



OPERATION & MAINTENANCE



CLEANING STEPS

Arcadia Louvered Roof systems are easy to maintain. Generally, normal rainfall is sufficient to keep its appearance clean. If cleaning is required, we recommend the following steps. Particular attention should be given to areas under eaves, porches, awnings, and other overhangs that have limited exposure to the natural cleansing effect of rainfall.

01 **MODERATE DIRT**

An occasional washing with clear water using a garden hose and soft-bristled brush is recommended (a long-handled, car-washing brush is ideal for this purpose).

02 **HEAVIER DIRT ACCUMULATION**

Wash in the manner indicated above, but use the following solution:

- 1/3 cup detergent (e.g. Tide®)
- 2/3 cup trisodium phosphate powder (also known as T.S.P.)
- 1 gallon water

03 **MILDEW ACCUMULATION**

Mildew can collect on surfaces of all types of building products and is often evident on surfaces that have not been properly maintained. Normally, mildew will appear as black spots. Mildew is easy to remove by using the following cleaning solution:

- 1/3 cup detergent (e.g. Tide®)
- 2/3 cup trisodium phosphate powder (also known as T.S.P.)
- 1 quart sodium hypochloride 5% solution (e.g. Clorox®)
- 3 quarts water

04 **ENVIRONMENTAL BLACK STREAKING**

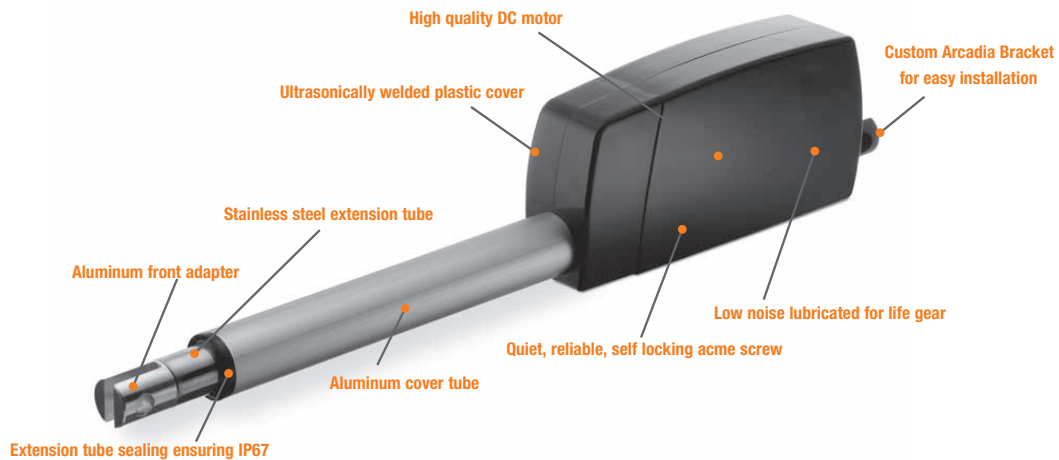
Black streaking can also collect on the surface of a structure. Black streaking can be removed by using Gutter Zap 4, which can be purchased from the dealer that installed your unit.

05 **CAULKING COMPOUNDS, TAR, ETC.**

Use mineral spirits in reasonable amounts, apply directly to foreign substance. Rinse the area thoroughly with water immediately after cleaning.

OUT WITH THE OLD AND IN WITH THE NEW ATIONS

Introducing the new upgraded motor to the Arcadia Louvered Roofs System. A sleek and compact design, washdown protection, electronic limit switches and a national sales and service organization are just some of the features offered. The result is the optimum motor for the applications it is built to serve. Read below for some extra information about how this actuator will improve the performance of Arcadia's current Louvered System:



MAINTENANCE FREE

Arcadia Louvered Roofs new motor is unique in that it requires zero maintenance throughout the entire life of the motor. The average life is 10,000 cycles (one full stroke back and forth) at the maximum load. Once properly installed, the new Arcadia motor will provide trouble-free operation with zero maintenance, thereby reducing the total cost of ownership.

