heat sensitive material, such as perspex or acrylic glass. The distance must not be less than 50cm. Set the heating power to a maximum of Level 3.

If the radiator housing is removed, there is a danger of electric shock. Trained personnel only should carry out maintenance and servicing.

2. Definitions & Symbols.

Note, Important, Caution and Warning.

Note : The remark "Note" is used in the text to indicate procedures or conditions which might otherwise be overlooked or incorrectly understood. A note may also be used to clarify apparently contradictory or confusing situations.

Important : Similar to note, but used when greater emphasis is necessary.

Caution : The remark "Caution" is used to draw attention to a procedure, which must be followed exactly in order to avoid damaging or destroying the equipment.

Warning: The remark "Warning" is used in the text to draw attention to dangerous situations in connection with the operation, cleaning or maintenance of the equipment if there is a possibility of injury or danger of death to the operator or patient.

Attention : Consult accompanying documents

AC power

Danger! High voltage!

Type B equipment

Attention : Hot surface

I

Power ON

O

Power OFF

3. General.

3.1 Introduction.

This manual contains operator instructions for the erection, use and maintenance of the Ceratherm 600-2 Heat Radiator. Viamed Ltd are not liable for the proper functioning of the heat radiator if it is not operated according to the instructions, if the maintenance recommendations in this manual are not followed or if repairs are carried out using non-approved components.

Only trained personnel should perform calibration and repairs. Maintenance documents are obtainable through your local dealer or from Viamed Ltd.

The personnel who work with this heater should read this manual carefully and should fully understand all instructions contained therein. The manual should be kept so that it can be easily inspected; it is advisable to store it in an easily accessable place. Contact Viamed Ltd should you require any further information.

3.2 Technical Data.

The technical data for the Ceratherm heat radiator are shown in Table A. All technical data may be changed without prior notice.

Table A.

Current requirement.	220-240V AC 50/60Hz 630W.
Protection class.	1
Degree of protection.	B IP 20.
Test provision.	IEC 601-2 TUV / CE.
Size.	Width 21cm, Length 55cm, Height 90cm.
Weight.	4.9 Kg (heat radiator only).
Trolley.	Width 61cm, Length 82cm, Height 10cm.
Upright tube.	170 / 195cm maximum height.
Height adjustment.	25cm.
Swivel range of the arm.	45°.

4. Operating Instructions.

4.1 Structure and Use.

The heat radiator is intended for warming baby changing tables and for maintaining the body temperature of infants. The built-in ceramic radiator has very good radiation properties and

generates invisible infrared radiation in the region of 3 micro/M. The skin very readily absorbs this radiation spectrum and the patients' skin colour is not altered.

4.2 General Description.

Refer to Front / Rear diagrams and Table B, page 7.

The Ceratherm 600-2 heat radiator has 4 heat output settings, which can be individually set in the range 20% - 99%.

These output settings are indicated by the yellow heat level indicator's (1 - 4). Only one heat output setting can be active during operation. The choice of output setting is made by pressing the forward (6) or reverse button (5). The heating monitor indicator (10) lights when the element is being heated.

When the unit is switched on, a time interval begins. After 15 minutes a 5 second audible alarm and continuous visual alarm (flashing red alarm indicator/button (7)) are triggered. 8 seconds later, the heat output of the radiator reduces to a preset value (the safety setting), with a corresponding change in the duty cycle(*) of heating monitor indicator (10). If the alarm is cancelled by pressing the alarm indicator /button (7), the time interval is restarted and the heat radiator returns to the original heat output setting. Alarm cancellation also deactivates the flashing red alarm.

(*) Duty Cycle : the relative length of time when the heating monitor indicator (10) is lit compared to the length of time when it is unlit.

4.3 Wall Mounting.

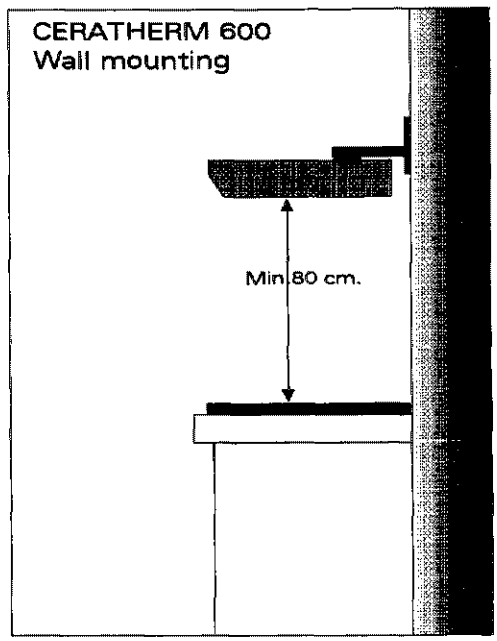
After removing the packaging, compare the instrument data on the type plate with the available connection data. Electrical connection is via a 220-240V AC 50/60 Hz mains socket and a 6A connected load.

The wall holder (fixed or movable) must be fastened in solid masonry (chalky sandstone, brickwork or concrete) with suitable wall plugs and screws.

Mount the radiator in such a way that there is a distance of at least 80cm and not more than 100 cm between the surface on which the patient lies and the lower edge of the radiator.

WARNING!

The distance between the surface on which the patient lies and the lower edge of the radiator must not be less than 80cm. If this instruction is not observed, prolonged exposure to heat radiation may cause burns.



Mounting possibilities.

Wall mounting with fixed holder.
Wall mounting with moveable arm.
Ceiling stand with rotatable extension arm.
Wall stand with pivotable extension arm.
Special version.

4.4 Start Up.

1. Switch main heater switch (9) to ON.
   The heater is now switched on.

2. Using the forward and reverse buttons (5 & 6), set the desired heat output to level 1 to 4. The current heat output setting is shown by a lit yellow heat level indicator 1, 2, 3 or 4.
   After about 5 - 10 minutes, the treatment surface will have been preheated.

   Note : The heat output of the radiator is set to zero when the reverse button is repeatedly pressed until all yellow heat level indicators (1 - 4) are extinguished.

3. Set the light switch (8) to ON.
   The non dazzling halogen light is used for illuminating the treatment area.

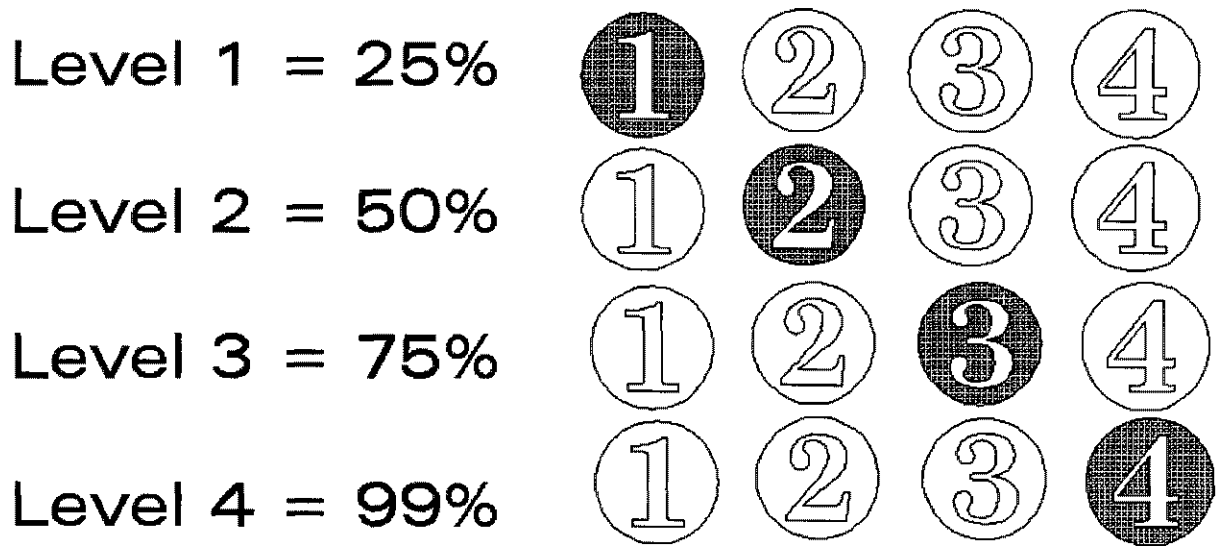
4.5 Setting the Heating Power.

The heat output can be set in accordance with actual requirements using the four heat output settings (1 - 4). The factory set levels corresponds to the following settings :

Level 1 = 25%	Level 2 = 50%	Level 3 = 75%	Level 4 = 99%

The heating output of the individual steps 1 - 4 can be set for special applications, e.g. :

Level 1 = 20%	Level 2 = 40%	Level 3 = 60%	Level 4 = 80%



The various power levels can be used as follows :-

Level 1 : To keep the support surface warm for continuous operation.
Level 2 : For normal operation on changing and examination areas.
Level 3 : Additional warmth for resuscitation, for the labour room or for the operating theatre.
Level 4 : For increased heat in the operating theatre, during anaesthesia or for adults.

4.6 LED heating indicator.

When the LED heating indicator (10) is lit, the radiator element is being heated. When high heat levels are selected, the LED heating indicator is lit for a longer period of time than when lower heat levels are selected. The relative amount of time that the LED heating indicator is on compared to when it is off, reflects the level of heat being generated by the radiator.

4.7 Alarm monitoring.

When the unit is switched on, a time interval begins which after 15 minutes triggers an audible alarm for 5 seconds and a continuous visual alarm in the form of a flashing red alarm indicator/button (7).

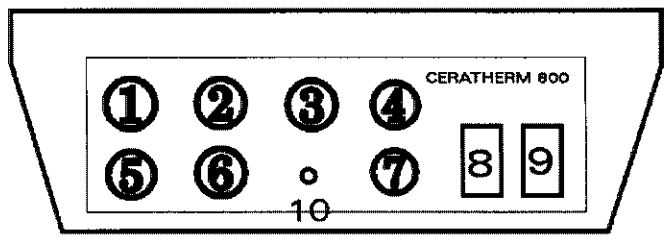
The alarm can be cancelled by pressing the alarm indicator/button (7), causing the alarm indicator to extinguish and the audible alarm signal to stop (if cancellation is carried out within the 5 second audible alarm period). If the alarm is not cancelled within 8 seconds, the heat output of the radiator is reduced to a preset value (the safety setting - factory set to 20%). The red alarm indicator/button flashes continuously.

WARNING!
A child must not be left unattended on a bed with radiator switched on.

4.8 Controllers, displays and connections.

This section of the manual describes the controllers, displays and connections of the Ceratherm 600-2 heat radiator.

Front



Rear

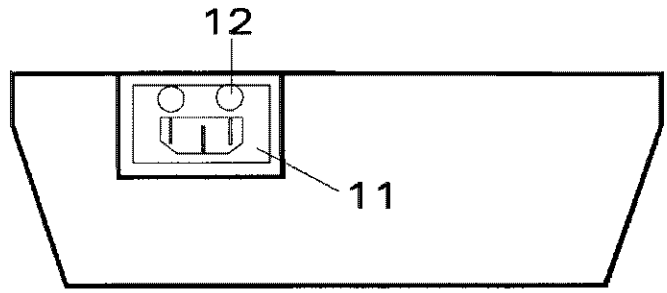


Table B

Part no.	Designation	Function
1, 2, 3 & 4	Yellow heat level indicators	Display of selected heat output setting.
5 & 6	Forward / reverse buttons	Buttons for selecting output setting.
7	Alarm indicator/button	Display and reset button for alarm.
8	Lighting switch	Switching on halogen light.
9	Main on / off switch	Switching unit on and off.
10	Heating monitor indicator	Display indicating that heating is active.
11	Unit supply socket	Socket for 220/240V 50/60Hz connection.
12	Fuses	Mains fuses, 2 x 3.15Amp.

5. Company Details.

Main Office.

Viamed Ltd,
15 Station Road,
Crosshills,
Keighley,
West Yorkshire,
BD20 7DT.

Tel : +44 (0)1535 634542.
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Email : info@viamed.co.uk.
Web : www.viamed.co.uk.

HEAT RADIATOR CERATHERM 600-2.

OPERATOR MANUAL.

CE 0123

5. Company Details.

Main office.

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15 Station Road,
Crosshills,
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BD20 7DT.

Tel : +44 (0)1535 634542.
Fax : +44 (0)1535 635582.
Email : info@viamed.co.uk.
Web : www.viamed.co.uk.

INDEX.

1. Precautions.

The heat radiator must not be used in rooms where there is a risk of explosion, i.e. in the immediate vicinity of explosive anaesthetic gases or mixtures.

The distance between the surface on which the patient lies and the lower edge of the radiator must not be less than 80cm. If this instruction is not followed, prolonged exposure to the heat radiation may cause burns.

"Danger of burns" : Contact with the protective grating and the reflector should be avoided.

"Danger of fire" : The protective grating on the upper side of the radiator must remain unobstructed at all times in order to ensure adequate heat loss.
Do not place anything on the protective grating.

If the type of cover on the surface is changed for example, the use of a dark sheet or heating cushions, etc., the support surface may reach excessively high temperatures and thus influence the body temperature of the infant or patient.

After the radiator has been switched on, an acoustic and visual alarm is given after 15 minutes. This can be reset for a further 15 minutes with the red button.

The infant or patient must never be left unattended under the operating heat radiator.

When using the heat radiator over incubators, care must be taken to ensure that there is sufficient space between the lower edge of the radiator and heat sensitive material, such as perspex or acrylic glass. The distance must not be less than 50cm. Set the heating power to a maximum of Level 3.

If the radiator housing is removed, there is a danger of electric shock. Only trained personnel should carry out maintenance and servicing.

2. Definitions & Symbols.

Note, Important, Caution and Warning.

Note : The remark "Note" is used in the text to indicate procedures or conditions which might otherwise be overlooked or incorrectly understood. A note may also be used to clarify apparently contradictory or confusing situations.

Important : Similar to note, but used when greater emphasis is necessary.

Caution : The remark "Caution" is used to draw attention to a procedure, which must be followed exactly in order to avoid damaging or destroying the equipment.

Warning: The remark "Warning" is used in the text to draw attention to dangerous situations in connection with the operation, cleaning or maintenance of the equipment if there is a possibility of injury or danger of death to the operator or patient.

Attention : Consult accompanying documents

AC power

Danger! High voltage!

Type B equipment

Attention : Hot surface

I

Power ON

O

Power OFF

3. General.

3.1 Introduction.

This manual contains operator instructions for the erection, use and maintenance of the Ceratherm 600-2 Heat Radiator. Viamed Ltd are not liable for the proper functioning of the heat radiator if it is not operated according to the instructions, if the maintenance recommendations in this manual are not followed or if repairs are carried out using non-approved components.

Only trained personnel should perform calibration and repairs. Maintenance documents are obtainable from Viamed Ltd.

The personnel who work with this heater should read this manual carefully and should fully understand all instructions contained therein. The manual should be kept so that it can be easily inspected; it is advisable to store it in an easily accessible place. Contact Viamed Ltd should you require any further information.

3.2 Technical Data.

The technical data for the Ceratherm heat radiator are shown in Table A. All technical data may be changed without prior notice.

Table A.

Current requirement.	220-240V AC 50/60Hz 630W.
Protection class.	1.
Degree of protection.	B IP 20.
Test provision.	IEC 601-2 TUV / CE.
Size.	Width 21cm, Length 55cm, Height 90cm.
Weight.	4.9 Kg (heat radiator only).
Trolley.	Width 61cm, Length 82cm, Height 10cm.
Upright tube.	170 / 195cm maximum height.
Height adjustment.	25cm.
Swivel range of the arm.	45°.

4. Operating Instructions.

4.1 Structure and use.

The heat radiator is intended for warming baby changing tables and for maintaining the body temperature of infants. The built-in ceramic radiator has very good radiation properties and generates invisible infrared radiation in the region of 3 micro/M. The skin very readily absorbs this radiation spectrum and the patients' skin colour is not altered.

4.2 General description.

Refer to front / rear diagrams and Table B on page 7.

The Ceratherm 600-2 heat radiator has 4 heat output settings, which can be individually set in the range 20% - 99%.

These output settings are indicated by the yellow indicator's (1 - 4). Only one heat output settings can be active during operation. The choice of output setting is made by pressing the reverse button (5) or the forward button (6). The heating monitor indicator (10) lights when the element is being heated.

When the unit is switched on, a time interval begins. After 15 minutes a 5 second audible alarm and continuous visual alarm (flashing red indicator 7) are triggered. 8 seconds later, the heat output of the radiator reduces to a pre-set value (the safety setting), with a corresponding change in the duty cycle* of heating monitor indicator. If the alarm is cancelled with button (7), the time interval starts again and the heat radiator returns to the original heat output setting. Alarm cancellation also deactivates the flashing red alarm.

(*) Duty Cycle : the relative length of time when the heating monitor indicator is lit compared to the length of time when it is unlit.

4.3 Wall mounting.

After removing the packaging, compare the instrument data on the type plate with the available connection data. Electrical connection is via a 220V AC 50/60 Hz mains socket and a 6A connected load.

The wall holder (fixed or movable) must be fastened in solid masonry (chalky sandstone, brickwork or concrete) with suitable wall plugs and screws.

