

SPECIFICATIONS FLOATING CELESTIAL FOUNTAINS® SYSTEM

1.0 GENERAL

1.1 DESCRIPTION

- A. Manufacturer shall furnish a floating fountain system capable of pumping water from below the surface of a body of water.
- B. A submersible motor shall draw water into an impeller chamber where it shall be pumped into the atmosphere in the form of a decorative fountain.
- C. The water droplets shall become oxygen enriched and return to the surface, therefore transferring oxygen from the atmosphere into the body of water.
- D. This repeated action shall effectively mix the body of water and distribute the dissolved oxygen continuously.
- E. Fountain system shall include a motor in a housing combined with a centrifugal type pump housing, attached to a modular floatation system. This assembly shall be connected to an electrical control panel by underwater power cable, all of which as specified in SECTION 1.2.

1.2 FOUNTAIN COMPONENTS DESCRIPTION

- A. **Floats** shall be made of linear low density polyethylene. Float system shall a modular in-line configuration and field adjustable to maintain an even floatation level. Four series 300 stainless steel C-channel rails shall be welded to the fountain framework for float mounting. All optional lights and anchor mounting shall be capable of being installed into fixture mounting areas which are provided on the framework. (See SECTION 5).
- B. **Impeller** shall be of a closed type, cast Series 300 Stainless Steel and precision balanced. The impeller is housed in a series 300 stainless steel, single stage centrifugal type pump housing with vertical discharge. Discharge piping shall not have more than two 90 degree bends to reduce pumping losses.
- C. **Framework** shall be a weldment of rectangular and square series 300 stainless steel tubing with a minimum wall thickness of 1/8 inch. Framework shall be equipped with four heavy duty linear low density polyethylene wheels mounted on series 300 stainless steel axles for ease of installation and routine maintenance practices. Wheels shall have a diameter of not less than ten inches and a width not less than five inches for ground bearing purposes.
- D. **Motor Housing** shall be Series 300 Stainless Steel. The 10-15 HP shall have a permanent series 300 stainless steel electrical hub welded on side of housing to allow electrical cable entry. The 20-25 HP shall have a series 300 stainless steel junction box housing and housing end plate for electrical cable entry secured with series 300 stainless steel bolts and o-ring sealed.

- E. **Motor** shall be of open frame construction with a series 316 Stainless Steel shaft and with a serviceable heavy duty ball bearing support system. The rotor shall be dynamically balanced. The stator windings shall be double dipped and baked with a Class F insulation, designed for oil immersion operation. The oil shall be of a synthetic food grade quality, meeting FDA regulations. The oil shall provide continuous lubrication of bearings and internal seals and further function as an efficient heat transfer medium, allowing the motor to operate at 3450 RPM, at relatively low temperatures. The motor shall be contained in the motor housing by a series 300 stainless steel top plate.
- F. **Seals** used to protect the motor against water or oil leakage shall be a mechanical rotating type assembly composed of Silicon carbide, Series 300 Stainless Steel and brass positive drive system. The positive drive assembly shall be attached to the motor shaft with two allen head set screws. These set screws should be tightened into pre-drill dimples drilled into the shaft to prevent the seal assembly from slipping at any time the motor shaft is rotating, thus creating a non slip positive drive system. All elastomers shall meet UL 778 requirements. This assembly shall then be encapsulated and protected within a series 300 stainless steel cartridge assembly. This assembly shall be filled with a synthetic food grade oil meeting FDA regulations.
- G. **Underwater Power Cable** shall be UL Listed and specifically designed for underwater use. The conductors are flexible, stranded copper wire sized for the amp draw and length of run. The conductors shall be resistant to oil, water and cracking. Power cable shall be fitted with a cable strain relief device, located within five feet of motor housing, capable of being attached to the latches mounted on the cart framework. This will ensure that no potential damage can occur to any cable connections, due to tension on the cable.
- H. **Underwater Power Cable Disconnect** (10–15 HP) shall be located approximately five feet from the series 300 stainless steel motor housing. It is a two piece molding assembly made of thermoplastic material meeting the UL 778 requirements. The cap half of this disconnect shall be permanently attached to a wire reinforced braided hose assembly. The free end of this hose assembly shall be attached to a series 300 stainless steel hub which is welded to a series 300 stainless steel motor housing. This complete assembly shall be sealed with a flexible potting compound.
- (20-25 HP) shall be located approximately five feet from the series 300 stainless steel motor housing. It is a two piece molded assembly made of thermoplastic material meeting the UL 778 requirements. The cap half of this disconnect shall be permanently attached to a wire reinforced braided hose assembly. The free end of this hose assembly shall be attached to a series 300 stainless steel electrical connection end plate. This complete assembly shall be sealed with a flexible potting compound. The body half of the under water disconnect shall be permanently attached to the underwater power cable by means of a water tight connector and grommet assembly. This assembly shall be sealed with an approved potting compound to prevent water entry if damage would occur to the cable. The disconnect assembly shall be sealed with an internal o-ring and by an external series 300 stainless steel clamp ring, which can be easily opened. This allows removal of the complete fountain assembly without the power cable attached for storage and maintenance.

