

INSTRUCTION MANUAL

MODEL : CHAM NEW CU-5000
CHAM NEW CU-3000



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CTI-M-3401 Rev(1) Feb 01, 2023



CAUTION!

1. You must be well acquainted with this manual before using it.
2. This manual should be placed where the user could read it whenever necessary.

Thank you for purchasing CHAM CU-50000, CHAM CU-3000 E.N.T. Treatment Unit. To ensure safe operation and long-term performance stability, it is essential that you fully understand the functions and operating, maintenance instructions by reading this manual before operating the equipment.

Particular attention should be paid to all warnings, cautions and notes incorporated herein.

To prevent physical injury or property damage, read this section carefully before you use this device, and be sure to comply following safety precautions.

Incorrect operation due to failure to follow the instructions may cause harm or damage

The following conventions are used throughout the manual to denote information of special emphasis.



WARNING!

“Warning” is used to indicate the presence of hazard that can cause severe personal injury, death or substantial property damage if the warning is ignored.



CAUTION!

“Caution” is used to indicate the presence of hazard that will or can minor personal injury and property damage if the caution is ignored.



NOTE!

“Note” is used to notify the user of installation, operation or maintenance information that is important but not hazard related.

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Chapter 1. Introduction

1.1 Intenduction

As a medical equipment used at ENT hospital or clinic for medical examination and treatment of a patient, this is an ENT device composed of spray, suction used for sucking foreign substances from the nasal cavity, an instrument tray used for displaying and storing of various instruments, a can that holds a gauze, antiseptic solution or water, etc. and an air heating device.

1.2 Intended use

Main function

- ▶ Treats patient with spray and suction device
- ▶ Instrument warming & pre-heating
- ▶ Stores and protects the device from dust.
- ▶ Medical examination with endoscope
- ▶ Possible to attach endoscopic system and microscope

Application area

- ▶ Medical university and E.N.T clinic for E.N.T medicine

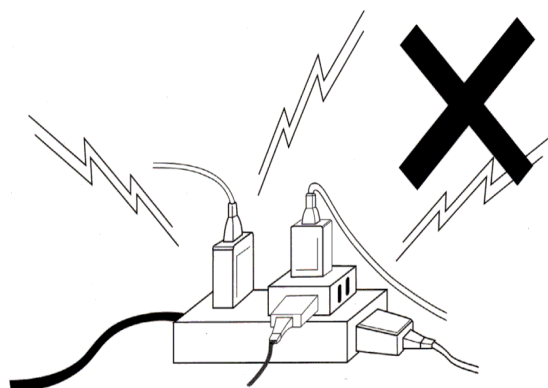
1.3 Features

- ▶ Efficient 2-suctions
- ▶ Mirror quick heater (Anti-fog) automatically turns off after 10 seconds (Max 30 seconds)
- ▶ Artificial marble surface is dust proof and easy to clean
- ▶ Drawer type endoscope storage with UV sterilizing function to keep scopes away from contamination
- ▶ Drawer type Suction bottle holder enables easy cleaning
- ▶ Rolling casters for easy movement
- ▶ Main instrument tray has dust proof sliding cover and pre-heating function to keep medical instruments in warm temperature
- ▶ Suction bottle window enable user to check bottle liquid level.
- ▶ Medicine bottles with folded arm supporter
- ▶ Suction device and sprays operate automatically when lifted and stops when returned to the holder

Chapter 2. Safety Information

2.1 Before Turning on Power

Connection of Power Cable (with the outlet)



Avoid sharing the outlet.



CAUTION !

- Make sure that the covering of cable is not damaged to prevent electric shock or short circuit.
- If you find any damage or any sign of it, immediately contact an agency.
- Put the Power cord into only one plug
- Make sure not to share the power outlet to prevent device from being affected.

2.2 General cautions



NOTE!

Since this device is made up of precise components, you should install the product according to the instructions as below.

Precautions on Safety

These are the instructions required to be observed by the user for his or her safety, thus prevent from sustaining property damage, etc. Please read them carefully and use the product properly.



It's a sign instructing for forbidding the use.



It's a sign of requirement for grounding to be done for protecting an electric shock.



It's a sign instructing to comply with the instruction without fail.



It's a sign instructing not to touch it.



Warning

"WARNING" indicates the situation in which serious damage to both the user's life and property would result if the user should fail to observe the precautions.


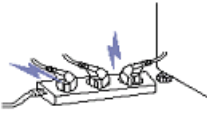

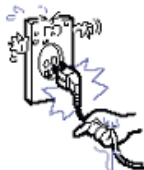







Caution








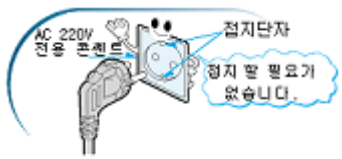
"Caution" indicates the situation in which comparatively light damage to both the user's life and property would result if the user should fail to observe the precautions.






NOTE

"Notes" shows the important precautions to be followed by the user in installation, using and

 Caution	checking, but also highlights the contents that may create dangerous situation.	
<ol style="list-style-type: none"> 1. You should understand properly with this manual before using this device. 2. This manual should be place where the user could read it whenever necessary. 		
When connecting to the power	When using it	
<p>Do not use other than 220V, and also do not use other electrical products connected to the power at the same time</p> <p>▶ Otherwise, electric shocks or fire may result.</p> 	<p>Never place a flower vase or other medicines that contains water on the top of the device.</p> <p>▶ This device is a medical equipment designed for using for the purpose of ENT treatment and is never allowed for using other treatment purposes.</p> <p>▶ Otherwise, electric shocks or fire may result.</p> 	
<p>Do not attempt to disconnect the power plug by pulling the code, or do not touch it with your wet hand.</p> <p>▶ Otherwise, electric shocks or fire may result.</p> 	<p>Do not leave a child alone near to the instrument,</p> <p>▶ The child may attempt to operate it, which would cause electric shocks or safety-accident.</p> <p>▶ Due to the body of the device is made out of steel and marble material, the child may sustain an injury by crashing into the device</p> 	
<p>Do not bend the electric code by constraint, or pressed down by putting a heavy article on it.</p> <p>▶ Otherwise, electric shocks or fire may result.</p> 	<p>When thunder or lightning strikes, or when leaving the device out of use for a long period, make sure to disconnect the power plug from the outlet .</p> <p>▶ Otherwise, electric shocks or fire may result.</p> 	
<p>Do not extend cut or modify the power Cable.</p> <p>▶ Otherwise, electric shocks or fire may result due to an electrical damage to the power cable.</p> 	<p>Do not use or store the device in a place near any inflammable sprays or ignitable substances.</p> <p>▶ Otherwise, electric shocks, fire or property damage may result.</p> 	

