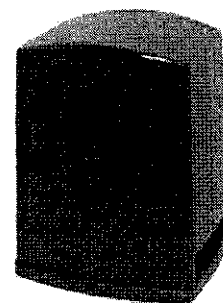




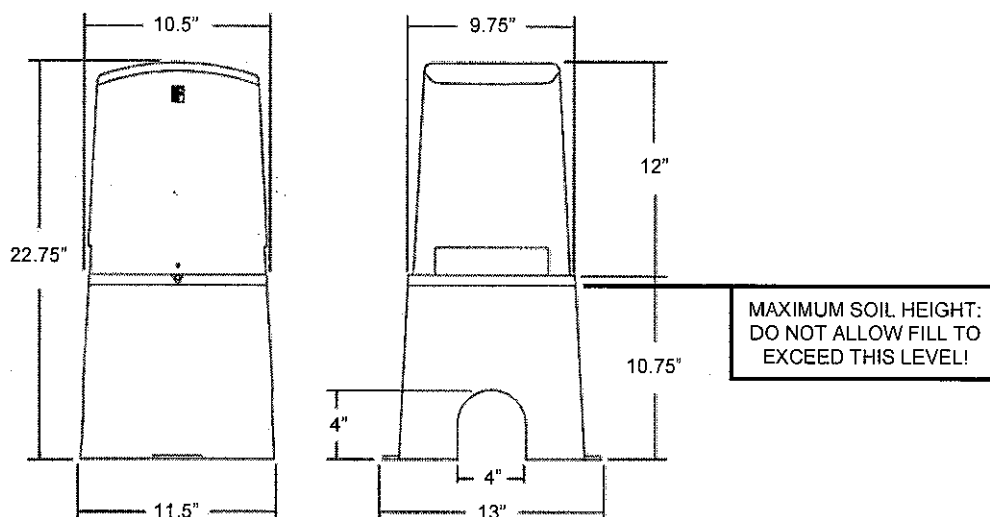
FIBERSTARS®

Sustainable Technology in Lighting™



6004 SERIES

INSTALLATION MANUAL



SPECIFICATIONS

CONSTRUCTION

Case: High Impact Polycarbonate
Ventilation: 110 cu ft/min air volume
Acoustic rating: 50dB(A)
Weight: 20 lbs.

WARNING: DO NOT INSTALL WITHIN 1.5M (5 FT.) OF A POOL, SPA, OR HOT TUB.
ADVERTISSEMENT: NE PAS INSTALLER A MOINS DE 1,5M D'UNE PISCINE OU D'UNE CUVE DE RELAXATION.

ELECTRICAL

Voltage required: 120VAC 60Hz
Power consumption: 200 Watts max
Start current load: 4.4 amps
Current usage: 1.8 amps

LAMP

Type: Metal-Halide, proprietary design
Lamp life: 6000 hrs average
Cool down restrike period: 3 minutes
Replacement p/n: Y20-6000



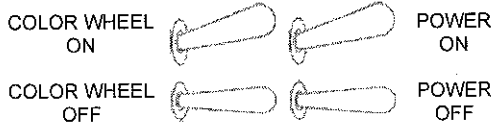
ELECTRICAL CONNECTIONS

6004 SERIES

120v 60Hz ONLY

TOGGLE SWITCH POSITIONS

MANUAL CONTROL



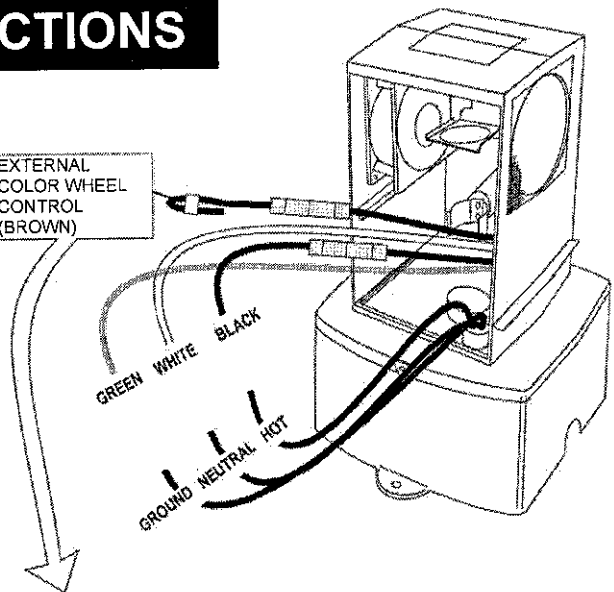
EXTERNAL AUTO CONTROL



OPTIONAL RM6000 CONTROL



EXTERNAL COLOR WHEEL CONTROL (BROWN)