UNIQUE & COMPATIBLE

Arcadia Louvered Roofs linear motor is unique in that it offers a one-of-a-kind sensor (ELS or electronic limit switches) which turns off in case of overload (i.e.: branches fall, snow, ice, etc.). These features are unavailable anywhere else. The new motor has 450 lbs per static and dynamic load; this makes it 3 times stronger than our previous motor.

EXCEPTIONALLY QUIET

Arcadia Louvered Roofs new motors boast a low sound level of less than 45 dBA, about the same as an average library. This quiet, consistent low sound level is conducive to optimal outdoor living and provides unobtrusive linear motion in an elegant package.

ENVIRONMENTAL PROTECTION

The motor is able to operate in harsh conditions where it is exposed to washdown, rain, dust, or other particulate without the use of any additional cover. The Arcadia Louvered Roofs motor is rated for protection class IP67.

EXTRA CERTIFICATIONS & STANDARDS

Arcadia's new motor is designed to meet all relevant certificates and is built in accordance with ISO 9000. That means it is both UL & CE certified. American made, American strong!

SPECIFICATIONS

Specifications are subject to change without notice. It is the responsibility of the product user to determine the suitability of this product for a specific application.

TECHNICAL SPECIFICATIONS 2000N

VOLTAGE		
Input voltage	[VDC]	12 / 24
LOAD		
Static load (Fx), maximum	[N]	2000 (450 lbs)
Dynamic load (Fx), maximum	[N]	2000 (450 lbs)
STROKE		
Stroke lengths, standard	[cm]	10, 20, 30, 40, 50
CURRENT		
Current consumption, rated load	[A]	4.5 / 2.2
Current consumption, stall/in-rush	[A]	14 / 8.0
GENERAL DATA		
Speed, no load	[mm/s]	5.8 (.23"/s)
Speed, rated load	[mm/s]	4.0 (.16"/s)
Operating temperature limits	[°C]	-25 to +40 (-13F to 104F)
Duty cycle, maximum	[%]	10
Life, average	[cycles]	10 000
Sound level	[dBa]	< 45
Lead screw type		acme
Protection class		IP67
Certificates		CE (EN60601-1) UL (UL60601-1)

FEATURES

Maintenance free
Very high sealing degree due to ultrasonic welding of enclosure
Washdown proof during operation
Can be submerged when not operating
Compact and light weight

OPTIONS

Electronic limit switches (ELS) ¹
Anti rotation mechanism ²
Mounting adapters turned 90°
¹ Shuts off the power at the end of stroke and all along the stroke at overload conditions. ELS is normally set for 120% of the rated dynamic maximum load.
² Prevents the extension tube from rotating if it is not fixed in the end.

BEFORE CONNECTING THE RECEIVER, YOU MUST READ THE INSTRUCTIONS CAREFULLY.

1 CHARACTERISTICS

- 01 Voltage: DC12V or DC24V
 - 02 Operation temperature: -10°C to 50°C
 - 03 Operation frequency: 433MHz (315MHz Optional)
- NOTICE:** RF315MHz is not compatible with RF433MHz

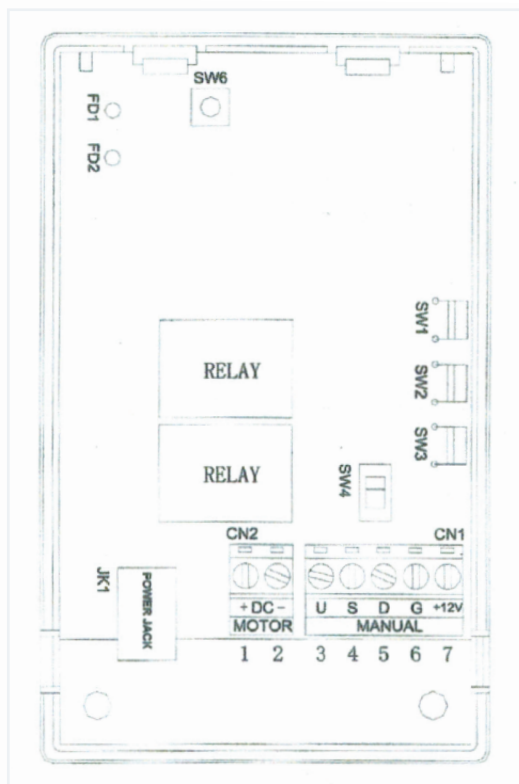
2 RECOMMENDATION FOR INSTALLATION

- 01 Install the receiver with the cables entry pointing downwards to avoid water infiltration
- 02 Do not install the receiver against or sheltered by a metallic parts (it could affect the radio transmission)
- 03 Minimum distance between the receiver and the floor: 150CM
- 04 Minimum distance between the receiver and the roof: 30CM
- 05 Minimum distance between the receiver and the transmitter: 30CM
- 06 Minimum distance between two receivers: 20CM