2.3 Precautions on safe use

Precautions on Safe Use		These are instructions for user's safety and thus preventing from sustaining property damage, etc. Please read them carefully for proper using the product.	
 caution!	<p>1) It may cause serious damages such as electric shocks, fire or personal injury. Please understand it well and observe it without fail.</p> <p>2) This product is allowed to be used for medical purpose only by trained personnel engaged in medical treatment.</p>		
When cleaning		When installing it.	
<p>Do not spray water on it directly, or do not attempt to clean it with any inflammable substances such as benzene or thinner, etc.</p> <p>▶ Otherwise, an explosion or fire may result.</p> 		<p>Do not place any inflammable objects such as candlelight or the light of a cigarette on top of the device.</p> <p>▶ Otherwise, electric shocks or fire may result.</p> 	
<p>It may cause damage to the interior or exterior surfaces if they are scratched badly.</p> <p>▶ It may cause destroy or damage to the device.</p> 		<p>Do not install it where they are much humidity or dust, or where water splashing (Washing machine, humidifier, etc.).</p> <p>▶ Otherwise, electric shocks or fire may result.</p> 	
<p>Any water or dust around the power plug must be thoroughly removed, and if there's any abnormal condition, such as cracks, etc. appear, then please stop using the device immediately and contact the agent from where the product purchased and inform about it.</p> <p>▶ If there's dust, water, or if the connection is unsafely done, fire may result.</p> 		<p>Do not attempt to dismantle, repair or modify thoughtlessly.</p> <p>▶ Otherwise, electric shocks, fire or property damage may result.</p> 	
<p>Please do grounding safely.</p> <p>▶ You must use a power outlet of AC 22V that is with a grounding terminal</p> <p>▶ In case you use a power outlet of AC 220V having a grounding terminal, having a separate grounding work will not be required.</p> <p>▶ In order to avoid electric leakage problems or accident cause by a electric shock, please do the grounding work without fail.</p> <p>▶ Even though you use a proper product, you can feel subtle stray current if you touch the body of the device if no grounding done with it.</p> <p>▶ If you want to procure a grounding wire or install it, please contact CHAMMED CO., LTD. about it.</p> <p>Please avoid grounding it on a gas pipe, plastic water pipe or telephone wire, etc.</p> <p>▶ Otherwise, electric shocks or fire may result.</p> 			

<p style="text-align: center;">Precautions on Safe Use</p>	<p>These are instructions for user's safety and thus preventing from sustaining property damage, etc. Please read them carefully for proper using the product.</p>
<p style="text-align: center;">  Caution! </p>	<p>1) It may cause serious damages such as electric shocks, fire or personal injury. Please understand it well and observe it without fail.</p> <p>2) This product is allowed to be used for medical purpose only by trained personnel engaged in medical treatment.</p>
<p>When relocating the device</p> <p>The product must be moved with holding it by four (4) people. (Please hold on the bottom part of the device when relocating it).</p> <ul style="list-style-type: none"> ▶ Do not hold the marble when moving the device <p>The device may be broken or damaged.</p> <ul style="list-style-type: none"> ▶ When moving over long distances, remove all components. <p style="text-align: center;">  CHAMMED </p>	<p>When installing the device</p> <p>Please do not install it in a place which surface is sloped or not leveled.</p> <ul style="list-style-type: none"> ▶ Never tilt the device sideways more than 10 degree. There's danger of having overturning. ▶ Damage to the device or personal injury may result due to overturning accident. <p style="text-align: center;">  </p>
	<p>When moving the unit for a short distance (within approx. 30m), there is a risk that the product can be damaged. Fix the top and bottom of the door by taping it. In case moving for a long distance (in a vehicle or moving through the stairs), then please contact the manufacturer or local distributor where you purchased the instrument for more detail in transportation.</p>
<p style="text-align: center;">Others</p>	
<p>If strange smell or smoke is detected, disconnect the power plug from the outlet immediately and inform the manufacturer or your local distributor.</p> <ul style="list-style-type: none"> ▶ If you continue use it, electric shocks or fire may result. 	

Installation of the Device and Storage Place

- 1) Store it in a place away from the contact of water.
- 2) For installation and storing the instrument, be careful about choosing a suitable place in terms of atmospheric pressure, temperature, humidity, ventilation and sun light. Install and store it in a place not adversely affected by the air containing dust, salt and ion.
- 3) Be aware of the safety condition in terms of a place declined, vibration and shock (including a shock caused by moving it) etc.
- 4) The wheels on the bottom can be removed, thus they can be used to your convenience. Please make it stabilized by installing and maintaining it at the level.
- 5) Do not install or store it in a place near to a chemical storage or where gas is generated.
- 6) Be cautious of the voltage of power, frequency and power consumption when installing the instrument.

Before Using the Medical Treatment Device

- 1) Confirm if the treatment device is in a proper and stabilized operational condition.
- 2) Confirm if the connection of the grounding wire and codes are maintained correctly and safely.
- 3) In the event that other electrical products are used parallel, then secure and follow an instruction from the specialist about it.
- 4) In handling the treatment device, please make it sure that you are well familiar with the instructions concerning the handling and operation in advance.

Precautions While Using the Treatment Device

- 1) Check the status of the impurity bottle frequently.
- 2) It's allowed to touch the treatment lamp and its components softly, but do not handle it forcibly.
- 3) The treatment lamp is in a double-heat resistant glass, and also used a heat resistant cover, thus its risk of possible damage by the heat has considered been reduced. Still it's necessary to be careful when you touch it.
- 4) In order to maintain the Suction in a clean and operable condition, please rinse it out in running water every time after using it, and one or two times a day with sucking clean water for 1~2 seconds and remove foreign substances from the inside the hose.
- 5) Please check the treatment table and the patient and ensure there's no abnormality exists with them, otherwise, stop the operation of the instrument right away and take a proper action for the safety of the patient.
- 6) Be careful not to have the patient come into contact with the treatment device and other electrical equipment.
- 7) Please proceed with using the instrument taking precautions on other electrical safety. .

