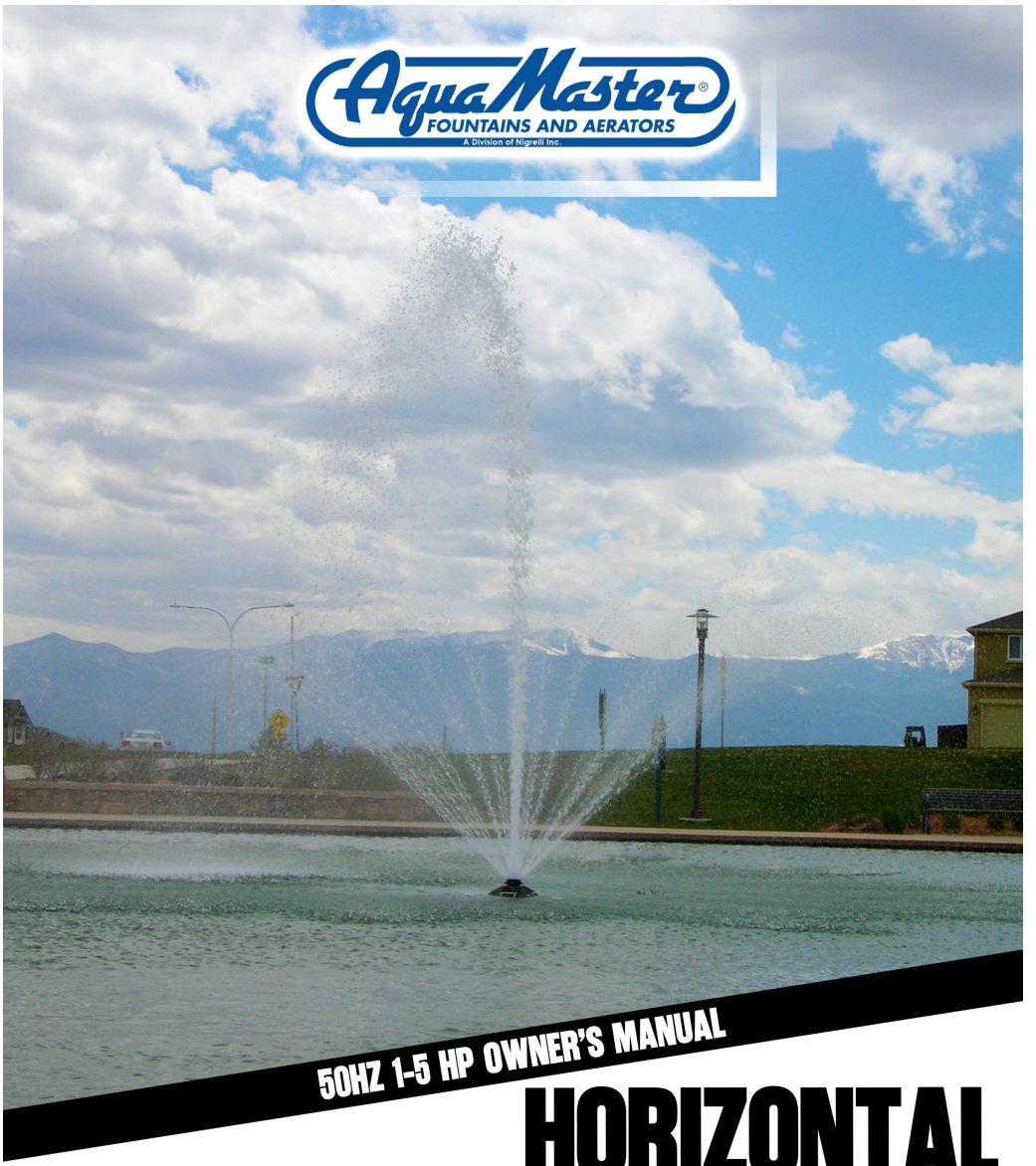


50HZ 1-5 HP OWNER'S MANUAL

HORIZONTAL FIXED BASE SERIES®

Every **AquaMaster®** unit is fully inspected and produced in accordance with applicable standards for safety, and are listed by Underwriters Laboratories, Inc. (UL) for safety in the USA and Canada. **AquaMaster®** will continue to build the best units to assure you, the customer, of many years of enjoyable and reliable service. AquaMaster's commitment to excellence ensures superior aquatic management systems.

