

# Half Cassette LED Awning Manual 16x10 and 20x10-ft. Sizes

Installation & Owner's Manual

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## Half Cassette LED Awning Manual 16x10 and 20x10-ft. Sizes

Have a question? We're here to help! Call or email to speak with one of our Product Experts.

833-926-2323

hello@aleko.com

Scan to see the video installation:







#### **Pre-Installation Safety Instructions**

To ensure personal safety and to get the most out of your investment, please read this entire manual and watch our assembly video (QR Code on previous page) before beginning the installation process. If you feel this process is too difficult, we advise that you seek assistance from a local building or home improvement contractor.

WARNING! DO NOT remove the safety wrap the secures the awning arms until instructed to do so. Improper assembly and operation of your awning can result in severe personal injury as well as product failure not covered by warranty.

Please follow all instructions carefully or contact technical support at 833-926-2323 or <a href="mailto:hello@aleko.com">hello@aleko.com</a> for assistance.

#### Warnings

! Failure to follow these instructions can result in a broken product or personal injury. Please be attentive to each step.

! Open the awning package carefully to avoid damaging the product or causing injury to yourself.



#### Warnings

- ! DO NOT remove the safety wrap the secures the awning arms until instructed to do so. The awning arms will spring open and can cause serious injury if handled incorrectly.
- ! Install ALL screws tightly for maximum security.
- ! Never install your awning in an area with high winds. The awning could fall and cause injury or property damage.
- ! Do not install the awning in a place that receives excessive vibrations.
- ! Do not install the awning in places with high temperatures, such as walls near furnaces.
- ! Never place heavy items on the awning frame. This can cause it to fall.
- ! Close the awning in storm conditions, such as excessive wind and rain.
- ! Two adults are required for installation.



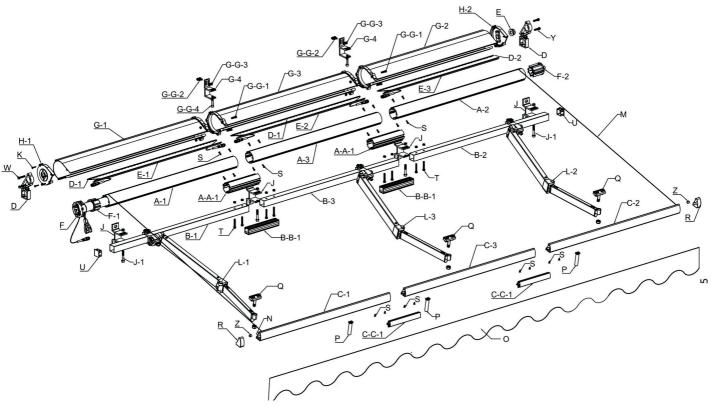


#### **Tools Required for Assembly**

- 1. Tape measure
- 2. Marker or chalk
- 3. Wood or plastic mallet
- 4. Two ladders
- 5. Scissors
- 6. Phillips head screwdriver or electric drill with T30 bit and 7 mm and 16 mm standard bits
- 7. Socket wrench with 10 mm socket
- 8. Allen wrench key in 5mm, 6mm, 10mm, and 19 mm sizes



#### **Parts Diaaram**



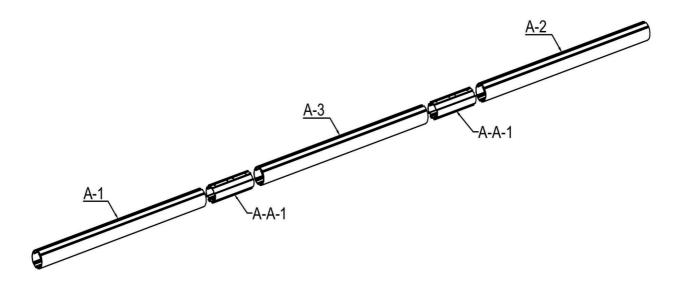
A-1	Fabric Roller (left)	G-G-1	M6*25 Bolts; Nuts
A-2	Fabric Roller (right)	G-G-2	M6*16 Bolts; Nuts; Washers
A-3	Fabric Roller (middle)	G-G-3	M6*10 Square Nuts
A-A-1	(2) Fabric Roller Connector	G-G-4	M8*50 Bolt
B-1	Torsion Bar (left)	H-1	End Cap for Awning Cassette (left)
B-2	Torsion Bar (right)	H-2	End Cap for Awning Cassette (right)
B-3	Torsion Bar (middle)	J	Wall Brackets
B-B-1	Torsion Bar Connector	J-1.	M8*55 Bolts; Nuts; Washers
C-1	Front Bar (left)	K	M4*25 Self-Tapping Screws
C-2	Front Bar (right)	L-1	Left Arm
C-C-1	Front Bar Connector	L-2	Right Arm
D	(2) Fabric Roller Support	L-3	Middle Arm
D-1	LED with Male/Female Plug	М	Fabric
D-2	LED with Female Plug	N	Fabric Liner
E	Plastic Brushing	0	Valence
E-1	LED Plastic Cover (left)	Р	(3) Blocker
E-2	LED Plastic Cover (middle)	Q	(3) Arm-Bar Link
E-3	LED Plastic Cover (right)	R	(3)Plastic Cover for Front Bar
F	Motor	S	M4*10 Screws
F-1	Motor Adapter	T	M6*45 Bolts; Washers; Nuts
F-2	Fabric Roller End Cap with Round Bar	U	(2) Plastic Cover for Torsion Bar
G-1	Awning Cassette (left)	W	M6*40 Bolts (pre-assembled)
G-2	Awning Cassette (right)	Υ	M6*30 Bolts; (2) Washers
G-4	Cassette Holder	Z	(2) Front Bar Fabric Lock