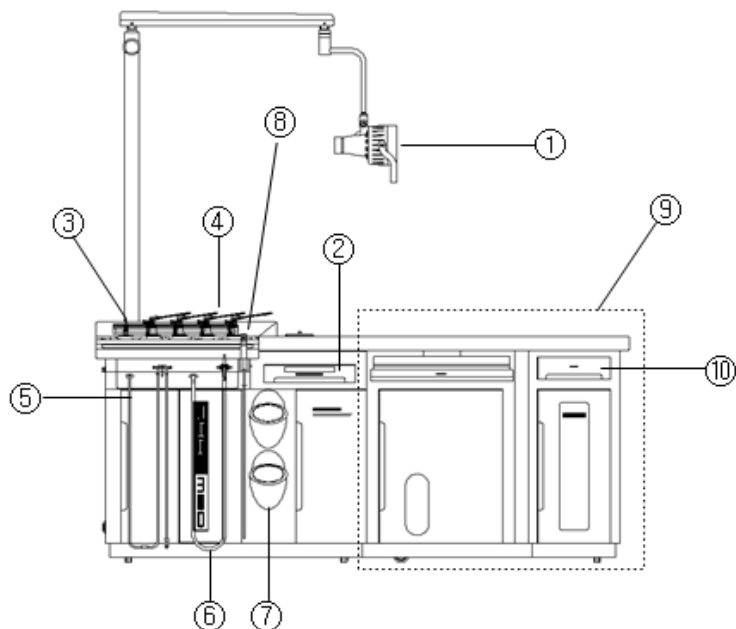
Precautions After Using the Treatment Device

- 1) Put the operation switches back to the original position following the designated sequence and turn the power off.
- 2) Ensure all operations have been stopped before removal of the electrical plug from the outlet.
- 3) Clean the treatment device so that no inconvenience caused for the use it by the next patient.

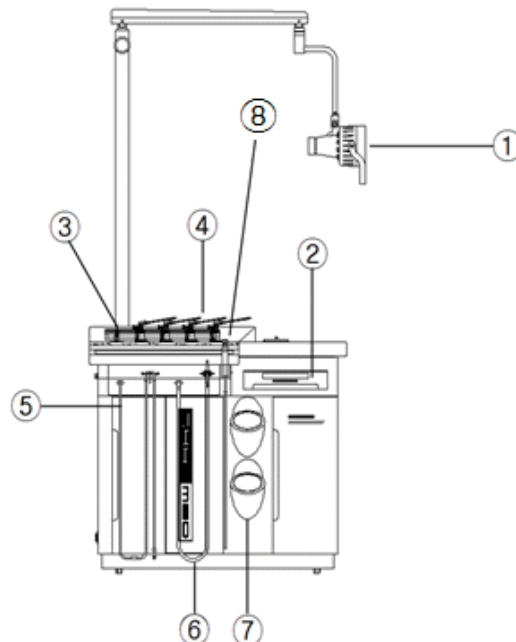
Chapter 3. Configuration of Device

3.1 Front View

(model : CHAM CU-5000)



(model : CHAM CU-3000)

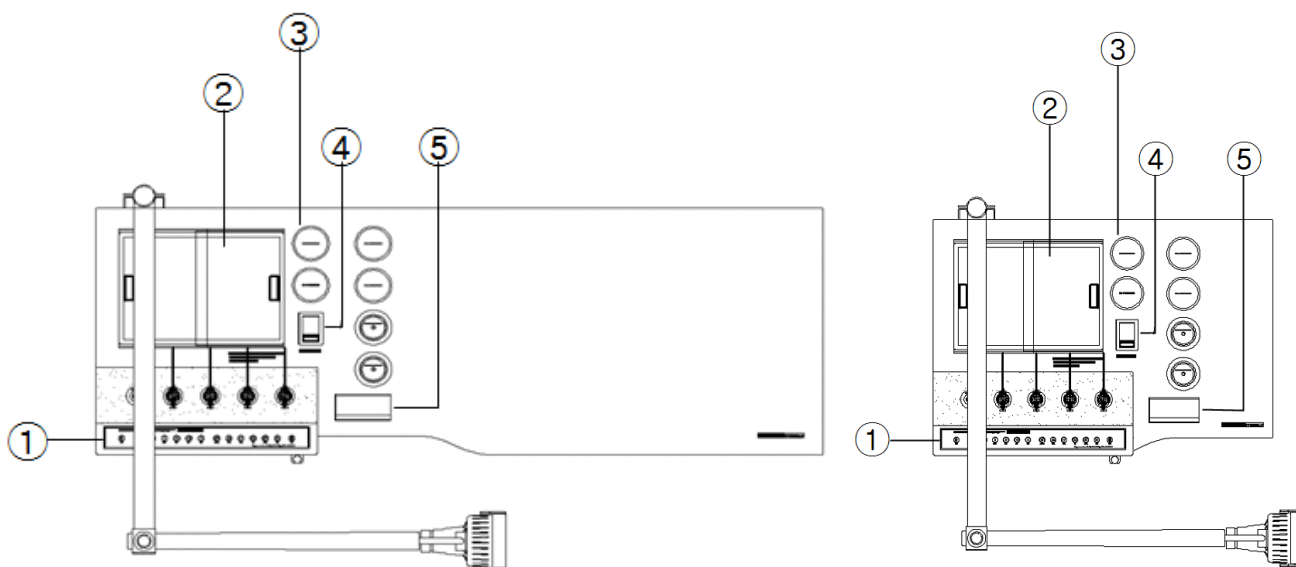


No	Name	Description
1	Light Head	Lights the affected part of the patient utilizing the light.
2	Ultraviolet Sterilizer	Sterilizes various surgical tools utilizing the ultraviolet ray.
3	Main suction	It is used for sucking foreign substances
4	Sprayer	A medication sprayer
5	Vent	Used for blowing away the clogged eustachian tube using air coming from the compressor when its operation switch is pressed.
6	Sub suction	It is used for sucking foreign substances
7	Can	Stainless can to place used gauze or apparatus during medical treatment.
8	Pen Light	An apparatus that can illuminate the affected part of the patient using light
9	Side Table	Table for convenience of work (model : CHAM CU-5000 only)
10	Drawer	Drawers to store various items (Model : CHAM CU-5000 only)

