



grow  
your **OWN**



MotherShip™ / Roomate

2009 Technical Manual



**BC NORTHERN LIGHTS**  
www.bcnorthernlights.com | toll free: 1-888-236-1266



# BC NORTHERN LIGHTS

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# THANK YOU FOR CHOOSING THE BC NORTHERN LIGHTS MotherShip

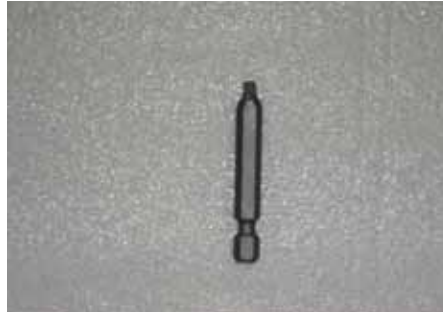
Although this innovative product is very straight-forward to use, the following manual contains a few guidelines to make your growing experience easier.

Tools Required **Adjustable Screwdriver (Robertson bit provided) & Glass cleaner and cloth**

## MotherShip and RoomMate Packing & Checklist



**Keys** - Twist tied to the door handle



**Robby Bit** - Fits in drill, used for replacing and removing lids



**1 - 400W Metal Halide Bulb**



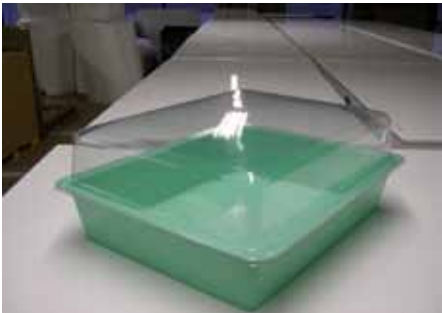
**Warranty Card & Envelope** - Found in clone dome. Please fill out and mail back to BCNL



**Manual** - DVD or Print versions also available at [BCNorthernlights.com](http://BCNorthernlights.com)



**1 - Phat Filter - Air Filter**



**Clone Dome** - Green base w/ clear lid used for starting seeds and cuttings



**Hydro4 Tub bottom**



**Clone Tray** - White metal tray that mounts on to the 2 screws in the back of the left hand chamber of the MotherShip™ or RoomMate



**1/2 Slab 1" Rock Wool - 48** - Growing medium used for starting seeds or clones

## RoomMate ONLY parts



Hydro4 Tub Lid



1 - 8 pack of 5" Rockwool



1 - ECO 132 Pump and Adapter



Mixing Tub & Syringe



400 watt HPS Bulb



4 - 12" Air Stones & Airline Whips



4 - 5" Mesh Pots

## MotherShip ONLY parts



4 - Coco Grow Medium



4 - 10" Hydro Buckets

## Useful Tools

- Cordless Drill (Drill Bit provided. Used for removing top during bulb installation)
- Hair Dryer or large-ass bowl of hot water (Used for easier installation of pump adapters and air stones)
- Surge protector or Universal Power Supply

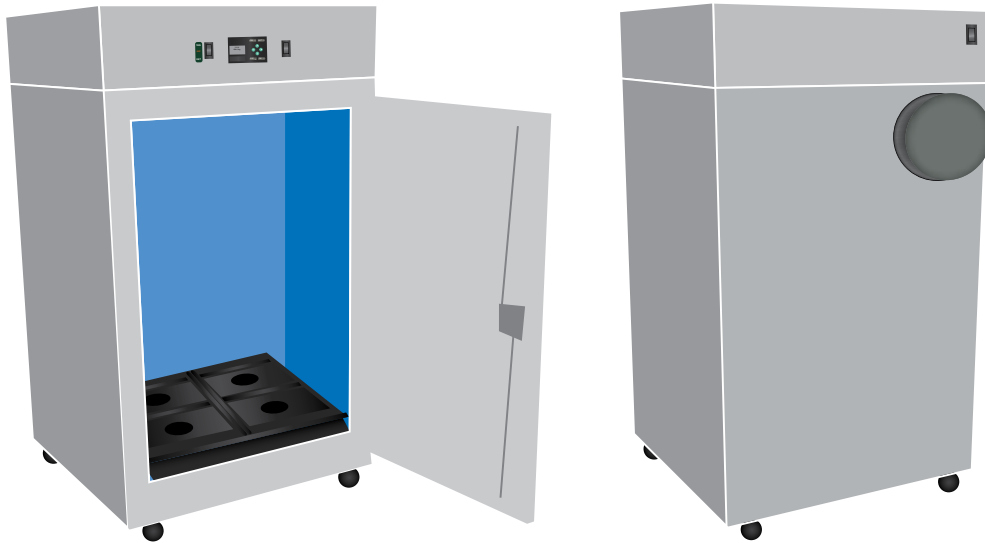
Remove all accessories and parts from the tub inside the unit. It is a lot easier to assemble your Mothership with everything outside the unit.