- I. **Fasteners and Anchor Connectors** shall be Series 300 Stainless Steel.
- J. **Electrical Control Panel** specifications, see SECTION 3.
- K. **Intake Screen** shall be made of 18 Gauge, Series 300 Stainless Steel. A stainless steel handle shall be attached to the top end of the screen for easy removal without tools for cleaning as required. The screen shall have a minimum of 58% open area, representing 360 square inches of open intake area.
- L. **Spray Patterns (Standard Nozzles)** shall be threaded and tightened onto the discharge assembly. Standard nozzles are interchangeable.
- M. **Spray Patterns (Specialty Nozzles)** shall consist of a modified discharge assembly to achieve the desired spray pattern. Specialty nozzles are not interchangeable. The Olympian (tri-geyser) requires the circular float configuration.
- N. **Circular Float Configuration** (optional) shall use the same floats as the in-line configuration but are mounted in a circular configuration. Additional framework made of series 300 stainless steel is required for this option. Floats are mounted to the framework using series 300 stainless steel brackets and bolts.
- O. **Series 316 Stainless Steel Upgrade** (optional) is available for sites with salt or brackish water. This option will upgrade all series 300 stainless steel components to series 316.

FLOATING FOUNTAIN SYSTEM DETAIL SPECIFICATIONS

2.0 DETAILED INFORMATION

- 2.1 This specification is intended to provide prospective bidders the necessary information pertaining to the fountain aerator(s) specified for the _____ Project.
- 2.2 The MOTOR(S) shall be _____ HP, operating at _____ Volts, 60 Hertz, _____ Phase at 3450 RPM.
- 2.3 The CELESTIAL FOUNTAIN[®] MODEL(S) specified shall be the _____ MODEL NUMBER _____ capable of creating a _____ pattern. It shall come complete with an electrical control panel, protective intake screen and _____ feet of _____ gauge, 4 conductor underwater power cable.
- 2.4 The fountain aerator shall produce a SPRAY PATTERN _____ feet in diameter and _____ feet in height.

Please refer to TABLES 1, 2 and 3 to assist in the completion of SECTION 2.

FLOATING FOUNTAIN DETAIL SPECIFICATIONS (cont.)

3.0 ELECTRICAL CONTROL PANEL COMPONENTS DESCRIPTION

- A. **Electrical Enclosure** shall be NEMA 3R type, gray in color. Panel shall be both lock and mount capable.
- B. **Ground Fault Protection**
GFCI Breaker shall provide overload protection and be capable of disconnecting all incoming electricity from the control panel or a molded case breaker shall provide overload and short circuit protection, while a residual current device or ground fault relay kit rated at 30 mA shall provide ground fault protection.
- C. **Control Breaker** shall provide overload protection and be capable of disconnecting all incoming electricity from the control panel.
- D. **Motor Contactor** shall provide a means for disconnection of all motor leads. It shall be a magnetic, across the line starter type.
- E. **Overload Relay** shall provide overload protection by means of a bi-metallic overload relay. It is adjustable over the listed full load amperage draw of the motor. It shall have a visual trip indicator, test button and manual/automatic reset modes.
- F. **Soft Start (three phase ONLY)** shall provide ramped starting and stopping to minimize electrical and mechanical stresses to the motor and power source.
- G. **Digital Timer** shall be a single pole type, rated at 120 Volts, 16 Amps, capable of 8 ON / OFF functions per day for 7 days. Digital timer has a lithium battery to retain the programming when power is disconnected.

3.1 SAFETY TESTING CONTROL PANEL

The electrical control panel shall be tested and approved as a complete unit. It is inspected and listed by Underwriters Laboratories, Inc. under Category 508: Industrial Control Panels and Category 778: Submersible Aerators and Aerating Fountain Pump Systems.

