# RGB2 · RGB3



# Fountain Light Kit Stainless Steel, RGBW Color Changing LED Light Kits

# Two-light or three-light kits for use on EasyPro 1/2 and 1 hp Aqua Fountains or Kasco 1/2 to 2 hp VFX, AF or JF series fountains

### Instructions for Operation • Safety • Warranty

Thank you for purchasing the RGB2 or RGB3 RGBW color changing LED fountain light kit. This kit will transform your fountain into a beautiful night time display. These low voltage lights use only 17.5 watts per fixture (maximum with full color mix).

### **Safety and Electrical Connections**

- Never enter water with electrical connections plugged in or in operation. Even though units are supposed to be connected to GFCI protection, it is NEVER recommended to enter water with equipment in operation.
- 2. Lights must be attached to a matching 5 pin RGBW cords and RGBW 5 pin 24 volt DC controller.
- 3. Never connect the lights directly to a 110 volt or higher outlet.
- 4. Connect the RGBW controller/transformer to a 110 volt receptacle that is protected by a Ground Fault Circuit Interrupter.
- 5. Do not modify wiring in any way, quick plug ends must stay intact to function and should not be replaced with any other connections.
- 6. Not approved for swimming pool or spa use.
- 7. All electrical work must be performed by a qualified technician. Always follow the National Electrical Code (NEC) or the Canadian Electrical Code as well as all local, state and provincial codes. Failure to follow manufacturer's installation instructions may result in electrical shock, fire hazard, personal injury or death, damaged equipment, provide unsatisfactory performance and will void manufacturer's warranty.

### **Controller/Transformer Specifications**

- 115 volt, 60hz input, 24volt DC output
- · Includes built in voltage regulator for cables up to 300' long
- Digital timer with 16 on/off settings and manual override
- Outdoor rated

# **Stainless Steel Light Specifications**

- Corrosion resistant stainless steel housing, bracket and hardware
- Epoxy filled fixtures
- Pigtail with 5 pin, quick connect end
- Waterproof connections
- Dimmable, 24 volt DC
- 17.5 Watts (maximum with full color mix)
- RGBW for color mixing and true warm white color option

### **General Instructions**

Inspect the box and check for damaged or missing parts. Contact your EasyPro supplier if products are damaged in shipping.

#### Parts Included

#### **RGB2 Two Light Kits**

- Two stainless steel fixtures with pigtail
- Two stainless steel mounting brackets with hardware
- One 2 x 1 splitter with waterproof connections for lights to power cord
- One outdoor rated controller/transformer with digital timer and pigtail
- Stainless steel hardware packs
  - LKH-AFBW longer bolts for Aqua Fountain, large washers and nylock nuts
  - LKH-KBW shorter bolts for 1/2 1 hp Kasco units, Pan Head screws for 2 hp units, washers and nylock nuts
- · Power cord (length varies by kit)

#### **RGB3 Three Light Kits**

- Three stainless steel fixtures with pigtail
- Three stainless steel mounting brackets with hardware
- One 3 x 1 splitter with waterproof connections for lights to power cord
- · One outdoor rated controller/transformer with digital timer and pigtail
- Stainless steel hardware packs
  - LKH-AFBW longer bolts for Aqua Fountain, large washers and nylock nuts
  - LKH-KBW shorter bolts for 1/2 1 hp Kasco units, Pan Head screws for 2 hp units, washers and nylock nuts
- Power cord (length varies by kit)

#### LED Light Kit Assembly Instructions for 1/2 and 1 hp Aqua Fountains

Actual light fixture appearance may vary slightly from figures below.

- Attach the light fixture to the supplied brackets. The nylock nut comes attached to the bracket for shipping. You will need to remove nylock nut and install the yoke of the light fixture to the bracket. Run the pig tail as shown in Figure 1. Secure the light fixture with nylock nut.
- 2. Remove float cover from top of fountain. Float cover is not secured to float and can simply be lifted off.
- The float will have three pre-drilled holes for the light brackets. These are marked with "LT" next to them as shown in Figure 2. Bolt the lights, using LKH-AFBW hardware, onto the float and tighten securely. Place the large washer on the top of the float and run the bolt through the float.
- 4. To secure the light bracket to the float, line up the hole closest to the end with the bolt. Secure bracket to bottom side of float using nylock nut and tighten. Don't overtighten otherwise the upper washer may pull too far into the float. Some movement of the bracket will not affect quality of lighting. For two light kits swivel the light brackets to widest position possible.
- Connect pigtails to cord splitter (two or three x 1 depending on kit). Be sure the pigtails go around the motor screen in an orderly way so all lights can be connected without twisting. Verify the o-ring is present in the female portion of the connectors. (Figure 3) Push pigtails into splitter and secure with 1/2 turn quick connect nut on splitter. (Figure 4)
- Connect main cord to the remaining end of the splitter section. Be sure the o-ring is present (Figure 3) and secure cords with 1/2 turn quick connect nut. (Figure 4) Multiple cords can be connected up to 300' long between the light fixtures and the control unit.
- The main cord **MUST BE SECURED** to the eye bolt of the fountain. Use the plastic cable ties included in your kit to do this. This acts as a strain relief for the cords.