# MotherShip™/RoomMate™ Assembly

**Do not plug the machine into the wall outlet until the machine is fully assembled and you have read the instructions. The pumps should not be plugged into the top of the machine unless there is water in the tubs.**

These are some things you will need to pick up to have your machine run properly. A surge protector from any electronic store. Also, we cannot ship PH up or PH down across the border. These can be purchased at any aquarium or pet store. Or at a Hot Tub or Pool supply store. Also, if you have a friend you could call to help assist you thru setting this machine up, it would speed up the process and make some things a little easier.



Ensure that both the vegetation and flower rocker switches are off. This will ensure that the lights are off when the machine is plugged into the wall. Remove all accessories and parts from the tub inside the unit.

Air pump shutoff switch is located on the back of the machine.

## Unpacking Tips

Remove items in this order. . .

- |   |                             |
|---|-----------------------------|
| 1. Loose items such as rockwool, clone dome, tubing | 3. Mixing Tub               |
| 2. Boxes, Dryer (Royale)                            | 4. Hydro4 Tub or Hydro4 Lid |

The Hydro4 lid is quite flexible. If you have trouble getting it out the doors just tilt it a little or give it a squeeze upward from each end.

It is also recommended that you plug your machine into a surge protector. This will protect your machine from any power spikes due to storms, power outages, etc... ( These can be bought from any electronic store).

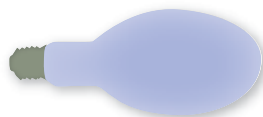


## Electrical Considerations

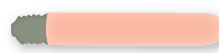
**MS - 5 - AMPS**

**Typical Household Circuit Breaker - 15AMP to 20 AMP**

*\*Amperage is calculated on using all components of each unit at the same time. It is recommended that no more than 2 MotherShips go on a single 15 amp breaker.*



400W MH  
Mothership Only



400W HPS  
Roommate Only

# Chamber Assembly

- Do not plug the machine into the wall outlet until the machine is fully assembled and you have read the instructions. The pumps should not be plugged into the top of the machine unless there is water in the tubs.
- Ensure that the rocker switches are off. For the veg/flower switch this will be the center position. For the water override switch (RM) or accessory switch (MS) this will be the down position. This will ensure that the lights are off when the machine is plugged into the wall. Air pump shutoff switch is located on the back of the machine.
- Remove all accessories and parts from the tub inside the unit. It is a lot easier to assemble your Mothership with everything outside the unit.



Fig 1.1



Fig 1.2

- Remove the Large lid using your drill and the robertson bit that is provided. (fig. 1.2)
- Install the 400-watt MH bulb from inside the growth chamber. Turn bulb clockwise and do not over tighten. Try not to touch the bulb with your fingers since the oils from your fingers can harm the bulb. (fig. 1.6)
- Clean glass.
- Replace the large lid using your drill. (fig. 1.8)



Fig 1.6



Fig 1.8



Fig 1.9

## MotherShip Mode

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This machine is used to vegetate mother plants as well as propagate seedlings and newly cut clones. A 400 watt metal halide bulb provides an ideal lighting spectrum for lush vegetative growth. When you are ready to use the light, turn the rocker switch either up or down depending on what lighting schedule you prefer. You will have 2 lighting schedules for your preference. The majority of people use 18 hours ON / 6 hours OFF, while some prefer 24 hours ON. The middle position on the rocker switch is the 24 hours OFF position.

