Satellite LED Plus Pro Instructions

To avoid injury and possible electric shock, it is imperative you:
READ AND FOLLOW ALL SAFETY INSTRUCTIONS AND WARNINGS

Important Warnings | Save these Instructions

This is NOT a page of legalese. It contains important safety information that you should read and save for future reference. Remember you can always quickly reference instructions for all Ecoxotic products on our website.

• Never attempt repairs yourself; return the appliance to an authorized service facility for service or discard the appliance.
• Carefully examine the fixture after installation and BEFORE you plug it into the GFCI wall outlet. Be sure there is no water on any part of the fixture.
• Never plug in a wet cord. If a plugged in unit or socket does get wet, DON'T touch it. Instead, promptly disconnect the fuse or circuit breaker that supplies power to the fixture. Then, you may unplug the fixture and examine for the presence of water.
• Never operate a fixture that is damaged or malfunctioning, discontinue use immediately and return the appliance to an authorized service facility.
• Close supervision is necessary when any appliance is used by or near children.
• Always unplug the fixture when not in use, before putting on or taking off parts, and before cleaning. Never pull the cord to unplug from the GFCI outlet.
• Do not use the fixture for anything other than intended use. The use of attachments not recommended or sold by the fixture manufacturer may cause an unsafe condition and will void your warranty.
• Do not install or store the fixture where it will be exposed to the weather or to temperatures below 0º Celsius or 32º Fahrenheit.
• Do not operate at temperatures above 50º Celsius or 122º Fahrenheit.
• Ensure the fixture is securely installed before supplying power to the unit.
• Read and observe all the important notices and warnings on the fixture and power cord.
• If an extension cord is necessary, a cord with a rating of at least 15 amperes should be used. A cord rated for less amperes or watts than the fixture rating may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.
• Do not mount LEDs close to metal halide or high heat producing fluorescent lamps.
• Do not look directly into the LEDs.

Important Warnings: Drip Loops

Drip Loops should always be used to help prevent water from traveling along the cord and coming into contact with an electrical outlet. Drip loops must always be below the level of the outlet. If the plug or outlet does get wet, DO NOT TOUCH the cord. Disconnect the fuse or circuit breaker that supplies power to the system. After disconnecting the power, unplug and examine for the presence of water. To help protect the transformer, use the included Velcro tape attachment to secure it either inside the aquarium stand or anywhere it is safe from potential water spills.

Grounding Instructions:

This LED system must be powered with a UL approved 24VDC transformer. To avoid possible electric shock, this transformer must be plugged into a GFCI protected AC outlet that is installed and grounded in accordance with all appropriate codes and ordinances.

GFCI Outlet

Drip Loop

Maintenance:

We recommend cleaning your light fixture once per week using a slightly damp towel or shammy with a bit of freshwater. Remove any mineral deposits and salt creep which may build up on your fixture. Remove from service if any rust or corrosion is found. Always clean your light with it removed from your aquarium and unplugged from the transformer and wall outlet.
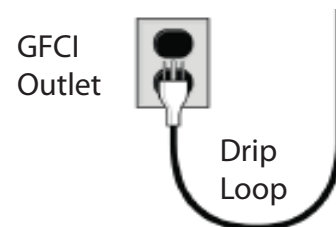
What's Included

1 - Satellite Plus Pro LED Strip (either 18", 24", 36" or 48")
2 - Adjustable docking mounts (pre-installed)
1 - Satellite Plus Pro LED controller
1 - Wireless LED controller remote
1 - 12VDC transformer/power adaptor
1 - Velcro for controller

Installing the Satellite Plus Pro

1 Carefully unpack the LED fixture and all components. Ensure your package includes all of the items listed above. Remove any plastic film or packaging material from fixture and components.

