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The New
Fiberstars™
AN **ENERGY FOCUS** COMPANY

OUR GOAL:

To provide the best products, sales support, and customer service in the industry.

OUR MISSION:

To go the extra mile for all of our customers. We understand what it takes to be the best (You have to prove it everyday).

MY PROMISE:

We will always work hard to earn your business. But we will work even harder to keep it.

Sincerely,

Steve Gasperson
President Sales & Marketing
Pool - Commercial / Lighting Divisions

TURN KEY SOLUTIONS
Custom Star Floor Program

- Complete Turn Key Bid

- Installed by Factory Trained Crews

- 3D Pool Design

- 48 Hour Bid Turnaround

- We DESIGN IT - INSTALL IT - LIGHT IT
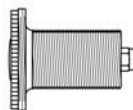
Builder Calls - We install - That's all!

For complete bid and 3D design, please contact: Joe West - Custom Installation Manager
Cell: 317-989-1872 email: jwest@fiberstars.com

INTRODUCTION TO THE PAL-Treo UNDERWATER LIGHTING SYSTEM

PAL-Treo

A **T**otally **R**etrofitable **E**ven Glow LED Technology **O**ptic. This soft, evenly distributed light is now possible from the molded prismatic lens design that provides the PAL-Treo with an outstanding illumination eliminating the end shadow effect common with other existing pool lights. The PAL-Treo light is available with a 100,000 hour color change LED array that has six lockable colors and two color change modes. The PAL-Treo will color synchronize with the upcoming 2010 Light Streams series of water features and becomes a key product in the growing family of 12VAC products by Fiberstars. This family of high performance, low power consumption lighting products can be wirelessly controlled by the WPC 12V Power Centers that include the WIRTRAN, WPC1-XXXX-T, WPC2-XXXX-T.

Recommended Coverage: Light - Medium Interior Color: 200-225 sq ft.
                                                     Medium - Dark Interior Color: 175-200 sq ft.

PAL-Treo Unique Features:

• **Color Change Digital Array.** Includes a 100,000 hour color change LED Array with color lock on six different colors or two color change modes.

• **Self Synchronized.** LED color array light is self synchronizing with other PAL-Treo lights.

• **Retrofitable.** Will retrofit most existing fiber installations.

• **Standard wall fittings.** 1.5" wall fittings that only require 2.75" of 1.5" straight conduit behind fitting.

• **Even Light Distribution.** No other light has a flexible molded prismatic lens.

• **Wide Beam Spread.** The end shadow effect common in other lights has been eliminated.

• **Color synchs with Light Streams Products.** The PAL-Treo will color synch with the new 2010, CLS-2 version of Light Streams LED water features.

• **No Earth Bonding Required.** Due to fully insulated design.

• **Non Leak Water Seal.** No polycarbonate materials used to make the seal.

• **Flexible Lens.** Absorbs pressure increase due to the expanding air when light is on.

• **Encapsulated Cable Terminations.** Ensures no external cable or water seal deterioration due to heat.

• **Kits Available.** PAL and WIRTRAN Wireless Light Control combo kits are available. See page 8.

PAL-Treo Fitting Compatability Chart

Brand	Part #	Type	Comment	Brand	Part #	Type	Comment
FS	LNS-2G	Gunite	Stock fit OK	CMP	25522-500	Fiberglass	Modify Internal Shoulder
FS	LNS-2A	Fiberglass	Stock fit OK	CMP	25550-000	Fiberglass	No Fit - Fitting too shallow w/ MIP installed
FS	LNS-2V	Vinyl Liner	Stock fit OK	CMP	25522-000	Vinyl Liner	Stock fit OK
Hayward	SP-1022S	Gunite	Modify Internal Shoulder	Waterway	215-9150B	Gunite	Modify Internal Shoulder
Hayward	SP-1023S	Fiberglass	Modify Internal Shoulder	Waterway	400-9390	Gunite	No Fit - Fitting too narrow overall
Hayward	SP1408	Vinyl Liner	Stock fit OK	Waterway	215-9170	Gunite	No Fit - Fitting too shallow w/ MIP installed
Pentair	542405	Gunite	No Fit - Loose Threads	Waterway	400-9150B	Fiberglass	Modify Internal Shoulder
Pentair	542414	Fiberglass	No Fit - Loose Threads	Waterway	400-9170	Fiberglass	No Fit - Fitting too shallow w/ MIP installed
Pentair	86205100	Vinyl Liner	No Fit - Loose Threads	Waterway	400-9160B	Vinyl Liner	No Fit - Loose threads, face too large
CMP	25523-00	Gunite	Modify Internal Shoulder	Waterway	400-9060	Vinyl Liner	No Fit - Loose threads, face too large
CMP	25523-100	Gunite	Modify Internal Shoulder				

1.5" standard wall fittings - However, due to the variety and great number of fittings that have been made, some may need to field modified if the internal shoulder is too shallow or too thick. This can be performed in the field in about 1-2 minutes with a 1 3/4" hole saw or small sanding drum.

Basic requirements are: **Standard 1.5" wall fitting with exposed face and internal threads - initially connects to 1.5" waterproof conduit - conduit terminates above ground.**

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PAL-Treo LIGHTING SYSTEM

CONCRETE/FIBERGLASS LIGHTS AND ACCESSORIES

PAL-Treo

FPAL-C-TR

12VAC, 5 watt complete underwater LED light assembly with 79' of low voltage cord. Fits in most 1.5" wall fittings and only requires 2.75" of 1.5" straight conduit behind fitting. 100,000 hour LED color array is self synchronizing with other Treos. Choice of six lockable colors and two color change modes.

Part #	Description	List $
FPAL-C-TR	LED Color Light, white ring	$306.21

FPAL-C-TR-150

12VAC, 5 watt complete underwater LED light assembly with 150' of low voltage cord. Fits in most 1.5" wall fittings and only requires 2.75" of 1.5" straight conduit behind fitting. 100,000 hour LED color array is self synchronizing with other Treos. Choice of six lockable colors and two color change modes.
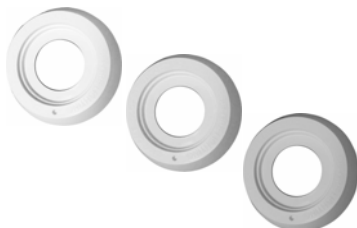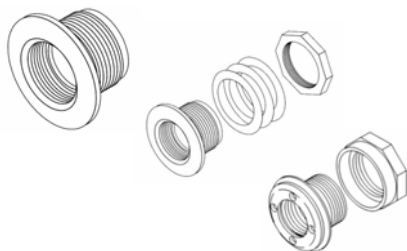
Part #	Description	List $
FPAL-C-TR-150	LED Color Light, white ring, 150' Cord	$336.19

PAL-Treo Colored UL Warning Ring

Customize your PAL-Treo installation to blend with the color of your pool surface. Simply replace the provided white ring with one of the Treo specific trim colored rings below.

Part #	Description	List $
FPAL-TRW-TR	UL warning plate, white	$13.38
FPAL-TRT-TR	UL warning plate, tan	$13.38
FPAL-TRG-TR	UL warning plate, gray	$13.38

PAL-Treo Wall Fitting

Standard 1.5" wall fittings to be used with PAL-Treo lights as well as various fiber light lenses.

Part #	Description	List $
LNS-2G	Gunite Wall Fitting. Glues to 1.5" PVC	$12.13
LNS-2A	Fiberglass Wall Fitting. Glues to 1.5" PVC	$15.77
LNS-2V	Vinyl Wall Fitting. Threads to 1.5" PVC MIP	$23.67

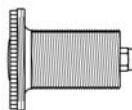### PAL-Treo 12V, 5W LED Color Lock Array Replacement Lamp

This LED array provides six fixed colors and two color change effects. It has no external controllers, synchronizes with other PAL-Treos, and is the replacement lamp for PAL-TREO.

Part #	Description	List $
FPAL-LAU	12VAC, 5W Replacement Lamp for PAL-TREO	$66.17
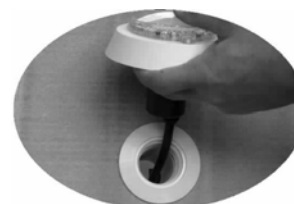
INTRODUCTION TO THE PAL-2000 UNDERWATER LIGHTING SYSTEM

PAL-2000 LIGHTING SYSTEM

PAL-2000

A soft evenly distributed light is now possible from the molded prismatic lens design that provides the PAL-2000 with an outstanding illumination eliminating the end shadow effect common with other existing pool lights. The PAL-2000 light is available with a 10,000 hour life xenon lamp or with a 100,000 hour color change LED array. The PAL-2000 operates from a safe 12V supply and is UL approved. The PAL-2000 has a unique extraction system allowing the light to be simply removed from the pool wall when the lamp has to be replaced as illustrated below.

Recommended Coverage: Light - Medium Interior Color: 200-225 sq ft.
Medium - Dark Interior Color: 175-200 sq ft.

PAL-2000 Unique Features:

• **NEW! Color synchs with Light Streams Products.** The color PAL-2000 can color synch with the new 2010, CLS-2 version of Light Streams LED water features.

• **Compact Size.** 60% smaller than normal pool lights.

• **Flush Fit to Pool Wall.** The other lights protrude off the wall.

• **Even Light Distribution.** No other light has a flexible molded prismatic lens.

• **Side Light Feature.** The end shadow effect common in other lights has been eliminated.

• **Long Lamp Life.** Fitted with an extra bright, 10,000 hr 12v, 50w, xenon lamp.

• **Clip-On Colored Lenses.** Red, Blue, Green, Orange, Clear.

• **Color Change Digital Array.** Can be fitted with a 100,000 hour color change LED Array with color lock on six different colors or two color change modes.

• **Fully Approved Product.** UL Listed E239438

• **No Earth Bonding Required.** Due to fully insulated design.

• **Non Leak Water Seal.** No polycarbonate materials used to make the seal.

• **Flexible Lens.** Absorbs pressure increase due to the expanding air when light is on.

• **Encapsulated Cable Terminations.** Ensures no external cable or water seal deterioration due to heat.

• **Kits Available.** PAL and WIRTRAN Wireless Light Control combo kits are available. See page 8.

Assembly Information for PAL-2000RCU light in Concrete Pools & Spas
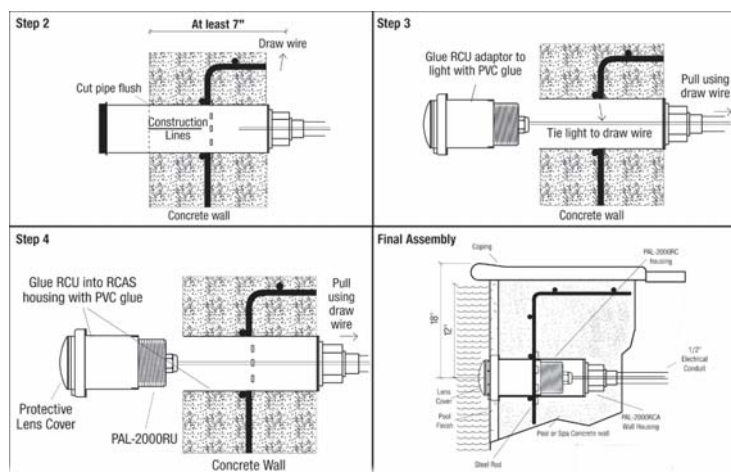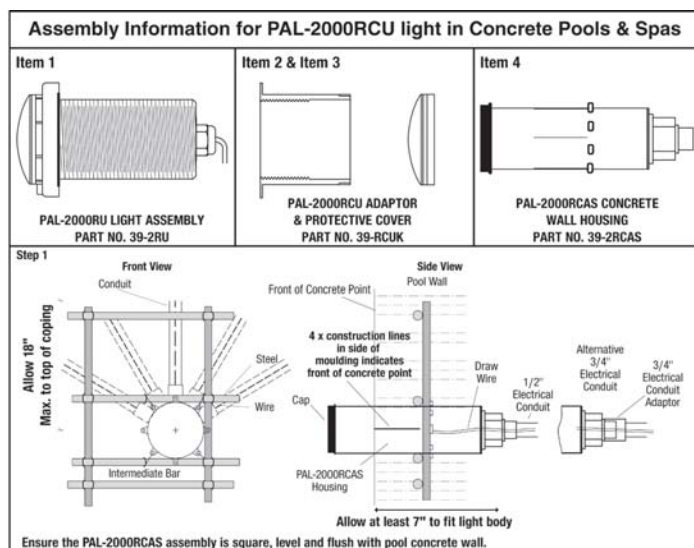
PAL-2000 LIGHTING SYSTEM

CONCRETE/FIBERGLASS LIGHTS AND ACCESSORIES

PAL-2000

PAL-2000 White Light

50w, 12V, Underwater Light with 10,000 hour Xenon lamp, complete assembly with 79 ft. cord, locking nut, and seal. Must use UL listed outdoor transformer. Light includes blue, green, and clear lenses.
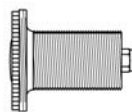
Part #	Description	List $
FPAL-WHT	Light, white ring	$256.96

PHOTO SHOWS LAMP HOLDER REMOVED

PAL-2000 LED Color

Complete underwater light assembly fitted with a 100,000 hour digital LED color array with color lock and color unison features. Choice of six single colors and two color change modes.
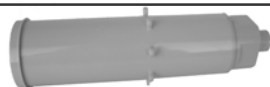
Part #	Description	List $
FPAL-C	Light, LED color, white ring (5w, 12v)	$306.21

LAU DIGITAL COLOR ARRAY INCLUDED **PHOTO SHOWS LAMP HOLDER REMOVED**

PAL-2000 Colored UL Warning Ring

Customize your PAL-2000 installation to blend with the color of your pool surface. Simply replace the provided white ring with one of the colored rings below.

Part #	Description	List $
FPAL-TRW	UL warning plate, white	$13.78
FPAL-TRB	UL warning plate, black	$13.78
FPAL-TRG	UL warning plate, gray	$13.78
FPAL-TRT	UL warning plate, tan	$13.78

PAL-2000 Concrete Fitting

This concrete pool fittting allows for the installation of a standard PAL-2000 underwater light into a concrete / gunite installation. Sold with protective cap. Requires the use of PAL-2000 concrete adapter.

Part #	Description	List $
FPAL-CA	Concrete pool fitting for PAL-2000. Use with FPAL-CN	$21.39
FPAL-VA	Vinyl wall adapter for PAL-2000. One adapter per light req'd	$16.54

REQUIRES USE OF CONCRETE ADAPTER

PAL-2000 Concrete Adapter

This adapter attaches to the standard PAL-2000 light to enable it's use with the concrete fitting. Sold with protective clear cover.

Part #	Description	List $
FPAL-CN	Concrete Adapter - Use with FPAL-CA	$17.20

REQUIRES USE OF CONCRETE POOL FITTING

PAL-2000 12v LED Color Lock Array

This LED array provides six fixed colors and two color change effects. It has no external controllers, synchronizes with other PAL-2000 LAU series LED arrays, and is retrofittable to any existing PAL-2000.

Part #	Description	List $
FPAL-LAU	Color LED lamp for PAL-2000 & PAL-Treo with O-ring	$66.17

PAL-2000 12v Replacement Xenon Bulb Kit

This super-bright long life 10,000 hour replacement bulb is shipped with a new light lens O-ring. 50w for pools.

Part #	Description	List $
FPAL-X	Xenon bulb kit, 12v, 50w, w/ O-ring	$20.95

PAL-2000 Light Lens Accessories

Part #	Description	List $
FPAL-LB	Blue snap on lens	$8.05
FPAL-LG	Green snap on lens	$8.05
FPAL-LR	Red snap on lens	$8.05
FPAL-LO	Orange snap on lens	$8.05
FPAL-LC	Clear snap on lens	$8.05
FPAL-CK	Snap on lens - set of 4 - blue, green, orange, red	$29.78

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NEW! WIRTRAN -

The simple 12VAC power center with wireless control

WIRTRAN is a small, simple, 12VAC power center* operated by the included handheld *wireless remote*. It is a low cost solution for any 12VAC, low-wattage product that is single switch operated. A great companion purchase with the Fiberstars **PAL Series** color LED lights or **Light Streams™** lighted water features.

*up to 30 Watts max.

WIRTRAN
- Easy Installation
- Great for existing or new pool construction
- Handheld Wireless Remote included with every unit
- 75' wireless range
- 10' movable / mountable antenna, 65' extension available
- Manual override switch inside enclosure
- Small size - H 9.5", W 5.62", D 4"
- 110VAC, 60Hz input - 12VAC output, 30W max.
- ETL listed, outdoor enclosure

WIRTRAN (remote included)

Part #	Description	List $
WIRTRAN	12VAC, 30W power center with wireless remote control	$299.79

NEW! WIRTRAN Combo Kits -
WIRTRAN & PAL-TREO or WIRTRAN & PAL-2000
Color LED lights create the ultimate low cost, low power solution

See page 4 for **PAL-TREO** Color LED light details.
See page 6 for **PAL-2000** Color LED light details.

Part #	Description	List $
1TREO-WIRTRAN	12VAC, 30W power center with wireless remote control and 1 FPAL-C-TR Color LED light	$565.31
2TREO-WIRTRAN	12VAC, 30W power center with wireless remote control and 2 FPAL-C-TR Color LED lights	$871.52
3TREO-WIRTRAN	12VAC, 30W power center with wireless remote control and 3 FPAL-C-TR Color LED lights	$1,177.73
1FPALC-WIRTRAN	12VAC, 30W power center with wireless remote control and 1 PAL-2000 Color LED light	$565.31
2FPALC-WIRTRAN	12VAC, 30W power center with wireless remote control and 2 PAL-2000 Color LED lights	$871.52
3FPALC-WIRTRAN	12VAC, 30W power center with wireless remote control and 3 PAL-2000 Color LED lights	$1,177.73

WaterlevV Auto-Fill System

Wireless installation is as easy as 1, 2, 3

NEW!

The **WaterlevV** Auto-Fill system automatically replaces the water lost through evaporation, swim use, and water feature startup / shutdown. Its new hi-tech *Digital Capacitive* water level sensor is designed for accurate level detection with no moving parts for long lasting, trouble free use. New electronic Wave Detection guards against false readings - saves water.

IGW-5000

- Easy Installation
- New Pool Construction Only
- 75' Sensor Cable Included
- ETL Listed
- Audible Alarm for High Water Level
- Adjustable Water Level Setting
- Valve Control Plugs into Standard Outdoor Outlet
- LED Visual Indicators

IGW-6000

- Easy Installation
- Great for Existing or New Pool Construction
- Up to 100' Wireless Range
    - 50' Antenna Extension Available
- ETL Listed, FCC Certified
- Battery Powered Sensor with Seasonal Switch
- Audible Alarm for Low Power and High Water Level
- Adjustable Water Level Setting
- Valve Control Plugs into Standard Outdoor Outlet
- LED Visual Indicators

STEP 1

Install valve on a water return line
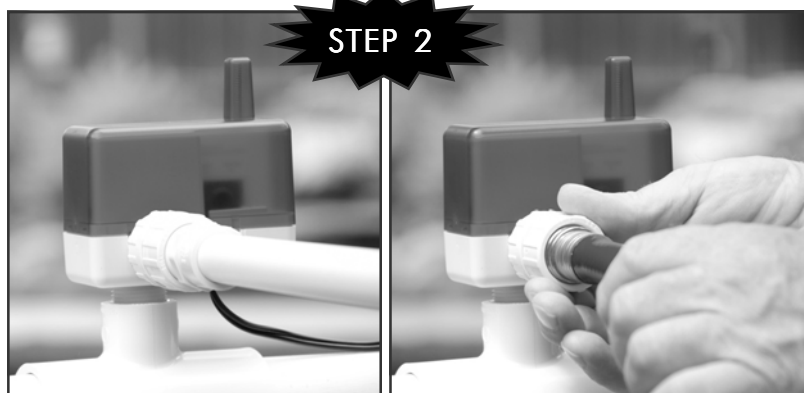
STEP 2

Source is 3/4" PVC   or   garden hose

STEP 3

Adjustable wireless water level sensor

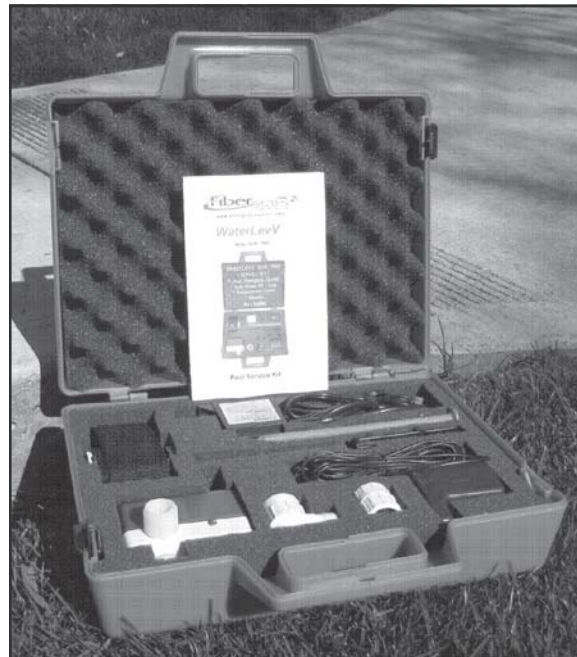| Part #	Description	List $
IGW-5000	Wired sensor auto-fill system	$406.85
IGW-6000	Wireless sensor auto-fill system	$417.56
IGW-EXT	50' Antenna extension for IGW-6000	$96.36

WaterlevV
IGW-7000 Pro-Fill Service Kit

NEW!

Time is Money!

The IGW-7000 Pro-Fill Service Kit allows your Service Personnel to be more efficient in the field. Fill any kind of pool to a desired level without the need to remain close by. This can be used with gunite, fiberglass or vinyl pool construction. Do not waste man hours on water filling to just below the steps or light locations. Complete the jobs that were started during the filling process but were interrupted because someone had to leave to "turn the water off." The IGW-7000 provides "Peace of Mind" for pool Service Personnel and their customers.

IGW-7000
- Comes complete, ready to use in high visibility red case and housing
- Uses 3/4" hose fitting
- Average 8 GPM continuous flow rate
- Adjustable belt-mounting sensor for various fill heights.
- Mounting stakes for use around dirt backfill
- Sensor has 12' cord to control valve
- Outdoor rated power supply included
- LED visual status indicators

Part #	Description	List $
IGW-7000	WaterlevV Pro-Fill Service Kit	$503.21

COLOR LIGHT STREAMS™
by Fiberstars

A complete line of color changing, synchronizable, L.E.D. illuminated water features that bring you brilliant lighting solutions with endless possibilities.

Color Light Streams products are self-conatined and include an internal light source. You can now install water features individually or in combinations, wherever you want. Why have unlit water features when you can afford to have Color Light Streams? **Color Light Streams can make the difference.**

NEW! 2010 version will now color synch with Fiberstars PAL-Series LED underwater lights!

Water Features include:

- Color Light Streams Large Laminar (p.12)

- Color Light Streams Mini Lighted Fountain (p.12)

- Color Light Streams Rain Waterfalls (p.13)

- Color Light Streams Rock Waterfall Kit (p.14)

- Color Light Streams Sun Shelf Kit (p.14)

- Color Light Streams Star Floor Kit (p.15)

- Color Light Streams Lighted Bubbler Kit (p.16)

FEATURES:

- 6 vibrant colors, 2 color change modes. Set it the way you like it!

- Self Contained L.E.D. color changing synchronized Light Driver included with each product

- Easy to sell, easy to price out

- BRIGHT!!

- Easy to install - No fiber to cut

- 12V operation - 100' of 12V cable included with each unit

- Single Switch Operation

These water features can be used for a variety of pool applications and will add charm to your backyard. **Let Color Light Streams™ enhance your lighting choices!**

NOTE: All Light Streams products are ETL listed for installation within 5' of the water's edge!

Color Light Streams™ Large Laminar

Deck Box

Mini Deck Box

COLOR LIGHT STREAMS™ LARGE LAMINAR & COLOR LIGHT STREAMS™ MINI LIGHTED FOUNTAIN

A single, Large Laminar or a single, Mini Lighted Fountain with internal, color changing, synchronizable, L.E.D. lighting, that is completely self contained. *NEW! 2010 versions have 6 vibrant colors and 2 color change modes. Synchronizes with PAL-2000 and PAL-TREO color LED lights. You set it the way you like it!*

Lend a dramatic splash to a backyard with Color Light Streams Large Laminars or Mini Lighted Fountains. These glasslike rods of water can be used individually or in multiples for a dramatic effect. Each Color Light Streams Large Laminar or Mini Lighted Fountain comes with a Deck Box and an L.E.D. light driver, which includes 100' of 12V cable. The deck box lids can be painted to your desired color. Use paint that is suitable for use on ABS materials.

*Maximum Arc: 　　Large Laminar: 　　　6' x 6'

　　　　　　　　　　　Mini Lighted Fountain: 　3' x 3'

*FLOW RATE: 　　Large Laminar: 　　　10 GPM (approx)

　　　　　　　　　　Mini Lighted Fountain: 　5 GPM

　　　　　　　　　　Always install a cartridge filter.

*DIMENSIONS OF DECK BOX: 　Large: 　15 1/4" H x 13 1/2" W

　　　　　　　　　　　　　　　　　Mini: 　13" H x 9" W

*See Page 45 for general specifications. For an installation manual, visit our website at www.fiberstars.com

*Compatible with Fiberstars' WPC controls. (See pages 24-29)

Fig. 1

1" Stand Pipe — 1" Drain

13 1/2"

12"

15 1/4"

Fig. 2
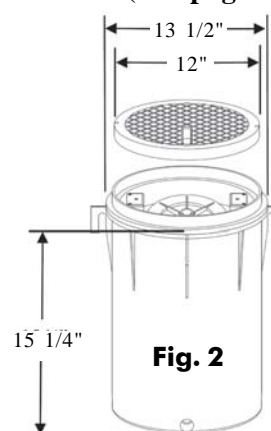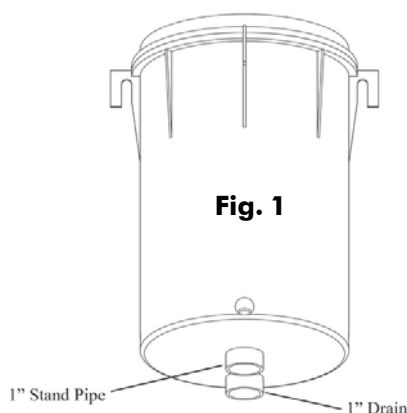
Part #	Description	List $
CLSLL	Color Light Streams Large Laminar - Includes Deck Box and L.E.D. Light Driver	$771.95
CLS-LL-RPL	Color Light Streams Large Laminar fountain **Fiber-to-LED conversion kit - COLOR**	$529.34
CLSML	Color Light Streams Mini Lighted Fountain - COLOR. Includes Deck Box and L.E.D. Light Driver	$740.28
CLS-ML-RPL	Color Light Streams Mini Lighted Fountain **Fiber-to-LED conversion kit - COLOR**	$529.34
LS-12V	12 Volt Magnetic Transformer. (Internal Transformer Only.) Fits in WPC and othr control system enclosures and sub panels.	$70.58
WIRTRAN	12VAC, 30W power center with wireless remote control	$299.79

Color Light Streams

**Color Light Streams™
Lighted Rain Waterfall**

COLOR LIGHT STREAMS™ LIGHTED RAIN WATERFALLS - Straights only!

These stunning, color changing, synchronized, LED lighted Rain Water Falls enhance the beauty of any backyard. *NEW! 2010 versions have 6 vibrant colors and 2 color change modes. Synchronizes with PAL-2000 and PAL-TREO color LED lights. You set it the way you like it!*

Color Light Streams Lighted Rain Waterfall is available in three different sizes: 24", 36", and 48" wide. The approximate water flow is between 5-8 GPM per foot of rain.

To install, simply mount the Color Light Streams Lighted Rain Waterfall on your raised bond beam, situate the deck box in the softscape behind the deck (or in the deck if you choose), supply water and 12VAC and you have streaming lighted water. Use as many as you want to achieve a multiple waterfall effect.

