

## SunLite<sup>®</sup> Floor Model Light Garden Assembly Instructions

The SunLite Floor Model Light Garden can be used alone or as a base for our popular Tabletop Light Garden (sold separately). Assembly takes less than an hour and the only tools you'll need are a Phillips screwdriver, a hammer or rubber mallet, and pliers.

### Frame Assembly

**Step 1.** Place all parts on a flat, clean surface. *All frame parts are labeled with a letter and number. (See Parts List.)* Use a hammer or rubber mallet to tap the End Plugs into the ends of two S3 Top Bars (Fig. 2).

**Step 2.** Take an S2 Vertical Cleat Bar and find the nut insert inside one end (Fig. 2). Using the shorter 3/4" bolt, connect the S3 Top Bar to the S2 bar by screwing the bolt through the S3 Bar and into the Nut Insert inside the S2 Bar. **Only partially tighten the bolts for now; you will need the bars to be flexible as you go through the rest of the assembly.**

**Step 3.** Using a 2" bolt, take an S4 Bottom Bar and attach it to the bottom of the S2 Vertical Cleat Bar (Fig. 2).

**Step 4.** Use the 2" bolts to connect an S1L and S1R Vertical Bar to each side of the S3 Top Bar and S4 Bottom Bar (Fig. 2). You've just completed the first Side Frame.

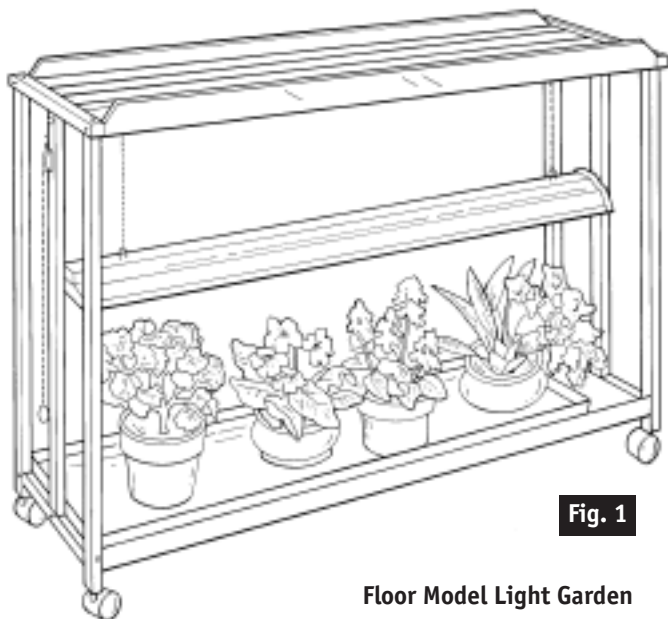


Fig. 1

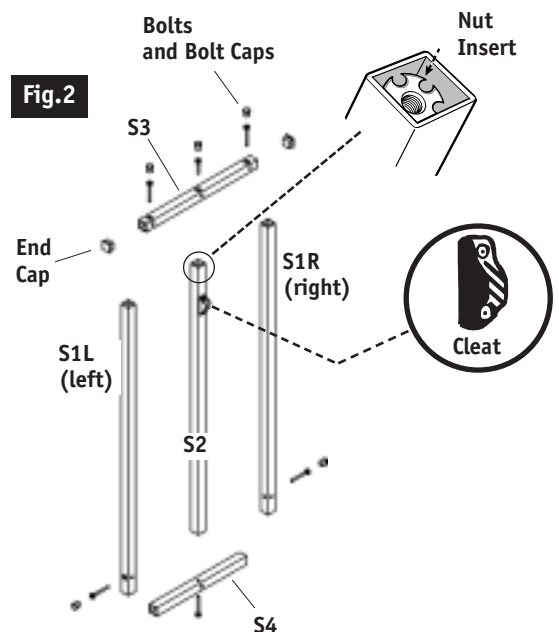
Floor Model Light Garden

### Parts List

Frame Parts	Qty	Hardware:	Qty
S1R Vertical Bar	2	Ball Chains	2
S1L Vertical Bar	2	Chain Connectors	4
S2 Vertical Cleat Bars	2	Split Rings, large	2
S3 Top Bars	2	Split Rings, small	2
S4 Bottom Bars	2	3/4" Bolts	2
A3 Pulley Bar	1	2" Bolts	22
A4 Lower Shelf Bars	2	End Plugs	4
A2 Bottom Center Bar	1	Bolt Caps	10
A5 Upper Shelf Bars	2	Corner Guards	4
		Casters	4
		Caster Inserts	4

