

- Please carefully read all the safety precautions and instructions before using the device.
- Service fee may apply for any damaged caused by misuse and not taking proper safety precautions.

WARNING

Use only the correct power outlet 110V/220V Compliant

Never disassemble and/or modify the controller
Don't break or change the seal of the controller. This may lead to the damage of the controller.

Avoid storing device in unventilated areas or areas near open flame.
Storing the capsule near chemicals or corrosive gas could result in fire or electrical shock

Consult with a Hue Light professional for safe-use instructions
When using this device with other devices, contact Hue Light for safe-use instructions.

Schedule regular maintenance
To ensure safe operation of the device, perform regular maintenance and follow user instructions.

Use caution when moving the device
Avoid vibration and physical shock during transportation.

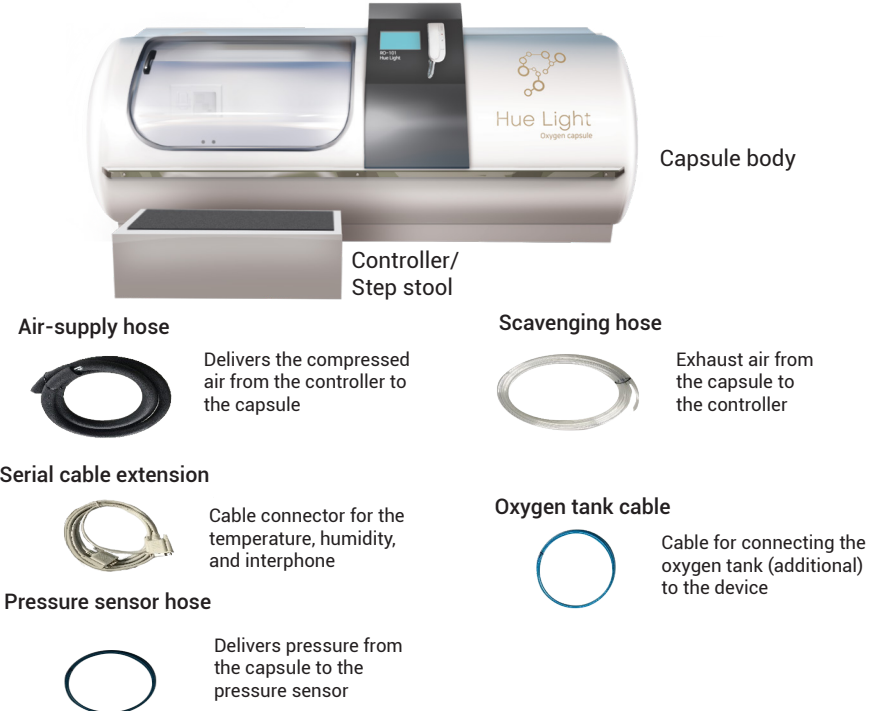
Notify users of the following precautions during pressurization and decompression

- Allow the user to follow the equalizing attempts during pressurization and decompression. Breathing hard while covering the nostrils and the mouth can help to clear the ears.
- Stop the device when the user complains of pain in the ears.
- Carefully observe the user during operation.

FIRE WARNING

Never use and/or carry flammable objects or objects that are sensitive to high pressure in the capsule.

COMPONENTS



SAFETY NOTE

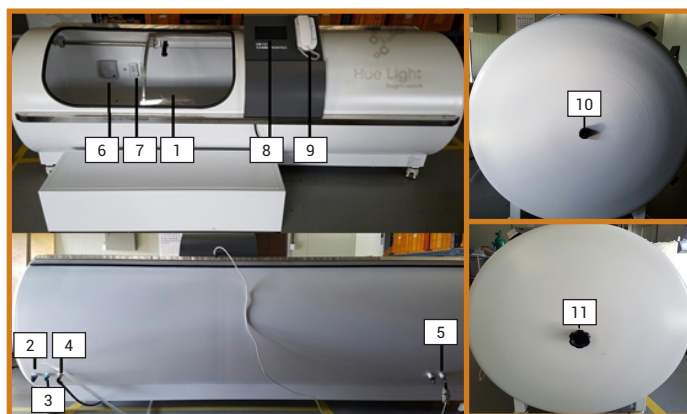
- Do not open the system's case
- Do not open the door of the capsule during the operation
- Store a fire extinguisher near the capsule
- Avoid placing sharp items and flammable materials near the device

OPERATIONAL CAUTIONS

- The following users should avoid using this device:
 - users with cold/flu
 - drinkers
 - users with ear infections (i.e. mid-ear infection, otitis externa)
 - users with compressed-air disease
 - users with expanded lungs
- Rapid exhaustion of the compressed air may lead to pain in the ears
- If a user exhibits abnormal behavior, stop the device and move the user to a safe place
- Place a fire extinguisher outside of the capsule for emergency
- Avoid static shock when touching the entrance door

