



## Installation Manual

# MICROMAX

Revision	Date	Change Description	Approval
Initial	01/Oct/2017	N/A	

## 1. PRODUCT INFO

Fully D0-160 tested and weighing in at only 23 grams, MicroMax™ will help you comply with all the tightening and future regulations around operating small UAVs/MiniDrones and ensure SAFETY is included in your flight operations. Available in Red, White, NVIS White or even InfraRed, the patented MicroMax™ provides a 360 degree arc of coverage. An amazing product from Aveo's famous engineering prowess, which has made it the world market leader in UAV lighting by a wide margin.

### 12 High brightness LEDs for ANTICOLLISION light coverage (360°)

Packed with 12 ultra high brightness CREE LEDs in RED, WHITE, NVIS WHITE or INFRARED color that are the industry state-of-the-art in performance and output lumens, the MicroMax feature a significantly lower footprint than competitor lights.

### Low Profile/Small Diameter Strobe

An extremely lightweight, aerodynamic and low-profile design make this the light of choice for any aircraft requiring a rear coverage light due to wingtip light coverage zone limits.



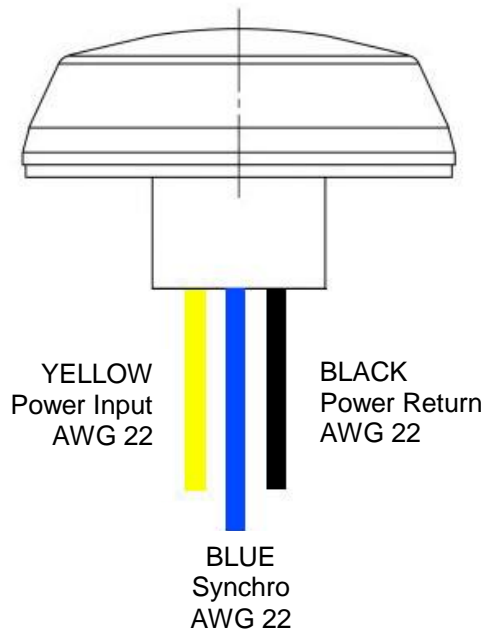
### No separate strobe power box needed

Aveo pioneered the no external power supply design from its inception in the industry and the copycats have yet to match our exclusive circuitry. Quite simply the lowest weight solution you can get, in 9 to 32 volt input range too!

### Waterproof / Shockproof / Dust-proof



## 2. WIRING DIAGRAM



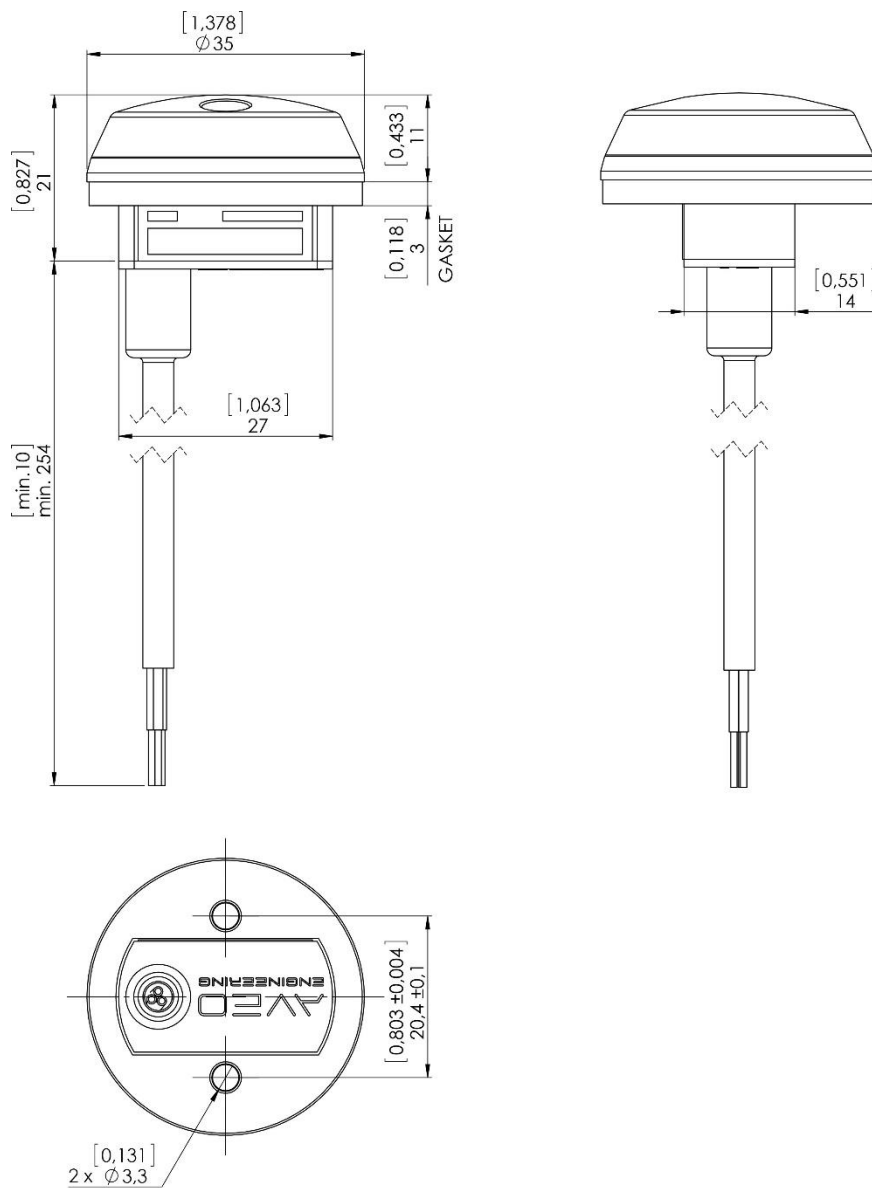
- Power Input - YELLOW** - positive position power supply line
- Power Return - BLACK** - negative common power supply line (ground)
- Synchronisation - BLUE** - synchronisation line