### Additional Parts:

Light Fixture	1
4-ft SunLite <sup>®</sup> Tubes	3
Poly Trays	2
Spacer Boards	2



**Step 5.** Repeat Steps 2 through 4 to assemble the second Side Frame, then firmly tighten all bolts on each Frame, making sure all Frame Bars are flush with one another.

**Step 6.** Position the assembled Side Frames 4 feet apart, with the Cleats facing out in opposite directions.

**Step 7.** Connect the ends of the two A4 Lower Shelf Bars to the S1 Vertical Bars (Fig. 3).

Each Shelf Bar is box-shaped with a thin flange. Make sure the flat side of the flange is flush with the outside of the S1 Vertical Bars on each side and pointing toward the top of the unit. The box-shaped portion of the Shelf Bars are positioned inside to act as shelves for the Poly Tray.

**Step 8.** Connect the ends of the A2 Bottom Center Bar to the center of each S4 Bottom Bar (Fig. 3).

**Step 9.** Connect the A3 Pulley Bar to the center of each S3 Top

Bar. The open side of the Pulley Bar should face toward the ground (Fig. 3).

**Step 10.** Connect the two A5 Upper Shelf Bars to each end of the S3 Top Bars. The flange on each Upper Shelf Bar has an angled cut at each end. Position these Bars with the angled cuts on top and the box-shaped portion of the Bars facing in. (Fig. 3). Cover each angled cut with a protective Corner Guard (Fig. 3).

**Step 11.** You may now tighten all bolts on the frame, holding the bars in place as you tighten. With the frame upright, make sure all outside edges of the bars are flush and secure. Adjust the bars as necessary.

**Step 12.** Place a Caster Insert into the bottom of each S1 Vertical Bar (Fig. 3). Firmly push a Caster into each insert.