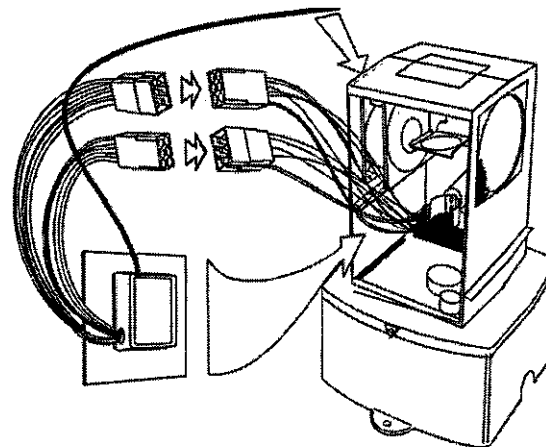
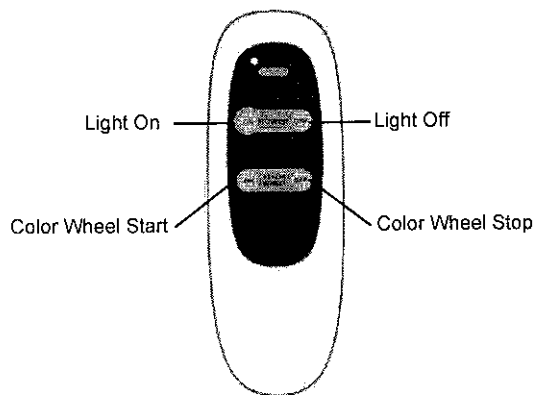


EXTERNAL AUTO CONTROL HOOK-UP FOR COLOR WHEEL
For WPC, Jandy Aqualink, Compool, etc.

Run a 120V hot wire to the illuminator from a second relay in the control's sub panel for the color wheel control. Connect this wire to the folded brown wire with fuse. Place the Color Wheel toggle switch in the bottom position.

OPTIONAL RM6000 WIRELESS REMOTE

1 Year warranty!



This RM6000 Automatic Operating System package is specifically designed for the Lifetime Illuminator™ fiber optic illuminator and should not be modified or adapted in any way. This is an electric component and should only be installed by a qualified technician. Please follow the instructions carefully. RANGE IS APPROXIMATELY 75 FEET DEPENDING ON CONDITIONS.

