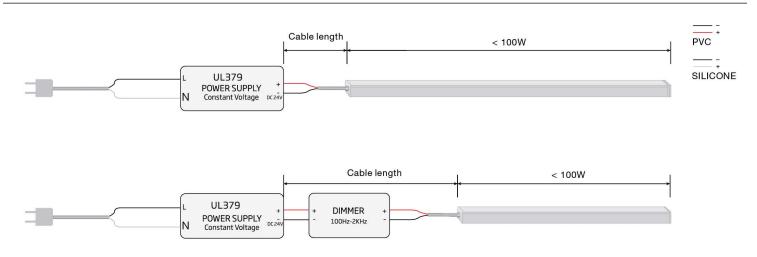


AQUA NEON WAVE: 24V

Wiring Diagram - Static Whites & Colors

- 1. For supply connection, use only an isolating low voltage power supply with ungrounded output, evaluated for swimming pool use.
- 2. Dimming frequency ranges from 100Hz to 2000Hz, and 500Hz is recommended.

WIRING - STATIC - SINGLE



LIGHT LENGTH

The length of the longest single light in parallel connection or sum of lights in series connection.

CABLE LENGTH

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

HOW TO MINIMIZE VOLTAGE DROP

- 1. It is optimal to position the power supply in the middle of a single light or multiple lines in daisy chain to keep the equivalent cable length on both ends for double-end feed.
- 2. Please ensure the cable length is not more than the table "Max. Cable Length" according to the half of light length and its wire gauge.
- 3. Shielded Twisted Pair cable is required to be used to connect DMX master controller and decoder, and its length shall be less than 300m.

MAX RUNNING LIGHT LENGTH 1 CONNECTOR

CONNECTOR TYPES	PVC SUBMERSIBLE	SILICONE SUBMERSIBLE	
Wire gauge	18AWG*2	18AWG*2	
PVC 24V: Power 2.43W/ft (8W/m)	31.5ft (9.6m)	N/A	
PVC 24V: Power 3.66W/ft (12W/m)	21.0ft (6.4m)		
Silicone 24V: Power 1.82W/ft (6W/m)		42ft (12.8m)	
Silicone 24V: Power 2.43W/ft (8W/m)		31.5ft (9.6m)	
Silicone 24V: Power 2.74W/ft (9W/m)	N/A	28ft (8.53m)	
Silicone 24V: Power 3.66W/ft (12W/m)		21.0ft (6.4m)	
Silicone 24V: Power 4.57W/ft (15W/m)		16.8ft (5.12m)	

Note: Above conclusion is based on voltage drop testing result of the light with 0.98ft (0.3m) cable only. The maximum running length is based on a static light in full load. Above running length is only the light length excluding lengths of connectors. The delivered length might be subject to the maximum packing length.



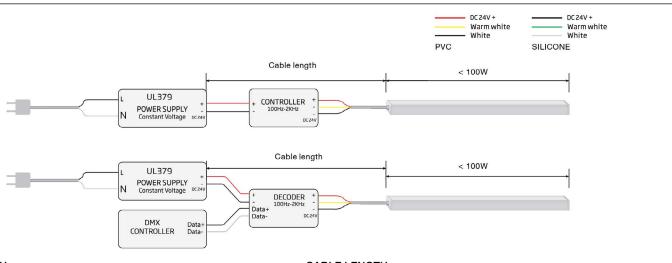


AQUA NEON WAVE: 24V

Wiring Diagram - Tunable Whites

- 3. The rated power of controller/decoder shall be higher than the actual power consumption of light, its frequency range shall be $100\sim2000$ Hz, and 500Hz is recommended.
- 1. For supply connection, use only an isolating low voltage power supply with ungrounded output, evaluated for swimming pool use.
- 2. A compatible controller is required to achieve various light changing effects.

WIRING - TUNABLE WHITE - SINGLE



LIGHT LENGTH

The length of the longest single light in parallel connection or sum of lights in series connection.