**Step 13.** Cover each round bolt hole with a Bolt cap (Fig. 3). Place

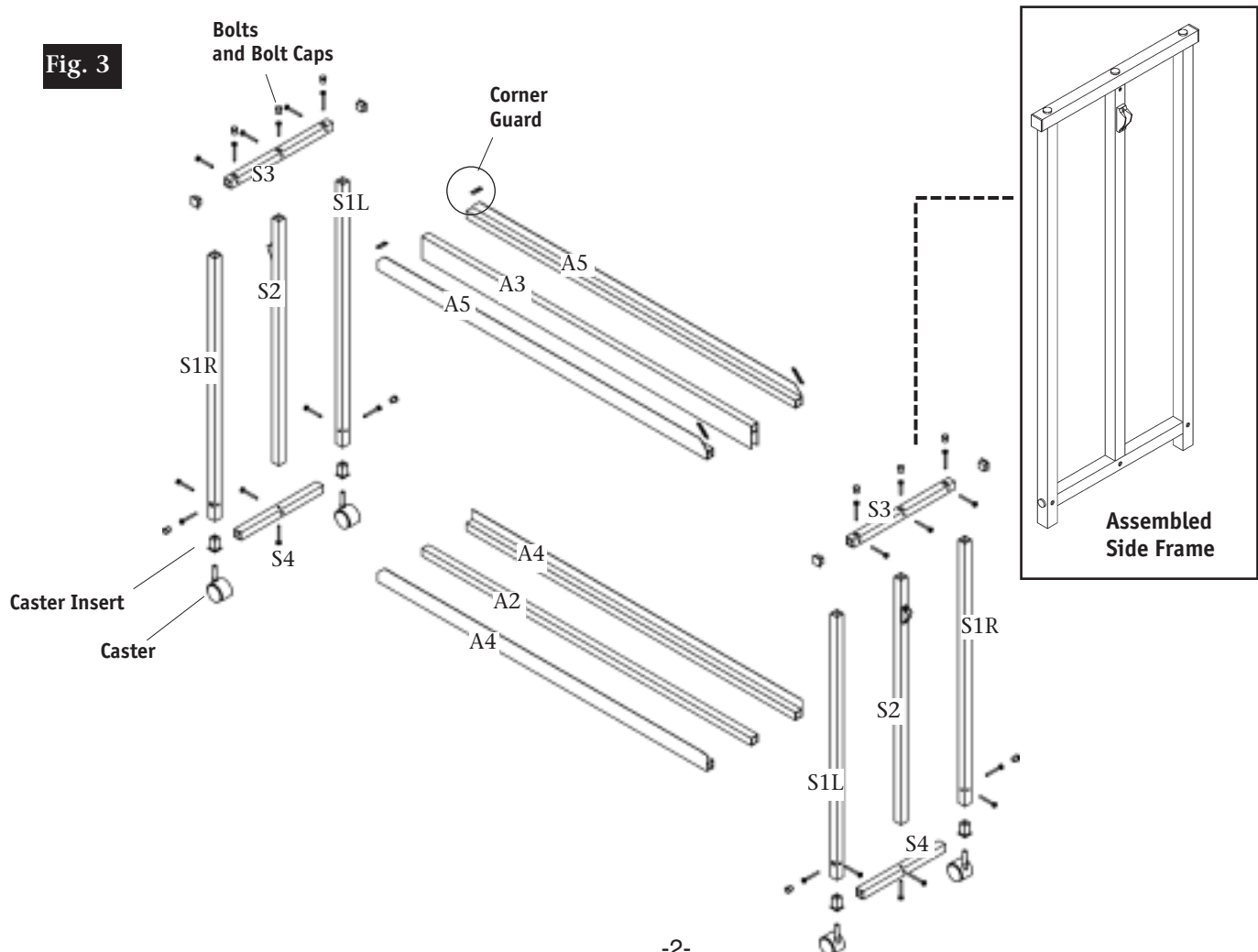
a Poly Tray on the Shelf Crossbars at each level. Rest a spacer board to one side of each Poly Tray. You are now finished assembling the frame.

## Ball Chain Assembly

**Step 14.** Attach a Chain Connector to all Split Rings (Fig. 4). If necessary, use pliers to pry open the Split Rings. (Needlenose pliers work best.)

**Step 15.** Connect a Ball Chain to each Chain Connector on the Large Split Rings only. The last ball of each chain will “snap” onto the connector (Fig. 4).

**Step 16.** Take the loose end of one Ball Chain and thread it through the guide hole in the S2 Vertical Cleat Bar (Fig. 5). Direct the loose end of the chain over the lip of the pulley inside the A3 Pulley Bar. *If this proves difficult, attach a twist-tie or wire to the end of the chain to help lead the chain over the pulley.*



Repeat this step to install a Ball Chain on the other side, then attach a Chain Connector and Small Split Ring to the end of each Ball Chain (Fig. 5).

**Step 17.** Place the Light Fixture right side up on the lower Poly Tray. Orient the power cord to one side of the frame.

**Step 18.** Find the two slots with the "T"-shaped tabs in the top of the Light Fixture. Hook the Small Split Rings around the "T"-shaped tabs on each end of the Light Fixture (Fig. 6).

## Adjusting the Fixture

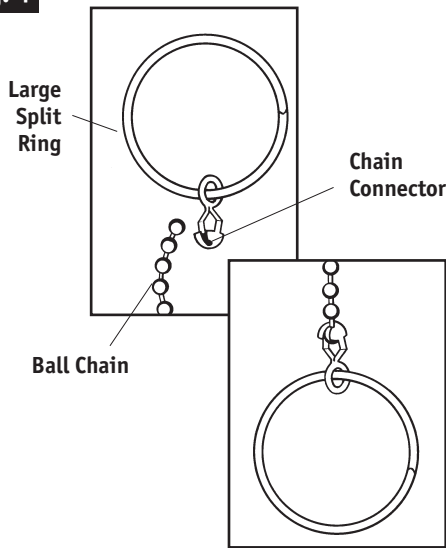
**Step 19.** Check the Ball Chains to make sure they are correctly positioned and move freely over the pulleys.