TOGGLE SWITCH POSITIONS

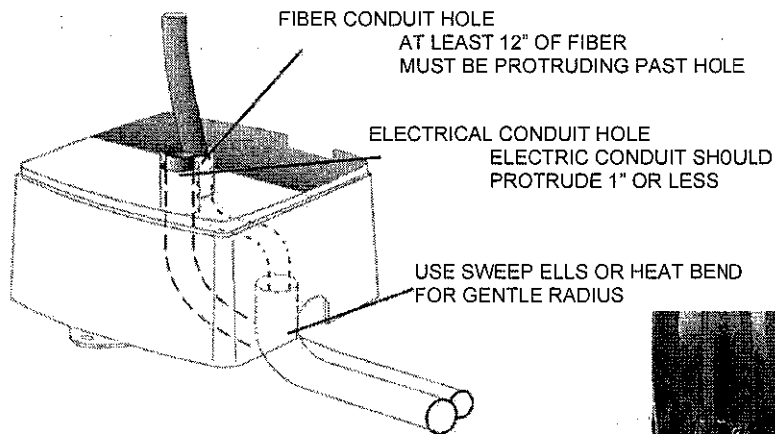
OPTIONAL RM6000 CONTROL



INSTALLATION GUIDELINES

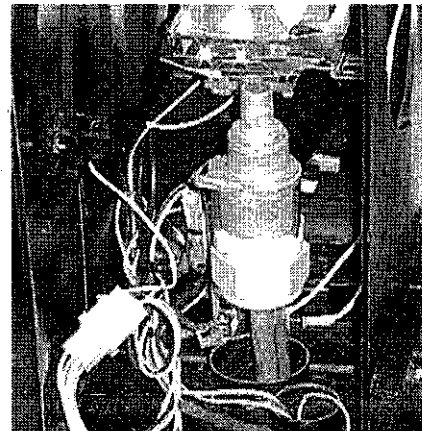
REFER TO THE DIAGRAM ON THE FRONT OF THIS MANUAL FOR THE FOLLOWING PROCEDURES

- 1) SEE OUR GENERAL INSTALLATION MANUAL FOR FIBER AND CONDUIT INSTALLATION IN THE POOL. THIS MANUAL COVERS THE 6000 SERIES ILLUMINATOR INSTALLATION ONLY.
- 2) CUT THE FIBER CONDUITS SO THEY WILL ENTER THE INSTALLATION BASE APPROXIMATELY HALFWAY. CUT THE ELECTRICAL CONDUIT SO IT WILL PROTRUDE PAST THE CONDUIT HOLE 1" OR LESS (FIG A.). PULL ALL FIBER OPTIC CABLES AT LEAST 12" THROUGH THE TOP OF THE INSTALLATION BASE.
- 3) FOLLOW THE PORT ASSEMBLY PROCEDURES ON THE BACK OF THIS MANUAL.
- 4) PLACE THE CHASSIS ON THE INSTALLATION BASE. SECURE THE ILLUMINATOR WITH THE TWO SCREWS SUPPLIED. SNAP THE PORT INTO THE CLIP ON THE CHASSIS. MAKE SURE IT SEATS FIRMLY INTO THE CLIP (FIG B.).
- 5) MAKE THE ELECTRIC CONNECTIONS AS SHOWN ON THE PREVIOUS PAGE. MAKE SURE NO WIRES INTERFERE WITH THE COOLING FAN OR COLOR WHEEL.
- 6) a) IF INSTALLING IN THE GROUND:
BACKFILL HALFWAY UP THE INSTALLATION BASE. ALLOW AMPLE HEIGHT FOR TOP SOIL AND LANDSCAPING. DO NOT ALLOW THE VENTS ON THE BOTTOM OF THE ILLUMINATOR TO BE BLOCKED. THIS WILL CAUSE THE ILLUMINATOR TO OVERHEAT AND SHUT OFF.
b) IF SURFACE MOUNTING:
USE PROPER SECURING SCREWS FOR THE SURFACE TYPE YOU ARE ATTACHING TO, USING THE 2 HOLES PROVIDED ON THE BASE. EXAMPLE: FOR CONCRETE, USE PROPER CONCRETE SCREWS. FOR WOOD SURFACE, USE PROPER WOOD SCREWS.



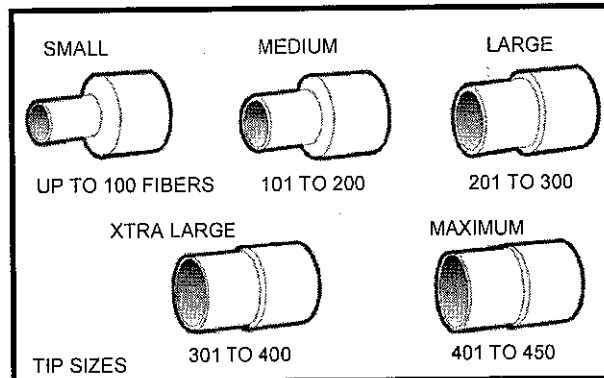
APPROVED CONDUITS FOR USE WITH FIBER OPTIC CABLES

- White PVC conduit/pipe SCH 40 or SCH 80
- Gray PVC conduit/pipe SCH 40 or SCH 80
- Flexible PVC pipe
- Black poly pipe
- Any other suitable conduit



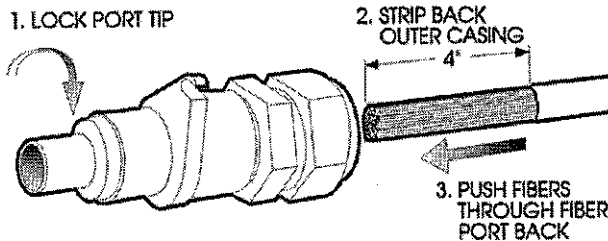
PORT ASSEMBLY/FIBER TERMINATION

A) Insure that the total fiber count of all fiber tubings is 450 or less. If you have more than 450 individual fibers, you will need a second illuminator. The maximum capacity of the 6004 series port is 450 fibers (optional CCS-600 for expanding port to 600 fibers sold separately).

