OPERATION MANUAL

Portable Solar Light Tower

SPLT-1.06K-LM30-6XWP600E-AT-BC

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SPLT-1.06K-LM30-6XWP600E-AT-BC OPERATION MANUAL
DEPLOYING THE UNIT



1. Choose a location that is close to level as possible to position the trailer. Drop the trailer from the tow vehicle using the single hand jack located on the front of the trailer. Ensure that the safety chains, trailer cable, and breakaway lanyard have been disconnected from the tow vehicle.





2. Once the trailer has been disconnected from the hitch of the tow vehicle, extend the remaining jacks. There are (2) leveling jacks located on the back and (2) jacks located on the front of the trailer. Pull the pin on the side of the jack to rotate it 90° toward the ground and hand crank the jack clockwise to extend it. **Use a bubble level to ensure the mast is level before extending!**



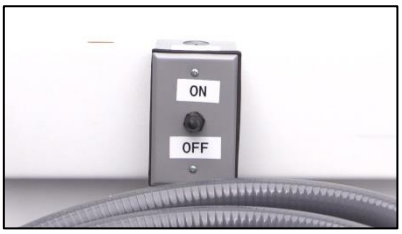
3. To position the solar panels 45°, there is a pin located on each side of the solar panel. Remove each pin to free the panel assembly and pivot the solar panels down against the frame at a 45° angle. Insert each pin to secure the panels in the new position.



4. The top set of solar panels slide outward revealing a 3rd and 4th panel below. Find the latch in between the front solar panels and pull the pin to unlatch and free them. This enables the panels to slide outward. Slide each panel out fully into the open position.



5. Open the job box located next to the mast. If included with a padlock, locate the keys to both padlocks if it is locked. The job box will open once unlocked and there is no need to remove the padlocks.



6. See Solar Controls section. Move the power switch to its **ON** position to power the internals. Make sure all breakers and switches are moved to the **ON** position at this time. This will enable power to your attached devices and allow the solar panels to begin charging the batteries. A built in cooling system will circulate air when the job box exceeds 90° F (32° C) to help keep the internals cool.

7. Locate the winch controller inside the job box. Put the hand control in the "**OUT**" position. Press and hold the button that says "**RUN**" in order to extend the mast to the desired height. Letting off of the "**RUN**" button will stop the mast. Watch for snags during this process if there are any cords attached to the top of the mast.



Once the unit reaches its maximum height it will hit a sensor and retract for 3 seconds. This will prevent the mast from over extending. Let off the "**RUN**" button once this happens. At this point, the unit is deployed.

Important: The winch is designed for intermittent use only. Continuous running in excess of 3 minutes can damage the winch motor. Allow a 20 minute cooling off period before continuing use. Continuous use without a cooling off period will cause overheating and damage the motor.

8. To rotate the mast, view **ROTATING THE MAST** on **page 5** of this manual.

The trailer is now deployed.

To Retract Mast:

- Locate the provided hand control/pendant switch.
- Make sure the Power Switch is in the "**ON**" position and that the inverter is running.
- Put the hand control in the "**IN**" position.
- Press and hold the button that says "**RUN**" in order to retract the mast. Letting off of the "**RUN**" button will stop the mast. Once the mast is all the way down, let off of the "**RUN**" button.
- Once the cable goes slack, stop immediately. **DO NOT ALLOW THE WINCH TO "FREE SPOOL".** If needed, reverse the winch to tighten up the cable.

Important: The winch is designed for intermittent use only. Continuous running in excess of 3 minutes can damage the winch motor. Allow a 20 minute cooling off period before continuing use. Continuous use without a cooling off period will cause overheating and damage the motor.

SOLAR CONTROLS

The job box consists of all the solar controls and electronics.
The following switches should be turned ON for proper function.

..CONTINUE

- **Red Disconnect ON** – Solar panel cutoff switch.
- **Yellow Breaker ON** – Solar Controller cutoff switch. Enables battery charging.
- **Black Toggle Switch ON** – Enables power to all electronics separate from the solar controller and solar panels.

ENABLING SOLAR CHARGING

Turn all switches ON to enable the solar charger and power supply.

1. Disconnect ON
2. Breaker ON
3. Power Switch ON

Once these switches are turned ON, the controller display will turn on indicating the unit is active. Clean and adjust the solar panels towards the sun to receive the best possible charge throughout the day.



Turn on the Power Switch

Make sure the inverter is switched ON.

The main power switch controls everything connected to the terminal blocks. This includes the Fan, 24VAC Inverter. It does not turn off the solar controller.



80A BREAKER


DISCONNECT


POWER SWITCH

A 80A breaker and Disconnect are used to turn off the solar controller. The solar controller should only be turned off when storing the unit for an extended peeriod of time (more than a couple of weeks). The low voltage disconnect module should be unplugged for long storage. This will keep the batteries from running down during storage.