All **AquaMaster®** products are designed and built to be installed with an **AquaMaster®** UL Listed control panel and to be operated as a complete system. Any alterations to or substitution for items in this system, unless allowed by these installation instructions, will **void** the UL Listing and will void the product warranty. **It may also create a hazardous installation.** Read these instructions thoroughly before starting your installation and follow them carefully throughout.

WARNING 

NOTICE: Save and pass the installation, anchoring and operating instructions to subsequent owners. The information provided is intended to notify and warn about making unsafe modifications, making unsafe repairs, or using unauthorized parts or repair facilities.

Improper installation, operation, service, repair, maintenance or alteration of this product may result in property damage or bodily injury.

Turn **OFF** electrical power at disconnect switch or service panel before servicing this unit or lighting system.

Risk of electric shock! This pump or lighting system has not been investigated for use in swimming pool or marine areas. **DO NOT use in swimming or marine areas.**

Only qualified personnel shall service and install **AquaMaster®** pumps or lighting systems. Installation and service to be in accordance with the National Electric Code and local codes and/or ordinances. This unit is intended to be operated only after it is properly installed, anchored and wired.

Risk of electrical shock! **DO NOT** operate this unit dry unless testing for proper rotational/ mechanical function (see electrical connections, later in this manual). If this unit has been inadvertently operated out of the water, the unit must be serviced by a qualified person before being returned to service.

Risk of electric shock! This pump and lighting system is supplied with a grounding conductor. To reduce the risk of electric shock, be certain that it is connected only to a proper ground. Use a copper conductor of the correct size from the grounding terminal in the control box to a grounding connection in the service panel.

This pump and lighting fixtures are provided with flexible underwater cable and strain relief. **DO NOT** remove as electrical shock and/or damage to this unit or lighting system could occur.

Risk of electrical shock! **DO NOT** remove the wire harness from the pump housing or underwater disconnect. **DO NOT** connect conduit to pump.

This unit and lighting system is intended for water use only. **DO NOT** operate out of the water unless checking for proper mechanical/electrical function.

This lighting system is intended to be used with the **AquaMaster®** floating fountain or aeration systems only. **DO NOT** use this fixture in any other manner.

Risk of electrical shock! Submerse lighting fixtures before turning on.

This pump and lighting fixtures are for fresh water only.

TABLE OF CONTENTS

SHIPPING CLAIMS

When you receive your **AquaMaster®** unit, examine the package for any signs of external damage it may have sustained enroute. If there is apparent damage either outside the box or to its contents, make a claim with the shipper immediately. Save the original shipping carton and the packing material if a claim is to be filed.

Pictures and images used in this manual are for representational purposes only, may not depict the actual product.

FIXED BASE WATER FEATURES FOUNTAINS
1 – 5 H.P. ASSEMBLY INSTRUCTIONS

WARNING: Read these instructions carefully. Failure to follow these instructions could cause a malfunction of the system. Improper installation, wiring or anchoring could result in property damage or bodily injury.

CAUTION: Do not install or operate in swimming areas. RISK OF ELECTRICAL SHOCK. Do not remove the wire harness from the pump housing or underwater cable disconnect. DO NOT CONNECT CONDUIT TO PUMP. DO NOT REMOVE FLEXIBLE UNDERWATER CABLE OR THE CABLE SUPPORT GRIP.

Your unit has been shipped partially assembled to avoid damage during shipment.

1. Carefully unpack your unit and inspect for damage. If damage has occurred, you must file a claim with the carrier.

2. If (optional) lights are provided, slide the light bracket assembly over the riser tube and tighten six (6) stainless steel screws equally to clamp assembly in location.

3. Loosen hardware on the lamp housing and slide onto elevation arms as shown. Tighten ¼-20 nut after desired angle is achieved.