2 Slide the adjustable docking legs on the side of the fixture to match the length of your aquarium.

3 Set fixture on your aquarium and adjust docking mounts to ensure a snug fit.

Figure 1

RGBW Controller

12VDC Transformer

LED Strip

Wireless LED Remote
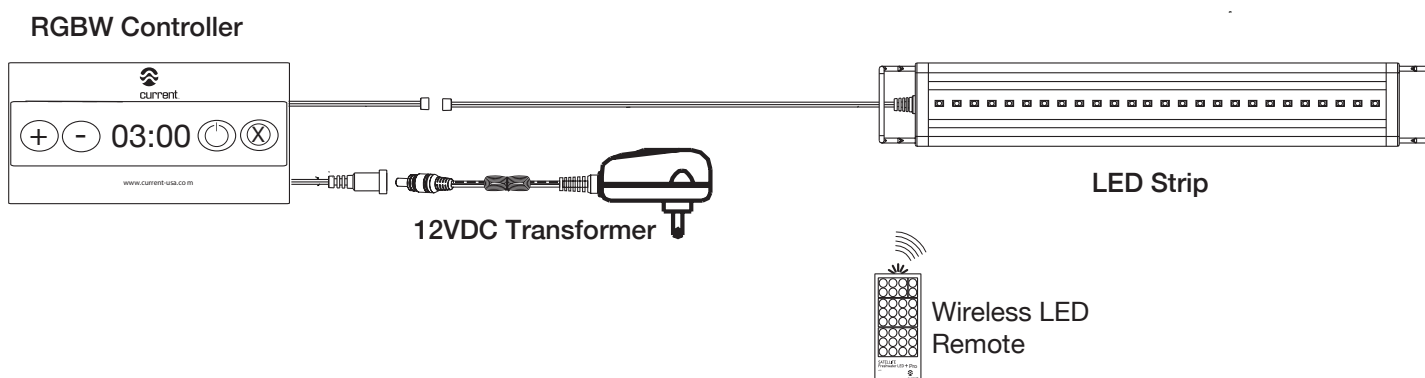
4 Connect the 12VDC transformer to the DC plug on the RGBW controller. Plug transformer into a GFCI protected AC outlet. Ensure transformer is not near water and a drip loop is in place.

5 Connect the LED strip to the RGBW controller by matching the pins and gently pressing the connector together. Complete connection by turning cap in a clockwise position.

6 Mount controller using velcro (included) and attach controller to aquarium stand or a location where it will not get wet.

7 Remove the wireless IR remote from the plastic sleeve and remove the small plastic tab located at the bottom of the remote. This will connect the battery.

8 Point the IR remote at the controller and press the red button on the top right corner of the remote. Light should turn on and is ready to be programmed using the steps on the following pages.

www.current-usa.com

Wireless IR Remote Guide
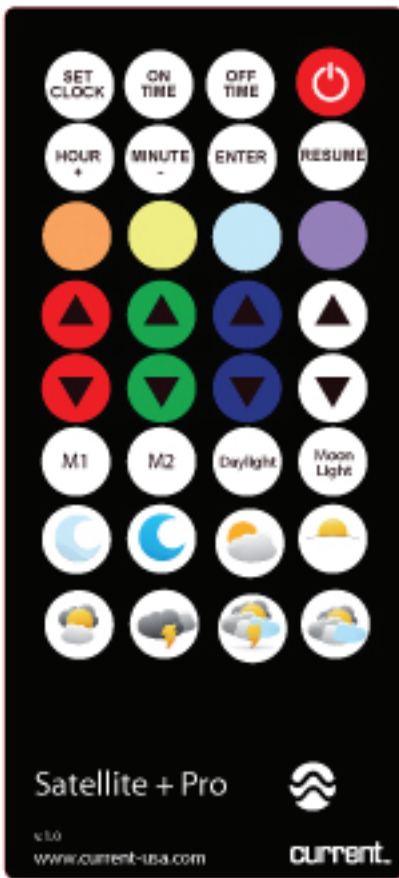
Set Clock
Used for setting the current time of day

Hour+/Minute-
Used for changing hours and minutes

Memory Keys
Stores customized color settings

On/Off Time
Sets daylight time on and off

Enter
Completes settings

Daylight
Used for setting the daylight color spectrum

Main On/Off
Turns light on/off

Resume
Exits a dynamic mode and resumes timer light schedule

Moonlight
Used for setting the moonlight color spectrum

Preset Colors
Pre-programmed color settings. See page 6 for more details.
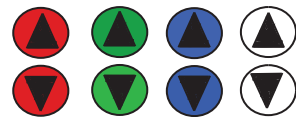
Manual Color Adjustment
Increase or decrease the intensity of each color spectrum. Ideal for programming moonlight and custom colors.

Dynamic Modes
On-demand moonlight, thunderstorm with lightning, cloud cover and slow color fade.

Programming Overview

Please read the following simple instructions for programming your Satellite Plus Pro LED fixture.