**Step 20.** The height of the Light Fixture is adjusted one side at a time. Pull the chain out of the Guide Hole horizontally. This will allow you to adjust the height with the least amount of resistance and protect the Guide Holes from abrasion (Fig. 7).

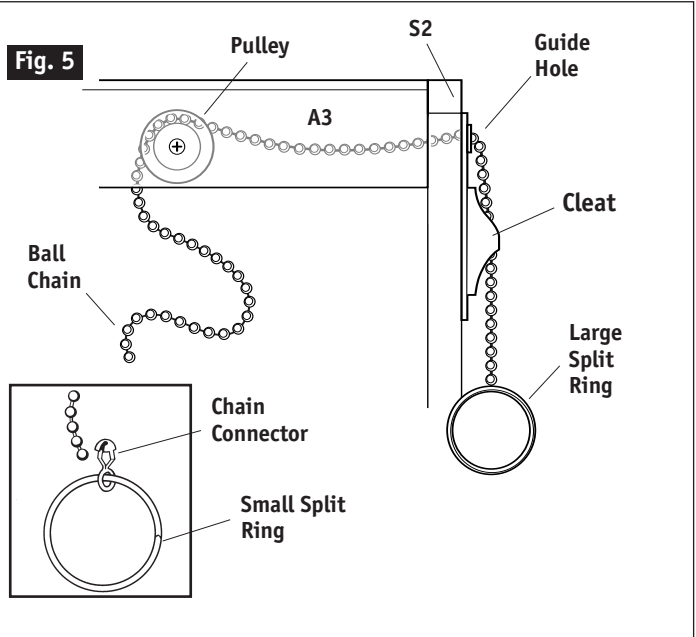
**Step 21.** After you've raised the Light Fixture to the desired height, bring the chain down to meet the Cleat. "Lock" the chain into place by releasing it and allowing it to wedge up into the grooves of the Cleat (Fig. 7).

To release the chain, pull it down and out of the Cleat, then adjust the height by pulling the chain in or out of the Guide Hole in a horizontal direction.