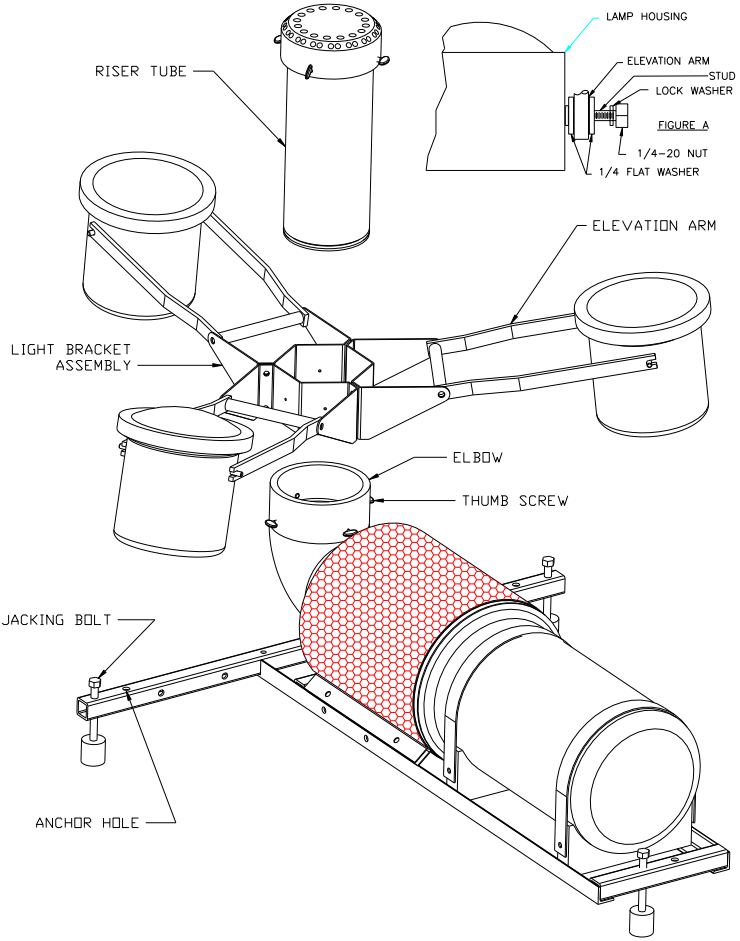
4. Insert riser tube into elbow and tighten 4 thumb screws. **NOTE:** thumbscrews should extend into groove on riser tube for a secure assembly.

5. Place the fountain in the pond at desired location. Use jacking bolts at three locations to level the unit. This will assure the fountain of water goes straight up.

6. The frame may be anchored using holes adjacent to jacking bolts. If you do not wish to put holes in the bottom of the pond, you may use paving blocks under the anchor holes.

7. If (optional) lights are provided, adjust the angle of the fixture for desired effect.
   IMPORTANT:
   LIGHT LENSES MUST BE APPROXIMATELY 1" UNDER WATER COMPLETELY COVERED WITH WATER TO PREVENT LENS FAILURE!

FIXED BASE WATER FEATURES FOUNTAINS
1 – 5 H.P. ASSEMBLY INSTRUCTIONS (CONT.)



MD001-219

ELECTRICAL CONNECTION – 50Hz
(Electrical Control Panel NOT supplied by AquaMaster®)

Electrical connections must be completed by a licensed electrician or installer in accordance with European community, national, local codes or ordinances.

CAUTION: Aeration systems require the use of a residual current device (RCD) with a rated residual operating current not exceeding 30 mA for safe operation. If the proper grounding and RCD are not used, serious FATAL electrical shock may occur.

ELECTRICAL NOTICE

Supply conductors must be of sufficient cross sectional area to operate the equipment in regard to cable length, motor nameplate current and voltage ratings. All cables, conduits and external ducts must enter the enclosure from the bottom only. Install cables, conduits and external wiring ducts by qualified installer and per local codes utilizing appropriate bushings and glands. Care must be used to protect cables when entering and leaving the pond area by the use of protective duct, conduits or like protection devices. Electrical cable must extend completely onto shore to power source without breaks or splices. Underwater splices are dangerous and will void the warranty.

