SOLAR RAIN MAKER

INSTALLATION and OPERATION INSTRUCTIONS-2011

www.flowerhouses.com – www.solarrainmaker.com

CAUTION: Frost and Freeze will damage your unit beyond repair.
After operating your Solar Rain Maker store it where it will Not Freeze.

*Please send in warranty card and proof of purchase within 14 days of purchase to activate your one year limited warranty against manufactures defects.

SOLAR RAIN MAKER BATTERY OPERATION

The 3 AA rechargeable batteries are not included .This is to insure the longest battery life for your new Solar Rain Maker. Install them through the back in the white water tight battery case. They will be RECHARGED by the Solar Rain Maker ONLY when power switch is ON and it sets in the sunlight. To test battery is charged turn knob to ON 12345 waiting briefly to see red light and listening for pump to start then immediately turn it off. DO NOT RUN PUMP DRY

Omit - ***

1. Attach the Solar Rain Maker box where it will be in full sun if possible. The water tank /bucket/rain barrel should set in the shade to reduce algae growth.

a. The Solar Rain Maker may be mounted to any sturdy location like a wall or post in a sunny position.

b. Only pump water through the supplied Filter to your Solar Rain Maker , algae ,dirt and debris and make your pump not work correctly. Always use your filter and with you pump.

The Solar Rain Make may be positioned up to10' from the water source. (test position it in your location) The Solar Rain Maker box should NOT be set up more than 9 feet or 3 meters higher than the bottom of the rain barrel.

- Drippers can be positioned higher than the top of the Solar Rain Maker.

1. Connect - I - intake to the rain barrel.

a. Either put the intake end with filter attached into your rain barrel keeping the intake at least 2 inches 5cm above the bottom of rain barrel or drill a 1/4" or 6 mm hole in the lid, or near the top of the rain barrel, above the water line then thread some tubing through the hole and attach the filter to it. Adjust the tubing so the filter hangs at least 2 inches or 5cm above the bottom of the rain barrel.

b. The other end of the tube should be attached to the I inlet male port on the bottom of the Solar RainMaker, cut cleanly to length and attached to the pump inlet it is the left hand connector marked I. The connections to the pump should be straight with no kinks to avoid blockage and or leakage.

2. Check the pumping with intake line in the water and Filter On. Turn the pump on by rotating the knob on the Solar Rain Maker box clockwise to the full on position. After 5 seconds Pump light should come on and you can hear pump run. Water will soon come out the O outlet side. This is where the dripper hose plugs into the O outlet side. If pump does not come on, battery is dead or the batteries are not set in place correctly.

3. Outlet .O side needs and anti-siphon devise supplied installed on outlet side a few inches under the Solar Rain Maker as shown in image below,right side is outlet left side is intake.

4. Drippers. It is now time to hook up the outlet side with the water drip ends to your plants. Cutting hose a little extra long to start is better, then you can trim back if needed. Drippers Ts and Filters all screw in place for best seal at joints. If it over waters, turn it down a notch at a time until you are pleased with water volume. Minimum is 1 minute watering time every 3 hours Water volume can be checked by catching the water coming out of a dripper into a bucket.

5. Monitoring Settings. The timer on the pump is zeroed by turning the unit off then on again. Numbers on dial 12345 xx xxxxx pump will run every 3 hours. The pump will cut out automatically after 3 hours. Pump settings are 1 - 5 minutes, 2 - 10 minutes, 3 - 15 minutes, 4 - 20 minutes and 5 - 30 minutes. The pump will run for the set time then shut itself off for 3 hours and thereafter at every 3 hours interval run for minutes it is set at.

--Replace with: adjust the pump speed. Position 5 is maximum pump speed, 4 is approximately 80%, 3 - 60%, 2-40%, 1-20%

6. Run time may vary if the Sun has not charged batteries to maximum charge.

NOTE : Pump runs every three hours xx the xx xxx Pump settings are 1 - 5 minutes, 2 - 10 minutes, 3 - 15 minutes, 4 - 20 minutes and 5 - 30 minutes .

Replace with: till the batteries drop below a set voltage limit. This helps to prolong battery life.

***The duration of pumping is also determined by how much sun light has fallen on the solar panel .If sunlight has not charged batteries up to a set point pump will not run . The position of the control knob must be set at 1,2,3,4,or 5 to charge battery .(Off is Off – No battery charge) ***

6. Pump Priming. The Solar Rain Maker pump is self priming, but if it has been disconnected ensure that the O outlet hose is not reconnected until all the air has been pumped out of the I- inlet line, as water in the tube above the pump can prevent it priming properly.

7. Maintenance

a. Keep the Solar Rain Maker pump hoses and drippers in a frost and freeze -free place in the winter.

b. Once a month check the Filter making sure it is clean .

c. Battery life is typically around 500 charge/discharge cycles, but will vary depending on conditions and usage. For peace of mind put new batteries in each season and or before going away and use the old ones up when at home.

d. The RainMaker has been designed with dependability and long term use in mind. A Full range of spares are available at local retailers and www.flowerhouses.com – www.solarrainmaker.com

RAIN MAKER KIT INCLUDES

any party of any default or breach of this agreement will not constitute a waiver of any subsequent default or breach of the same or different kind. E. If any section or provision of this agreement is found to be invalid, such invalidity does not affect or extend to other sections or provisions in this agreement. F. This warranty gives you the specific legal rights. You may also have other rights that vary from state to state. This agreement shall be governed by the laws of the State of Michigan, United States of America.