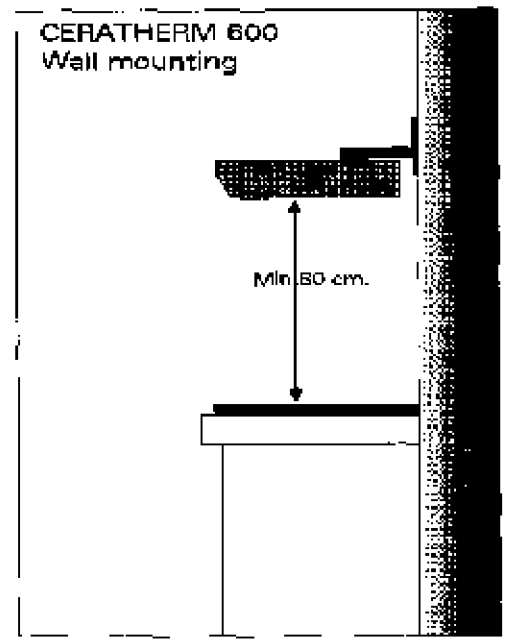
Mount the radiator in such a way that there is a distance of at least 80cm and not more than 100 cm between the surface on which the patient lies and the lower edge of the radiator.

WARNING!

The distance between the surface on which the patient lies and the lower edge of the radiator must not be less than 80cm. If this instruction is not observed, prolonged exposure to heat radiation may cause burns.

Mounting possibilities.

Wall mounting with fixed holder.
Wall mounting with moveable arm.
Ceiling stand with rotatable extension arm.
Wall stand with pivotable extension arm.
Special version.



4.4 Start up.

1. Switch main heater switch (9) to ON.
The heater is now switched on.

2. Using the forward and reverse buttons (6 and 5), set the desired heat output to level 1 to 4.
The current heat output setting is shown by lit yellow indicator 1, 2, 3 or 4.
After about 5 - 10 minutes, the treatment surface will have been preheated.

Note : The heat output of the radiator is set to zero when the reverse button is repeatedly pressed until all yellow indicators (1 - 4) are extinguished.

3. Set the light switch (8) to ON.
The non dazzling halogen light is used for illuminating the treatment area.

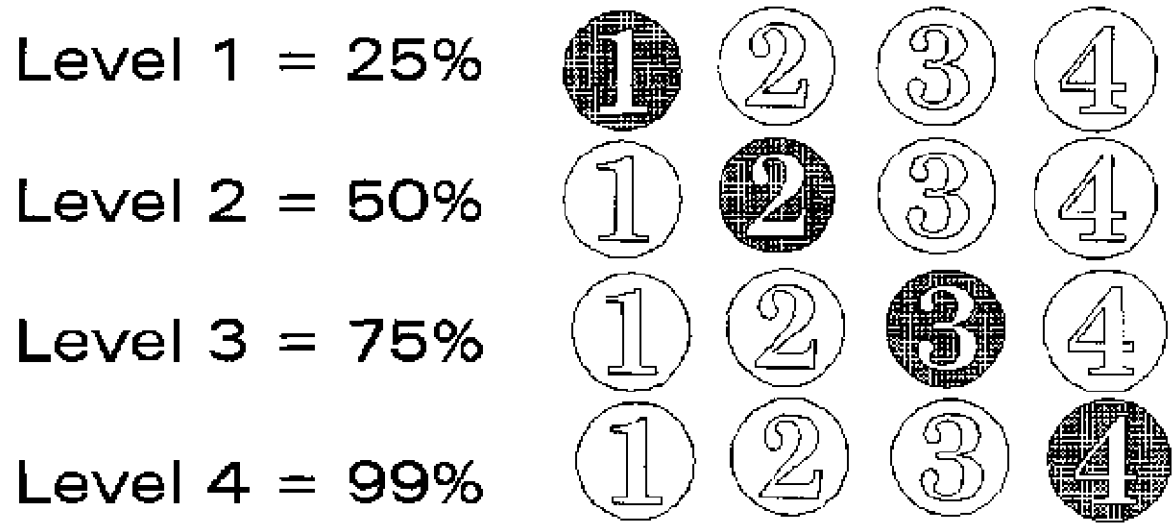
4.5 Setting the heating power.

The heat output can be set in accordance with actual requirements using the four heat output settings (1 - 4). The factory set levels corresponds to the following settings :

Level 1 = 25%	Level 2 = 50%	Level 3 = 75%	Level 4 = 99%

The heating output of the individual steps 1 - 4 can be set for special applications, e.g. :

Level 1 = 20%	Level 2 = 40%	Level 3 = 60%	Level 4 = 80%



The various power levels can be used as follows :-

Level 1 : To keep the support surface warm for continuous operation.
Level 2 : For normal operation on changing and examination areas.
Level 3 : Additional warmth for resuscitation, for the labour room or for the operating theatre.
Level 4 : For increased heat in the operating theatre, during anaesthesia or for adults.

4.6 LED heating indicator.

When the LED heating indicator (10) is lit, the radiator element is being heated. When high heat levels are selected, the LED heating indicator is lit for a longer period of time than when lower heat levels are selected. The relative amount of time that the LED heating indicator is on compared to when it is off, reflects the level of heat being generated by the radiator.

4.7 Alarm monitoring.

When the unit is switched on, a time interval begins which after 15 minutes triggers an audible alarm for 5 seconds and a continuous visual alarm in the form of a flashing alarm indicator (7).

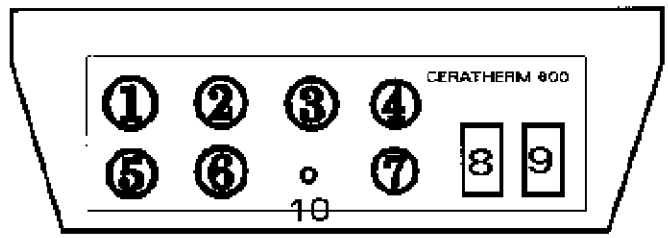
The alarm can be cancelled with the red button (7), causing the alarm indicator to extinguish and the audible alarm signal to stop (if cancellation is carried out within the 5 second audible alarm period). If the alarm is not cancelled within 8 seconds, the heat output of the radiator is reduced to a pre-set value (the safety setting - factory set to 20%). The red alarm indicator flashes continuously.

WARNING!
A child must not be left unattended on a bed with radiator switched on.

4.8 Controllers, displays and connections.

This section of the manual describes the controllers, displays and connections of the Ceratherm 600-2 heat radiator.

Front



Rear

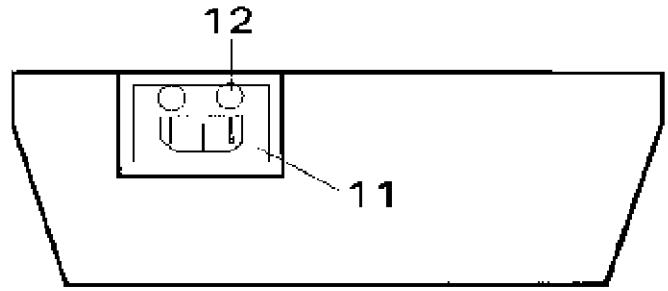


Table B.

Part no.	Designation	Function
1, 2, 3 & 4	Yellow LED	Display of selected output setting
5 & 6	Forward / reverse buttons	Buttons for selecting output setting
7	Alarm button	Display and reset button for alarm
8	Lighting switch	Switching on halogen light
9	Main on / off switch	Switching unit on and off
10	LED heating indicator	Display indicating that heating is active
11	Unit supply socket	Socket for 220/240V 50Hz connection
12	Fuses	Mains fuses, 2 x 3.15 Amp.

VIAMED

HEAT RADIATOR CERATHERM 600-2.

OPERATOR MANUAL.

CE 0123

INDEX.

1. Precautions.

The heat radiator must not be used in rooms where there is a risk of explosion, i.e. in the immediate vicinity of explosive anaesthetic gases or mixtures.

The distance between the surface on which the patient lies and the lower edge of the radiator must not be less than 80cm. If this instruction is not followed, prolonged exposure to the heat radiation may cause burns.

"Danger of burns" : Contact with the protective grating and the reflector should be avoided.

"Danger of fire" : The protective grating on the upper side of the radiator must remain unobstructed at all times in order to ensure adequate heat loss.
Do not place anything on the protective grating.

If the type of cover on the surface is changed for example, the use of a dark sheet or heating cushions, etc., the support surface may reach excessively high temperatures and thus influence the body temperature of the infant or patient.

After the radiator has been switched on, an acoustic and visual alarm is given after 15 minutes. This can be reset for a further 15 minutes with the red button.

The infant or patient must never be left unattended under the operating heat radiator.

When using the heat radiator over incubators, care must be taken to ensure that there is sufficient space between the lower edge of the radiator and heat sensitive material, such as perspex or acrylic glass. The distance must not be less than 50cm. Set the heating power to a maximum of Level 3.

Care should be taken to ensure that the upper portion of the stand and radiant warmer is supported before the height adjuster locking knob is released and the stand height altered.

If the radiator housing is removed, there is a danger of electric shock. Only trained personnel should carry out maintenance and servicing.

2. Definitions & Symbols.

Note, Important, Caution and Warning.

Note : The remark "Note" is used in the text to indicate procedures or conditions which might otherwise be overlooked or incorrectly understood. A note may also be used to clarify apparently contradictory or confusing situations.

Important : Similar to note, but used when greater emphasis is necessary.

Caution : The remark "Caution" is used to draw attention to a procedure, which must be followed exactly in order to avoid damaging or destroying the equipment.

Warning: The remark "Warning" is used in the text to draw attention to dangerous situations in connection with the operation, cleaning or maintenance of the equipment if there is a possibility of injury or danger of death to the operator or patient.

Attention : Consult accompanying documents

AC power

Danger! High voltage!

Type B equipment

Attention : Hot surface

I

Power ON

O

Power OFF

3. General.

3.1 Introduction.

This manual contains operator instructions for the erection, use and maintenance of the Ceratherm 600-2 Heat Radiator. Viamed Ltd are not liable for the proper functioning of the heat radiator if it is not operated according to the instructions, if the maintenance recommendations in this manual are not followed or if repairs are carried out using non-approved components.

Only trained personnel should perform calibration and repairs. Maintenance documents are obtainable from Viamed Ltd.

The personnel who work with this heater should read this manual carefully and should fully understand all instructions contained therein. The manual should be kept so that it can be easily inspected; it is advisable to store it in an easily accessible place. Contact Viamed Ltd should you require any further information.

3.2 Technical Data.

The technical data for the Ceratherm heat radiator are shown in Table A. All technical data may be changed without prior notice.

Table A.

Current requirement.	220-240V AC 50/60Hz 630W.
Protection class.	1.
Degree of protection.	B IP 20.
Test provision.	IEC 601-2 TUV / CE.
Size.	Width 21cm, Length 55cm, Height 90cm.
Weight.	4.9 Kg (heat radiator only).
Trolley.	Width 61cm, Length 82cm, Height 10cm.
Upright tube.	170 / 195cm maximum height.
Height adjustment.	25cm.
Swivel range of the arm.	45°.

4. Operating Instructions.

4.1 Structure and use.

The heat radiator is intended for warming baby changing tables and for maintaining the body temperature of infants. The built-in ceramic radiator has very good radiation properties and generates invisible infrared radiation in the region of 3 micro/M. The skin very readily absorbs this radiation spectrum and the patients' skin colour is not altered.

4.2 General description.

Refer to front / rear diagrams and Table B on page 7.

The Ceratherm 600-2 heat radiator has 4 heat output settings, which can be individually set in the range 20% - 99%.

These output settings are indicated by the yellow indicator's (1 - 4). Only one heat output settings can be active during operation. The choice of output setting is made by pressing the reverse button (5) or the forward button (6). The heating monitor indicator (10) lights when the element is being heated.

When the unit is switched on, a time interval begins. After 15 minutes a 5 second audible alarm and continuous visual alarm (flashing red indicator 7) are triggered. 8 seconds later, the heat output of the radiator reduces to a pre-set value (the safety setting), with a corresponding change in the duty cycle* of heating monitor indicator. If the alarm is cancelled with button (7), the time interval starts again and the heat radiator returns to the original heat output setting. Alarm cancellation also deactivates the flashing red alarm.

(*) Duty Cycle : the relative length of time when the heating monitor indicator is lit compared to the length of time when it is unlit.

4.3 Wall mounting.

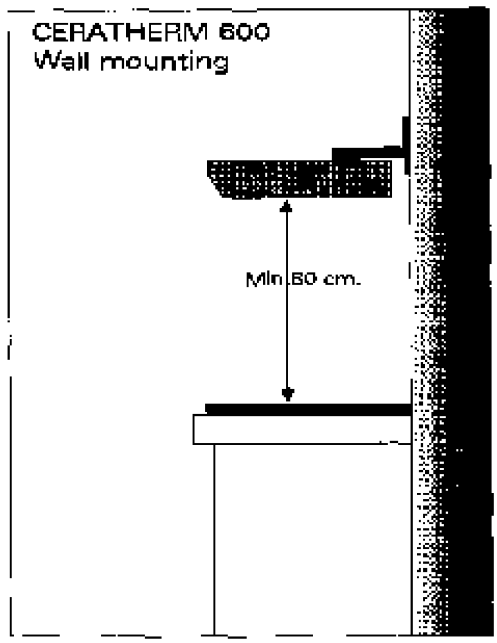
After removing the packaging, compare the instrument data on the type plate with the available connection data. Electrical connection is via a 220V AC 50/60 Hz mains socket and a 6A connected load.

The wall holder (fixed or movable) must be fastened in solid masonry (chalky sandstone, brickwork or concrete) with suitable wall plugs and screws.

Mount the radiator in such a way that there is a distance of at least 80cm and not more than 100 cm between the surface on which the patient lies and the lower edge of the radiator.

WARNING!

The distance between the surface on which the patient lies and the lower edge of the radiator must not be less than 80cm. If this instruction is not observed, prolonged exposure to heat radiation may cause burns.



Mounting possibilities.

Wall mounting with fixed holder.
Wall mounting with moveable arm.
Ceiling stand with rotatable extension arm.
Wall stand with pivotable extension arm.
Special version.

4.4 Start up.

1. Switch main heater switch (9) to ON.
The heater is now switched on.

2. Using the forward and reverse buttons (6 and 5), set the desired heat output to level 1 to 4.
The current heat output setting is shown by lit yellow indicator 1, 2, 3 or 4.
After about 5 - 10 minutes, the treatment surface will have been preheated.

Note : The heat output of the radiator is set to zero when the reverse button is repeatedly pressed until all yellow indicators (1 - 4) are extinguished.

3. Set the light switch (8) to ON.
The non dazzling halogen light is used for illuminating the treatment area.

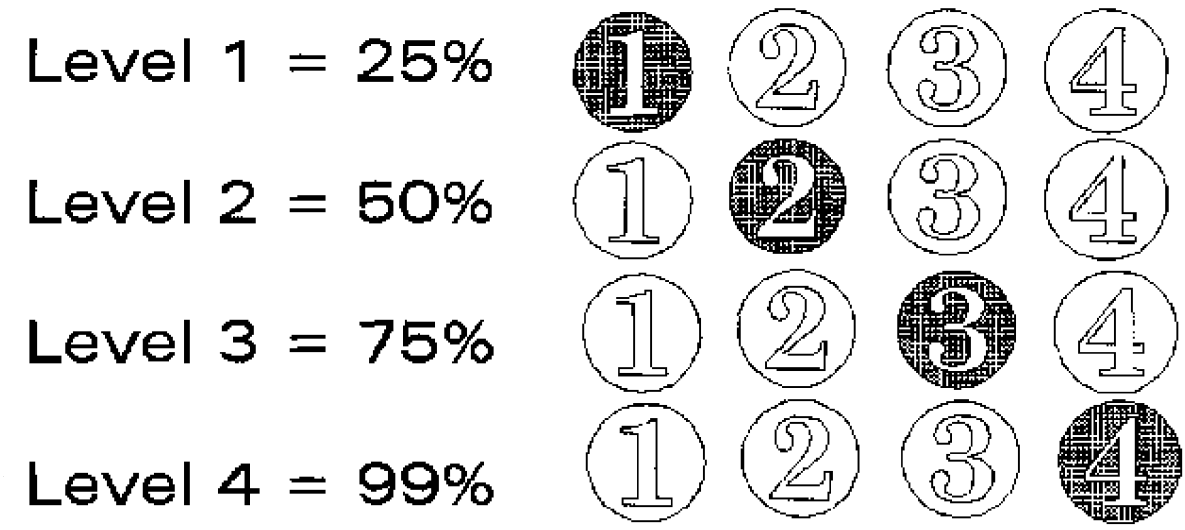
4.5 Setting the heating power.

The heat output can be set in accordance with actual requirements using the four heat output settings (1 - 4). The factory set levels corresponds to the following settings :

Level 1 = 25%	Level 2 = 50%	Level 3 = 75%	Level 4 = 99%

The heating output of the individual steps 1 - 4 can be set for special applications, e.g. :

Level 1 = 20%	Level 2 = 40%	Level 3 = 60%	Level 4 = 80%



The various power levels can be used as follows :-

Level 1 : To keep the support surface warm for continuous operation.
Level 2 : For normal operation on changing and examination areas.
Level 3 : Additional warmth for resuscitation, for the labour room or for the operating theatre.
Level 4 : For increased heat in the operating theatre, during anaesthesia or for adults.

4.6 LED heating indicator.

When the LED heating indicator (10) is lit, the radiator element is being heated. When high heat levels are selected, the LED heating indicator is lit for a longer period of time than when lower heat levels are selected. The relative amount of time that the LED heating indicator is on compared to when it is off, reflects the level of heat being generated by the radiator.

4.7 Alarm monitoring.

When the unit is switched on, a time interval begins which after 15 minutes triggers an audible alarm for 5 seconds and a continuous visual alarm in the form of a flashing alarm indicator (7).