3.2 Top View

(model : CHAM CU-5000)

(model : CHAM CU-3000)

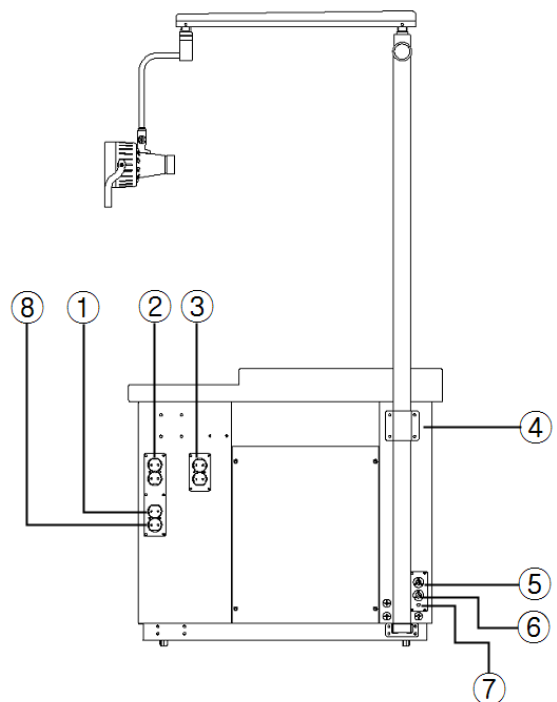
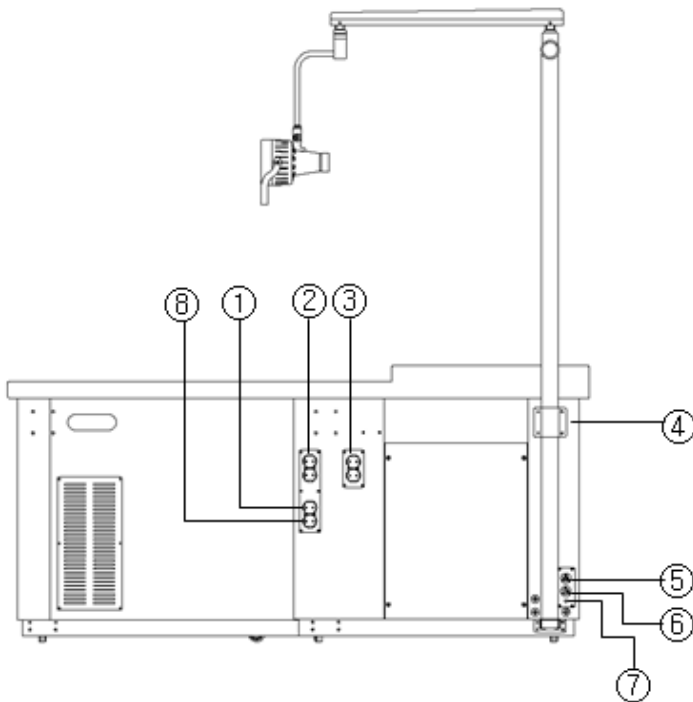


No	Name	Description
1	Switch panel	Used for controlling the power and various functions of the instrument
2	Instrument tray	A tray for storing various surgical tools..
3	Can 83mm(option)	Stainless cans to put various medical instruments.
4	Mirror-quick heater	A heating system for warming up medical instrument before use
5	Gauze can(option)	Stainless cans to put gauze etc.

3.3 Rear View

(model : CHAM CU-5000)

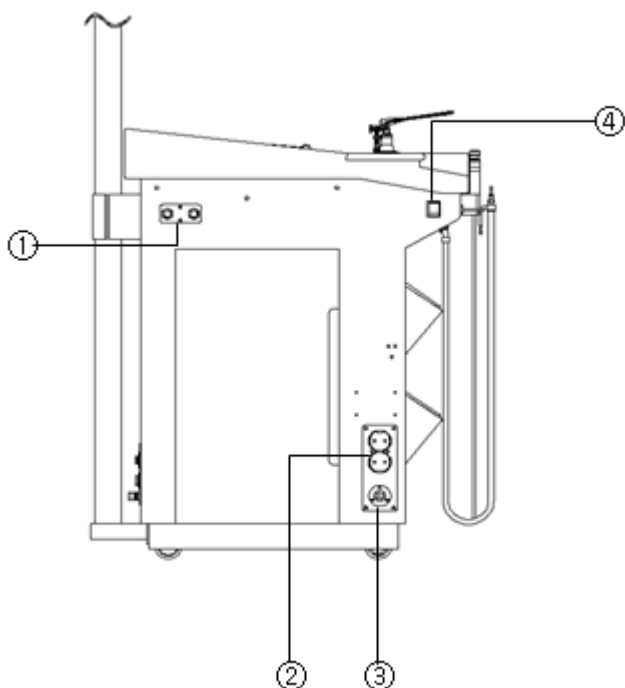
(model : CHAM CU-3000)



No	Name	Description
1	Light so. Connector (Option)	Power connector for Light source
2	Micro Connector (Option)	Power connector for Microscope,
3	Monitor Connector (Option)	Power connector for monitor
4	Bracket (Option)	Bracket that supports post pole or reflection light
5	power connector	3 pinned Connector for main power source.
6	Light connector	2 pinned Connector for reflection light
7	Ground connector	Ground connection for terminal
8	Film connector (Option)	Power connector for film view box

