Solar Power Generator with Light Tower Mast
Instruction Manual

Thank you for your purchase of the Larson Electronics SPG366A-600 Series solar power generator with light tower.

WARNING:

READ CAREFULLY BEFORE INSTALLING FIXTURE. RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE. CRITICAL SAFETY INSTRUCTIONS:

- INSTALLATION SHOULD ONLY BE CONDUCTED BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH NEC AND ANY RELEVANT LOCAL BUILDING CODES.
- RISK OF FIRE OR ELECTRIC SHOCK. FIXTURE INSTALLATION REQUIRES KNOWLEDGE OF FIXTURE'S ELECTRICAL SYSTEMS. IF NOT QUALIFIED, CONTACT A QUALIFIED ELECTRICIAN.
- BE CERTAIN ELECTRICAL POWER IS OFF BEFORE AND DURING INSTALLATION AND MAINTENANCE.
- MAKE SURE THE SUPPLY VOLTAGE IS THE SAME AS THE FIXTURE'S RATED VOLTAGE.
- TO PREVENT WIRING DAMAGE OR ABRASION, DO NOT EXPOSE WIRING TO EDGES OF SHEET METAL OR SHARP OBJECTS. SUITABLE FOR DAMP LOCATIONS.

IMPORTANT

READ CAREFULLY BEFORE INSTALLING THIS FIXTURE. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE. THE SPG366A-600 Series MUST BE WIRED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE AND ALL APPLICABLE LOCAL CODES. PROPER GROUNDING IS REQUIRED FOR SAFETY.

WE STRONGLY ENCOURAGE ONLY A LICENSED ELECTRICIAN INSTALL, OPERATE AND MAINTAIN THIS PRODUCT. IF YOU ARE NOT QUALIFIED OR UNFAMILIAR WITH ANY ASPECT OF THIS INSTRUCTION SHEET, CONSULT AN ELECTRICIAN. THERE ARE NO SERVICEABLE PARTS INSIDE.

WARNING: MAKE SURE POWER IS TURNED **OFF** BEFORE STARTING THE INSTALLATION OR PERFORMING ANY MAINTENANCE.

RISK OF FIRE/ELECTRIC SHOCK – DISCONNECT POWER AT BREAKER BEFORE INSTALLING OR SERVICING.
RISK OF PERSONAL INJURY – FIXTURE MAY BECOME UNSTABLE OR DAMAGED IF NOT INSTALLED PROPERLY.
RISK OF BURN – ALLOW FIXTURE TO COOL BEFORE SERVICING.

WARNING:

USER SHOULD BE TRAINED IN THE PROPER USE AND MAINTENANCE OF THIS DEVICE. THIS LINE CORD IS INTENDED TO ALLOW OPERATORS TO EXTEND POWER TO EQUIPMENT WHEN STATIONARY OUTLETS ARE NOT READILY AVAILABLE.

IMPROPER USE OF THIS CORD, PLUG, AND RECEPTACLE CAN LEAD TO SERIOUS INJURIES OR DEATH TO PERSONNEL.

PERIODIC INSPECTION OF THE CORD IS NECESSARY.

THE CORD MUST BE ROUTINELY CHECKED FOR CUTS, BREAKS, OR ANY SEVERE ABRASIONS, AND IF ANY ARE FOUND, THE CORD MUST BE REPLACED BEFORE RESUMING USE.

The SPG366A-600 Series from Larson Electronics is a Solar Powered Generator with Light Mast Tower and Junction Box that provides an ample power supply for work locations that do not have one readily available. This generator features two 265 watt solar panels to charged the 200aH 24V battery bank with 100aH useable power. The SPG366A-600 Series has a small footprint that makes it ideal for a wide variety of work locations. The weatherproof pyramid enclosure provides protection from the elements and is fully removable for maintenance. The SPG366A-600 Series can be configured in 12V or 24V, and is ideal for security camera, temporary remote wireless internet distribution, lighting and equipment deployment. The SPG366A-600 Series also includes a T-Head mounting bracket at the top of the mast which enables operators to mount their existing equipment such as junction boxes, lights or cameras.