WARNING

BEFORE INSTALLING INTO THE WATER, test the unit briefly (30 seconds or less) to make sure it runs and check for proper rotation (counter clockwise looking down from top of power unit). Listen for any unusual noises. Unit should run smoothly and quietly. If single phase rotation is backwards, **PLEASE CONTACT THE FACTORY IMMEDIATELY**. If three phase rotation is backwards, change any two motor load leads. If rotation is still backwards check all connections or contact the factory for assistance.

DO NOT operate the unit out of the water except for testing and checking rotation (30 seconds or less). **DO NOT** attempt maintenance procedures or adjustments with unit in operation.

DO NOT burn the lighting fixtures out of the water except to test the lamps (60 seconds or less).

NOTE: Excessive buildup on the lenses may cause the lenses to crack, lamps to burn out and gaskets to fail. To maintain maximum light output and long lamp life, cleaning of the lenses may become necessary.

GROUNDING

Permanently ground this unit in accordance with European community, national, local codes or ordinances. Use a copper conductor of the correct size from the grounding terminal in the control box to a grounded connection in the service panel or a properly driven and electrically grounded ground rod.

OPERATING CONDITIONS

OPERATE UNIT ONLY IN FRESH WATER WITH WATER TEMPERATURE NOT EXCEEDING 40 degree C. DO NOT OPERATE IN SWIMMING AREAS.

ELECTRICAL CONNECTION – 50Hz
(Supplied with AquaMaster® control panel)

Electrical connections must be completed by a licensed electrician or installer in accordance with European community, national, local codes or ordinances.

CAUTION: Aeration systems require the use of a residual current device (RCD) with a rated residual operating current not exceeding 30 mA for safe operation. If the proper grounding and RCD are not used, serial FATAL electrical shock may occur.

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WARNING

DO NOT burn the lighting fixtures out of the water except to test the lamps (60 seconds or less).

NOTE: Excessive buildup on the lenses may cause the lenses to crack, lamps to burn out and gaskets to fail. To maintain maximum light output and long lamp life, cleaning of the lenses may become necessary.

DO NOT BYPASS YOUR CONTROL PANEL. (TO DO SO COULD RESULT IN THE DANGER OF ELECTROCUTION TO ANYONE, HUMAN OR ANIMAL, IN CONTACT WITH THE WATER IF AN ELECTRICAL SHORT SHOULD OCCUR.)

1. To wire your unit and main power to your control panel proceed as follows:
   a. Electrical cable must extend completely onto shore to power source without breaks or splices. Underwater splices are dangerous and will void the warranty. Securely fasten electrical cables with appropriate devices.
   b. Connect black lead from cable to terminal marked 1T1 on terminal strip.
   c. Connect white lead from cable to terminal marked 1T2 on terminal strip.
   d. Connect red lead from cable to terminal marked 1T3 on terminal strip.
   e. Connect the green lead to the earthing system terminal.

ELECTRICAL CONNECTION – 50Hz (CONT.)
(Supplied with AquaMaster® control panel)

2. To connect power to control panel:
   a. Connect Line 1 to L1 on the terminal strip.
   b. Connect Line 2 to L2 on the terminal strip.
   c. Connect Line 3 to L3 on the terminal strip (3 Phase Only).
   d. Connect the neutral to N on the terminal strip (3 Phase Only).
   e. Connect the ground to the earthing system terminal.

WARNING: Always make sure power is off when changing motor direction!

3. Set or verify the overload device in the panel is set to the motor nameplate value plus two amperes.

4. **BEFORE INSTALLING INTO THE WATER**, test the unit briefly (30 seconds or less) to make sure it runs and check for proper rotation (counter clockwise looking down from top of power unit). Listen for any unusual noises. Unit should run smoothly and quietly. If single phase rotation is backwards, **PLEASE CONTACT THE FACTORY IMMEDIATELY**. If three phase rotation is backwards, change any two motor load leads. If rotation is still backwards check all connections or contact the factory for assistance.

DO NOT operate the unit out of the water except for testing and checking rotation (30 seconds or less). **DO NOT** attempt maintenance procedures or adjustments with unit in operation.