3.4 Side View

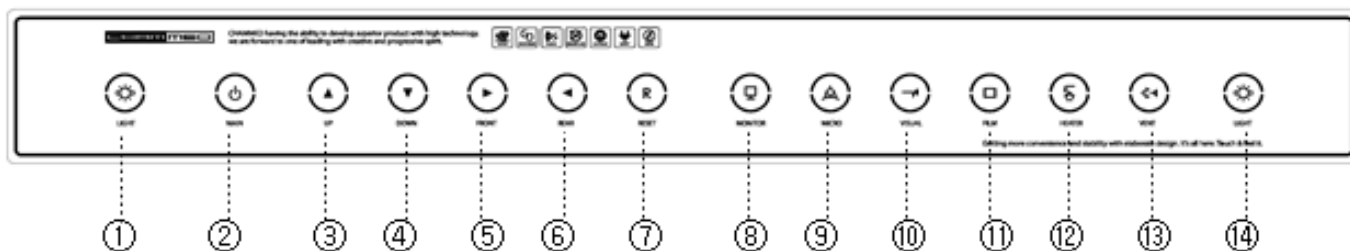
(model : CHAM CU-5000, CHAM CU-3000)



No	Name	Description
1	Main fuse	Main fuse for safety (250V 10A)
2	Chair power connection outlet	Outlet that can supply power when using a chair connected to the treatment device
3	Chair signal connector	10P connector for chair connection
4	Main Power Switch	Power switch to turn on / off the whole equipment



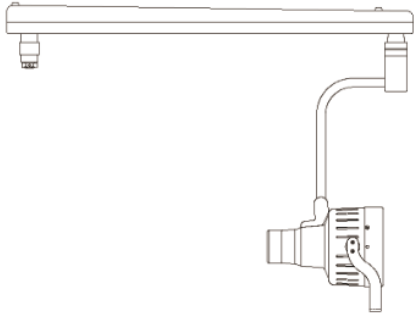

3.5 Operation switch

(model : CHAM CU-5000, CHAM CU-3000)



No	Name	Description
1	LIGHT	ON/OFF switch that signals the reflection light to power off and on.
2	MAIN	Controls (ON/OFF) the power of the main body of the instrument.
3	UP	Used for connecting the patient chair to the treatment device. Chair raises when the UP switch is pressed
4	DOWN	Used for connecting the patient chair to the treatment device. Chair lowers when the DOWN switch is pressed
5	FRONT	Used for connecting the treatment chair to the treatment device. It pulls the chair forward.
6	REAR	Used for connecting the treatment chair to the treatment device. It reclines the chair backwards.
7	RESET	Used for connecting the treatment chair to the treatment device. It returns the chair back to its original position.
8	MONITOR	ON/OFF switch that signals the monitor to power on and off. (Option)
9	MICRO	ON/OFF switch that signals the microscope to power on and off. (Option)
10	VISUAL	Used for connecting the endoscopic visual system to the treatment device. ON/OFF switch that signals the endoscopic visual system to power on and off.
11	FILM	Used for connecting the film viewer to the treatment device. ON/OFF switch that signals the film viewer to power on and off. (Option)
12	HEATER	Used for turning ON/OFF the heating system that warms up medical instrument before use
13	VENT	Used for turning the vent connected to the compressor ON/OFF. When the operating switch is pressed, air from the compressor is used to blow off the clogged Eustachian tube.
14	LIGHT	ON/OFF switch signals the treatment lamp to power off and on.

3.6 Component

(1) Bottle	(2) 100mm Can	(3) Versatile 83mm Can
		
(4) Spray	(5) Post pole	(6) Light Arm
		
(7) Main Cable	(8) Suction Adaptor	(9) Pen Light
		

Chapter 4. How to install

4.1 Before installation



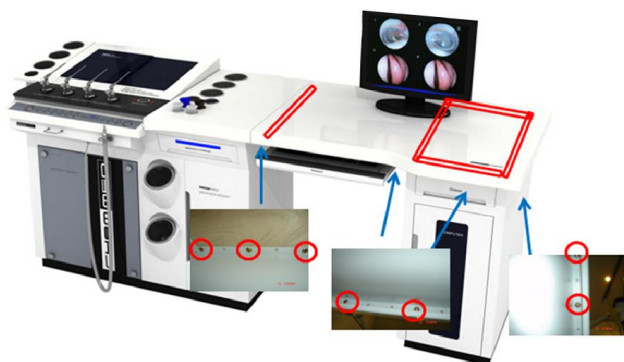
- ▶ Necessary tools – Screw driver, hexagonal wrench (5" , 3")
- ▶ Minimum install personnel – 2 People
- ▶ Installation procedure changes depend on each option

4.2 Install Main body

- 1) Place the CHAM CU-5000. CHAM CU-3000 on flat floor



- 2) Connect with sub-table (CHAM CU-3000 optional)



Along red line, screw up enough, bottom part is wood.

Should see from bottom to up.

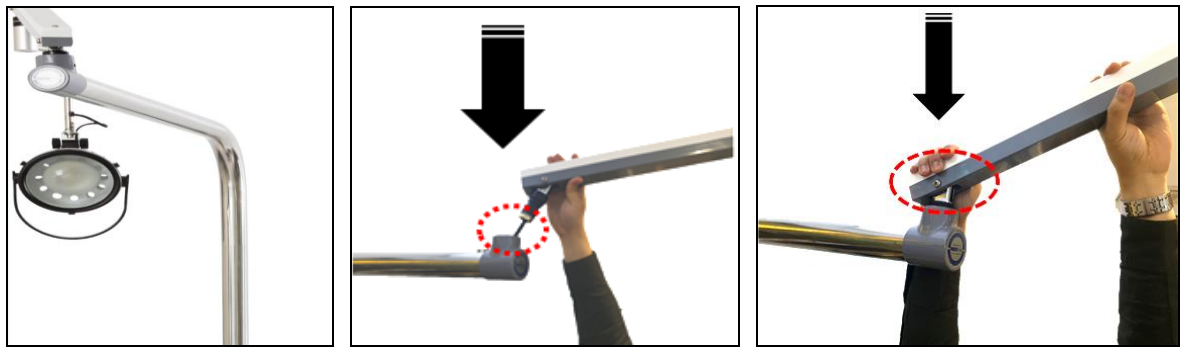
4.3 Install post pole 1# & Light Arm Set

- 1) Insert Post pole 1#, screw (tighten) Postpole1# by 5mm screwdriver.



<Post pole 1#> (optional)

- 2) Insert the light cable from the top of Post Pole through inside of post pole.