The innovative RGBW LED controller included with this fixture is designed to mimic a typical 24-hour photoperiod in freshwater environments. The graph below shows a typical 24-hour photoperiod and will help you understand each of the programming steps:

Daylight

Sunrise
(15 minute ramp up)

Sunset
(15 minute ramp down)

Moonlight

Moonlight

On Time

Off Time

24 Hour Photoperiod
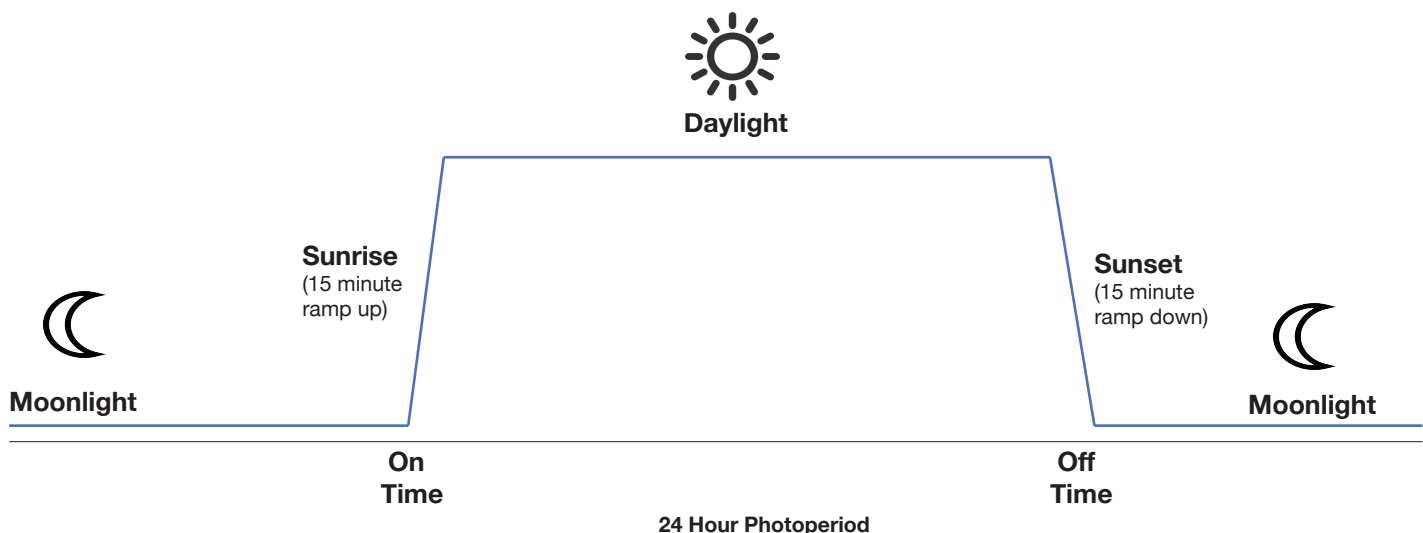
Programming Instructions

Programming time of day

Please note: this timer uses a 24:00 Hr. clock (for example, 1:00pm = 13:00 hrs). The on/off times must be within the same 24:00 day (i.e. do not program the lights to turn on/off on different days)

1. Press Set Clock, (SET CLOCK) screen will blink for 3-5 seconds.

2. Press Hour+ (HOUR +) until current hour is reached

3. Press Minute - (MINUTE -) until current minutes reached

4. Press Enter (ENTER) current time is now set

Programming on/off time

1. Press On Time, (ON TIME) screen will blink for 3-5 seconds.

2. Press Hour+ (HOUR +) and Minute-(MINUTE -) until desired On Time is reached

3. Press Enter (ENTER) scheduled On Time is now set

4. Press Off Time (OFF TIME)

5. Press Hour+ (HOUR +) and Minute (MINUTE -) until desired Off Time is reached

6. Press Enter (ENTER) scheduled Off Time is now set

Note: At scheduled On Time, the Satellite+ Pro LED will slowly ramp up over 15 minutes simulating a gradual sunrise. At the Off Time, the LED will slowly dim down over 15 minutes simulating a sunset.

Program daylight color spectrum

1. Press Daylight (Daylight)

2. Press any of the pre-programmed color spectrums ●●●● and customize the color and intensity using the adjustment buttons ▲▲▲▲ ▼▼▼▼ until your desired color spectrum is acheived.

Please see page 6 for daylight color spectrum recommendations.

