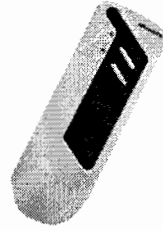


Add-a-Motor Model 154 Owner's Manual

Retrofit Remote Control for Patio and Market Umbrellas

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Optional



Thank you for purchasing our product. We sincerely hope that it provides you years of convenience and reliable service.

PRODUCT APPLICATIONS

Adds remote control to patio and market umbrellas up to ten (10) feet in diameter, with round, square and rectangular canopies. Controls umbrellas that have crank mechanism, cord pulls, and manual lift systems, metal or wood poles.

Manual-tilt umbrella: A button in the pole allows the upper end to tilt. The Model 154 can be used to lift and lower this type umbrella. Umbrella can still be tilted after it is open.

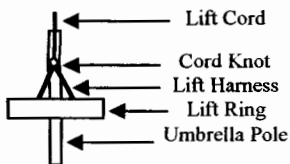
Auto-tilt umbrella: If crank-handle is continuously turned after umbrella is full open, it auto-tilts. The Model 154 can be used to lift and lower this type umbrella, however, because crank-handle is by-passed, tilting is not available.

Components List	
1	Owner's Manual
1	Motor Module
1	Control Module
1	RF Transmitter, battery, battery shield tab.
1	AC-DC Adapter with 25' cord
1	Pole Clamp
1	Motor Rope
4	Mounting Screws

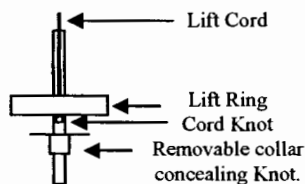
IDENTIFY YOUR UMBRELLA TYPE

HAND CRANK MECHANISMS

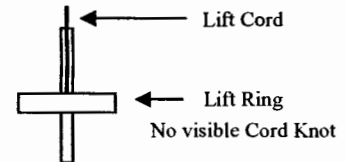
Type A



Type B

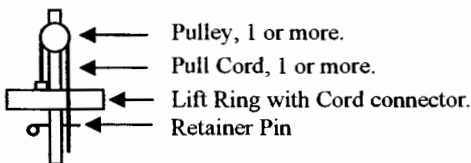


Type C



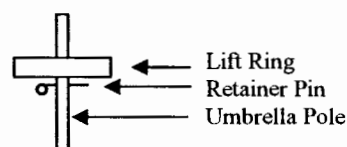
HAND-PULL CORD(S)

Type D



MANUAL LIFT SYSTEM

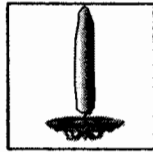
Type E



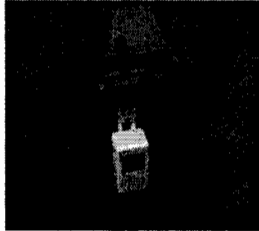
WARNING AND CAUTION NOTICES ARE FOR PERSONAL SAFETY. PLEASE READ CAREFULLY.



⚠ WARNING: Do not use product if umbrella has a "natural" grass canopy because excessive weight can cause product damage. Artificial poly-grass canopies can be controlled using this product.



WARNING: Unplug system whenever a protective cover is installed over canopy.



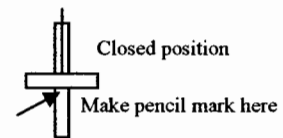
⚠ WARNING: For outdoor use, plug AC-DC Adapter into GFCI protected outlet with weatherproof cover (not furnished).

TOOLS: Tape measure, pencil, screwdriver (straight and Phillips), drill, 1/16" drill bit (plus 1/8" bit for E Lift Rings).

INSTALLATION STEPS

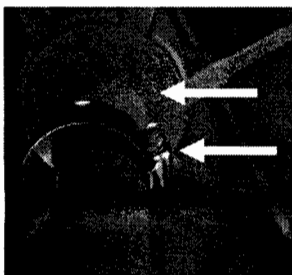
If Umbrella is mounted through patio table hole, remove from table and stand it in support base.

1. Close Umbrella. Make a pencil mark on Umbrella Pole at bottom edge of the Lift Ring.



2. Open Umbrella to its normal open position.

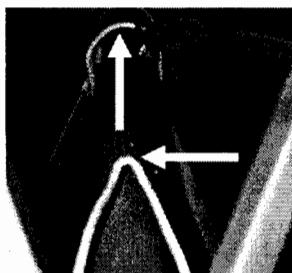
Type D and E: Retain in open position by installing Retainer Pin through hole in Pole under Lift Ring.



3. Type A, B and C: Attach and tighten furnished Pole Clamp to Umbrella Pole under Lift Ring.

⚠ WARNING: for personal safety, Pole Clamp must be against lower end of Lift Ring, secured to Umbrella Pole, and tightened to support entire weight of canopy.

4. Turn handle to lower Lift Ring against Pole Clamp causing a foot or more slack in Lift Cord. Then do following.



Type A Lift: Do not cut Harness. Harness must remain attached to Lift Ring. Untie Lift Cord and separate from Harness. Wrap free-end of Lift Cord around top of Umbrella Pole and tie to prevent it from dropping down inside Pole.