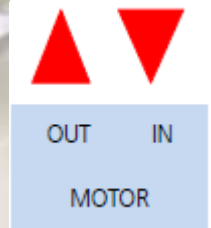
<Light Arm Set> (optional)

- 3) Pull out cable from the opposite end of post pole. Connect this cable with 2P connector of main body backside. Tighten screw by 3mm hexagon wrench.



4.4 Install Suction Motor

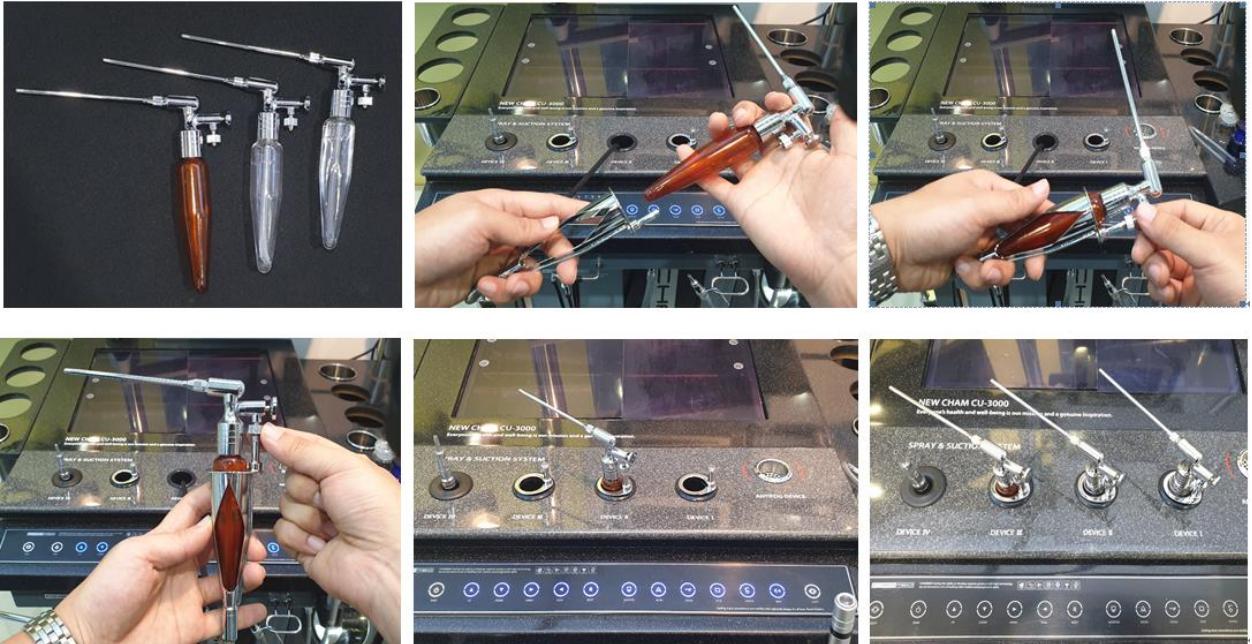
1. Open the back door of main body
2. Connect "IN,OUT" hose to suction motor
3. Plug in and close the door.



1. Do not connect hose opposite way.
2. Make sure hose doesn't fold.

4.5 Install Spray, Suction, Ventilation device

- 1) Put spray set in holder and screw



- 2) Insert suction hose into suction hole and hang on suction hanger.



<suction hose>

- 3) Put Ventilation hose into ventilation hole and hang on ventilation hanger.



<Ventilation hose>

4.6 Connect power source cable.

Plug Power source cable in "Power In" hole and socket.

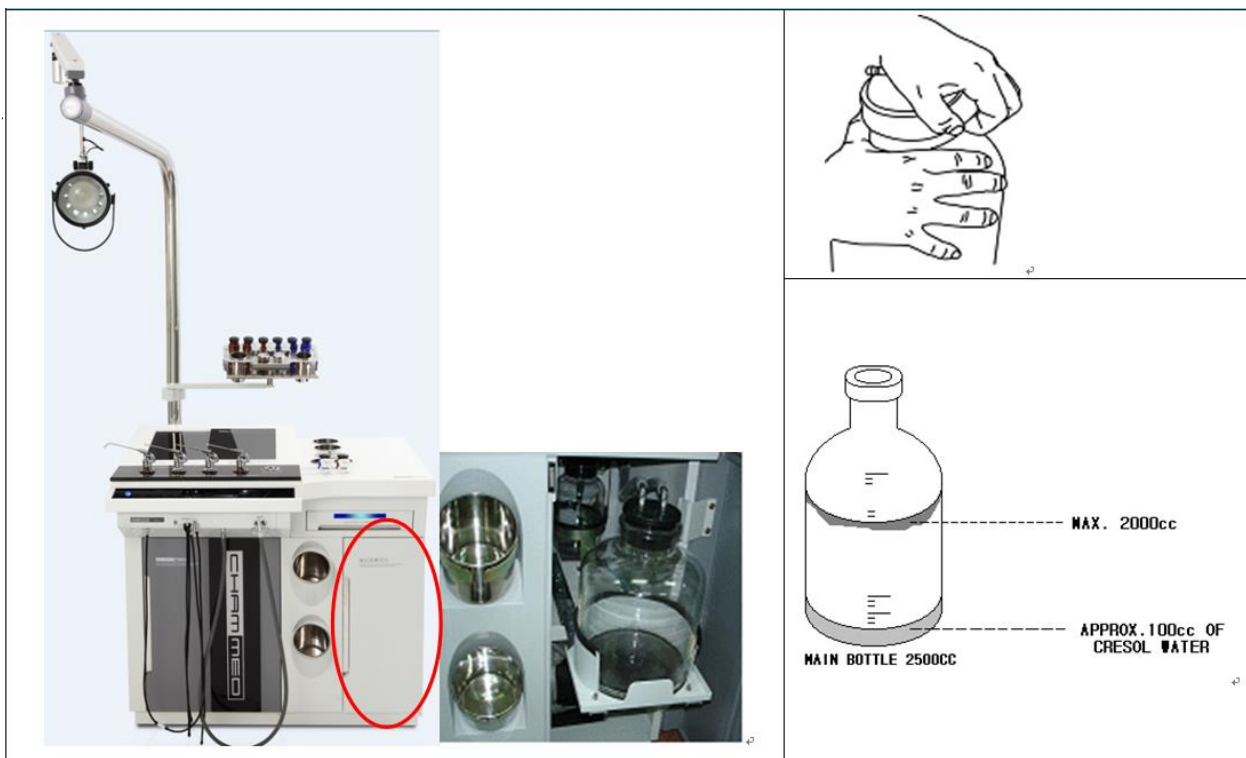


<power source cable>



Chapter 5. Maintenance

5.1 Suction & Suction bottle



► Please make sure that the cleaning work be carried out more than 2 times a day.

