



User Manual

for
Amethyst DS 20 - mini light

Ideal for mother plants, mini tents
&
indoor herb gardens

Thank you for purchasing your Plant Photonics light. It has been designed and built to provide you with a lifetime of service. Please read the following instructions to get the best from your light.

VERY IMPORTANT!

Your new Plant Photonics light can produce 2 spectrum's which are designed for the **vegging** and **flowering** stages of your plants life cycle.

YOU MUST SWITCH THE LIGHT OFF
BEFORE CHANGING THE SPECTRUM!

Failure to do so may lead to failure of the leds and will void your warranty!

Amethyst DS 20 Led Light component's diagram



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1. Light Maintenance

Your light should be kept clean for best performance and quieter operation. Never use harsh chemicals or solvents to clean your light. Use a soft dry or SLIGHTLY damp cloth or a small paint brush. Clean the top of the light after every grow cycle . A layer of dust on the top of the light will cause it to operate at a higher temperature. Clean the lens with a dry micro fibre cloth. If you have splashed chemicals or nutrient solution on the lens, use a damp cloth to remove the splash, then gently dry the lens.

2. Setting Up Your Light

In the box you have 1 led light panel and 1 mains lead with the correct mains plug for your region on one end and a small white connector on the other. Carefully plug the mains lead connector into the mains lead socket on the power supply of the light until the 2 retaining clips snap into position. Please check it is the right way around and never use force, the connector should go in easily! You will notice that the mains lead has a D ring and a split ring attached to it. This is the stress relief which protects against the cord being pulled out of the socket (*please see photo A below*). Attach the split ring to the attachment point on the light. The attachment point is a small hole drilled in the upright support for the power supply.

3. Using Your Light

- Hanging Your Light

Your light should be hung in the centre of the area you want it to cover. The light should be high enough to give even coverage of the growing area. Normally the light will be about 20 cm above the top of the plant although you can place it closer for flowering or further away for small clones and seedlings. Experiment to see what works best for you.

- Selecting the correct Spectrum.

Your light has 2 different modes which are controlled by a switch. **YOU MUST SWITCH THE LIGHT OFF BEFORE CHANGING THE SPECTRUM!** Failure to do so may damage the leds and will void your warranty!

- 1) **Vegging mode** - This provides the correct spectrum for vegging and mother plant maintenance. The power output in this mode is 23 watts.
- 2) **Flowering mode** - This provides the correct spectrum for flowering. It can also be used to provide faster and slightly 'stretchier' growth for mother plants when you wish to take cuttings . It is recommended that you switch to this mode 1 or 2 weeks before either switching to shorter light periods for flowering or taking cuttings for cloning. The power output in this mode is 32 watts.

- Timers and Extension cords

Your light can be used with any type of timer; mechanical or electronic.

I recommend not using more than 560 watts of led lights per timer. If you have more than this, I recommend using more than 1 timer and setting the timers so they come on at slightly different times. This is to avoid the possibility of the inrush current blowing a fuse or circuit breaker. Although the lights draw very little power when they are on, when they

are first switched on they create what is called an 'inrush current'. This is a short period (about 1/100) of a second where the power supplies draw a large amount of power as they charge their capacitors and stabilise.

Having said that, I would always recommend buying a decent timer as it will be more reliable and last longer.

I recommend you do NOT use any extension cords or multi-plugs which have a power on light or lighted switch. These seem to allow a tiny trickle of power through (possibly via ground leakage) which is enough to make the leds glow slightly when the light is switched off! If you see this problem, simply change your extension cord for a plain one and the leds won't glow!

4. Hint and Tips

- Change the spectrum from Vegging to Flowering a week before you cut the hours. This will cause faster flowering. A good time to do it is when you change the fertilizer to a flowering one.
- Change back to the vegging spectrum for the last 2 weeks of flowering. This will give you the highest quality results. It is the same as the way many growers go back to MH for the last 2 weeks, to increase resin production and improve taste.
- Use less nutrients/fertilizer than usual. Hydro growers will notice they will only need to top up about half as often as usual. Usually the plants will do better with a much lower EC than you needed with normal lights. This also means plants grown under leds require less flushing.