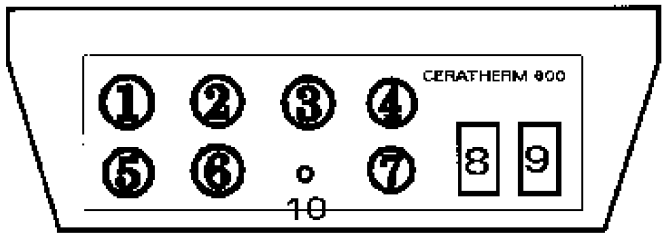
The alarm can be cancelled with the red button (7), causing the alarm indicator to extinguish and the audible alarm signal to stop (if cancellation is carried out within the 5 second audible alarm period). If the alarm is not cancelled within 8 seconds, the heat output of the radiator is reduced to a pre-set value (the safety setting - factory set to 20%). The red alarm indicator flashes continuously.

WARNING!
A child must not be left unattended on a bed with radiator switched on.

4.8 Controllers, displays and connections.

This section of the manual describes the controllers, displays and connections of the Ceratherm 600-2 heat radiator.

Front



Rear

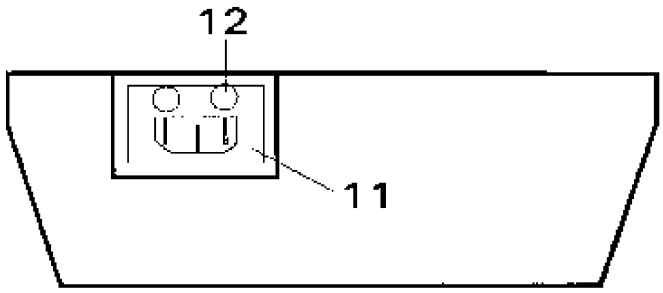


Table B.

Part no.	Designation	Function
1, 2, 3 & 4	Yellow LED	Display of selected output setting
5 & 6	Forward / reverse buttons	Buttons for selecting output setting
7	Alarm button	Display and reset button for alarm
8	Lighting switch	Switching on halogen light
9	Main on / off switch	Switching unit on and off
10	LED heating indicator	Display indicating that heating is active
11	Unit supply socket	Socket for 220/240V 50Hz connection
12	Fuses	Mains fuses, 2 x 3.15 Amp.

5. Company Details.

Main office.

Viamed Ltd,
15 Station Road,
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Web : www.viamed.co.uk.

HEAT RADIATOR CERATHERM 600-2.

OPERATOR MANUAL.

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1. Precautions.

The heat radiator must not be used in rooms where there is a risk of explosion, i.e. in the immediate vicinity of explosive anaesthetic gases or mixtures.

The distance between the surface on which the patient lies and the lower edge of the radiator must not be less than 80cm. If this instruction is not followed, prolonged exposure to the heat radiation may cause burns.

"Danger of burns" : Contact with the protective grating and the reflector should be avoided.

"Danger of fire" : The protective grating on the upper side of the radiator must remain unobstructed at all times in order to ensure adequate heat loss.
Do not place anything on the protective grating.

If the type of cover on the surface is changed for example, the use of a dark sheet or heating cushions, etc., the support surface may reach excessively high temperatures and thus influence the body temperature of the infant or patient.

After the radiator has been switched on, an acoustic and visual alarm is given after 15 minutes. This can be reset for a further 15 minutes with the red button.

The infant or patient must never be left unattended under the operating heat radiator.

When using the heat radiator over incubators, care must be taken to ensure that there is sufficient space between the lower edge of the radiator and heat sensitive material, such as perspex or acrylic glass. The distance must not be less than 50cm. Set the heating power to a maximum of Level ③.

Care should be taken when adjusting the mobile stand height and that (i). the heater is switched off and allowed to cool and (ii). the upper section of the stand is supported before the height adjuster locking knob is released.

If the radiator housing is removed, there is a danger of electric shock. Only trained personnel should carry out maintenance and servicing.

2. Definitions & Symbols.

Note, Important, Caution and Warning.

Note : The remark "Note" is used in the text to indicate procedures or conditions which might otherwise be overlooked or incorrectly understood. A note may also be used to clarify apparently contradictory or confusing situations.

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Caution : The remark "Caution" is used to draw attention to a procedure, which must be followed exactly in order to avoid damaging or destroying the equipment.

Warning: The remark "Warning" is used in the text to draw attention to dangerous situations in connection with the operation, cleaning or maintenance of the equipment if there is a possibility of injury or danger of death to the operator or patient.

Attention : Consult accompanying documents

AC power

Danger! High voltage!

Type B equipment

Attention : Hot surface

I **Power ON**

O **Power OFF**

3. General.

3.1 Introduction.

This manual contains operator instructions for the erection, use and maintenance of the Ceratherm 600-2 Radiant Warmer. Viamed Ltd are not liable for the proper functioning of the heat radiator if it is not operated according to the instructions, if the maintenance recommendations in this manual are not followed or if repairs are carried out using non-approved components.

Only trained personnel should perform calibration and repairs. Maintenance documents are obtainable from Viamed Ltd.

The personnel who work with this heater should read this manual carefully and should fully understand all instructions contained therein. The manual should be kept so that it can be easily inspected; it is advisable to store it in an easily accessible place. Contact Viamed Ltd should you require any further information.

3.2 Technical Data.

The technical data for the Ceratherm heat radiator are shown in Table A. All technical data may be changed without prior notice.

Table A.

Current requirement.	220-240V_{AC} 50/60Hz 630W.
Protection class.	1.
Degree of protection.	B IP20.
Test provision.	IEC 601-2 TUV / CE.
Size.	Width 21cm, Length 55cm, Height 90cm.
Weight.	4.9 Kg (heat radiator only).
Trolley.	Width 61cm, Length 82cm, Height 10cm.
Upright tube.	170 / 195cm maximum height.
Height adjustment.	25cm.
Swivel range of the arm.	45°.

4. Operating Instructions.

4.1 Structure and use.

The heat radiator is intended for warming baby changing tables and for maintaining the body temperature of infants. The built-in ceramic radiator has very good radiation properties and generates invisible infrared radiation in the region of 3 micro/M. The skin very readily absorbs this radiation spectrum and the patients' skin colour is not altered.

4.2 General description.

Refer to the front & rear diagrams on page 7.

The Ceratherm 600-2 heat radiator has 4 heat output settings, which can be individually set in the range 20% - 99%.

These output settings are indicated by the yellow indicator's (① - ④). Only one heat output settings can be active during operation. The choice of output setting is made by pressing the reverse button (<) or the forward button (>). The heating indicator lights when the element is being heated.

When the radiant warmer unit is switched on, a time interval begins. After 15 minutes a 5 second audible alarm and a continuous flashing red alarm indicator / cancel are triggered. 8 seconds later, the heat output of the radiator reduces to a pre-set value (the safety setting), with a corresponding change in the duty cycle* of heating monitor indicator. If the alarm is cancelled by pressing the alarm indicator / cancel button, the time interval starts again and the heat radiator returns to the original heat output setting. Alarm cancellation also deactivates the flashing red alarm.

(*) Duty Cycle : the relative length of time when the heating monitor indicator is lit compared to the length of time when it is unlit.

4.3 Wall mounting.

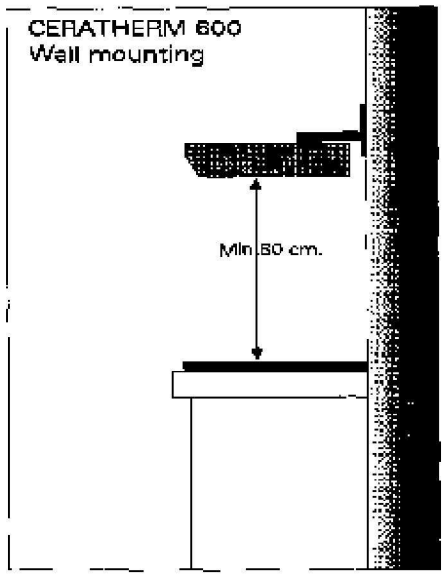
After removing the packaging, compare the instrument data on the type plate with the available connection data. Electrical connection is via a 220V AC 50/60 Hz mains socket and a 6A connected load.

The wall holder (fixed or movable) must be fastened in solid masonry (chalky sandstone, brickwork or concrete) with suitable wall plugs and screws.

Mount the radiator in such a way that there is a distance of at least 80cm and not more than 100 cm between the surface on which the patient lies and the lower edge of the radiator.

WARNING!

The distance between the surface on which the patient lies and the lower edge of the radiator must not be less than 80cm. If this instruction is not observed, prolonged exposure to heat radiation may cause burns.



Mounting possibilities.

Wall mounting with fixed holder.
Wall mounting with moveable arm.
Ceiling stand with rotatable extension arm.
Wall stand with pivotable extension arm.
Special version.

WARNING!
A risk of injury is present to the operator if care is not taken when adjusting the mobile stand height ensuring that (i). the heater is switched off and allowed to cool and (ii). the upper section of the stand is supported before the height adjuster locking knob is released.

4.4 Start up.

1. Switch radiant warmer on / off switch to ON. The heater is now switched on.

2. Using the forward and reverse buttons {(<) & (>)}, set the desired heat output to level ① to ④. The current heat output setting is shown by a lit yellow indicator ①, ②, ③ or ④.
After about 5 - 10 minutes, the treatment surface will have been preheated.

Note : The heat output of the radiator is set to zero when the reverse button (<) is repeatedly pressed until all yellow indicators (① - ④) are extinguished.

3. Set the light on / off switch to ON.
The non dazzling halogen light is used for illuminating the treatment area.

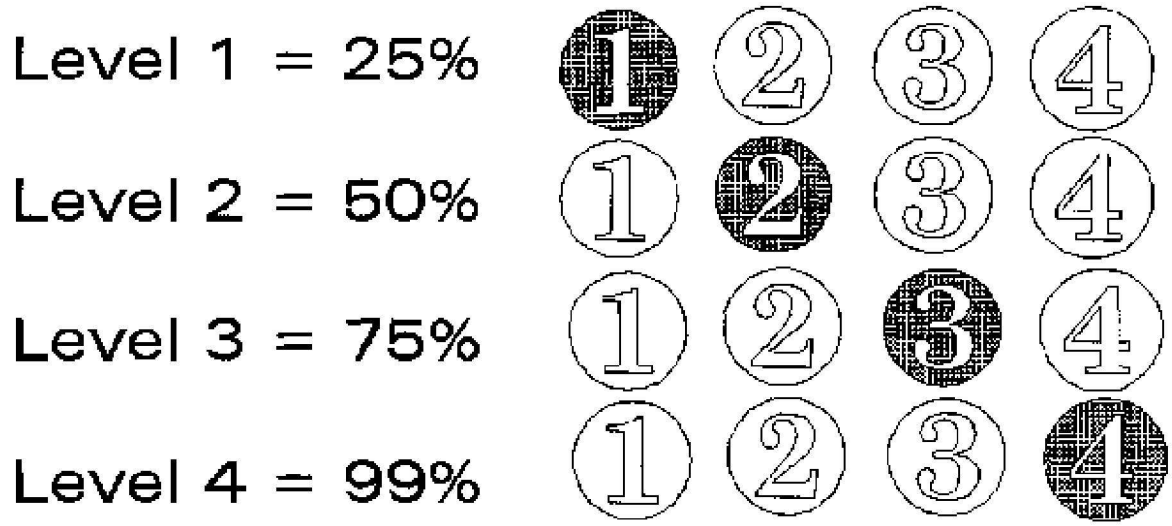
4.5 Setting the heating power.

The heat output can be set in accordance with actual requirements using the four heat output settings (① - ④). The factory set levels corresponds to the following settings :

Level ① = 25%	Level ② = 50%	Level ③ = 75%	Level ④ = 99%

The heating output of the individual steps ① - ④ can be set for special applications, e.g. :

Level ① = 20%	Level ② = 40%	Level ③ = 60%	Level ④ = 80%



The various power levels can be used as follows :-

Level ① : To keep the support surface warm for continuous operation.
Level ② : For normal operation on changing and examination areas.
Level ③ : Additional warmth for resuscitation, the labour room or for the operating theatre.
Level ④ : For increased heat in the operating theatre, during anaesthesia or for adults.

4.6 LED heating indicator.

When the heating indicator is lit, the radiator element is being heated. When high heat levels are selected, the heating indicator is lit for a longer period of time than when lower heat levels are selected. The relative amount of time that the heating indicator is on compared to when it is off, reflects the level of heat being generated by the radiator.

4.7 Alarm monitoring.

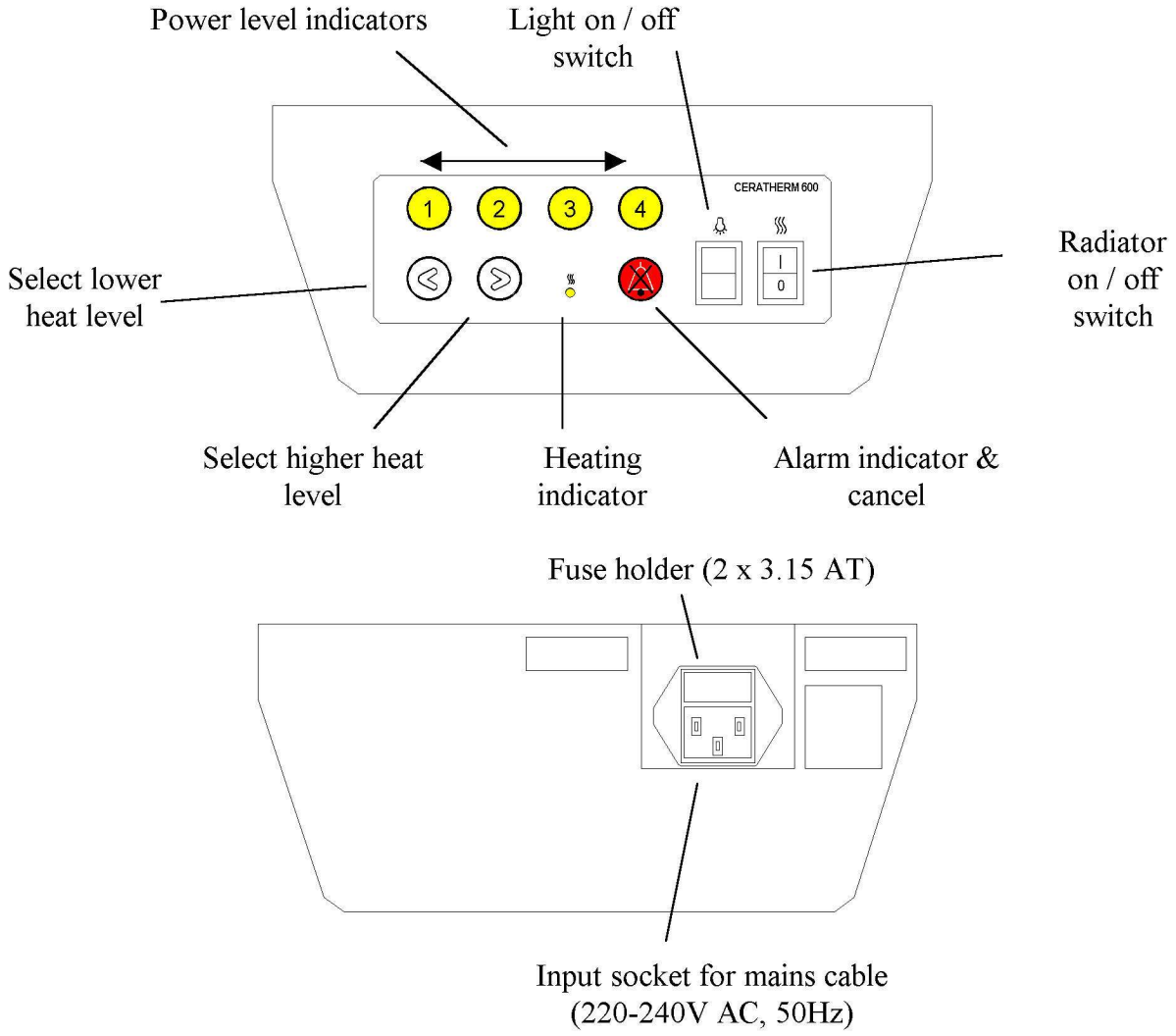
When the radiant warmer unit is switched on, a time interval begins. After 15 minutes triggers an audible alarm for 5 seconds and a continuous visual alarm in the form of a flashing alarm indicator / cancel button.

The alarm can be cancelled by pressing the alarm indicator / cancel button which causes the alarm indicator to extinguish and the audible alarm signal to stop (if cancellation is carried out within the 5 second audible alarm period). If the alarm is not cancelled within 8 seconds, the heat output of the radiator is reduced to a pre-set value (the safety setting - factory set to 20%). The red alarm indicator flashes continuously.

WARNING!
A child must not be left unattended on a bed with radiator switched on.

4.8 Controllers, displays and connections.

This section of the manual describes the controllers, displays and connections of the Ceratherm 600-2 heat radiator.



5. Company Details.

Main office.

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Resuscitation Cabinet

Instructions for use

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Fax +44 (0) 1535 635582 www.viamed.co.uk Email: info@viamed.co.uk

Index

Introduction

Thank you for purchasing a Viamed Resuscitation Cabinet, if maintained correctly this unit should give many years of trouble free service.

This Manual contains instructions for the erection, use and maintenance by the operator. Viamed is not liable for the proper functioning of any part of this product if it is not operated according to the instructions, if the maintenance recommendations in this Manual are not followed or if repairs are carried out using non-approved components.

Calibration and repairs should be performed only by trained personnel.
Maintenance documents are obtainable through your local dealer or direct from Viamed.