The deck box lids can be painted to your desired color. Use paint that is suitable for use on ABS materials.
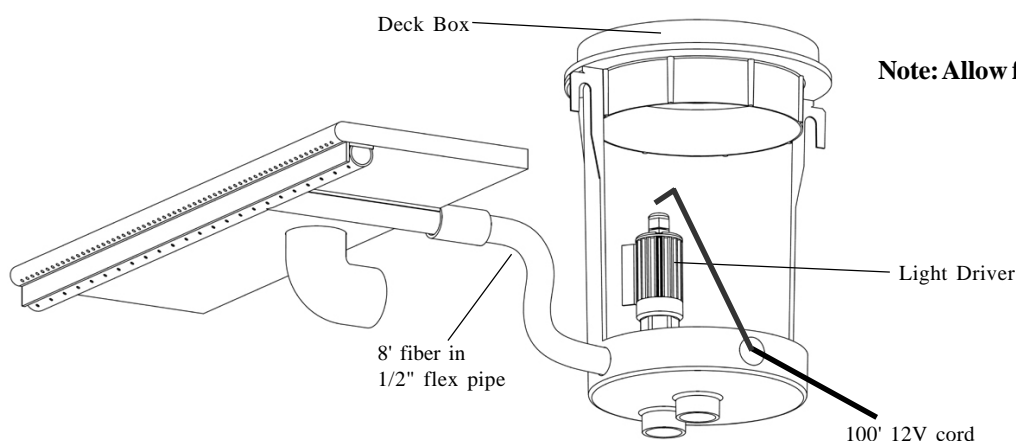
New! • *4 Strands per 1", enhances light ouput*
      • *Brightening Shield added*
        -Hides points of light while reflecting light onto rain droplets

*For installation manual, visit our website at www.fiberstars.com
*Compatible with Fiberstars' WPC controls. (See pages 24-29)

Deck Box

Note: Allow for bend radius of 3/4" flex PVC

Light Driver

8' fiber in
1/2" flex pipe

100' 12V cord

Part #	Description	List $
Light Streams Lighted Rain Waterfall - Complete with Fiber and L.E.D. lights - STRAIGHTS ONLY!		
CLSRW24-8	24" Color Light Streams Lighted Rain Waterfall with an 8' run of fiber	$959.42
CLSRW36-8	36" Color Light Streams Lighted Rain Waterfall with an 8' run of fiber	$1,120.43
CLSRW48-8	48" Color Light Streams Lighted Rain Waterfall with an 8' run of fiber	$1,303.49
LS-12V	12 Volt Magnetic Transformer. (Internal Transformer Only.)	$70.58
	Fits in WPC and other control system enclosures and sub panels.	
WIRTRAN	12VAC, 30W power center with wireless remote control	$299.79

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**Color Light Streams™
Rock Waterfall Kit**
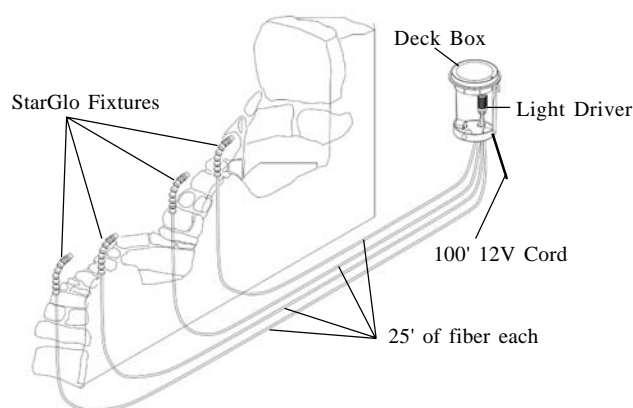
COLOR LIGHT STREAMS™ ROCK WATERFALL KIT

The simplest, easiest way of lighting a color changing, synchronized LED lit, rock water fall kit. *NEW! 2010 versions have 6 vibrant colors and 2 color change modes. Synchronizes with PAL-2000 and PAL-TREO color LED lights. You set it the way you like it!*

Color Light Streams Rock Waterfall kit is a simple and easy way of lighting a rock waterfall. Each kit comes with 4 Fiberstars' StarGlo fixtures, which have 25' of 50 strand fiber, a Color Light Streams L.E.D. light driver, 100' of 12V cable and a deck box. Each StarGlo fixture is adjustable for an optimum lighting effect, creating an aesthetically pleasing environment. Simply install the StarGlo fixtures in the desired locations, mount the deck box and run 12 VAC power to the L.E.D light driver. Use alone or in combination with another kit.
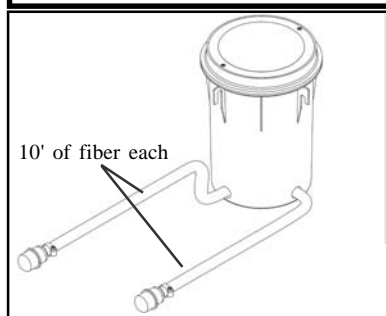
All 4 fiber ends are pre-ported and simply plug into the LED Driver. No hot knife needed. The deck box lids can be painted to your desired color. Use paint that is suitable for use on ABS materials.

*For installation manual, visit our website at www.fiberstars.com
*Compatible with Fiberstars' WPC controls. (See pages 24-29)

Part #	Description	List $
CLSLR-4	Color Light Streams Rock Waterfall Kit. Comes with 4 StarGlo fixtures, each with 25' of 50 strand fiber.	$961.63
LS-12V	12 Volt Magnetic Transformer. (Internal Transformer Only.)	$70.58
	Fits in WPC and other control system enclosures and sub panels.	
WIRTRAN	12VAC, 30W power center with wireless remote control	$299.79

**Color Light Streams™
Sun Shelf Kit**

COLOR LIGHT STREAMS™ SUN SHELF KIT

Designed as an easy way to light up your sun shelf - all in one kit. *NEW! 2010 versions have 6 vibrant colors and 2 color change modes. Synchronizes with PAL-2000 and PAL-TREO color LED lights. You set it the way you like it!*

The Color Light Streams Sun Shelf kit includes one deck box with a Color Light Streams LED light driver and 100' of 12V cable. It also includes two KL2 Sealed Lens, each with 10' of pre-attached fiber. Lens Housings are NOT included. The deck box lids can be painted to your desired color. Use paint that is suitable for use on ABS materials.

See page 55 for more information on Lens Housings.

Part #	Description	List $
CLSSUNKIT	Color Light Streams Sun Shelf Kit. Comes with 2 sealed lens with 10' of fiber each.	$802.83
LS-12V	12 Volt Magnetic Transformer. (Internal Transformer Only.)	$70.58
	Fits in WPC and other control system enclosures and sub panels.	
WIRTRAN	12VAC, 30W power center with wireless remote control	$299.79
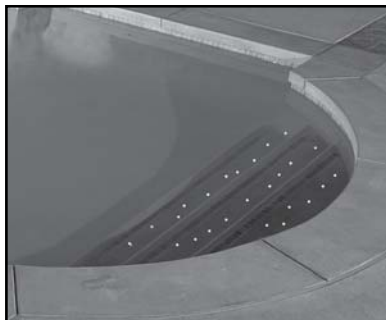
COLOR LIGHT STREAMS™ STAR FLOOR KIT

These color changing, synchronized, LED lights are the simplest, easiest way of putting the evening stars in the bottom of your next pool. (For gunite pools or decks.) *NEW! 2010 versions have 6 vibrant colors and 2 color change modes. Synchronizes with PAL-2000 and PAL-TREO color LED lights. You set it the way you like it!*
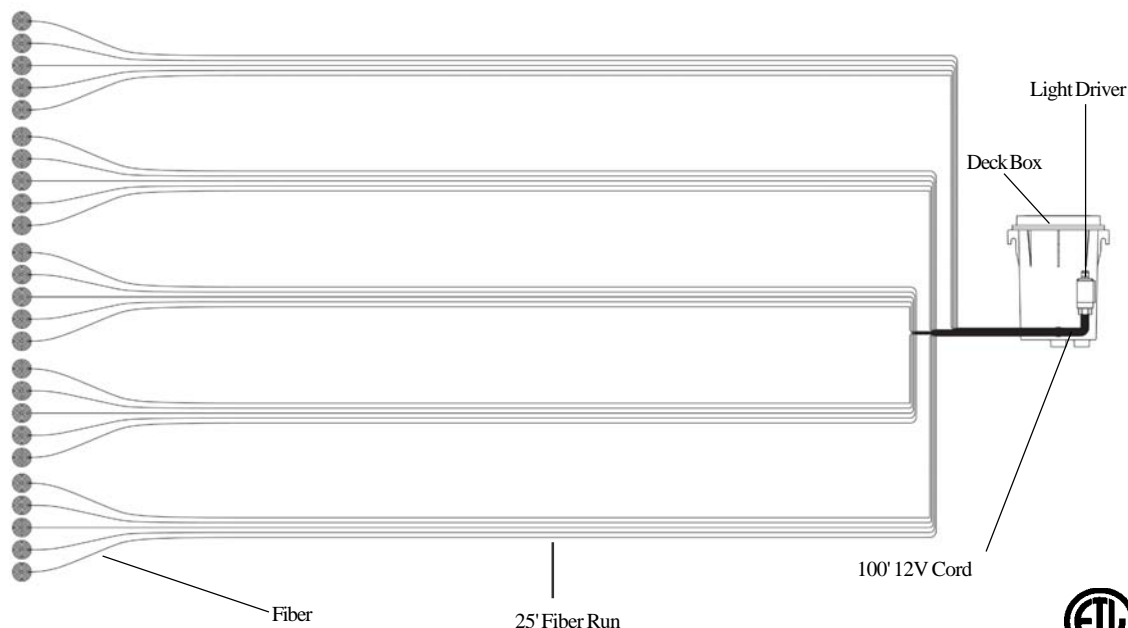

**Color Light Streams™
Star Floor Kit**

Color Light Streams Star Floor Kits are the perfect way to add color to the bottom of your pool. Each Star Floor Kit comes with either 10 points of light or 25 points of light that have 2 strands of fiber each. The kits also include a Color Light Streams L.E.D. light driver, 100' of 12V cable and a deck box.

The deck box lids can be painted to your desired color. Use paint that is suitable for use on ABS materials.

*For installation manual, visit our website at www.fiberstars.com

*Compatible with Fiberstars' WPC controls. (See pages 24-29)

Part #	Description	List $
CLSSFK-10	Color Light Streams Star Floor Kit with 10 points of light, 2 strands of fiber at each point	$868.99
CLSSFK-25	Color Light Streams Star Floor Kit with 25 points of light, 2 strands of fiber at each point	$1,098.37
LS-12V	12 Volt Magnetic Transformer. (Internal Transformer Only.) Fit in WPC and other control system enclosures and sub panels.	$70.58
WIRTRAN	12VAC, 30W power center with wireless remote control	$299.79

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Color Light Streams™ Dual Lighted Bubbler Kit

COLOR LIGHT STREAMS™ LIGHTED BUBBLER KIT

An easy, fun, and unique way to light a sun shelf, swim-out, or beach entry using color L.E.D. technology. NEW! 2010 versions have 6 vibrant colors and 2 color change modes. Synchronizes with PAL-2000 and PAL-TREO color LED lights. You set it the way you like it!

Color Light Streams Lighted Bubbler Kit is a unique way to light a sun shelf, swim-out, or beach entry. It will enhance the beauty of your pool with a splash of color. Simply install both bubblers into the gunite surface and locate the Color Light Streams L.E.D. deck box in the deck or softscape. Supply the water and 12 VAC to complete the job.

Each kit comes with 2 lighted bubblers, a Color L.E.D. Light Driver, 100' of 12V cable and a Deck Box. The deck box lids can be painted to your desired color. Use paint that is suitable for use on ABS materials. These bubblers can also be used in small fountain areas where lighted bubbling water is desired because they have very simple water flow requirements.
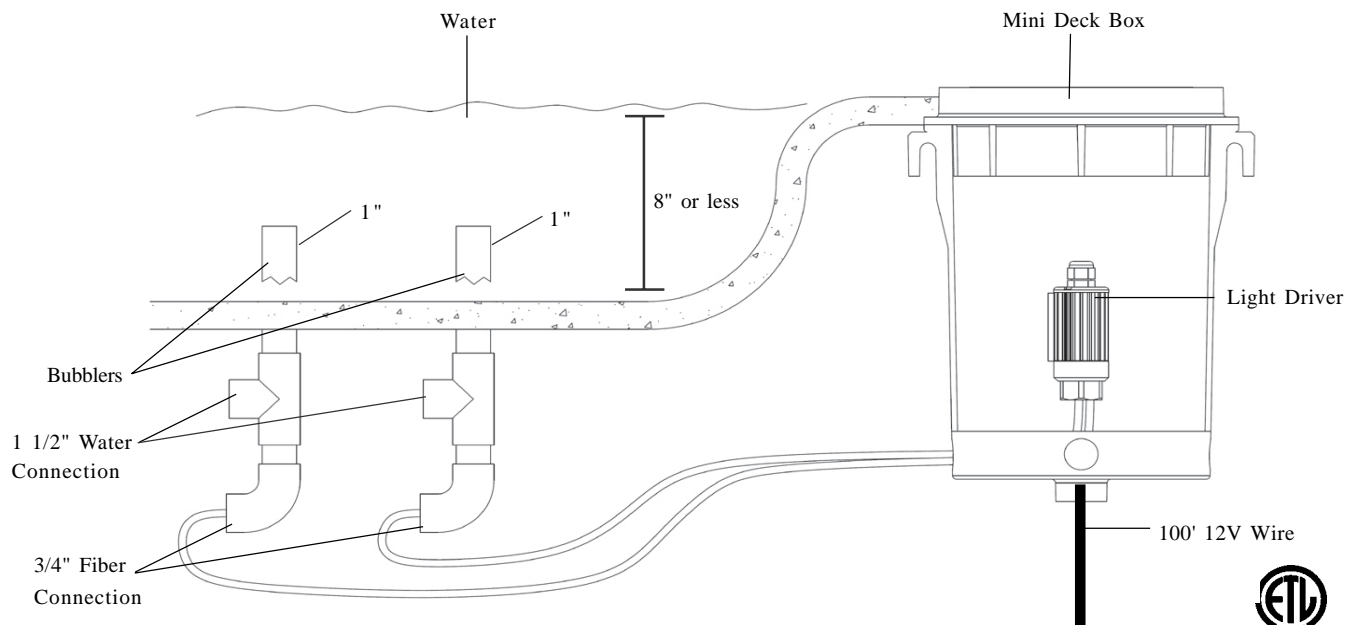
*Each bubbler requires approximately 8-10 GPM.
*Install 4"-8" or less below the water's surface.
*For installation manual, visit our website at www.fiberstars.com
*Compatible with Fiberstars' WPC controls. (See pages 24-29)
*Currently, the LED version is for Gunite only.

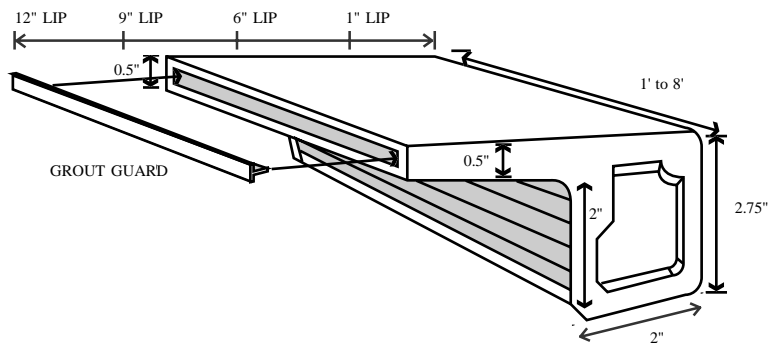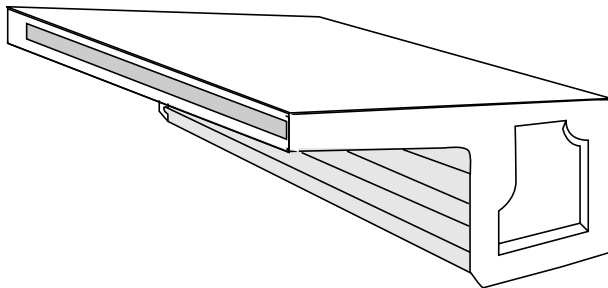| Part #	Description	List $
2LSLBK	Color Light Streams Dual Lighted Bubbler Kit. Each bubbler has 25' of fiber pre-attached. -Includes L.E.D. Light Driver and Deck Box.	$985.89
LS-12V	12 Volt Magnetic Transformer. (Internal Transformer Only.) Fit in WPC and other control system enclosures and sub panels.	$70.58
WIRTRAN	12VAC, 30W power center with wireless remote control	$299.79

UNLIGHTED SHEER WATERFALLS

1' to 8' long with either 6" or 9" extended lips -
Custom radius cuts available.

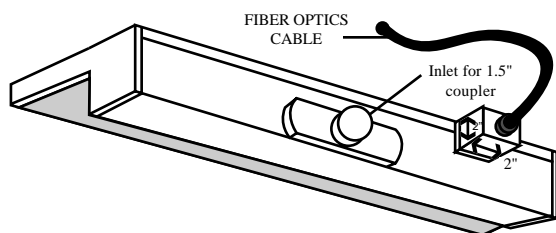Arch WaterFall is available in 1' to 4' length with 6" lip only -
NO radius cuts

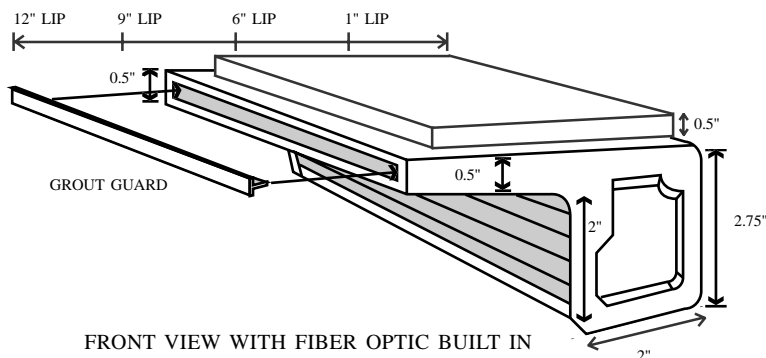| Part #	Description	List $
IWF-12EL-6	12" Sheer Waterfall with 6" extended lip	$171.37
IWF-18EL-6	18" Sheer Waterfall with 6" extended lip	$201.28
IWF-24EL-6	24" Sheer Waterfall with 6" extended lip	$216.23
IWF-36EL-6	36" Sheer Waterfall with 6" extended lip	$278.54
IWF-48EL-6	48" Sheer Waterfall with 6" extended lip	$353.94
IWF-60EL-6	60" Sheer Waterfall with 6" extended lip	$438.09
IWF-72EL-6	72" Sheer Waterfall with 6" extended lip	$523.47
IWF-84EL-6	84" Sheer Waterfall with 6" extended lip	$572.06
IWF-96EL-6	96" Sheer Waterfall with 6" extended lip	$620.66
IWF-12EL-9	12" Sheer Waterfall with 9" extended lip	$183.21
IWF-18EL-9	18" Sheer Waterfall with 9" extended lip	$213.10
IWF-24EL-9	24" Sheer Waterfall with 9" extended lip	$227.02
IWF-36EL-9	36" Sheer Waterfall with 9" extended lip	$290.39
IWF-48EL-9	48" Sheer Waterfall with 9" extended lip	$365.18
IWF-60EL-9	60" Sheer Waterfall with 9" extended lip	$449.91
IWF-72EL-9	72" Sheer Waterfall with 9" extended lip	$534.67
IWF-84EL-9	84" Sheer Waterfall with 9" extended lip	$583.28
IWF-96EL-9	96" Sheer Waterfall with 9" extended lip	$632.51
IAF-12EL-6	12" Arch Waterfall with 6" extended lip - STRAIGHT ONLY - Can not be radius cut.	$190.69
IAF-18EL-6	18" Arch Waterfall with 6" extended lip - STRAIGHT ONLY - Can not be radius cut.	$221.22
IAF-24EL-6	24" Arch Waterfall with 6" extended lip - STRAIGHT ONLY - Can not be radius cut.	$236.17
IAF-36EL-6	36" Arch Waterfall with 6" extended lip - STRAIGHT ONLY - Can not be radius cut.	$297.86
IAF-48EL-6	48" Arch Waterfall with 6" extended lip - STRAIGHT ONLY - Can not be radius cut.	$373.28

FIBER LIT SHEER WATERFALLS

1' to 8' long with 9" extended lip -
Custom radius cuts available.

See page 20 for hydraulic guidelines.

FIBER OPTICS CABLE

Inlet for 1.5" coupler

2"

12" LIP   9" LIP   6" LIP   1" LIP

0.5"

GROUT GUARD

0.5"

0.5"

2"

2"

2.75"

BACK VIEW WITH FIBER OPTIC BUILT IN   **FRONT VIEW WITH FIBER OPTIC BUILT IN**

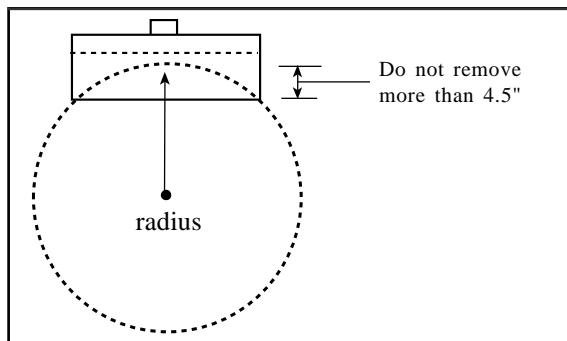| Part #	Description	List $
IFF-12EL-9-45	12" Fiber lit, Sheer Waterfall with 9" extended lip and 45' of 25 strand fiber included	$404.43
IFF-18EL-9-45	18" Fiber lit, Sheer Waterfall with 9" extended lip and 45' of 50 strand fiber included	$425.61
IFF-24EL-9-45	24" Fiber lit, Sheer Waterfall with 9" extended lip and 45' of 50 strand fiber included	$463.02
IFF-36EL-9-45	36" Fiber lit, Sheer Waterfall with 9" extended lip and 45' of 75 strand fiber included	$580.56
IFF-48EL-9-45	48" Fiber lit, Sheer Waterfall with 9" extended lip and 45' of 100 strand fiber included	$704.20
IFF-60EL-9-45	60" Fiber lit, Sheer Waterfall with 9" extended lip and 45' of 150 strand fiber included	$826.32
IFF-72EL-9-45	72" Fiber lit, Sheer Waterfall with 9" extended lip and 45' of 150 strand fiber included	$1,012.03
IFF-84EL-9-45	84" Fiber lit, Sheer Waterfall with 9" extended lip and 45' of 225 strand fiber included	$1,239.46
IFF-96EL-9-45	96" Fiber lit, Sheer Waterfall with 9" extended lip and 45' of 225 strand fiber included	$1,517.41

CUSTOM RADIUS PROGRAM
Avoid the hassles of cutting on the job - let Fiberstars do the work for you!

Up-charge fee for factory custom radius.

1' - 4' non-lit models = **$32 up-charge**   5'-8' non-lit models = **$54 up-charge**   All fiber lit models = **$75 up-charge**

Do not remove more than 4.5"

radius

MINIMUM RADIUS PER WATERFALL LENGTH

For requirements on minimum radius per waterfall length and when designing custom curves for the Island Falls Extended Lip models, please refer to the Radius Reference Guide on Page 19 to select the correct Island Falls model. Some models accommodate very tight radius curves and are available by special order.

Note: Never remove more than 4.5" of the extended lip, leaving a minimum of 1.5" of lip. The top of the beam, where the Island Fall unit is to be installed, should be a minimum of 9" thick.

RADIUS REFERENCE GUIDE

6	9	12	S	
6"	9"	12"	Special	Not Available

ISLAND SHEER WATERFALL LENGTH								
	12"	24"	36"	48"	60"	72"	84"	96"
1'	6	S						
1.5'	6	6	S					
2'	6	6	12	S	S			
2.5'	6	6	9	S	S	S		
3'	6	6	6	12	S	S	S	
3.5'	6	6	6	9	S	S	S	S
4'	6	6	6	9	S	S	S	S
4.5'	6	6	6	9	12	S	S	S
5'	6	6	6	9	12	S	S	S
5.5'	6	6	6	6	12	12	S	S
6'	6	6	6	6	9	12	S	S
6.5'	6	6	6	6	9	12	S	S
7'	6	6	6	6	9	12	S	S
7.5'	6	6	6	6	9	9	12	S
8'	6	6	6	6	6	9	12	S
8.5'	6	6	6	6	6	9	12	S
9'	6	6	6	6	6	9	12	S
9.5'	6	6	6	6	6	9	12	12
10'	6	6	6	6	6	9	9	12
10.5'	6	6	6	6	6	9	9	12
11'	6	6	6	6	6	6	9	12
11.5'	6	6	6	6	6	6	9	12
12'	6	6	6	6	6	6	9	12
12.5'	6	6	6	6	6	6	9	9
13'	6	6	6	6	6	6	9	9

RADIUS SIZE

Island WaterFall Design Considerations

DESIGN PREFACE

Waterfalls naturally narrow as they fall. Fiberstars presents the following waterfall height specifications for this waterfall unit:

1. Maximum waterfall height
2. Width of sheet of water at the maximum waterfall height.
3. Length of waterfall fixture.
4. Recommended waterfall height from lip of the fixture to the pool water surface.
5. Width of the sheet of water at the pool water surface (when installed at the recommeded height) measurement B.
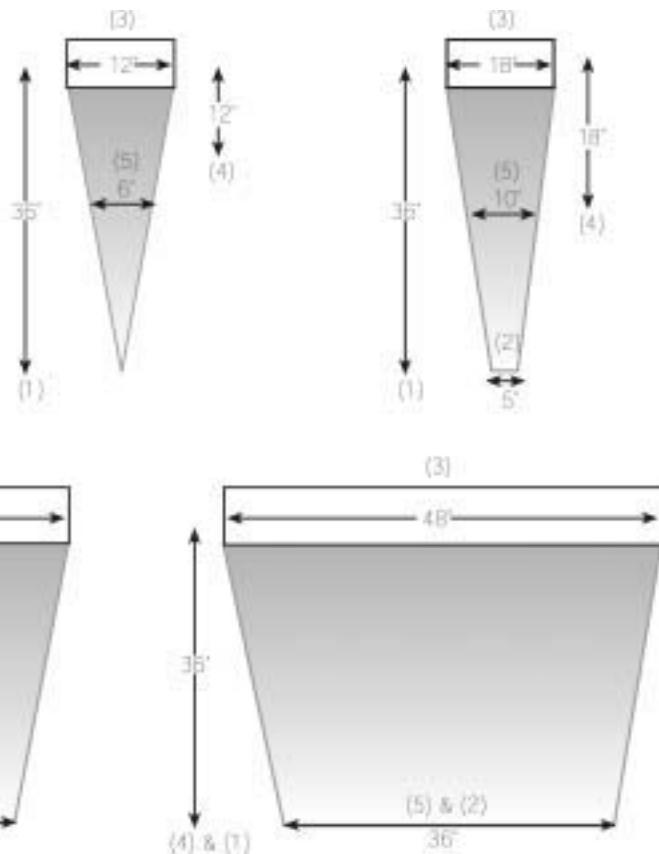
Minimum recommended flow rate: 10 GPM per linear foot.
See charts for additional information

HYDRAULIC GUIDELINE CHART

- Use minimum of 1.5" pipe
- Use minimum of 2" pipe for runs in excess of 60' or if waterfall is over 5'
- Dedicated plumbing lines are recommended
- Maximum recommended flow for a typical installation:

1.5" pipe	for	60 GPM
2" pipe	for	100 GPM
2.5" pipe	for	140 GPM
3" pipe	for	225 GPM

WATER FLOW REQUIREMENT CHART FOR 1' TO 4' MODELS
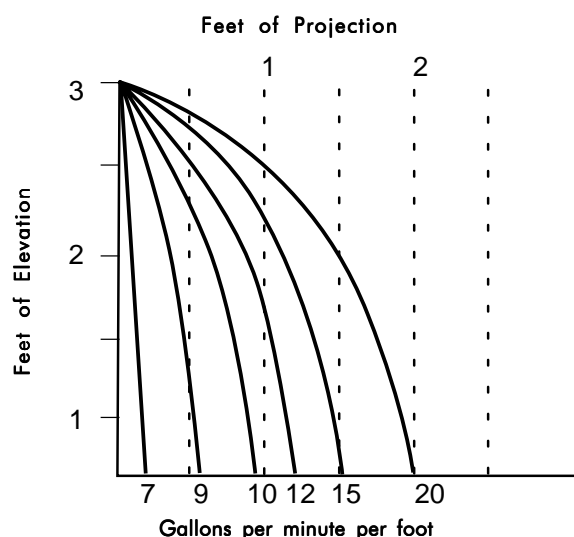
Custom Radius Cut Order Form

Completed form must accompany your order from your preferred Distributor to Fiberstars

- -

Distributor fills out this section

Distributor:_____ Branch:_____

PO#:_____ Purchaser:_____

- -

Builder fills out this section

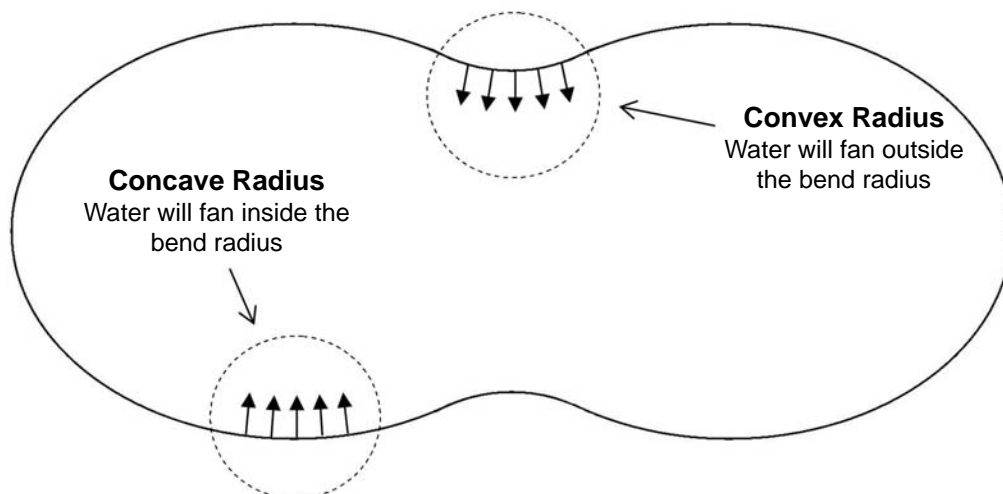Date:_____

Company Name:_____

Contact Name:_____

Phone:_____ Fax:_____

Address:_____

City:_____ St:_____ Zip:_____

Circle desired radius type: Concave Radius   Convex Radius

Size of radius:_____ft._____inches   Template provided: YES / NO

Concave Radius
Water will fan inside the bend radius

Convex Radius
Water will fan outside the bend radius

Jazz Light - Pool

Jazz Light - Spa

THE JAZZ™ LIGHT SERIES   The Brightest color light!