GROUNDING

Permanently ground this unit in accordance with local codes or ordinances. Use a copper conductor of the correct size from the grounding terminal in the control box to a grounded connection in the service panel or a properly driven and electrically grounded ground rod.

TIMER OPERATING INSTRUCTIONS

1. To set the time, hold down the CLOCK Key while pressing either the HOUR or MINUTE keys. Continue pressing until the desired number is shown. Then simply lift finger off the CLOCK Key to set.

2. To Set Program (ON/OFF) times: Press the TIMER Key once to enter into program mode. Display will show “1 ON-- --“.

3. Press the HOUR Key and then the MINUTE Key to select the desired first OFF time. Repeat the entire sequence to complete up to eight ON/OFF times as desired.

4. When programming is done, press the CLOCK Key then the SELECT Key repeatedly until the indicator bar is above the word “AUTO”.

CAUTION: Disconnect all power before servicing. **DO NOT** install or operate in swimming areas.

OPERATING CONDITIONS

OPERATE UNIT ONLY IN FRESH WATER WITH WATER TEMPERATURE NOT EXCEEDING 40^0 C. DO NOT OPERATE IN SWIMMING AREAS.

1. Make sure the timer is set to the proper time on the front dial of the timer. Set the on-off sequence to turn the fountains on and off at the desired time.

2. Turn on supply disconnect which is located on the right side of the panel.

3. Turn on the Residual Current Operator. Test to make sure that this safety device works properly. Press the test button and the breaker should trip. If it does not trip, check for proper wiring or defective device.

NOTE: DO NOT BYPASS THIS SAFETY DEVICE. THIS DEVICE MUST BE TESTED EVERY MONTH.

4. Reset the breaker.

5. Sit back and enjoy your fountain/aerator.

CAUTION: DISCONNECT ALL POWER BEFORE SERVICING

MAINTENANCE

WARNING: DISCONNECT ALL POWER BEFORE SERVICING

Like all pieces of precision machinery, certain maintenance procedures must be performed to keep the unit running trouble free for years. The following recommendations should be done annually to prevent a more serious and costly problem from occurring.

Following these recommended procedures will result in years of trouble free operation, as well as keeping the warranty in effect.

- In all cases it is strongly recommended that the unit is removed from the water annually for a good visual inspection.

- Remove the unit from the water and inspect the nuts, bolts, brackets and float. Replace any broken or worn parts. Tighten any nuts and bolts that may have worked loose.

- Make sure the intake screen is in place, intact and free of debris. If debris is floating in the water (plastic bags, fishing line, etc.), performing routine maintenance more frequently on the unit will help assure years of trouble free operation.

- Inspect the motor shaft, propeller and diffuser making sure they are not damaged. If there is damage to any parts, replace them. If debris has wrapped around them, remove it, and inspect the shaft especially around the seal area. Debris wrapped in this area can push the seal faces apart causing water to enter the unit and shorting out the motor. If there is any evidence of this an annual maintenance should be performed (oil and seal change) to keep the unit running properly and warranty in effect.

- Check motor bearings by turning the propeller shaft by hand; it should turn smoothly and quietly.

- Inspect the power cable making sure there are no cuts, worn spots or animal chew marks. If any damage has occurred, replacement of the cable must be done, do not splice your cables. Make sure the cable support grip is not broken and securely fastened to the unit before putting the unit back into the water.

- Under normal conditions, internal maintenance is not required for a specific period of time after the initial installation of the unit. Routine maintenance consisting of power unit oil and seal change, along with inspection of all other in-water and electrical control panel components is recommended annually when installed in saltwater or highly brackish water conditions. Preventative or routine maintenance expenses are the responsibility of the customer. For warranty repair or replacement consideration, equipment must be pre-approved and returned to the **AquaMaster®** factory for inspection, repair or replacement.

- On 1-5HP units it is recommended that maintenance of replacing the seal and oil be performed annually after the initial 5 years of operation and every year thereafter.

For further information, parts ordering assistance and the name of the closest distributor contact the factory at 920.693.3121.