3.2 ACCEPTABLE MANUFACTURER

This fountain's electrical control panel, as specified in Section 3.0, shall be manufactured by AQUAMASTER® FOUNTAINS AND AERATORS, 16024 CTH X, Kiel, WI 53042, (800) 693-3144 or approved equal.

3.3 INSTALLATION

The electrical control panel must be installed in accordance with the installation instructions, in compliance with all local and National Electrical Code requirements. This should be done by a licensed electrical contractor. Any alterations to or substitution for items in this system, unless allowed by the installation instructions, will void the Underwriters Laboratories Listing and will void the product warranty and may also create a hazardous installation. Read the instructions thoroughly before starting the installation and follow them carefully throughout.

3.4 ELECTRICAL CONTROL PANEL WARRANTY

All control panels and their components shall have a 3 year warranty on parts and labor.

FLOATING FOUNTAIN DETAIL SPECIFICATIONS (cont.)

4.0 SAFETY TESTING

The floating fountain system shall be tested and approved as a complete unit. This approval must meet Underwriters Laboratories Inc. requirements in compliance with Category 778: Submersible Aerators and Aerating Fountain Pump Systems. Individual component testing and wet niche environment equipment approval are not acceptable.

4.1 ACCEPTABLE MANUFACTURER

This floating fountain, as specified in Sections 2.2, 2.3 and 2.4, shall be a CELESTIAL FOUNTAIN[®] as manufactured by AQUAMASTER[®] FOUNTAINS AND AERATORS, 16024 CTH X, Kiel, WI 53042, (800) 693-3144, or approved equal.

4.2 INSTALLATION

All AQUAMASTER[®] FLOATING FOUNTAIN are designed and built to be installed with an AQUAMASTER[®] UL Listed control panel and to be operated as a complete system. Any alterations to or substitution for items in this system, unless allowed by the installation instructions, will void the UL Listing and will void the product warranty and may also create a **hazardous installation**. Read the instructions thoroughly before starting the installation and follow them carefully throughout.

4.3 WARRANTY

All 10 – 25 HP AQUAMASTER[®] CELESTIAL FOUNTAINS[®] motor, seal assembly, float and underwater power cable (referred to as in-water components) are covered under warranty at 100% replacement cost should it fail due to defects in materials or workmanship for a period of 4 years on parts and labor. This is in effect from the date of shipment, when given normal and proper usage as determined by The Seller upon examination, and when owned by the original user.

FLOATING FOUNTAIN LIGHTING SYSTEMS AND OPTIONS SPECIFICATIONS

- 5.0 LIGHTING SYSTEM** shall be LED/RGBW _____ Volt/Watts, Model #(s)_____. There are _____ total fixtures, containing _____ (choose color(s) if applicable: amber, blue, red, or green) color board assemblies.
- 5.1** A total length of _____ feet of _____ gauge 3(LED) or 5(RGBW) conductor underwater power cable is required. Two runs of cable may be required; reference cable sizing chart.
- 5.2 MULTI-PURPOSE ELECTRONIC LIGHT SYSTEM SEQUENCER** shall be capable of cycling light fixtures off and on, up to 6 programs. Yes ___ No ___
- 5.3** A total length of _____ feet of _____ gauge 4 conductor underwater power cable is required for sequencer. Two runs of cable is required.
- 5.4 Circular Float Configuration** shall configuration but are mounted in a circular configuration. Yes ___ No ___
- 5.5 SERIES 316 STAINLESS STEEL UPGRADE** is available for sites with salt or brackish water. Yes ___ No ___

Please refer to TABLE 4 to assist in the completion of SECTION 5.

FLOATING FOUNTAIN LIGHTING SYSTEMS AND OPTIONS SPECIFICATIONS (cont.)