*ALL Jazz Lights are Auto Sync!
The only COLOR pool light to offer metal halide technology.
The *Brightest* light to illuminate dark interior pools and spas!
Pool light - 400 Watt brightness!

Specifications:

Electrical	Jazz Pool	Jazz Spa
Voltage Requirement:	120 VAC, 60 Hz	120 VAC, 60 Hz
Power Consumption:	84 Watts max	40 Watts max
Operating Current Load:	2.0 amps	.35 amps

Lamp	Jazz Pool	Jazz Spa
Type:	50-Watt Metal-Halide H.I.D., Proprietary Design	35-Watt Halogen MR8
Life:	10,000 Hours Avg.	2,000 Hours Avg.
Cool Down/Restrike Period:	2-3 minutes	None
Replacement Lamp Assembly No.:	J20-2000	JSP-2000
Color Temperature:	3600° K	3050° K

Miscellaneous
Jazz Lights are ETL classified for use in specific Sta-Rite, Pentair & Hayward niches. Please see installation manual for these specific product niche model numbers. All Jazz color lights are a 4 wire hookup with 2 switches.

Includes
Complete Electric Light with Cord
Owner's Manual

***Auto Synchs to each other and / or 6004-AS fiberoptic illuminator.
Compatible with Fiberstars' WPC controls. (See pages 24-29)

Part #	Description	List $
J400C-100AS	Jazz Light 400 Watt Equivalent - Metal Halide 4-Position Color Wheel AUTO SYNCH, 100' Cord	$893.25
JSPAC-100AS	Jazz Spa Light - Quartz Halogen 4-Position Color Wheel, AUTO SYNCH, 100' Cord	$564.63

Jazz White Light - Pool

Jazz White Light - Spa

THE JAZZ™ WHITE LIGHT SERIES
The Brightest White Light!

The only WHITE pool light to offer metal halide technology. The *Brightest* light to illuminate dark interior pools and spas! Pool light - 400 Watt brightness!

Specifications:

Electrical	Jazz Pool	Jazz Spa
Voltage Requirement:	120 VAC, 60 Hz	120 VAC, 60 Hz
Power Consumption:	84 Watts max	40 Watts max
Operating Current Load:	2.0 amps	.35 amps

Lamp	Jazz Pool	Jazz Spa
Type:	50-Watt Metal-Halide H.I.D., Proprietary Design	35-Watt Halogen MR8
Life:	10,000 Hours Avg.	2,000 Hours Avg.
Cool Down/Restrike Period:	2-3 minutes	None
Replacement Lamp Assembly No.:	J20-2000	JSP-2000
Color Temperature:	3600° K	3050° K

Miscellaneous
Jazz Lights are ETL classified for use in specific Sta-Rite, Pentair & Hayward niches. Please see installation manual for these specific product niche model numbers. All white Jazz lights are a 3 wire hookup - 1 switch light.

Includes
Complete Electric Light with Cord
Owner's Manual
1 Switch Light
3 Wire Operation

*Compatible with Fiberstars' WPC controls. (See pages 24-29)

Part #	Description	List $
J400-100	Jazz Light 400 Watt Equivalent - Metal Halide WHITE Light Only, 100' Cord	$406.85
JSPA-100	Jazz Spa Light - Quartz Halogen WHITE Light Only, 100' Cord	$374.73

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W. P. C.

Wireless   **Pool**   **Controls**

A line of inexpensive wireless controls

Example: WPC2 - XX1X - 5

List Price: $623.36

WPC-2

SIZE OF CAN:
Width - 16 1/2"
Height - 14 1/4"
Depth - 4 1/2"

Water resistant Wireless Remote and wall holder Included

- Wireless Button #1 - Pool Light

- Wireless Button #2 - Time Clock Pump Overide

- 100 amp sub panel

- Manual overide switches

- Example listed includes Freeze Protect & 2nd Time Clock for pool cleaner booster pump.

- Options - Pool Cleaner Clock / Freeze Protection / 2 Speed Pump Control

* For ALL 2 speed controls - See pages 27 - 29

Wireless Pool Controls

WIRELESS POOL CONTROL WPC-04R

Fiberstars WPC-04R offers a Time Clock and a wireless light control all built together.

WPC-04R

SIZE OF CAN:
Width - 5 5/8"
Height - 9 1/2"
Depth - 4"

WPC-4 Features:
- For simple pools, if you need a Time Clock and light control
- **Fantastic for field replacement** for pools with a 1 speed pump and light.
- 3 position On, Off, Auto, 24 hour Time Clock with four, 15 minute increments per hour.
- Time clock / Pump circuit rated for *30A max.
- Wireless circuit rated for 8 Amps at 120V.
- 75' wireless operating range (extension antenna also available).
- 10' cord on moveable antenna.
- Manual override switch on wireless circuit inside enclosure.
- Water resistant transmitter with wall cradle.
- Controls all single-switch white or color lights.

Water resistant Wireless Remote and wall holder included

Part #	Description	List $
WPC-04R	For 1 speed pumps - 24 hr Time Clock for pump control *30A max, with 1 wireless circuit for 120V light switching.	$251.43

Not for use with Fiberstars Jazz™ lights or fiber optic illuminators.

WIRELESS POOL CONTROL 1

Fiberstars WPC-1 offers all the benefits of a regular Time Clock for pump control plus 2 additional wireless circuits for lights.

WPC-1

SIZE OF CAN:
Width - 7 3/4"
Height - 11 3/4"
Depth - 4 1/2"

WPC-1 Features:
- 3 position On, Off, Auto, 24 hour time clock with four, 15 minute increments per hour.
- Time clock rated for *30A max.
- 10' cord on moveable antenna.
- Manual override switches on each circuit.
- 2 wireless circuits; each circuit 8amp at 120V.
- Synch or non-synch wireless circuits.
- GFCI knockout.
- **Many options to choose from!**

Water resistant Wireless Remote and wall holder included

Part #	Description	List $
WPC-1-XXXX-X	**WPC1 Standard**: For 1 speed pumps - 24 hr Time Clock for pump control *30A max, with 2 wireless circuits for 120V light switching.	$289.08
WPC1-XXXX-9	All the features of WPC1 Standard **with standard Time Clock removed.**	$283.19

*30A max = approx. 1.5HP–120V / 3HP-240V   ** Motorized valves not included

Optional features see page 29

**WIRTRAN
(remote included)**

WPC1-XXXX-T

WPC2-XXXX-T

NEW! WIRTRAN & WPC Combo Kits

The simple 12VAC power center with wireless control

WIRTRAN is a small, simple, 12VAC power center* operated by the included handheld *wireless remote*. It is a low cost solution for any 12VAC, low-wattage product that is single switch operated. A great companion purchase with the Fiberstars **PAL-Series** color LED lights or **Light Streams™** lighted water features.

*up to 30 Watts max.

WIRTRAN
- Easy Installation
- Great for existing or new pool construction
- Handheld Wireless Remote included with every unit
- 75' wireless range
- 10' movable / mountable antenna, 65' extension available
- Manual override switch inside enclosure
- Small size - H 9.5", W 5.62", D 4"
- 110VAC, 60Hz input - 12VAC output, 30W max.
- ETL listed, outdoor enclosure

WPC1-XXXX-T Features:
- 3 position On, Off, Auto, 24 hour time Clock with four, 15 minute increments per hour.
- Time clock rated for *30A max.
- 10' cord on moveable antenna.
- Manual override switches on each circuit.
- 2 wireless circuits. One 12V, 30W and one 120V, 8 Amp
- 75' wireless operating range (extension antenna available)
- Synch or non-synch wireless circuits.
- GFCI knockout.

WPC2-XXXX-T Features: All of the WPC Features above Plus...
- Includes integrated dust cover for all time clocks.
- Knock out for additional Time Clock and additional GFCI knockout.
(Up to 3 Time Clocks)
- 100 amp sub-panel with circuit breaker knockouts.

Part #	Description	List $
WIRTRAN	12VAC, 30W power center with wireless remote control	$299.79
WPC1-XXXX-T	**For 1 Speed pumps** - 24 Hr Time Clock for pump control. *30A max, with 12V, 30W transformer and remote control included. Button 1 controls 12V circuit. Button 2 controls 120V, 8A, lighting circuit.	$331.91
WPC2-XXXX-T	**For 1 Speed pumps** - 24 Hr Time CLock for pump control *30A max, **100A sub-panel** with 12V, 30W transformer and remote control included. Button 1 controls 12V circuit. Button 2 controls 120V, 8A, lighting circuit.	$492.51

WPC-2

SIZE OF CAN:
Width - 16 1/2"
Height - 14 1/4"
Depth - 4 1/2"

Water resistant Wireless Remote and wall holder Included

WIRELESS POOL CONTROL 2

Fiberstars WPC-2 offers all the benefits of a regular Time Clock for pump control plus two additional wireless circuits for lights and a 100amp sub-panel.

WPC-2 Features:

• 1 or 2 speed pumps. If 2 speed pump model is used, Fiberstars supplies 2 time clocks for ultimate control, 1 for Low speed and 1 for High speed.

• 3 position On, Off, Auto, 24 hour time clock with four, 15 minute increments per hour.

• Includes integrated dust cover for all time clocks.

• Time Clock rated for *30A max.

• 2 wireless circuits. Each circuit 8 amp - 120V.

• Manual override switches on each circuit.

• 75' wireless operating range (extension antenna available).

• Synch or Non-Synch your wireless circuits with our synch button.

• Knock out for additional Time Clock and additional GFCI knockout. (Up to 3 Time Clocks)

• 100 amp sub-panel with circuit breaker knockouts.

1 speed pump models		
Part # **Description**		**List $**
WPC-2-XXXX-X **WPC2 Standard**: For 1 speed pumps - 24 hr Time Clock for pump control *30A max, 100A sub-panel with 2 wireless circuits for 120V light switching.		$428.27
WPC2-XX1X-5 All the features of WPC2 with TC Bypass **Plus Freeze Protection and 2nd Time Clock. for pool cleaner booster pump.**		$623.36

Water resistant Wireless Remote and wall holder Included

WPC-2 / 2-speed

2 speed pump models		
Part # **Description**		**List $**
WPC2-3XXX-X **WPC with 2TC**: For 2 speed pumps - 1st Time Clock for Low speed and 2nd Time Clock for High speed *30A max, 100A sub-panel, 2 wireless circuits for 120V light switching.		$577.46

*30A max = approx. 1.5HP–120V / 3HP-240V   ** Motorized valves not included

WPC-3

SIZE OF CAN:
Width - 16 1/2"
Height - 14 1/4"
Depth - 4 1/2"

Water resistant Wireless Remote and wall holder Included

WIRELESS POOL CONTROL 3

Fiberstars WPC-3 offers all the benefits of a regular Time Clock for pump control; Plus - 1 Time Clock pump by-pass circuit, 1 - 3HP 80 Amp 240V circuit, and 3 additional 120V circuits for lights.

WPC-3 Features:

• 1 or 2 speed pumps. If 2 speed pump model is used, Fiberstars supplies 2 Time Clocks for ultimate control, 1 for Low speed & 1 for High speed.
• 3 position On, Off, Auto, 24 hour Time Clock with four, 15 minute increments per hour
• Time Clock/Pump bypass circuit rated for *30A max.
• 3 additional circuits, Circuit 1 is a universal 120/240V circuit which can be used for additional features including water feature booster pumps up to *30A max, Circuits 2 and 3 are synchronizable 120V wireless light circuits
• Knock-outs for additional Time Clock and additional GFCI.
• 100 Amp Sub-Panel with circuit breaker knock-outs
• 75' wireless operating range (Extension antenna also available)
• 10' cord on moveable antenna

ETL LISTED®

1 speed pump models

Part #	Description	List $
WPC3-XXXX-X	**WPC3 Standard**: For 1 speed pumps - 24 hour Time Clock for pump control *30A max, 100A sub-panel, 3 wireless circuits *plus* additional T/C pump bypass circuit. Circuit 1 is a universal 120/240V circuit which can be used for additional features such as a water feature booster pump up to *30A max. Circuits 2 and 3 are synchable 120V wireless light circuits.	$630.79

Water resistant Wireless Remote and wall holder Included

WPC-3 / 2-speed

ETL LISTED®

2 speed pump models

Part #	Description	List $
WPC3-3XXX-X	**WPC3 with 2TC**: For 2 speed pumps - 1st Time Clock for Low speed and 2nd Time Clock for High speed *30A max, 100A sub-panel, 3 wireless circuits *plus* additional Time Clock pump bypass circuit (activates high speed). Circuit 1 is a universal 120/240V circuit which can be used for additional features such as a water feature booster pump up to *30A max. Circuits 2 and 3 are synchable 120V wireless light circuits.	$745.48

** Motorized valves not included   *30A max = approx. 1.5HP–120V / 3HP-240V

Optional features for WPC-3 models see page 29

WPC-3 - 2 speed

For Pool / Spa Combos

Water resistant Wireless Remote and wall holder Included

Part #	Description	List $
WPC3-3X4X-X	**WPC3 Two Speed Pool/Spa Combo**: For 2 speed pumps, Time Clocks for Low and High speeds *30A max, 100A sub panel, 3 wireless circuits *plus* additional T/C pump bypass circuit (activates high speed) ***and* dual JVA valve switching for pool/spa combo w/ HTR control.** Circuit 1 is a universal 120/240V circuit which can be used for additional features such as a water feature booster pumps up to *30A max. Circuits 2 and 3 are synchable 120V wireless light circuits.	$883.11

Optional WPC features

Part #	Description	List $
FP-1/2	Freeze Protection Device	$59.07
WE-65	65' Antenna wire extension	$47.24
TC-2	Additional time clock assembly for a pool cleaner booster pump	$82.69
LS-12V	12 Volt Magnetic Transformer. Internal Transformer Only. Fits in WPC and other control system enclosures and sub panels.	$70.58
WPC-TRANS	24V Transformer for JVA	$52.93
WPC1/2 WFPR	240V 3 HP water feature pump relay kit. Replacement for JQX Relay	$82.69
FIRESWT	Fireman switch for heater protection (Not for use with WPC-04R and WPC-04M)	$82.58
WPC Replacement Parts		
WPC04RMT	Replacement Transmitter for WPC-04	$55.14
WPC1-2RMT	Replacement Transmitter for WPC1 and WPC2	$59.55
WPC3RMT	Replacement Transmitter for WPC3	$77.19
WPCRMR	Replacement remote receiver	$87.16
WPCS87R	Replacement S87R relay	$64.23
WPCTC	Replacement Time Clock	$55.05
WPCANT	Replacement antenna	$45.88

**Freedom Switch™
Junction Box**

**Wireless Transmitter
Included**

FREEDOM SWITCH™

The first Wireless Control Junction Box!

Fiberstars' new Freedom Switch is the first wireless control junction box. It is **great for existing pools**, and is easy to install. You can install the Freedom Switch on existing Pentair™, American Products™, or a Thermocraft Junction box. It can also replace X-10 light switches.

The Freedom Switch is great for 110-120V color changing lights and has a manual on / off override. It has a diagnostic indicator light, which makes it easy to maintain. This is the ultimate combo...

A junction box with a wireless light control built in!

Wireless circuit: 5 amps max, 120V 600W

Part #	Description	List $
FDS-R	Freedom switch - Retro fit applications.	$216.15

WARRANTY

Each Fiberstars product has its own warranty, terms and conditions. Please refer to the specific warranty included with the product for more details.

INSTALLATION HINTS: HOW TO DESIGN YOUR FIBER OPTIC PROJECT

1. Choose an Illuminator. - See pages 35-37.

2. Choose a Fiber Kit For the Pool.

The fiber sizes we recommend to light a pool are: B225, B300 or multiple runs of B75, B100, B150. See the examples on pages 32-33. For help with light placement, FAX a copy of your pool plan to us, using the pool plan fax on page 34. Our fax number is (888) 704-2292. Fiberstars' Representatives can also help you with proper placement of your light kits. Either way, we will help you select the proper size fiber optics for your pool.

3. Choose a Fiber Kit For Spa Lighting.

Spa light kits are available in 50, 75, and 100 strands and in several lengths. Choose your kit based on brightness level desired and fiber run distance.

4. Water Features. - See pages 11-16 for all Color Light Streams™ and pages 40-52 for all fiber optic water features.

Please read and follow the install manuals included with the fiber optic illuminator before you begin.

Illuminator Placement for Pool Lighting

In most cases, it is recommended to place the Illuminator at the end of the pool on the short wall at the deep end. The Illuminator should be placed a minimum of 5 ft. and a maximum of 15 ft. from the main pool lens location. This will allow for maximum brightness and lowest cost. For multiple light systems, please consult with the Fiberstars Customer Support Department or your local Fiberstars Sales Representative.

Fiber optic Water Feature Lighting

If using multiple units, it is very important that all fiber lengths are the same. Example: If you have 1 unit at 20' and another at 40', both should have 40' of fiber. This will balance the light output to both units. Always use the shortest run possible for maximum brightness.

Illuminator Fiber Capacity

You can operate numerous lights from the Fiberstars system, but you must stay under *450 fibers for the 6004 and 6004-AS Illuminators, and *400 for the 2004 and 2004-AS Illuminators. Listed below are the numbers of fiber in each light. You can mix and match these lights into one illuminator system as long as you **do not exceed the maximum amount of fibers.**

*NOTE: When using our Constant Color System (CCS), you may use up to 600 fibers with the 6000 series Illuminators and 450 fibers with the 2000 series Illuminators. See page 38 for details.

Darker pool surfaces have substantially less light reflection than white surfaces, requiring more fiber lights. Please fax your plan to us for light placement, a list of materials and specify type of surface being used. See page 32 for the fiber sizing chart.

Type of Light	Part#	#Fibers	Color of tubing	Type of Light	Part#	#Fibers	Color of tubing
T.F.S.-Total Fiber System	B375	**375**	Black	Accessory/Spa Light	B25	**25**	Black
Ultra Duty Fiber Glo	B300	**300**	Black	Accessory Accent Light	B12	**12**	Black
Heavy Duty Fiber Glo	B225	**225**	Black	30 Strand Perimeter	FSSB/FSCA	**60***	Frosted, flat back
Fiber Glo	B150	**150**	Black	42 Strand Cabled Flat	FSSB-CABL-42	**84***	Frosted, flat back
Accessory Pool/Spa Light	B100	**100**	Black	42 Strand Cabled Round	CABL-42	**84***	Round
Accessory Pool/Spa Light	B75	**75**	Black	Fiberstix™ Fiber	FSPT-3	**3**	Black
Accessory Pool/Spa Light	B50	**50**	Black				

*Perimeter fiber has either 30 or 42 strands of fiber, but both ends connect at the optical port so it counts as 60 or 84 fibers, respectively.

Fiber Sizing Chart

FIBER SIZING CHART
* Fiber Sizing chart assumes fiber length to pool light is less than 15'

Pools

Plaster Color	Up to 28'	Up to 32'	Up to 34'	Up to 36'	Up to 40'	Up to 45'
White	225	300	300	2x 300*	2 x 300*	2 x 300*
Light/Medium Color	225	300	300	2 x 300*	2 x 300*	2 x 300*
Dark Color	300	2 x 300*	2 x 300*	2 x 300*	2 x 300*	3 x 300*
Black (White light box only!)	300	2 x 300*	2 x 300*			

*Requires 2 AutoSynch (AS) Illuminators

Pebble Finish Color	Fiber Strand Size					
Light/Medium Color	300	300	2 x 300*	2 x 300*	2 x 300*	2 x 300*
Dark Color	300	2 x 300*	2 x 300*	2 x 300*	2 x 300*	2 x 300*
Black (Not Recommended!)						

*Requires 2 AutoSynch (AS) Illuminators

Vinyl Liner Color	Fiber Strand Size					
Light/Med. Blue and Patterns	225	300	300	2 x 300*	2 x 300*	2 x 300*
Dark Blue and Patterns	300	2x 300*	2 x 300*	2 x 300*	2 x 300*	
Black (Not Recommended!)						

*Requires 2 AutoSynch (AS) Illuminators

Fiberglass/Acrylic Color	Fiber Strand Size					
White/Light Blue	225	300	300	300	2 x 300*	2 x 300*
Medium Colors	300	300	300	2 x 300*	2 x 300*	2 x 300*

*Requires 2 AutoSynch (AS) Illuminators

Spas - If the fiber length exceeds 30', increase fiber count up to the next size

Spa Color	Fiber Strand Size
White and Light Colors	50 / 75
Medium to Dark Colors	75 / 100
Black	100 / 150

*This chart is to be used as a guide ONLY. The individual brightness requirements of the pool owner should be considered.

PREFERRED LENS AND CONDUIT PLACEMENT FOR SINGLE POOL/SPA LOCATION

EXAMPLE:

Long Wall — Spa — Short Wall — Illuminator Placement Should be 5' to 15' from Main Pool Lens Location — PLACE LIGHT IN DEEP END OR SHALLOW END. (DEEP END PLACEMENT IS PREFERRED!) — Bring in Conduit High on Bench Face of Footwell Wall — Bring in Conduit 12-14" Below Top of Wall (8" to 10" Below Water Level)

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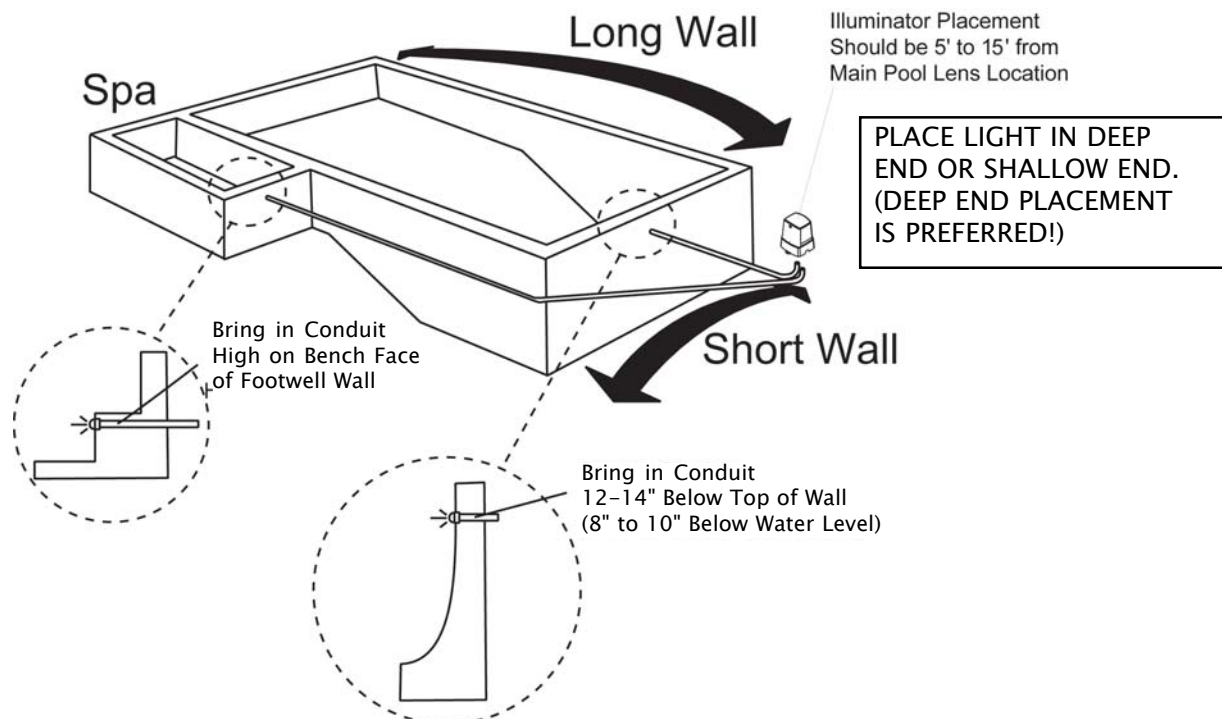
BUILDING A BACKYARD ENVIRONMENT

16 x 32 White Plaster Pool

Lighting:
Fiber Optic Pool Light Only

Benefit:
Safe, Colorful Underwater Lighting

Material:
1 Illuminator
1 Pool Fiber Kit
1 Lens Housing

W/ Raised Bond Beam

Lighting:
Fiber Optic Pool Light
+ Perimeter Lighting
+ Fiberstars Lighted Rain Waterfalls

Benefit:
Safe, Colorful Underwater Lighting
plus Perimeter Fiber to Frame the Picture-Perfect Pool
plus Beautiful Lighted Rain Waterfalls
plus Contrasting Color Effects

Material:
2 Illuminators
1 Pool Fiber Kit
1 Lens Housing
1 Perimeter Fiber Kit
2 Lighted Rain Waterfalls

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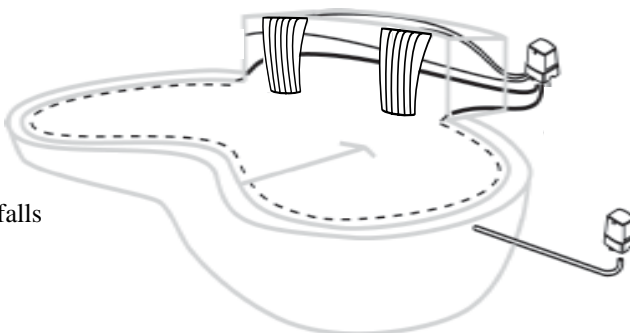
20 x 40 Pebble-Finish Gunite Pool with Spa

Lighting:
Fiber Optic Pool Lights
Spa Light

Benefit
Safe, Colorful Underwater Lighting
Auto Synch Illuminators Change Colors at the Same Rate

Material:
2 6004-AS (Auto Synch) Illuminators
2 Pool Fiber Kits
1 Spa Fiber Kit
3 Lens Housings

TIP Synchronized illuminators are only necessary when lighting one body of water with two or more illuminators. Use a seperate illuminator for spa and feature lighting for a great color contrast effect!

---

18 X 34 Vinyl Liner with L

Lighting:
Fiber Optic Pool Lights

Material:
1 Illuminator
1 Pool Fiber Kit
1 Supplemental Fiber Kit
2 Lens Housings

Benefit:
Safe, Colorful Underwater Lighting
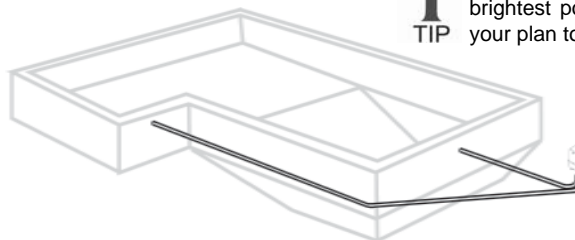
TIP Fiberstars offers a FAX-back service for all pool builders to make sure you have the brightest pool at the lowest cost. Just fax your plan to (888) 704-2292. See Page 34.

---

20 x 40 Fiber Optic Water Feature Lighting ONLY

Lighting:
Fiber Optic Spa Light
plus Fiberstars Lighted Laminars

Benefit:
Safe, Colorful Water Feature Lighting
plus Beautifully Lighted Laminar Jets

Material:
1 Illuminator
1 Spa Fiber Kit
1 Lens Housing
2 Fiberstars Lighted Laminars

TIP This is a beautiful look with no fiber optic pool light. It is a great way to add the exciting color of fiber optics to just the features of an otherwise dark surfaced pool.

33

POOL PLAN FAX

The New
Fiberstars™
AN **ENERGY FOCUS** COMPANY
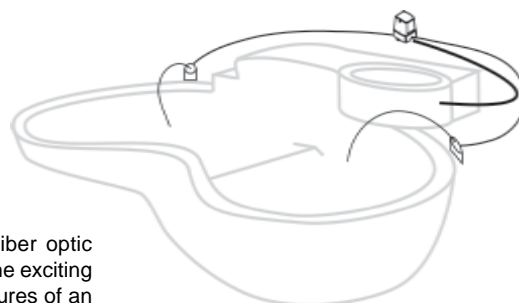
To: Pool Design Department
Fax: 888-704-2292

Date:
Pages:

In order to process your pool plan please provide the following information:

*Company Name:	
Your Name:	
Address:	
Fax/Phone number:	
E-Mail Address:	
Cell Phone Number:	

MUST HAVE A PLAN/DRAWING

Is this drawing to scale? _____

If so, what scale? _____

What is the Max Length (pool)? _____ Max Width (Pool)? _____Spa Size:_____
(Please have measurements in feet or meters)

What are the depths? _____

What color and type of surface is the pool? _____

Show house location on Plan/Drawing
Please have the Decking layout on Plan/Drawing

Example
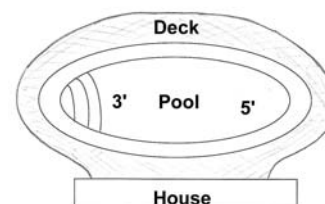
What features on the pool/spa do you want to light? _____

 Light up the pool water? _____

 Light up the spa water? _____

 Perimeter band? _____

 Waterfalls? _____

 Water Features? _____

 Type of water feature – LED or Fiber optic?_____

Deck
3' Pool 5'
House

***Desired lighting level*:**

 ☐ *Mood*   ☐ *Standard*   ☐ *"Make it Shine" (discussion by phone required)*

FYI: A Star Floor application is not a design application. It is your preference on how many Star Floor kits you would like to use. It is recommended that you do not create patterns. If one fiber were to break upon installation, it would be highly noticeable, where as in a random layout it would not.