WINTERIZATION

AquaMaster® strongly suggests removing the unit for winter if you experience long periods of cold, freezing weather. Damage to the float, lighting, and power unit could result from ice around the unit or lighting system. Also, possible damage to the motor could result if the propeller or impeller is frozen in the ice when the unit tries to start.

There are specific maintenance procedures, as outlined in these assembly instructions, that will keep your unit trouble free for years. These procedures are especially important should you live in a potentially cold climate. The removal of your **AquaMaster®** unit before freezing conditions occur is a perfect opportunity to inspect your unit and keep it running trouble free.

If you have freezing temperatures for short periods of time, you can decrease the chance of freezing by running the unit for 24 hours a day.

NOTICE: Freeze damage to any component of your **AquaMaster®** unit or lighting system will not be covered under warranty.

WARNING: When operating the unit in ice covered bodies of water, the ice around the open water will be dangerously thinner than the rest of the body of water. Signs such as **DANGER THIN ICE** need to be posted. Injury and/or fatality may result if this danger is not posted. **Owner assumes all responsibility.**

GENERAL WARRANTY INFORMATION

Warranty at a Glance Information can be found at:

https://www.aquamasterfountains.com/warranty-information/

General Warranty Information can be found at:

www.aquamasterfountains.com

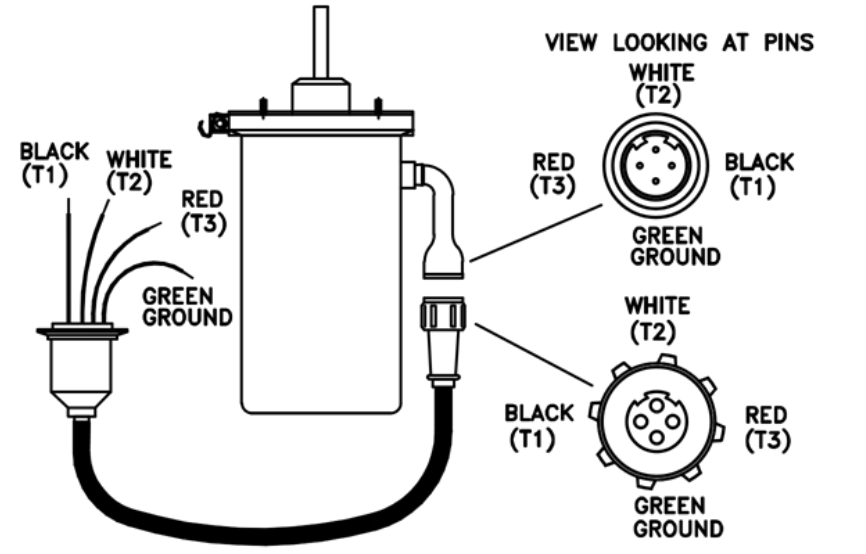
Notes:

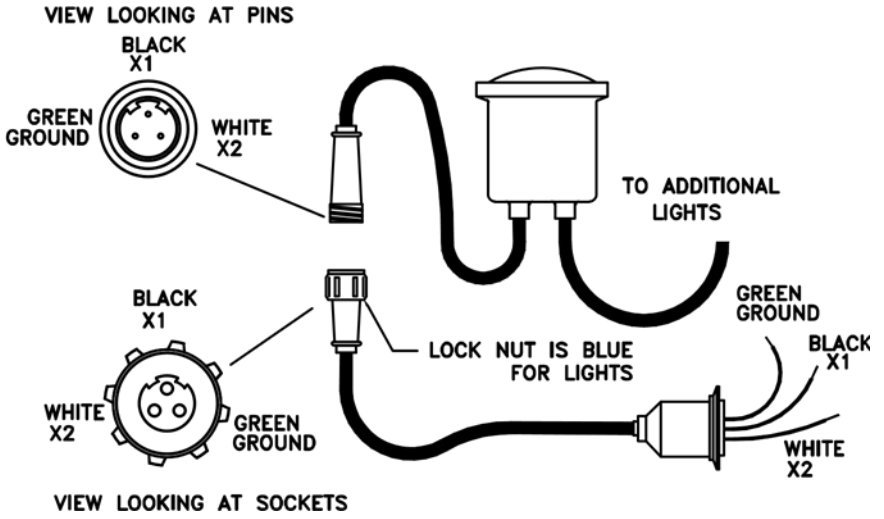
TROUBLESHOOTING GUIDE

WARNING: Turn off all electrical power before servicing the unit. To prevent accidental startup of the unit while repairs are in process or while servicing the unit, the main electrical equipment disconnect should be turned off and the panel should be locked out.