Figure 1



Figure 2



Figure 3



Figure 4

- 8. Adjust the angle of the light fixtures based on the spray pattern being used. Tip in toward center for narrower pattern and tip out slightly for wider pattern.
- 9. Plug the main cable into the pigtail of the mounted controller unit. Be sure to mount the weatherproof controller with timer in a secure location near a power supply and plug into 115 volt outlet. See "Setting the Timer" for detailed instructions on the controller.
- 10. Over time the LED lights may appear dimmer than when new. This is caused by algae or sediment on light lens. This can easily be removed with a small brush (a toothbrush works great).

#### LED Light Kit Assembly Instructions for 1/2 to 1 hp Kasco VFX, AF and JF Series Units

Actual light fixture appearance may vary slightly from figures below.

- 1. Attach the light fixture to the supplied brackets. The nylock nut comes attached to the bracket for shipping. You will need to remove nylock nut and install the yoke of the light fixture to the bracket. Run the pig tail as shown in Figure 1. Secure the light fixture with nylock nut. A three light set can be attached as you see in Figure 2; the arrows indicate where you would attach a two light kit (recommended only up to 3/4 hp units).
- 2. For Kasco units use the hardware pack labelled LKH-KBW with shorter bolts and smaller washer. Put bolt through the bottom of the bracket in the hole closest to the light. Then line it up in holes on float and secure to float with washer and nylock nut on top of float. Do not overtighten; simply make sure it is snug and secure. Some movement of the bracket will not affect quality of lighting.
- 3. Connect pigtails to cord splitter (two or three x 1 depending on kit). To do this, be sure the pigtails go around the motor screen in an orderly way so all lights can be connected without twisting. When connecting cords, be sure the o-ring is present in the female portion of the connectors. (Figure 3) Push pigtails into splitter and secure with 1/2 turn quick connect nut on splitter. (Figure 4)
- 4. Connect main cord to the remaining end of the splitter section. Be sure the o-ring is present (Figure 3) and secure cords with 1/2 turn quick connect nut. (Figure 4) Multiple cords can be connected up to 300' long between the light fixtures and the control unit.
- 5. The main cord **MUST BE SECURED** to the float of the fountain. Use the plastic cable ties included in your kit to do this. This acts as a strain relief for the cords.
- 6. Adjust the angle of the light fixtures based on the spray pattern being used. Tip in toward center for narrower pattern and tip out slightly for wider pattern.



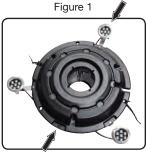


Figure 2



Figure 3



Figure 4

- 7. Plug the main cable into the pigtail of the mounted controller unit. Be sure to mount the weatherproof controller with timer in a secure location near a power supply and plug into 115 volt outlet. See "Setting the Timer" for detailed instructions on the controller.
- 8. Over time the LED lights may appear dimmer than when new. This is caused by algae or sediment on light lens. This can easily be removed with a small brush (a toothbrush works great).

## LED Three Light Kit Assembly Instructions for 2 hp Kasco VFX, AF and JF Series Units

Actual light fixture may vary slightly from fixtures below.