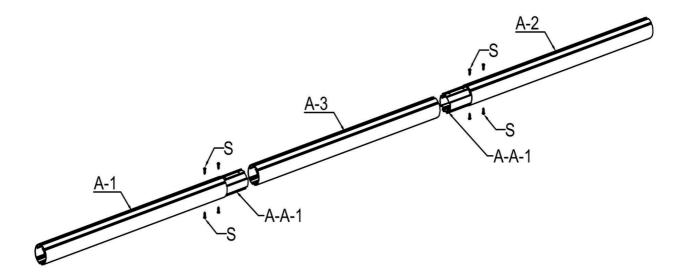


#### **Assembly Instructions**

#### **Step 1: Assemble the Fabric Roller**

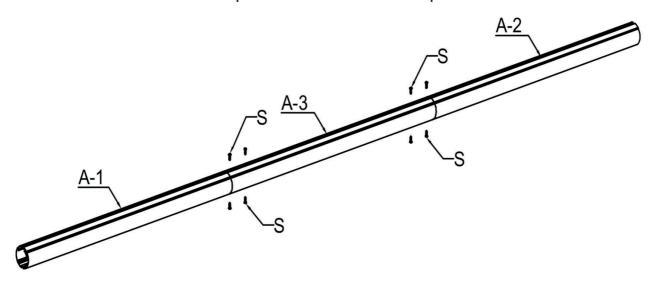
Insert fabric roller connectors (A-A-1) into right and left fabric roller bars (A-1) and (A-2) and tap into place with a mallet. Use 4 (S) screws on each side and standard Phillips bit to secure in place.







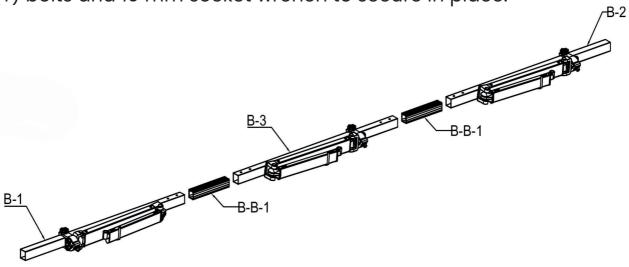
Insert fabric roller connectors (A-A-1) into middle fabric roller bar (A-3) and tap into place with a mallet. Use 4 (S) screws on each side and standard Phillips bit to secure into place.



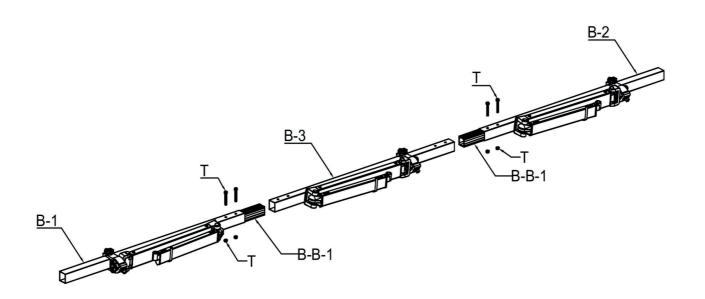
Step 2: Assemble the Torsion Bar

## WARNING! DO NOT REMOVE THE SAFETY SLEEVES THAT HOLD THE ARMS DOWN!

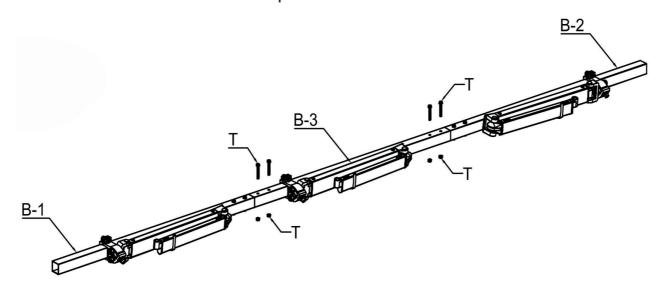
Insert the torsion bar connectors (B-B-1) into the left and right torsion bars (B-1) and (B-2) and tap into place with a mallet. Use 2 (T) bolts and 10 mm socket wrench to secure in place.







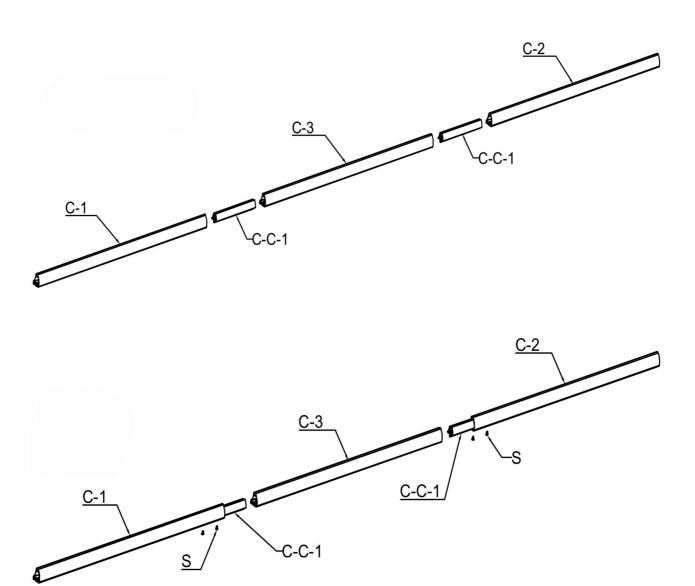
Insert torsion bar connectors (B-B-1) into the middle torsion bar (B-3) and tap into place with a mallet. Use 2 (T) bolts and 10 mm socket wrench to secure in place.