Sympton	Possible Cause	Solution
The unit will not operate.	There is no electrical power.	Check the breakers or fuses at the power source. Check the breakers and fuses in the control panel. Check the connections in the cord/motor disconnect. Check for the proper voltage.
	The motor hums but will not run.	Check the capacitors.
	GFCI tripped.	Reset the GFCI. If the GFCI continues to trip, have a qualified electrician check to determine the cause. Check the power cable for bite or chew marks (animal damage). Check the power cable cuts. If cut or damaged, replace the cable.
	The timer is not correct.	Reset the timer. This should be done after any power interruption. Check the voltage to the timer.
The motor runs but there is no spray pattern or the pattern is erratic.	The propeller is loose or missing. The propeller is bent.	Tighten or replace the propeller assembly. Replace the propeller diffuser assembly.
	Debris in the propeller diffuser assembly	Clean the debris out. **NOTE:** Plastic bags, plastic wrap on the propeller or shaft. This must be cleaned out for proper performance.
	The nozzle is clogged. The propeller is bent.	Remove the nozzle and clean out the debris. **NOTE:** If the water is very dirty, put on an oversized intake screen.
	The unit is touching the bottom of the water.	Reposition the unit to a deeper point in the water.
	High Winds.	No corrective action to be taken. The pattern will return to normal as the winds subside.
	Sinking float.	Replace the float.
The timer will not run.	Blown fuse.	Replace the control fuse.
	Bad timer.	Replace the timer.
The timer runs and the power are okay but the unit will not run.	Bad timer contacts.	Replace the timer.
The contactor is not good.	Overload tripped.	Reset the overload.
	Contacter is defective.	Replace the motor contactor.
The unit runs but stops and starts by itself.	Low oil in the unit.	Consult a dealer or authorized repair center.
	Leaky seal or damaged cable connector.	Consult a dealer or authorized repair center.

MATCHING WIRE COLOR TO PIN LOCATION
FOR AQUALOCK (ALC)
USE FOR DIAGNOSTIC PURPOSES ONLY





MD001-608

Notes:

Pushbutton RGBW Quick Start Program Guide

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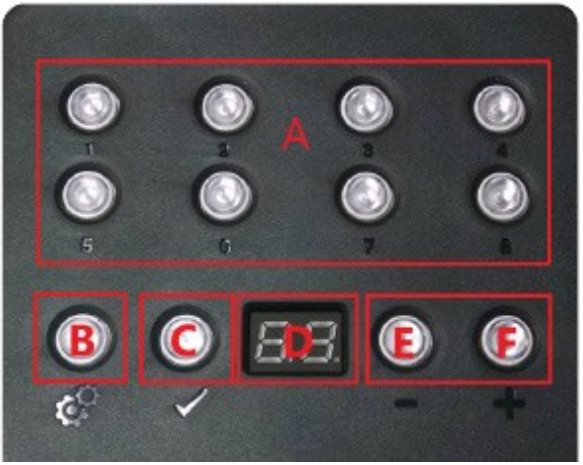
RGBW Controller Quick Start Guide - New Controller



To Change Programs:

1. If not in scene mode, press the select button (B) until 'SA' appears in the LED display, and press the check button (C) to confirm.

2. Select programs 1-8 directly using the numbered push buttons (A).

3. Use the plus (F) and minus (E) buttons to select a program number, and press the check button to confirm.

To Change Program Speed:

1. If not in speed mode, press the select button (B) until 'SP' appears in the display (D), and press the check button (C) to confirm.