WARRANTY CARD - SOLAR RAIN MAKER

Send this copy to: FlowerHousee P.O. Box 595 • Clio, MI 48420-0595

Product Model Number _____

Name: _____

Date of Purchase: _____

Where Purchased: _____

Print Name: _____

Address: _____

E-mail: _____

My signature below acknowledges that I have read, fully understand, and accept this limited warranty agreement.

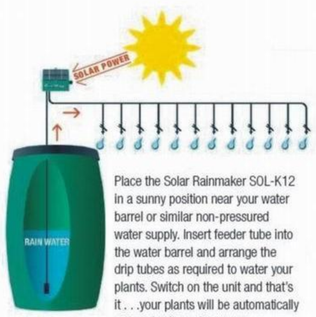
Signature: _____

Date _____

Must return within 14 days of purchase with copy of dated register receipt to activate warranty
Please make a copy of this for yourself, and mail to: FlowerHouse® PO Box 595 • Clio, MI 48420-0595

BACK

TYPICAL IRRIGATION LAYOUT



Place the Solar Rainmaker SOL-K12 in a sunny position near your water barrel or similar non-pressured water supply. Insert feeder tube into the water barrel and arrange the drip tubes as required to water your plants. Switch on the unit and that's it . . .your plants will be automatically watered using solar power.

Rain barrel not included.

A- In the diagram above the pump inlet tube is on the left. Filter is near bottom we recommend 2-3 inches up from the bottom. Tube can be safely cut with good kitchen scissors.

B- Choose the length of tube from Solar Rain Maker O outlet to T then between T to tube to drip fittings as required to reach each of your pots. Tube can be safely cut with good kitchen scissors.

C -Tees and drippers easily screw into the end of the tubing be sure to keep the main feeder line running straight then T off it to a tube then a dripper to your plants (as shown in diagram above)

D -Up to 12 -two quart per line (as supplied) less drippers where dripper outlets are not at the same height or higher output drippers are used.

E- Optional higher and lower output drippers may be used for different pot sizes. Alternatively extra drippers can be put in large pots.

F -The Highest drippers should be no higher than top of solar panel on the RainMaker.

G- Supplied Stakes should be used to secure drippers in position.

H- Irrigation line may be run up the back of pots to stay out of view.

a. If you have further questions or comment please contact customerservice@flowerhouses.com - www.solarrainmaker.com

---

-WARRANTY -

READ THIS AGREEMENT BEFORE SIGNING THE WARRANTY CARD
This FlowerHouse® product has a limited warranty. No other warranties, whether expressed or implied, including warranties of merchantability and fitness for a particular purpose, apply to the product.

I. GENERAL PROVISIONS OF LIMITED WARRANTY
A. The original purchaser of this FlowerHouse® product is warranted against defects in material and workmanship for ONE year following the date of its retail purchase. B. The exclusive remedy for defects in material and workmanship under the warranty is replacement or repair at FlowerHouse's® expense. C. FlowerHouse® will, at its option, repair or replace products not conforming to this limited warranty at no charge. This is the sole and exclusive remedy available under any legal theory for this FlowerHouse™ product. D. Customer is responsible for all shipping and handling charges involved with warranty fulfillment.

II. NO OTHER WARRANTIES
No other warranties, whether expressed or implied, including warranties of merchantability and fitness for a particular purpose, shall apply to the product.

III. EXCLUSIONS, LIMITATIONS, AND CONDITIONS OF LIMITED WARRANTY
A. This warranty cannot be assigned or transferred. B. This warranty only applies if the FlowerHouse® product is used in accordance with FlowerHouse's® written instructions. C. FlowerHouse® products are intended only for gardening. FlowerHouse™ products are not intended or authorized for use in any situations that may create health or injury risks. D. This warranty is void if the product is damaged through abuse, accident, improper use, negligence, or normal wear and tear. Warranty Excludes Battery E. This warranty is void if the product is altered, changed or modified in any manner. F. This warranty is void if any attempt is made to repair the product without written authorization from FlowerHouse®. G. Except as provided in this limited warranty, all FlowerHouse® products are provided "as is." All other warranties and representations, oral or written, expressed or implied, including but not limited to any implied warranties of merchantability or fitness for a particular purpose, are excluded and do not apply.

IV. PROCEDURES IN EVENT OF DEFECT
A. If you find a product to be defective, contact
FlowerHouse®, Box 595,
Clio, MI 48420;
Phone: (810) 686-8252
Fax: (810) 686-5492
Email; customerservice@flowerhouses.com
B. When you receive authorization from FlowerHouse®, return the product as directed to FlowerHouse™.

V. LIMITATION OF DAMAGES
A. FlowerHouse® shall not, under any circumstances or legal theory, be liable or responsible for direct, indirect, special, incidental, or consequential damages.
B. FlowerHouse® shall not, under any circumstances or legal theory, be liable or responsible for any amount in excess of the product purchase price.
C. FlowerHouse® shall not, under any circumstances or legal theory, be liable or responsible for damage to items or equipment used with the FlowerHouse® product. D. FlowerHouse® shall not, under any circumstances or legal theory, be liable for personal injury, personal loss, lost profits, lost wages, goodwill, downtime, economic loss in excess of the product purchase price, or any non-economic damages.

VI. ADDITIONAL PROVISIONS
A. This agreement is the entire agreement between you and FlowerHouse®. This agreement supersedes any prior or different agreements, representations, or proposals, whether written or oral. B. No representative, agent or employee of FlowerHouse® is authorized to make warranties, representations, or obligations other than those set forth in this limited warranty. C. This agreement may only be changed through an express written agreement with FlowerHouse®. D. Waiver by