- 1. For 2 hp Kasco units use the 3/4" pan head screws from hardware pack labelled **LKH-KBW** with nylock nut and smaller washer. Put screw through the bottom of the bracket supplied with the Kasco float. Then line it up in hole on light bracket and secure with washer and nylock nut as shown in Figure 1. Attach to brackets on 2 hp Kasco in three locations seen in Figure 2.
- 2. Connect pigtails to three way cord splitter (three x 1). To do this, be sure the pigtails go around the motor screen in an orderly way so all lights can be connected without twisting. When connecting cords, be sure the o-ring is present in the female portion of the connectors. (Figure 3) Push pigtails into splitter and secure with 1/2 turn quick connect nut on splitter. (Figure 4)
- 3. Connect main cord to the remaining end of the splitter section. Be sure the o-ring is present (Figure 3) and secure cords with 1/2 turn quick connect nut (Figure 4). Multiple cords can be connected up to 300' long between the light fixtures and the control unit.
- 4. The main cord **MUST BE SECURED** to the float of the fountain. Use plastic cable ties included in your kit to do this. This acts as a strain relief for the cords.
- 5. Adjust the angle of the light fixtures based on the spray pattern being used. Tip in toward center for narrower pattern and tip out slightly for wider pattern.
- 6. Plug the main cable into the pigtail of the mounted controller unit. Be sure to mount the weatherproof controller with timer in a secure location near a power supply and plug into 115 volt outlet. See "Setting the Timer" for detailed instructions on the controller.



Figure 1



Figure 2



Figure 3

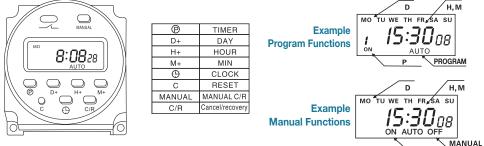


Figure 4

7. Over time the LED lights may appear dimmer than when new. This is caused by algae or sediment on light lens. This can easily be removed with a small brush (a toothbrush works great).

### **Setting the Timer**

Mount the weatherproof controller box in a secure location near a power supply and plug into 110 volt outlet. The controller is weatherproof and does not need to be protected from the weather.



#### **Programmable Timer Features**

- Digital electronic time switch with daily programs
- Repeat programs with 16 on/off settings and manual override
- · Lithium battery power reserve to keep time and programs even in power outage.
- Auto time error correction +/- 60 sec. weekly

## **Operation Instructions for Automatic Program Function**

- 1. Plug controller into 110 volt GFCI protected outlet. Red light on timer will come on to indicate power is being supplied to lights. After timer settings are made, the red light only comes on during operation of programmed Auto "On" setting or when **ON** in Manual mode (see Manual Mode section).
- 2. Remove clear plastic cover from timer. Be sure not to lose this cover.
- 3. Unlock the timer by pressing the "C/R" button four times. This removes the "**a**" character in lower left corner of the display screen. If no keys are selected in 15 seconds, the time will automatically lock. Or once programming is finished press "C/R" button to lock.
- 4. To clear all programs, press the Reset button (labeled as 'c'). It is inset and will require a pen or small object to depress.
- 5. Once unlocked, set the time by pressing the button with the clock icon, then use D+ to set the day of the week, H+ to set the hour (uses military time only) and M+ to set the minute.
- 6. Up to 16 on/off settings can be programmed using the chart below.

Note: Set times in sequence as you may not cross set. System will auto lock with no activity or data saved within 15 seconds.

Step	Key	Programming
1	P	Setting 1 ON time (display 1 on)
2	H+/M+	Setting hours and minutes to turn on
3	D+	Daily selects same time or separate times
4	Р	Setting 1 OFF time (display 1 off)
5	H+/M+	Setting hours and minutes to turn off
6	D+	If using the same time everyday, do not press
7	Repeat 2-6	Set 2-16 ON/OFF time
8	G	End
If you do not require 16 settings, press clock icon to the end		

# **Operation Instructions for Manual Function**

- 1. Be sure the controller is plugged into 110 volt GFCI protected outlet.
- 2. Remove clear plastic cover from timer. Keep cover safe and replace when finished.
- 3. Unlock the timer by pressing the "C/R" button four times. This removes the "**a**" character in lower left corner of the display screen.
- 4. Press "Manual" button to select desired function. The **ON** function will tell controller to send power to lights and **OFF** function will stop power from being supplied to lights.
- 5. When pressing the "Manual" button it will scroll through settings in this order: **ON**, **AUTO**, **OFF**, **AUTO**.

#### Here is what happens at each setting and in this order

**ON** – Power is supplied to the lights.

- AUTO When using the "Manual" button and stopping on AUTO right after the ON setting, power to the lights will remain on until next programmed OFF setting.
- OFF Power supply to the lights is turned off.
- AUTO When stopping on AUTO after the OFF setting, power to the lights will be off and will turn back on at next programmed "On" setting.

# **Remote Control Operation**

#### (remote control will come with controller)

To change settings and colors, use the unit's remote control. Controllers within the remote's 1000' range will be synchronized.