Upon receipt of this information, we ask for 24 to 48 hour lead-time.

Thank you.
Design Department
Fax back to 888-704-2292

6004 ILLUMINATOR

6004 / 6004-AS SERIES ILLUMINATORS (METAL HALIDE)

4 position color wheel: white - blue - green - magenta

Specifications:
Construction
Enclosure: High-Impact Outdoor Grade Polycarbonate
Ventilation: 110 ft^3/min.
Acoustic Rating: 50dB (A)
Weight: 20 lbs.
Maximim Fiber Capacity: 450 strand capacity
*Add our optional Constant Color System to increase to 600 strands (see pages 34-35)

Electrical
Voltage Requirement: 120 VAC, 60 Hz
Power Consumption: 200 Watts max
Start Current Load: 4.4 amps
Run Current Load: 1.8 amps

Lamp
Type: Metal-Halide H.I.D., Proprietary Design
Life: 6000 Hours Average
Cool Down/Restrike Period: 2-3 minutes
Replacement Lamp Assembly No.: Y20-6000
Color Temperature: 4300º K

Options
***Wireless Pool Controls (WPC).**
 6004 / 6004-AS can be used with WPC1, WPC2 and WPC3 (See pgs 24-29)
 For multiple 6004-AS, use WPC controls, not RM6000

***Internal wireless Remote Control, see RM6000. For single non-AS Illuminators only.**

Part #	Description	List $
6004	Metal-Halide Illuminator, 4-Position Color Wheel, 450 Port Capacity	$738.87
6004-AS	Metal-Halide Illuminator, 4-Pos Color Wheel, 450 Port Capacity AUTO SYNCH	$904.28
	All 6004-AS units do not require communication cables and can be synchronized with all Jazz™ Light AS Units	
RM-6000	Internal Wireless Remote Control System for 6004 Illuminator. NOT for synchronized units.	$202.91

2004 ILLUMINATOR

2004 / 2004-AS SERIES ILLUMINATORS (QUARTZ HALOGEN)

4 position color wheel: white - blue - green - magenta

Specifications:

Construction

Enclosure: High-Impact Outdoor Grade Polycarbonate
Ventilation: 110 ft^3/min.
Acoustic Rating: 50dB (A)
Weight: 15 lbs.
Maximum Fiber Capacity: 400 strand capacity
*Add our optional Constant Color System to increase to 450 strandS (See pages 38-39)
2004-AS Auto Synch units have a 3 wire single switch operation.

Electrical

Voltage Requirement: 120 VAC, 60 Hz
Power Consumption: 250 Watts Max
Current Load: 2.0 amps

Lamp

Type: Quartz-Halogen, Proprietary Design
Life: 400-700 Hours Average
Replacement Lamp Number: HI-111
Color Temperature: 2800° K

Options

*<u>W</u>ireless <u>P</u>ool <u>C</u>ontrols (WPC).
  2004 and 2004-AS can be used with WPC1, WPC2 and WPC3
  WPC-04 can only be used with 2004-AS or any other one button lighting fixture.
  (See pages 24-29)
  For multiple 2004-AS, use WPC controls, not RM1

***Internal wireless remote see RM1**
  (For use on single units only. NOT for synchronized units.)

Part #	Description	List $
2004	Quartz-Halogen Illuminator, 4-Position Color Wheel, 400 Port Capacity	$496.25
2004-AS	Quartz-Halogen Illuminator, 4-Pos Color Wheel, 400 Port Capacity AUTO SYNCH	$646.23
	-Has 3 wire installation, 1 control switch.	
	All 2004-AS units do not require communication cables	
RM1	Remote Control - Wireless for 2004. NOT for synchronized units.	$202.91

TFS / 409 Series Illuminator
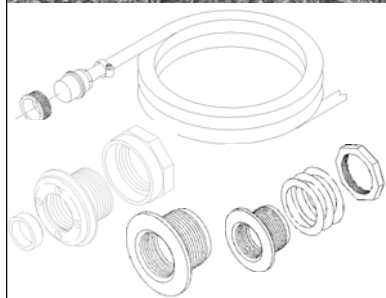
TOTAL FIBER SYSTEM (T.F.S.)

Now you can create the brilliant color magic of fiber optics for your pool with a single purchase! Our Total Fiber System (T.F.S.) features the 6004 multi-color Illuminator. You also receive 12' or 18' of our 375 Strand fiber - the industry's largest mainpool bundle. All of this AND MORE come in one box to make your fiber purchasing much easier!

Includes
• 6004 Series Illuminator - Metal Halide-4-Position Color Wheel

Specifications of 6004 Illuminator: See Page 35.

• 12' or 18' of 375 Strand Fiber

• LNS-2G, LNS-2V, LNS-2A wall fittings

• Fiber Optic Port Assembly

• Installation Manual / Owner's Manual

*__Wireless Remote Sold Seperately__ (RM-6000)
*Constant Color port tip CCS-600 or CCS-450 can be purchased seperately. (See pgs 38-39)

**Compatible with Fiberstars' WPC controls. (See pages 24-29)*

Part #	Description	List $
TFS-12	Complete One Box System featuring 4-Pos. Color Wheel, standard port tips and 12' of 375 strand fiber	$1,107.61
TFS-18	Complete One Box System featuring 4-Pos. Color Wheel, standard port tips and 18' of 375 strand fiber	$1,218.84
	(See above for complete package details.)	
Options		
RM-6000	Wireless Remote Control System for 6004 Illuminator	$202.91
WPC	Wireless Pool Controls - See pages 24-29	

409 SERIES ILLUMINATOR (SPECIAL ORDER ONLY!)

This commercial-grade, 150-Watt metal halide illuminator is designed for added brightness. Great for use on Fiberstars Lighted Laminars in high ambient light areas. (Allow 2 - 3 weeks for delivery.)

Lamp
Type: Metal-Halide H.I.D., Proprietary Design
Life: 6000 Hours Average
Replacement Lamp Number: HID 440

Includes
Complete Fiber Optic Illuminator
Fiber Optic Port Assembly
Installation and Owner's Manual

Miscellaneous
Fiber Capacity: 400 strands
UL listed for wet locations
For Master / Slave units, it is required to run 22 AWG communication cable between the units

Options
*__Wireless Pool Controls (WPC)__
   (See pages 24-29)

Part #	Description	List $
409-W	409 Series, Commercial-Grade Illuminator - Metal Halide White Light Only	$1,380.69
409-C-4	409 Series, Commercial-Grade Illuminator - Metal-Halide 4-Position Color Wheel	$1,460.09
409-C4M	409 Series, Commercial-Grade Illuminator - Metal-Halide 4-Position Color Wheel, Master Unit	$1,786.51
409-C4S	409 Series, Commercial-Grade Illuminator - Metal-Halide 4-Position Color Wheel, Slave Unit	$1,742.40
409-C8	409 Series, Commercial-Grade Illuminator - Metal-Halide 8-Position Color Wheel	$1,521.84
409-C8M	409 Series, Commercial-Grade Illuminator - Metal-Halide 8-Position Color Wheel, Master Unit	$1,554.93
409-C8S	409 Series, Commercial-Grade Illuminator - Metal-Halide 8-Position Color Wheel, Slave Unit	$1,940.90
HID-440	Replacement metal-halide Lamp	$384.58

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Constant Color System

CONSTANT COLOR SYSTEM - PORT ASSEMBLIES

Our exclusive, new patented Constant Color System allows all fibers to change color precisely at the same time, creating unique shades of blended color.

CCS-450 Port Tip

CCS-450 Color Rod
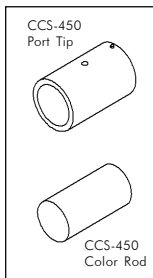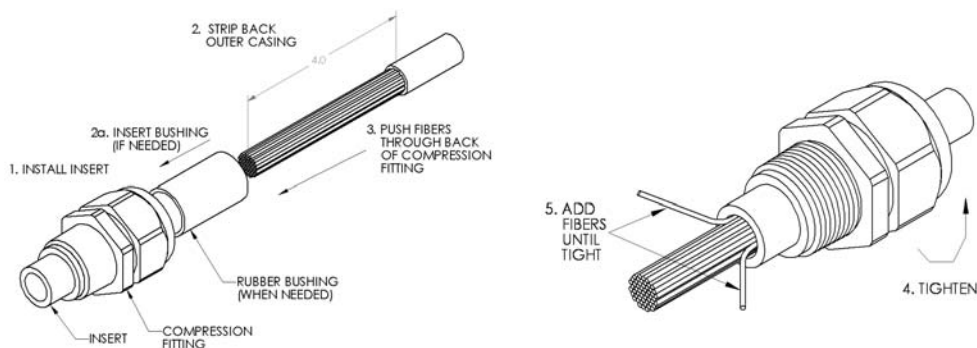
Constant Color System 450 Strands

RUBBER BUSHING | 600 FIBER PORT | CCS-600 INSERT | CCS-600 TIP | CCS-600 COLOR ROD
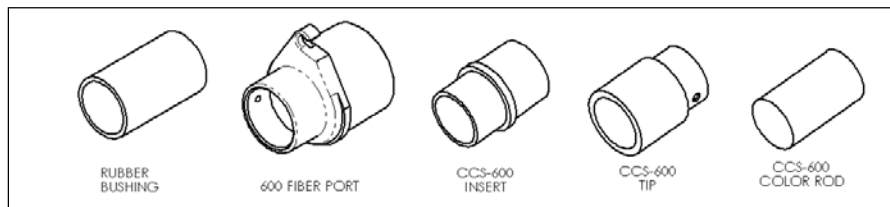
Constant Color System 451 - 600 Strands

Part #	Description	List $
CCS-450	Patented Constant Color System Port tip - 450 fiber capacity	$30.88
CCS-600	Patented Constant Color System Port tip - 600 fiber capacity (with new port body for high capacity)	$61.76

CONSTANT COLOR SYSTEM: PORT ASSEMBLY INSTRUCTIONS 451 - 600 FIBERS

A. Ensure that the total fiber count of all fiber strands is between 451 and 600. If you have more than 600 fibers you will need a second illuminator. The maximum capacity of this Constant Color System port is 600 fibers.

B. Install the Insert into compression fitting and fully seat insert (Fig. 1).

C. Strip back all fiber casings no less than 4 inches (Fig. 2). Take care not to nick the fibers.

D. Insert the bare fibers into the insert so that ALL fibers protrude past the insert end (Fig. 3). Tighten the port compression nut down on the fiber casing (Fig. 4). If fiber casing will not go into the compression fitting then install the rubber bushing into the fitting half-way. (Fig 2a) Then insert the bare fibers until the fiber casing is in contact with the bushing. Tighten the port compression nut down on the bushing.

E. IMPORTANT: If the insert is not completely full, insert scrap individual fibers into the insert until it is completely full (Fig. 5). This will keep the lit fibers perpendicular to the lamp and prevent the fibers from overheating.

**Note: It is important that you match your fiber bundle with the correct size CCS.
For example: Use a CCS-450 for 450 strands. Do not use a CCS-600.**

Constant Color System

F. Heat up hot knife (PN FS-118 or FS-163). Once hot knife is up to temperature, apply firm downward pressure on the fibers with the blade touching the insert at a slight angle (Fig 6). **DO NOT SAW BACK AND FORTH**. Allow the heat of the knife to slowly trim the fibers. Ease the pressure off as the knife starts to complete the cut. Turn the hot knife off and allow it to cool in a safe place.
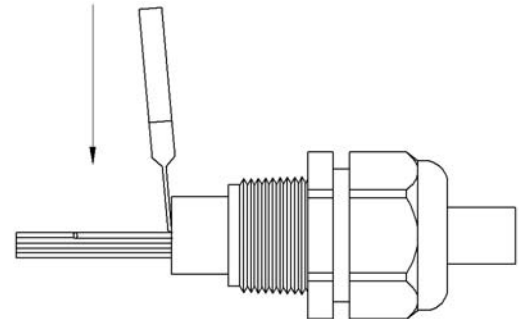
6. APPLY STEADY DOWNWARD FORCE WITH HOT KNIFE
DO NOT SAW BACK AND FORTH

G. Line up hole on insert with hole on the port and fully seat the insert on the port (Fig. 7).
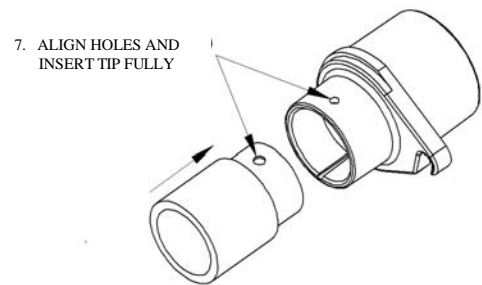
7. ALIGN HOLES AND INSERT TIP FULLY

9. INSTALL SET SCREW
DO NOT OVERTIGHTEN

H. **NOTE: Avoid touching the flat surfaces of the CC Rod as fingerprints will reduce light performance.**
Slide the constant color rod inside the insert until the end is flush with the end of the tip (Fig. 8). Use the set screw to lock the constant color rod and tip in place (Fig. 9). **DO NOT OVER TIGHTEN!** Set screw should be just tight enough to keep the constant color rod and port tip in place.

8. SLIDE COLOR ROD INTO TIP UNTIL END IS FLUSH WITH END OF THE PORT TIP.

I. Screw port assembly onto compression fitting until fully seated (Fig. 10)
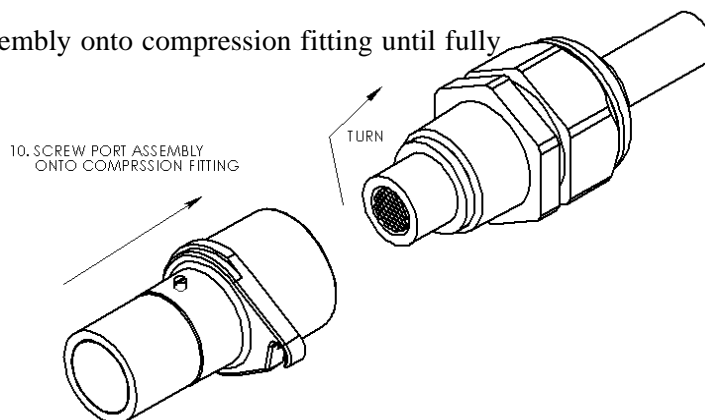
10. SCREW PORT ASSEMBLY ONTO COMPRSSION FITTING

TURN

Lighted Rain Waterfall

LIGHTED RAIN WATERFALLS - Straights only!

These unique Lighted Rain Water Falls come complete with fiber pre-attached.

Fiberstars Lighted Rain Waterfall adds dramatic nighttime excitement that is breathtaking. The rain waterfall is available in five different sizes, listed below.

Our Lighted Rain Waterfall requires the least amount of fiber for the maximum amount of light output. Each one comes with 45' of pre-attached fiber and is paintable. You can easily combine the waterfalls for 6', 7' and 8' sizes. 5-8 GPM per foot. More information on page 42.

New! Brightening Shield added
-Hides points of light while reflecting light onto rain droplets

Part #	Description	List $
Lighted Rain Waterfall - Complete with Fiber - STRAIGHTS ONLY!		
LRWF12-45	12" Rain Waterfall with 45' of 25 Strand Fiber	$393.30
LRWF18-45	18" Rain Waterfall with 45' of 36 Strand Fiber	$479.34
LRWF24-45	24" Rain Waterfall with 45' of 50 Strand Fiber	$589.95
LRWF36-45	36" Rain Waterfall with 45' of 75 Strand Fiber	$734.96
LRWF48-45	48" Rain Waterfall with 45' of 100 Strand Fiber	$958.65

INSTALLING THE LIGHTED RAIN WATERFALL*

Fiberstars Lighted Rain Waterfalls are designed to provide single rows of water and project them away from the falls lip at a 45 degree angle. The rows of water simulate the sound and effect of rain falling into the pool creating a unique and pleasant sound for you. The minimum water flow is between 5 and 8 GPM (gallons per minute). Keep in mind that as you increase the GPM flow rate, the further out the "rain" fall will extend from the wall of the pool. The Fiberstars Lighted Rain Waterfall must be installed with lip of the fall extending a minimum of 2" from the wall. Notch the beam for inclusion of the fiber and water connections. These rainfalls come in straight, non-radius designs only. You may use multiple 18" Lighted Rain Waterfalls to do radius applications.

PLUMBING

The Fiberstars Lighted Rain Waterfalls water supply line should be 1-½" PVC SCH 40 pipe. A 3 way valve should be installed at the equipment pad to regulate the water flow to achieve the minimum specified flow rate. A rock trap is included with this fall and should be installed in a horizontal position with the debris trap pointing down. Place the rock trap as close to the fall as possible. Most important, **MAKE SURE THAT THE ROCK TRAP IS INSTALLED WITH THE FLOW ARROW POINTING TOWARDS THE FIBERSTARS LIGHTED RAINFALL.**
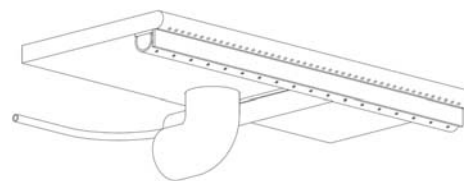
FIBER INSTALLATION

A 1" conduit is required for the fiber optic cable which should be run from the fall to the illuminator location. Install the fiber optic cable into the illuminator per the directions included with the illuminator. Use only sweep elbows or heat-bent PVC to maintain a 2" radius on all conduit connections.

START-UP

After the pool is complete and filled with water, the Fiberstars Lighted Rain Waterfall is ready to be used. Make sure the openings are clear of debris before turning on the water supply pump. Slowly open the 3 way valve until the air is purged and water begins to flow from the fall. Adjust flow to achieve your desired effect.

NOTE: If using multiple units, it is very important that all fiber lengths are the same. Example: If you have 1 unit at 20' and another at 40', both should have 40' of fiber. This will balance the light output to both units. Do not remove excess fiber lengths.

*See Color Light Streams™ LRWF on page 13 for the LED version.
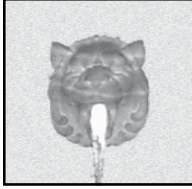
AQUA ACCENT DELUXE LIGHTING KIT

Aqua Accent Deluxe

Fiberstars multi-application Aqua Accent Deluxe lights up wall features and sconces. The Aqua Accent Deluxe Lighting Kit is designed to be installed during the gunite phase of pool building. The kit is pre-assembled for an easy connection to a 3/4" water supply line and a 3/4"conduit connection for the fiber. The kit comes with 45' of 50-strand preattached fiber.

FIG. 1

3/4" Conduit for Fiber

Bond Beam

50 fiber strands

3/4" SCH 40 Conduit
Water Inlet Connection
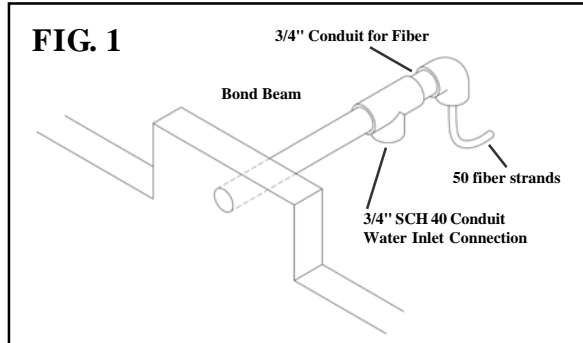
For a complete installation manual, please visit our website at www.fiberstars.com.

Part #	Description	List $
FAA-DL-45	Aqua Accent Deluxe (Lion's Head / Bubbler) Lighting Kit. Includes 45' of 50-strand fiber. -DOES NOT include Lion's Head fixture.	$196.30
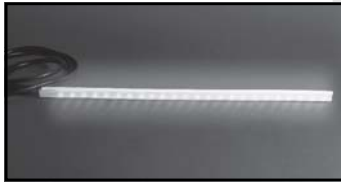
WATERFALL LIGHT BAR KIT - Straight or Radius

Fiberstars Waterfall Light Bar Kit allows you to add color to waterfalls and rainfalls. This light bar easily mounts to the bottom lip of a sheer waterfall or rainfall, straight or radiused. There are two fibers per inch that aim down to light the water flow. A ¾" conduit is placed next to the waterfall so you can run fiber back to the illuminator.

NOTE: For standard Light Bars, the fiber tail exits out of the left side. **Reversed Light bars are now available** (fiber tail exit on the right side). Add an "R" to the part numbers below. This will enable you to combine two lightbars to make 6', 7' and 8' sizes. No additional cost.

Light ouput is more dramatic on rainfalls.

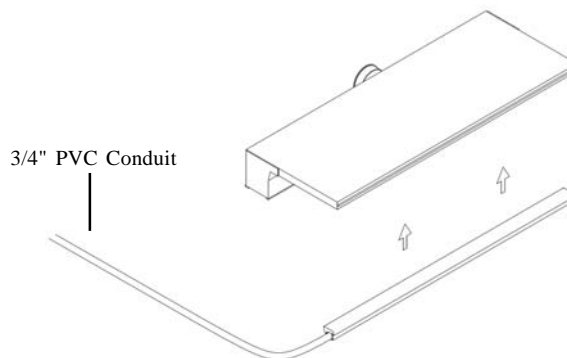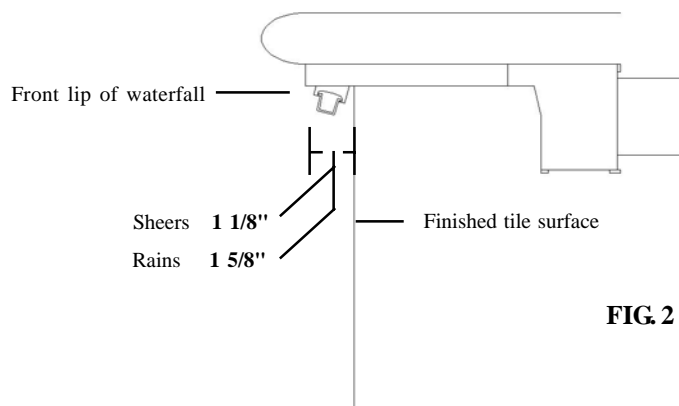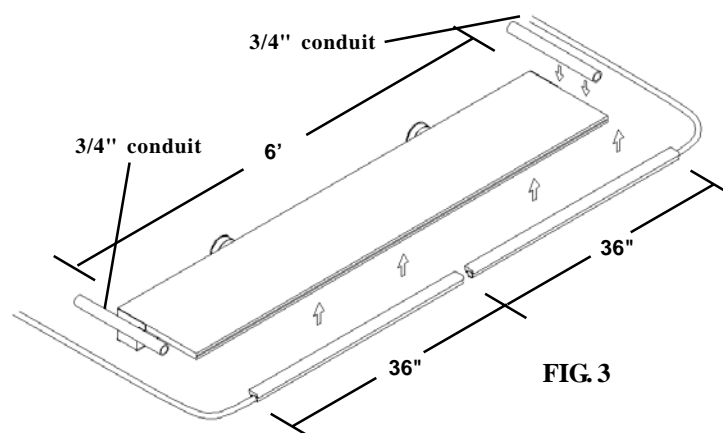| Part #	Description	List $
Waterfall Light Bar Kits - FOR RADIUS OR STRAIGHTS!		
WLB12-25	Waterfall Light Bar, 12" wide, 25' of 25-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	$165.42
WLB12-45	Waterfall Light Bar, 12" wide, 45' of 25-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	$187.47
WLB18-25	Waterfall Light Bar, 18" wide, 25' of 36-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	$205.12
WLB18-45	Waterfall Light Bar, 18" wide, 45' of 36-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	$244.82
WLB24-25	Waterfall Light Bar, 24" wide, 25' of 50-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	$249.23
WLB24-45	Waterfall Light Bar, 24" wide, 45' of 50-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	$313.19
WLB36-25	Waterfall Light Bar, 36" wide, 25' of 75-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	$299.96
WLB36-45	Waterfall Light Bar, 36" wide, 45' of 75-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	$379.36
WLB48-25	Waterfall Light Bar, 48" wide, 25' of 100-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	$430.09
WLB48-45	Waterfall Light Bar, 48" wide, 45' of 100-strand fiber-LIGHT BAR ONLY, Attaches to Rainfalls / Waterfalls	$573.45

NOTE: If using multiple units, it is very important that all fiber lengths are the same. Example: If you have 1 unit at 20' and another at 40', both should have 40' of fiber. This will balance the light output to both units. Do not remove excess fiber lengths.

INSTALLING THE WATERFALL LIGHT BAR*

NOTE: We strongly recommend using Rain Waterfalls when using a Fiberstars Water Light Bar (WLB). The lighting effect on Rain Waterfalls is much more dramatic than on sheer falls!

Ideal for radius rainfalls!

For all sizes of Fiberstars Waterfall Light Bars, install 3/4" PVC conduit from the left side of the fall (see Fig. 1) to the illuminator location. The conduit should be placed so the top of the hole in the conduit is even with the bottom of the waterfall lip.

The Fiberstars Waterfall Light Bar can be installed before or after the fall is installed. **Note**: Installation of light bar on radius falls before the fall is installed is recommended. Make sure the bevel on the light bar track is angling away from the pool wall, toward the back of the water (see Fig. 2). Simply attach the light bar to the fall using clear PVC cement. Be careful not to obstruct the water flow with the light bar track or PVC cement. Pull fiber through the conduit at the waterfall back to the illuminator location.

IMPORTANT! On sheer falls there must be 1 1/8" between the finished tile and the front lip of the fall. On rain falls there must be 1 5/8" clearance for installation of light bar. **You must use a 6" extended lip!**

3/4" PVC Conduit

FIG. 1

Front lip of waterfall

Sheers **1 1/8"**
Rains **1 5/8"**

Finished tile surface

FIG. 2

TIPS FOR A MULTIPLE LIGHT BAR INSTALLATION

1. When installing multiple light bars, make all fiber runs the same length to insure uniformity of light using the longest run as the guide.

2. When using multiple light bars to light waterfalls longer than 48", install two 3/4" conduits, one on each end of two waterfalls (see Fig. 3). You will use one standard Lightbar and one Reversed Lightbar.
Example: WLB48-25 (fiber tail exits on the left side) and WLB48-25**R** (fiber tail exits on the right side)

3/4" conduit

3/4" conduit   **6'**

36"

36"

FIG. 3

NOTE: If using multiple units, it is very important that all fiber lengths are the same. Example: If you have 1 unit at 20' and another at 40', both should have 40' of fiber. This will balance the light output to both units. Do not remove excess fiber lengths.

LARGE LAMINAR FLOW FOUNTAINS -

These beautiful Laminars are perfect for night time viewing either individually or in multiple arrangements.

Fiberstars Large Laminar Flow Fountain comes with 20' or 40' of fiber pre-attached. It includes a Light Enhancement Device (built in), which is a fully adjustable device for increasing the light output in the water flow. The fiber and laminar are produced together for an optimum light output. For best lighting results, keep the water throw to 6' up and 6' out.

DIMENSIONS OF DECK BOX: 15 1/4" H x 13 1/2" W
The deck box lids can be painted to your desired color. Use paint that is suitable for use on ABS materials.

Also available in complete kits (see below) which include:
2 laminar fountains each with 20' or 40' of 150 strand fiber pre-attached
2 Deck Boxes
2 Light Enhancement Devices
1 Fiberstars 2004-AS or 6004-AS Illuminator

*For an installation manual, visit our website at www.fiberstars.com or see page 45 for general specifications.

Large Laminar Flow Fountain

Deck Box

Part #	Description	List $
LLF20-DB	Large Laminar Flow Fountain with 20' of 150 Strand Fiber - Includes Deck Box	$754.30
LLF40-DB	Large Laminar Flow Fountain with 40' of 150 Strand Fiber - Includes Deck Box	$932.96
LLF-NF	Large Laminar Flow Fountain with Deck Box (21"H x 12"W) - **Unlit, NO Fiber**	$458.76
CLS-LL-RPL	Color Light Streams Large Laminar fountain **Fiber-to-LED conversion kit - COLOR**	$529.34

LARGE LAMINAR FLOW FOUNTAINS - Complete Kits!
Includes Auto-Sync Illuminators!

