FAQs Regarding Aquarium Lighting

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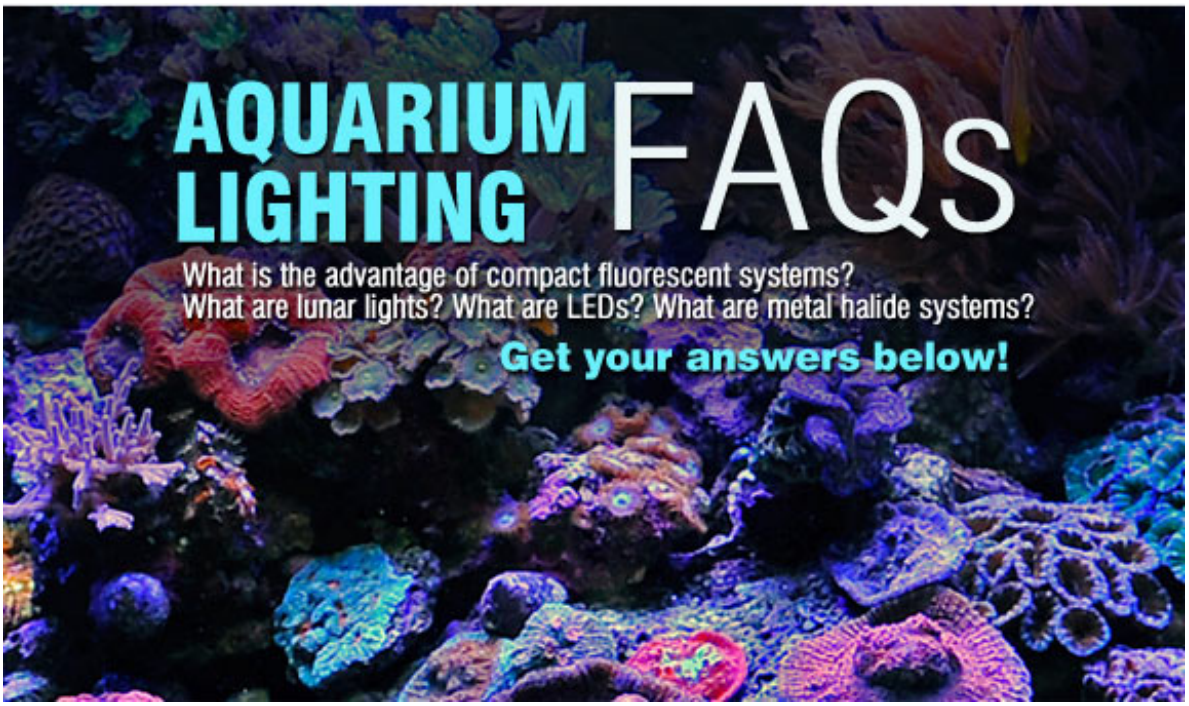

What is the advantage of compact fluorescent systems?

Compact fluorescent systems incorporate dual or quad tube lamps for greater light output. A single compact fluorescent light fixture easily does the job of two standard fluorescent fixtures. This space-saving feature makes compact fluorescent systems a great choice when upgrading from standard fluorescent systems.

What are lunar lights?

Lunar lights are supplementary lighting units designed to simulate moonlight. For this reason, they are also called moon lights. The use of moon lights allows hobbyists to observe natural, nocturnal behavior without disturbing aquarium inhabitants. Most lunar lights employ LED technology.

What are LEDs?

L.E.D. is an acronym for "Light Emitting Diode." As a relative "newcomer" to the world of aquarium lighting, LED light fixtures are often subject to confusion and misconceptions. LED technology employs a radically different approach to light generation. LEDs emit light as energized or exited subatomic particles pass through a semiconductor material. This distinct process of light generation called electroluminescence requires FAR LESS energy to produce brilliant light for an energy-efficient choice to aquarium lighting.

What are metal halide systems?

Metal halide systems are high intensity discharge (HID) lighting systems. They are popular among many aquarium hobbyists because metal halide systems provide intense illumination. Metal halide fixtures are capable of emitting several hundred watts of light energy. In most cases, the light output from a single metal halide fixture exceeds that of multiple standard or compact fluorescent light fixtures.

What does the T-rating signify?