The personnel who work with this equipment should read this Manual carefully and should fully understand all instructions contained therein. The Manual should be kept so that it can be easily inspected; it is advisable to store it in an easily accessible place. If you do not understand any function or part of this manual please contact Viamed or a Viamed distributor in order to obtain further information or clarification

Components

The range of Resuscitation cabinets contain a carefully selected group of products, each main item can be purchased as a single item to function on its own. Viamed have combined these devices into one product in an arrangement to suit maternity and labour departments.
For this reason each device has its own service manual and thus this manual is a cumulation of all the information required to use each item to its optimum in accordance with the original manufacturers instructions.

All the components carry the correct and relevant CE marking.

The CE files for each component are held by the original manufacturer or in Viamed.

Installation

Tom Thumb

The Tom Thumb requires a standard oxygen wall outlet or oxygen cylinder.

The gas supply should be placed as conveniently close to the cabinet as possibly thus eliminating the need for trailing gas hoses. Enough space between the cabinet and the gas outlet should be left to avoid kinks in the hoses

The Tom Thumb is supplied with its own universal mounting clamp designed to fit any of the rails within the cabinet

Suction Controller

If the unit has been supplied with a suction controller a standard vacuum supply is required.

The vacuum supply should be placed as conveniently close to the cabinet as possibly thus eliminating the need for trailing gas hoses. Enough space between the cabinet and the gas outlet should be left to avoid kinks in the hoses

The suction controller comes complete with a suction jar /cage with its own universal mounting clamp designed to fit any of the rails within the cabinet. The jar is connected to the controller by means of a clear tubing (supplied)

Timer

The standard timer is supplied with its own universal mounting clamp designed to fit any of the rails within the cabinet

Storage Lin Bins

3 bins are supplied as standard, these can be hooked on any of the fixed cabinet brackets

The Bed and matteress

The bed is supplied fixed to the cabinet front platform and requires no installation
The matteress sits on the bed with no need for securement

The Cabinet

CE Classification: Class 1

This cabinet has been specially designed to Viameds specifications.
The cabinet supplied may be different to Viameds' standard if the staff responsible for the order requested changes to be made.

Fixing to the wall

Due to different wall constructions Viamed do not supply fixing screws.
The correct fasteners required must be assessed by a qualified installer. Viamed does not offer a direct service of installation but if requested can arrange for an outside contractor to complete the work. The expenses of this will be charged to the hospital unless previously quoted as inclusive.

The following hole positions are approximate and may vary due to manufacturing and design changes. Viamed recommends that the installer takes the necessary measurements from the cabinet itself before finalising position.

Dimensions:
A: 30 mm
B: 555 mm
C: 80 mm
D: 456 mm
E: 130 mm
F: 260 mm
G: 50 mm

Cabinet back plate

Gas pipe outlets:

F: Standard position exiting through cabinet base

G: Optional position exiting though cabinet side wall (exits on side walls must be requested at the time of ordering.

Smiths
Process timers

Model NS 22G Seconds Timer

Instructions for use

1. Press the red button (stop).
2. Ensure that the time is fully wound by using the key provided for this purpose at the back of the case.
3. Bring both hands to the 60 position by pressing the black button (zero - fly back).
4. The timer is now ready for use.
5. To start the timer press the green button; to stop the timer press the red button; for zero fly back press the black button.
6. It is recommended that the zero - fly back button (black) should only be pressed if the red button (stop) is pressed beforehand. When the green button (start) is pressed, the zero - fly back button (black) should not be used.
7. Special "Stop and Go-on" feature:
   the timer can be stopped and restarted at any reading to give a cumulative timing. The timer should be fully wound once each day.

Heater arm installation

Disconnecting the arm

1) Loosen screw set in the plastic ring
2) Insert screwdriver between the metal piece and the plastic tongue
3) With screwdriver in position push plastic ring upwards

Connecting the Arm
Reverse the instructions above

Mounting Instructions and drilling template for wall bracket

1) Remove Housing
2) Unlock cover and remove
3) Remove cap

Mark position of plugs in vertical line using crosses A & B on the card supplied.
The plugs supplied should be cemented in and allowed to set.

4) If the wall is uneven slide the distance plate between the wall and the bracket and screw tight.

ıtation Unit

Instruments returned to Viamed:
All instruments should be returned to Viamed in good working order
Units not in good working order may incur extra charges

Instruments serviced on site:
All units to be serviced should be available and in good working order for the engineer
Units not in good working order may incur extra charges

Travel
Travel will be charged at the current rate per hour.

Tom Thumb
Check the unit mechanically
Complete a full function test
Complete a full calibration test and make adjustments if found necessary
Incorporate any upgrades found suitable
Any minor parts used will be included in the price
"O" rings will be replaced when necessary or every 2 years
Any minor parts will be included in the price

Radiant warmer Ceratherm 600-
Check the unit mechanically
Check the electrical specification
Complete a full functional check
Complete a full specification test
Complete a safety check to BS5754 and provide certification
Incorporate any upgrades found suitable

Cabinet and accessories
Check all parts mechanically
Check specifications where necessary

Clock
Requires no service

Suction Unit
Check the unit mechanically
Check the electrical specification
Complete a full functional check
Complete a full specification test
Complete a safety check to BS5754 and provide certification
Incorporate any upgrades found suitable

Multiple units which are all available on one visit are subject to a discount on the service price:

5 or more units 10%
10 or more units 25%

Warranty

All parts of this resuscitation cabinet are hereby guaranteed for a period of 12 months from

the date of purchase. The best materials and workmanship have been employed throughout every stage of manufacture and every part is thoroughly tested before despatch. This warranty covers any defect in material and manufacture but excludes damage caused by accident, misuse or neglect. Should any component develop a defect within this period it will be repaired or replaced at our option.

In the event of a complaint regarding this product purchased outside the UK please contact your local distributor

The service under this guarantee does not affect your statutory rights against your supplier if any component is faulty.

Resuscitation Cabinet

Instructions for use

15 Station Road, Cross Hills, Keighley, West Yorkshire, BD20 7DT Tel: +44 (0) 1535 634542 Fax 635582
Fax +44 (0) 1535 635582 www.viamed.co.uk Email: info@viamed.co.uk

Index

Introduction

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This Manual contains instructions for the erection, use and maintenance by the operator. Viamed is not liable for the proper functioning of any part of this product if it is not operated according to the instructions, if the maintenance recommendations in this Manual are not followed or if repairs are carried out using non-approved components.

Calibration and repairs should be performed only by trained personnel.
Maintenance documents are obtainable through your local dealer or direct from Viamed.

The personnel who work with this equipment should read this Manual carefully and should fully understand all instructions contained therein. The Manual should be kept so that it can be easily inspected; it is advisable to store it in an easily accessible place. If you do not understand any function or part of this manual please contact Viamed or a Viamed distributor in order to obtain further information or clarification

Components

The range of Resuscitation cabinets contain a carefully selected group of products, each main item can be purchased as a single item to function on its own. Viamed have combined these devices into one product in an arrangement to suit maternity and labour departments.
For this reason each device has its own service manual and thus this manual is a cumulation of all the information required to use each item to its optimum in accordance with the original manufacturers instructions.

All the components carry the correct and relevant CE marking.

The CE files for each component are held by the original manufacturer or in Viamed.

Installation

Tom Thumb

The Tom Thumb requires a standard oxygen wall outlet or oxygen cylinder.

The gas supply should be placed as conveniently close to the cabinet as possibly thus eliminating the need for trailing gas hoses. Enough space between the cabinet and the gas outlet should be left to avoid kinks in the hoses

The Tom Thumb is supplied with its own universal mounting clamp designed to fit any of the rails within the cabinet

Suction Controller

If the unit has been supplied with a suction controller a standard vacuum supply is required.

The vacuum supply should be placed as conveniently close to the cabinet as possibly thus eliminating the need for trailing gas hoses. Enough space between the cabinet and the gas outlet should be left to avoid kinks in the hoses

The suction controller comes complete with a suction jar /cage with its own universal mounting clamp designed to fit any of the rails within the cabinet. The jar is connected to the controller by means of a clear tubing (supplied)

Timer

The standard timer is supplied with its own universal mounting clamp designed to fit any of the rails within the cabinet

Storage Lin Bins

3 bins are supplied as standard, these can be hooked on any of the fixed cabinet brackets

The Bed and matteress

The bed is supplied fixed to the cabinet front platform and requires no installation
The matteress sits on the bed with no need for securement

The Cabinet

CE Classification: Class 1

This cabinet has been specially designed to Viameds specifications.
The cabinet supplied may be different to Viameds' standard if the staff responsible for the order requested changes to be made.

Fixing to the wall

Due to different wall constructions Viamed do not supply fixing screws.
The correct fasteners required must be assessed by a qualified installer. Viamed does not offer a direct service of installation but if requested can arrange for an outside contractor to complete the work. The expenses of this will be charged to the hospital unless previously quoted as inclusive.

The following hole positions are approximate and may vary due to manufacturing and design changes. Viamed recommends that the installer takes the necessary measurements from the cabinet itself before finalising position.

Dimensions:
A: 30 mm
B: 555 mm
C: 80 mm
D: 456 mm
E: 130 mm
F: 260 mm
G: 50 mm

Cabinet back plate

Gas pipe outlets:

F: Standard position exiting through cabinet base

G: Optional position exiting though cabinet side wall (exits on side walls must be requested at the time of ordering.

Smiths
Process timers

Model NS 22G Seconds Timer

Instructions for use

1. Press the red button (stop).
2. Ensure that the time is fully wound by using the key provided for this purpose at the back of the case.
3. Bring both hands to the 60 position by pressing the black button (zero - fly back).
4. The timer is now ready for use.
5. To start the timer press the green button; to stop the timer press the red button; for zero fly back press the black button.
6. It is recommended that the zero - fly back button (black) should only be pressed if the red button (stop) is pressed beforehand. When the green button (start) is pressed, the zero - fly back button (black) should not be used.
7. Special "Stop and Go-on" feature:the timer can be stopped and restarted at any reading to give a cumulative timing. The timer should be fully wound once each day.

Disconnecting the arm

1) Loosen screw set in the plastic ring
2) Insert screwdriver between the metal piece and the plastic tongue
3) With screwdriver in position push plastic ring upwards

Connecting the Arm
Reverse the instructions above

Mounting Instructions and drilling template for wall bracket

1) Remove Housing
2) Unlock cover and remove
3) Remove cap

Mark position of plugs in vertical line using crosses A & B on the card supplied.
The plugs supplied should be cemented in and allowed to set.

4) If the wall is uneven slide the distance plate between the wall and the bracket and screw tight.

Service Contracts Resuscitation Unit

Instruments returned to Viamed:
All instruments should be returned to Viamed in good working order
Units not in good working order may incur extra charges

Instruments serviced on site:
All units to be serviced should be available and in good working order for the engineer
Units not in good working order may incur extra charges

Travel
Travel will be charged at the current rate per hour.

Tom Thumb
Check the unit mechanically
Complete a full function test
Complete a full calibration test and make adjustments if found necessary
Incorporate any upgrades found suitable
Any minor parts used will be included in the price
"O" rings will be replaced when necessary or every 2 years
Any minor parts will be included in the price

Radiant warmer Ceratherm 600-
Check the unit mechanically
Check the electrical specification
Complete a full functional check
Complete a full specification test
Complete a safety check to BS5754 and provide certification
Incorporate any upgrades found suitable

Cabinet and accessories
Check all parts mechanically
Check specifications where necessary

Clock
Requires no service

Suction Unit
Check the unit mechanically
Check the electrical specification
Complete a full functional check
Complete a full specification test
Complete a safety check to BS5754 and provide certification
Incorporate any upgrades found suitable

Multiple units which are all available on one visit are subject to a discount on the service price:

5 or more units 10%
10 or more units 25%

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VIAMED

SPECIFICATION SHEET

TC400R

Wall Mounted Overhead Heater With Resuscitation Cabinet

Overhead Heater is our standard TC400/W Heater unit mounted onto a wall plate approximately 300mm square. It can swivel in either direction to lie against the wall when not in use. In use it is locked with a pin in a position 90 degrees to the wall. The Size of the Heater unit is 850mm from the wall 100mm x 100mm. Output is manually adjustable to 400 watts,

The wall plate is fixed by 6 screws or wall bolts. The weight of the heater (7.6Kg) is evenly distributed along the heater unit.The height of the heater should be a minimum of 660mm above the bed. Although it is preferable to have it higher to avoid conflict with the user's head. A height of more than 760mm will start to substantially reduce the heat at the bed surface. The maximun output generates a temperature of approximatley 10 degrees above ambient in the vicinity of the cot/mattress. This will be affected by ambient conditions.The TC400/W can be used with standard mobile cots.

Resuscitation Cabinet is of metal construction, fixed to the wall with 4 screws or wall bolts. Size 620mm x 280mm x 665mm. Weight 16Kg.

The inner rear wall has fixed to it a rack to hold plastic bins for disposables etc. A small open shelf at the top is designed to accommodate the clock, suction, and resuscitation block.

The bed is white acrylic with retainers on both sides and a removable mattress. Size 250mm x 500mm.

The door which doubles as a level working surface is a composite material to which the bed and hinges are screwed. This material has no cracks or joins so is easily cleaned. The mattress is removable.

Time Elapsed Clock is rail mounted on a hinge to facilitate quick access for winding. It is the standard three button operation, Start, Stop and Reset.

Tom Thumb Resuscitation Block is manufactured in metal, is a modular system and designed to have a long life with low service costs.

Low Suction Controller which accepts disposable jars is available if required.

Standard Hospital Inspection Lamps can be fitted to the exterior of the cabinet or to the wall.

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Viamed

SPECIFICATION SHEET

TC400R

Wall Mounted Overhead Heater With Resuscitation Cabinet

Description: Wall Mounted Overhead Heater
Part Number: TC400/W
Dimensions: Heater Unit 850mm L x 100mm W x 100mm D
Wall Mount 300mm.sq.Approx. (6 fixing points)
Weight:Heater Unit 7.6Kgs
Wall Mount 3.5Kgs
Output: 400 Watts Maximum (variable control)
Temperature: Variable.Dependent upon output and Patient to Heater distance
400Watts at 720mm creates approximatly 10 Degrees above ambient
IMPORTANT Minimum distance from Heater to Patient should not be less than 720mm

Power Supply: 240V,50Hz (mains)
Mode Of Operation: Continuous
Fuse Type/Rating: 20mm x 5mm cartridge.2 Amp antisurge (T)
Heater Element: Tubalox element Incolax sheathed
Protection against electric shock:: Class 1 Type B

DESIGNED TO COMPLY WITH BS5724;PART 1

Description: Wall Mounted Resuscitation Cabinet
Part Number: TC400R

Dimensions: Resuscitation Cabinet 665mmL x 620mmW x 280mmD
Mattress Area 500mmL x 250mmW.

Weight: 16Kgs

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Part number	Description	Parts required for TC400/R	Parts required for TC400/RS
A521-60022	Wall mounted Radient Heater	1	1
BA/10	Resuscitation Cabinet	1	1
FE101-431	M2.5 pan head bolt(box 100) for PP8650	0.02	1
FE101-447	M4 Nut(box 100) for PP8560	0.02	1
FE143-059	No 6 self tapping screws(box100) for bed	0.06	1
FE149-690	M5 Washers(box 100) for PP8652	0.04	1
FE758-693	M4 bolt(box 100) for PP8652	0.01	1
INT-6181	Patient circuit (one patient use)	1	1
PP8650	Resuscitation Bed 12"	1	1
PP8651	Angle bracket for timer	1	1
PP8652	Brass spacers for Suction controller	2	
PP8653	Aluminium plate for suction controller	1	
RD0172	Suction Mounting Bracket(special)	1	
S6666	Suction hose assembly(3metres)	1	
S714916	Low suction controller	1	
TC453	Mattress for BA/10	1	1
TC460	Time elapsed clock	1	1
TC472	Size 3 box (10 pk)	0.3	0.3
THE2003	Universal rail clamp with 'V'	1	1
THE2050	Universal clamp with vertical holes	1	1
THE4302	Suction clear tubing(30M)	0.03	
THE4505	Dovetail (male)	1	1
THE4508	1/2 litre jar and cage with clamp	1	
TT490	Tom Thumb W/Flowmeter	1	1

TC400/R Resuscitation Cabinet
Tender Information

Directors and advisers :

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J S Lamb Secretary
Mrs G G Lamb Mrs G G Lamb

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Fax 001 818 934 1651
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Mechanical Engineers & Medical Products
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Rawdon
Leeds
LS19 6EU
Tel 0113 2502917
Fax 0113 250 2917

Two reference sites of users :

Sister in Charge
Neonatal Unit
Royal Victoria Infirmary
Newcastle Upon Tyne
Tel 0191 232 5131

Sister in Charge
Neonatal Unit
Stepping Hill Hospital
Stockport
Tel 0161 483 1010

Resuscitation Cabinet

Operators Manual

Viamed

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Version 1.0 (03/02/99)

3. General

3.0 Introduction

This Manual contains instructions for the erection, use and maintenance by the operator . Nufer Medical is not liable for the proper functioning of the heat radiator if it is not operated according to the instructions, if the maintenance recommendations in this Manual are not followed or if repairs are carried out using non-approved components.

Calibration and repairs should be performed only by trained personnel. Maintenance documents are obtainable through your local dealer or from Nufer Medical.

The personnel who work with this heat radiator should read this Manual carefully and should fully understand all instructions contained therein. The Manual should be kept so that it can be easily inspected; it is advisable to store it in an easily accessible place. If you do not understand something, contact a Nufer Medical agent in order to obtain further information.