3 CABLING OF THE RECEIVER

The receiver is compatible with all standard tubular motor. Below is the cabling arrangement diagram and description:

- 01 Disconnect the mains supply before carrying out any work
 - 02 Be careful to avoid static electricity which could damage some electronic components
 - 03 Please use flexible cables
 - 04 Make sure that cable will not be affected by no longitudinal forces action after installation
- NOTICE:** Earth wire must be connected



FUNCTION

- 01 FD1: Power LED
- 02 FD2: Operation LED
- 03 SW6: Set code button
- 05 SW4: Change direction switch
Just used to change direction of manual switch on receiver.

WIRING

- 01 Motor Cable Terminals
 - 1 + connect DC positive pole
 - 2 - connect DC negative pole
- 02 Manual Switch Terminals
 - 3-U: Connect Switch UP/DOWN
 - 4-S: Connect Switch Stop
 - 5-D: Connect Switch DOWN/UP
 - 6-G: Neutral (connect DC12V negative pole)
 - 7-+12V provide 12V power to sensor

NOTICE: No need to change wiring when changes motor direction!
The outer manual switch can be compatible with three-wire cable and four wire cables. When connect three wire cable, no need to connect "S".

BEFORE CONNECTING THE RECEIVER, YOU MUST READ THE INSTRUCTIONS CAREFULLY.

4 PROGRAM SETTING

1. Choose the channel of transmitter, which you need.
2. Press the programming button of receiver, program light flashing, the receiver is ready to set up program. It'll return to the original status if no pressing its "STOP" button within 10 seconds.
3. Press "STOP" button of the receiver till the indication light flashing to confirm the program setting request.
4. Press transmitter's "UP" button till the receiver program indicating light flashing three times then go out, program setting is finished. (The same operation to any channel).

5 DELETE THE CHANNELS' MEMORY FROM RECEIVER

Press "DOWN" and "STOP" buttons simultaneously (about 7 seconds) till the program setting light flashing three times then go out, indicating that the channel memory of receiver has been deleted.

6 DELETE ONE OF THE CHANNEL'S MEMORY

1. Choose the channel which you want to delete on transmitter.
2. Press "programming setting button" of receiver (picture 5), program setting light begin flashing means receiver is ready to be programmed. It will return to original status if not pressing receiver's related button within 10 seconds.
3. Press "STOP" button of the receiver (picture 6) till the indication light flashing to confirm the deleting request (when using double channel receiver, just the A single or B single's STOP button you need.)
4. Press transmitter "DOWN" Button, the program setting light flashing three times then go out, indicating channel has been deleted. (The same operation to other channels). It will return to original state if not pressing transmitter's related button within

7 SETTING RECEIVER'S DIRECTION

Pressing receiver's UP and DOWN buttons at the same time about 7 seconds (picture 8) till program setting light flashing three times then go out, changing direction is completed (when using double channel receiver, just choose the one you want to change.)

8 | CHANGING TRANSMITTER'S DIRECTION

1. Choose the channel whose direction you want to change.
2. Press "programming" button of receiver (picture 5), the light of program setting flashing means the receiver is ready to be programmed, it will return to original status if no pressing receiver's STOP button within 10 seconds.
3. Press "STOP" button of the receiver (picture 6) till the indication light flashing to confirm the changing direction request (when using double channel receiver, just the A single or B single' STOP button you need.)
4. Press "DOWN" button of transmitter, if the program setting light of receiver flashing three times then goes out, Indicating changing direction is completed. The transmitter will return to original status if no pressing transmitter's related button within 10 seconds. (The same operation to other channel.)