INVERTER OUTLETS AND POWER SWITCH

A 120V battery charger is included in case there is not enough sun to charge the batteries. There is a cable wrapped on the front of the job box for charging. When the charger is plugged in, the solar controller will automatically disconnect and will automatically reconnect when the charger is unplugged.


120V BATTERY CHARGER


SOLAR CONTROLLER

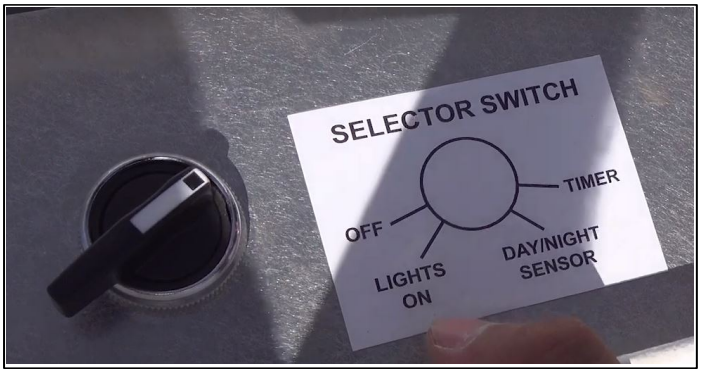
THERMOSTAT

Adjusted from factory to keep the unit cool in warm temperatures. The thermostat will automatically enable a fan when temperatures exceed the set point and turn off once cooled.

SELECTING OPERATING MODE

Use the selector switch to operate unit in desired fashion.

1. OFF
2. LIGHTS ON
3. DAY/NIGHT SENSOR
4. TIMER



OPERATING THE TIMER MODE

Locate the Timer Box next to the emergency kill switch.

- Using the buttons on the interface select the days you want the unit to operate and for how long.
- Select the P button to select the day scheduling and then use D+ to cycle through what day scheduling you want.
    - The first selection is for what days you want the unit ON, the second selection is what days you want the unit OFF.
- Select the time you want operation to occur, use the H+ button for selecting the hour, and the M+ button for selecting the minute.
    - You will select the time to turn ON in the first mode you select in prior step, and you will select the time to turn OFF in the second mode you select in prior step.





ROTATING THE MAST

The mast can be rotated while fully lowered or elevated.



1. Loosen the two bolts located toward the center of the mast on the collar.



2. Once loose, rotate the mast to your desired position

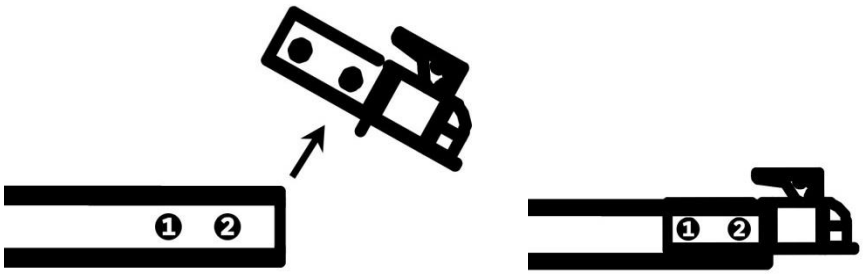


3. Tighten the two bolts in order to hold the mast in place

Note: Pay attention to any attached cords while rotating the unit to prevent tangles or strain around the light mast.

REMOVING THE HITCH

The trailer hitch can be removed preventing the trailer from unauthorized towing. Remove the two bolts ❶ & ❷ from the graphic below holding it in place and lift the hitch off. This can be stored inside the job box when not in use. To install the hitch, place it back on the trailer tongue and replace the two bolts. Be sure both safety chains are attached.



PREPARING FOR TRANSPORT



1. Lower the mast by following the steps on ***page 3*** - **To Retract Mast**.



2. If previously rotated, return the mast to its original position.



3. Power off all equipment. Open the job box and position the main power switch **OFF**. If you wish to turn off the solar controller and charger during extended periods of storage time. Switch the main disconnect and breakers off.



4. Lock the job box and take the keys to prevent unauthorized access.



5. Slide the outer solar panels back inwards and latch in place. Position the solar panels horizontal and secure them with the two hand screws.



6. Lift the (4) jacks on each corner of the trailer by rotating the hand crank counter-clockwise. Pull the pin and rotate each jack 90°.

7. When the mast is fully lowered, powered off, and the (4) main jacks are raised, you are ready to attach a tow vehicle. Once tied to a tow vehicle, raise the tow jack and ensure all other outriggers are raised. Ensure the trailer hookup, breakaway cable, and safety chains are connected. Test the trailer lights to ensure stop/tail/brake lights work before operating on public roadways.