Part #	Description	List $
COMPLETE KITS - Everything you need in one box! Illuminators are Auto Synch (AS).		
2LLF2-DBKITAS	2 Laminar Flow Fountains with 20' of Fiber ea. Includes 2 Deck Boxes and a **2004-AS Illuminator** (For use in synching with each other.)	$2,029.12
2LLF4-DBKITAS	2 Laminar Flow Fountains with 40' of Fiber ea. Includes 2 Deck Boxes and a **2004-AS Illuminator** (For use in synching with each other.)	$2,348.93
2LLF2-DBKIT-6AS	2 Laminar Flow Fountains with 20' of Fiber ea. Includes 2 Deck Boxes and a **6004-AS Illuminator** (For use in synching with each other.)	$2,205.57
2LLF4-DBKIT-6AS	2 Laminar Flow Fountains with 40' of Fiber ea. Includes 2 Deck Boxes and a **6004-AS Illuminator** (For use in synching with each other.)	$2,635.65

NOTE: If using multiple units, it is very important that all fiber lengths are the same. Example: If you have 1 unit at 20' and another at 40', both should have 40' of fiber. This will balance the light output to both units. Do not remove excess fiber lengths.

*See Color Light Streams™ Large Laminar Flow Fountains on page 12 for the LED version.

Mini Lighted Fountain

**Mini Deck Box
vs.
Large Deck Box**

MINI LIGHTED FOUNTAINS -

The only Mini Lighted Fountain with pre-attached fiber!

Fiberstars' new MINI Lighted Fountains are unique and small, measuring 13"H x 10"W. These small lighted fountains are perfect for those applications where bundled water features are desired. They are designed for water flows of 3' in height and 3' in distance. They come with 20' or 40' of **75 strand fiber** pre-attached and include a deck box.

Also available in complete kits (see below) which include:
3 Mini Lighted Fountains, each with 20' or 40' of **75 strand fiber**
   pre-attached
3 Deck Boxes
1 Fiberstars 2004-AS Illuminator

DIMENSIONS OF DECK BOX: 13" H x 9" W
The deck box lids can be painted to your desired color. Use paint that is suitable for use on ABS materials.

The minimum flow rate is 5GPM per Mini Fountain.

*For an installation manual, visit our website at www.fiberstars.com or see page 45 for general specifications.

Part #	Description	List $
ML20-DB	Mini Lighted Fountain with 20' of 75 strand Fiber, pre-attached - Includes Deck Box	$458.76
ML40-DB	Mini Lighted Fountain with 40' of 75 strand Fiber, pre-attached - Includes Deck Box	$538.16
MLDBNF	Mini Lighted Fountain with Small Deck Box - **Unlit, NO Fiber**	$390.39
CLS-ML-RPL	Color Light Streams Mini Lighted fountain **Fiber-to-LED conversion kit - COLOR**	$529.34

MINI LIGHTED FOUNTAINS - Complete Kits!
Includes Auto-Sync Iluminators!

Part #	Description	List $
COMPLETE KITS - Everything you need in one box! Illuminators are Auto Synch (AS).		
3ML2-DBKITAS	3 Mini Lighted Fountains with 20' of 75 strand fiber ea., pre-attached	$2,029.12
	Includes 3 Deck Boxes & a **2004-AS Illuminator**, for use in synching with each other.	
3ML4-DBKITAS	3 Mini Lighted Fountains with 40' of 75 strand fiber ea., pre-attached	$2,260.71
	Includes 3 Deck Boxes & a **2004-AS Illuminator**, for use in synching with each other.	

NOTE: If using multiple units, it is very important that all fiber lengths are the same. Example: If you have 1 unit at 20' and another at 40', both should have 40' of fiber. This will balance the light output to both units. Do not remove excess fiber lengths.

*See Color Light Streams™ Mini Lighted Fountain on page 11 for the LED version.
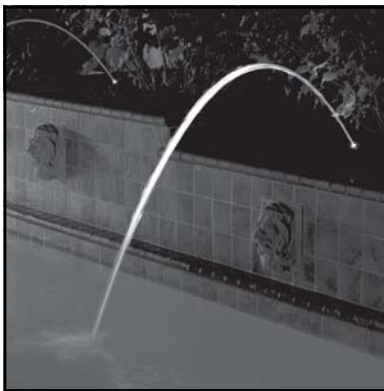
COLOR LIGHT STREAMS™ and FIBER OPTIC

INSTALLING THE LARGE LAMINAR AND MINI FOUNTAIN

**Large Laminar
Flow Fountain**

Mini Fountain

**Mini Deck Box
vs.
Large Deck Box**

**<u>IMPORTANT GENERAL SPECIFICATIONS FOR LARGE
LAMINARS AND MINI FOUNTAINS INSTALLATION:</u>**

1. The water supply to the laminar flow fountain should be filtered with a cartridge filter. Sand filter and DE filters will likely produce small particles of debris that will clog the internal filter screens of the laminar flow fountains.

2. Water supply is dependant upon 3 important factors:
      A. Pump Size: If a dedicated pump is used it must be a minimum of 1/2 hp and a supply flow rate at 16 ft. of head.
      B. Plumbing pipe size
      C. Number of laminar flow fountains on system

3. A plumbing loop must be utilized.

4. Each plumbing loop should have a gate valve installed for flow adjustment. All gate valves should be located as close as possible to the equipment pad area to reduce water turbulence from entering the laminar fountain.

5. Maximum fiber optic distance is 5 feet off of the fiber distance. This is caused by plumbing fitting, etc..
    20 feet = 15 feet maximum distance
    40 feet = 35 feet maximum distance

6. The Large Laminars are designed for total water throws of 12' or less.
Examples: 6' up, 6' out
                5' up, 7' out
                4' up, 8' out

7. The Mini lighted fountains are designed for total water throws of 6' or less.
Examples: 3' up, 3' out
                2' up, 4' out

8. Large Laminars and Mini Fountains are more dramatic when the laminars are placed with the water flow aimed towards the main viewing area.
A separate cartridge filter is required for installation

*For the complete installation manual, please visit our website at www.fiberstars.com.

LIGHTED BUBBLER DELUXE - 75 Strands of Fiber

Perfect for sun shelves, swim outs, beach entry areas, or small fountain areas. Provide that splash of color in a flume of water approximately 4" - 6" above the water surface.

Fiberstars Bubbler Deluxe mounts flush on sun shelves, swim outs, etc. You can locate the bubbler just under or out of the water on fountains for two completely different effects. Each bubbler is preassembled for easy connection to a water supply line and a conduit connection for the fiber. The bubbler comes with 45' of 75 strand fiber pre-attached and uses Fiberstars' sealed lens assembly. It has simple water flow requirements and needs 1-1/2" plumbing for water and 3/4" conduit for fiber.

Bubblers

Part #	Description	List $
BLK-DL-45	Lighted Bubbler Deluxe with 45' of 75 Strand fiber pre-attached	$339.66
	-Includes tee for water & fiber connections	
BLK-DL-45F	Lighted Bubbler Deluxe with 45' of 75 Strand fiber pre-attached	$390.39
	-Includes tee for water & fiber connections - For FIBERGLASS pools	

USING THE LIGHTED BUBBLER DELUXE

The Lighted Bubbler Deluxe may be installed in many different methods and applications, such as: Flush with interior surface (described below), raised off the surface area but with the tip under the water surface (typically fountains), or raised above the water surface (typically fountains). The minimum flow rate is 8-10 GPM.

INSTALLATION FOR GUNITE POOLS (BLK-DL-45)
The Lighted Bubbler Deluxe is designed to be installed during the gunite phase of pool building. Two conduits should be run to the bubbler: 1-1/2" PVC pipe for water supply and 3/4" conduit for fiber. The pipe supplying the water to the bubbler should have a gate valve or ball valve installed to adjust the water supply flow. The conduit for the fiber optic cable should be run to the Fiberstars illuminator position and installed per directions included with the illuminator.

FOR FLUSH SUN SHELF / SWIMOUT INSTALLATIONS
IMPORTANT NOTICE - DO NOT INSTALL THE BUBBLER TIP MORE THAN 4" ABOVE THE GUNITE SURFACE AREA! THE INTERIOR OPTIC ROD IS 4¾" DOWN FROM THE TIP'S TOP AND WILL BE DAMAGED IF TRIMMED FOR FLUSH INSTALLATIONS BELOW THIS LEVEL!

The Lighted Bubbler Deluxe is designed so that the tip of the bubbler is approximately **4 to 8 inches underwater**. Keep in mind that the deeper the tip is underwater the less the lighting effect will be above the water. Fiberstars recommends that during installation the Lighted Bubbler Deluxe tip is capped off with tape, etc. so that no debris gets into the internal area of the bubbler. After connecting the fiber to the illuminator and the completion of all steps indicated above, turn on the water supply. Adjust the water volume to achieve the desired water flume/lighting effect.

ALSO AVAILABLE FOR FIBERGLASS POOLS (BLK-DL-45F). For an installation manual see www.fiberstars.com
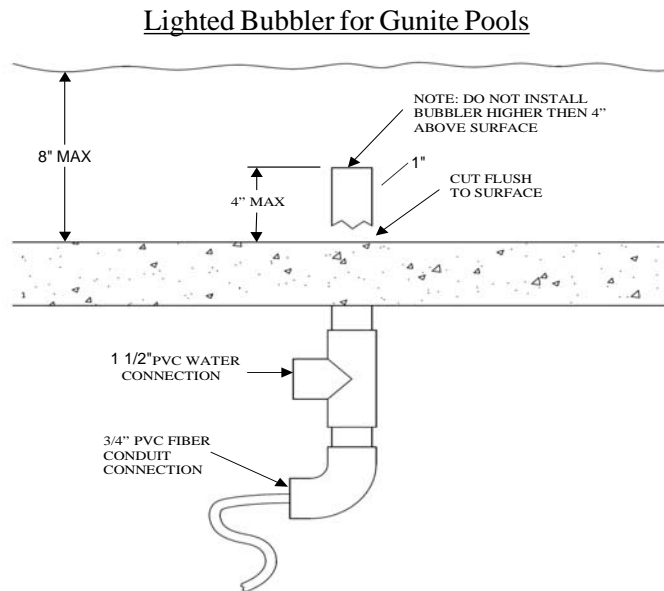
NOTE: If using multiple units, it is very important that all fiber lengths are the same. Example: If you have 1 unit at 20' and another at 40', both should have 40' of fiber. This will balance the light output to both units. Do not remove excess fiber lengths.

*See Color Light Streams™ Lighted Bubbler on page 16 for the LED version.
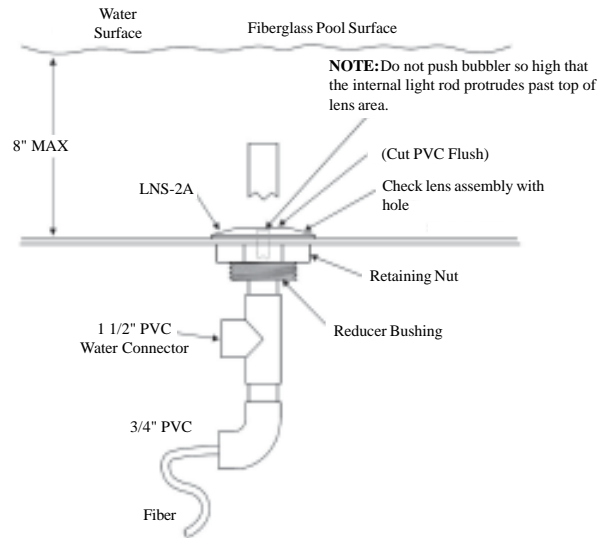
## USING THE LIGHTED BUBBLER DELUXE* (CONT'D)

Lighted Bubbler for Gunite Pools

8" MAX

NOTE: DO NOT INSTALL BUBBLER HIGHER THEN 4" ABOVE SURFACE

4" MAX

1"

CUT FLUSH TO SURFACE

1 1/2"PVC WATER CONNECTION

3/4" PVC FIBER CONDUIT CONNECTION

Lighted Bubbler for Fiberglass pools

Water Surface

Fiberglass Pool Surface

NOTE: Do not push bubbler so high that the internal light rod protrudes past top of lens area.

8" MAX

LNS-2A

(Cut PVC Flush)

Check lens assembly with hole

Retaining Nut

1 1/2" PVC Water Connector

Reducer Bushing

3/4" PVC

Fiber

*See Color Light Stream™ Lighted Bubbler on page 16 for the LED version.

Star Floor Kits

STAR FLOOR KITS

An easy way of creating fiber optic points of light in floors, swim outs and steps for the gunite pool builder.

Fiberstars has taken the custom job and created two unique and easily installed kits for the gunite pool. Star Floor Kits work with any interior surface materials. They come with 60' of fiber pre-attached and are available in 2 kits: 10 or 25 points of light. Each fixture has 2 strands of fiber. Now it is easy to add the twinkle in any gunite pool.
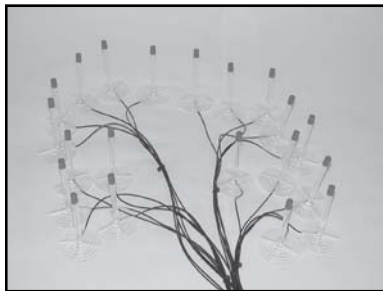
Part #	Description	List $
SFK10-60	10 Floor Fixtures (2 strands of fiber each) for installation in gunite pools - Includes 60' of fiber pre-attached	$271.28
SFK25-60	25 Floor Fixtures (2 strands of fiber each) for installation in gunite pools - Includes 60' of fiber pre-attached	$685.93

NOTE: If using multiple units, it is very important that all fiber lengths are the same. Example: If you have 1 unit at 20' and another at 40', both should have 40' of fiber. This will balance the light output to both units. Do not remove excess fiber lengths.

*See Color Light Streams™ Star Floor Kit on page 15 for the LED version.

INSTALLING THE STAR FLOOR KIT
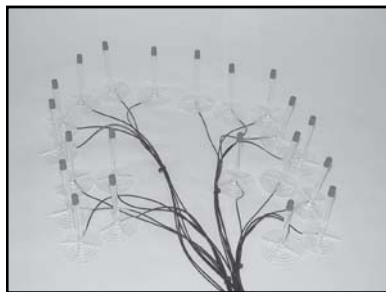
Star Floor Kits

These unique fixtures and fiber optic cable kits will allow for the installation of fiber optic lights into the interior of a gunite pool. These kits are NOT designed for use in fiberglass or vinyl pool applications.

**NOTE:
SFK10-60   **This kit includes 10 fixtures. 2 strands each. 2 fixtures at 56', 57', 58', 59', 60'.**
SFK25-60   **This kit includes 25 fixtures. 2 strands each. 5 fixtures at 52', 54', 56', 58', 60'.**

INSTALLATION:

1. 1-1/2" conduit should be run from the illuminator location to the general location within the pool where the Star Floor fixtures are going to be located.
2. After gunite, the 1-1/2" conduits should be cut down so that it is below the interior surface area.
3. Take the Star Floor Kit assembly and layout the fiber so that the fiber can be pulled back through the conduit. It also helps the fiber get warm, so that it is easier to place the fixtures down on the pool surface.
4. Mark on the pool's interior surface a location for each Star Floor fixture.
   NOTE: It is recommended that after this point in the installation you go to a location where you can view the overall design of the star Floor fixtures before proceeding further.
5. At this time, pull the fiber through the conduit and remove any slack from the pool's interior.
6. Use a small amount of caulking on the base of each Star Floor fixture to hold it in place on the gunite surface.
   NOTE: You may also elect to form a small pocket in the gunite in which the Star Floor fixture can be caulked to. This helps reduce the amount of plaster, etc. that will be required to cover the fixture.
7. Make sure all the fiber running from each Star Floor fixture is laying flat. You may want to use a small amount of caulk on any strands that are trying to rise up off the floor.
8. **IMPORTANT STEP: Make sure all the Star Floor fixtures are secured in place. Use a Portland cement mixture to plaster over all the Star Floor fixtures, fiber, and conduit entry point(s). It is very important to ensure that there is no leakage at the conduit entry point(s). This method of going over the fiber strands and the Star Floor fixtures also helps protect the fiber / fixtures during the plastering process.**
9. Once the interior surface has dried, trim each Star Floor fixture flush.
10. To change the light effect out of each fixture you may do the following to the remaining tip that is flush with the interior surface:
    A. Polish the tip with med. grit/ dry sand paper. This will give you the least amount of light from the tip.
    B. Use a medium grade sand paper and sand the tip end. This will achieve a higher amount of light output than item A.
    C. Use a very heavy grade of sand paper and make the tip end extremely rough. The rougher the tip end is made, the more light you will see.
11. The final step is to terminate the fiber according to directions in the illuminator.

This product requires no maintenance. Over time, as the Star Floor fixture tips become rougher, the tips will glow even brighter.

Multiple kits can be used to create more elaborate effects.

StarGlo

STAR GLO

StarGlo fixtures are flexible and are great for lighting up rock waterfalls and landscape features.
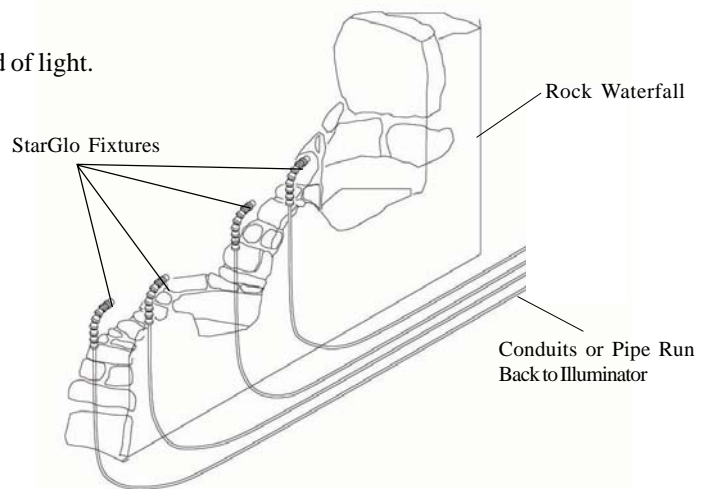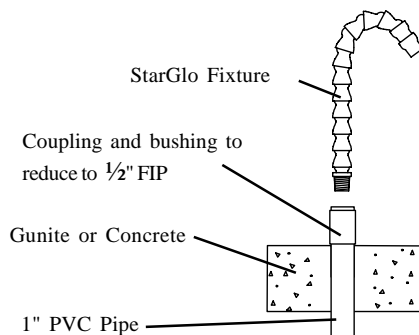
USING THE STAR GLO TO CREATE LIGHTED ROCK WATERFALLS

CASCADING WATER LIGHTING METHOD

HOW TO DO IT - This method should be done during the construction of the waterfall, but can be done afterwards by hiding the pipe or conduit with rocks and concrete. Using StarGlo fixtures (or kits) you can light areas of cascading water in the waterfall. The StarGlo fixtures should be placed above water level and pointed towards areas where the most water action will occur. This will typically be at the bottom of a waterfall with the StarGlo pointed back towards the cascading water. DO NOT place the StarGlo submerged under water! It is NOT a watertight fitting! Use 1" PVC pipe or conduit from the illuminator to each StarGlo location, then reduce to ½" FIP to allow the fixture to thread in. Always use sweep 90^0 fittings to allow the fiber to be installed easily. 25, 50, or 75 strands of fiber may be used.

WHAT IT DOES -
This method will light the splashing water with a small flood of light.

StarGlo Fixture

Coupling and bushing to reduce to ½" FIP

Gunite or Concrete

1" PVC Pipe

Rock Waterfall

StarGlo Fixtures

Conduits or Pipe Run Back to Illuminator

Part #	Description	List $
SG-100	Star Glo Landscape Fixture. No Fiber included	$46.32
SG-KIT-15	Star Glo Kit - Includes 1 SG-100 with 15' of 25 strand fiber	$116.90
SG-KIT-25	Star Glo Kit - Includes 1 SG-100 with 25' of 25 strand fiber	$172.03
SG-KIT-40	Star Glo Kit - Includes 1 SG-100 with 40' of 25 strand fiber	$258.05

*See Color Light Streams™ Rock Waterfall Kit on page 14 for the LED version.

FiberStix

FIBERSTIX®

Fiberstars Fiberstix are like wands of light that are great for illuminating walkways, paths and landscape features.

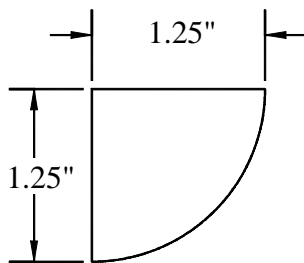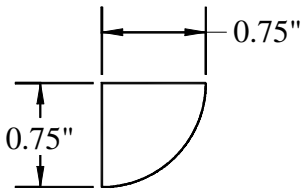| Part #	Description	List $
FiberStix		
FSTX-6	FiberStix Landscape Fixture, fiber not included	$39.70
FSTX-45	45' of 12 Strand Fiber with 1 Fiberstix fixture	$176.45
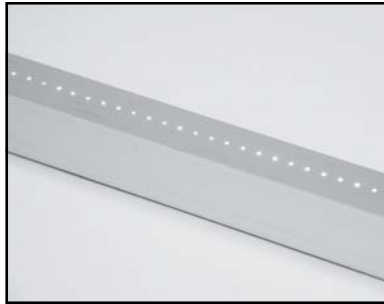
Light Beam (LB)

DESIGNER SERIES LIGHT BARS - Special Order Only! LIGHT BEAM BAR*

These Light Beam Bars are designed for STRAIGHT DROP falls or spillovers.

Light Beam by Fiberstars® makes it possible for you to illuminate along a linear path with the light aimed exactly where you want it and at exactly the right intensity. The light that is directed has no electrical hazard, no ultraviolet rays, and is virtually infra-red free.

Low profile, linear light fixture. Square shape available in standard and compact frames as well as low, medium, and high light intensities. Quality aluminum extrusion of rugged construction.

Compact Base Configuration:
(up to 168 fibers)

0.65"
0.65"
0.50"
0.65"

Standard Base Configuration:
(up to 480 fibers)

1.00"
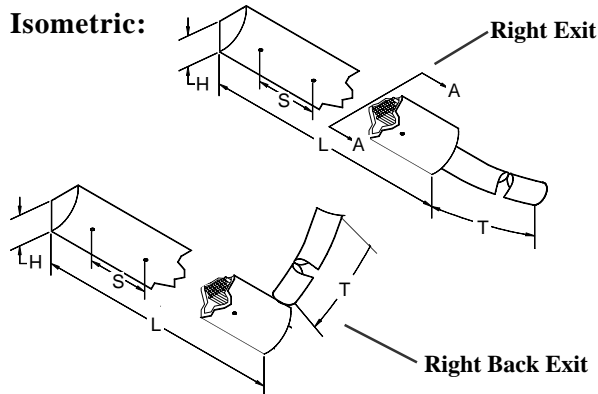1.01"
0.75"
1.03"

Specifications:

Beam Spread:	60 degrees
Max Lit Lengths:	Standard size: High intensity 108" (2776MM), Medium and Low intensity 120" (3084MM), Compact size: High intensity 36" (914MM), Medium intensity 84" (2134MM), Low intensity 120" (3084MM)
Base Size:	Standard size: 1" (25.4MM) square Compact size: 0.65" (16.5MM) square
Technical Remarks:	Emits a wash of light along an axis. Wash intensity increases when fiber spacing decreases.
Cable Diameters:	Standard size: 7/8" Max Compact size: 9/16" Max

*ORDERING GUIDE AND PRICING ON PAGE 52

Isometric Key:
- **H** Base Size
- **L** Length up to 120"
- **S** Fiber Spacing (0.25", 0.5", & 1")
- **T** Tail Length

Isometric:

Right Back Exit

Right Exit

Cross Section:

SECTION A-A

Light Beam Quarter Round (LBQR)

These Light Beam Bars are designed for ARCING falls or spillovers.

Light Beam Quarter Round by Fiberstars® makes it possible for you to illuminate along a linear path with the light aimed exactly where you want it and at exactly the right intensity. The light that is directed has no electrical hazard, no ultraviolet rays, and is virtually infra-red free.

Low profile, linear light fixture. Quarter round shape allows angular light distribution in a standard or compact frame. Available in low, medium, or high light intensities. Quality aluminum extrusion of rugged construction.

Compact Base Configuration: (up to 168 fibers)

0.75"
0.75"

Standard Base Configuration: (up to 480 fibers)

1.25"
1.25"

Specifications:

Beam Spread:	60 degrees
Max Lit Lengths:	Standard size: High intensity 108" (2776MM), Medium and Low intensity 120" (3084MM), Compact size: High intensity 36" (914MM), Medium intensity 84" (2134MM), Low intensity 120" (3084MM)
Base Size:	Standard size: 1 1/4" QR (31.75MM) Compact size: 3/4" QR (19.05MM)
Technical Remarks:	Light emits 45 degrees from right-angle side Other aims possible by special order.
Cable Diameters:	Standard size: 7/8" Max Compact size: 9/16" Max

Isometric Key:
H	Base Size
L	Length up to 120"
S	Fiber Spacing (0.25", 0.5", & 1")
T	Tail Length

Isometric:

Right Exit
H
S
A
L
A
T

Right Back Exit
H
S
L
T

Cross Section:

Section A-A

45°

ORDERING GUIDE FOR: Light Beam (LB) & Light Beam Quarter Round (LBQR)

Part #	Description
LB	**Light Beam**
LBQR	**Light Beam Quarter Round**
	Lit Length:
	() Specify Inches
	Tail Length:
	() Specify Feet
	Wash Intensity:
	M MEDIUM (.5" Spacing)
	H HIGH (0.25" Spacing)
	U ULTRA (0.125" Spacing)
	Base Size for:
LB	**S** Standard (1" sq)
	C Compact (.65" sq)
LBQR	**S** Standard (1.25" sq)
	C Compact (.75" sq)
	Finishes:
	S Standard Clear Anodized
	B Black Anodized
	Tail Exit:
	L Left End
	R Right End
	LB Left Back
	RB Right Back
	C Custom

	Lit Length	20 ft Tail List	30 ft Tail List	40 ft Tail List	50 ft Tail List
Medium Intensity 2 Fibers per Inch	up to 12"	$182.73	$208.84	$234.96	$261.05
	12"-24"	$339.39	$398.14	$456.87	$515.60
	25"-36"	$480.63	$561.28	$639.60	$717.92
	37"-48"	$587.40	$685.31	$783.20	$881.11
	49"-60"	$730.99	$848.47	$965.97	$1,083.45
	61"-72"	$894.18	$1,037.75	$1,181.32	$1,324.89
	73"-84"	$1,005.11	$1,161.75	$1,318.39	$1,475.03
	85"-96"	$1,138.93	$1,315.14	$1,491.37	$1,667.58
	97"-108"	$1,308.62	$1,523.98	$1,739.35	$1,954.72
	109"-120"	$1,507.67	$1,742.63	$1,977.58	$2,212.54
High Intensity 4 Fibers per Inch	up to 12"	$274.12	$326.35	$378.55	$430.76
	12"-24"	$509.08	$626.56	$744.06	$861.54
	25"-36"	$711.40	$868.06	$1,024.73	$1,181.39
	37"-48"	$913.75	$1,109.54	$1,305.34	$1,430.47
	49"-60"	$1,083.43	$1,318.41	$1,553.40	$1,788.38
	61"-72"	$1,380.39	$1,667.58	$1,954.77	$2,241.98
	73"-84"	$1,585.99	$1,899.29	$2,212.59	$2,525.89
	85"-96"	$1,853.61	$2,206.04	$2,558.48	$2,910.92
	97"-108"	$2,160.36	$2,590.96	$3,021.55	$3,452.17
Ultra Intensity 8 Fibers per Inch	up to 12"	$505.83	$603.74	$701.65	$799.54
	12"-24"	$832.18	$995.31	$1,158.48	$1,321.64
	25"-36"	$1,158.50	$1,419.57	$1,680.62	$1,941.67
	37"-48"	$1,419.57	$1,745.90	$2,072.25	$2,398.57
	49"-60"	$1,745.90	$2,137.52	$2,529.14	$2,920.74

Designer Series

* **All light bars are custom made.**
 After sign off on order form they are not subject to cancellation

SPECIAL NOTICE!

If you purchase Fiber kits, you need to purchase ONLY the Lens Housings (page 55). If you purchase Fiber in Bulk rolls or lengths, you need to purchase BOTH the Lens Housings and Sealed Lens Kits.

For instructions on how to install our Sealed Lens onto bulk fiber, please refer to Pg. 54

SEALED LENS KITS

FOR USE WITH BULK FIBER ROLLS ONLY.

KL2-SF KIT
(For 75 strands or less of fiber)
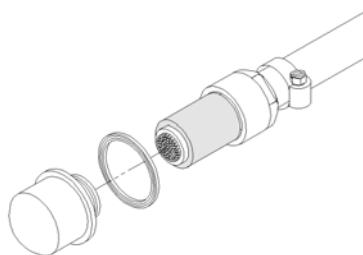
KL2-SF (For use with 75 strands or less of fiber)
These Sealed Lens Kits are used with fiber that is 75 strands or less. Each KL2 lens assembly can only be used with a single jacket. Kit includes: Silicone Bushing (25 Strand), Silicone Bushing (50 Strand), Silicone Bushing (75 Strand), Lens, Lens Gasket, Compression Nut, Retaining Ring, 7/32" - 5/8" Clamp, and a Tie Rap (for 25 Strand Only).