- Desired setting must be achieved by clicking remote functions of speed, mode, power or main colors. Depress buttons slowly and deliberately.
- Brightness settings only work with solid colors.
- Changing the speed of a light cycle will reset the mode to the beginning of its cycle.
- · Remote requires an A23 battery (included)
- Remote control works only when red light of the timer is on. This is during Manual or Programed "On" functions.

### **Color Modes**

- (Default) Change Red, Yellow/Green, Green, Cyan, Blue, Cool White, Yellow, Cool White, Purple, Cool White, Cyan, Cool White, Warm White, Orange
- 2. Change Red, Green, Blue, Warm White
- 3. Change Red, Green, Blue
- 4. Change Warm White, Blue, Green, Red
- 5. Change Red, Green, Blue, Warm White (several color cycles then accelerates to strobe)
- 6. Change Red, off, Green, off, Blue, off, Yellow/ Green, off, Purple, off, Cyan, off, Warm White, off
- 7. Change Yellow/Green, Purple, Cyan



- 8. Change Red, Yellow/Green, Warm White, off
- 9. Change Warm White, Yellow/Green, Red, off
- 10. Change Red, Green, Blue, Yellow/Green, Purple, Cyan, Warm White
- 11. Change Demo Mode
- 12. Solid Red
- 13. Solid Green
- 14. Solid Blue
- 15. Solid Yellow/Green
- 16. Solid Purple
- 17. Solid Cyan
- 18. Solid Warm White

#### Service and Maintenance

- 1. A Disconnect the transformer from the power supply before service.
- 2. All parts of the lighting system should be checked on a regular basis to make sure the system is functioning properly.
- 3. All wires should be protected from possible damage from wildlife and other causes. Damaged wires due to neglect are not covered under warranty.
- 4. If light output is diminished check the face of the light fixture for debris and clean if necessary, or use remote control to increase brightness.
- 5. If lights are not working, be sure the timer on the controller is set to operate lights when desired.

#### EasyPro Pond Products Limited Warranty

EasyPro Pond Products ("EasyPro") warrants to the purchaser that this product ("Product") will be free from any mechanical or material defects for a period of:

Light fixtures and brackets: three years from the date of purchase

Controller, remote control and cords: one year from the date of purchase

Removal of Quick Connect ends will void warranty. Do not open the controller. There are no serviceable parts inside the controller and opening the controller will void warranty. This warranty only covers properly installed and maintained Products sold by authorized EasyPro Sellers who are subject to and follow EasyPro's quality control standards. Please note that because EasyPro is unable to control the quality of Products sold by unauthorized sellers, unless otherwise prohibited by law, this warranty does not cover Products purchased from unauthorized sellers.

This warranty does not cover normal wear and tear, nor any deterioration suffered through overloading, improper use, negligence, improper installation, acts of God or accident. Similarly, any modification made by the purchaser to the Product will cause the warranty to be null and void. This warranty does not cover any cost associated with the installation or removal of the Product subject to a warranty claim.

All returned items will be inspected to determine cause of failure before a warranty claim is approved. The exclusive remedies provided hereunder shall, upon EasyPro's inspection and option, be either repair or replacement of the Product or parts covered under this warranty.

Making a Claim: A Return Authorization ("RA") number must first be obtained by calling EasyPro at 800-448-3873 or via email at warranty@easypro.com. It is the purchaser's responsibility to pay the return shipping charges. Be sure to include the RA number, original receipt (in the form of an invoice or sales receipt), your name, your return address and your phone number inside of the package. No warranty claims will be honored without the original receipt that shows that your purchase was made from an Authorized EasyPro Seller. Ensure the product is properly packaged and insured for the replacement value. Damage due to improper packaging is the responsibility of the sender.

ALL OTHER EXPRESS OR IMPLIED WARRANTIES INCLUDING MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE ARE HEAREBY LIMITED IN DURATION TO THE DURATION OF THE WARRANTY AS DESCRIBED ABOVE. Some States do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

EasyPro shall not be held liable for any damages caused by defective components or materials of this Product; or for loss incurred because of the interruption of service; or any consequential/incidental damages and expenses arising from the production, sale, use or misuse of this Product. Some States do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

EasyPro shall not be held liable for any loss of fish, plants or any other livestock as a result of any failure or defect of this Product. This warranty gives you specific legal rights, and you may also have other rights that vary from State to State.



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