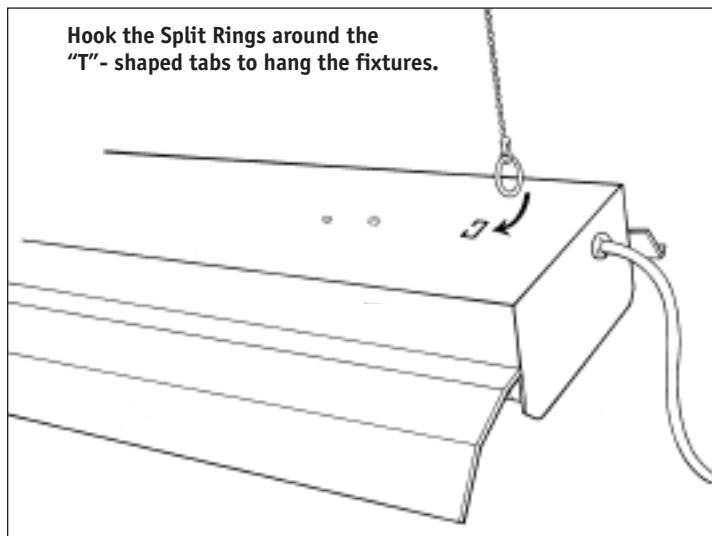
**Fig. 4**



**Fig. 5**

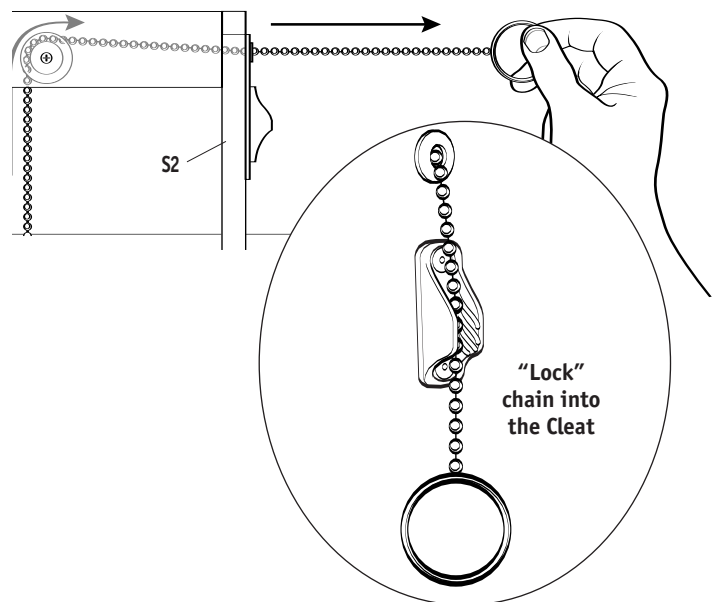


**Fig. 6**



**Fig. 7**

Pull chain in a horizontal direction.



## Fixture Use and Safety

- Always turn off the power to the Light Fixtures when inserting, adjusting or removing Light Tubes. If you insert a Light Tube when the power is on, it may trigger an auto safety mechanism, resulting in the light shutting off. If this happens, turn off the Fixture; make sure the Light Tubes are fully seated in the tube sockets; wait for thirty (30) seconds, then turn the Fixture on again. This will reset the Light Fixture so the lights operate normally.

- Use the power cord only with a properly grounded electrical outlet or power strip. Do not use with a two-plug outlet or extension cord unless the adapter you use is properly grounded.

- If water is spilled near the power source, unplug the unit before you wipe up the water.

- Do not put objects on top of the frame or on Light Fixtures.

- For best results, attach a timer to your lights to control the length of time the lights are on and to be sure your plants get adequate light — even if you're away.

- For on/off manual control of your lights, use the switch located on the Light Fixture.

## Installing and Adjusting Light Tubes

**Step 22.** Unhook the Chains from the Light Fixture and place the Fixture upside down on the Poly Tray. This will reveal the Light Tube sockets (Fig. 8). Then, take a fluorescent Light Tube and

find two pins on each end of the Tube. Slide the pins into the tube sockets, then rotate the Tube 90 degrees until it “locks” into place, revealing the dimple guide mark on the end of the Tube (Fig. 8). This guide mark indicates proper placement of the Light Tubes inside the sockets. Install three Light Tubes per Fixture.

*Installing the Tubes correctly will ensure they produce the optimum amount of light.*

**Step 23.** Turn the Light Fixtures upright and reconnect them to the Ball Chains. Guide the power cord through the bars and down one side of the frame, making sure they don't interfere with your ability to raise and lower the lights.

## Combining the Tabletop and Floor Model Light Gardens

You get double the growing space and greater mobility when you combine the Tabletop Light Garden (sold separately) with the Floor Model Light Garden. If you have previously purchased a Tabletop Light Garden, combining the two models is easy.