KL2-PF KIT
(For 100 strand fiber and over)

KL2-PF (For use with 100 strands of fiber and over)
These Sealed Lens Kits are used with fiber that is 100 strands or over. Each KL2 lens assembly can only be used with a single jacket. Kit includes: Silicone Bushi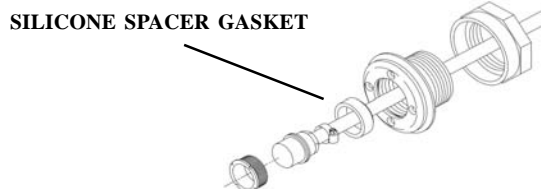ng (100 Strand), Silicone Bushing (150 Strand), Silicone Bushing (225/300 Strand), Lens, Lens Gasket, Compression Nut, Retaining Ring, 7/32" - 5/8" Clamp (Up to 150 Strand), and a 1/2" - 29/32" Clamp (225/300 Strand).

Part #	Description	List $
KL2-SF	Sealed Lens for 75 strands or less of fiber	$20.95
KL2-PF	Sealed Lens for 100 strands of fiber and over	$20.95

Sealed Lens Kits

ASSEMBLY INSTRUCTIONS: SEALED LENS KITS
KL2-SF, KL2-PF

SEALED LENS ASSEMBLY

NOTE: The KL2 lens assemblies can only be used with a single jacket. EXAMPLE: Correct assembly (1) 50 strand. Incorrect assembly (2) x 25 strand to total 50 strands.

1. Strip the fiber jacket back approximately 1-1/2". **FIG. 1**
NOTE:When cutting around the fiber jacket, take care not to nick the fiber.

2. Slide the clamp and compression nut over the fiber jacket. **FIG. 1**

3. **Choose the correct size bushing for the fiber count!** Slide the silicone bushing onto the fiber jacket until the jacket extends approximately 1/8" past the end of the bushing. Slide the compression nut up againt the silicone bushing. Slide the clamp up to within 1/4" of the compression nut and tighten. **FIG. 2**

4. Using a hot knife, cut the fiber as straight as possible using the fiber jacket as a guide. Do not saw or rock the knife blade back and forth. Hold steady pressure straight down on the fiber, tilting the blade of the hot knife at a slight angle, easing the pressure slightly while completing the cut. **FIG. 3**

CLAMP — COMPRESSION NUT — 1 1/2" — **FIG. 1**
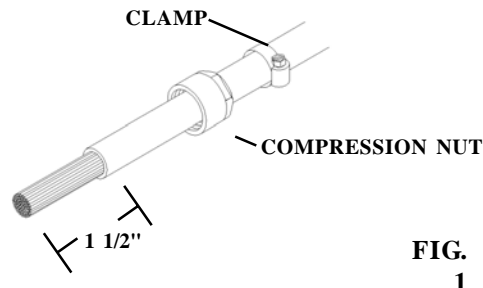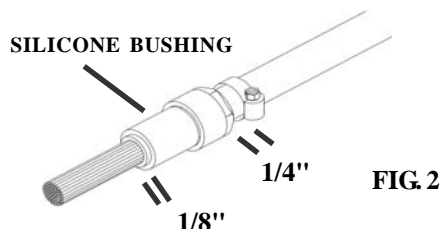
SILICONE BUSHING — 1/4" — 1/8" — **FIG. 2**
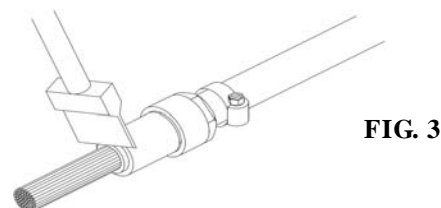
FIG. 3

GUNITE and ACRYLIC

1. Install the lens gasket on the lens. Slide the lens over the silicone bushing and screw the compression nut to the lens. Tighten the compression nut until it contacts the gasket. **DO NOT** over tighten and distort the gasket. **FIG. 4**

2. Install the fiber through the lens housing and tighten lens retaining ring. **FIG. 5**

FIG. 4

FIG. 5 — LENS RETAINER RING
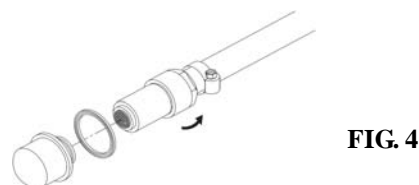
VINYL

For a vinyl installation, **DO NOT install the white lens gasket on the lens.** Use the silicone spacer gasket supplied with the vinyl lens housing.
Fiberstars part# LNS-2V. **FIG. 6**

SILICONE SPACER GASKET — **FIG. 6**

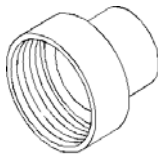6678 Owens Drive Suite 105 • Pleasanton, CA 94588 • 888.704.2276 • www.fiberstars.com

SPECIAL NOTICE!

If you purchase Fiber kits, you need to purchase ONLY the Lens Housings. If you purchase Fiber in Bulk rolls or lengths, you need to purchase BOTH the Lens Housings and Sealed Lens Kits (page 53).
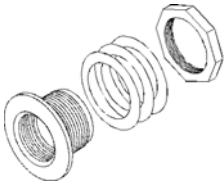
LENS HOUSINGS

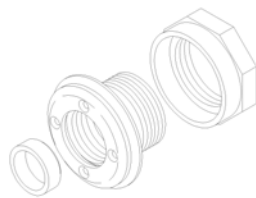### FOR USE WITH FIBER KITS AND BULK FIBER ROLLS.
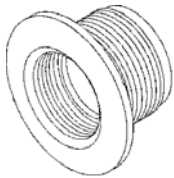
LNS-2G or LNS-2GB

LNS-2G (white, for gunite pools) OR
LNS-2GB (black, for gunite pools)
These lens housings glue onto 1-½" PVC pipe. Our Sealed Lens Kits (included on all fiber kits) seats in the housing. 1-½" slip connection.
Includes: Lens Housing only. NO LENS INCLUDED.

LNS-2GI

LNS-2GI (insider for gunite pools)
These lens housings glue inside 1-½" PVC SCH 40 pipe. Our Sealed Lens Kits (included on all fiber kits) seats in the housing. 1-½" SCH 40 inside connection.
Includes: Insider Lens Housing only. NO LENS INCLUDED.

LNS-2A or LNS-2AB

LNS-2A (white, for acrylic / fiberglass)
LNS-2AB (black, for acrylic / fiberglass)
These lens housings glue onto 1-½" PVC SCH 40 pipe. Includes nuts and gaskets for sealing on acrylic and fiberglass vessels. Our Sealed Lens Kits (included on all fiber kits) seats in the housing. 1-½" slip connection.
Includes: Lens Housing with nut only. NO LENS INCLUDED.

LNS-2V

LNS-2V (white, for vinyl liners)
These lens housings have 1-½" FIP threads. Includes nut, faceplate, and screws for sealing on the liner. Our Sealed Lens Kits (included on all fiber kits) seats in the housing and is completed by a silicone spacer, which takes the place of the old spacer and gasket. 1-½" FIP connection.
Includes: Lens Housing with nut, face plate and screws, and silicone spacer. NO LENS INCLUDED.

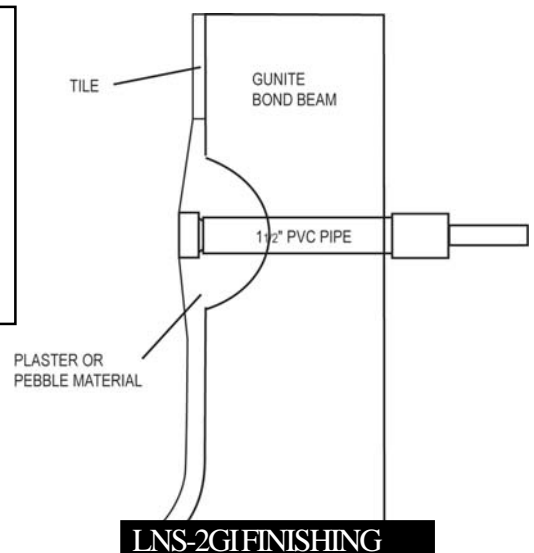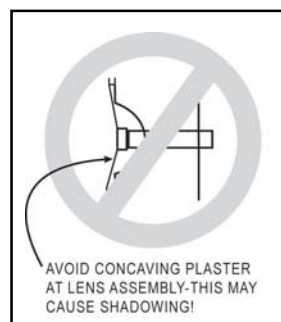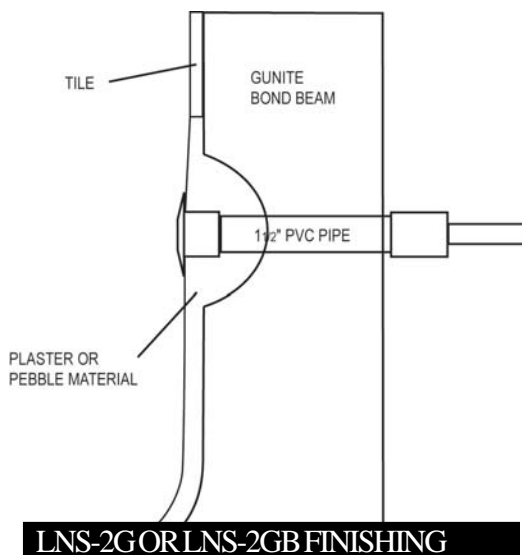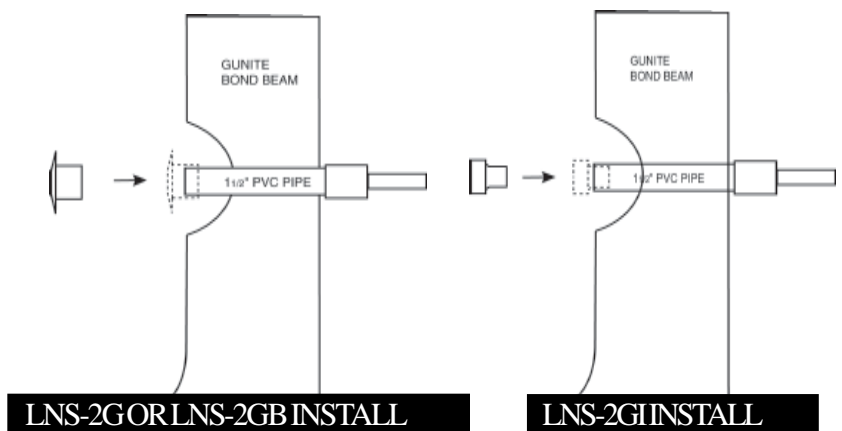| Part #	Description	List $
LNS-2G	Lens Housing (Wall Fitting) for Gunite - White	$12.13
LNS-2GB	Lens Housing (Wall Fitting) for Gunite - Black	$18.20
LNS-2GI	Lens Housing (Wall Fitting) for Gunite - Insider	$37.72
LNS-2V	Lens Housing (Wall Fitting) for Vinyl - White	$23.67
LNS-2A	Lens Housing (Wall Fitting) for Acrylic - White	$15.77
LNS-2AB	Lens Housing (Wall Fitting) for Acrylic - Black	$25.69

LENS HOUSING PREP - GUNITE POOLS

For: **LNS-2G (white)**
      LNS-2GB (black)
      LNS-2GI (insider)

1)   **BEFORE GUNITE:** Run PVC conduit from illuminator location to lens locations as demonstrated on page 32. Pool light conduits should enter the pool shell 12" to 14" below the top of the bond beam as shown at right. Shoot gunite and scoop out around the ends of the conduit.

2)   **AFTER GUNITE, BEFORE PLASTER:** Cut the conduit flush with the gunite wall as shown. Follow the instruction manual for the lens housing, and glue it on to the end of the conduit.

3)   Plaster or apply pebble surface, and trowel the material flush with the lens assembly as shown. It is acceptable if the plaster or pebble material rises slightly to meet the lens housing as shown. DO NOT CREATE A CONCAVE "BOWL", it will create a shadow on the bottom of the pool.
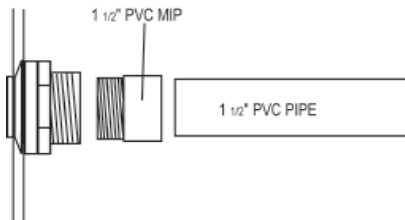
12" - 14" BELOW TOP OF BEAM
(8" - 10" BELOW WATER LEVEL)

GUNITE BOND BEAM

OK TO REDUCE TO 1" PVC OUTSIDE OF BOND BEAM
(EXCEPT 300 STRAND FIBER)

1½" PVC PIPE

CUT FLUSH WITH GUNITE

GUNITE POOL PREP

GUNITE BOND BEAM

1½" PVC PIPE

GUNITE BOND BEAM

1½" PVC PIPE

LNS-2G OR LNS-2GB INSTALL

LNS-2GI INSTALL

TILE

GUNITE BOND BEAM

1½" PVC PIPE

PLASTER OR PEBBLE MATERIAL

AVOID CONCAVING PLASTER AT LENS ASSEMBLY-THIS MAY CAUSE SHADOWING!

TILE

GUNITE BOND BEAM

1½" PVC PIPE

PLASTER OR PEBBLE MATERIAL

LNS-2G OR LNS-2GB FINISHING

LNS-2GI FINISHING

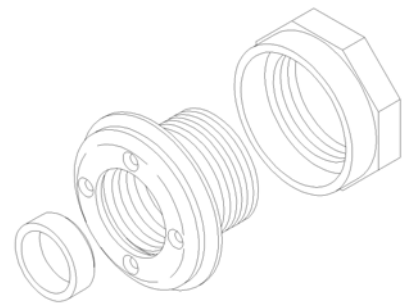## LENS HOUSING PREP - VINYL LINER POOLS

For: LNS-2V

1)   Following the placement guidelines on page 32, locate the wall panel where the lens assembly will be placed. Drill a 3" hole 12" to 14" down from the top of the wall.

2)   Install the lens housing as described in the LNS-2V instruction manual. Attach a 1-1/2" PVC Male adapter (MIP) to the lens housing. Run 1-1/2" PVC back to the illuminator location (you may reduce to 1" PVC for all fiber sizes except 300).

3)   To install lens and fiber **BEFORE LINER** installation: Feed the fiber kit through the lens housing and pipe as shown in the LNS-2V instruction manual. Proceed with the liner installation.

4)   To install lens and fiber **AFTER LINER** installation: Place the liner in the pool and begin filling. When the water is a few inches below the lens housing, attach the face plate with the screws. Cut out the liner in the center of the faceplate and run the fiber through. Proceed with filling the pool.

12" - 14" BELOW TOP OF WALL
(8" - 10" BELOW WATER LEVEL)

3" HOLE
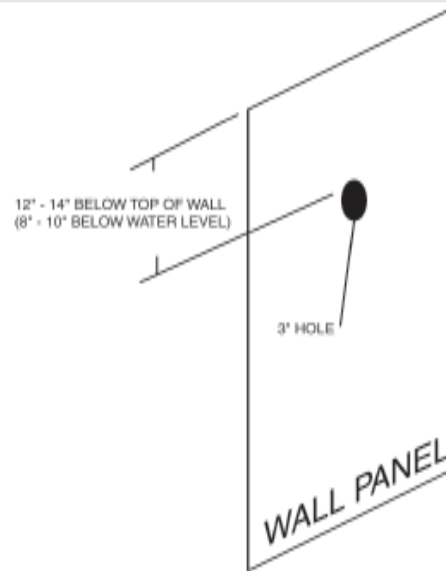
WALL PANEL

VINYL LINER WALL PREP

1 1/2" PVC MIP

1 1/2" PVC PIPE

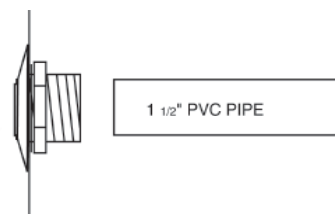**LNS-2V LENS ASSEMBLY**

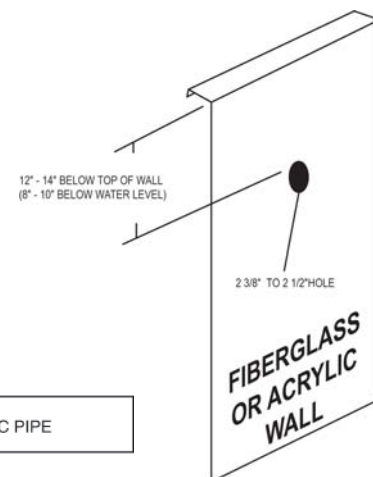## LENS HOUSING PREP - FIBERGLASS POOLS

For: LNS-2A

1)   Following the placement guidelines on page 31, locate the wall panel where the lens housing will be placed. Drill a 2-3/8" to 2-1/2" hole 12" to 14" down from the top of the wall.

2)   Install the lens housing as described in the LNS-2A instruction manual. Glue 1-1/2" PVC pipe into the back of the housing. Run the pipe back to the illuminator location. (You may reduce to 1" PVC for all fiber sizes except 300. Use at least 6" of pipe before reducing to 1").

12" - 14" BELOW TOP OF WALL
(8" - 10" BELOW WATER LEVEL)

2 3/8" TO 2 1/2"HOLE

FIBERGLASS OR ACRYLIC WALL

1 1/2" PVC PIPE

LNS-2A LENS HOUSING

FIBERGLASS/ACRYLIC WALL PREP

FLW Light Fixture (White)

FLG Light Fixture (Grey)

FLW-A Light Fixture (White)

FLW-V Light Fixture (White)

FEATURE LIGHT FIXTURES

Fiberstars' feature light fixtures are great for lighting up falls or features. Note: Maximum capacity for each fixture is 75 strands of fiber.

FLW (white, for gunite pools)
These feature lights glue inside 1" PVC pipe. Use with our standard spa/supplemental light kits in 25, 50, or 75 strand. Broadcast Lens™, centering device, and heyco fitting included.

FLG (grey, for gunite pools)
These feature lights glue inside 1" PVC pipe. Use with our standard spa/supplemental light kits in 25, 50, or 75 strand. Broadcast Lens™, centering device, and heyco fitting included.

FLW-A (white, for fiberglass pools)
These feature lights glue inside a bushing that threads into our LNS-2A (included). Use with our standard spa/supplemental light kits in 25, 50, or 75 strand. Broadcast Lens™, Lens O-ring, LNS-2A Lens Housing, centering device, and heyco fitting included.

FLW-V (white, for vinyl liner pools)
These feature lights glue inside a bushing that threads into our LNS-2V (included). Use with our standard spa/supplemental light kits in 25, 50, or 75 strand. Broadcast Lens™, Lens O-ring, and LNS-2V Lens Housing, centering device, and heyco fitting included.

Part #	Description	List $
FLW	Feature Light for Gunite, White	$68.37
FLG	Feature Light for Gunite, Grey	$68.37
FLW-A	Feature Light for Fiberglass, White	$79.40
FLW-V	Feature Light for Vinyl, White	$79.40

NOTE: If using multiple units, it is very important that all fiber lengths are the same. Example: If you have 1 unit at 20' and another at 40', both should have 40' of fiber. This will balance the light output to both units. Do not remove excess fiber lengths.
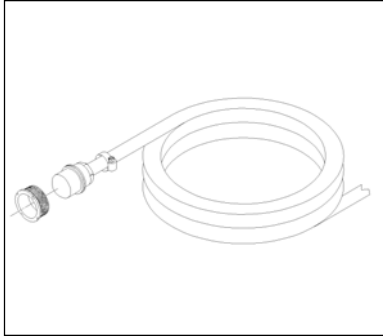
Pool/Spa Supplemental Light Kits

FIBER OPTIC KITS FOR UNDERWATER LIGHTING

SPECIAL NOTICE! All fiber kits include our Sealed Lens assemblies, which are the KL2-SF for kits with up to 75 strands OR the KL2-PF for 100 strands and up. You only have to purchase the Lens Housings to complete the installation if you are using a fiber kit. (Refer to Page 54 for Sealed Lens Assembly Instructions.)

Fiber Construction Type: High Quality LK Grade Fiber Optic Strands
Individual Fiber Thickness: .75mm
Outer Casing Material: PVC based polymer

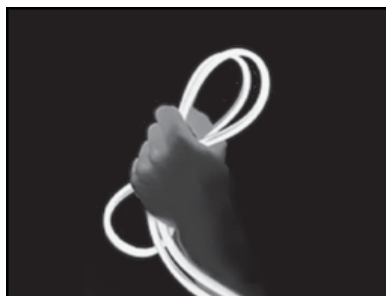| Part #	Description	List $
Pool Fiber Bulk Rolls		
B150	150 Strand Fiber, By The Foot - *	$15.59
B150 -50	150 Strand Fiber, 50' Roll	$778.65
B150-250	150 Strand Fiber, 250' Bulk Roll	$3,898.74
B225	225 Strand Fiber, By The Foot - *	$23.07
B225-50	225 Stra nd Fiber, 50' Roll	$1,153.07
B225-250	225 Strand Fiber, 250' Bulk Roll	$5,765.33
B300	300 Strand Fiber, By The Foot - *	$30.53
B300-50	300 Strand Fiber, 50' Roll	$1,526.14
B300-250	300 Strand Fiber, 250' Bulk Roll	$7,630.60
B375	375 Strand Fiber, By The Foot - *	$33.08

*SO - SPECIAL ORDER

Part #	Description	List $
Pool Fiber Kits (with Sealed Lens attached)		
B150KL2-15	150 Strand, 15' Pool Fiber Kit	$278.01
B150KL2-25	150 Strand, 25' Pool Fiber Kit	$440.50
B150KL2-40	150 Strand, 40' Pool Fiber Kit	$684.23
B225KL2-14	225 Strand, 14' Pool Fiber Kit	$383.88
B225KL2-18	225 Strand, 18' Pool Fiber Kit	$472.06
B300KL2-14	300 Strand, 14' Pool Fiber Kit	$495.15
B300KL2-18	300 Strand, 18' Pool Fiber Kit	$629.42

Part #	Description	List $
Supplemental Fiber Bulk Rolls		
B12	12 Strand Fiber, By The Foot - *	$2.71
B25	25 Strand Fiber, By The Foot - *	$5.45
B50	50 Strand Fiber, By The Foot - *	$6.77
B50-125	50 Strand Fiber, 125' Roll	$846.47
B50-250	50 Strand Fiber, 250' Buk Roll	$1,695.66
B50-500	50 Strand Fiber, 500' Bulk Roll	$3,391.39
B75	75 Strand Fiber, By The Foot - *	$8.12
B75-125	75 Strand Fiber, 125' Roll	$1,017.41
B75-250	75 Strand Fiber, 250' Bulk Roll	$2,034.83
B75-500	75 Strand Fiber, 500' Bulk Roll	$4,069.67
B100	100 Strand Fiber, By The Foot - *	$9.48
B100-125	100 Strand Fiber, 125' Roll	$1,185.60
B100-250	100 Strand Fiber, 250' Bulk Roll	$2,373.96
B100-500	100 Strand Fiber, 500' Bulk Roll	$4,747.90

* - SPECIAL ORDER

Part #	Description	List $
Supplemental Fiber Kits (with Sealed Lens attached)		
B50KL2-25	50 Strand, 25' Supplemental Fiber Kit	$174.99
B50KL2-50	50 Strand, 50' Supplemental Fiber Kit	$350.00
B75KL2-25	75 Strand, 25' Supplemental Fiber Kit	$210.26
B75KL2-50	75 Strand, 50' Supplemental Fiber Kit	$419.17
B100KL2-15	100 Strand, 15' Supplemental Fiber Kit	$146.52
B100KL2-25	100 Strand, 25' Supplemental Fiber Kit	$244.20
B100KL2-40	100 Strand, 40' Supplemental Fiber Kit	$392.02
B100KL2-50	100 Strand, 50' Supplemental Fiber Kit	$489.70

TRK-OVC50 C Track

TRK-OVW50 Track

TRK-VLW100 Track

FS-120 Fitting
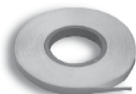
FS-130 Tape

FS-136 Silicone

PERIMETER FIBER TRACK & ACCESSORIES

TRK-OVC Track
Clear track for our flat-back perimeter fiber. Made of a PVC material for durability and boxed in 50 foot rolls. Fits all FSSB style fibers.

TRK-OVW Track
White track for our flat-back perimeter fiber. Made of a PVC material for durability and boxed in 50 foot rolls. Fits all FSSB style fibers.

TRK-VLW Track
Clear track for our flat-back perimeter fiber. Snaps into most vinyl-liner bead receivers. Made of a PVC material for durability and boxed in 4 foot sections, 100 feet to a box. Fits all FSSB style fibers.

TRK-BBW Track
White track for our flat-back perimeter fiber. For use on top of gunite bond beam. Made of a PVC material for durability and boxed in 50 foot rolls. Fits all FSSB style fibers.

FS-120 Fitting
Clear fitting to finish off the entrance/exit of perimeter fiber in the conduit. A nice touch to make your installation look professional. Fits inside 1" pipe and conduit. Use FS-136 silicone to seal.

FS-130 Tape
Clear, double-sided tape for temporarily holding flat-backed perimeter fiber to tile. Follow with FS-136 for a permanent installation.

FS-136 Silicone
Clear silicone adhesive for permanently attaching flat-backed perimeter fiber. Oxime-based adhesives are the only silicones tested and approved by Fiberstars. Also available in cases of 24 (Part # FS-138).

Part #	Description	List $
TRK-OVC50	50' Clear Track	$66.17
TRK-OVW50	50' White Track	$66.17
TRK-VLW100	100' Vinyl Liner Clear Track 4' sections	$173.64
TRK-BBW50	50' White Bond Beam Track	$89.55
FS-120	Clear finish fitting for perimeter	$12.22
FS-130	180' Roll clear double-sided tape	$46.12
FS-136	10.3 oz. tube of Oxime-cure silicone	$17.87

EASY-INSTALL TRACKS FOR PERIMETER FIBER

Supplier	Application	Part Number	Perimeter Fiber	Description
Fiberstars	Gunite, Tile	TRK-OVW	FSSB, FSSB-CBL42	White, flexible track
	Gunite, Tile	TRK-OVC	FSSB, FSSB-CBL42	Clear, flexible track
	Gunite, Tile w/ Brick, Stone or Coping	TRK-BBW	FSSB, FSSB-CBL42	White, flexible track for use on top of bond beam, brick or coping mud locks it in.
	Vinyl Liner	TRK-VLW	FSSB, FSSB-CBL42	White, flexible track that inserts into most vinyl liner bead receivers
	Vinyl Liner	PW-30	PW-30	Fiber casing has a tail that inserts into most vinyl liner bead receivers. (30 strand-cabled fiber incl.)
Stegmeier	Gunite, Cantilever Deck	7FS112	FSSB, FSSB-CBL42	Capstone profile deck form, pre-formed corners available
	Gunite, Cantilever Deck	77SV112	ELD	Capstone profile deck form, pre-formed corners available
	Gunite, Cantilever Deck	17FS112	FSSB, FSSB-CBL42	Regular profile deck form, pre-formed corners available
	Gunite, Cantilever Deck	17SV112	ELD	Regular profile deck form, pre-formed corners available
	Vinyl Liner, Cantilever Deck	8CF112	FSSB, FSSB-CBL42	Capstone profile deck form, pre-formed corners available
	Vinyl Liner, Cantilever Deck	8CF152	ELD	Capstone profile deck form, pre-formed corners available
	Vinyl Liner, Cantilever Deck	18CF112	FSSB, FSSB-CBL42	Regular profile deck form, pre-formed corners available
	Vinyl Liner, Cantilever Deck	18CF152	ELD	Regular profile deck form, pre-formed corners available
	Gunite, Coping and Tile	3FOR2	FSSB, FSSB-CBL42	Attaches to top of tile with supplied adhesive, brick or coping mud locks it in.
	Gunite, Coping and Tile	3FOR6	ELD	Attaches to top of tile with supplied adhesive, brick or coping mud locks it in.
	Gunite Renovation	7REN4F	FSSB, FSSB-CBL42	Requires a 1/8" wide x 5/8" deep saw cut.
	Gunite Renovation	7REN6S	ELD	Requires a 1/8" wide x 5/8" deep saw cut.
Mortex	Gunite, New or Renovation	TAC-IT	FSSB, FSSB-CBL42	Unique clip system that attaches to cove strip
	Vinyl Liner Top Mount	Flat	FSSB, FSSB-CBL42	Liner track with integral perimeter track
	Vinyl Liner Top Mount	Round	ELD	Liner track with integral perimeter track
Ft. Wayne	Vinyl Liner	EdgeLite	EL	Proprietary coping and fiber system
	Vinyl Liner	EdgeLite Deluxe	ELD	Proprietary coping and fiber system
Cinderella	Vinyl Liner	CP-7	FSSB, FSSB-CBL42	Vinyl liner coping with integral track
	Vinyl Liner	HM-7	FSSB, FSSB-CBL42	Liner track with integral perimeter track
	Vinyl Liner	VM-7	FSSB, FSSB-CBL42	Extrusion mounts on any vertical surface
Cardinal Systems	Vinyl Liner	Coping	FSCA	Vinyl liner coping with integral track
Arbor Aluminum	Vinyl Liner	Coping	FSCA	Vinyl liner coping with integral track
Pacific Pools	Vinyl Liner	Coping	FSCA	Vinyl liner coping with integral track
Modern Pool Systems	Vinyl Liner	FORTLT-8	ELD	Vinyl liner tracks with integral track - round fiber
	Vinyl Liner	FWTLT-8	FSCA	Vinyl liner tracks with integral track - flat back fiber
	Vinyl Liner	FOFTLT-8	FSSB, FSSB-CBL42	Vinyl liner tracks with integral track - flat back fiber
Esther Williams	Vinyl Liner	Coping	FSSB, FSSB-CBL42	Vinyl liner coping with integral track
Fox	Vinyl Liner	Coping	FSSB, FSSB-CBL42	Vinyl liner coping with integral track
Kafko	Vinyl Liner	Coping	FSSB, FSSB-CBL42	Vinyl liner coping with integral track
Pleasure Way	Vinyl Liner	Coping	FSSB, FSSB-CBL42	Vinyl liner coping with integral track
Technican-Pacific	Vinyl Liner	Coping	FSSB, FSSB-CBL42	Vinyl liner coping with integral track
Imperial Pools	Vinyl Liner	Coping	FSSB, FSSB-CBL42	Vinyl liner coping with integral track
Sentry Pools	Vinyl Liner	Coping	FSSB, FSSB-CBL42	Vinyl liner coping with integral track
Quaker Plastics	Vinyl Liner	Coping	FSSB, FSSB-CBL42	Vinyl liner coping with integral track

INSTALLING PERIMETER FIBER

NOTE: Use only 1" PVC SCH40 Pipe. Use sweep elbows or heat-bend the pipe. Any sharp angles will prevent fiber optic cable from going through the pipe!