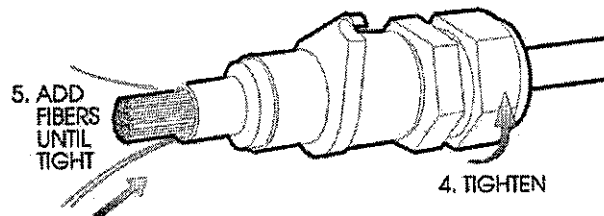


B) Insert the proper size tip into the port and twist with pliers to lock (fig. 1).

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

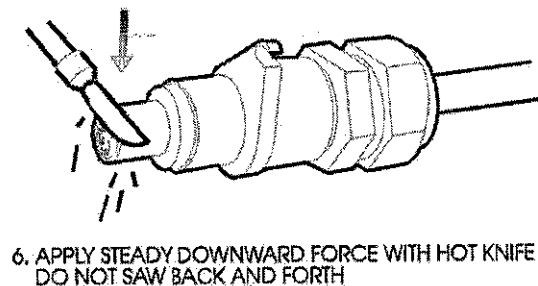


D) Insert the bare fibers into the port so ALL fibers protrude past the port tip (fig. 3). Tighten the port compression nut down on the fiber casing (fig. 4).



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

F) Plug in the hot knife (p/n FS-118) and allow it to heat up. Apply firm downward pressure on the fibers, with the blade touching the port tip at a slight angle (fig. 6.) Do not saw at the fibers. Allow the heat of the knife to slowly trim the fibers. Ease the pressure as the knife almost completes the cut. Unplug the hot knife and place it in a safe place to cool.

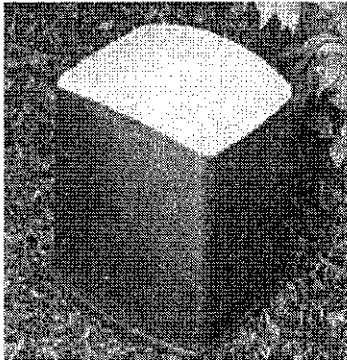


DELIVER TO CONSUMER



FIBERSTARS
Sustainable Technology in Lighting™

6004 AND 6004-AS OWNER'S MANUAL

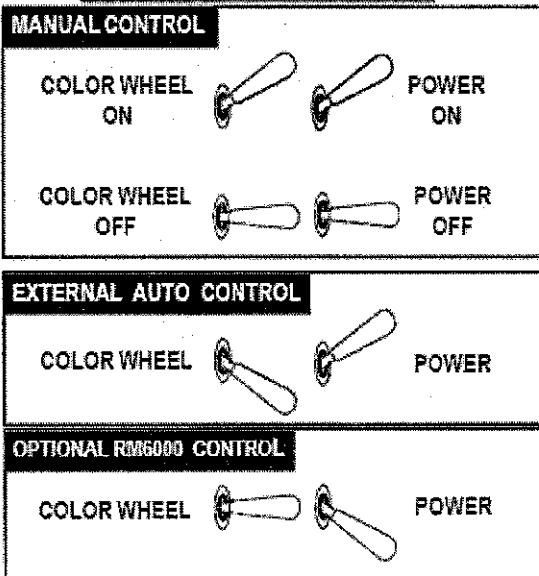


SPECIFICATIONS

CONSTRUCTION

Case: High Impact Polycarbonate
Ventilation: 110 cu ft/min air volume
Acoustic rating: 50dB(A)
Weight: 20 lbs.

TOGGLE SWITCH POSITIONS



ELECTRICAL

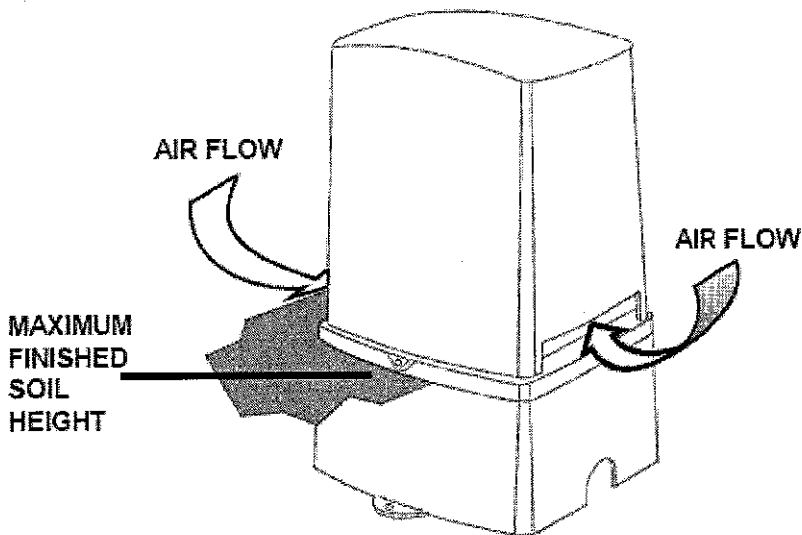
Voltage required: 120 VAC 60Hz
Power consumption: 200 Watts max
Start current load: 4.4 amps
Current usage: 1.8 amps
LAMP
Type: Metal-Halide, proprietary design
Lamp life: 6000 hrs average
Cool down restrike period: 3 minutes
Replacement p/n: Y20-6000