IMPORTANT

Please read and follow all of the instructions and safety messages listed below and labeled on the trailer before operation. Death or serious injury to you, your passengers, and others on the road may result if these instructions are not followed. Make sure all operators understand these instructions prior to using the equipment.

CONNECTING THE TRAILER

1. Lower the coupler onto the ball hitch on the vehicle. Make sure it is properly secured.
2. Push down on the handle located on top of the coupler to lock the coupler in place.
3. Connect the safety chains. **Do NOT tow the trailer without the safety chains securely attached to the tow vehicle. Do NOT tow the trailer by the safety chains alone.** The left chain crosses underneath the trailer's tongue and hooks to the right side of the tow vehicles permanent hitch frame or structure. The right chain hooks to the left side in the same manner. The chains need slack to allow your vehicle to make turns. Make sure these chains attach securely to your vehicle and do not drag on the roadway.
4. Connect the trailer's plug to the vehicle. This trailer is equipped with a 7-pin flat plug. The wire harness needs slack to allow your vehicle to make turns. **Do NOT allow these wires to drag on the roadway.**
5. Make sure all lights on the tow vehicle and trailer lights function properly.
6. Ensure all trailer jacks are turned for transport.
7. Ensure all outriggers are secured before transport.

TOWING

1. Do not exceed 55 mph on highways. Do not exceed any posted speed limits.
2. Slow Down for curves, adverse weather, hazardous road conditions, constructions zones, emergency vehicles and expressway exits.
3. Larson Electronics does not recommend using cruise control or overdrive when towing.
4. Allow at least 4 seconds between you and the vehicle in front of you.
5. Persistent side to side motion is not normal. If this occurs at a certain speed, it is a signal that whipping will likely occur if speed is increased. If you notice this behavior, immediately slow down and maintain at least 10 mph below the speed when the sway was first noticed.

TRAILER PREPARATION

Prepare the trailer for mast deployment.



1. Position the trailer in a location as close to level as possible. Pay attention to place the solar panels in a location where it can receive adequate sun throughout the day. This keeps the batteries charged in order to maintain proper operation. **NOTE:** *It is best practice to always face the solar panels towards the equator.*

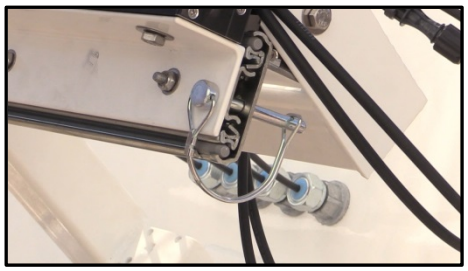


2. Extend all four (4) outriggers located at each corner of the trailer. This is done by loosening the "T" Handles on top of each outrigger and pulling them out. Rotate each jack perpendicular with the ground and lock in place.

3. Using the jacks on the outriggers, level the trailer before using. Adjust each jack to achieve proper leveling. Turning the handles clockwise raises the jacks and counterclockwise lowers the jacks.



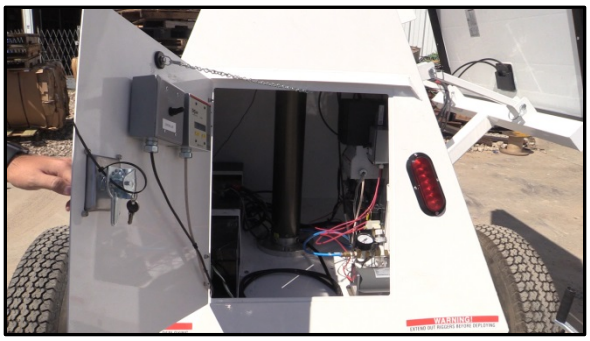
4. There are 2 pins on the back of the solar panels, attached to 2 arms, stabilizing the solar panels for transport. These pins can be removed to achieve a greater angle for the solar panels. After removing these 2 pins, pull the spring loaded pin located on the other stabilizing arm. Have a **2nd person** pull the solar panels outward, until the pin locks into place. **IMPORTANT: Make sure these pins are put into the original position before transport. Failure to use 2 people could cause serious injury.**