## 3. TECHNICAL SPECIFICATION

Dimensions:	<i>see section 4. Technical drawing</i>
Weight:	<i>23 g / 0.81 oz</i>
Operating Voltage Range:	<i>9 – 32V DC</i>
<b>Red LEDs version:</b>	
Output power:	<i>6W (peak)</i>
Input current:	<i>0.27A @28V (peak)</i>
	<i>0.50A @14V (peak)</i>
<b>White LEDs version:</b>	
Output power:	<i>7,8W (peak)</i>
Input current:	<i>0.35A @28V (peak)</i>
Repetition Flash Rate of Strobe:	<i>50 cycles per minute</i>
Recommended size of mounting screw:	<i>M3, stainless steel recommended. Length depends upon placement location on wing tips.</i>
Supplied cable:	<i>AWG22, length of wires is 25 cm (10 inches)</i>
Reverse polarity protection:	<i>Yes</i>
Over-Voltage spike protection:	<i>60V/1s</i>

Over-Voltage shut down:	Yes, 33V
Under-Voltage protection:	Yes, 8.5V
Operating temperature:	-40°C to +85°C (-40°F to +185°F)
Over-Temperature protection:	Yes
Waterproof	Yes
Vibration-proof	Yes
Shock-proof	Yes
Dust-proof	Yes

## 4. TECHNICAL DRAWING



[inches] millimetres

## 5. TESTING THE FUNCTION OF MICROMAX BEFORE INSTALLATION

All Aveo Aviation lights undergo rigorous testing prior to being released from our engineering manufacturing department. This testing involves a burn-in time as well as other function testing. No light is released for sale without undergoing this extensive operational testing.

When you receive the Aveo lights, and wish to test the function of the lights prior to installation on your aircraft, please note the following:

1. Please review the written information that is enclosed in the packaging. Warranty information as well as a cautionary note about power supply removal is enclosed with each package.
2. Remove the lights from the package. Note that there are three (3) wires coming from each light. These wires are:
  - a. Black wire – Ground wire (negative lead)
  - b. Yellow wire – Anticollision light function wire (positive leads)
  - c. Blue wire – Synchronisation wire (positive leads)
3. Testing of the function of each light can be done with a regular 12V/5A dc power supply (not a battery chargers). Connect the black wire to the ground (negative) leads of a power supply, then connect the yellow wire to the positive (+) leads on the power supply. The strobe light should light up. Connecting the blue wires from each Aveo strobe/anticollision light together (and not to the ground or positive terminals on the battery) should result in flashing all lights at once. It indicates that the synchronization feature is working properly. When installed on the aircraft, using the aircraft's power (14 or 28 volts), the lights will be at their maximum intensity.

After testing, the lights can be installed on the aircraft.

### IMPORTANT NOTES:

1. Under no circumstances should any power supply other than a 9-32V DC, or a 12/24 volt battery be used to test the lights. Do not use: Battery chargers, battery back-up power devices, or other bench avionics testing methods to test the aviation lights. The lights are functional between 9 and 32 volts. Use of a battery charger or other power unit to test the lights will void the warranty and may damage the lights.
2. All power supplies for existing strobe lights, flasher beacons, etc. are required to be removed from the aircraft prior to the installation of the Aveo lights.