



# USER MANUAL



## Wireless Pixel Tube (AL1)

**Manual Version:**  
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## 2 Safety



Before you operate the unit, read this manual carefully.

Make sure to keep the manual, in case you need to consult this manual again or you give the unit to another person.

Always make sure to include this manual if you hand out the unit to another person.

Keep in mind that this manual cannot address all possible dangers and environments. Please use your own caution when operating.

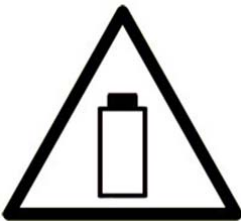


Only qualified personnel may repair this product.

Don't open the case.



Do not operate the unit in areas of temperature conditions or under direct sunlight. It will cause abnormal function or damage the product.



A rechargeable battery is built into this unit, please avoid bumping or plunging, it will cause FIRE or EXPLOSION.

Never store the battery when fully drained. Always recharge immediately when empty.



Make sure to fully charge all AL1 units before storing them.

Partially charged batteries will lose capacity.

Do not store the unit longer than 3 months without re-charging.

### **3 Specifications**

- a) **Wireless tubelight, for indoor and outdoor use**
- b) **Displays more than 16 million colors.**
- c) **Low power consumption**
- d) **Controllable by Radio Frequency Remote Control**
- e) **DMX integration via ART3 wireless DMX Transmitter**
- f) **8-24 hours operation time without recharging the battery.**
- g) **Up to 300 meter operation distance of the remote control**
- h) **High brightness LEDs**
- i) **RGB LEDs combined with white LEDs for a better color mixing and color appearance**

### 3.1 Technical Data

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**Light Sources**

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<b>Light Sources</b>	<b>high-brightness bullet LEDs</b>
<b>Amount of LEDs</b>	<b>64 (32xRGB, 32xWhite)</b>
<b>LED Power</b>	<b>16W</b>

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**Power Supply**

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Power supply unit	<b>Shipping with the Wireless Pixel Tube</b>
Input power	<b>AC 100-240V, 50/60Hz, 0.3A</b>
Output power	<b>DC 48V, 0.5A</b>
Battery operational time	<b>6 – 24h (depending on selected colors, brightness, programs)</b>

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**Wireless Module**

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Available versions	<b>RF(radio frequency), IR(infra-red)</b>
Range	<b>IR: up to 10m RF: 50m up to 300m</b>
RF Frequency	<b>Europe: 868.000 MHz – 869.750 MHz US: 902MHz – 928 Mhz</b>

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**Housing**

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Material	<b>Polycarbonate with metal endcaps</b>
Size	<b>L100cm x Ø4cm</b>
Weight	<b>0.950 kg</b>

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**Environmental Requirements**

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Operational Temperature	<b>0 ~ 50 °C work temperature</b>
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Environment	<b>Indoor and Outdoor (splash-proof)</b>
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## 4 Quick Start

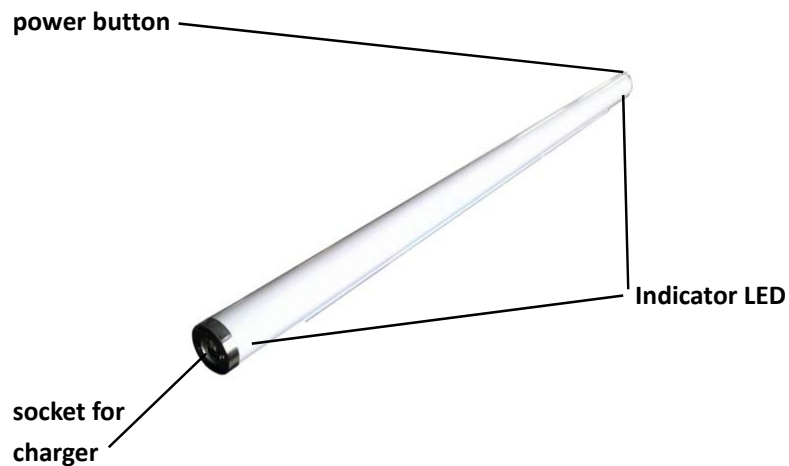
This Wireless Pixel Tube is designed for event illumination and decorative lighting. Due to its integrated battery and wireless module it offers an uncomplicated setup without the need to lay out cables for control and power supply.

The AL1 offers several mounting possibilities. Through its magnetic back it can be quickly attached at walls, ceilings or under tables and chairs. It can also be used to light up a range of optional decorative objects.

An AL1 can be used as standalone lamp since basic illumination can be started with the touch button. However, for better setting of colors and programs and additional functions it is recommended to use it together with the ARC2 remote control or the IR Remote Control.

For a larger setup, AL1s can be grouped and paired with other AL1 units and other wireless Astera lamps. This can be done with the ARC2 remote control or the ART3 Wireless DMX transmitter.