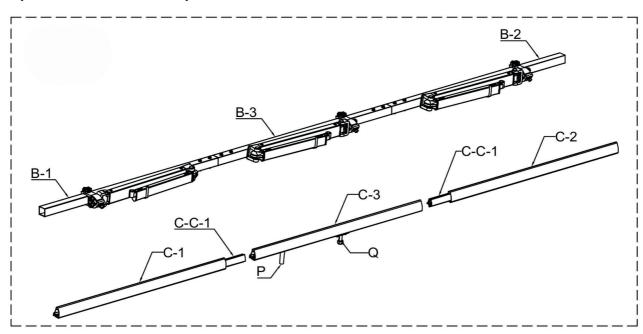
#### Step 3: Assemble the Front Bar

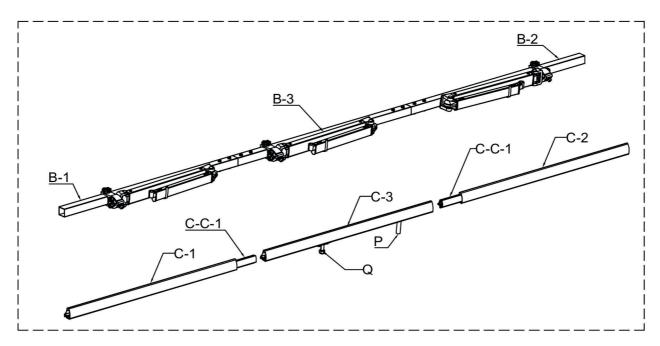
Insert the front bar connectors (C-C-1) into the left and right front bars (C-1) and (C-2) and tap into place with a mallet. Use 2 (S) screws on each side and standard Phillips bit to secure in place.





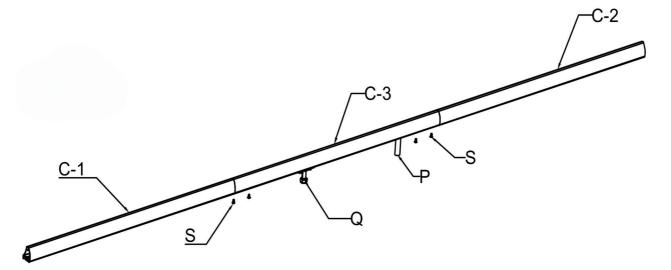
Insert arm-bar link (Q) and blocker (P) through the side slot of the middle bar and into position based on the diagrams below (the position depends based on which way the middle torsion bar (B-3) was assembled).







Insert front bar connectors (C-C-1) into the middle front bar (C-3) and tap into place with a mallet. Use 2 (S) screws on each side and standard Phillips bit to secure in place.





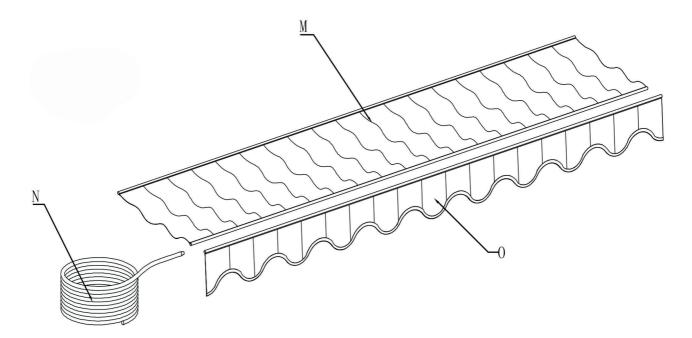
#### Step 4: Assemble the Fabric

Unfold fabric (M) and valance (O). Confirm both are facing right side up before beginning next steps. The fabric liner (N) comes with 3 cords: 2 thick cords and 1 thin cord.

Thread the thin fabric liner (N) through the top side of the fabric (M) that will be nearest to the wall when awning is mounted.

Thread the two thick fabric liners (N) through the bottom side of the fabric (M) and through the valance (O)

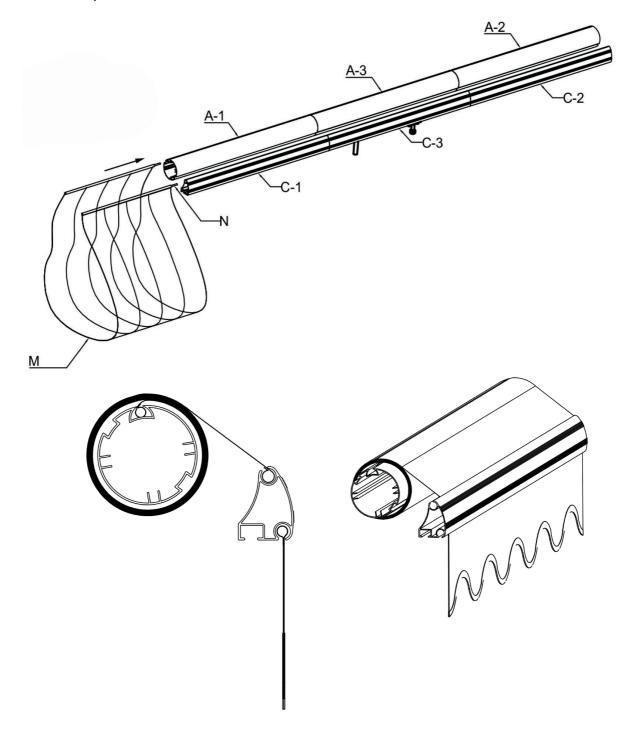
Tip: These steps are easier to complete with two people.





Thread the top side of the fabric (M) and its liner through the slot in the assembled fabric roller (A). Then, thread the bottom side of the fabric (M) and the valance (O) into the front bar (C).

Tip: These steps are easier to complete with two people. If the liners get caught where the fabric seams are located, wiggling the fabric helps!