CABLE LENGTH

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

HOW TO MINIMIZE VOLTAGE DROP

- 1. It is optimal to position the power supply in the middle of a single light or multiple lines in daisy chain to keep the equivalent cable length on both ends for double-end feed.
- 2. Please ensure the cable length is not more than the table "Max. Cable Length" according to the half of light length and its wire gauge.
- 3. Shielded Twisted Pair cable is required to be used to connect DMX master controller and decoder, and its length shall be less than 300m.

MAX RUNNING LIGHT LENGTH 1 CONNECTOR

CONNECTOR TYPES	PVC SUBMERSIBLE	SILICONE SUBMERSIBLE
Wire gauge	18AWG*3	18AWG*3
PVC 24V Full Load: Power 3.66W/ft (12W/m)	21.0ft (6.4m)	N/A
Silicone 24V Full Load: Power 3.66W/ft (12W/m)	N/A	21.0ft (6.4m)

Note: Above conclusion is based on voltage drop testing result of the light with 0.98ft (0.3m) cable only. The maximum running length is based on a static light in full load. Above running length is only the light length excluding lengths of connectors. The delivered length might be subject to the maximum packing length.



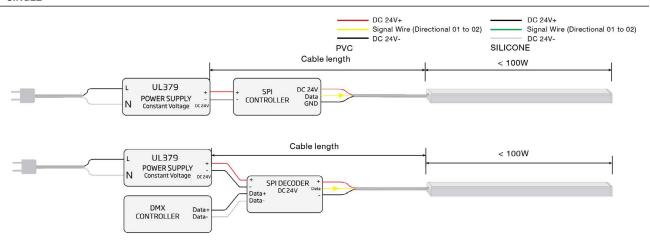


VIVID WAVE: 24V

Wiring Diagram - SPI-Pixel

- 1. For supply connection, use only an isolating low voltage power supply with ungrounded output, evaluated for swimming pool use.
- 2. A compatible decoder or controller that outputs SPI signal is required for this product with UCS2903 or UCS2904 IC inside.
- 3. The number of pixels light used should not exceed the maximum number of pixels of controller/decoder.
- 4. To avoid signal attenuation, please ensure the overall cable length is within the maximum signal transmission distance according to the specification of controller/decoder.

WIRING - SPI-PIXEL - SINGLE



LIGHT LENGTH

The length of the longest single light in parallel connection or sum of lights in series connection.

CABLE LENGTH

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

HOW TO MINIMIZE VOLTAGE DROP

- 1. It is optimal to position the power supply in the middle of a single light or multiple lines in daisy chain to keep the equivalent cable length on both ends for double-end feed.
- 2. Please ensure the cable length is not more than the table "Max. Cable Length" according to the half of light length and its wire gauge.
- 3. Shielded Twisted Pair cable is required to be used to connect DMX master controller and decoder, and its length shall be less than 300m.

MAX RUNNING LIGHT LENGTH 1 CONNECTOR

Connector types	PVC SUBMERSIBLE	SILICONE SUBMERSIBLE
Wire gauge	18AWG*3	18AWG*3
PVC 24V Full Load: Power 3.05W/ft (10W/m)	23.6ft (7.19m)	
PVC 24V Full Load: Power 3.66W/ft (12W/m)	21.0ft (6.4m)	N/A
PVC 24V Full Load: Power 5.02W/ft (16.5W/m)	15.26ft (4.65m)	
Silicone 24V Full Load: Power 3.05W/ft (10W/m)		25.2ft (7.68m)
Silicone 24V Full Load: Power 3.66W/ft (12W/m)	N/A	21.0ft (6.4m)
Silicone 24V Full Load: Power 5.02W/ft (16.5W/m)		15.26ft (4.65m)

Note: Above conclusion is based on voltage drop testing result of the light with 0.98ft (0.3m) cable only. The maximum running length is based on a static light in full load. Above running length is only the light length excluding lengths of connectors. The delivered length might be subject to the maximum packing length.