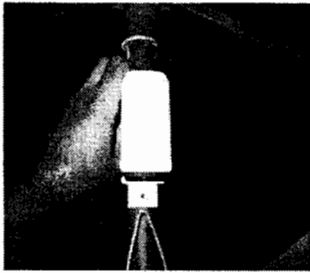
Type B Lift: Untie existing Lift Cord knot below Lift Ring. Remove Cord from Lift Ring. Wrap free-end of Lift Cord around top of Umbrella Pole and tie to Pole.

Type C Lift: Cut existing Lift Cord 8 to 10 inches above Lift Ring and let it hang. Wrap free-end of Lift Cord around top of Umbrella Pole and tie to Pole to prevent it from dropping down inside Pole.

Type D Lift Ring: Untie existing Pull Cord(s) from Lift Ring Connector or Pulley. Leave existing Connector attached to Lift Ring.

Type E Lift Ring: Go to next step.

5. Temporarily position Motor Module against Umbrella Pole, centered between canopy ribs as follows.



Type A: Position Motor Module a few inches above Lift Harness apex, centered between ribs. Mark on Pole the location of upper and lower mounting holes of Motor Module.

Type B: Position Motor Module a few inches directly above hole in Lift Ring, centered between ribs. Mark on Pole the location of upper and lower mounting holes of Motor Module.

Type C: Position Motor Module above and in line with cut-end of Lift Cord, centered between ribs. Mark on Pole the location of upper and lower mounting holes of Motor Module.

Type D: Position Motor Module a few inches above Lift Ring Connector or Pulley, centered between ribs. Mark on Pole the location of upper and lower mounting holes of Motor Module.

Type E: Position Motor Module above Lift Ring anywhere on Pole, centered between ribs. Mark on Pole the location of upper and lower mounting holes of Motor Module.

6. Remove Motor Module from Pole and drill 1/16" hole in Pole at marks. To aid drilling, create dent at each mark using hole punch or nail and hammer. **Type E:** Also, drill 1/8" hole vertically through Lift Ring below planned location of Motor Module.

KNOTS SAFETY

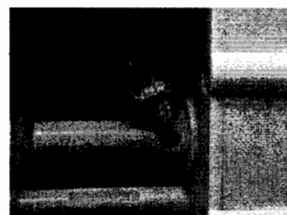
In the following steps, the Motor Rope is tied to the Motor Drive Shaft, Lift Ring, or end of existing Lift Cord.

VARIOUS KNOTS CAN BE USED. CHOOSING AND TYING KNOTS IS THE RESPONSIBILITY OF PRODUCT USER.

⚠ WARNING: For personal safety, knots must be secure. Knots must be periodically checked for holding strength. If knot fails, Umbrella can collapse unexpectedly causing injury and property damage.

Knot-tying resources are on the Internet. Choose a knot that results in smallest dimension with best retention. Reference: <http://www.iland.net/~jbritton/index.html>. Animated knot tying illustrations located at <http://www.grogon.com/knot>

7. Attach Motor Rope to Motor Dive Shaft. Insert end of Motor Rope through hole in Drive Shaft, then tie knot.



8. Position Motor Module against Pole and align mounting holes over drilled holes.

- Drive furnished screw through lower mounting hole of Motor Module first, then upper hole, and tighten into Pole.

9. Allow Motor Rope to hang below Lift Ring. Pull to make slightly taut and hold. Find the "closed" mark on the Pole (Step 1). Mark on Rope the "closed" location. Do Not cut off excess Rope.

10. Affix Motor Rope to Lift Ring as follows.

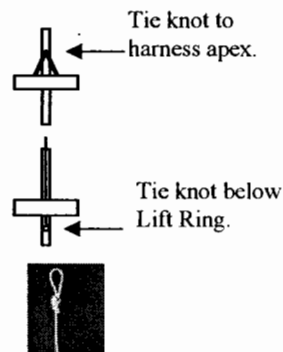
Type A: Pull Motor Rope through Lift Harness. When "closed" mark on Rope is in Lift Harness apex, tie triple half-hitch or suitable knot to secure Rope to Harness.

Type B: Thread Motor Rope through empty hole in Lift Ring. Tie knot at "closed" mark on Rope below Lift Ring. Knot must be large enough to prevent Rope from slipping though hole.

Type C: Use the remaining end of existing Lift Cord to make a loop, then triple half-hitch or suitable knot to retain the loop. Thread Motor Rope through the loop. When "closed" mark on Rope is in loop, tie triple half-hitch to secure Rope at the mark.

Type D: Thread Motor Rope through existing connector or pulley of Lift Ring. When "closed" mark on Rope is in connector, tie triple half-hitch or suitable knot to secure Rope. Or, drill 1/8" hole vertically through Lift Ring. Thread Motor Rope through hole and tie knot. Knot must be large enough to prevent Rope from slipping though hole in Lift Ring.

Type E: Thread Motor Rope through drilled hole (Step 6) and tie knot at "closed" mark on Rope. Knot must be large enough to prevent Rope from slipping back though hole in Lift Ring.