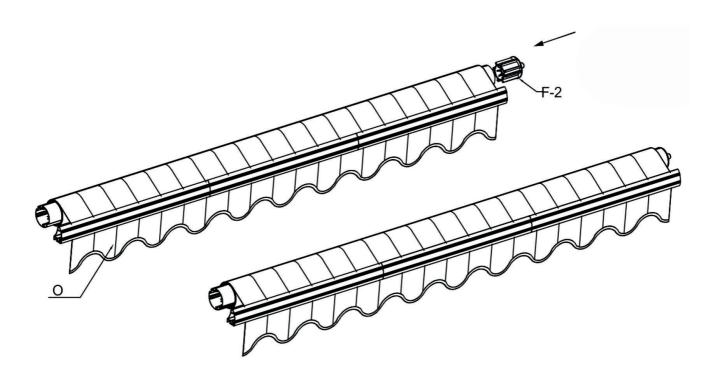




Roll up the assembled fabric. Be sure to roll tightly so that the fabric is taught when retracted.

Insert the fabric roller end cap (F-2) into the right side of the assembled fabric roller (A).

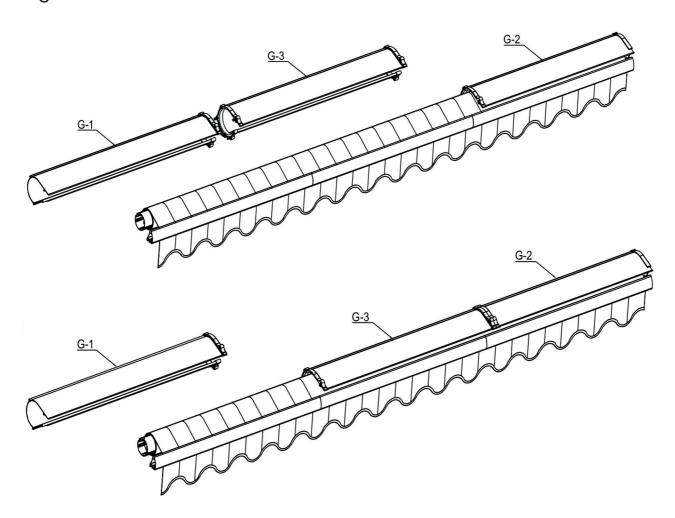
Tip: Use the fabric's left and right seams as a guide to en fabric is rolled up evenly.





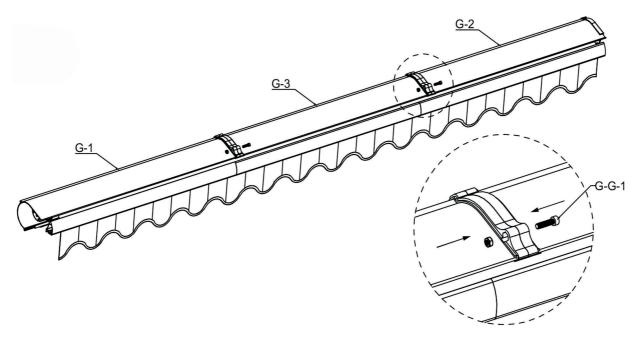
#### Step 5: Assemble the Cassette

Insert the assembled fabric roller into the right cassette (G-2). Then, connect the middle cassette (G-3) to the middle cassette (G-2) and use (G-G-1) bolts and T-30 bit to secure the cassettes together.





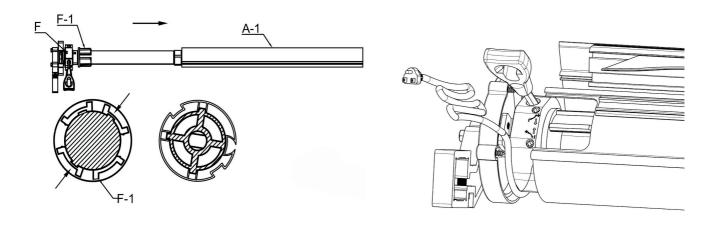
Connect left awning cassette (G-1) to middle cassette (G-2) and fasten with (G-G-1) bolts and T-30 bit.



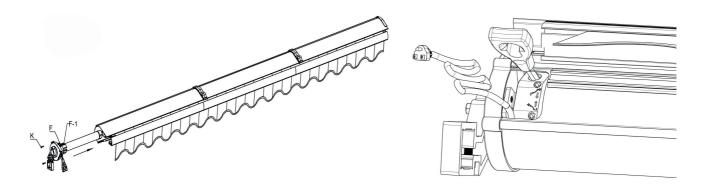


#### **Step 6: Assemble Motor**

Insert motor (F) into the left fabric roller (A). The power cord, hand crank, and limit switches should fit into the gap provided by the fabric roller.



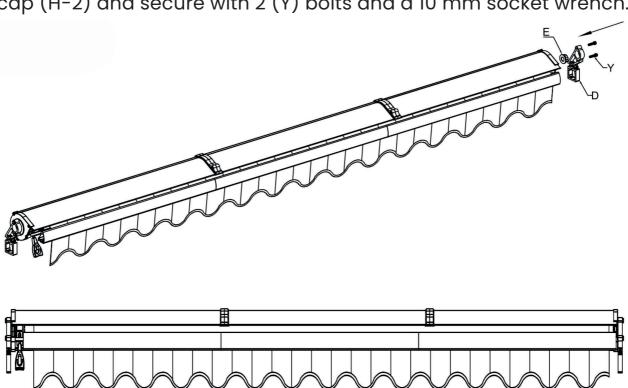
Insert motor (F) into the left fabric roller (A). The power cord, hand crank, and limit switches should fit into the gap provided by the fabric roller.