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9 SETTING "TOUCH ACTION" ON THE RECEIVER

Pressing "UP" and "DOWN" buttons at the same time (picture10) about 7 seconds till the programming light flashing three times, now the "touch action" of the receiver is finished. The same operation to delete this action.

Transmitter Operation: When receiver is under "touch-action" status, press transmitter's "UP" and "DOWN" button at the same within 1.5 seconds, now the transmitter is programmed as "touch-action" too. (If this pressing time is over 1.5 seconds, the transmitter won't has this action).

10 REPLACING BATTERY

- 01 Remove the back screw and open the back board.
- 02 Take out the old battery, then replace the new one.
- 03 Replace the back cover and screw. (Please dispose of the old battery appropriately).

11 TROUBLESHOOTING

ITEMS	SYMPTOM	PROBABLE CAUSE
1	Operation LED light flashes, but nothing happens when press remote control.	Please check the connection of wires or check the program setting.
2	The LED light of the transmitter if off or weak.	Please check the battery of the receiver.
3	The LED light of the transmitter and the receiver work well, but the motor does not work.	Please check the connection and main power supply or motor, or check the main power supply.

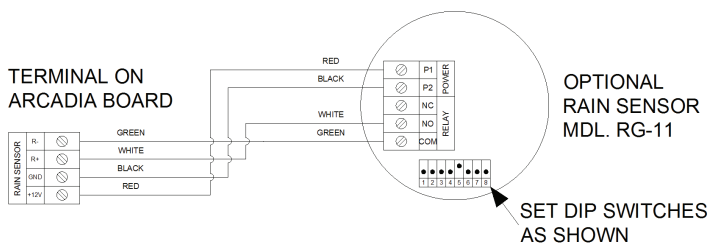
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BOARD SETUP

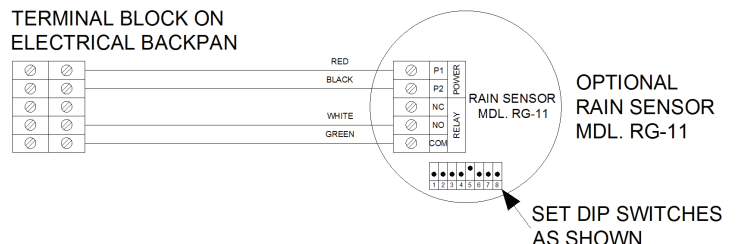
- 01 Disconnect all motors.
- 02 Turn on power to the board.
- 03 Press and hold the set button on the board for 5 seconds. This does a factory reset. This will also set password back to default "12345678".
- 04 Turn off power to the board and wait 10 seconds after the light on the board goes off.
- 05 Turn power back on to the board.
- 06 Attach motor 1 (and motor 5 if add-on board is present, etc.). Do not connect any other motors at this time.
- 07 Short press and release the set button on the board next to the battery for calibration. This will automatically extend and retract motor 1 (and motor 5 if add-on board is present, etc.).
- 08 Attach the rest of the motors.
- 09 Set up the app and fully open and fully close all motors using the app open and close buttons. Do this before you do anything else, this is the final step to finish calibration from step 7.
- 10 Everything is now ready, you can do presets on the app, weather, etc. at this time. Enjoy!

RAIN SENSOR (OPTIONAL)

- 01 Mount rain sensor above Arcadia system in an open area, away from the side of any upper structure, and in an unobstructed area to easily detect rainfall.
- 02 Make electrical connection between rain sensor and the Arcadia board using 4 conductor, 18 awg wire.
- 03 Wire rain sensor per applicable wiring diagram below.
- 04 Make sure the programming dip switches are set up as shown for proper function with your Arcadia system. Switch 5 is in the up position, all other switches are in the down position.