3. When the desired daylight color spectrum is reached, press Daylight (Daylight) and hold for 5 seconds. Light will flash, indicating the daylight color spectrum is now stored in memory.

4. Press RESUME (RESUME) key for light to go back into its normal 24-hour schedule, display will show "T-ON".

Programming Instructions cont'd

Program moonlight color spectrum

1. Press Moonlight (Moon Light)

2. Press any of the pre-programmed color spectrums ⬤ ⬤ ⬤ ⬤ and customize the color and intensity using the adjustment buttons 🔺🔺🔺🔺 until your desired color spectrum is acheived. 🔻🔻🔻🔻

Please see page 6 for moonlight color spectrum specifications and recommendations.

3. When the desired moonlight color spectrum and intensity is reached, press Moonlight (Moon Light) and hold for 5 seconds. Light will blink, indicating the moonlight color spectrum is now stored in memory. Press the RESUME (RESUME) key for light to go back into normal programming mode.

Customized on-demand color spectrums

1. Press M1 or M2 (memory locations) (M1) (M2)

2. Press any of the pre-programmed color spectrums ⬤ ⬤ ⬤ ⬤ and adjustment keys 🔺🔺🔺🔺 🔻🔻🔻🔻 until your desired color spectrum is acheived. Press M1 (M1) or M2 (M2) for 3 seconds. The light will blink, indicating color is stored in memory.

3. Press M1 (M1) or M2 (M2) at any time to view your aquarium under your custom color spectrum. To exit the custom color and put the light back in timer mode, press Resume (RESUME)

On-demand dynamic modes

1. Press any of the dynamic modes on-demand

2. To exist the dynamic mode and put the light back in timer mode, press Resume (RESUME)

Please note: these modes are recommended as on-demand only and cannot be incorporated into a programmed lighting schedule.

Controller Tips

The controller features an integrated IR (infrared) sensor which recieves signals via the IR wireless remote. The remote will work up to 30 ft. away from the controller, however it is best to ensure there is a clear "line of sight" between the remote and controller when programming or using dynamic lighting modes.

Many other home electronics use IR technology for control (such as your television TV). If you notice your light changing colors or time schedule changing, ensure your other electronics are not interfering with it (i.e. place the controller in a different location around the aquarium or under the stand).

Note: The RESUME (RESUME) key can be used as a toggle between timing mode and color/dynamic modes. Please ensure to press RESUME whenever you want the light to go back into the normal timing mode.

Recommended Photoperiods

The typical photoperiod for a planted aquarium is to run the daylight spectrum for 7-10 hours per day, an 8 hour day is most typical. Note: extended photoperiods of 10+ hours can cause algae growth. We highly recommend a 7-10 hour daylight lighting period.

For example:

7 Hour Photoperiod	8 Hour Photoperiod	9 Hour Photoperiod	10 Hour Photoperiod
On Time = 10:00 Hrs.	On Time = 9:00 Hrs.	On Time = 9:00 Hrs.	On Time = 8:00 Hrs.
Off Time = 17:00 Hrs.	Off Time = 17:00 Hrs.	Off Time = 18:00 Hrs.	Off Time = 18:00 Hrs.

Recommended Color Spectrums

Daylight

Sunlight
Provides a soft white color temperature similar to a lower K spectrum like 6,500K. Great for planted tanks and fish with orange and yellows.

Full Spectrum
Excellent for heavily planted aquariums, this color spectrum runs all of the white, red, green and blue LEDs at full power.

Crisp Blue
Similar to a 10,000K spectrum, emits a very crisp white with a hue of blue. We highly recommend this color for cichlids and other fish.

Deep Water
An amazing color for many aquarium fish. White mixed with a bit of blue and red makes many fish "pop" in color.

Moonlight

We recommend either a natural moonlight color (white) or a deep water moonlight (blue). Press Moonlight then one of the down arrows (hold each of the buttons down for 20 seconds) and the remote will lower the intensity level of each color spectrum to its lowest level (off) so that colors can be adjusted manually. For example, to program blue moonlight:

1. Press Moonlight
2. Turn all colors off by pressing each down arrow key for 10 seconds
3. Press the blue up arrow key once or twice (depending upon your preference).
4. Press Moonlight for 5 seconds. Light will blink and moonlight setting is saved.

Note: If you do not wish to have moonlight, simply follow the steps above and once all colors are at their lowest (off) setting, press the Moonlight for 5 seconds.