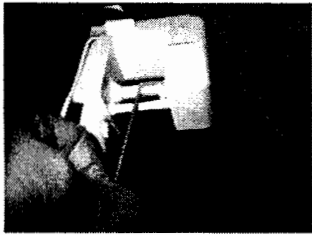


11. Make electrical connections.

- Plug Motor Power Cable into small jack of Control Module.
- Plug AC-DC Adapter Power Cable into larger jack of Control Module.
- Plug AC-DC Adapter into AC wall outlet.

TEST: Push any Transmitter button. LED should light. If not, remove battery Tab in battery compartment, or install 12V A23 battery.

12. Grip Motor Rope loosely and run Motor to wind Rope onto Motor Shaft as follows.



Grip Rope between fore-finger and thumb and **hold 1" from Pole**. Press Transmitter Up Button to start Motor. Continue holding Rope 1" from Pole with slight pressure. Allow Rope to wind evenly across Motor Shaft toward the Pole then overlaps itself and go back away from Pole across Shaft. When Rope starts to become taut, release grip. **Continue running Motor until Lift Ring lifts up 1/4 inch.** Release Transmitter button to stop Motor. **Unplug all cables from Control Module.**

⚠ WARNING: For personal safety, verify that all knots are secure.

13. Remove Pole Clamp from under Lift Ring, then reattach it over the lower mounting screw in Motor Module.



Reattach and tighten the Pole Clamp on top of the **lower** mounting screw of Motor Module and around Pole. The Pole Clamp **round screw housing must be centered** over the lower mounting screw, and positioned between the mounting screw and Motor Rope.

⚠ WARNING: Installation of Pole Clamp over Housing is required for personal safety. Motor can not lift umbrella to full open position unless Pole Clamp installed as illustrated.

14. Cut off excess Motor Rope, leaving a short tail.

15. Assemble Umbrella in hole of patio table if desired.

Control Module can be attached to Umbrella Pole above or below patio table.

- If Control Module is mounted above table height, thread AC-DC Power Cable through hole of table, from bottom side.
- Insert Umbrella Pole through hole of table and into a support base. Do not crimp or cut DC Power Cable. Do not force Pole into hole if hole is too small to accept Pole and Power Cable. Most table holes are large enough to accept Pole and Power Cable side-by-side.
- Position Control Module against Pole above table level, or if free standing umbrella position as desired.
- Mark on Pole position of Control Module mounting holes. Drill 1/16" holes. Mount Control Module to Pole using furnished screws.
- Plug AC-DC Adapter Power Cable and Motor Power Cable into Control Module jacks.
- Test using Transmitter buttons, and Toggle Switch located between plugs at base of Control Module.

TROUBLESHOOTING

Motor does not run. Check GFCI outlet and reset circuit to ON.

Motor struggles to lift umbrella full open. Step 13 missed. Verify that Pole Clamp is installed over Housing as illustrated.

Transmitter does not work. Check Battery compartment. Remove Battery Shield Tab. Replace Battery with 12-volt A23 type.

Clicking sound might be caused by a large knot or long tail in Lift Rope tied to Motor Drive Shaft.

PERIODIC MAINTENANCE

Frequently inspect knots to verify that all are secure. Inspect Pole Clamp and tighten if needed.

Inspect Motor Rope for wear. If worn, replace immediately with comparable cord, minimum 275 pound tensile strength.

CUSTOMER SERVICE

Email: addamotor@cox.net Arizona: 480-836-8170 Toll-free: 888-233-6686 Mon - Fri, 8:30 AM to 4 PM pacific time.

WARRANTY

Add-a-Motor, Inc. provides a One-Year Limited Warranty. This product is warranted free of defects in materials and workmanship for a period of one year from date of purchase. Should a problem occur during the one-year period, please contact Add-a-Motor Customer Service and request a Return Authorization (RA) number. Carefully pack and seal defective item. Inside include copy of purchase receipt. Return by mail or freight prepaid to Add-a-Motor, Inc. 15821 E Jericho, Fountain Hills, AZ 85268. Write RA number on outside of carton. If our inspection shows the trouble was caused by defective materials or workmanship, Add-a-Motor, Inc. will repair or replace the nonconforming part without charge. This warranty does not apply where: repairs have been made or motor case has been opened, repairs are required because of normal wear and tear, product has been abused, misused or improperly maintained, malfunctions due to user fabrication, installation errors, or alterations. IN NO EVENT SHALL ADD-A-MOTOR, INC. BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, CONSEQUENTIAL OR OTHER DAMAGES FROM THE SALE OR USE OF THE PRODUCT. THIS DISCLAIMER APPLIES BOTH DURING AND AFTER THE TERM OF THIS WARRANTY. THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, ORAL OR IMPLIED. ALL OTHER WARRANTIES, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. Correction of nonconformities as provided above shall be purchaser's exclusive remedy and shall constitute fulfillment of all liabilities of Add-a-Motor, Inc., whether in warranty, contract, negligence, tort or otherwise with respect to the equipment or part delivered hereunder. Returns: Product that was user modified in any manner cannot be returned, or is subject to a restocking charge.