### Vegetation Schedule

18	ON
6	OFF

or

### Vegetation Schedule

24	ON
0	OFF

## Hydro Buckets

Place the 10" hydro pots in the tub and insert the coco coir bricks.

### Using Coco Coir

- Place half the brick in a bucket and add water a few cups at a time.
- Break up the brick and mix well.
- Keep adding water until the brick is totally expanded and you have fluffy moist soil like mixture.
- Pour the coco mixture into your 10" hydro pots and plant your designated moms.

## Clone Dome

The clone dome provided is used to propagate your plants from seed or cuttings. The seedlings are grown in the dome until a good root system is visible protruding out of the 1-inch rock wool cubes. The clear dome is placed on the removable shelf closer to the bulb and will allow water to condense on the inside of the lid to create the warm humid environment that is needed during the propagating stage.

## PowerCloner (Optional)

The PowerCloner allows you to easily replicate your favorite plants. Plant propagation is quick and easy with the 45-site aeroponic PowerCloner. In this system, cuttings are sprayed with a high output pump and microjets to deliver a highly oxygenated rooting solution to plants that will exhibit root growth within 5 to 10 days. The right hand rocker switch is either off (down position) or on (up position) and powers the internal connector.

### **Open Up PowerCloner box and remove all contents.**

Read through the PowerCloner set-up instructions and complete steps 1 through 15.

Once the PowerCloner is completed insert the PowerCloner pump cord in the plastic white channel located in the back of the Mothership chamber. (fig 2.2) The channel opens from one side. Plug the white end into the receptacle at the top. (fig 2.1)

1. Connect the 2 airlines (running out of the bottom of the raceway) to the 2 black grommet on the neoprene cork on the Power Cloner. (fig 2.2) *Air pump switch is located on the side of the machine.*



Fig 2.0



Fig 2.1



Fig 2.2

2. Oxygen is supplied to the water in the cloner through the air pump. It is important that the air pump be running at all times as it provides the oxygen necessary for the roots to stay alive.
3. Plug your Mothership located on the back of the machine into a 110V grounded receptacle. This is the most common electrical outlet in a house. (fig 2.4)



Fig 2.3



Fig 2.4



Fig 2.5

It is also recommended that you plug your machine into a surge protector. This will protect your machine from any power spikes due to storms, power outages, etc... ( These can be bought from any electronic store).

### **⚠ WARNING**

Only plug the PowerCloner in when water is in the cloner and you are ready to begin using it.

# RoomMate Mode

If you plan to flower in your Mothership, you will need it configured for Roommate mode. This provides the Hydro4 tub option along with 12/12 lighting cycles and an HPS flowering bulb.

## Hydro4 Tub Assembly

- Hook up four of the 12” air stones to the shorter 12” lengths of clear vinyl tubing and lay the air stones flat in the bottom of the tub.
- Hook the black Tee on the airline whips to the airline coming thru the hole in the back of the reservoir tub.
- Hook up the pump adapter to the ECO 132 water pump (fig 1.5a,b)

**HELPFUL HINT** You may need to soak the adapter in hot water to make inserting easier.



Fig 1.1



Fig 1.2



Fig 1.3

### **WARNING**

Only plug the pump in at the top of the chamber (white clip on the right) when water is in the tub and you are ready to begin using the pump. The right clip will run your watering schedule ( 5 min in the morning and 5 min in the afternoon).

- Make sure the pump cord is placed in the notch at the back of the tub. **DO NOT RUN PUMPS DRY!!**
- Attach the other end of the pump adapter to the “Tee” that protrudes from the bottom of lid and lower the lid on the tub (fig 1.6)
- Place the 3.5 inch mesh pots inside the cutouts on the veg tub lid
- Set the completed Hydro4 tub the RoomMate



Fig 1.5a



Fig 1.5b



Fig 1.6

**HELPFUL HINT** Insert at a 45 degree angle to make placing the tub easier.

- Insert the water pump cord in the plastic white channel located in the back of the chamber (fig 2.0). The channel opens from one side (fig 2.1).



