Larson Electronics Mobile Light Tower
WCDE-11-6HPS-MR Instruction Manual

UNCRATING
Unpack your new light tower by removing the plastic and cardboard that surrounds the crate. Once the covers are removed, the crate will need to be disassembled so you can remove the cart. Once you have removed the wood framing you will be able to remove the cart, take care not to damage the cart or light fixtures during disassembly of the crate. Do this on a flat surface to prevent unwanted movement of the cart.

SETUP
The light tower may be shipped with the light fixtures and the trunnion mounts removed from the head.

- Install the top 2 trunnion mounts to the top of the light head by removing the bolt, nut, and washers holding the bottom mounts on. Place the top 2 mounts adjacent to the bottom ones, and replace the bolt, nut, and washers in the same way they were installed before you removed them and tighten. Each side of the light head has one bolt to secure the top and bottom mount for that side.
- Install the metal halide light fixtures into the trunnion mounts by placing them so that the threaded holes in the light fixtures aligns with the mount holes at the side of the trunnion. Secure the fixtures using the hardware provided with the fixtures and tighten securely.
- Make sure everything is tightly secured before raising the light mast.
- If generator was shipped drained of fluids, fill the generator with the proper lubricating oil, coolant, and fuel before starting. Refer to the warning sheet inside the control for oil and coolant capacities and types. Do not attempt to operate before the fluids have been added. Be sure engine maintenance is performed at regular intervals in compliance with normal operating standards.

Raising Light Mast
WCDE-11-6HPS-MR has 2 hand-crank winches; one for tilting the mast vertically or horizontally, and one for extending/lowering the mast to desired height.

- Always use the 4 outriggers to stabilize and level the light mast trailer before raising the mast.
- Use the hand-crank winch attached to the tongue of the trailer to tilt the mast vertically. Once the mast reaches it's vertical position, a pin at the base of the mast will lock it into position.
- Use the hand-crank winch attached to the base of the mast itself to extend the mast to desired height.
- Lower mast before tilting the mast back to horizontal position for storage or towing.
- Pull the pin to free the mast to be tilted back to the horizontal position.

Towing

- Always collapse mast and lay it down to the horizontal position before towing.
- Collapse and stow outriggers before transporting.
- Attach trailer to vehicle for towing via ball hitch, and hook tow chains to the tow vehicle for added safety. **ALWAYS USE BOTH TOW CHAINS WHEN TOWING.**
- Connect trailer lights.

If any additional information not provided in this document is needed, please contact Larson Electronics for further assistance.

LARSON ELECTRONICS LLC • 9419 E US HWY 175 • KEMP, TX 75143
p: 1-800-369-6671 • intl: 903-498-3363 • f: 903-498-3364 • sales@larsonelectronics.com

OPERATING INSTRUCTIONS

CAUTION! Read all safety and operating instructions in the manual supplied with this light tower before operating.

DANGER! Do not raise this light tower near any overhead power lines. Contact with power lines could result in very serious injury or death.

TOWER SET UP

1. Place light tower where it can best floodlight work. Choose high ground when available. Place far enough away from work to allow light to spread out. Place on fairly level spot turned so axle is level.
2. If more than one light is used, position towers around work to eliminate shadows.
3. Chock wheels to prevent light tower from rolling.
4. Unhitch from towering vehicle using jack to lift tongue off hitch.
5. Pullout all outriggers and stop pins engage. Swivel all jacks to vertical Crank jacks making firm contact with ground o level trailer and to stabilize against high winds.
6. WARNING! Do not raise tower without all out-riggers fully extended and all jacks firmly down. Replace any broken or missing jacks. Place pads under jacks to spread weight if ground is soft. Lower tower to a safe height in gate force winds. A turned over tower could result in serious injury or death.
7. Drive grounding rod into ground and connect wire to ground stud trailer.
8. If light fixtures are stored in cabinet remove and install on crossarm with lens facing down and weep holes facing forward.
9. Look out across job and select a target on the ground at which to aim each floodlight. If both narrow and medium beam spread floodlights are provided, plan to aim narrow at a more distant target.
10. To set horizontal spread of floodlight, first sight angle of separation between each target. Then rotating each floodlight to give the required angle of separation. Note that horizontal aim of the full set of floodlights is accomplished by rotating the tower once.
11. Remove travel locking pin at rear.
12. Operate winch to stand up tower. Stop winch when vertical tower lock engages at base of tower.
13. CAUTION! Insert safety lock pin into latch at base of tower before proceeding to telescope tower up.
14. Pull telescoping lock pin on side of tower and operate winch to telescope lower up. Pin can be released after tower starts up, it may be necessary to back off on winch slightly to relieve tensions so telescoping lock pin can be pulled.
15. Stop telescoping tower up when red line appears and cable tension builds. Do not over crank winch. Tower may be stopped at any height and floodlights operated.
16. Loosen “T” bolt on tower and rotate tower to align pre-aimed floodlights with targets, Retighten “T” bolt.
17. CAUTION! Make sure tower is plumb. Adjust jacks if necessary.