PRODUCT DETAILS

CAPSULE



No.	Component	Features
1	Sliding door	The entrance/exit of the capsule. Clear view allows the manager to observe the user
2	Exhaust valve	Capsule pressure controlling valve
3	Pressure sensor valve	Pressor sensor controlling valve
4	Air-supply valve	Valve to deliver the compressed air to the capsule
5	Serial cable connecting jack	For temperature, Humidity, and interphone connection
6	Internal Interphone	Alarm rings when press the call button
7	ON/OFF remote	Air-supply/On, exhaust/Off control
8	LCD touchscreen (7 inch)	Displays the chamber feature controls and status
9	External interphone	Alarm rings when the receiver is picked up and the call button is pressed
10	Pressure cut-off valve	Safety valve that operates when the internal pressure of the capsule is over 50kpa
11	Emergency release valve	Can decompress within 1 minute from 40kpa to atmospheric pressure

PURPOSE OF THE DEVICE

The device delivers oxygen to the users' tissues by exposing the user inside the hyperbaric oxygen capsule with highly concentrated oxygen generated through highly compressed air pressure.

SPECIFICATIONS

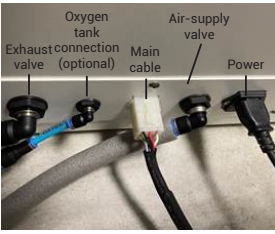
No	Subject	Features
1	User Capacity	Single per operating session
2	Air Input	Sourced motor's rated pressure
		The rated pressures of the supply motor: Max air-supply of 80kPa within 100L/min (air-supply pressure pump)
3	Exhaustion	Compression speed during operation
		50 kpa within 10 minutes
		Exhaust Control Valve
4	Ventilation	Decompressing Speed
		60 seconds (± 20 sec) from 40kPa to 20kPa
		Emergency exhaust valve
5	Air Permeability	within 10 minutes from 45kPa to 0kPa
		within 30 seconds from 45kPa to 0kPa
		Oxygen level
6	Temperature	0~100% ± 5% (Oxygen sensor)
		Carbon Dioxide
		0~10,000 ppm ± 5% (@ 1 atmospheric pressure) (Carbon dioxide sensor)
7	Measured Data	Humidity
		Less than 60% (humidity sensor)
		Pressure Leakage
8	Noise Level	Less than 5% of maximum allowed pressure at 45kPa for 30 minutes
		Max operating temp during the compression
		< ±5 degrees
9	Control Panel	Max operating temp during the decompression
		< ±4 degrees
		Maximum instantaneous temperature allowed
10	Control Panel Display	Less than 40 Max (during the compression)
		Temp allowed inside the capsule during the operation
		Less than 32
11	Door Opening	LCD Touch Display
		Recorded Pressure
		up to 4 hours with 1 min interval (0.1kPa unit operation, <5 % margin of error)
11	Door Opening	Oxygen Concentration
		20.9% ~ 30% (margin of error: <5%)
		Equal-pressure Condition
11	Door Opening	< 70dB(A)
		Compressing/decompressing state
		< 90dB(A)
11	Door Opening	Compression
		0~50kPa setting (Basic unit : 1kPa)
		Decompression
11	Door Opening	Decompressing while at a compressed setting (set from 50 to 0 kPa)
		Ventilation
		Control the level from 0~100L with the ventilation flowmeter knob
11	Door Opening	Communication method
		Interphone (9V, separate power source/battery)
		Pressure
11	Door Opening	Pressure level inside the capsule
		Temperature
		Temperature inside the capsule
11	Door Opening	O2
		Oxygen concentration level inside the capsule
		CO2
11	Door Opening	Partial pressure of CO ₂ inside the capsule
		Operating time
		Max 3 hours (1 min interval)
11	Door Opening	Power Control
		Power S/W, basic setting display (START COMPRESSION)
		Made of polycarbonate

HOW TO

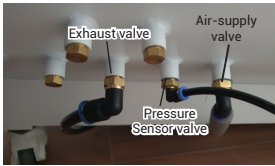
INSTALL THE DEVICE



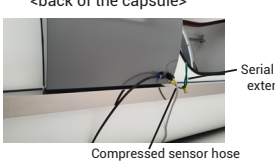
1. Fix the body of the capsule by tightening the locking device of the caster and by turning it counterclockwise



2. Connect the power A/C. Connect the air-supply hose (10mm) and the scavenging hose (12mm) to the controller (as shown in the picture) and the capsule (back). Connect the display cable from the front of the capsule to the controller



3. Connect the exhaust hose, and air-supply hose to the back of the capsule.



4. Make sure that the pressure sensor valve is properly connected at the back of the capsule.



5. Connect the serial cable extender on the back of the capsule. Check the interphone and the remote inside and out to confirm that it works properly.