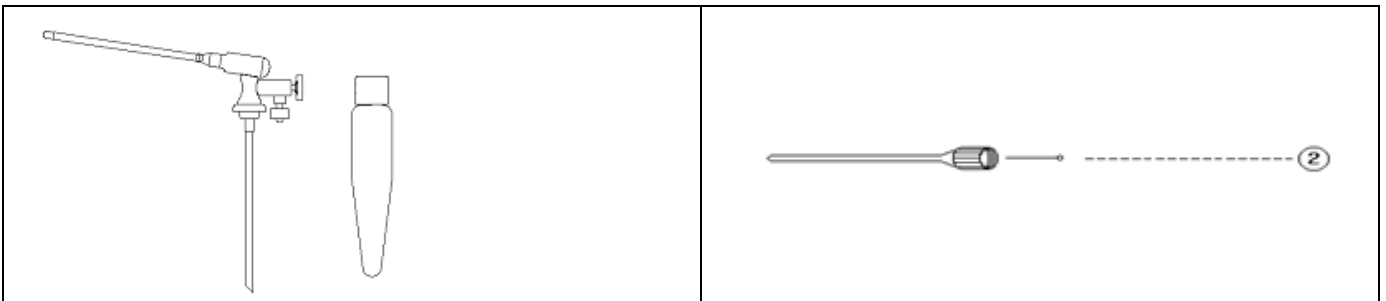
If you fail to clean the Suction Bottle on time, the impurities may become filled up and over flow into the subsidiary bottle, which in turn, flow backward into the motor causing the instrument to becomes inoperable.

▶ The disposition of such impurities should be done according to the relevant regulation for disposal of impurity and sewage with the hospital.

- 1) **If you fail to clean the Suction Bottle on time the impurities may flow backward into the suction motor, which causes serious malfunction problem. It is necessary to ensure checking the pressure gauge and adjust the pressure level as appropriate.**
- 2) **When you put the lid back into the Suction Bottle, please put it tightly so that the air does not leak out, otherwise, it may cause the suction pressure to drop and also cause an overall malfunction.**

- ▶ Suction tip: Soak the tip in tepid water for 15 minutes every day and then sterilize it with Autoclave or U.V.
- ▶ As the suction bottle is made of glass, be careful not to break it when placing it on the floor.
- ▶ Applying force on the rail may cause the rail to break, therefore do not apply excessive force when closing the lid.
- ▶ Empty even if it is about 2/3 of the capacity of each suction bottle, and make sure to empty it once or twice a day. (After washing, spreading about 3cm of water is convenient for washing)
- ▶ The 500cc bottle collects only moisture. thus empty the bottle once a week for a short period and once every two weeks for a long periode.
- ▶ After daily use, put hot water in a can from a water purifier and massage the suction pipe while performing suction.
- ▶ If the suction pressure becomes weak, let hot water pass through suction pipe while suctioning

5.2 Spray



-How to prevent the Spray Nozzle from being clogged

In case spray nozzle becomes clogged due to residue of the medical fluid which become solid, pierce the clogged nozzle by using a thin wire or no. 1 Guitar string.

-After completely removing the residue of the medical fluid, fill it up with water and spray it out for about 30 seconds.

▶ Make sure to rinse or sterilize it once every 2 days.

As the method of rinsing and sterilizing it, remove the Spray and put it in warm water for about 15 minutes, and wash it out in running water. And then, clean it thoroughly with a medical use alcohol.

▶ Separate the spray head, tip, bottle, and hose, and soak them in tepid water for about 15 minutes every day.

Since the head and tip are metal, sterilize in 'metal/ceramic mode' during the automatic mode of the steam sterilizer.

▶ Disinfect bottles and hoses in UV mode during manual mode of UV sterilizer.

▶ Tighten each joint tightly so that there is no sound of wind leaking when using the spray.


- ▶ When spray does not work well / makes a beeping sound / medicine is sprayed backward, the tip is likely to be clogged with the medicine, so pierce it with a spray needle.
- ▶ If the motor keeps operating even when the spray is put down, open the front cover and check if the line is twisted.
- ▶ If Vent is on, spray will not work. If it is on, turn it off.
- ▶ Be careful not to use saline solution for washing.
- ▶ If the medicine is not sprayed well, pierce the spray tip with a spray needle.



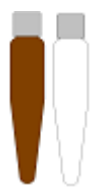

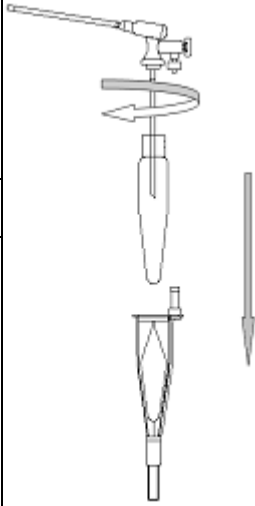
5.3 Surface

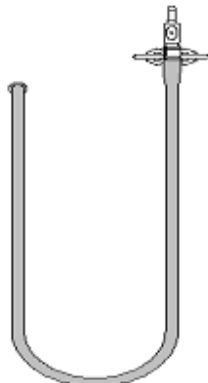
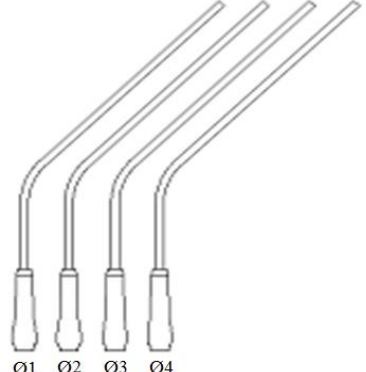


- ▶ Clean the exterior surface at least more than one time per day and keep it clean at all times.
- ▶ Clean the exterior surface of the instrument with a soft cloth soaked with a medical use alcohol or clean water.
- ▶ Clean the Operation Switch Panel with a dried cloth so that no water or neutral detergent may not soak through it.