3.1 Technical data

The technical data of the Ceratherm heat radiant are shown in Table A. All technical data may be changed without prior notice.

Table A

Current requirement	220-240 V AC 50/60 Hz 630W
Protection class	I
Degreee of protection	B IP 20
Test provision	IEC 601-2 TUV / CE
Size	Width 21cm Length 55cm Height 90cm
Weight	4,9kg heat radiator
Trolley	Width 61cm Lenght 82cm Height 10cm
Upright tube	170 / 195 max. Height
Height adjustment	25cm
Swivelarm	45°

2. Definitions and Symbols

Note, Important, Caution and Warning

Note: The ramark „Note“ is used in the text to indicate procedures or conditions which might otherwise be overlooked or incorrectly understood. A note may also be used to clarify apparently contradictory or confusing situations.

Important: Similar to Note, but used when greater emphasis is necessary.

Caution: The remark „Caution“ is used to draw attention to a procedure which must be followed exactly in order to avoid damaging or destroying the instrument.

Warning: The remark „Warning“ is used in the text to draw attention to dangerous situations in connection with the operation, cleaning or maintenance of the instrument if there is a possibility of injury or danger of death to the operator or to the patient.

Attention: consult accompanying documents.

Danger! High Voltage!

Attention Hot surface

AC POWER

Type B equipment with an F-type isolated (floating) applied part.

| **Power ON**

0 **Power OFF**

1. Precautions

The heat radiator must not be used in rooms where there is a risk of explosion, i.e. in the immediate vicinity of anaestheticgases.

The distance between the surface at which the patient lies and the lower edge of the radiator must not be less than 80cm. If this instruction is not followed, prolonged exposure to the heat radiation may cause burns.

Contact with the protective grating and the reflector should be avoided:
„Danger of burns“

The protective grating on the upper side of the radiator must always be free in order to ensure adequate removal of heat. Do not place sheets or flammable materials on the protective grating.
„Danger of fire“

If the underlay is changed, for example by the use of dark sheets, heating cushions, etc., the support surface may reach excessively high temperatures and thus influence the body temperature of the infant or patient.

After the radiator has been switched on, an acoustic and visual alarm is given after 15 minutes. This can be reset for a further 15 minutes with the red button.

The infant or patient must never be left unattended under the operating heat radiator.

When using the heat radiator over incubators, care must be taken to ensure that there is sufficient space between the lower edge of the radiator and heat-sensitivematerial, such as perspex or acrylic glass. The distance must not be less than 50cm. Set the heating power to max. level 3.

If the radiator housing is removed, there is a danger of an electric shock. Maintenance and service work must be carried out only by trained personnel.

Cabinet

The cabinet has been designed to conceal the internal products when closed and then provide easy access when open.

Excessive weight should not be applied to the drop down front platform.

It is strongly recommended the while in use the patient should be under close observation at all times.

Suction Controller

The Oxylitre S700 series suction controllers are designed specifically for Medical use.
It is available in high Suction-High Flow or Low Suction-High Flow models with either direct or remote (rail or "V"male) fittings.
The Suction Controllers comply to ISO 10079-3 1992, BS7259 Pt 2 1993.

Vacuum Source Connector

The S700 series suction controller is available with either a British Standard (BS5682) probe or a 9/16unf L/H fitting. The 9/16 unf L/H connection can be attached to various types of remote fittings i.e. Rail or "V" male mounted, with remote hose assemblies

Patient Inlet Connection

The inlet connection is an integral part of a detachable filter cartridge, which is infact a Disposable Hydrophobic Filtration Unit.

This filtration unit has been designed to prevent the ingress of fluids in to the controller and the pipeline system. (it is a multi-fit unit, designed to fit other manufacturers suction products).

Once the filter has been used for patient therapy or if wetted, for any reason, it must be changed. The unit has been designed so that a chemical coating on the filter membrane will prevent fluid passing through it, and may restrict the flow of suction once wetted.

Vacuum Gauge

The controller is fitted with a easy to read, dual scale colour coded gauge
Scale Readings:
High Suction 0 to 760mmHg (0 to 100kpa)
Low Suction 0 to 200mmHg (0 to 25kpa)

Safety Valve:

The units are fitted with an internal safety valve system. This will protect the suction controller from being damaged in the event of the unit being connected to a positive pressure source.

Suction Control and Safety:

To Increase/Decrease Suction

The control knob is graduated from a positive "OFF" to a maximum "MAX" vacuum position, within a approximatley two thirds rotation of the control knob. This has a safety aspect of gaining instant suction at a controlled level of all emergency situations.

A further safety feature is that the vacuum source can be turned off immediately by turning the control knob to the OFF position. This will automatically drain off all the remaining suction source from the suction tubing and receiver jar.

Also unlike some units with the ON/OFF flag/switch system, when the controller is turned ON to the gradients, the suction will increase as slowly or as quickly as the user requires, and not at the point where it was last set, as with the flag type.

Maintenance

A medical suction controller forms part of an essential life supporting system. All suction controllers must be treated with care and serviced on a regular basis (ie Preventative Maintenance) to ensure the units reliability and quality conformance for the purpose that it is intended for.

For service enquiries and information please contact Viamed to arrange a quotation etc.

NEVER USE FAULTY EQUIPMENT
Preventative maintenance ensures safety for the patient and user.

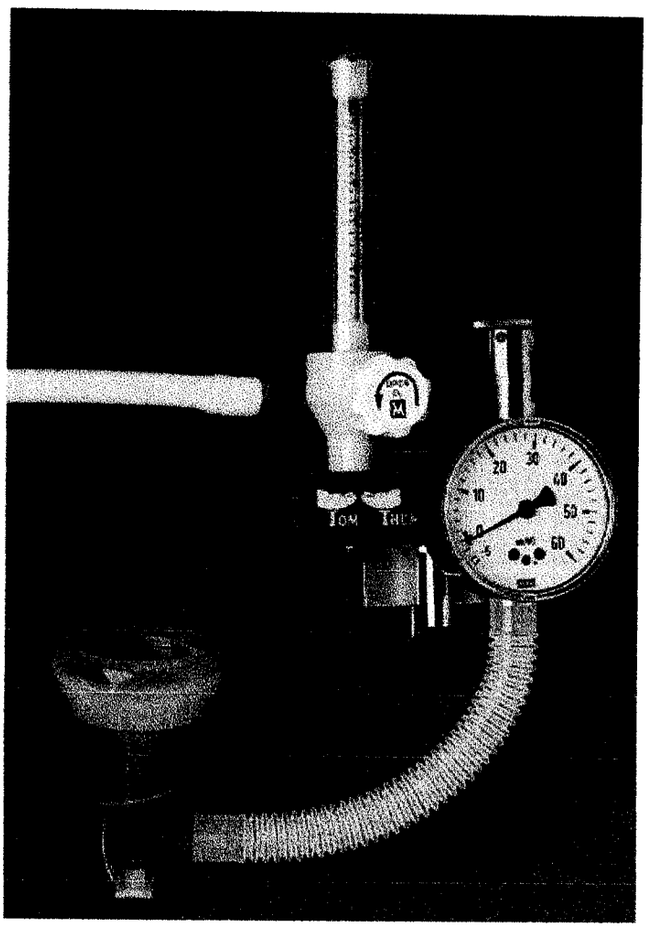
Replacement Filters

Ref: S750 per box of 30 units.

Timer Model (NS 22G Seconds Timer)

1. Press the red button (stop).
2. Ensure that the time is fully wound by using the key provided for this purpose at the back of the case.
3. Bring both hands to the 60 position by pressing the black button (zero fly back).
4. The timer is now ready for use.
5. To start the timer press the green button; to stop the timer press the red button; for zero fly back press the black button.
6. It is recommended that the zero fly back button (black) should only be pressed if the red button (stop) is pressed beforehand. When the green button (start) is pressed, the zero fly back button (black) should not be used.
7. Special "Stop and Goon" feature:
   the timer can be stopped and restarted at any reading to give a cumulative timing. The timer should be fully wound once each day.

Tom Thumb Instructions for use



Tom Thumb User Sheet

Instructions

Disconnect Tom Thumb from all inlet & outlet Hoses & tubes

1. Check that the pressure gauge reads Zero If it does not then Tom Thumb needs servicing
2. Attach Flowmeter inlet to the hospital oxygen supply
3. Set flowmeter to read 4-6 L/Minute
4. Adjust blow off valve to mininum (fully counter clockwise)
5. Connect Patient tubing (INT 6181) to Tom Thumb but NOT THE PATIENT
6. Occlude mask and open port of T piece --- adjust blow off valve until you reach the required pressure
7. **Tom Thumb is now ready for use**

Care of the Tom Thumb

Cleaning
Wipe over the unit with a damp cloth.
Do Not let moisture or foreign matter into either of the blow off valves

General Care
The Tom Thumb has been designed to give a lifetime of service if used correctly. However the gauge will be damaged if the unit is subjected to severe mechanical shock or if the unit is dropped.Tom Thumb should be checked for accuracy every 12 months minimum or when ever the pointer reads outside the black band at zero flow

Choosing a location
The rail bracket on the Tom Thumb is designed to fit most medical rails. However a problem may arise if the rail is mounted very close to a wall or the side of an incubator particularly if the gauge is mounted on the top or end pieces of the Tom Thumb.
A spacer kit Pt No. 9901-22 is available upon request

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Instruments returned to Viamed:
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"O" rings will be replaced when necessary or every 2 years
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Radiant warmer Ceratherm 600
Check the unit mechanically
Check the electrical specification
Complete a full functional check
Complete a full specification test
Complete a safety check to BS5754 and provide certification
Incorporate any upgrades found suitable

Cabinet and accessories
Check all parts mechanically
Check specifications where necessary

Timer
Requires no service

Suction Unit
Check the unit mechanically
Check the electrical specification
Complete a full functional check
Complete a full specification test
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INDEX

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Fax 031 / 951 46 73

Büro Westschweiz

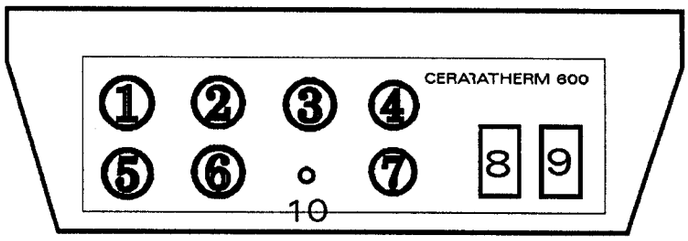
Herrn Jelle Hartmann
Le Crêt
1098 Epesses

Tel. 021 / 799 27 65
Fax 021 / 799 27 65

4.5 Controllers, displays and connections

This part describes the controllers, displays and connections of the Ceratherm 600-2 thermal radiator.

Front



Rear

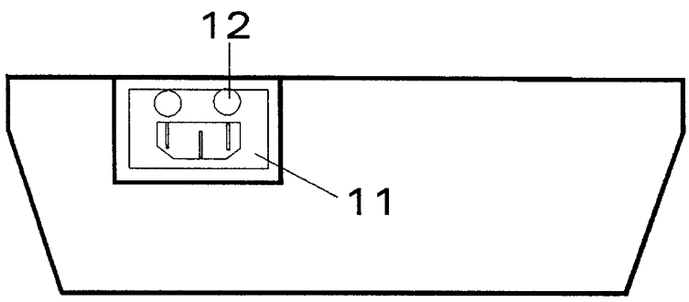


Table B

Part no.	Designation	Function
1-4	LED yellow	Display of selected output setting
5+6	Forward/reverse button	Button for selecting output setting
7	Alarm button	Display and reset button for alarm
8	Lighting switch	Switching on halogen lamp
9	Main switch	Switching unit on and off
10	LED heating monitor	Display indicating that heating active
11	Unit supply socket	Socket for 220-240V / 50Hz connection
12	Fuses	Main fuse 2 x 3,15 Ampère
5 / 6 /7	Buttons	These buttons are used together for programming the individual output settings

Alarm monitoring

When the unit is switched on, a time interval begins which after 15 minutes triggers an audible alarm and a visual alarm in the form of a flashing LED.

The alarm is cancelled with the red button, causing the red LED to extinguish and the audible signal to stop. The alarm flashing generator is deactivated. If the alarm is not cancelled within 8 seconds, the heating output set is reduced to a preset value (20%) (safety setting). The audible signal stops and the flashing red LED lights continuously.

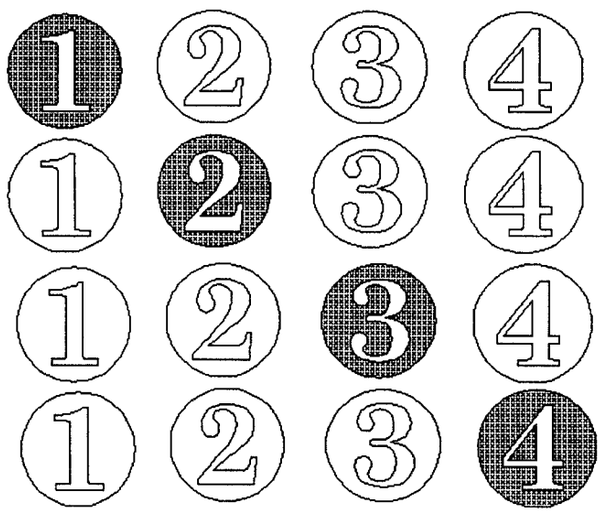
WARNING!
The child must not be left unattended on the bed with the radiator switched on.

Level 1 = 25%

Level 2 = 50%

Level 3 = 75%

Level 4 = 99%

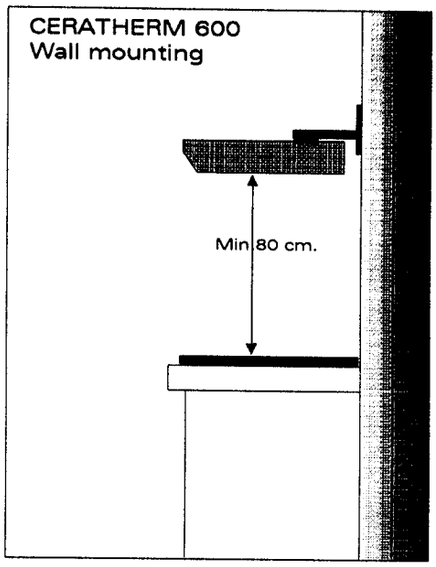


The various power levels can be used as follows:

Level 1	is used for keeping the support surface warm and for continuous operation
Level 2	is for normal operation on changing and examination area
Level 3	provides additional warmth for resuscitation, for the labour room or for the operating theatre
Level 4	is for increased heat requirement in the operating theatre, during anaesthesia or for adults

WARNING

The distance between the surface on which the patient lies and the lower edge of the radiator must not be less than 80cm. If this instruction is not observed, prolonged exposure to heat radiation may cause burns.



Mounting possibilities

Wall mounting with fixed holder
Wall mounting with movable arm
Ceiling stand with rotatable extension arm
Wall stand with pivotable extension arm
Special version

4.3 Start-up

1. Switch main heater switch to ON. The ceramic heating element is now switched on.

2. Using the adjusting knob, set the desired heating power to level 1-4. The particular setting is displayed on the four LED bars. After about 5-10 minutes, the support surface has been preheated.

3. Set main switch LIGHT to ON. The non-dazzling halogen lamp is used for illuminating the treatmentarea

4.4 Setting the heating power

The heating output can be set in accordance with actual requirements using the four-step regulation. The factory adjustment corresponds to the following local settings:

The heating output of the individual steps 1-4 can be individually adjusted for special applications, e.g.:

Level 1= 20% Level 2= 40% Level 3= 60% Level 4= 80%

4. Operating Instructions

4.0 Structure and use

The radiator is intended for warming baby changing tables and for maintaining the body temperature of infants. The built-in ceramic radiator has very good radiation properties and generates invisible infrared radiation in the region of 3 micro/M. This radiation spectrum is very readily absorbed by the skin, and the child's skin colour is not altered.

4.1 General description

The Ceratherm 600-2 unit has 4 output settings which can be set individually (20-99%). These output settings are indicated by the yellow LED's (1-4), in which only one can be active during operation. (*The numbers in ( ) are shown in Table B on Page 7.*) The choice of output setting is made by pressing the reverse button (5) or the forward button (6). The heater LED (10) indicates when heating is active. When the unit is switched on, a time interval starts, which after 15 minutes triggers an audible alarm for about 5 seconds and a visual flashing LED alarm (red LED 7). 8 seconds later, a reduction in output to a preset value takes place (safety setting), until this is cancelled with button (7), whereupon the time interval is started again. The cancellation also deactivates the flashing alarm.
Switch (8) switches the halogen lamp lighting on and off, while switch (9) switches the entire system on and off.

4.2 Wall mounting

After removing the packaging, compare the instrument data on the type plate with the available connection data. Electrical connection is via a 220V AC 50/60 Hz mains socket and a 6A connected load.

The wall holder (fixed or movable) must be fastened in solid masonry (chalky sandstone, brickwork or concrete) with suitable wall plungs and screws.

Mount the radiator in such a way that there is a distance of at least 80cm and not more than 100cm between the surface on which the patient lies and the lower edge of the radiator.

Resuscitation Cabinet

Instructions for use

15 Station Road, Cross Hills, Keighley, West Yorkshire, BD20 7DT Tel: +44 (0) 1535 634542 Fax 635582
Fax +44 (0) 1535 635582 www.viamed.co.uk Email: info@viamed.co.uk

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Introduction

Thank you for purchasing a Viamed Resuscitation Cabinet, if maintained correctly this unit should give many years of trouble free service.