2. Use the '+' and '-' buttons to increase or decrease speed, and press the check button (C) to confirm.

To Change Program Brightness:
1. If not in dimming mode, press the select button (B) until 'dI' appears in the display (D), and press the check button (C) to confirm.

2. Use the plus (F) and minus (E) buttons to increase or decrease speed, and press the check button (C) to confirm.

NOTE: Decreasing brightness dims all lights, and increasing brightness turns up the white component of the RGBW light.

3000989

RGBW Controller Quick Start Guide - Old Controller

To Change Programs:

1. Select programs 1-10 directly by pressing any of the numbered buttons (A).

2. Use the plus (E) and minus (C) buttons to cycle through the programs. Upon reaching the desired program, hold down the plus (E) or minus (C) button. The program number will flash in the LED display (D) when it is selected.

To Change Program Speed:

1. Press the mode button (B) until the speed indicator lights up (F).

2. Use the plus (E) and minus (C) buttons to increase or decrease speed.

To Change Brightness:

1. Press the mode button (B) until the brightness indicator lights up (G).

2. Use the plus (E) and minus (C) buttons to increase or decrease brightness.

NOTE: Decreasing brightness dims all lights, and increasing brightness turns up the white component of the RGBW light.

3000989

RGBW Program List and Custom Programs

Program List:

1. White
2. New Year's Day
3. Valentine's Day
4. Mardi Gras
5. St Patrick's Day
6. 4th of July
7. Breast Cancer Awareness
8. Thanksgiving
9. Hanukkah
10. Christmas
11. 12 Color Fade
12. Rainbow
13. Pastel Rainbow
14. Warm Colors
15. Cool Colors
16. RGBW
17. CMYW
18. Red
19. Orange
20. Yellow
21. Lime
22. Green
23. Teal
24. Cyan
25. Indigo
26. Blue
27. Violet
28. Magenta
29. Pink
30. Black (Off)
31. Warm White

Custom Programs:

1. White
2. New Year's Day
3. Valentine's Day
4. Mardi Gras
5. St Patrick's Day
6. 4th of July
7. Breast Cancer Awareness
8. Thanksgiving
9. Hanukkah
10. Christmas
11. 12 Color Fade
12. Rainbow
13. Pastel Rainbow
14. Warm Colors
15. Cool Colors
16. RGBW
17. CMYW
18. Red
19. Orange
20. Yellow
21. Lime
22. Green
23. Teal
24. Cyan
25. Indigo
26. Blue
27. Violet
28. Magenta
29. Pink
30. Black (Off)
31. Warm White

3000989

RGBW Program Guide

New Years: Different intensities of white blinking and flashing.

Valentine's Day: Reds, pinks and whites chasing around.

Mardi Gras: Yellow, teal and magenta fading together.

St Patrick's Day: Light and dark shades of green chasing around.

4th of July: Red, white and blue fading together.

Breast Cancer Awareness: Pink.

Thanksgiving: Autumn colors of yellow, red, brown, and orange chasing around.

Hanukkah: Blues and silvers fading together.

Christmas: Red, white and green fading together.

12 Color Fade: 12 colors around the color wheel fading together.

Rainbow: 12 colors around the color wheel chasing.

Pastel Rainbow: 12 colors around the color wheel with a white element chasing.

Warm Colors: Red, orange and yellow fading together.

Cool Colors: Blues and greens fading together.

RGBW: Red, green, blue and white fading together.

CMYW: Cyan, magenta, yellow and white fading together.

Notes:

Notes:

AquaMaster®
FOUNTAINS AND AERATORS
A DIVISION OF NIGRELLI INC.

BRINGING WATER TO LIFE

Floating Fountains
Masters Series®
Masters Decorative Series
Masters Grand® Series
Galaxy Select® Series

Lighting and Accessories
Night Glow Lighting and Control Panels
LED or RGBW Lighting System

High Performance Aeration Systems
Volcano II Surface Spray Systems
Volcano III Surface Spray Systems
AquaAir® Ultra Aeration Systems

Fixed Base Water Feature Fountains
Custom Horizontal and Vertical Models

Land Master® Landscape Lighting
LED or RGBW Lighting System