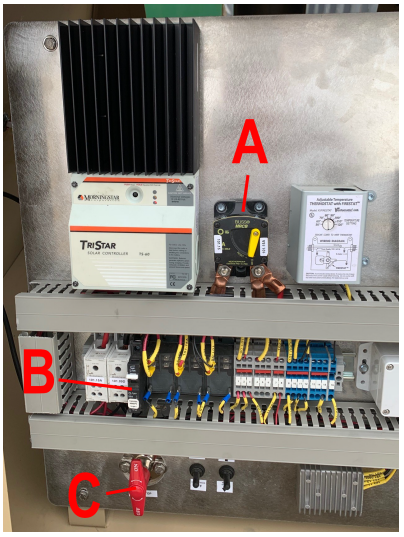


5. Located on the lower edge of the solar panels, is a retaining pin, to prevent the solar panels from sliding during transport. Remove the pin and slide the solar panels horizontally, and re-insert the pin. **IMPORTANT: Make sure the solar panels and pin are in the original position before transport.**

MAST DEPLOYMENT

IMPORTANT: Ensure the trailer has been properly leveled before proceeding with extending the mast.





1.) Unlock the compartment door at the front of the trailer to access the internal controls.

2.) Turn the battery disconnect switch (C) to the on position. Flip the black and yellow solar charger breaker (A) and the black solar panel breaker (B) to the on positions.



3.) *DO NOT RAISE MAST YET.* When you turn on the system, the remote meter will display "SEARCHING...", DO NOT raise the mast until this is no longer displayed.



4.) When the system is ready, you can now raise the mast. To raise, flip the air compressor switch to COMPRESSOR ON and the mast switch to MAST UP and allow the mast to fully elevate. **NOTE: The T-Head mast supports up to 120 lbs. DO NOT overload.**

5.) Once the mast is full, the air compressor will automatically shut off. This typically takes 30 seconds to 1 minute after the mast has fully extended. Keeping the air compressor switched on will keep the mast elevated during long term deployment.

LOWERING THE MAST

Lower the mast to its lowest position.



1. Open the compartment door and ensure the air compressor switch is turned **OFF**. *Please verify the compressor switch is turned off or the mast will not lower.*
2. Flip the mast switch to MAST DOWN. When fully down, put the switch into the middle neutral position.
3. All power may be turned off.

TOUNGUE REMOVAL

If necessary, the tongue can be removed for secure, long term installations. **NOTE: When removing the tongue, make sure to disconnect the trailer light wire.**

1. Once the trailer has been fully deployed with outriggers extended, raise the trailer hitch outrigger and fold it up.
2. Remove the two bolts holding the tongue in place including any clamps holding the tow cable.
3. Slide the tongue out and place it in a secure area to prevent unauthorized movement of the trailer.

TRANSPORTING

Prepare the trailer for transportation.

4. Replace the tongue, tow cables, and trailer light wire *(If Removed). Ensure the tongue is secured in position before attempting to tow the trailer.*
5. Extend the tongue jack to hold the trailer in position.
6. Disengage the outriggers and return all pieces to their original positions.
7. The unit is now ready for transport.

USE AND CARE

Unauthorized modification may impair the function and/or safety of this device and could affect the life of the equipment. Always check for damaged or worn out parts before using the device. Store it in a secure place out of the reach of children when not in use. Inspect for good working condition prior to storage and before re-use.

REPLACEMENT PARTS

The SPG366A-600 Series is designed to provide years of reliable performance. Should the need for replacement parts arise, please contact Larson Electronics.

THESE INSTRUCTIONS MAY NOT COVER ALL DETAILS OR VARIATIONS OF THIS PRODUCT FOR YOUR EQUIPMENT OR INSTALLATION REQUIREMENTS. SHOULD FURTHER INFORMATION NOT COVERED BY THESE INSTRUCTIONS BE REQUIRED, PLEASE CONTACT LARSON ELECTRONICS BY EMAIL AT SALES@LARSONELECTRONICS.COM OR BY PHONE AT 1-800-369-6671 FOR FURTHER ASSISTANCE.

PLEASE VISIT LARSONELECTRONICS.COM FOR **WARRANTY** AND **RETURN** INFORMATION.