1. Assemble both units first, using the instructions provided.

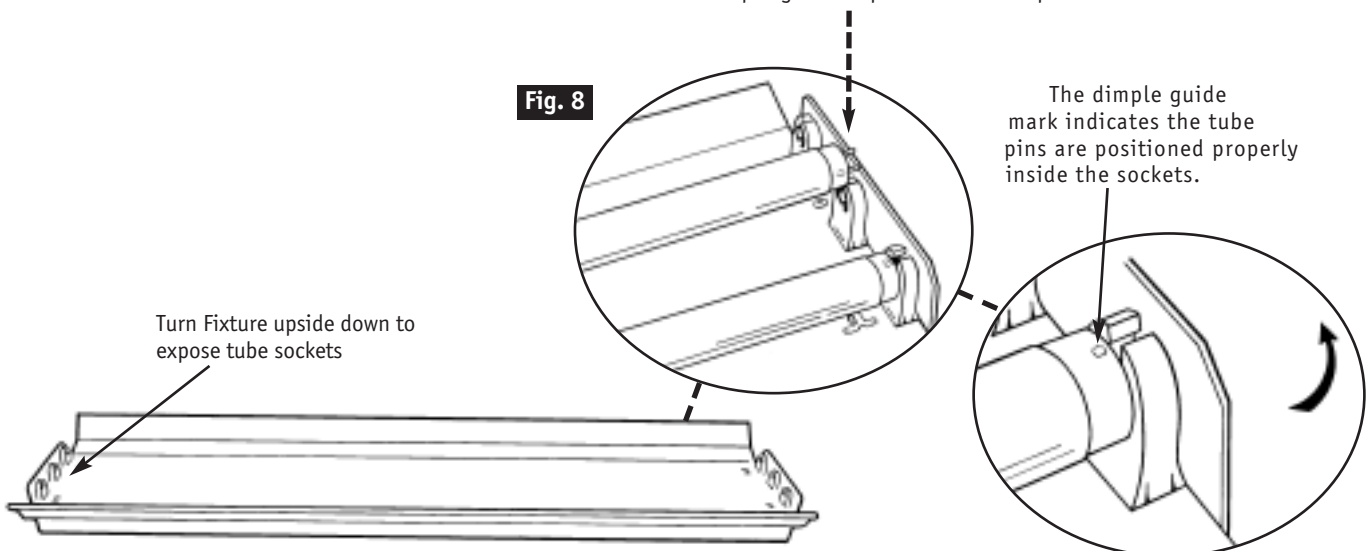
2. Remove the Poly Tray from the top of the Floor Model structure.

3. Remove the rubber Corner Guards from the top four corners of the Floor Model Light Garden.

4. Place the tabletop directly on top of the Floor Model, making sure the Light Fixture cords on each unit are hanging off the same end, then replace the Tray (Fig. 9). That's all there is to it!

Slide the pins down into the tube sockets then rotate 90 degrees until the dimple guide is positioned at top.

**Fig. 8**



**Fig. 9**

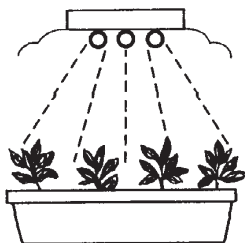


*The Tabletop Light Garden rests directly on top of the Floor Model.*

## Growing With Your Light Garden

By controlling the intensity and duration of light, you can grow healthier and more beautiful plants than ever before. The proximity of the light fixtures to your plants is very important because it affects light intensity. The closer the light, the greater the intensity. Plants that normally grow outdoors in full sun require the highest light intensity. This includes most flower and vegetable plants, orchids, gardenias and citrus. For these plants, light

### Some plants need higher light intensity than others



For most seedlings, keep plants no more than 3 inches from the lights.

tubes should be very close—no more than 3 inches away from the foliage. This need for intense light holds true for seedlings too (your vegetable and flower seedlings will grow tall and spindly if they are too far away from the lights).

Most common flowering houseplants do not require as much light intensity. African violets and begonias will be quite happy 10 to 12 inches away from the light tubes. Nonflowering tropical plants such as philodendrons and ivies can be placed between 20 and 36 inches from the light (see chart).

If you're growing different types of plants under one light fixture, you may need to vary the height of the pots. Place light-loving plants on an upside down flower pot or other platform to get them closer to the light. Your plants will also receive the best light intensity if they are placed under the middle section of the light fixtures, rather than the ends.

As your plants grow, raise the light fixture to maintain the appropriate distance between the top of the plant and the light tubes.