6.0 DESCRIPTION - LIGHTING

- A. **Light Set** shall consist of line voltage (120 VAC) 22W LED, 35W LED, or 40W RGBW LED lighting system with either 4, 6, 8, or 12 lights.
- B. **Lights** shall consist of a power supply/driver module with a 22W, 35W, or 40W RGBW (10W red, 10W green, 10W blue, 10W white) LED light engine.
- C. **Light Fixture** shall be of Series 300 Stainless Steel construction. They shall have a permanent series 300 stainless steel electrical hub welded on the bottom of the housing to allow electrical cable entry and be mounted with series 300 stainless steel brackets and fasteners.
- D. **Light Fixture Assembly** shall consist of a lens made of tempered glass with a clear non-diffusing surface with a minimum of 5/32nd thickness and sealed with “V” shaped lens gasket made of silicon. Clamp ring shall be of series 300 stainless steel. Fasteners and mounting hardware shall be of series 300 stainless steel.
- E. **Underwater Pin and Socket Connector** shall consist of a Series 900, IP68 pin and socket connector. It shall be of a 3(LED) or 5(RGBW) pin configuration rated 32 Amps at 600 VAC. The pin and socket ends shall each be attached to a UL Listed underwater power cable rated at 600 Volts. They both shall be permanently secured to their UL Listed power cables by an integrated neoprene grommet and compression nut assembly. These assemblies shall be epoxy filled to prevent entry of water or any other foreign matter. The pin end assembly shall be permanently attached to the light fixture with a nonmetallic connector and potted using a flexible approved potting compound. The socket end assembly shall be permanently attached to the power cable. Both the pin end and socket end assemblies come with protector caps.
- F. **Underwater Power Cable** shall be UL Listed and specifically designed for underwater use. The conductors are flexible, stranded copper wire sized for the amp draw and length of run. The conductors shall be resistant to oil, water and cracking. Power cable shall be fitted with a cable strain relief device, located within five feet of the first light fixture. This will ensure that no potential damage can occur to any cable connections, due to tension on the cable.
- G. **Light Controls** shall consist of a GFCI (Ground Fault Circuit Interrupter), overcurrent protection (fuse), digital timer with battery back-up. The Sequencer (optional) shall be capable of cycling light fixtures on and off, up to 8 fixtures. The RGBW controller (optional) is pre-programmed with assorted color, shows and holiday themed selectable programs. The controller can also adjust program speed and brightness. The standard controller shall consist of a programmable controller with push button interface. An optional programmable WiFi controller is available with an Android or iOS app included. An Android tablet preloaded with the app and connected to the controller is also available as a WiFi option.
- H. **Safety Testing** shall be tested and approved as a complete assembly. This approval must meet Underwriters Laboratories Inc. requirements in compliance with UL category 676: Underwater Luminaires.
- I. **Warranty** on all AQUAMASTER LIGHTING SYSTEMS are covered under warranty at 100% replacement cost should it fail due to defects in materials or workmanship for a period of 3 years.

TABLE 1: CELESTIAL FOUNTAINS® PERFORMANCE SPECIFICATIONS

**TECHNICAL DATA
REFERENCE MATERIAL FOR SECTION 2.0 DETAILED INFORMATION**

Model Number	HP	Voltage	Running Amp Draw	Spray Pattern Specifications: Height x Diameter				
				Gemini	Aquarius	Pisces	Libra	Scorpio
84102	10 - 1PH	220-240	56	50 x 2	Upper 32 Lower 10 x 40	28 x 10	26 x 10	25 x 10
84102-3	10	208-240	33.5					
84104-3		440-480	16.7					
84152-3	15	208-240	46	68 x 2	Upper 42 Lower 14 x 44	36 x 10	36 x 10	30 x 10
84154-3		440-480	23					
84202-3	20	208-240	58	80 x 2	Upper 48 Lower 16 x 52	44 x 12	42 x 10	32 x 10
84204-3		440-480	29					
84252-3	25	208-240	72	96 x 2	Upper 56 Lower 18 x 58	50 x 16	48 x 10	37 x 10
84254-3		440-480	36					
Model Number	HP	Voltage	Running Amp Draw	Spray Pattern Specifications: Height x Diameter				
				Taurus	Leo	Aries	Virgo	Olympian*
84102	10 - 1PH	220-240	56	Upper 30 Middle 20 x 40 Lower 10 x 45	35 x 10	Upper 30 Lower 16 x 35	Upper 30 Lower 10 x 40	Upper 17 x 3 Middle 14 x 3 Lower 9 x 3
84102-3	10	208-240	33.5					
84104-3		440-480	16.7					
84152-3	15	208-240	46	Upper 40 Middle 25 x 40 Lower 10 x 50	40 x 10	Upper 40 Lower 18 x 40	Upper 40 Lower 10 x 50	Upper 18 x 3 Middle 15 x 3 Lower 10 x 3
84154-3		440-480	23					
84202-3	20	208-240	58	Upper 50 Middle 25 x 45 Lower 12 x 60	50 X 10	Upper 50 Lower 20 x 45	Upper 50 Lower 10 x 50	Upper 21 x 3 Middle 16 x 3 Lower 12 x 3
84204-3		440-480	29					
84252-3	25	208-240	72	Upper 55 Middle 25 x 50 Lower 15 x 70	58 X 10	Upper 60 Lower 22 x 50	Upper 60 Lower 10 x 50	Upper 25 x 3 Middle 20 x 3 Lower 15 x 3
84254-3		440-480	36					