FLOODLIGHT OPERATION

1. Check fuel and engine oil levels, if unit has a radiator, check coolant level. If fuel tank was totally empty, fuel lines must be bled before starting the engine.
2. If the engine is fitted with glow plugs, turn switch to preheat until indicator glows.
3. If the engine is fitted with shutdown system relay push in relay bypass button while starting engine.
4. Hold engine switch on “Start” until engine starts, the release. Let engine come to speed and stabilize.
5. Turn main circuit breaker “On”.
6. Turn all floodlights circuit breakers “On”.
7. Then allow several minutes for the lamps to reach full brightness.
8. DANGER! Before troubleshooting any lamp that failed to operate follow all electrical shock cautions in operators manual and on safety decal located nearby.
9. Check any instruments and indicator lights on the control panel to insure all systems are operating normally. After floodlights are fully bright, frequency should be between 49 to 51 cycles per second (Hertz) and voltage should be between 210 and 240 colts. Refer to the manual supplied with the light tower for further information on instrumentation.
10. Close all doors to protect from rain and contain noise.
11. Lower and re-aim floodlights if required.
12. If lighted areas are too small with dark areas between, consider moving light tower further from target to allow light to spread out more.

FLOODLIGHT OPERATION

1. Turn all floodlight circuit breakers “OFF”.
2. CAUTION! Do not stop engine with any flood-light circuit breakers “On”.
3. Turn engine switch to “Off” to stop engine.

TOWER LAYDOWN

1. Loosen “T” bolt and rotate tower to lock to face rear of trailer so that lay-down groove aligns with bar.
2. Operate winch to telescope tower down. Watch telescope lock pin on side of tower and be sure it engages. Then insert safety pin into the telescope lock pin.
3. DANGER! Telescope lock pin must be engaged before tower is layed down. Failure to engage pin will result in tower failing when tower is about half way layed down.
4. Pull vertical tower lock at base of tower and operate winch to lay tower down into rear cradle. It may be necessary to tighten up on winch to free lock pin before pulling pin.
5. CAUTION! Do not let winch unwind too long. Excess slack may allow cable to kink and jump off pulleys.
6. Insert travel lock pin at rear of tower and secure with keeper pin.

TOWER RELOCATION

1. CAUTION! Allow lamps to cool at least ten minutes before moving light tower. Hot lamps will break if moved.
2. The floodlights can be transported either on the cross arm or inside of cabinet.
3. WARNING! Be sure rear travel lock and telescope lock are engaging.
4. Crank up all jacks except for one front jack and swivel to horizontal. Push in all outriggers until stop pins engage.
5. CAUTION! Do not forget to retract rear jacks.
6. Using remaining jack to lower coupler over vehicle hitch and secure. Connect safety chains and, if provided, running, and brake lights.
7. Crank up remaining jack, swivel and lock horizontal.
8. DANGER! Do not tow at excessive speeds. The weight of this light tower can cause loss of vehicle control, especially under emergency stopping conditions. Obey all traffic laws and regulations when lowering tower.

USE OF AUXILIARY RECEPTACLES

1. Auxiliary receptacle may be used with or with-out the floodlights “On”. Do not exceed amperage capacity of main breaker. Each flood light consumes 5 amps as 240 volts.
2. Close all doors protect from rain and contain noise.

---

1. Electrically ground trailer frame to earth before operating genset.
2. Screw all jacks firmly against ground.
3. For extra safety, also drive in ground rod and connect cable to stud welded to trailer frame.
4. Keep light fixture receptacle dry.
5. Screw caps on hand tight to seal receptacle when not in use.
6. Do not screw light fixture into receptacle if receptacle is wet.
7. When raising, lowering, or rotating tower, be sure to watch power cord.
8. If power cord gets cut or crushed replace before operating light tower.
9. Turn off genset when performing electrical work.
10. Turn off genset before relamping fixture.
11. Turn off genset before replacing ballast.
12. Take extra precautions when troubleshooting electrical problems.
13. Only use a voltmeter with two well-insulated pin probes rated for 600 volts
14. Ground trailer frame securely with all jacks and a backup ground cable.
15. Inspect ground cable between genset and trailer frame.
16. Treat all conductors as potentially hot.
17. Proceed through circuits systematically operating only one section at a time.
18. Before disconnecting ballast turn off circuit breaker and wait 30 seconds tor capacitor to discharge.
19. If all the lights are out and all the ballasts are receiving power suspect burned out power cable. Shut down genset and fully inspect power cable and junction box.