Perimeter Fiber In/Out

Top of Bond Beam

The basic concept behind perimeter lighting is to run the fiber from the illuminator around the pool, spa, or other application then back to the illuminator. This allows the fiber to be lit from both ends for maximum brightness. **Note: You may want to create an 8" loop on both ends of the fiber, prior to porting, when back at the Illuminator. This will allow you to "borrow" fiber in case you experience any shrinkage problems.**

1" PVC conduit should be run to the pool wall at the same level the fiber is to be located. The fiber can go to and from the illuminator in this same conduit.
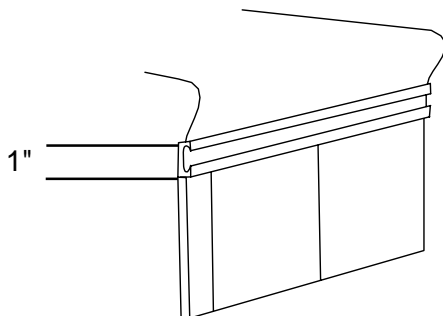

Fiberstars' FS-120 wall fitting slides into 1" PVC after the fiber is run through it, to give the entry point a finished look.

1" flexible PVC conduit may also be used to transition the fiber through elevation changes, as shown here for a raised bond beam...
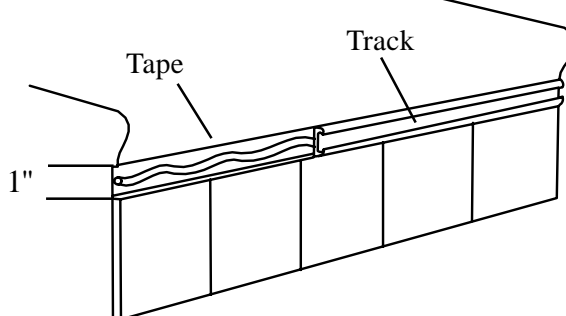

...or for step transitions...

...or for raised spas.

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INSTALLING PERIMETER FIBER

Preparation is the key to a successful Fiberstars perimeter lighting installation. This shows one method where the tile is installed 1" lower than normal, allowing for TRK-OVW (white) or TRK-OVC (clear) track to be flush with the tile. The fiber is then snapped into the track.

When installing TRK-OVW or TRK-OVC in a recess or when dropping the tile 1", use double sided tape and put the track in place. Finish the installation by running a bead of silicone on the top and bottom of the track.
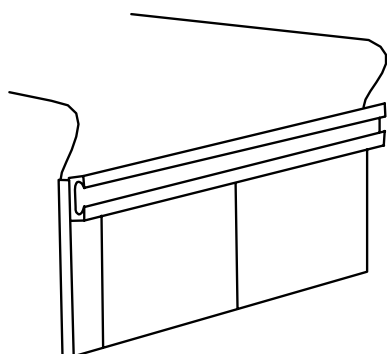
This is another method, using TRK-OVW or TRK-OVC directly on top of the tile. FS-130 double-sided tape is put on first temporarily, then the track is pressed in place. FS-136 silicone is then used on the top and bottom of the track to finish the installation. The fiber is then snapped in place.
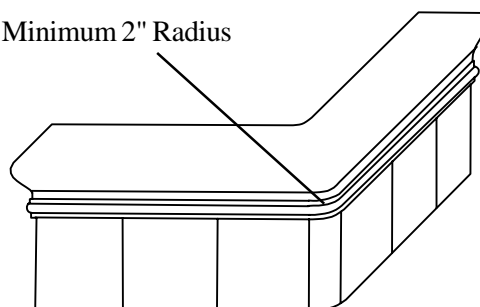
When preparing for perimeter lighting, a 2" radius should be maintained on all corners. This will allow the fiber to lay flat. If using track, stop the track 1" from the beginning of a corner to allow the fiber tubing to lay flat.
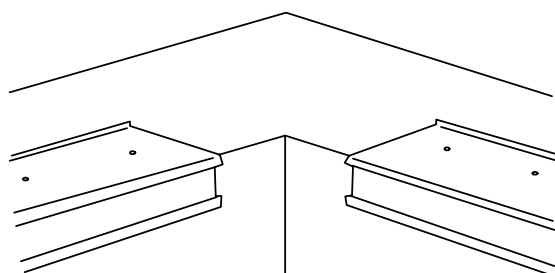
TRK-BBW is a track for use on top of the bond beam (after brown-out). The track is nailed directly to the bond beam, and brick or coping is installed on top. The fiber is then snapped into the track. Note that the track is stopped short of the corners to allow the fiber to make a radius and lay flat. Silicone should be used to hold the fiber in the corner.
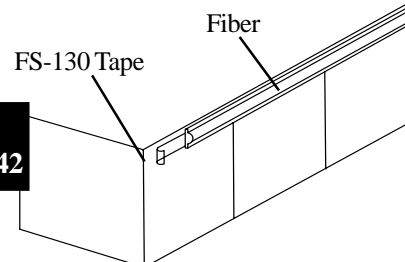
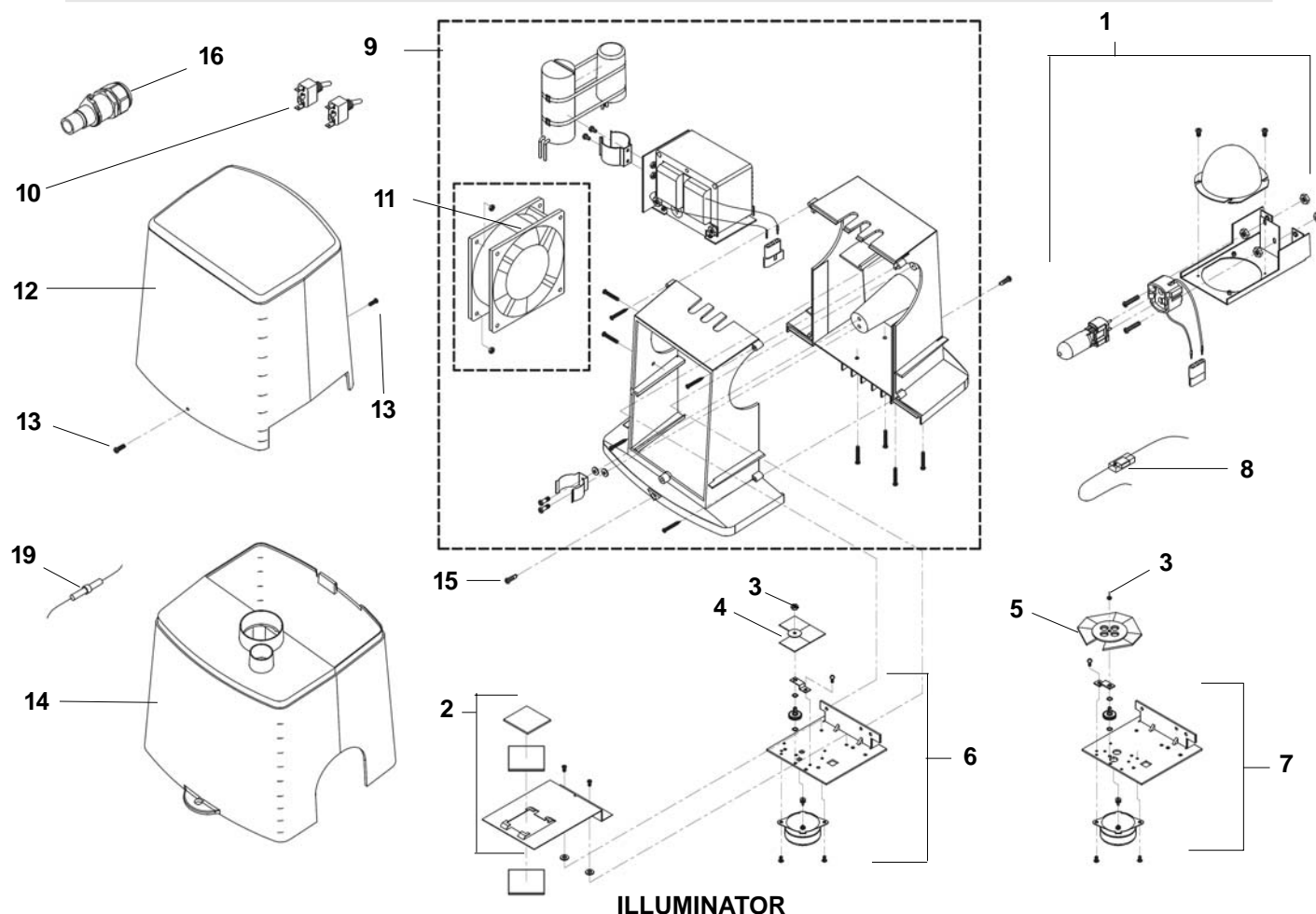Using FSSB fiber with no track is the simplest way to install perimeter fiber. FS-130 double-sided tape is applied to the top of the tile, then the fiber is pressed in place temporarily. Neutral-cure silicone is then used on the top and bottom of the fiber to hold it permanently. You should use about one tube for every 30 linear feet. Oxime-based, neutral-cure silicone is the only approved adhesive for Fiberstars fiber.
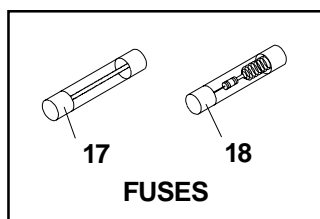
TOOLS/MISCELLANEOUS AND PARTS

Part #	Description	List $
22-15006-00	Lens Gasket - Large	$2.10
A10980	Port Assembly 1500 / 2000	$39.50
A11213	Color Wheel 2008 / 6008	$99.71
A11246	Screw Chassis to Base 2000 / 6000	$0.44
A11526	Toggle Switch 3 Position	$12.33
A11598	Fuse 1/10A Auto-Control 2000 / 6000	$3.09
A11603	Screw Cover 2000 / 6000	$0.44
A11604	Top Assembly 2000	$74.99
A12240	Port Assembly 6000	$39.50
A12269	Fuse 7A Main Power 6000	$3.02
A7002	Fan (FS250 / 2000 / 6000 Series)	$35.58
A7003	Fan Cord	$8.14
A7012	Fuse Holder	$7.17
A8092	Color Wheel Nut (All Models)	$0.44
A8630	Color Wheel Motor 3.6 RPM 19.7V	$275.41
A8633	Color Wheel Motor Flange	$1.43
A8935	Color Wheel Motor, 1 RPM, 19.7V	$200.79
A9150	Screw Motor Flange	$0.44
A9163	Relay Color Wheel	$30.57
A9173	Toggle Switch 2 Position	$12.86
A9182	Fuse 2.5A Main Power	$3.02
A9792/A9903	Centering device / Heyco 100-strands & up	$13.59
A9787/A9904	Centering device / Heyco 75-strands & under	$13.59
A9811	Sensor Sync Units	$6.70
B10724	Fiber Glo lens only	$13.59
B11458	Broadcast lens only	$13.59
B9155	Lamp Socket	$6.44
B9937	EvenGlo Lens Only	$13.59
C12467	Circuit Board Master (Replaces C11227)	$231.63
C12468	Circuit Board Slave (Replaces C-9514)	$214.01
C9516	Transformer C/W Motor 6008 Synch Units	$85.75
D12028	Baffle 1500 / 2000	$4.74
D9144E	Transformer 125V	$147.99
E12312	Bottom Assembly 2000 / 6000	$98.79
FS-115	Disposable Epoxy Kit	$36.74
FS-117	Lens Tightening Tool	$13.37
FS-118	**Heavy Duty Hot Knife, 60 Watt with new style chisel blade**	**$178.87**
FS-118A	**Pkg. of 5 Rplcmnt Blades old style X-ACTO**	**$12.13**
FS-118A1	**New Style Replacement Blade for the new style FS-118 and FS-163 hot knifes**	**$90.32**
FS-120	Clear Finish Fitting for Perimeter	$12.22
FS-130	180' Roll Clear Double-Sided Tape	$46.12
FS-136	10.3 oz. Tube of Oxime-Cure Silicone	$17.87
FS-163	**Butane Hot Knife**	**$308.78**
FX-8000	FX120V & Jazz Non-Sync Color Wheel Motor Assy	$120.38
FX-L	12V Halogen Lamp Replacement Kit for FX Light	$111.56
HI-109	Lamp 150W 21V Halogen	$42.79
HI-111	Lamp 250W 24V Halogen	$49.80
HID-440	409 Series Replacement Lamp Ass.	$384.58
J20-2000	Replacement Kit, Lamp & Gasket Jazz 400 Pool	$205.34
J30-3000	Replacement Kit, Pilot Screw & Washer, Jazz Pool	$3.31
J30-4000	Replacement Kit, Top Cover (Face Ring, Stainless Steel), Jazz Pool	$55.65
J30-5000	Replacement Kit, Compression Clamp, Jazz Pool	$26.62
J30-6000	Replacement Kit, Lens, Jazz Pool	$37.43
JSP-1000	Replacement Kit, Color Wheel, Jazz Spa	$87.78
JSP-2000	12V, 35W Halogen Bulb, Jazz Spa	$66.94
JSP-3000	Replacement Kit, Pilot Screw & Washer, Jazz Spa	$2.29
JSP-4000	Replacement Kit, Top Cover (Face Ring, Stainless Steel), Jazz Spa	$31.27
JSP-5000	Replacement Kit, Compression Clamp, Jazz Spa	$28.78
JSP-6000	Replacement Kit, Lens, Jazz Spa	$38.24
JSP-7000	Replacement Kit, Gasket, Lens, Jazz Spa	$10.87
L20-2000	Lamp Replacement Kit, UI-2/3, Single / Dual Sided	$222.12
LLF-01	Large Laminar Lid	$70.86
LLF-02	Large Laminar Deck Ring	$35.42
LLF-03	Large Laminar Arms (Quantity 2)	$70.86
LLF-04	Large Laminar Can	$213.72
LLF-05	Large Laminar Jet only	$314.96
LLF-06	Large Laminar Knobs (Quantity 2)	$12.13
ML-01	Mini Fountain Lid	$56.68
ML-02	Mini Fountain Deck Ring	$27.00
ML-03	Mini Fountain Arms (Quantity 2)	$56.68
ML-04	Mini Fountain Can	$168.73
ML-05	Mini Fountain Jet only	$236.00
ML-06	Mini Fountain Knobs (Quantity 2)	$12.24
PT-03C	Color Wheel FS250	$71.73
PT-03D	Color Wheel 2004 / 6004	$56.18
PT-05D	Color Wheel Sync 6004-AS	$98.72
PT-05DR	Color Wheel Sync 2004-AS	$98.72
Y10-4005	Color Wheel Motor Assembly 1504 / 2004	$57.52
Y10-4010	Color Wheel Motor Assembly 6004	$57.59
Y10-8005	Color Wheel Motor Assembly 2008	$58.45
Y10-8010	Color Wheel Motor Assembly 6008	$58.45
Y10-8011	Color Wheel Mtr Assy 2008-M&S, 6008-M&S only	$58.45
Y10-8020	PC Board & Motor Assembly 2004-AS	$225.63
Y10-8030	Color Wheel Mtr Assy Sync-M(6000 V.3)(2000 V.2)	$403.62
Y10-8031	Color Wheel Mtr Assy Sync-S(6000 V.3)(2000 V.2)	$403.62
Y10-8040	Circuit Board With Sensor-M (6000 V.3) (2000 V.2)	$241.05
Y10-8041	Circuit Board With Sensor-S (6000 V.3) (2000 V.2)	$241.05
Y10-8050	PC Board & Motor Assembly 6004-AS	$225.63
Y10-8051	Hot Mirror, C/W, Motor, PC Board Assy 6004-AS	$466.74
Y20-2050	Lamp Bracket Assembly 2000	$50.18
Y20-6000	Lamp Assembly 6000	$151.39
Y20-6050	Hot Mirror Bracket Assembly 6000	$143.76
Y30-0020	Thermal Overlaod (All Models)	$13.26
Y30-6010	RM6000 Transmitter Replacement	$50.46
Y30-6015	RM-400 Transmitter Replacement	$75.19
Y30-6900	Fuse Holder (Inline) Universal	$20.29

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6004 SERIES ILLUMINATOR - PARTS EXPLODED (See Page 65 for prices)

ILLUMINATOR

FUSES

KEY	DESCRIPTION	PART#
1	LAMP ASSEMBLY	Y20-6000
2	HOT MIRROR BRACKET ASSEMBLY	Y20-6050
3	COLOR WHEEL NUT	A8092
4	COLOR WHEEL ONLY (6004)	PTO3D
5	COLOR WHEEL ONLY (6008)	A11213
6	COLOR WHEEL MOTOR ASSY. (6004)	Y10-4010
7	COLOR WHEEL MOTOR ASSY. (6008)	Y10-8010
8	THERMAL OVERLOAD ASSEMBLY, UNIVERSAL	Y30-0020
9	CHASSIS - NOT AVAILABLE	
10	TOGGLE SWITCH, 3-POSITION	A11526
11	FAN	A7002

KEY	DESCRIPTION	PART#
12	TOP COVER	A11604
13	TOP COVER SCREW (#8-32 X .5)	A11603
14	BASE	E12312
15	BASE TO CHASSIS SCREW (#8 X .5 SELF DRILLING)	A11246
16	FIBER PORT ASSY.	A12240
17	FUSE, MAIN POWER, 7 AMP	A12269
18	FUSE, COLOR WHEEL MOTOR, .1 AMP	A11598
19	FUSE HOLDER, UNIVERSAL (NO FUSE INCLUDED)	Y30-6900

6004-AS SERIES ILLUMINATOR - AUTO SYNCH- PARTS EXPLODED

ILLUMINATOR

FUSES
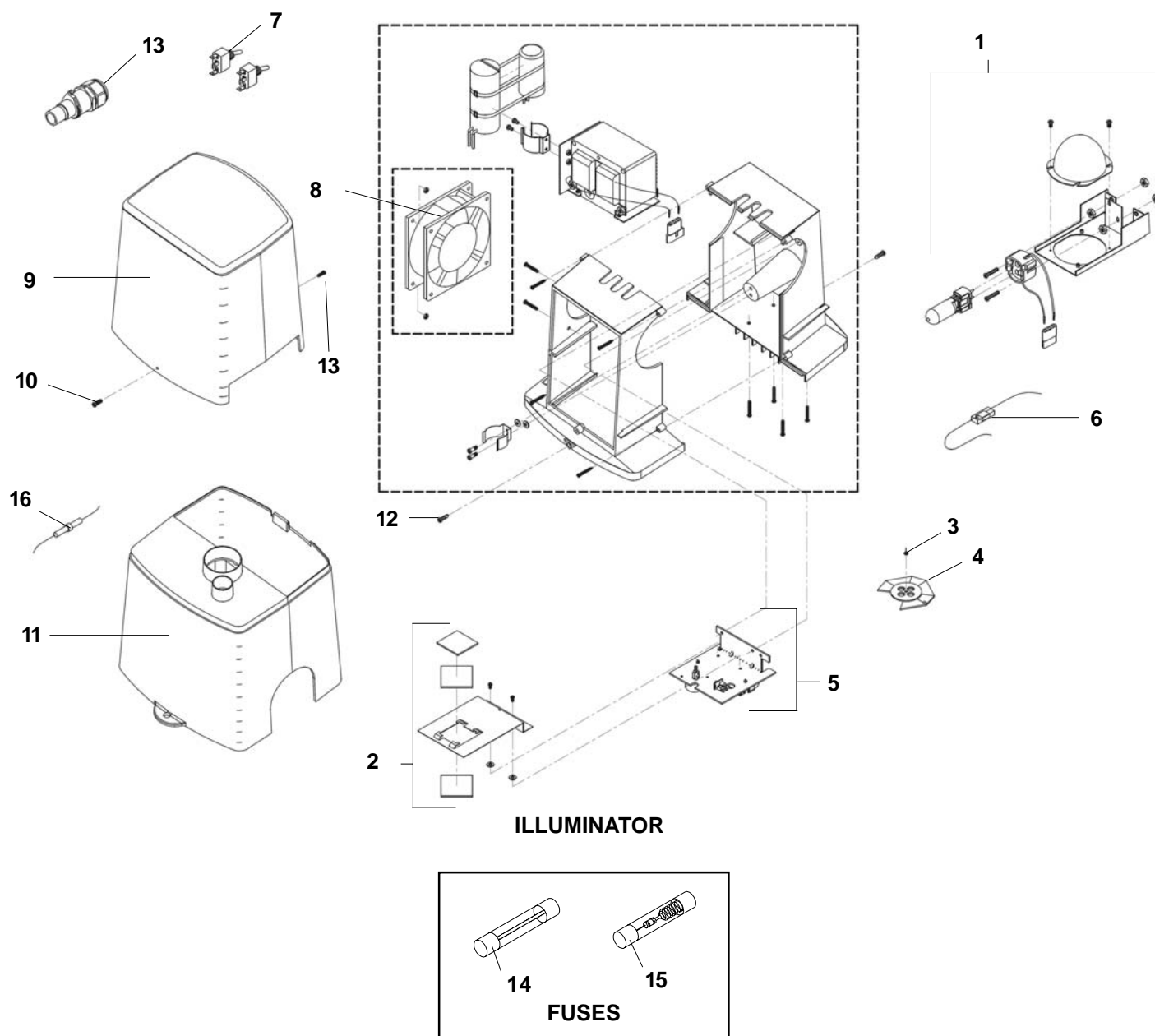
KEY	DESCRIPTION	PART#		KEY	DESCRIPTION	PART#
1	LAMP ASSEMBLY	Y20-6000		7	TOGGLE SWITCH, 3-POSITION	A11526
2	HOT MIRROR BRACKET ASSEMBLY	Y20-6050		8	FAN	A7002
3	COLOR WHEEL NUT	A8092		9	TOP COVER	A11604
4	COLOR WHEEL ONLY 6004-AS SYNC	PTO5D		10	TOP COVER SCREW (#8-32 X .5)	A11603
5	COLOR WHEEL MOTOR ASSY. AND	Y10-8050		11	BASE	E12312
	PC BOARD 6004-AS SYNC			12	BASE TO CHASSIS SCREW (#8 X .5 SELF DRILLING)	A11246
2&5	HOT MIRROR, MOTOR, COLOR WHEEL,	Y10-8051		13	FIBER PORT ASSY.	A12240
	AND PC BOARD ASSEMBLY 6004-AS SYNC			14	FUSE, MAIN POWER, 7 AMP	A12269
6	THERMAL OVERLOAD ASSEMBLY, UNIVERSAL	Y30-0020		15	FUSE, COLOR WHEEL MOTOR, .1 AMP	A11598
				16	FUSE HOLDER, UNIVERSAL (NO FUSE INCLUDED)	Y30-6900

2004 SERIES ILLUMINATOR - PARTS EXPLODED   (See Page 65 for prices)

ILLUMINATOR
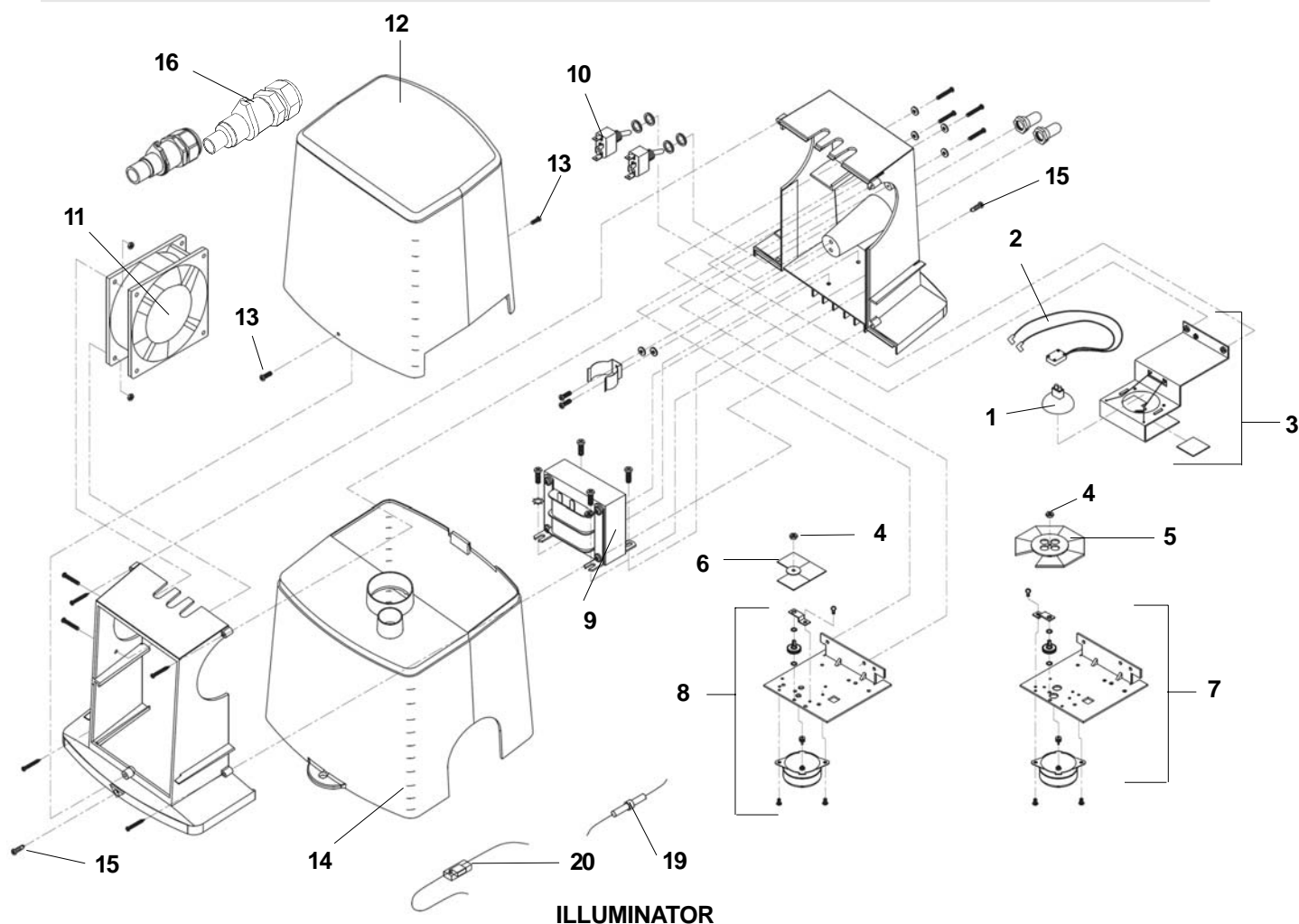
FUSES

KEY	DESCRIPTION	PART#		KEY	DESCRIPTION	PART#
1	LAMP 250W 24V	HI-111		13	TOP COVER SCREW (#8-32 X.5)	A11603
2	LAMP SOCKET	B9155		14	BASE	E12312
3	LAMP BRACKET ASSY.	Y20-2050		15	BASE TO CHASSIS SCREW (#8 X .5 SELF DRILLIN	A11246
4	COLOR WHEEL NUT	A8092		16	FIBER PORT ASSY.	A10980
5	COLOR WHEEL ONLY (2004)	PTO3D		17	FUSE, MAIN POWER, 2.5 AMP	A9182
6	COLOR WHEEL ONLY (2008)	A11213		18	FUSE, COLOR WHEEL MOTOR, .1 AMP	A11598
7	COLOR WHEEL MOTOR ASSY. (2004)	Y10-4005		19	FUSE HOLDER, UNIVERSAL (NO FUSE INCLUDED)	Y30-6900
8	COLOR WHEEL MOTOR ASSY. (2008)	Y10-8005		20	THERMAL OVERLOAD ASSEMBLY, UNIVERSAL	Y30-0020
9	TRANSFORMER, 120VAC - 19.7VAC	D9144E				
10	TOGGLE SWITCH, 3-POSITION	A11526				
11	FAN	A7002				
12	TOP COVER	A11604				