This Manual contains instructions for the erection, use and maintenance by the operator. Viamed is not liable for the proper functioning of any part of this product if it is not operated according to the instructions, if the maintenance recommendations in this Manual are not followed or if repairs are carried out using non-approved components.

Calibration and repairs should be performed only by trained personnel.
Maintenance documents are obtainable through your local dealer or direct from Viamed.

The personnel who work with this equipment should read this Manual carefully and should fully understand all instructions contained therein. The Manual should be kept so that it can be easily inspected; it is advisable to store it in an easily accessible place. If you do not understand any function or part of this manual please contact Viamed or a Viamed distributor in order to obtain further information or clarification

Components

The range of Resuscitation cabinets contain a carefully selected group of products, each main item can be purchased as a single item to function on its own. Viamed have combined these devices into one product in an arrangement to suit maternity and labour departments.
For this reason each device has its own service manual and thus this manual is a cumulation of all the information required to use each item to its optimum in accordance with the original manufacturers instructions.

All the components carry the correct and relevant CE marking.

The CE files for each component are held by the original manufacturer or in Viamed.

Installation

Tom Thumb

The Tom Thumb requires a standard oxygen wall outlet or oxygen cylinder.

The gas supply should be placed as conveniently close to the cabinet as possibly thus eliminating the need for trailing gas hoses. Enough space between the cabinet and the gas outlet should be left to avoid kinks in the hoses

The Tom Thumb is supplied with its own universal mounting clamp designed to fit any of the rails within the cabinet

Suction Controller

If the unit has been supplied with a suction controller a standard vacuum supply is required.

The vacuum supply should be placed as conveniently close to the cabinet as possibly thus eliminating the need for trailing gas hoses. Enough space between the cabinet and the gas outlet should be left to avoid kinks in the hoses

The suction controller comes complete with a suction jar /cage with its own universal mounting clamp designed to fit any of the rails within the cabinet. The jar is connected to the controller by means of a clear tubing (supplied)

Timer

The standard timer is supplied with its own universal mounting clamp designed to fit any of the rails within the cabinet

Storage Lin Bins

3 bins are supplied as standard, these can be hooked on any of the fixed cabinet brackets

The Bed and matteress

The bed is supplied fixed to the cabinet front platform and requires no installation
The matteress sits on the bed with no need for securement

The Cabinet

CE Classification: Class 1

This cabinet has been specially designed to Viameds specifications.
The cabinet supplied may be different to Viameds' standard if the staff responsible for the order requested changes to be made.

Fixing to the wall

Due to different wall constructions Viamed do not supply fixing screws.
The correct fasteners required must be assessed by a qualified installer. Viamed does not offer a direct service of installation but if requested can arrange for an outside contractor to complete the work. The expenses of this will be charged to the hospital unless previously quoted as inclusive.

The following hole positions are approximate and may vary due to manufacturing and design changes. Viamed recommends that the installer takes the necessary measurements from the cabinet itself before finalising position.

Dimensions:
A: 30 mm
B: 555 mm
C: 80 mm
D: 456 mm
E: 130 mm
F: 260 mm
G: 50 mm

Cabinet back plate

Gas pipe outlets:

F: Standard position exiting through cabinet base

G: Optional position exiting though cabinet side wall (exits on side walls must be requested at the time of ordering.

Smiths
Process timers

Model NS 22G Seconds Timer

Instructions for use

1. Press the red button (stop).
2. Ensure that the time is fully wound by using the key provided for this purpose at the back of the case.
3. Bring both hands to the 60 position by pressing the black button (zero - fly back).
4. The timer is now ready for use.
5. To start the timer press the green button; to stop the timer press the red button; for zero fly back press the black button.
6. It is recommended that the zero - fly back button (black) should only be pressed if the red button (stop) is pressed beforehand. When the green button (start) is pressed, the zero - fly back button (black) should not be used.
7. Special "Stop and Go-on" feature:
   the timer can be stopped and restarted at any reading to give a cumulative timing. The timer should be fully wound once each day.

Heater arm installation

Disconnecting the arm

1) Loosen screw set in the plastic ring
2) Insert screwdriver between the metal piece and the plastic tongue
3) With screwdriver in position push plastic ring upwards

Connecting the Arm
Reverse the instructions above

Mounting Instructions and drilling template for wall bracket

1) Remove Housing
2) Unlock cover and remove
3) Remove cap

Mark position of plugs in vertical line using crosses A & B on the card supplied.
The plugs supplied should be cemented in and allowed to set.

4) If the wall is uneven slide the distance plate between the wall and the bracket and screw tight.

ıtation Unit

Instruments returned to Viamed:
All instruments should be returned to Viamed in good working order
Units not in good working order may incur extra charges

Instruments serviced on site:
All units to be serviced should be available and in good working order for the engineer
Units not in good working order may incur extra charges

Travel
Travel will be charged at the current rate per hour.

Tom Thumb
Check the unit mechanically
Complete a full function test
Complete a full calibration test and make adjustments if found necessary
Incorporate any upgrades found suitable
Any minor parts used will be included in the price
"O" rings will be replaced when necessary or every 2 years
Any minor parts will be included in the price

Radiant warmer Ceratherm 600-
Check the unit mechanically
Check the electrical specification
Complete a full functional check
Complete a full specification test
Complete a safety check to BS5754 and provide certification
Incorporate any upgrades found suitable

Cabinet and accessories
Check all parts mechanically
Check specifications where necessary

Clock
Requires no service

Suction Unit
Check the unit mechanically
Check the electrical specification
Complete a full functional check
Complete a full specification test
Complete a safety check to BS5754 and provide certification
Incorporate any upgrades found suitable

Multiple units which are all available on one visit are subject to a discount on the service price:

5 or more units 10%
10 or more units 25%

Warranty

All parts of this resuscitation cabinet are hereby guaranteed for a period of 12 months from

the date of purchase. The best materials and workmanship have been employed throughout every stage of manufacture and every part is thoroughly tested before despatch. This warranty covers any defect in material and manufacture but excludes damage caused by accident, misuse or neglect. Should any component develop a defect within this period it will be repaired or replaced at our option.

In the event of a complaint regarding this product purchased outside the UK please contact your local distributor

The service under this guarantee does not affect your statutory rights against your supplier if any component is faulty.

Resuscitation Cabinet

Operators Manual

Version 3.01 (20/07/00)
Part Number 0390006

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Index

Introduction

Thank you for purchasing a Viamed Resuscitation Cabinet, if maintained correctly this unit should give many years of trouble free service.

This Manual contains instructions for the operation and maintenance to be carried out by the operator. Viamed is not liable for the proper functioning of any part of this product if it is not operated according to the instructions, if the maintenance recommendations in this Manual are not followed or if repairs are carried out using non-approved components.

Calibration and repairs should be performed only by trained personnel. Maintenance documents are obtainable through your local dealer or direct from Viamed.

The personnel who work with this equipment should read this Manual carefully and should fully understand all instructions contained therein. The Manual should be kept so that it can be easily inspected; it is advisable to store it in an easily accessible place. If you do not understand any function or part of this manual please contact Viamed or a Viamed distributor in order to obtain further information or clarification.

Cabinet

The cabinet has been designed to conceal the internal products when closed and then provide easy access when open.

Excessive weight should not be applied to the drop down front platform.

It is strongly recommended the while in use the patient should be under close observation at all times.

Suction Controller

The Oxylitre S700 series suction controllers are designed specifically for Medical use.
It is available in high Suction-High Flow or Low Suction-High Flow models with either direct or remote (rail or "V"male) fittings.
The Suction Controllers comply to ISO 10079-3 1992, BS7259 Pt 2 1993.

Vacuum Source Connector

The S700 series suction controller is available with either a British Standard (BS5682) probe or a 9/16unf L/H fitting. The 9/16 unf L/H connection can be attached to various types of remote fittings i.e. Rail or "V" male mounted, with remote hose assemblies

Patient Inlet Connection

The inlet connection is an integral part of a detachable filter cartridge, which is infact a Disposable Hydrophobic Filtration Unit.

This filtration unit has been designed to prevent the ingress of fluids in to the controller and the pipeline system. (it is a multi-fit unit, designed to fit other manufacturers suction products).

Once the filter has been used for patient therapy or if wetted, for any reason, it must be changed. The unit has been designed so that a chemical coating on the filter membrane will prevent fluid passing through it, and may restrict the flow of suction once wetted.

Vacuum Gauge

The controller is fitted with a easy to read, dual scale colour coded gauge
Scale Readings:
High Suction 0 to 760mmHg (0 to 100kpa)
Low Suction 0 to 200mmHg (0 to 25kpa)

Safety Valve:

The units are fitted with an internal safety valve system. This will protect the suction controller from being damaged in the event of the unit being connected to a positive pressure source.

Suction Control and Safety:

To Increase/Decrease Suction

The control knob is graduated from a positive "OFF" to a maximum "MAX" vacuum position, within a approximatley two thirds rotation of the control knob. This has a safety aspect of gaining instant suction at a controlled level of all emergency situations.

A further safety feature is that the vacuum source can be turned off immediately by turning the control knob to the OFF position. This will automatically drain off all the remaining suction source from the suction tubing and receiver jar.

Also unlike some units with the ON/OFF flag/switch system, when the controller is turned ON to the gradients, the suction will increase as slowly or as quickly as the user requires, and not at the point where it was last set, as with the flag type.

Maintenance

A medical suction controller forms part of an essential life supporting system. All suction controllers must be treated with care and serviced on a regular basis (ie Preventative Maintenance) to ensure the units reliability and quality conformance for the purpose that it is intended for.

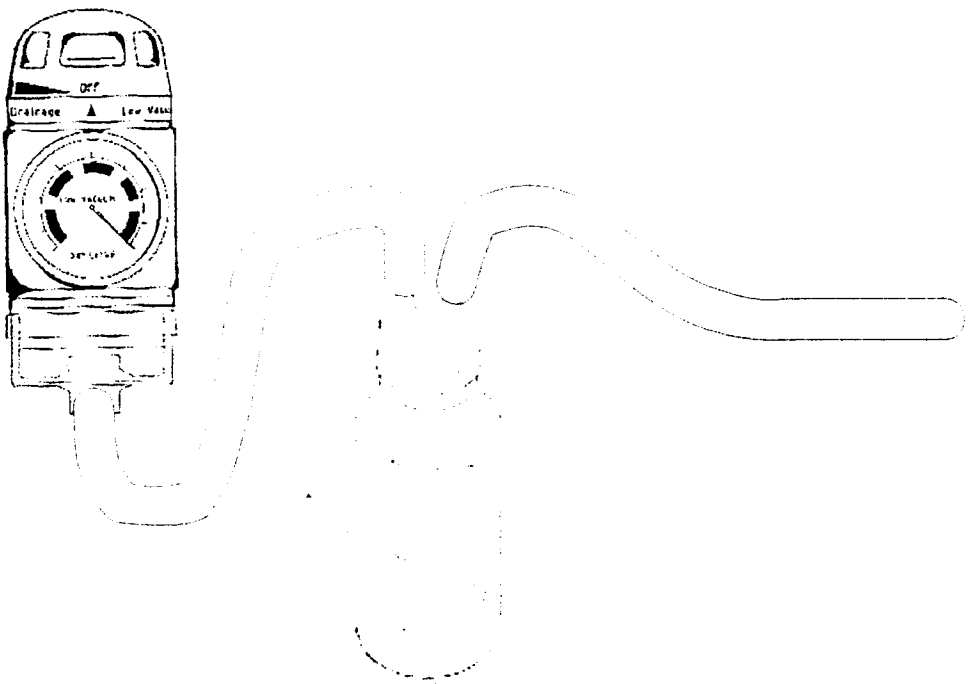
For service enquiries and information please contact Viamed to arrange a quotation etc.

NEVER USE FAULTY EQUIPMENT

Preventative maintenance ensures safety for the patient and user.

Replacement Filters

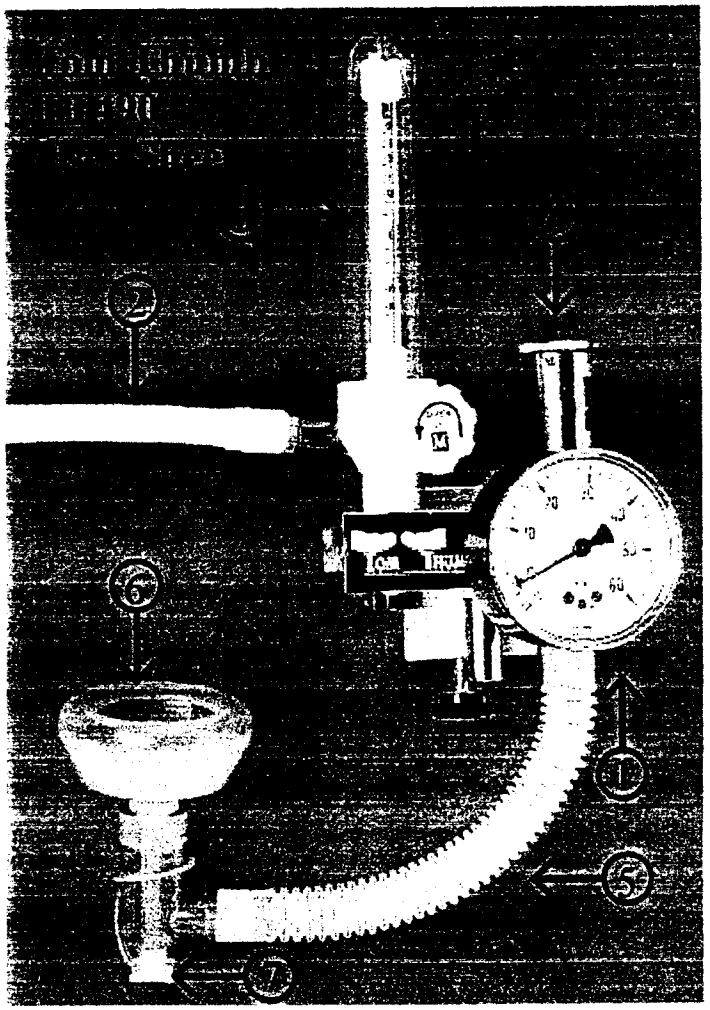
Ref: S750 per box of 30 units.



Timer Model (NS 22G Seconds Timer)

1. Press the red button (stop).
2. Ensure that the time is fully wound by using the key provided for this purpose at the back of the case.
3. Bring both hands to the 60 position by pressing the black button (zero fly back).
4. The timer is now ready for use.
5. To start the timer press the green button; to stop the timer press the red button; for zero fly back press the black button.
6. It is recommended that the zero fly back button (black) should only be pressed if the red button (stop) is pressed beforehand. When the green button (start) is pressed, the zero fly back button (black) should not be used.
7. Special "Stop and Goon" feature:
   the timer can be stopped and restarted at any reading to give a cumulative timing. The timer should be fully wound once each day.

Tom Thumb Instructions for use



Tom Thumb User Sheet

Instructions

Disconnect Tom Thumb from all inlet & outlet Hoses & tubes

1. Check that the pressure gauge reads Zero If it does not then Tom Thumb needs servicing
2. Attach Flowmeter inlet to the hospital oxygen supply
3. Set flowmeter to read 4-6 L/Minute
4. Adjust blow off valve to minimum (fully counter clockwise)
5. Connect Patient tubing (INT 6181) to Tom Thumb but NOT THE PATIENT
6. Occlude mask and open port of T piece --- adjust blow off valve until you reach the required pressure
7. **Tom Thumb is now ready for use**

Care of the Tom Thumb

Cleaning

Wipe over the unit with a damp cloth.
Do Not let moisture or foreign matter into either of the blow off valves

General Care

The Tom Thumb has been designed to give a lifetime of service if used correctly. However the gauge will be damaged if the unit is subjected to severe mechanical shock or if the unit is dropped.Tom Thumb should be checked for accuracy every 12 months minimum or when ever the pointer reads outside the black band at zero flow

Choosing a location

The rail bracket on the Tom Thumb is designed to fit most medical rails. However a problem may arise if the rail is mounted very close to a wall or the side of an incubator particularly if the gauge is mounted on the top or end pieces of the Tom Thumb.
A spacer kit Pt No. 9901-22 is available upon request

Parts List

Part number	Description	Parts required TC400/R	Parts required TC400/RS
A52160022	Wall mounted Radiant Heater	1.00	1.00
BA/10	Resuscitation Cabinet	1.00	1.00
FE101431	M2.5 pan head bolt(box 100) for PP8650	0.02	1.00
FE101447	M4 Nut(box 100) for PP8560	0.02	1.00
FE143059	No 6 self tapping screws(box100) for bed	0.06	1.00
FE149690	M5 Washers(box 100) for PP8652	0.04	1.00
FE758693	M4 bolt(box 100) for PP8652	0.01	1.00
INT6181	Patient circuit (one patient use)	1.00	1.00
PP8650	Resuscitation Bed 12"	1.00	1.00
PP8651	Angle bracket for timer	1.00	1.00
PP8652	Brass spacers for Suction controller	2.00	
PP8653	Aluminium plate for suction controller	1.00	
RD0172	Suction Mounting Bracket(special)	1.00	
S6666	Suction hose assembly(3metres)	1.00	
S714916	Low suction controller	1.00	
TC453	Mattress for BA/10	1.00	1.00
TC460	Time elapsed clock	1.00	1.00
TC472	Size 3 box (10 pk)	0.30	0.30
THE2003	Universal rail clamp with 'V'	1.00	1.00
THE2050	Universal clamp with vertical holes	1.00	1.00
THE4302	Suction clear tubing(30M)	0.03	
THE4505	Dovetail (male)	1.00	1.00
THE4508	1/2 litre jar and cage with clamp	1.00	
TT490	Tom Thumb W/Flowmeter	1.00	1.00

Service Contracts Resuscitation Unit

Instruments returned to Viamed:
All instruments should be returned to Viamed in good working order
Units not in good working order may incur extra charges

Instruments serviced on site:
All units to be serviced should be available and in good working order for the engineer
Units not in good working order may incur extra charges

Travel
Travel will be charged at the current rate per hour.