#### **Step 7: Assemble the Roller Support**

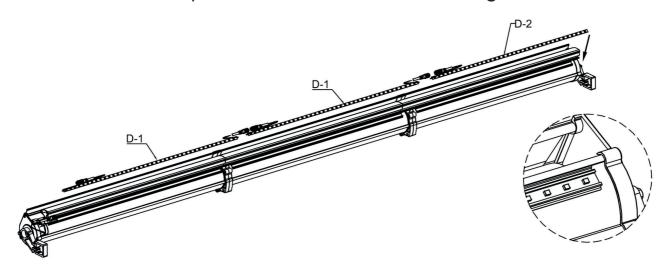
Attach fabric roller support (D) and plastic brushing (E) to end cap (H-2) and secure with 2 (Y) bolts and a 10 mm socket wrench.



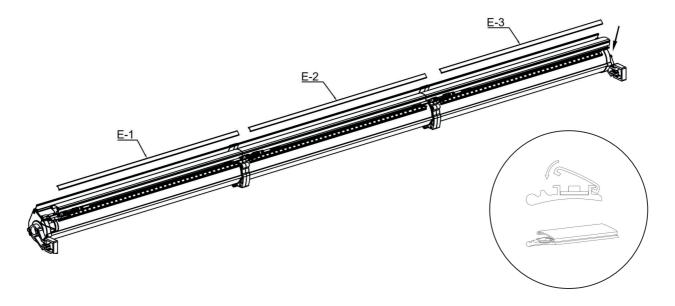


#### **Step 8: Assemble LED Lights**

Stick adhesive LED tape (D-1) (D-2) to groove on the cassette. The D-1 LED tape should be installed on the left and middle cassettes, and the D-2 LED tape should be installed on the right cassette.

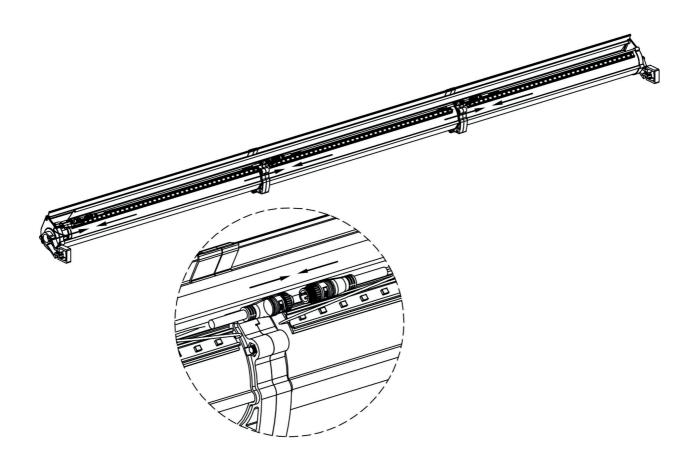


Fix plastic cover (E-1) (E-2) (E-3) to LED groove on the cassette.





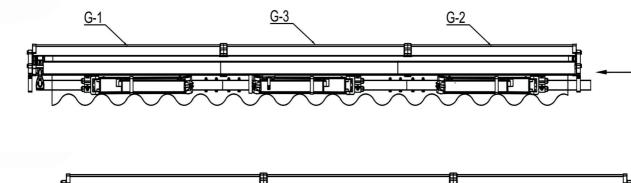
Connect motor (F) to LED tape (D-1). Then connect remaining LED tapes together.

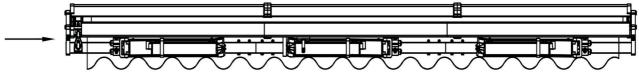




## Step 9: Connect the Assembled Cassette to the Assembled Torsion Bar

Insert assembled torsion bar into the assembled cassette and roller bar. Make sure the ends of the assembled torsion bar are flush, then secure by tightening bolts with a 6 mm Allen wrench.



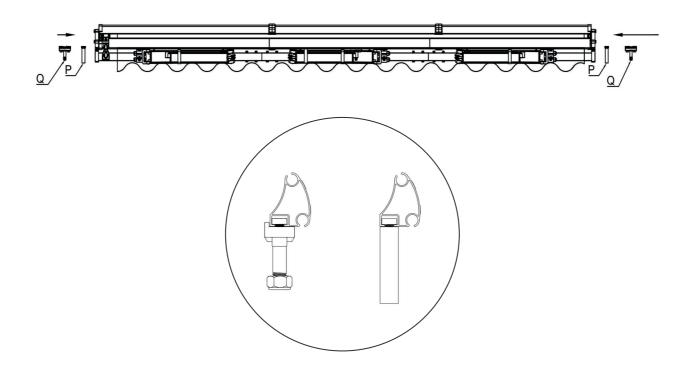




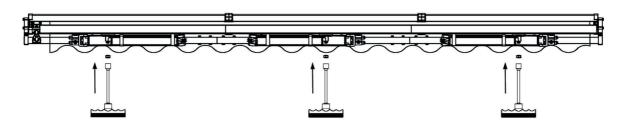
#### Step 10: Insert Remaining Blockers and Arm Bar Links

Before assembling, inspect the wrapping on the arms to ensure the wrapping is still intact. **Arm bars are spring-loaded and can cause serious damage or injury during assembly.** 

Slide blockers (P) into the left and right-side grooves located on the assembled front bar (C). Insert arm bar links (Q) into the same groove on the assembled front bar (C).



Slide the blockers down to be a few inches away from the inside of each arm elbow. Then tighten with a 5 mm Allen wrench.