2004-AS ILLUMINATOR AUTO SYNCH- PARTS EXPLODED

ILLUMINATOR

FUSES

KEY	DESCRIPTION	PART#
1	LAMP 250W 24V	HI-111
2	LAMP SOCKET	B9155
3	LAMP BRACKET ASSY.	Y20-2050
4	COLOR WHEEL NUT	A8092
5	COLOR WHEEL ONLY 2004-AS SYNC	PTO5DR
6	CLR WHL MOTOR ASSY. AND	Y10-8020
	PC BOARD 2004-AS SYNC	
5&6	HOT MIRROR, MOTOR, COLOR WHEEL,	Y10-8021
	AND PC BOARD ASSEMBLY 2004-AS SYNC	
7	TRANSFORMER, 120VAC - 19.7VAC	D9144E
8	TOGGLE SWITCH, 3-POSITION	A11526
9	FAN	A7002

KEY	DESCRIPTION	PART#
10	TOP COVER	A11604
11	TOP COVER SCREW (#8-32 X.5)	A11603
12	BASE	E12312
13	BASE TO CHASSIS SCREW (#8 X .5 SELF DRILLIN	A11246
14	FIBER PORT ASSY.	A10980
15	FUSE, MAIN POWER, 2.5 AMP	A9182
16	FUSE, COLOR WHEEL MOTOR, .1 AMP	A11598
17	FUSE HOLDER, UNIVERSAL (NO FUSE INCLUDED)	Y30-6900
18	THERMAL OVERLOAD ASSEMBLY, UNIVERSAL	Y30-0020

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PAL-2000 CONCRETE/FIBERGLASS LIGHT

PAL-2000 LIGHTING SYSTEM
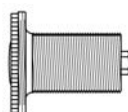
PAL-2000

PAL-2000 LIGHTING SYSTEM

PAL-2000 CONCRETE/FIBERGLASS LIGHT

PAL-2000

KEY	PART #	DESCRIPTION	LIST PRICE
3	20-15017-00	Conduit adapter, 1/2"s - 3/4" spg	
4	FPAL-X	Xenon lamp kit, 12v, 50w for pool light	$20.95
5	FPAL-CA	Concrete adapter kit (requires 39-2RCAS)	$21.39
6	FPAL-LAU	Color LED lamp for PAL-2000 & PAL-Treo with O-ring	$66.17
7	64-15014-00	Lens diffuser, prismatic design	
8	28-15012-00	Clamp ring, clear prismatic	
9	10-15129-00	Lens screw, stainless, set of six	
10	FPAL-LB	Lens cover, snap-on plastic, Blue	$8.05
10	FPAL-LG	Lens cover, snap-on plastic, Green	$8.05
10	FPAL-LR	Lens cover, snap-on plastic, Red	$8.05
10	FPAL-LO	Lens cover, snap-on plastic, Orange	$8.05
10	FPAL-LC	Lens cover, snap-on plastic, Clear	$8.05
10	FPAL-CK	Lens cover, snap-on plastic, set of 4 colors	$29.78
11	10-15130-00	Screw, nylon, lens cover	
14	FPAL-TRW	UL warning plate, white	$13.78
14	FPAL-TRB	UL warning plate, black	$13.78
14	FPAL-TRG	UL warning plate, gray	$13.78
14	FPAL-TRT	UL warning plate, tan	$13.78
15	22-15042-00	Cassette gasket seal, rubber	
16	11-15025-00	Cassette nut for fiberglass installs	
17	FPAL-CN	Concrete wall fitting (use with 39-2RCUK)	$17.20

Complete Light Assemblies

	FPAL-WHT	PAL-2000RU, white, 12v, 50w, 79 ft.	$256.96
	FPAL-C	PAL-2000LAL, white, 12v LED array, 79 ft.	$306.21
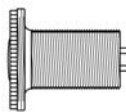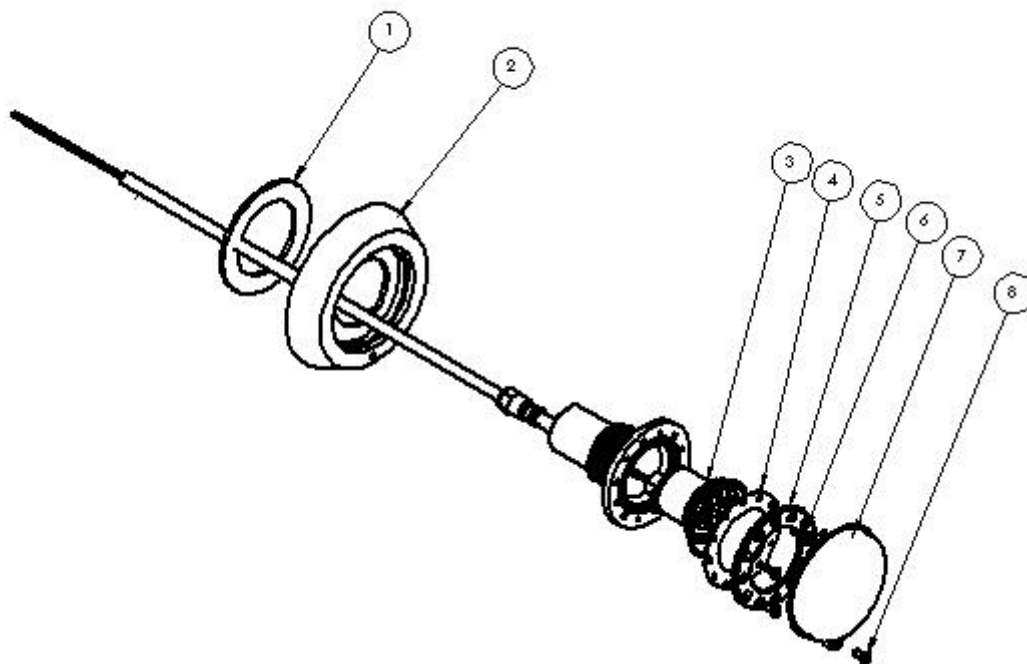
PAL-Treo 12VAC, Color LED Light for 1.5" fittings			
Key	Part #	Description	Qty.
1	22-15042-00	Cassete gasket seal, rubber	1
2	FPAL-TRW-TR	Trim ring PAL-Treo white	1
	FPAL-TRT-TR	Trim ring PAL-Treo tan (optional)	
	FPAL-TRG-TR	Trim ring PAL-Treo grey (optional)	
3	FPAL-LAU	Color LED lamp for PAL-2000 & Treo w/O-ring	1
4	64-15014-00	Lens difusser, prismatic design	1
5	28-15012-00	Clamp ring, clear prismatic	1
6	10-15129-00	Lens screw, stainless, set of six	1 (set)
7	FPAL-LC	Lens cover, snap-on plastic, Clear	1
8	10-15130-00	Screw, nylon, lens cover	1

THE JAZZ™ POOL LIGHT REPLACEMENT PARTS EXPLODED

THE JAZZ SPA LIGHT (120V & 12V) REPLACEMENT PARTS EXPLODED
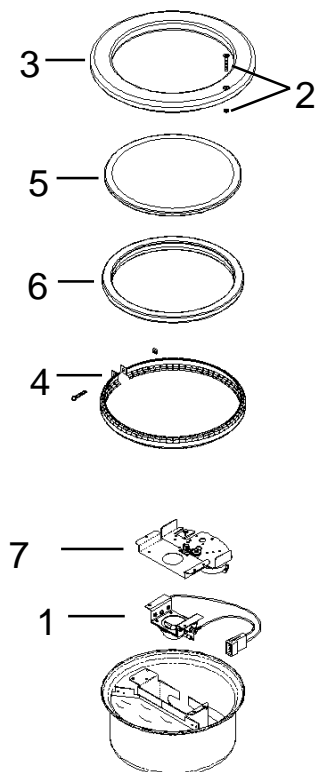
KEY	DESCRIPTION	PART#
1	LAMP KIT, 50W METAL HALIDE FOR J400 SERIES (INCLUDES REPLACEMENT GASKET #7)	J20-2000
2	PILOT SCREW, WITH CAPTIVE GUM WASHER	J30-3000
3	FACE RING, STAINLESS STEEL	J30-4000
4	COMPRESSION CLAMP	J30-5000
5	LENS, FIBERSTARS, 8-3/8" DIA., TEMPERED	J30-6000
6	GASKET, LENS	J30-7000
7	SYNC & NON-SYNC COLOR WHEEL MOTOR ASSEMBLY	FX-8000
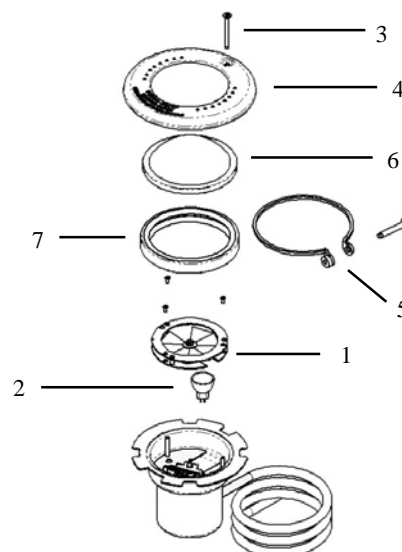
KEY	DESCRIPTION	PART#
1	COLOR WHEEL	JSP-1000
2	12V 35W HALOGEN LAMP (INCLUDES ITEMS #3-PILOT SCREW & #7-GASKET)	JSP-2000
3	PILOT SCREW, WITH CAPTIVE GUM WASHER	JSP-3000
4	FACE RING, STAINLESS STEEL	JSP-4000
5	COMPRESSION CLAMP	JSP-5000
6	LENS	JSP-6000
7	GASKET, LENS	JSP-7000
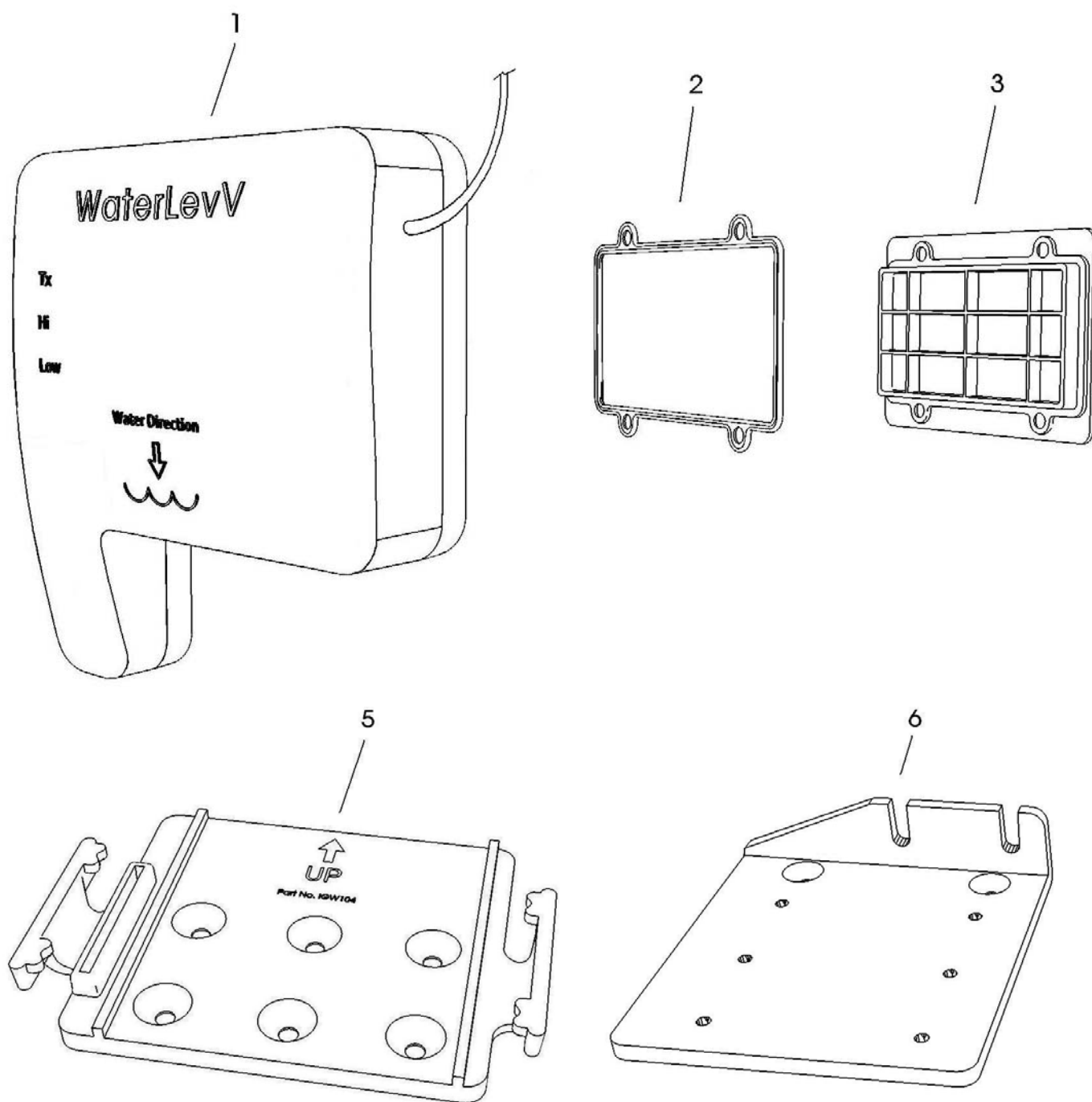
IGW-5000 Sensor

KEY	DESCRIPTION	PART#
1	IGW-5000 SENSOR COMPLETE (BLUE)	IGW-5000-101B
2	SENSOR GASKET	IGW-100
3	SENSOR BACK COVER	IGW-103
4	SENSOR COVER SCREWS (PACK OF 12)	IGW-440-12
5	SENSOR BRACKET	IGW-104
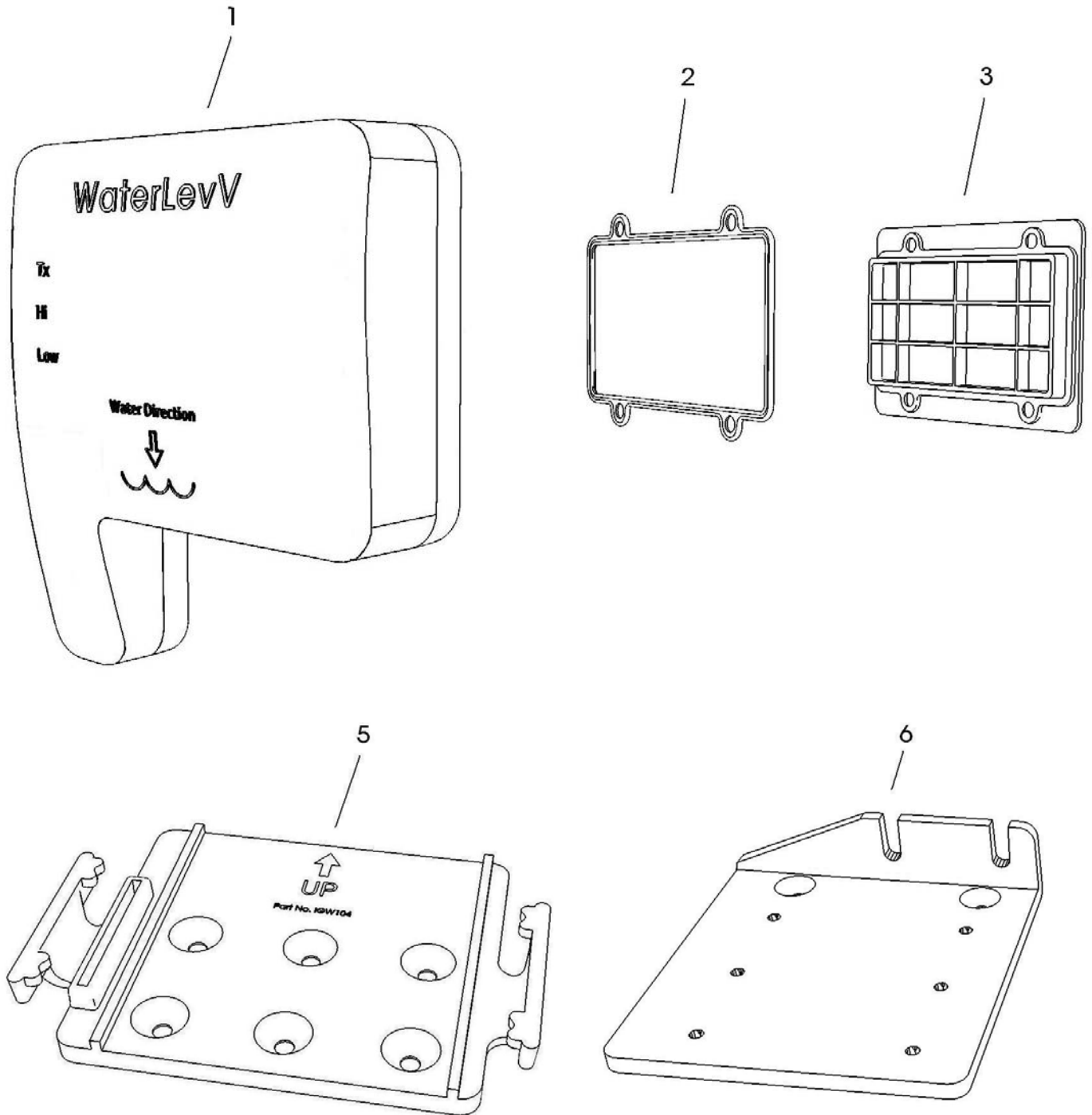
IGW-6000 Sensor

KEY	DESCRIPTION	PART#
1	IGW-6000 SENSOR COMPLETE (BLUE)	IGW-6000-101B
2	SENSOR GASKET	IGW-100
3	SENSOR BACK COVER	IGW-103
4	SENSOR COVER SCREWS (PACK OF 12)	IGW-440-12
5	SENSOR BRACKET	IGW-104
6	SKIMMER LID BRACKET	IGW-109
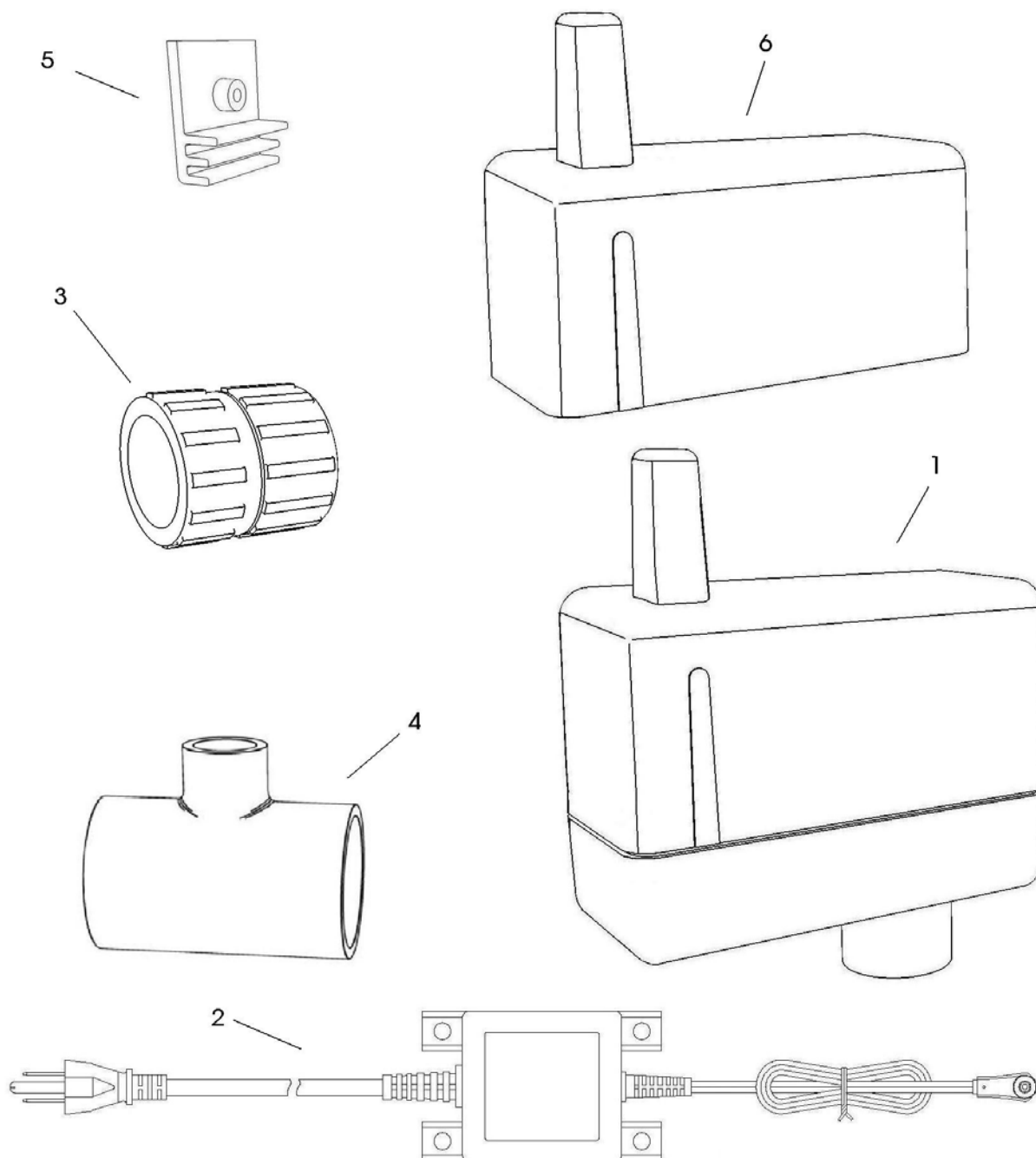
IGW-6000 Valve Unit

KEY	DESCRIPTION	PART#
1	IGW-6000 VALVE UNIT COMPLETE (BLUE)	IGW-6000-106B
2	OUTDOOR POWER SUPPLY (9 VDC 1 AMP)	IGW-PS1
3	HOSE ADAPTER 3/4 FGHT X 3/4 FGHT	IGW- 3/4-FIPT
4	TEE FITTING 2" X 2" X ¾" FIPT	IGW-2234-TEE
5	WIRE CLIP W / SCREW	IGW-108
6	IGW-6000 VALVE UNIT COVER ONLY (BLUE)	IGW-105B

IGW-7000 Service Kit

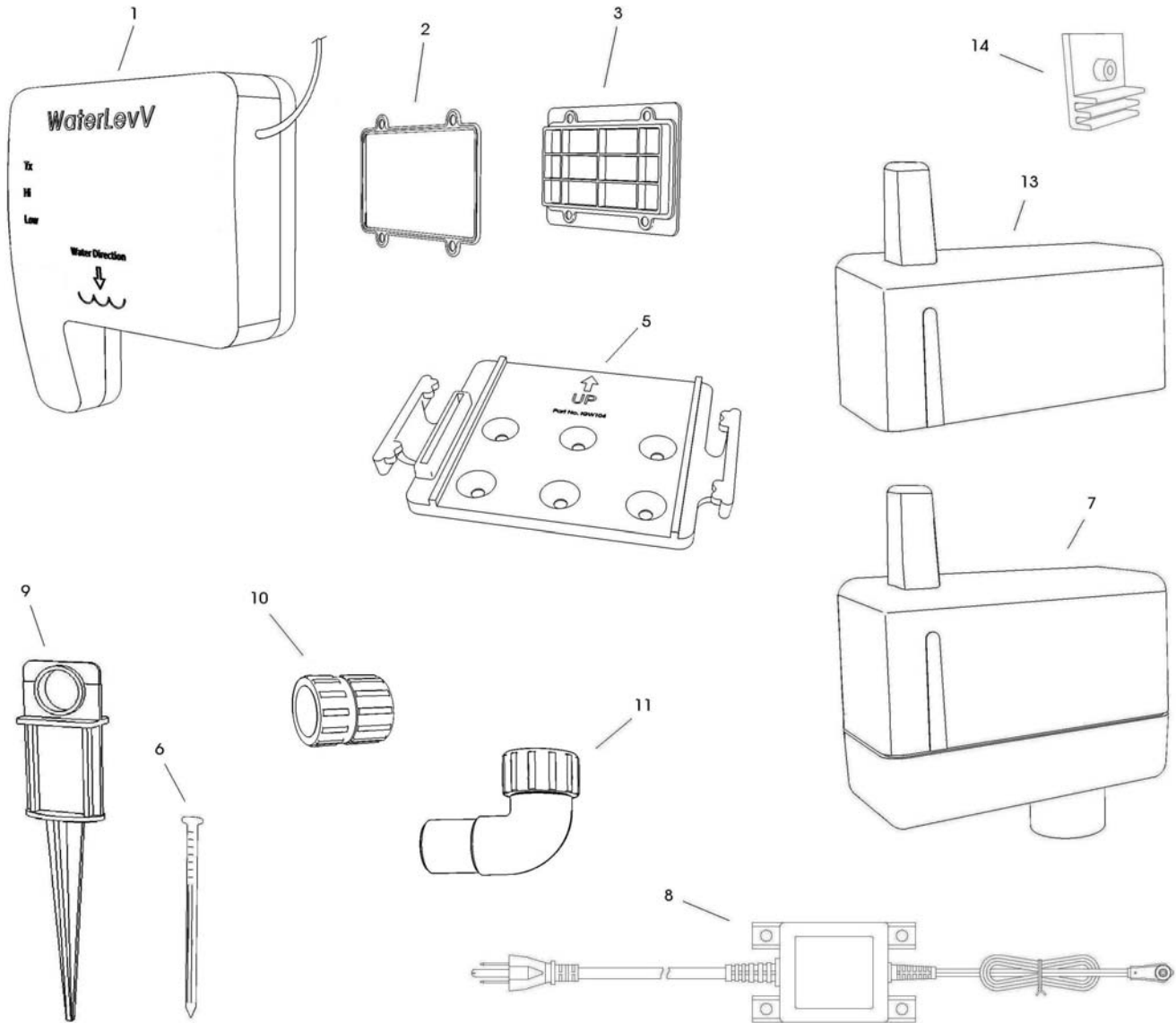| KEY	DESCRIPTION	PART#
1	IGW-7000 SENSOR COMPLETE (RED)	IGW-7000-101R
2	SENSOR GASKET	IGW-100
3	SENSOR BACK COVER	IGW-103
4	SENSOR COVER SCREWS (PACK OF 12)	IGW-440-12
5	SENSOR BRACKET W / STRAP	IGW-7000-104
6	SENSOR STRAP SPIKE	IGW-112
7	IGW-7000 VALVE UNIT COMPLETE (RED)	IGW-7000-106R
8	OUTDOOR POWER SUPPLY (9 VDC 1 AMP)	IGW-PS1
9	VALVE SPIKE (BLACK)	IGW-111B
10	HOSE ADAPTER 3/4 FGHT X 3/4 FGHT	IGW- 3/4-FIPT
11	HOSE ADAPTER 90 DEG. 3/4 FIPT X 3/4 MGHT	IGW-90-FIPT
12	PLASTIC CARRYING CASE (RED)	IGW-113R
13	IGW-7000 VALVE UNIT COVER ONLY (RED)	IGW-105R
14	WIRE CLIP W / SCREW	IGW-108

PART #	DESCRIPTION	LIST PRICE
IGW-5000	WaterlevV AutoFill System Wired Sensor	$406.85
IGW-6000	WaterlevV AutoFill System Wireless Sensor	$417.56
IGW-EXT	WaterlevV Antenna Extension	$96.36
IGW-7000	WaterlevV Pro-Fill Service Kit	$503.21
	Replacement Parts	
IGW-5000-101B	WaterlevV IGW-5000 Sensor Only (Blue Wired)	$132.76
IGW-5000-106B	WaterlevV IGW-5000 Valve Unit (Blue)	$137.04
IGW-6000-101B	WaterlevV IGW-6000 Sensor Only (Blue Wireless)	$132.76
IGW-6000-106B	WaterlevV IGW-6000 Valve Unit (Blue)	$137.04
IGW-PS1	Power Supply 9 VDC 950ma / coax / 90 deg / 2mm	$51.39
IGW-2234-TEE	Tee Fitting 2" x 2" x 3/4" FIPT	$8.57
IGW-104	Sensor Bracket	$12.85
IGW-109	Sensor Skimmer Lid Bracket	$12.85
IGW-103	Battery Cover	$10.71
IGW-100	Battery Cover Gasket	$9.64
IGW-440-12	SS 4-40 x 3/16 Flat Philips Screws (Pack of 12)	$9.64
IGW-105	Valve Cover (Blue)	$12.85
IGW-108	Plastic Wire clip with Screw	$9.64
IGW-3/4-FIPT	House Adapter 3/4 FIPT x 3/4 FGHT	$17.13
IGW-7000-101R	WaterlevV IGW-7000 Sensor Only (Red)	$155.25
IGW-7000-106R	WaterlevV IGW-7000 Valve Unit (Red)	$137.04
IGW-7000-104	Sensor Bracket with strap	$59.96
IGW-90-FIPT	Hose Adapter 90 deg 3/4 FIPT x 3/4 MGHT	$17.13
IGW-111B	WaterlevV IGW-7000 Valve Spike (Black)	$12.85
IGW-112	Sensor Strap Spike (Pack of 2)	$9.64
IGW-113R	Plastic Carrying Case (Red)	$100.64
IGW-105R	Valve Cover IGW-7000 (Red)	$12.85

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