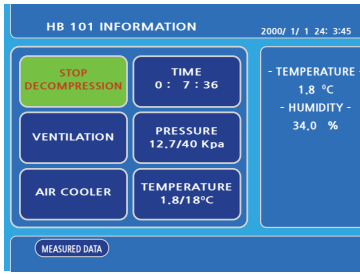
<back of the capsule>



<Inside the capsule>

Setting & Operating the Device

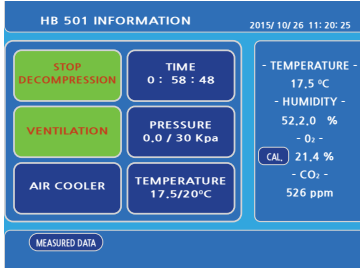
Turn on the device. The LCD display will light up as shown.



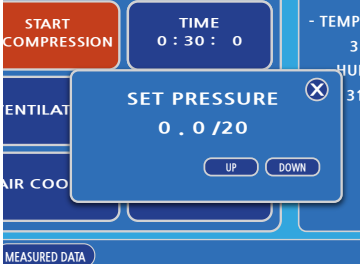
Start mode: The air pump will turn on, and air will be compressed to the set pressure level. When the air compression starts, start mode switches to stop mode. When you touch the button, the air pump will stop and automatic decompression will start



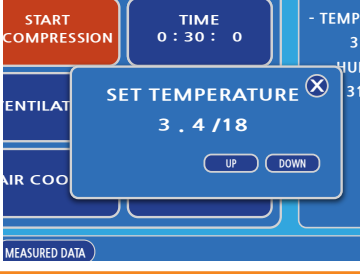
Time mode: Set the time for compression



Ventilation mode: Set it to turn on ventilation during compression. Ventilation mode must be turned off when the pressure is over 15kPa

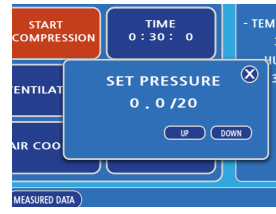


Pressure mode: Pressure setting could be set between 15 kPa - 50 kPa

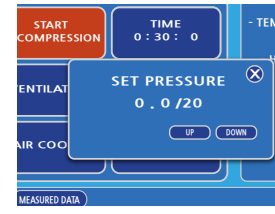


Air cooler mode: Turn on to lower the humidity and the heat generated from the air pump

How to prepare for the first run



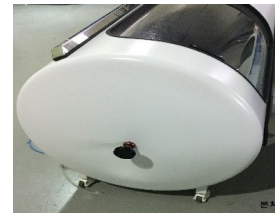
(1) Set the pressure to 50kPa at max



(2) Set the run time to 180 min at max

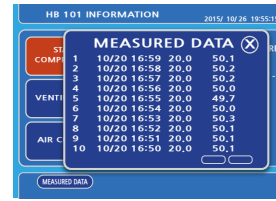


(3) Check that the interphone, remote, and emergency exhaust valve works properly



(4) Close the door and start running the device by touching the start button

The air pump will operate and the door will rise to tighten the gap and the compression will start



(5) Open the measured data to confirm the pressure difference for every 50 minutes

Check whether there's condensed liquid water in the cup placed on the right side of the base
If the air cooler is not engaged (e.g. wintertime use), no water will form.

6. Check that all the features work properly

7. Now, the device is ready to be operated

Safety Features

Pressure Cut-off Safety Feature

Pressure cut-off valve (right side) operates at 48 kPa ± 5%.

Safety Valve

Operates when the air pump pressure is over 80 kPa max.

Opening door (closing and opening device)

The sliding door is manual and does not open when the pressure is above 0.1kPa.

Interphone

Communication tool between the user inside the capsule and the manager outside of the capsule. The alarm rings when call button is pressed.

Emergency Power

When the power is off, the solenoid valve opens to automatically exhaust compressed air.

Emergency Exhaust valve

While the exhaust valve (decompression valve) automatically closes when the power is on and opens when the power is off, emergency exhaustion valve immediately decompresses when manually opened.

Maintenance

After using the device

- 1) Leave the door open if the device is used frequently
- 2) Wipe the inside mat of the capsule between uses
- 3) Store the device unplugged when it is not in use
- 4) When using the air cooler, always check and empty the water catch on the backside of the controller

Device	Hyperbaric Oxygen Capsule
Model	RO-101
Manufacturer	Sambo Tech.

License No.	954
Weight	Capsule 150Kg, Controller 75kg
Storage	Store in cool, dry place

A/S Warranty

If there is any issue with this product, you may qualify for 1 year of A/S service. A/S warranty coverage requires proof of purchase.

Paid Service

Product failure or damage due to the user's error
Failure due to improper repair or modification

Failure caused by natural disaster
Damage caused by failure to observe any cautions specified in this manual