Fig 2.0



Fig 2.1



# Machine Overview

## GroSmart Control Center

The GroSmart is the most state of the art control center available. After years of testing and research with data loggers, we are confident that all levels of the Mothership are perfect. The GroSmart control center is pre-programmed to ensure that your plants have optimal levels of light, air movement, CO2, and water/nutrient solution. Please see below on how to initialize your pre-programmed control center.

The GroSmart is the heart and soul of your Mothership. Please make sure that before you plug in your machine, all switches are in the OFF position. You can ONLY set the time on your Mothership when all of your switches are OFF.

## Setting Time and Date on your MotherShip/Roommate

Clock is in 24hr format. 4:20 pm = 16:20 / 4:20 am = 04:20 (add 12 after = 1:00pm)

6:00 am - 06:00	11:00 a.m. - 11:00	4:00 p.m. - 16:00	9:00 p.m. - 21:00
7:00 a.m. - 07:00	12:00 p.m. - 12:00	5:00 p.m. - 17:00	10:00 p.m. - 22:00
8:00 a.m. - 08:00	1:00 p.m. - 13:00	6:00 p.m. - 18:00	11:00 p.m. - 23:00
9:00 a.m. - 09:00	2:00 p.m. - 14:00	7:00 p.m. - 19:00	12:00 p.m. - 00:00
10:00 a.m. - 10:00	3:00 p.m. - 15:00	8:00 p.m. - 20:00	

To SET CLOCK from the main display:

**MOTHERSHIP / 00:00  
SYSTEM OFF**

**1. press the OK key**

From the sub menu:

**PROGRAM  
RUN  
PARAMETER  
SET CLOCK**

**2. Use the up/down arrows to choose SET CLOCK and then press OK. Your screen should now read:**

**\*SET CLOCK\*  
SUMMERTIME**

**Press OK again to get to the screen:**

**SET CLOCK  
yy/mm/dd  
08/04/2\_**

The last digit of the date will be highlighted and flashing. Press OK again and you will be able to change the number. Continue using your left and right arrow keys to change the other parts of the date and time. When you have finished setting the date and time press OK. Your screen should read:

**SET CLOCK  
SET?**

**If everything is looking good click OK, then hit ESC twice to back out.**

You are now ready to grow! Just make sure your Veg/Flower switch is in the appropriate position!

## Contacts

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Our knowledgeable staff are happy to answer any questions or comments you may have. We offer help 7 days a week, 16 hours a day. From relationship advice to growing questions, your BCNL rep is there. For more information visit our website at: [www.bcnorthernlights.com](http://www.bcnorthernlights.com) or by phone, email or mail.

Phone: **1-866-933-3269**

Email: **support@bcnorthernlights.com**

Address: **Unit 311 - 13060 80th Avenue  
Surrey, BC Canada V3W 3B2**

### **Tarren Ext. 112**

*General tech support and sales. Tarren handles all purchase orders, initial sales calls, and management of all other sales related items. All co-op advertising and potential marketing are managed by Tarren.*

### **Teresa Ext. 115**

*All Yellow Transport, Producer and Large Dryers) and UPS (Small dryers and accessories) shipments are processed through Teresa. Tracking #'s are given to each customer as well as an expected arrival date. Accounts Payable/Receivable are handled by Teresa as well.*

### **Davin Ext. 131**

*Vendor ordering and operations manager.*

### **Justin Ext. 114**

*Production manager and lead tech support. If your rep just can't help you, Justin's your man.*

### **Blair Ext. 116**

*Sales and general tech support. He also specializes in the Big Kahuna and Big Kahuna with Cheese!*

### **Matt Ext. 128**

*Sales and general tech support.*

### **Jacks Ext. 130**

*Sales and general tech support.*

### **Dave Ext. 118**

*Sales and general tech support.*

### **Ayden Ext. 119**

*Sales and general tech support.*

### **Jordan Ext. 124**

*Sales and general tech support.*

## Warranty Procedure

At BCNL we offer a 3 year warranty on all components of the Bloombox except bulbs. Please call your BCNL rep to explain the problem as there might be an easy fix without having to replace a part. If part needs to be replaced we ship out UPS every Tuesday and Thursday to service our customers better.