Tom Thumb
Check the unit mechanically
Complete a full function test
Complete a full calibration test and make adjustments if found necessary
Incorporate any upgrades found suitable
Any minor parts used will be included in the price
"O" rings will be replaced when necessary or every 2 years
Any minor parts will be included in the price

Radiant warmer Ceratherm 600
Check the unit mechanically
Check the electrical specification
Complete a full functional check
Complete a full specification test
Complete a safety check to BS5754 and provide certification
Incorporate any upgrades found suitable

Cabinet and accessories
Check all parts mechanically
Check specifications where necessary

Timer
Requires no service

Suction Unit
Check the unit mechanically
Check the electrical specification
Complete a full functional check
Complete a full specification test
Complete a safety check to BS5754 and provide certification
Incorporate any upgrades found suitable

Multiple units which are all available on one visit are subject to a discount on the service price:

Warranty

All parts of this resuscitation cabinet are hereby guaranteed for a period of 12 months from the date of purchase. The best materials and workmanship have been employed throughout every stage of manufacture and every part is thoroughly tested before despatch. This warranty covers any defect in material and manufacture but excludes damage caused by accident, misuse or neglect. Should any component develop a defect within this period it will be repaired or replaced at our option. In the event of a complaint regarding this product purchased outside the UK please contact your local distributor

The service under this guarantee does not affect your statutory rights against your supplier if any component is faulty.

RESUSCITATION CABINET.

OPERATOR MANUAL.

Resuscitation Cabinet Operator Manual.
Version 4.0. 12/06/03.
Part no. : 0390006.

CE 0123

INDEX.

1. Introduction.

Thank you for purchasing a Viamed Resuscitation Cabinet.

If maintained correctly, this unit should give many years of trouble free service.

This Manual contains instructions for the operation and maintenance to be carried out by the operator. Viamed is not liable for the proper functioning of any part of this product if it is not operated according to the instructions, if the maintenance recommendations in this manual are not followed or if repairs are carried out using non-approved components.

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The personnel who work with this equipment should read this manual carefully and should fully understand all instructions contained therein. The manual should be kept so that it can be easily inspected; it is advisable to store it in an easily accessible place.

If any function or part of this manual is not clear, please contact Viamed or your distributor in order to obtain further information or clarification.

2. Ceratherm 600-2 Infant Radiant Warmer.

Comprehensive manuals covering Operation and Servicing of the Ceratherm 600-2 Infant Radiant Warmer are supplied with the Resuscitation Cabinet. Please refer to these manuals before use.

Each Ceratherm 600-2 Infant Radiant Warmer is safety tested to Class 1, type B and a certificate supplied.

It is recommended that the equipment is retested for safety and function after installation and at least annually there after.

3. Cabinet.

The cabinet has been designed to conceal the internal products when closed and provide easy access when open.

Excessive weight should not be applied to the drop down front platform.

It is strongly recommended the while in use the patient should be under close observation at all times.

4. Suction Controller.

The Oxylitre 5700 series suction controllers are designed specifically for medical use. It is available in high suction / high flow or low suction / high flow models with either direct or remote fittings. Suction controllers comply to ISO 10079-3 1992, BS7259 Pt 2 1993.

Vacuum Source Connector.

The S700 series suction controller is available with either a British Standard (BS5682) probe or a 9/l6unfL/H fitting. The 9/16 unfL/H connection can be attached to various types of remote fittings i.e. Rail or "V' male mounted, with remote hose assemblies

Patient Inlet Connection.

The inlet connection forms an integral part of a detachable filter cartridge or Disposable Hydrophobic Filtration Unit.

This filtration unit has been designed to prevent the ingress of fluids into the controller and the pipeline system. It is a multi-fit unit, designed to fit other manufacturers suction products.

Once the filter has been used for patient therapy or if wetted for any reason, it must be replaced. If the filter membrane is wet, the chemical coating on it will prevent fluid passing through it and may restrict the flow of suction.

Vacuum Gauge.

The controller is fitted with a easy to read, dual scale colour coded gauge

Scale Readings : High Suction : 0 to 760 mmHg (0 to 100kpa).
Low Suction : 0 to 200 mmHg (0 to 25kpa).

Safety Valve.

The suction controller is fitted with an internal safety valve system. This will protect the suction controller from being damaged if inadvertently connected to a positive pressure outlet.

Suction Control and Safety.

To vary the level of suction, the control knob should be rotated from the OFF position to the MAX vacuum position. This is approximatley a two thirds rotation of the control knob. This a safety aspect of gaining instant suction at a controlled level in all emergency situations.

A further safety feature is that the vacuum source can be turned off immediately by turning the control knob to the OFF position. This will automatically drain off all the remaining suction source from the suction tubing and receiver jar.

Also unlike some units with the ON/OFF flag/switch system, when the controller is turned ON to the gradients, the suction will increase as slowly or as quickly as the user requires, and not

at the point where it was last set, as with a flag type suction controller.

Maintenance.

Never use faulty equipment.

All suction controllers must be treated with care and serviced on a regular basis to ensure the device reliably performs the intended purpose.

Preventative maintenance ensures safety for the patient and user.

For service enquiries and information please contact Viamed to arrange a quotation.

Replacement Filters : Ref: S750 per box of 30.

5. APGAR Timer.

Instructions for use.

1. Remove the battery box cover and remove the battery insulating strip.
2. Refit the battery box cover.
3. Ensure the screen display reads 0:00:00.00.
4. To start or stop the timer respectively, press & release the red Start / Stop button.
5. To zero the timer, press & release the black Reset button.

If the display shows LOBAT, replace the battery with an equivalent 1.5V alkaline AA battery.

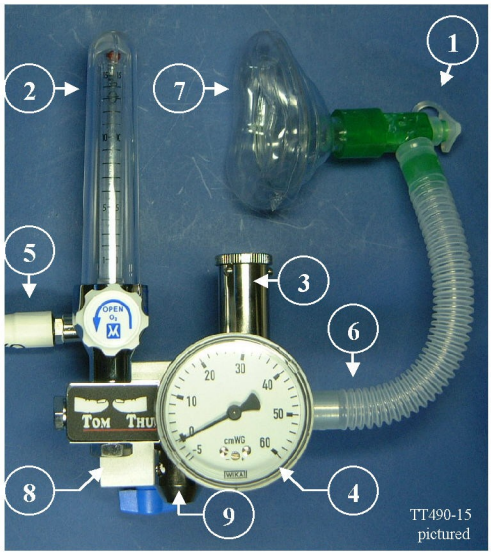
6. Tom Thumb.

Instructions for Use are attached to the Tom Thumb within the resuscitation cabinet. Please refer to these before use of the Tom Thumb.
Shown below for example only, are Instructions for Use for the TT490 / TT490-15 models.

VIAMED

PN 039000703.
v1.0.

Tom Thumb, TT490 / TT490-15. Instructions for Use.



Pre-use Checks.

- Uncap the T piece port ①.
- Adjust the flowmeter ② to minimum (fully clockwise) and the adjustable valve control ③ to minimum (fully counter clockwise).
- Check that the pressure gauge ④ reads zero. If not, the Tom Thumb requires servicing.
- Connect the flowmeter inlet ⑤ to the O_2 supply.
- Connect the patient tubing ⑥ to the Tom Thumb outlet but do not apply the mask ⑦ to the patient.
- Set the flowmeter to the required flow rate.
- Occlude the mask and the T piece port. Gradually turn the adjustable valve control clockwise until the required outlet pressure is shown on the pressure gauge.
- The Tom Thumb is now ready for use.

Important.

For use by qualified and trained personnel only.
Use flow rates within the range of the flowmeter.
Adjust outlet pressure after altering the flow rate.
Do not attempt to adjust the safety valve ⑨.
Recommended O_2 inlet pressure of 4 bar.

Guideline for Use during Resuscitation.

1. Follow the pre-use checks and set the required flow rate and outlet pressure.
2. Apply the mask to the patient and cover the T piece port to inflate the patients lungs at the set flow rate and pressure.
3. Uncover the T piece port and allow the patients lungs to deflate.
4. Repeat steps 2 & 3 as necessary during the resuscitation of the patient (follow the hospital protocol for resuscitation).

Care, Cleaning, Location and Sterilisation.

Clean using a damp cloth. The Tom Thumb is not intended to be sterilised. Do not autoclave. Do not allow moisture or foreign matter to enter the safety valve or adjustable valve. Damage will occur if the Tom Thumb is subjected to severe mechanical shock or dropped.

The Tom Thumb should be serviced every 12 months, if the pressure gauge does not read zero (outside of the black band) with no flow or if the units accuracy is doubted.

The rail bracket ® is designed to fit most medical rails. It is advised that the Tom Thumb is not mounted close to a wall or to the side of an incubator particularly if the gauge is fitted to the end of the body (specials only).

Warranty.

Viamed warranty ensures that goods are free from defects of manufacture for a period of one year from the date of shipment from Viamed.

Liability shall be limited solely to the replacement and repair of the goods and shall not include shipping costs or other incidental damages.

This warranty is null and void if any items are subjected to misuse, negligence, accident, or repairs other than those performed by Viamed or an authorised service centre.

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Email : info@viamed.co.uk
Website : www.viamed.co.uk

7. Service Contracts.

Equipment returned to Viamed : Equipment should be returned to Viamed in good working order; those not in good working order may incur extra charges.

Equipment serviced on site : Equipment to be serviced should be available and in good working order for the engineer; those not in good working order may incur extra charges.

Travel : Charged at the current rate per hour.

Tom Thumb :
Check the unit mechanically.
Complete a full functional test.
Complete a full calibration test and make adjustments if found necessary.
Incorporate any upgrades as required.
O rings will be replaced when necessary or every 2 years.
Minor parts used will be included in the price.

Ceratherm 600-2 Infant Radiant Warmer :
Check the unit mechanically.
Check the specification and installation.
Complete a full functional check
Complete a safety test to BS5754 : Class 1, type B and provide certification.
Incorporate any upgrades as required.

Cabinet and accessories : Check all parts mechanically.
Check the specification and installation.

Timer : No service required.

Suction Controller: Check the unit mechanically.
Complete a full functional check.
Incorporate any upgrades as required.

Multiple units which are all available on one visit are subject to a discount on the service price; 5 or more units : 10%, 10 or more units : 25%.

8. Parts List.

Part number.	Description.	Quantity : Type 1 cabinet.	Quantity : Type 2 cabinet.
0310025	Wall mounted Radiant Warmer.	1	1
0310001	Resuscitation Cabinet, type1.	1	1
0310002	Resuscitation Cabinet, type 2.	6	6
0330065	No 6 self tapping screws for bed.	1	1
0330040	Patient circuit (one patient use).	1	1
0320020	Resuscitation bed 300mm.	1	1
0330040	Suction hose assembly (3m).	1	1
0310035	Low suction controller.	1	1
0320005	Mattress for BA/10.	1	1
0310009	APGAR timer.	1	1
0310020	Size 3 storage box.	4	3
0320010	Universal rail clamp with 'V'.	2	2
0330035	Suction clear tubing..	1 x 1m	1 x 1m
0330030	Dovetail (male).	1	1
0320030	1/2 litre jar and cage with clamp.	1 (reuseable)	1 (reuseable)
0310034	Tom Thumb resuscitation unit. (as standard TT490-15, other variants may be supplied).	1	1

9. Warranty.

All parts of this resuscitation cabinet are guaranteed for a period of 12 months from the date of purchase.

The best materials and workmanship have been employed throughout every stage of manufacture and every part is thoroughly tested before dispatch.

This warranty covers any defect in material and manufacture but excludes damage caused by accident, misuse or neglect.

Should any component develop a defect within this period it will be repaired or replaced.

In the event of a complaint regarding this product purchased outside the UK please contact your local distributor.

The service under this guarantee does not affect your statutory rights against your supplier if any component is faulty.

10. Company Details.

Main office.

Viamed Ltd,
15 Station Road,
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VIAMED

RESUSCITATION CABINET.

OPERATOR MANUAL.

CE 0123

INDEX.

1. Introduction.

Thank you for purchasing a Viamed Resuscitation Cabinet.

If maintained correctly, this unit should give many years of trouble free service.

This Manual contains instructions for the operation and maintenance to be carried out by the operator. Viamed is not liable for the proper functioning of any part of this product if it is not operated according to the instructions, if the maintenance recommendations in this manual are not followed or if repairs are carried out using non-approved components.

Only trained personnel should perform calibration and repairs.
Maintenance documents are obtainable through your local dealer or direct from Viamed.

The personnel who work with this equipment should read this manual carefully and should fully understand all instructions contained therein. The manual should be kept so that it can be easily inspected; it is advisable to store it in an easily accessible place.

If any function or part of this manual is not clear, please contact Viamed or your distributor in order to obtain further information or clarification.

2. Ceratherm 600-2 Infant Radiant Warmer.

Comprehensive manuals covering Operation and Servicing of the Ceratherm 600-2 Infant Radiant Warmer are supplied with the Resuscitation Cabinet. Please refer to these manuals before use.

Each Ceratherm 600-2 Infant Radiant Warmer is safety tested to Class 1, type B and a certificate supplied.

It is recommended that the equipment be retested for safety and function after installation, and at least annually thereafter.

3. Cabinet.

The cabinet has been designed to conceal the internal products when closed and provide easy access when open.

Excessive weight should not be applied to the drop down front platform.

It is strongly recommended the while in use the patient should be under close observation at all times.

4. Suction Controller.

The Ox litre 5700 series suction controllers are designed specifically for medical use. It is available in high suction / high flow or low suction / high flow models with either direct or remote fittings. Suction controllers comply with ISO 10079-3 1992, BS7259 Pt 2 1993.

Vacuum Source Connector.

The S700 series suction controller is available with either a British Standard (BS5682) probe or a 9/l6unfL/H fitting. The 9/16 unfL/H connection can be attached to various types of remote fittings i.e. Rail or "V' male mounted, with remote hose assemblies

Patient Inlet Connection.

The inlet connection forms an integral part of a detachable filter cartridge or Disposable Hydrophobic Filtration Unit.

This filtration unit has been designed to prevent the ingress of fluids into the controller and the pipeline system. It is a multi-fit unit, designed to fit other manufacturers suction products.

Once the filter has been used for patient therapy, or if wetted for any reason, it must be replaced. If the filter membrane is wet, the chemical coating on it will prevent fluid passing through it and may restrict the flow of suction.

Vacuum Gauge.

The controller is fitted with an easy to read, dual scale colour coded gauge

Scale Readings : High Suction : 0 to 760 mmHg (0 to 100kpa).
Low Suction : 0 to 200 mmHg (0 to 25kpa).

Safety Valve.

The suction controller is fitted with an internal safety valve system. This will protect the suction controller from being damaged if inadvertently connected to a positive pressure outlet.

Suction Control and Safety.

To vary the level of suction, the control knob should be rotated from the OFF position to the MAX vacuum position. This is approximately a two-thirds rotation of the control knob. This is a safety aspect of gaining instant suction at a controlled level in all emergency situations.

A further safety feature is that the vacuum source can be turned off immediately by turning the control knob to the OFF position. This will automatically drain off the entire remaining suction source from the suction tubing and receiver jar.

Also unlike some units with the ON/OFF flag / switch system, when the controller is turned ON to the gradients, the suction will increase as slowly or as quickly as the user requires, and not at the point where it was last set, as with a flag type suction controller.

Maintenance.

Never use faulty equipment.

All suction controllers must be treated with care and serviced on a regular basis to ensure the device reliably performs the intended purpose.

Preventative maintenance ensures safety for the patient and user.

For service enquiries and information please contact Viamed to arrange a quotation.

Replacement Filters: Ref: S750 per box of 30.

5. APGAR Timer.

Instructions for use.

Reset button

Start / Stop
Button

1. Remove the battery box cover and remove the battery-insulating strip.
2. Refit the battery box cover.
3. Ensure the screen display reads 0:00:00.00.
4. To start or stop the timer respectively, press & release the red Start / Stop button.
5. To zero the timer, press & release the black Reset button.

If the display shows LOBAT, replace the battery with an equivalent 1.5V alkaline AA battery.

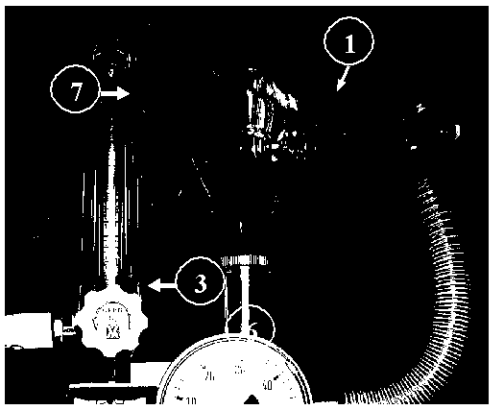
6. Tom Thumb.

Instructions for Use are attached to the Tom Thumb within the resuscitation cabinet. Please refer to these before use of the Tom Thumb.
Shown below for example only, are Instructions for Use for the TT490 / TT490-15 models.

VIAMED

PN 039000703.
v1.0.

Tom Thumb, TT490 / TT490-15.
Instructions for Use.