*Olympian has a valve for each geyser so the heights can be adjusted

Model Number	HP	Voltage	Approx. Running Amps	Minimum Operating Depth	Ship Weight LBS.
84102	10 - 1PH	220-240	56	4'	650
84102-3	10	208-240	33.5		
84104-3		440-480	16.7		
84152-3	15	208-240	46	4'	650
84154-3		440-480	23		
84202-3	20	208-240	58	4'	650
84204-3		440-480	29		
84252-3	25	208-240	72	4'	650
84254-3		440-480	36		

All performance data (heights & diameters) have been tested at 230 volts 3PH, except for 10HP 1PH which was tested at 240 volts 1PH. Your overall performance may vary due to actual voltage, intake restrictions, relative humidity and cable lengths.

TABLE 2: CABLE SIZING CHART

Maximum recommended length (in feet) from fountain to control panel

AquaMaster® recommends consulting a Licensed Electrician to properly size any underground cable from the main power source to our control panel. Cable runs to the panel located away from main power source requires recalculating voltage drop to insure proper cable sizing. Please contact AquaMaster® if assistance is required.

4 conductor: Required on all Celestial Fountains									
Single Phase 4 conductor			4 conductor Copper Wire Gauge Size						
Unit	Volts	Approx Amps	#14	#12	#10	#8	#6	#4	#2
10HP	220-240 *	56.0	--	--	--	119	190	300	464
Three Phase 4 conductor			4 conductor Copper Wire Gauge Size						
Unit	Volts	Approx Amps	#14	#12	#10	#8	#6	#4	#2
10HP	208-240	33.5	--	--	149	230	366	578	896
10HP	440-480	16.7	--	--	634	975	1552	2454	3803
15HP	208-240	46.0	--	--	--	167	266	421	653
15HP	440-480	23.0	--	--	460	708	1127	1781	2761
20HP	208-240	58.0	--	--	--	133	211	334	518
20HP	440-480	29.0	--	--	365	562	894	1413	2190
25HP	208-240	72.0	--	--	--	--	170	269	417
25HP	440-480	36.0	--	--	294	452	720	1138	1764

* 10HP 1PH models require a minimum voltage of 220.

Actual voltage to motor will affect your fountain's performance.

TABLE 3: FLOATING FOUNTAIN SPRAY PATTERN DESCRIPTIONS

1. **AQUARIUS**
Magnificent two-tiered fountain combining a Gemini geyser rising through a perfect, lower circle.
SPECIFICATION DESCRIPTION: COMBINED FAN & COLUMN
2. **ARIES**
Narrower, two-tiered pattern reaching fantastic heights.
SPECIFICATION DESCRIPTION: TWO-TIERED MULTI-STREAMS & COLUMNS
3. **GEMINI**
Dramatic geyser reaching amazing heights in a massive column of water.
SPECIFICATION DESCRIPTION: SOLID VERTICAL COLUMN
4. **LEO**
Dramatic geyser creates a full profile in a massive column of water.
SPECIFICATION DESCRIPTION: FROTHY VERTICAL COLUMN
5. **LIBRA**
Modification of the Gemini, it creates a wider, feathered geyser effect.
SPECIFICATION DESCRIPTION: WIDE VERTICAL COLUMN
6. **OLYMPIAN**
Multi-geyser pattern with adjustable valves for harmonizing water columns from full open to stepped patterns for customized look. This pattern requires a circular float.
SPECIFICATION DESCRIPTION: THREE MULTI WIDE GEYSER HEAVY COLUMNS WITH WATER
7. **PISCES**
Narrower, frothy version of the Aquarius producing a multi-tiered fountain.
SPECIFICATION DESCRIPTION: FROTHY SPRAY
8. **SCORPIO**
Wide full-flow geyser that creates a massive heavy column of water.
SPECIFICATION DESCRIPTION: WIDE-FULL FLOW VERTICAL COLUMN
9. **TAURUS**
Stunning tri-tier reaching amazing heights with a massive column of water.
SPECIFICATION DESCRIPTION: TRI-TIER SPRAY
10. **VIRGO**
Thick center jet of water surrounded by a frothy, lower tier.
SPECIFICATION DESCRIPTION: COMBINED FAN & COLUMN

