



RoomMate

Technical Manual





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## THANK YOU FOR CHOOSING BC NORTHERN LIGHTS

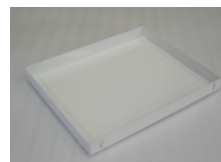
Although the RoomMate is very straight-forward to use, the following manual contains a few guidelines to make your growing experience even easier.

Tools Required: **Adjustable screwdriver, glass cleaner, and cloth**

### RoomMate Packing & Checklist



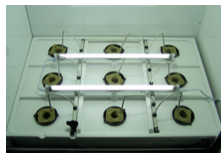
**Keys** - Twist tied to the door handle



**Clone shelf** - White metal shelf that mounts on to the 2 screws in the back of the RoomMate™



**1 - 400W Metal Halide Bulb**



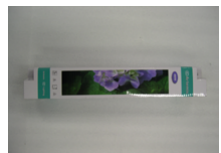
**T-5 upgrade** - Used to provide more light from below (optional).



**CO<sub>2</sub> Regulator** - Located in brown box. (optional)



**1/2 slab 1" rockwool - 48** - Growing medium used for starting seeds or clones



**400 Watt HPS bulb**



**Internal fan** - For optimum air flow in the grow chamber (optional)



**2 - Vent covers** - Used to deflect light from the back of the unit. They attach at the back of the units.



**Mixing reservoir** - Large Rubbermaid reservoir with drain hose.



**Measuring syringe** - Syringe with black fill reservoir attached on end.



**4 - 12" air stone**

RoomMate parts (cont'd)



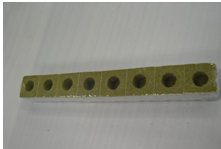
4 - 5" mesh pots



Irrigation whips (5)



Block covers (Pack of 40)



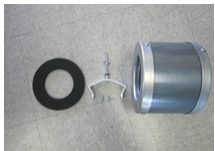
1 - 8 pack of 5" rockwool



H<sub>2</sub>O pumps - ECO 185



1 - Pump adapter hose.



Can filter and filter mount



Hydro4 reservoir lid



Optional LEDs

Useful Tools

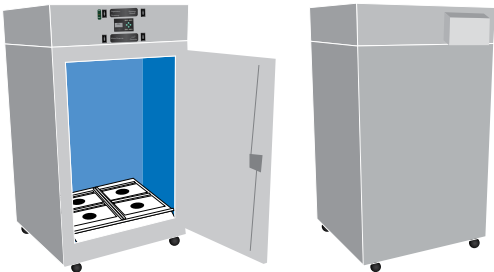
- Cordless drill
- Hair dryer or small cup of hot water (used for easier installation of pump adapters and air stones)
- Surge protector or universal power supply

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

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 reservoirs.**

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. These can be purchased at any aquarium or pet store, or at a hot reservoir or pool supply store. Also, if you have a friend you could call to help assist you through 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 reservoir inside the unit.

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

Unpacking Tips

Remove items in this order. . .

1. All loose items
2. Boxes, dryer (Royale)
3. Mixing reservoir
4. Hydro4 reservoir 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

Electrical Considerations

MS: 5 amps  
Typical Household Circuit Breaker: 15-20 amps

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



400W MH

400W HPS

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 reservoirs.
- 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 down. This will ensure that the lights are off when the machine is plugged into the wall. Airpump shutoff switch is located on the front of the machine.
- Remove all accessories and parts from the reservoir inside the unit. It is a lot easier to assemble your RoomMate with everything outside the unit. Remove the Large lid using your drill. (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. 1.4).
- Clean glass.
- Replace the large lid using your drill (fig. 1.5).
- Install the irrigation whips in your irrigation lid, insert the drip the stakes into the black drip emitter. The drip stake sticks go into the rockwool in your mesh pots (fig. 1.3).



Fig. 1.2



Fig. 1.3



Fig. 1.4



Fig. 1.5

- **Installing a Can Filter:** Attach your filter mount by squeezing the mount and sliding it into the collar on the exhaust fan (fig. 1.7a). Attach with the bolts provided (fig. 1.7b). Slide the neoprene washer over the collar (fig. 1.7c). Slide the Can Filter on to the filter mount and secure on to the box with the rubber washer and wing nut (rubber side of washer towards the filter) (fig.1.7d).

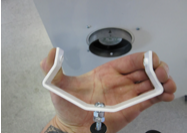


Fig. 1.7a



Fig. 1.7b



Fig. 1.7c



Fig. 1.7d

Hydro4 Reservoir 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 reservoir.
- Hook the black Tee on the airline whips to the airline coming thru the hole in the back of the reservoir.
- Hook up the pump adapter to the ECO 185 water pump (fig. 1.5 a, 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 reservoir and you are ready to begin using the pump. The right clip will run your watering schedule (5 min. in the morning ).

- Make sure the pump cord is placed in the notch at the back of the reservoir. **DO NOT RUN PUMPS DRY!**
- Attach the other end of the pump adapter to the 90° that protrudes from the bottom of lid and lower the lid on the reservoir (fig. 1.6).
- Place the 5 inch mesh pots inside the cutouts on the veg reservoir lid.