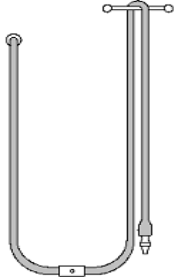
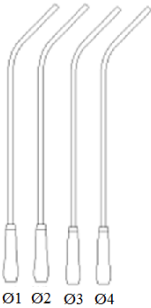
5.4 Reflection light

	<p>When you clean the exterior of the light, make sure to turn the power off.</p> <ul style="list-style-type: none"> ▶ Never attempt to remove the Light Cable under the normal operational condition of the instrument. A personal injury may occur due to an electric shock. ▶ When you want to remove the Light Cable, make sure the work is carried out with the power turned off. ▶ When you have left the treatment lamp turned on for more than 30 minutes, do not touch the lamp other than the handle. High temperature may cause burn
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About medical sprayer				
				
	<p align="center">Spray Head</p>	<p align="center">Spray Bottle</p>	<p align="center">Spray Holder</p>	
	<p>-Remove the bottle by unscrewing it and put medicine into the bottle, then lock it up by screwing it.</p> <p>-Put the bottle in the holder and lock it up by tightening the screw underneath the switch.</p> <p>- The sprayer will operate automatically if it is lifted from the holder.</p> <p>- Press the button of the Sprayer with your finger to spray the medicine.</p> <p>- Sprayer will deactivate automatically once it is left to its original position after use.</p> <p><i>*Please do not drop the Sprayer on the floor. The function of the sprayer may be impaired</i></p>			

About Suction.		
		<ul style="list-style-type: none"> ▶ Materials: Stainless Steel ▶ Size: 150mm ▶ Types of suction tips:Ø1~ Ø4. (option) <p><i>Please suck up an alcohol or saline solution for about 1~2 seconds after using the Suction. This is to prevent the wear of the inside of the Suction hose..</i></p>
<p>Types Suction Tips(option)</p>		

About Vent.

		<ul style="list-style-type: none"> ▶ Materials: Stainless Steel ▶ Size: 150mm ▶ Types of Ventilation TIPS: Ø1~ 4. (option) <p style="color: red;">Please suck up an alcohol or saline solution for about 1~2 seconds after using the ventilation.</p>
Vent Tips(option)		

5.5. Cleaning Plan

	After each procedure	Daily	Weekly	Monthly
<i>UNIT</i>				
Hose connection		○		
Suction hose		○		
Suction bottle				
Suction nozzle for hose irrigation		○		
Silicone attachment piece	○			Replace
Suction nipple	○			
Storage container for hose irrigation system			○	
Spray		○		
Spray tip	○			
Storage container		○		
Ear irrigation bowl	○			
Hose tip	○			
quiver		○		
<i>ENDOSCOPIC SYSTEM</i>				
Camera		○		
Scope	○			
Light conductor		○		
Light source		○		
Microscope		○		
Headlight		○		
<i>Surfaces</i>				
Unit surface		○		
Drawers		○		
Writing surface		○		
Instrument tray		○		

Chapter 6. Trouble shooting

6.1 General check list

Trouble	Check list
Not working	Plug the power cable
	Check the fuse
	Check the cable is not damaged
Spray is not working	Make sure all connection points are completely sealed
	Disassemble the spray and put it in warm water for 20minutes
	Penetrate spray with enclosed needle
Spray is not off	Open the frond door and check the micro switch of the hose roll
Suction is not strong	Check the suction intensity knob on the front
	Make sure suction bottle cover is completely sealed
	Put suction hose in warm water for 20mins

Chapter 7. Technical Specification

7.1 Product specification

No.	Specification Item		Specifications
			CU-5000, CU-3000
1	Power Voltage & Frequency		220VAC~, 50/60Hz
2	Power Consumption		1200VA
3	Spray	Spray pressure	Max. 2.2Kgf/cm ² ± 0.7Kgf/cm ² (Adjustable)
4	Suction device	Suction power	Over 500mmHg within 30 sec. (Adjustable)
		Flow rate	100 LPM
		Motor	Induction, 4 pole, Thermally protected
		Suction bottle	3,000 cc
	Instrument tray heating temperature		Over 35°C within 15 min from start, not over 45°C.
	UV sterilizer		Wave length 253.7nm±5%
	Illumination		220V, 100W , 45000Lux
	Ventilator		Automatic ON/OFF
5	Main Fuses		2 X AC250, 10A
6	Protection Against Electric Shock Hazards		Class 1, Type B
7	Dimension		(CU-5000) 1800(W) x 709(D) x 1946(H) ± 10% (CU-3000) 930(W) x 709(D) x 1946(H) ± 10%
8	Weight		(CU-5000) 178kg± 10% (CU-3000)130kg± 10%

7.2 Safety device

1. Power fuse 2ea (10A) are installed on main body from electric shock. to protect device
2. Bimetal for preventing overheat 50 °C

Chapter 8 Policy & warranty

- CHAMMED CO., LTD. guarantees 1 year warranty all new products against faults in materials from date of shipment. This warranty covers faulty components by manufacturer.
- CHAMMED CO., LTD. will charge service fee in following cases.
 - If the product is out of order after the warranty expires.
 - If the product is out of order due to natural disasters.
 - If the product is out of order due to improper transportation after installation and careless use.
 - If the product is out of order due to improper repair or renovation.
- CHAMMED CO., LTD. will not be responsible for any loss, damage, or injury resulting from delay in service under this warranty.⁷
- CHAMMED CO., LTD. will not be responsible to you for incidental or consequential damages of any kind arising from or connected with the use of its equipment.
- For the After-sales service that occurs in foreign countries such as in EU etc, it shall be processed through the regional agency and our producer will take responsibility for the provision of components etc.
- When medical accidents or recall etc. happens and they are due to the inappropriateness of the device, the producer will take the whole responsibility. Other than that, free After-sales service can be decided depending on the contract with the customer.



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