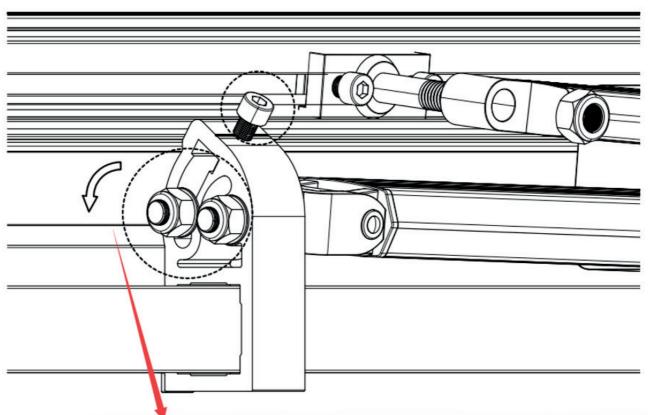






#### Step 11: Attach Arm Bar Links to Awning Arms

Line up arm bar links with top of each arm and tighten with a 6mm Allen wrench. Then, insert arm bar links into top of arm. Hand-tighten nuts to secure. Important: **Do not over-tighten nuts!**Over-tightening nuts will prevent awning rotation.



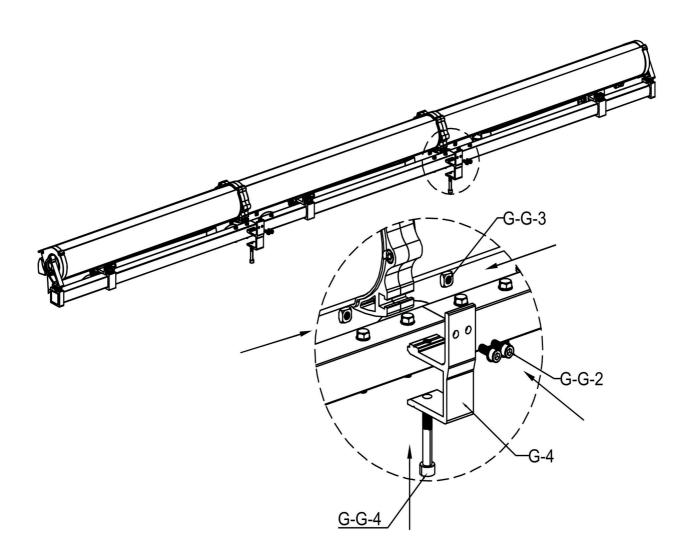
You can loosen these three locking bolts on the torsion bar if needed to fit the arm link onto the arm.



#### **Step 12: Attach Cassette Support**

Attach cassette support (G-4) to torsion bar (B). Insert 2 nuts (G-G-3) into the back groove of the assembled cassette (G) and fasten with two bolts (G-G-2).

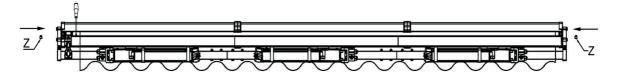
Secure the bottom of the cassette support with 1 bolt (G-4).



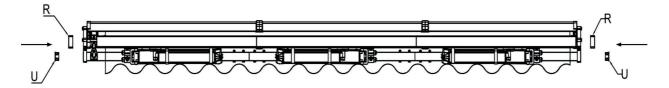


## Step 13: Insert Fabric Locks, Torsion Bar Cover, and Front Bar Cover

Insert fabric locks (Z) into both ends of the assembled front bar (C), and tighten with a Phillips screwdriver.



Insert torsion bar cover (U) and front bar cover (R) onto each end of the assembled torsion bar and assembled front bar, respectively.



#### Step 14: Cut Wrapping on Arms

Once the awning is completed, you can cut the wrapping on the arms.

Warning! Use caution when removing the safety sleeves, as the arms are spring-loaded!



#### **Wall Mounting Instructions**

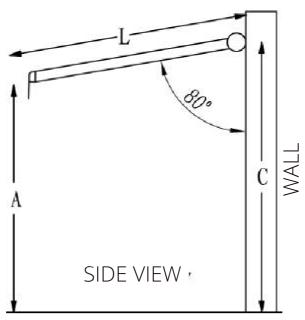
#### **Safety Instructions**

Never attempt to secure the wall brackets to loose wall stones or any surfaces that are not absolutely firm.

**WARNING!** It is critical that you fasten all mounting brackets to studs, joists, headers, or other major structural components. Failure to securely fasten all the brackets to the wall could result in the collapse of the awning and cause personal injury or death.

#### **Mounting Height**

It is important to consider the awning's drop area before installing your wall mounts. If you would like to install the awning above a patio door, for example, please leave at least 8 inches above the door frame and ensure that the awning does not interfere with opening and closing the door. The drop angle can only be changed minimally.





**Recommended Installation Height:** 8-12 feet; the distance between the roof and the bottom bracket hole should be at least 8 inches. The awning has a drop of 24 inches when at a slope or 15 degrees.

#### **Calculating Awning Slope**

You can use the following formula to calculate the appropriate awning angle:

#### $C = A + 0.17 \times L$

A = The desired height of the arm bar

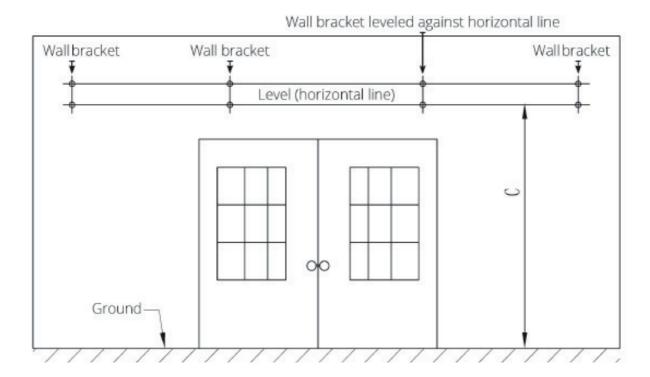
L = The length of the arm stretched out

C = The height of the wall brackets

#### **Measuring the Mount Site**

- Measure the length of your awning along the wall where you intend to install it.
- Use a leveler to make a chalk line across the distance. This line will be the highest point of your awning and will align with the top of the wall bracket.
- Now that you have a straight, centered line, measure the middle point and mark it. This is where the middle bracket will be installed.
- Take a wall bracket and place the top of it, completely level, under the line as shown in the diagram below. With chalk or a marker, mark the position of all the wall brackets and their bolt/screw holes.