Fig. 1.5a



Fig. 1.5b



Fig. 1.6

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

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



Fig. 2.0



Fig. 2.1

T-5 Bulb Installation

Installing Your T-5 Bulbs (optional)

- Mount all three T-5 lights onto the irrigation lid by pressing them into the metal T-5 clips.
- On the ends of each T-5 ballast, is a slot for the power cable to connect to them. One end is male (has 2 pins), and the other end is female (has 2 holes).
- Mount the center ballast and the right side ballast with the Female end facing the front of your machine. And the left ballast with the male end facing the front of the machine.
- Connect the long T-5 jumper cord on the front ends of the ballasts (fig. 4.1).
- Connect the main "Tee" T-5 power cord on the back ends of the center T-5 ballast and the right T-5 ballast (fig. 4.2).
- Run the T-5 cord up the duct channel on the inside side panel of the grow chamber, (same as airlines and water pumps cord), and plug into the T-5 socket at the top of the grow chamber (fig. 4.3).
- Your T-5 lights will now come on with the same lighting schedule as your ballasted HPS or MH bulb.

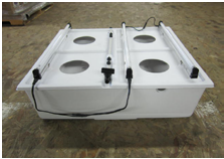


Fig. 4.1

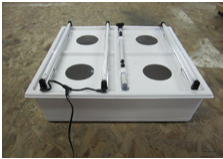


Fig. 4.2



Fig. 4.3

Internal Fan Mounting Instructions

- Unbox the internal fan and locate the Key slot on the handle (fig. 4.4).
- Locate the fans mounting bolt in the top/front left corner of the grow chamber (fig. 4.5).
- Loosen the bolt enough to slide the fan's key slot onto the bolt, then tighten the bolt so the fan is secure.
- Plug the internal fans power cord into the "ALWAYS ON" socket right beside the bolt.
- Turn the dial on the backside of fan to 1 of the 2 possible speeds.

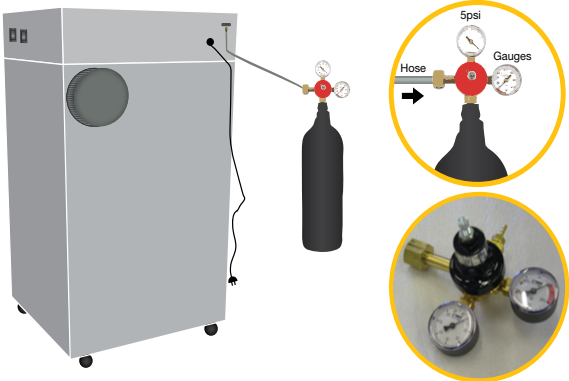


Fig. 4.4



Fig. 4.5

CO<sub>2</sub> System Assembly (optional)



- Attach the regulator provided to the CO<sub>2</sub> tank (not provided). Tighten the regulator fitting with a wrench provided (not provided) (fig. 3.8).
- Attach the clear CO<sub>2</sub> hose mounted on the back of the machine (fig. 3.9) to the brass fitting on the regulator (fig. 4.0). Ensure you push the CO<sub>2</sub> line all the way on the barb.

**HELPFUL HINT** You may need to warm up the CO<sub>2</sub> line with warm water or a hair dryer to make insertion easier.



Fig. 3.8



Fig. 3.9



Fig. 4.0

**WARNING** Please ensure that your CO<sub>2</sub> tank is turned off until you are ready to begin using CO<sub>2</sub>. When you are ready to begin using CO<sub>2</sub>, refer to the CO<sub>2</sub> section in your grow manual. Don't begin to use CO<sub>2</sub> until the second week of the flowering cycle and only use if your plants have a good root system and look healthy.


CO<sub>2</sub> Injection and Water overrides

The RoomMate features the ultimate easy to use CO<sub>2</sub> injection system The use of CO<sub>2</sub> will dramatically increase the production of your plants. CO<sub>2</sub> is programmed to inject automatically throughout the day to maintain a constant level of 1200 to 1600 PPM.

The CO<sub>2</sub> rocker switch override should only be used when initially setting your CO<sub>2</sub> regulator, or when instructed by BC Northern Lights technical support. If the CO<sub>2</sub> switch has been left in the override (up) position by accident, it will automatically shut off after 15 minutes as a safety feature so your plants don't suffocate.

The water override switch is used mainly for draining your nutrients out of your reservoir. If you flick your water override switch up, it will run your water pump for a max of 20 mins. MAKE SURE YOU DO NOT RUN YOUR PUMP DRY.

With your water override switch in the off position, your GroSmart will run your automatic watering schedule once per day for 5 minutes.

 **HELPFUL HINT**

The CO<sub>2</sub> rocker switch must be in the down position for the control center to automatically inject your CO<sub>2</sub>. Don't begin to use CO<sub>2</sub> until the second week of the flowering cycle and only use if your plants have a good root system and look healthy.



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 the RoomMate's programming guarantees optimal conditions for growing. The GroSmart control center is pre-programmed to ensure that your plants have optimal levels of light, air movement, 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 RoomMate. 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 RoomMate when all of your switches are OFF.

Setting Time and Date on your RoomMate

Clock is in 24-hour 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:

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, 13 hours a day. From relationship advice to growing questions, your BC Northern Lights rep is there. For more information visit our website at [www.bcnorthernlights.com](http://www.bcnorthernlights.com), or call, email, or mail us.

Phone: **1-866-833-8659**

Email: **[support@bcnorthernlights.com](mailto:support@bcnorthernlights.com)**

Address: **#311 - 13060 80th Avenue, Surrey, British Columbia, V3W 3B2, Canada**

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*Sales and general tech support.*

## Warranty Procedure

At BC Northern Lights we offer a 3-year warranty on all components of the RoomMate except bulbs. Please call your BC Northern Lights 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 everyday to service our customers better.