iLOUVER WIRING DIAGRAM

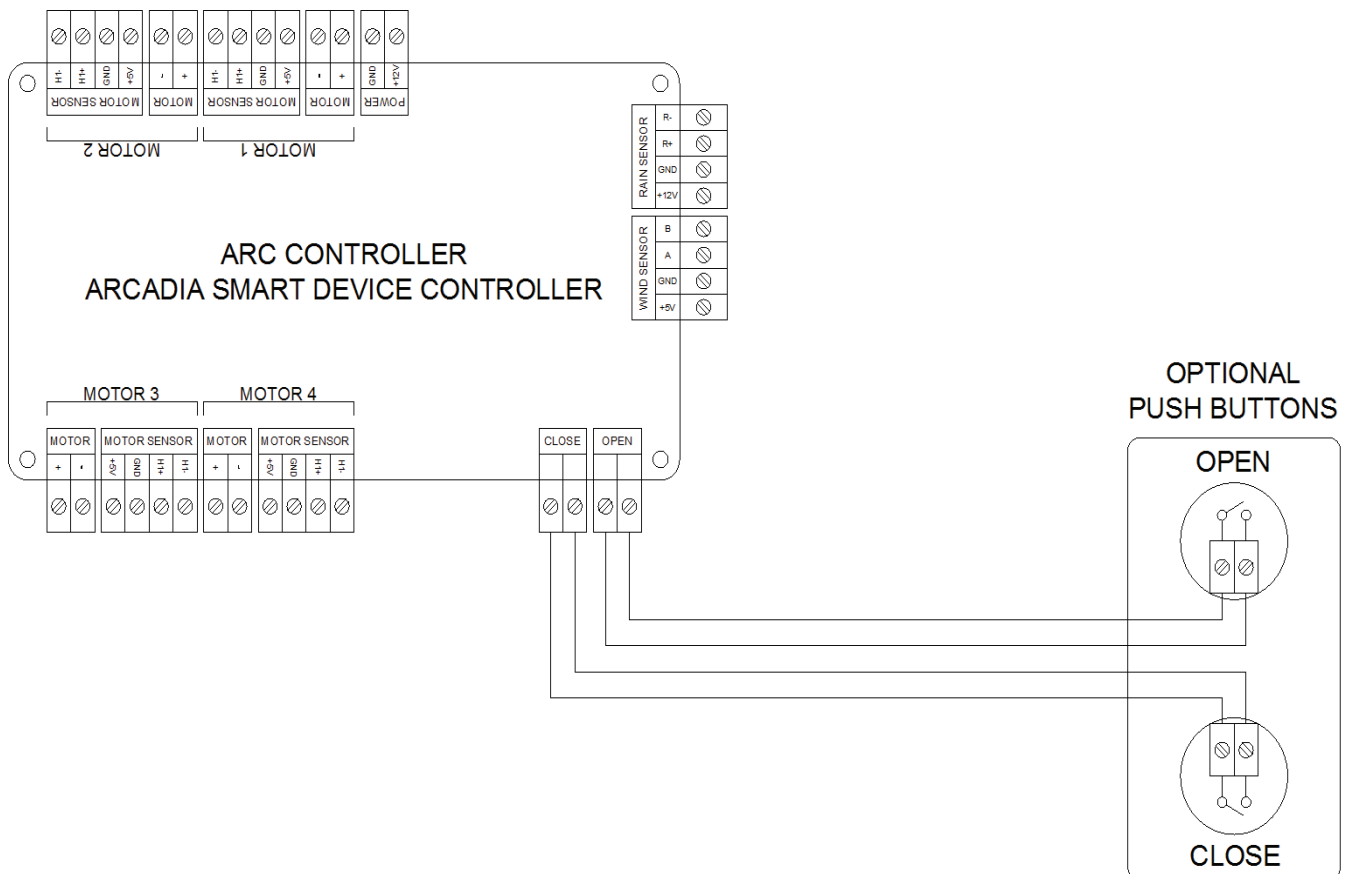


RF RECEIVER WIRING DIAGRAM

BEFORE CONNECTING THE RECEIVER, YOU MUST READ THE INSTRUCTIONS CAREFULLY.

PUSH BUTTON (OPTIONAL)

- 01 The Arcadia wired push button is for use with the iLouver technology smart board only, and not with the RF type receivers.
- 02 Push button cover plate can be mounted on any single gang type electrical box appropriate for the installation location.
- 03 Make electrical connection between screw terminals on back of push buttons and Arcadia controller terminals using 4 conductor, 18 awg wire or equivalent. One pair (2 wires) for each button.
- 04 Wire switch plate so the button on top opens the louvers, and the button on the bottom closes the louvers.



PUSH BUTTON WIRING DIAGRAM