Pre-use Checks.

- Uncap the T piece port ①.
- Adjust the flowmeter ② to minimum (fully clockwise) and the adjustable valve control ③ to minimum (fully counter clockwise).
- Check that the pressure gauge ④ reads zero. If not, the Tom Thumb requires servicing.
- Connect the flowmeter inlet ⑤ to the O_2 supply.
- Connect the patient tubing ⑥ to the Tom Thumb outlet but do not apply the mask ⑦ to the patient.
- Set the flowmeter to the required flow rate.
- Occlude the mask and the T piece port. Gradually turn the adjustable valve control clockwise until the required outlet pressure is shown on the pressure gauge.
- The Tom Thumb is now ready for use.

Important.

Guideline for Use during Resuscitation.

1. Follow the pre-use checks and set the required flow rate and outlet pressure.
2. Apply the mask to the patient and cover the T piece port to inflate the patient's lungs at the set flow rate and pressure.
3. Uncover the T piece port and allow the patients lungs to deflate.
4. Repeat steps 2 & 3 as necessary during the resuscitation of the patient (follow the hospital protocol for resuscitation).

Care, Cleaning, Location and Sterilisation.

Clean using a damp cloth. The Tom Thumb is not intended to be sterilised. Do not autoclave. Do not allow moisture or foreign matter to enter the safety valve or adjustable valve. Damage will occur if the Tom Thumb is subjected to severe mechanical shock or dropped.

The Tom Thumb should be serviced every 12 months, if the pressure gauge does not read zero (outside of the black band) with no flow or if the units' accuracy is doubted.

The rail bracket ⑧ is designed to fit most medical rails. It is advised that the Tom Thumb is not mounted close to a wall or to the side of an incubator particularly if the gauge is fitted to the end of the body (specials only).

Warranty.

Viamed warranty ensures that goods are free from defects of manufacture for a period of one year from the date of shipment from Viamed.

Liability shall be limited solely to the replacement and repair of the goods and shall not include shipping costs or other incidental damages.

This warranty is null and void if any items are subjected to misuse, negligence, accident, or repairs other than those performed by Viamed or an authorised service centre.

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7. Service Contracts.

Equipment returned to Viamed:	Equipment should be returned to Viamed in good working order; those not in good working order may incur extra charges.
Equipment serviced on site:	Equipment to be serviced should be available and in good working order for the engineer; those not in good working order may incur extra charges.
Travel:	Charged at the current rate per hour.
Tom Thumb:	Check the unit mechanically. Complete a full functional test. Complete a full calibration test and make adjustments if found necessary. Incorporate any upgrades as required. O-rings will be replaced when necessary or every 2 years. Minor parts used will be included in the price.
Ceratherm 600-2 Infant Radiant Warmer:	Check the unit mechanically. Check the specification and installation. Complete a full functional check Complete a safety test to BS5754: Class 1, type B and provide certification. Incorporate any upgrades as required.
Cabinet and accessories:	Check all parts mechanically. Check the specification and installation.
Timer:	No service required.
Suction Controller:	Check the unit mechanically. Complete a full functional check. Incorporate any upgrades as required.

Multiple units which are all available on one visit are subject to a discount on the service price - 5 or more units: 10%, 10 or more units: 25%.

8. Parts List.

0310025	Wall mounted Radiant Warmer.	1	1
0310001	Resuscitation Cabinet, type1.	1	1
0310002	Resuscitation Cabinet, type 2.	6	6
0330065	No 6 self-tapping screws for bed.	1	1
0330040	Patient circuit (one patient use).	1	1
0320020	Resuscitation bed 300mm.	1	1
0330040	Suction hose assembly (3m).	1	1
0310035	Low suction controller.	1	1
0320005	Mattress for BA/10.	1	1
0310009	APGAR timer.	1	1
0310020	Size 3 storage box.	4	3
0320010	Universal rail clamp with 'V'.	2	2
0330035	Suction clear tubing.	1 x 1m	1 x 1m
0330030	Dovetail (male).	1	1
0320030	1/2 litre jar and cage with clamp.	1 (reusable)	1 (reusable)
0310034	Tom Thumb resuscitation unit. (As standard TT490-15, other variants may be supplied).	1	1

9. Warranty.

All parts of this resuscitation cabinet are guaranteed for a period of 12 months from the date of purchase.

The best materials and workmanship have been employed throughout every stage of manufacture and every part is thoroughly tested before dispatch.

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VIAMED

RESUSCITATION CABINET.

OPERATOR MANUAL.

CE 0123

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Only trained personnel should perform calibration and repairs.
Maintenance documents are obtainable through your local dealer or direct from Viamed.

Servicing personnel must be aware of the potential clinical implications of incorrectly serviced equipment.

The personnel who work with this equipment should read this manual carefully and should fully understand all instructions contained therein. The manual should be kept so that it can be easily inspected; it is advisable to store it in an easily accessible place.

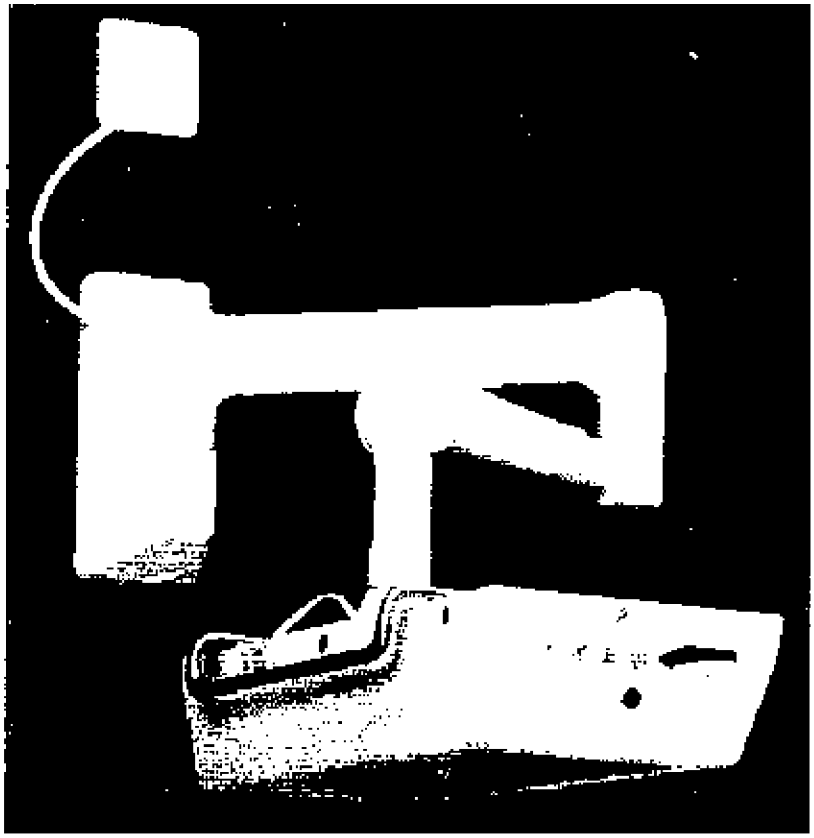
If any function or part of this manual is not clear, please contact Viamed or your distributor in order to obtain further information or clarification.

2. Ceratherm 600-2 Infant Radiant Warmer.

Comprehensive manuals covering Operation and Servicing of the Ceratherm 600-2 Infant Radiant Warmer are supplied with the Resuscitation Cabinet. Please refer to these manuals before use.

Each Ceratherm 600-2 Infant Radiant Warmer is safety tested to Class 1, type B and a certificate supplied.

It is recommended that the equipment be retested for safety and function after installation, and at least annually thereafter.

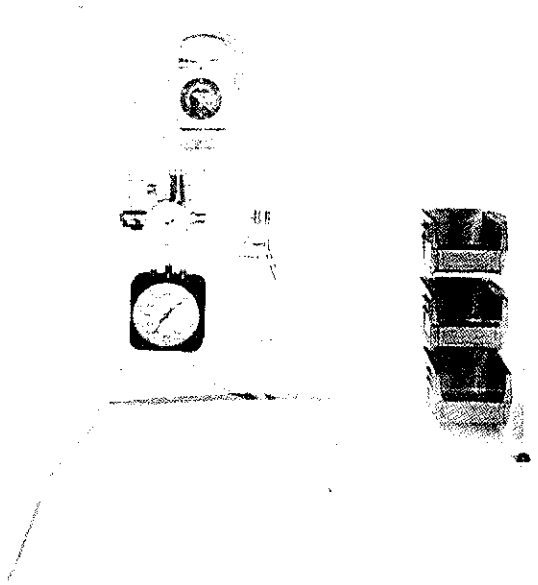


3. Cabinet.

The cabinet has been designed to conceal the internal products when closed and provide easy access when open.

Excessive weight should not be applied to the drop down front platform.

It is strongly recommended the while in use the patient should be under close observation at all times.



4. Suction Controller.

The suction controllers are designed specifically for medical use. They are available in high suction / high flow or low suction / high flow models with either direct or remote fittings. Suction controllers comply with ISO 10079-3 1992, BS7259 Pt 2 1993.

Vacuum Source Connector.

The suction controller is available with either a British Standard (BS5682) probe or a 9/l6unfL/H fitting. The 9/16 unfL/H connection can be attached to various types of remote fittings i.e. Rail or "V' male mounted, with remote hose assemblies

Patient Inlet Connection.

The inlet connection forms an integral part of a detachable filter cartridge or Disposable Hydrophobic Filtration Unit.

This filtration unit has been designed to prevent the ingress of fluids into the controller and the pipeline system. It is a multi-fit unit, designed to fit other manufacturers suction products.

Once the filter has been used for patient therapy, or if wetted for any reason, it must be replaced. If the filter membrane is wet, the chemical coating on it will prevent fluid passing through it and may restrict the flow of suction.

Vacuum Gauge.

The controller is fitted with an easy to read, dual scale colour coded gauge

Safety Valve.

The suction controller is fitted with an internal safety valve system. This will protect the suction controller from being damaged if inadvertently connected to a positive pressure outlet.

Suction Control and Safety.

To vary the level of suction, the control knob should be rotated from the OFF position to the MAX vacuum position. This is approximately a two-thirds rotation of the control knob. This is a safety aspect of gaining instant suction at a controlled level in all emergency situations.

A further safety feature is that the vacuum source can be turned off immediately by turning the control knob to the OFF position. This will automatically drain off the entire remaining suction source from the suction tubing and receiver jar.

Also unlike some units with the ON/OFF flag / switch system, when the controller is turned ON to the gradients, the suction will increase as slowly or as quickly as the user requires, and not at the point where it was last set, as with a flag type suction controller.

Maintenance.

Never use faulty equipment.

All suction controllers must be treated with care and serviced on a regular basis to ensure the device reliably performs the intended purpose.

Preventative maintenance ensures safety for the patient and user.

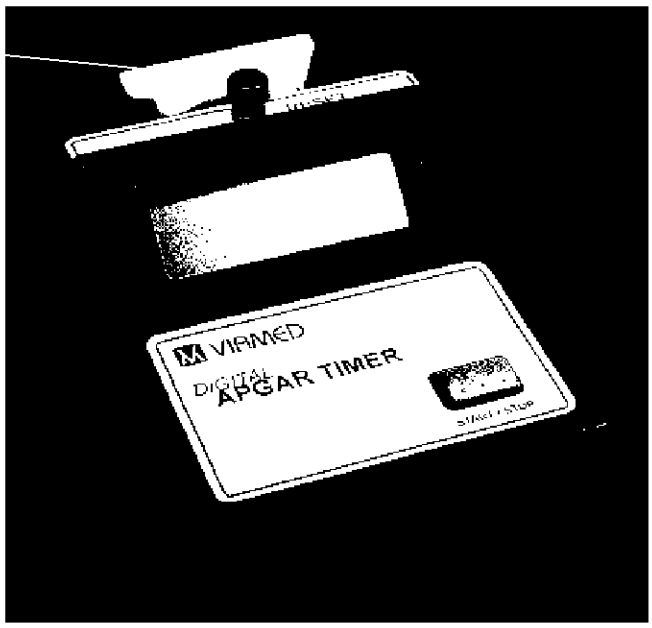
For service enquiries and information please contact Viamed to arrange a quotation.

Replacement Filters: Ref: S750 per box of 30. - Oxylitre
???????

5. APGAR Timer.

Instructions for use.

Reset button



Start / Stop Button

1. Remove the battery box cover and remove the battery-insulating strip.
2. Refit the battery box cover.

3. Ensure the screen display reads 0:00:00.00.

4. To start or stop the timer respectively, press & release the red Start / Stop button.

5. To zero the timer, press & release the black Reset button.

If the display shows LOBAT, replace the battery with an equivalent 1.5V alkaline AA battery.

6. Tom Thumb.

Instructions for Use are attached to the Tom Thumb within the resuscitation cabinet. Please refer to these before use of the Tom Thumb.
Shown below for example only, are Instructions for Use for the TT490 / TT490-15 models.

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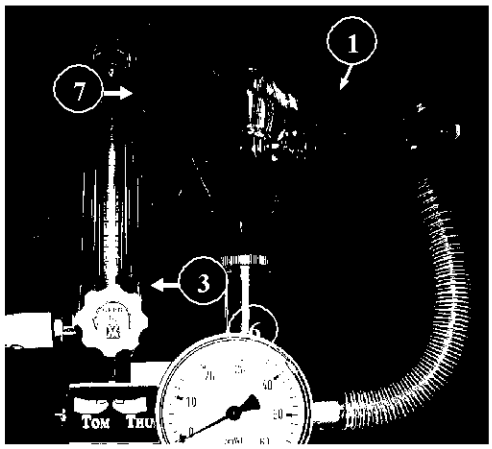
PN 039000703.
v1.0.

Tom Thumb, TT490 / TT490-15. Instructions for Use.



Pre-use Checks.

- Uncap the T piece port ①.
- Adjust the flowmeter ② to minimum (fully clockwise) and the adjustable valve control ③ to minimum (fully counter clockwise).
- Check that the pressure gauge ④ reads zero. If not, the Tom Thumb requires servicing.
- Connect the flowmeter inlet ⑤ to the O_2 supply.
- Connect the patient tubing ⑥ to the Tom Thumb outlet but do not apply the mask ⑦ to the patient.
- Set the flowmeter to the required flow rate.
- Occlude the mask and the T piece port. Gradually turn the adjustable valve control clockwise until the required outlet pressure is shown on the pressure gauge.
- The Tom Thumb is now ready for use.

Important.

Guideline for Use during Resuscitation.

1. Follow the pre-use checks and set the required flow rate and outlet pressure.
2. Apply the mask to the patient and cover the T piece port to inflate the patient's lungs at the set flow rate and pressure.
3. Uncover the T piece port and allow the patients lungs to deflate.
4. Repeat steps 2 & 3 as necessary during the resuscitation of the patient (follow the hospital protocol for resuscitation).

Care, Cleaning, Location and Sterilisation.

Clean using a damp cloth. The Tom Thumb is not intended to be sterilised. Do not autoclave. Do not allow moisture or foreign matter to enter the safety valve or adjustable valve. Damage will occur if the Tom Thumb is subjected to severe mechanical shock or dropped.
The Tom Thumb should be serviced every 12 months, if the pressure gauge does not read zero (outside of the black band) with no flow or if the units' accuracy is doubted.
The Oxygen Hoses should be checked every 3 months, and replaced ever 4 years as a minimum.
The rail bracket ⑧ is designed to fit most medical rails. It is advised that the Tom Thumb is not mounted close to a wall or to the side of an incubator particularly if the gauge is fitted to the end of the body (specials only).

Warranty.

Viamed warranty ensures that goods are free from defects of manufacture for a period of one year from the date of shipment from Viamed.

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Travel:	Charged at the current rate per hour.
Tom Thumb:	Check the unit mechanically. Complete a full functional test. Complete a full calibration test and make adjustments if found necessary. Incorporate any upgrades as required. O-rings will be replaced when necessary or every 2 years. Minor parts used will be included in the price.
Ceratherm 600-2 Infant Radiant Warmer:	Check the unit mechanically. Check the specification and installation. Complete a full functional check Complete a safety test to BS5754: Class 1, type B and provide certification. Incorporate any upgrades as required.
Cabinet and accessories:	Check all parts mechanically. Check the specification and installation.
Timer:	No service required.
Suction Controller:	Check the unit mechanically. Complete a full functional check. Incorporate any upgrades as required.

Multiple units which are all available on one visit are subject to a discount on the service price i.e. - 5 or more units: 10%, - 10 or more units: 25%.

8. Parts List.

0310025	Wall mounted Radiant Warmer.	1	1
0310001	Resuscitation Cabinet, type1.	1	1
0310002	Resuscitation Cabinet, type 2.	6	6
0330065	No. 6 - self-tapping screws for bed.	1	1
0330040	Patient circuit (one patient use).	1	1
0320020	Resuscitation bed 300mm.	1	1
0330040	Suction hose assembly (3m).	1	1
0310035	Low suction controller.	1	1
0320005	Mattress for BA/10.	1	1
0310009	APGAR timer.	1	1
0310020	Size 3 storage box.	4	3
0320010	Universal rail clamp with 'V'.	2	2
0330035	Suction clear tubing.	1 x 1m	1 x 1m
0330030	Dovetail (male).	1	1
0320030	1/2 litre jar and cage with clamp.	1 (reusable)	1 (reusable)
0310034	Tom Thumb resuscitation unit. (As standard TT490-15, other variants may be supplied).	1	1

9. Warranty.

All parts of this resuscitation cabinet are guaranteed for a period of 12 months from the date of purchase.

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