



## Internal Halyard (Cam) Flagpole Beacon Installation Guide

### ⚠ IMPORTANT SAFETY WARNINGS

1. **Electrical Safety:** Ensure all power is turned **OFF** at the breaker before beginning installation.
  2. **Qualified Personnel:** All wiring on 120V units must be performed by a qualified electrician in accordance with local electrical codes.
  3. **Pinch Hazard for New Installs:** When setting the pole, ensure the wire does not get pinched or sheared against the ground sleeve.  
**When in Doubt, Call:** Should any questions arise during installation, call (800) 962-0956 or email [info@flagco.com](mailto:info@flagco.com).
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### Step 1: Pre-Installation Function Test and Pole Prep

1. **Before drilling any holes or applying adhesive**, connect the Beacon to your power source on the ground.
2. Turn on the power; the light should illuminate immediately.
3. If the light does not turn on, check your connections. **Do not proceed** with installation until the unit is confirmed working.

### Step 2: Above-Grade Wiring Preparation (Recommended for Retrofits)

*(Skip this step if you are wiring below grade)*

Drill a 11/16" diameter hole in the flagpole at ground level.

Ensure the hole is positioned where the flash collar will hide the wire exit point.

### Step 3: Above-Grade Wiring Preparation (Recommended for Retrofits)

*(Skip this step if you are wiring above grade)*

1. Dig a trench in accordance with local code, running from your power supply to the ground sleeve location.
2. Drill a hole large enough to accept conduit in the side of the ground sleeve. This hole should align with your trench depth to allow for conduit/wire entry.
3. Drill a 11/16" corresponding hole in the flagpole shaft. This hole should align with the hole in the ground sleeve when the pole is seated. Drill this hole before pole assembly (Step 5).
4. Install any necessary conduit into the foundation sleeve hole, ensuring compliance with all local codes.
5. Run 120V-rated power wire from your power source through the trench and through the hole in the ground sleeve, leaving enough excess wire to connect to the wire from the Beacon inside the ground sleeve.  
**Note:** All wire connections inside the ground sleeve must use weatherproof splice connectors rated for direct burial or wet locations.

### Step 4: Routing the Halyard

1. The pull-through twine is shipped in a closed loop to maintain proper routing. Carefully untie the loop, **ensuring you hold onto both ends** so the twine does not slip out of the pulley or off the pulley bar.



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2. Attach the **non-thimble end** of the halyard to the twine located at the "nose" (pulley end) of the unit. Pull the opposite end of the twine to draw the halyard through the pulley and out the bottom of the Beacon assembly.
3. Thread the flag halyard up through the center hole, over the pulley(s), and feed it down through the "nose" (cable exit) hole.
4. **Troubleshooting:** If the halyard does not feed through easily, remove the three set screws connecting the upper cap to the lower housing. Carefully separate the pieces and manually route the halyard through the nose pulley, over the pulley bar, and through the hole on the top of the lower housing. Reset the upper cap back on top of lower housing and tighten all three set screws.

### **Step 5: Mounting the Beacon**

1. Assemble pole sections in accordance with flagpole manufacturer's instructions.
2. Tape the end of the halyard and the power wire to fish tape. Feed the halyard and wire down through the top of the flagpole until it reaches the cam cleat access door.
3. Apply Loctite (or an equivalent thread locker) to the set screw holes on the lower housing where the Beacon connects to the flagpole.
4. Place the Beacon on top of the flagpole and tighten set screws.
5. After attaching the Beacon onto the top of the flagpole, verify that the halyard and electrical wire have not become twisted or tangled inside the pole.

### **Step 6: Fishing the Wire**

1. Route the Beacon wire behind or around the cam cleat assembly. This prevents the wire from interfering with the cam during operation.
2. Go to the 11/16" hole in the flagpole shaft (drilled in Step 2 or Step 3).
3. Create a small hook at the end of a stiff piece of wire (such as solid copper wire) or use a fish tape.
4. Insert the hook into the hole, snag the Beacon power wire hanging inside the pole, and carefully pull the power wire out through the hole.
5. Pull the wire until most of the slack is removed from inside the pole but leave enough slack at the top to allow the Beacon to rotate.

### **Step 7: Erecting the Flagpole**

- Route the halyard through the cam cleat according to the manufacturer's instructions. Once secured, raise the flagpole into the ground sleeve following the pole manufacturer's guidelines.
- **Note for below-grade installation:** Do not cover the conduit hole with sand until power is connected and tested.

**CRITICAL:** Ensure the wire exiting the bottom of the pole does not get pinched or sheared against the ground sleeve during this process.



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### **Step 8: Final Connection**

1. Connect the power wire from the pole to the power wire from the power supply in the ground sleeve (or under the flash collar), using weather-proof splice connectors.
2. Connect the power supply to your external timer or switch.
3. For below-grade installations: fill the ground sleeve with sand and tamp once power is connected and tested.