The T-rating on fluorescent lamps indicates the diameter of the lamps described in increments of 1/8 inch. Therefore, a T-8 fluorescent light lamp is 8/8 or 1 inch in diameter. A T-12 lamp is 12/8 or 1-1/2 inches in diameter and a T-5 lamp is 5/8 inch in diameter.

What are VHO fluorescent light systems?

The different types of fluorescent lighting systems are generally distinguished by their light output. VHO or Very High Output fluorescent bulbs are similar in design to standard fluorescent lamps. However, by using a special ballast, they emit up to three times more light than a standard fluorescent lamp.

What is incandescent light used for?

Incandescent light fixtures are often included in small,desktop aquariums and certain aquarium hoods. They emit a "warm," yellow light that provides general-purpose lighting, well suited for fish-only aquariums.

What are retrofit kits?

A retrofit kit is essentially a light fixture without its housing. Retrofit kits are comprised of fundamental working parts of a light fixture, generally including endcaps with leads, ballast assembly with power plugs, and a reflector. Retrofit kits are used to upgrade existing aquarium light fixtures. In many cases, retrofit kits are a cost-effective alternative to brand new light fixtures. Retrofit kits are also used for custom lighting systems or custom canopies when suitable off-the-shelf light fixtures may not be available.

How long do I keep the lights on in my aquarium?

In general, the length of time your aquarium lights are on (photoperiod) should simulate the natural day and night cycle. A photoperiod of 10 to 12 hours of light a day will provide sufficient light energy for photosynthetic plants and animals, but depending on the type of aquarium and the light requirements of the aquarium inhabitants, photoperiods can be slightly longer

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Why do I need a timer?

The use of a timer is the easiest way to maintain proper photoperiod in a consistent manner. By automating light function with a timer you can ensure a reliable lighting schedule for your aquarium, even while you're away.

Why do I need a canopy?

The use of a glass top or canopy is recommended for all light fixtures, especially fixtures with exposed bulbs or without a protective lens or splashguard. Not only do glass canopies provide additional stability for your light fixture, they also protect the light bulb and fixture from condensation and splashing. Contact with water can damage the unit or cause serious injury.

How often should I replace the bulbs and why?

The intensity of a bulb diminishes over time. Even though the bulb will still light up, it may not emit the spectrum or intensity necessary to support healthy growth of photosynthetic organisms. In many instances, diminished light output can encourage nuisance algae growth.

Incandescent Bulbs - Replace every 2 to 4 months.
Standard Fluorescent Bulbs - Replace every 6 to 18 months depending on ballast type.
VHO Fluorescent Bulbs - Replace every 4 to 18 months depending on ballast type.
T-5 HO Fluorescent Bulbs - Replace every 16 to 24 months.
Compact Fluorescent Bulbs - Replace every 14 to 24 months.
Metal Halide Bulbs - Replace every 6 to 18 months.

Why are there so many different types of aquarium light fixtures?

Different aquarium inhabitants have different light requirements. To provide the best care for them, different light fixtures are necessary to create the specific light conditions in which they thrive. Selecting the right light fixture is essential for a successful aquarium hobby.

What are the different types of lighting systems available for aquarium use?

The most common aquarium lighting systems include: incandescent, standard fluorescent, VHO fluorescent, compact fluorescent, LED light, and metal halide fixtures. These lighting systems are employed as either the primary light source or as supplementary lighting. Since each type of light fixture has unique benefits, many light fixture manufacturers offer combination light fixtures.

What is color temperature and the kelvin rating?

Many aquarium bulbs are categorized or described by their color temperature, signified by their Kelvin rating (K-rating). The K-rating gives us insight to the appearance of the light emitted by the bulb. Bulbs with lower K-ratings tend to produce light that appears warm (i.e. reds, yellows, and oranges) and bulbs with high K-ratings produce light that appears "cool." Sunlight at noon has a K-rating of 5500°K and contains a blend of all the colors of the color spectrum. For this reason, a 5500°K bulb is also referred to as a full-spectrum bulb and can be used as a reference point when selecting a bulb based on its K-rating.

What are the benefits of fluorescent light systems?

Fluorescent light systems are extremely popular due to their versatility. They are available in a wide selection of color temperatures ideal for both freshwater and marine aquariums. Furthermore, they boast low operating cost and lower heat emission, making fluorescent light systems an energy-efficient choice for hobbyists.