#### **Drill the Bolt Holes**

#### If you are mounting your awning to brick or concrete:

• Using a 16mm masonry drill bit, drill bolt holes approximately 4 inches deep.

#### If you are mounting your awning to wood:

• Drill holes with 7 mm bit to fit mounting screws.

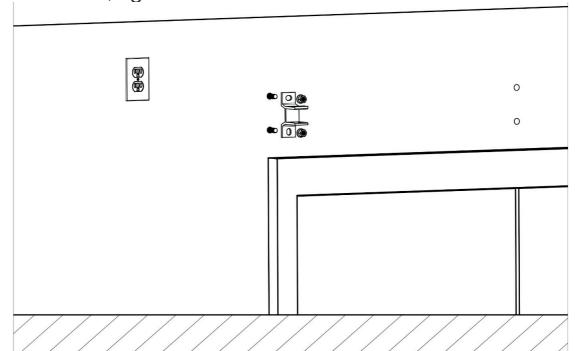
IMPORTANT! All bolt/screw holes must be aligned vertically and horizontally to ensure that the awning hangs straight. The diameter and depth of your mounting holes must be the same size as your expansion bolts or mounting screws.



#### **Mounting the Wall Brackets**

#### If you are mounting your awning to brick or concrete:

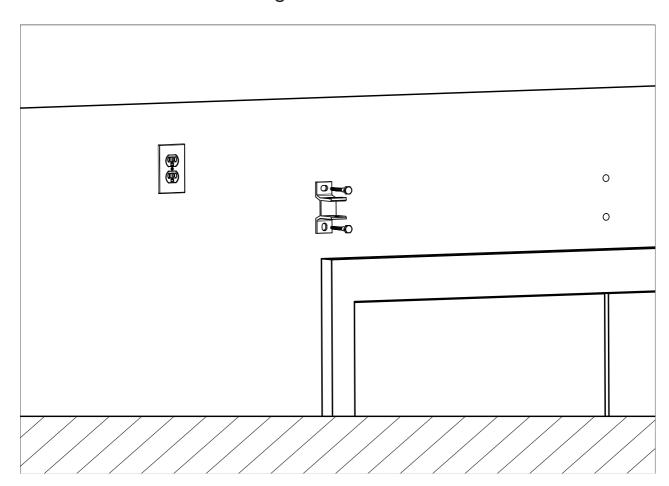
- Insert expansion bolts. It may be necessary to drive the bolts in with a wooden mallet. (If a mallet is necessary, we recommend placing the nut on the screw loosely before hammering to avoid damaging the bolt threads).
- 2. Make sure the bolts are firmly in place and stick out of the wall approximately 1 inch or less so that the wall bracket can be installed onto them.
- 3. Firmly tighten the bolts with a 19 mm Allen wrench. It is best to use a closed-end wrench to avoid damaging the nut, should it slip.
- 4. Now that the bolts are securely in the wall, remove the nuts and place wall brackets over the bolts. Then, place washers over the bolts and secure them with the nuts.
- 5. The brackets must sit firmly on the wall! If there is any movement, tighten them more.





#### If you are mounting your awning to wood:

• Place the wall brackets over the holes you just drilled and secure with screws using a 7 mm bit.



#### **Mounting the Awning**

 Once the wall brackets are secure, place the awning (with two people!) on to the brackets and secure with (J-1) bolts and 10 mm socket wrench.

**IMPORTANT!** Do not attempt to open awning with motor until instructed to do so. Using the motor before setting up the deploy and retract positions can damage your awning.

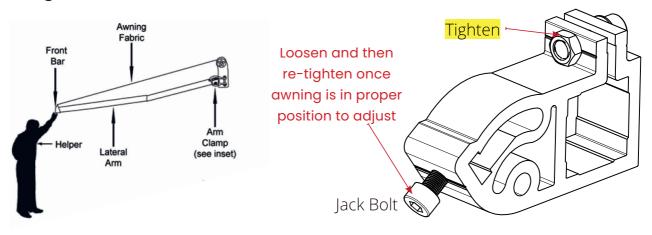




#### **Adjusting Awning Pitch**

Each awning comes with a pre-set pitch (angle) that is considered ideal. However, you may need to adjust the pitch slightly to ensure the awning is completely even when retracted.

To adjust your awning pitch, have someone help hold the front bar while you adjust the bolts on the torsion bar as shown in the diagrams below.

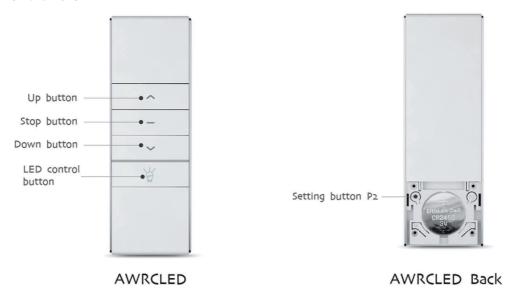


**IMPORTANT!** If you choose to raise the awning pitch, this will increase risk of rainwater pooling on the fabric. To prevent the awning from collapsing due to rainwater weight, you must retract the awning when unattended. Failure to do so could result in a broken awning or personal injury.



## How to Pair Your Awning Remote and Set Up Awning Limit Switch Positions

#### **Remote Guide**



#### **Technical Support**

• Emission Power: 10 milliwatt

• Operating Temperature: 14°F - 122°F

• Operating Distance:

o Open: 200m

Two Walls: 30m

• ·LED Control: Press LED button to turn on LED to 50% brightness. Press again to turn the LED to 100% brightness. Press the button a third time to turn off LED.