### Recommended Distance Between Houseplants and SunLite Tubes\*

Plant	Approximate Distance (inches)
African violet	10"-12"
Anthurium	10"-12"
Azalea	10"-12"
Cactus	10"-12"
Cineraria	10"-12"
Caladium	18"-20"
Camellia	10"-12"
Chlorophytum, spider plant	18"-20"
Chrysanthemum	3"-4"
Citrus	3"-4"
Cyclamen	10"-12"
Dendrobium	3"-4"
Gardenia	3"-4"
Geranium	3"-4"
Gloxinia	10"-12"
Herbs (culinary)	3"-4"
Hibiscus	3"-4"
Jasmine	10"-12"
Kalanchoe	3"-4"
Oncidium orchid	3"-4"
Peperomia	18"-20"
Phaenopsis orchid	3"-4"
Philodendron	20"-36"
Sansiviera (snake plant)	20"-36"
Schefflera (umbrella plant)	18"-20"
Scindapsus (pothos plant)	18"-20"
Spathyphylum (spathe plant)	20"-36"
Streptocarpus	6"-8"
Succulents	10"-12"
Tolmiea (piggy back plant)	18"-20"

\* (based on a 2-bulb fixture.)

## Leaving the Lights On

No matter what types of plants you are growing indoors, you should always give them time to “sleep.” When it’s dark, plants respire, which is an important part of their growth process. The balance of rest time to active growth time affects many biological processes, including growth rate and the setting of buds and fruit.

Like people, plants differ in the amount of rest they require. They are categorized according to their preferred day length: short-day, long-day, or day-neutral.

Short-day plants, such as chrysanthemums, kalanchoe, azaleas and begonias will thrive on 12 hours per day. In fact, these plants usually require a series of even shorter days (less than 12 hours) before they will set buds and flower.

Long-day plants require at least 14 to 18 hours of light each day. Vegetables and most flowers fall into this category. Day-neutral plants, which include non-flowering foliage plants, as well as geraniums, coleus, and African violets are usually satisfied with 8 to 12 hours of light all year-round.

Using automatic timers is the best way to ensure that your plants receive the right duration of light each day. Group your plants under each light fixture according to what day length they prefer and your indoor gardening adventures will be easier and much more rewarding.

## Water and Humidity

Seedlings and other plants that are placed close to warm fluorescent lights will require watering daily or every other day to keep the soil from drying out. If you’re using our Accelerated Propagation System (APS), check the water level in the reservoir twice a week.

Your houseplants may require less water if they are placed further away from the light fixtures (room temperatures can also affect how frequently you have to water). Generally, water houseplants once or twice a week, allowing the soil to dry between waterings.

Many plants, including most orchids, require high humidity as well as adequate water. You’ll need to

pay more attention to this when they’re growing under lights. To create a humid environment, fill a shallow tray with gravel or marbles, set the orchid pot on top and then cover the gravel with water. The water will evaporate around the pots to create a more humid environment. You may need to experiment for the first few weeks to determine a good watering schedule.

## Getting the Most From Your Lights

- When the ends of a fluorescent light tube darken, it means that the light is aging. Light output from an old tube can be less than half that of a new tube. Replace the light tube when this occurs.
- An accumulation of dust and dirt can dramatically reduce the amount of light your plants receive. Be sure to clean your fluorescent tubes monthly with a soft dry cloth.
- T-8, 32-watt fluorescent light tubes can provide many years of use (up to 24,000 hours); however; when it comes time to dispose of light tubes, please do so responsibly. Dispose of light tubes at your nearest waste recycling center.

## Guaranteed Easy-to-Grow Plants

You can grow almost any plant under lights if temperature and humidity are right! Garden newcomers will have good success with easy-to-grow seeds like zinnias, marigolds, tomatoes, and cucumbers. Easy-care plants include: begonias, ferns, geraniums, oxalis, jade, philodendrons, and all types of succulents. If you like the cactus members of the succulent family, they’re the easiest of all!

## Care Instructions

- To clean the Light Garden frame, unplug the unit first, then wipe down the frame with a damp cloth.
- Clean the fluorescent tubes monthly with a dry cloth. An accumulation of dust and dirt can dramatically reduce the amount of light your plants receive.