

# 30' Telescoping Light Mast

## 12-30' Three Stage Light Tower - 360° Rotating Boom - Coiled Cable Instruction Manual

Thank you for your purchase of the Larson Electronics LM-30-3S-FM-NYC-12.3-M3 telescoping light mast. Read and retain these instructions before installing or operating.

### WARNING:

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

- INSTALLATION OF ELECTRONIC DEVICES ON LIGHT MAST 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.
- HEED WARNING LABELS ON FIXTURE.

The Larson Electronics LM-30-3S-FM-NYC-12.3-M3 fixed mount 3-stage light mast provides a safe and effective way for operators to quickly deploy lights, security cameras and other equipment to elevations of up to thirty feet. Equipped with two NEMA 4X rated junction boxes connected by a 12/3 coiled external power cable, this light tower features a rotating boom that allows for 360° of rotation and a removable mast head for storing mounted equipment when not in use.

## Installation

Position light mast in the desired location. Ensure that the unit is **completely level** and anchor the light mast using all six (6) mounting holes located on the base. This will require six (6) 9/16" bolts. When picking a location, ensure the mast is free and clear from any overhead obstructions.

Attach equipment to mast head. Use appropriate measures for securing attached devices. Drill thru-holes as necessary. **Do not exceed weight capacity listed on nameplate!**

Install junction boxes in desired locations, with one going on the mast head to power attached electronic equipment, and one near the base of the mast for bringing in the supply power. Junction box near the base can be installed on any flat surface capable of supporting the load of the box and tension of the coiled cable. Be sure boxes are mounted in such a way that there are no cable obstructions when raising and lowering the mast.

Install mast head. *See mast head installation steps below on page 2.*

## Operation

### Raising the mast:

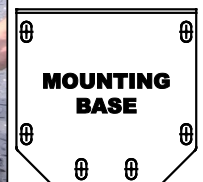
Remove the retaining pin at the base of the mast and set aside.

Use the lower hand winch to fold the mast upright. Turn this clockwise until the mast is fully upright and enough tension keeping the mast in place. You should hear a clicking noise from the hand winch indicating the proper direction.

**Replace the pin that was removed earlier at the base!** This retaining pin will prevent the mast from falling over should the winch cable fail.

**Mast must be level!** Use a bubble level to level the mast before extending!

*Operation instructions continued on page 2*



Use the upper hand winch for extending the mast. Turn this clockwise until it stops. You should hear a clicking noise from the hand winch indicating the proper direction. **Do not force the winch any further passed its stopping point!**



**Lowering the mast:**

To lower the mast, rotate the upper winch counter-clockwise. The winch will not click at this point and you should visually see the mast lowering. Stop once there is no more tension on the cable. *Do not allow excessive slack on winch cable.* If mast stops while lowering, it may not be level. Rotate winch clockwise to take slack out of cable and raise mast slightly, verify mast is level, then try lowering again.

**WARNING:** Power cables can become pinched or tangled around mast while lowering or rotating. Take caution in keeping cables clear.

Once mast is lowered, remove the retaining pin from the base of the mast and set aside. **This pin must be removed before folding the mast!**



Use the lower hand winch to fold the mast down. Rotate the winch counter-clockwise until there is no more tension on the cable and the mast is horizontal.

Replace retaining pin that was removed from the base before lowering.

In order for the spring on fold over models to activate, a headload of at least 15 lb is required. **If the spring does not activate due to insufficient headload:**

1. Unwind the fold over winch two times.
2. Apply pressure in folding direction to help the mast fold over.
3. Resume cranking the winch to lower the mast.



**Rotating the mast:**

The mast can be rotated while lowered or elevated, just be mindful of masthead mounted equipment. When using power cables, minimize full 360° rotation to prevent tangling cord around light mast. **Ensure cables are not in the way or tangled when lowering mast!**

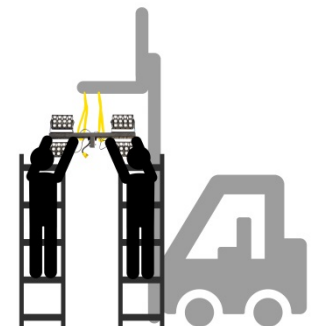
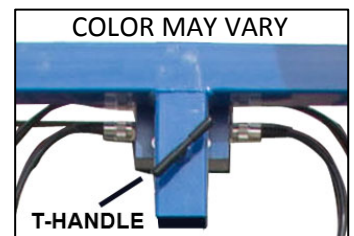
1. Loosen bolt(s) located toward center collar of light mast.
2. Rotate mast to desired angle.
3. Tighten bolt(s) in order to secure mast in place.



**Mast Head Installation**

The mast ships with the light head / T-head removed to prevent damage during transport. Follow the steps below for installing or removing mast head.

- Mast head has T-handle screw for securing it to the mast. Be sure this is loosened enough to allow the mast head to slip over the top of the mast.
- Using a pair of slings, wrap both slings around the mast head in between the equipment on both sides.
- Attach the slings to a forklift or other lifting device. With 2 people holding the mast head steady, slowly raise the mast head above the top stage of the mast. Good quality, sturdy ladders should be used for this, one on each side, as shown in the graphic. Guide mast head carefully into place and slip it over the top stage of the mast. Tighten T-handle screw to secure mast head in place.



*Heavy duty slings are recommended for installing heavy loads and to ensure operator safety. Should other methods be used, Larson Electronics shall not be held responsible for damages or personal injuries.*

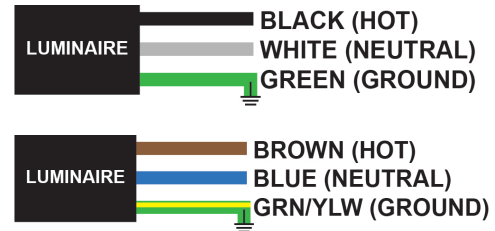
## Wiring

**We strongly encourage a licensed electrician install this product**, in all locations, especially in outdoor areas where weatherproofing may be required.

**Warning:** Check product/equipment label for correct input voltage!

Attach supply line wires to the appropriate light fixture wires as shown in the diagram →

Once junction boxes have been installed, electrical connections are made via flying leads inside the boxes. Supply power should be brought into the box near the base, and connections to equipment should be made in the box attached to the mast head. Be sure supply power matches ratings for equipment being used on mast head. Take precautionary steps for weatherproofing all connections if installed in a location where water may come in contact with the unit. Ensure the unit is properly grounded and that wiring is done according to all local and national electrical/building codes.



## 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 LM-30-3S-FM-NYC-12.3-M3 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](mailto:SALES@LARSONELECTRONICS.COM) OR BY PHONE AT 1-877-348-9680 FOR FURTHER ASSISTANCE.

PLEASE VISIT [LARSONELECTRONICS.COM](http://LARSONELECTRONICS.COM) FOR **WARRANTY** AND **RETURN** INFORMATION.