#### **How to Pair Remote with Awning Motor**

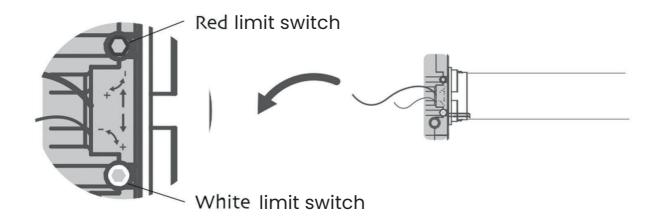
- 1.Disconnect the power and wait for 10 seconds. Reconnect the power so that the motor jogs and beeps once.
- 2.Press P2 on the remote so that the awning motor will beep once.
- 3. Press P2 again so that the motor beeps once more.
- 4. Turn the remote immediately and press the DOWN button so that the awning jogs once and beeps several times.

The remote is now paired with the motor.

**IMPORTANT!** Do not attempt to open awning with motor until instructed to do so. Using the motor before setting up the deploy and retract positions can damage your awning.

#### How to Set Up Deploy and Retract Positions

Limit Switch Diagram







To Set the Deploy Position			
		Using the special	- 10.
	If the awning	regulator tool, turn	
	automatically	the white limit switch	
Press	stops before the	toward "+" sign until	
DOWN	desired position:	the awning reaches	+ +
button on		the desired position.	_
the	If the awning does		
remote	not stop when it	Turn the white limit	
	reaches the	switch toward "-" sign	
	desired position,	and continue to	
	hit the STOP	check if the awning	
	button on your	will stop at the	D +
	remote to prevent	desired position.	_
	motor damage:		

To Set the Retract Position (should be set 2 cm away from the tube)			
Press UP button on	If the awning automatically stops before the awning is closed in the desired position:	Turn the red limit switch toward "+" sign to set the desired closed position.	+
the remote	If the awning does not stop in the correct closed position, press the STOP button on your remote to prevent motor damage:	Turn the red limit switch toward "-" sign until the awning stops 2 cm from the tube.	





	Case of Malfunction	Reason	Solution
1	The awning does not work when operated by remote control.	1.There is no power supply.  2.The residual current automatic circuit breaker is turned to "off."  3.The voltage is too low.	1.Check the plug to ensure it is properly connected. 2.Call a professional to inspect. 3.Call a professional to inspect.
2	The awning does not work when operated by the remote, although you can hear the signal sound from the remote receiver.	1. The remote receiver and motor are switched or the wire from the motor is disconnected.  2. The motor switched off due to the overheat protection.	1. Check two places: fasten pins and the screws.  2. The motor will automatically resume operation after approximately 20 minutes.
3	The fabric is loose, even though the awning is extended entirely.	<ul><li>1. The pitch needs to be adjusted.</li><li>2. The fabric needs to be rolled up tighter.</li><li>1. The arm bar link placement needs to be adjusted.</li></ul>	<ul><li>1. Adjust pitch to be higher.</li><li>2. Re-roll the fabric to be tighter.</li><li>3. Adjust arm bar links.</li></ul>
4	There is unwanted noise when operating the awning.	1.There is a loose screw.  2.The arm bar links have been over tightened.	1. Check all screws to ensure they are tightly fastened. 2. Adjust arm bar links to relieve tension.
5	When operated by a remote control, the indicative lamp does not work and there is no signal from the receiver.	1.The cell is exhausted. 2.The cell is disconnected.	1. Replace with a new cell. 2. Reset the cell.
6	Motor starts slowly or does not work after power is connected.	1.Power voltage is low 2.Wiring error 3.Overload 4.Improper installation	1. Adjust power to proper rating. 2. Check circuit and correct wiring connections. 3. Ensure rated torque is not being exceeded. 4. Re-install the motor
7	The motor stops suddenly after running.	The motor has overheated.	The motor will automatically resume after 20 minutes of cooling.





#### **Awning Motor Warnings**

- Motor Working Temperature: 14°-120°F
- Operational Voltage: 110 V
- 1.Do not expose tubular motor element to water at any time.
- 2.Do not pound the tubular motor into place.
- 3.Do not drill into the motor assembly for any reason.
- 4.Ensure slack in the power cord to allow moisture to run off before reaching electric motor.

### WARNING: Important safety instructions to be read before installation and use

This product contains a coin/button cell battery. If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death. Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the product and keep away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

- 1: Even used batteries may cause severe injury or death.
- 2: Call a local poison control center for treatment information.
- 3: Non-rechargeable batteries are not to be recharged.
- 4: Do not force discharge, recharge. disassemble, heat above (manufacturer's specified tem perature rating) or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.
- 5: Ensure the batteries are installed correctly according to polarity (+ and -).
- 6: Do not mix old and new batteries, different brands or types of batteries, such as alkaline, car -bon-zinc.
- or rechargeable batteries
- 7: Remove and immediately recycle or dispose of batteries from equipment not used for an extended period of time according to local regulations
- 8: Always completely secure the battery compartment. If the battery compartment does not close securely, stop using the product, remove the batteries and keep them away from children.
- 9: Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate.



#### Warning: contains coin battery

#### **AWARNING**

- INGESTION HAZARD: This product contains a button cell or coin battery.
- **DEATH** or serious injury can occur if ingested.
- A swallowed button cell or coin battery can cause Internal Chemical Burns in as little as 2 hours.
- KEEP new and used batteries OUT OF REACH of CHILDREN
- **Seek immediate medical attention** if a battery is suspected to be swallowed or inserted inside any part of the body.