### 4.1 Overview



## **4.2 Advantages**

**Wireless design** --- The AL1 is easy for installation due to its integrated battery and RF receiver.

**Smart programming** --- The AL1 not only displays complex color-changing programs but also gives you the possibility to use your own customized colors for these programs when controlled by an ARC2 Remote Control. The AL1 can be used as a standalone unit or grouped and paired with other Astera lamps and be controlled with an ARC2 RF Remote Control.

**Energy saving design** --- Low working voltage, low power consumption and additional white LEDs helps to save up to 80% energy so it can reach a maximum operation time of up to 24 hours.

## **4.3 Button and Operation**

To power on the unit, hold the on/off button for 2-3 second.

To power off, press the on/off button shortly.

To choose basic colors or a rainbow effect, turn the unit on, then hold down the button and keep the finger until the lamp turns into the blue blinking mode. Push the button several times to cycle through the basic colors until the rainbow effect. When the desired color is displayed, hold the button until the LEDs stop blinking and the lamp turns into normal operation.

To do a Factory Reset, turn the unit on. Then hold down the button and keep the finger until: unit turns off → turns on blue blinking → turns off again

When the unit turns off for the second time, a factory reset was done.

## 5 Charging

### 5.1 Indicator LED

When the lamp is switched on, the indicator LED will show the battery charge state:

- Green = up to 30mins runtime have been used
- Orange = over 30mins runtime have been used
- Red = less than 30mins runtime remain – recharge soon
- Blinking Red = battery is about to run out and the fixture might not switch on

While charging, the indicator LED will blink in green. Once the battery is completely full the indicator LED will stop blinking and the charging process will stop automatically.

### 5.2 Battery Runtime

The work temperature is 0~50 Celsius degree.

When you switch on but it's not working and the red light is keep shining means you need recharge the battery.

The LED POWER modes description:

- When we use maximum runtime, we setting the LED power is 50% full power, the LED will run longer time, but the brightness is just 50% also
- When we use normal brightness, we setting the LED power is 70% full power, the LED will run time is our normal time.
- When we use high brightness, we setting the LED power is 100% full power, then the LEDs will more bright, but the run time will be shorter than the normal brightness or maximum runtime mode.

Here are estimated battery runtimes:

Color	MAX RUNTIME	NORMAL	HIGH BRIGHTNESS
COLR WHITE	9,6 h	8,0 h	5,6 h
CYAN	11,4 h	9,8 h	7,0 h
MAGENTA	12,9 h	11,1 h	8,1 h
YELLOW	13,5 h	11,7 h	8,5 h
ORANGE	17,3 h	15,1 h	11,1 h
GREEN	18,9 h	16,6 h	12,3 h
BLUE	21,2 h	18,4 h	13,8 h
RED	23,7 h	20,9 h	15,7 h



## 6 Troubleshooting

<i>Faulty condition</i>	<i>Cause</i>	<i>Troubleshooting</i>
LED show no light when you switch on	Due to the vast number of settings, one cannot always predict behavior of the units, if setup was already done earlier.	Set the brightness to other value, make sure C1 is not set to Black
Units behave incorrectly	Due to the vast number of settings, one cannot always predict behavior of the units, if setup was already done earlier.	Do FACTORY RESET on units and/or remote control.
Lamp does not start up	Battery might have run out	Plug connect to an AC socket, charge for 20 minutes, then turn on
The indicator LED is not blinking when charging	DC plug or AC input is not settled well or battery is already full	Discharge the battery a little or check whether the DC has been plugged or whether the AC input has any problem.
Units will go out of battery after only 6 hours of operation.	The units last only 8 hours with COLD WHITE, if the LED POWER is set to NORMAL. For HIGH BRIGHTNESS the run time is shorter than 8 hours.	Adjust LED POWER and/or see manual of the unit.
When connected with the charger, the units go shortly on, then off, then on, then off but refuse to charge the battery.	The battery is completely empty and not strong enough to light up and charge units at the same time.	While the LEDs are on, switch off the unit by pressing its power button. Charging it for 30mins will give it enough battery power to light up and charge at the same time.

## 7 Disposal

Follow local ordinances and/or regulations for disposal!



### ***PACKAGING:***

The unit is shipped in protective packaging.  
This packaging can be recycled!



### ***UNIT:***

Don't throw the unit into the garbage at the end of its lifetime.  
Make sure to dispose is according to your local ordinances and/or  
regulations, to avoid polluting the environment!



### ***BATTERIES:***

Don't throw empty batteries into the garbage!

Bring them to a collecting point for used batteries!

This instruction manual is part of the device and persons operating the device must have access to it at any time. Safety precautions mentioned in the instruction manual have to be observed. If the device is being sold, this instruction manual has to be included.

#### **Translations**

If the device is being sold, this instruction manual has to be translated into the national language of the destination country. If discrepancies occur in the translated text, the original instruction manual has to be used to solve them for the manufacturer has to be contacted.

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