TABLE 4: FLOATING FOUNTAIN LIGHTING SYSTEMS

AQUAMASTER® CELESTIAL FOUNTAINS® are even more dramatic at night, with the addition of a UL and cUL Listed NIGHT GLOW LIGHTING SYSTEM.

Any lighting system choice includes stainless steel lamp housings, sealed with clear tempered glass lenses in a stainless steel clamp ring. All lights remain water-cooled.

All necessary electrical controls, including timer, are pre-wired into the fountain’s existing UL Listed control panel. Color board assemblies (White, Red, Green, Blue, or Amber) must be selected for each light. An optional sequencer can complete your dramatic aquatic display.

For uniformity of spray pattern coverage, 6 lights minimum is recommended.

LINE VOLTAGE: 120 Volt LED Lighting Systems

22 Watt Fixtures (Inline, Circular)	Each system includes: <ul style="list-style-type: none"> • 22 or 35 Watt LED light engine • GFCI Protection • Digital Timer • Clear lenses • UL and cUL Listing • Choice of Red, Green, Blue, or Amber Light Engine
6 light system: Model # 890414, 890416	
8 light system: Model # 890415, 890417	
12 light system: Model # N/A, 890418	
35 Watt Fixtures	
4 light system: Model # 890497, 890500	
6 light system: Model # 890498, 890501	
8 light system: Model # 890499, 890502	
12 light system: Model # N/A, 890503	

LINE VOLTAGE: 120 Volt RGBW LED Lighting Systems

40 Watt Fixtures (Inline, Circular)	Each system includes: <ul style="list-style-type: none"> • 40 Watt RGBW LED light engine • GFCI Protection • Digital Timer • Clear lenses • UL and cUL Listing
4 light system: Model # 890445, 890448	
6 light system: Model # 890446, 890449	
8 light system: Model # 890447, 890450	
12 light system: Model # N/A, 890421	

TABLE 4: FLOATING FOUNTAIN LIGHTING SYSTEMS (cont.)

CABLE SIZING CHART FOR LED LIGHTS

Maximum recommended length from fountain lights to control panel

AquaMaster® recommends consulting a Licensed Electrician to properly size any underground cable from the main power source to our control panel. Cable runs to the panel located away from main power source requires recalculating voltage drop to insure proper cable sizing. Please contact AquaMaster® if assistance is required.

3 Conductor				Copper Wire Gauge Size		
Watts Per Fixture	# of Fixtures	Volts	Approx Amps	#14	#12	#10
22	6	120	0.850	1139	1765	2941
22	8	120	1.133	854	1324	2206
22	12	120	1.700	569	882	1471
35	4	120	1.167	829	1286	2143
35	6	120	1.750	553	857	1429
35	8	120	2.330	415	643	1071
35	12	120	3.500	276	429	714

Cable Sizing Chart for lights when ordered with a sequencer

3 & 4 Conductor (see notes below)			Copper Wire Gauge Size		
Watts Per Fixture	# of Fixtures	Volts	#14 (ft)	#12 (ft)	#10 (ft)
22	3 or 4	120	6832	10588	17648
22	6 (3 colors)	120	3416	5294	8824
22	8 (4 colors)	120	3416	5294	8824
35	3 or 4	120	3318	5142	8572
35	6 (3 colors)	120	1659	2571	4286
35	8 (4 colors)	120	1659	2571	4286

Lighting Sequencer requires 2 runs of cable:

- 1) Sequencer with 3 colors requires (1) run of 3 conductor cable and (1) run of 4 conductor cable
- 2) Sequencer with 4 colors requires (2) runs of 4 conductor cable

CABLE SIZING CHART FOR RGBW LED LIGHTS

5 Conductor				Copper Wire Gauge Size		
Watts Per Fixture	# of Fixtures	Volts	Approx Amps	#14	#12	#10
40	4	120	1.333	726	1125	1875
40	6	120	2.000	484	750	1250
40	8	120	2.667	363	563	938
40	12	120	4.000	242	375	625