WARRANTY
See Enclosure

WARNING:
UNIT MUST BE FREE OF YARD
DEBRIS AND OTHER FLAMMABLE
MATERIAL.



DO NOT ALLOW AIR VENTS TO BE BLOCKED!



Your 6004 / 6004-AS illuminator needs air to breathe! Lack of ventilation can cause the unit to overheat. This will shorten the lamp life and could damage the unit. **DAMAGE TO THE UNIT BECAUSE OF BLOCKED AIR VENTS IS NOT COVERED UNDER OUR WARRANTY!**

TROUBLE SHOOTING

-THERE IS NO LIGHT

You can hear the fan running: The lamp has probably failed. Replace with Fiberstars part# Y20-6000.

There is no fan running: The illuminator is not getting power. Check the toggle switch position by referring to the diagram on the front of this manual. Check the GFCI breaker and check the fuse on the illuminator.

-THE UNIT SHUTS OFF AFTER A FEW MINUTES THEN COMES BACK ON

Check to see if the air vents are blocked. Refer to the above drawing to make sure the vents are clear.

Turn off power and remove the two screws securing the cover and check for obstruction in the cooling fan.

-REMOTE CONTROL UNITS (WITH OPTIONAL RM6000 PACKAGE-with its own separate warranty coverage)

YOU CAN TEMPORARILY OPERATE THE UNIT MANUALLY VIA THE TOGGLE SWITCHES IF A REMOTE CONTROL PROBLEM IS SUSPECTED. SEE DIAGRAM ON THE FRONT OF THIS MANUAL.

There is a click at the unit when the button is pressed, but no light: If you hear the fan running, the lamp has probably failed. Replace with Fiberstars part #Y20-6000. If you cannot hear the fan running, the receiver module is probably defective. Have a qualified service company replace it.

There is NO click at the unit when the button is pressed: Make sure that the transmitter is TURNED ON. The red light on the transmitter should glow when a button is depressed. If the transmitter is functioning properly, but the illuminator still does not come on, the receiver module may be defective. Have a qualified service company replace it.

YOU CAN TEMPORARILY OPERATE THE UNIT MANUALLY VIA TOGGLE SWITCHES. SEE THE DIAGRAM ON THE FRONT OF THIS MANUAL.

-LIGHTS ARE NOT BRIGHT ENOUGH

The adequacy of pool lighting is subjective at best. What is acceptable to most, may not be for some. The pool builder is given guidelines by Fiberstars, and the builder alone is responsible for the final design and installation. There are many factors that determine the ultimate brightness of our product; fiber lengths, pool finish color, installation techniques, etc. Remember that darker color on our color wheel, i.e. magenta, are not as bright as lighter colors like white

HOW IT WORKS

Before switching on the 6004-AS illuminators, make sure color wheel switch is in "OFF" position. Turn on the power to the illuminators, the color wheels will rotate to the "HOME" position. This action takes about 15 seconds. At this time, all AS units should be holding on the same color. After the color wheels have reached their home positions, the color wheels can be switched on. The units should now be in sync. When shutting down the system, always turn the color wheel OFF so the next time the lights are turned on, the color wheels can return to their home position again, assuring synchronization.

Lamp "Restrike"

When turning the system off and then turning it immediately back on, it may take 1 to 3 minutes before the lamp comes back on.

This process allows the lamp to cool down and then restart. This is a normal function of the Metal-Halide lamp system that the Fiberstars 6004 / 6004-AS illuminator uses.

6000 Series Warranty

The 6000 Series Warranty covers all failed components in the unit under recommended use for the first three (3) years from the original installation date. Should any components fail within the warranty period, only the first year from the original installation date shall the labor fees be covered. In the event that the entire unit itself requires replacement within the Warranty period, the entire unit must be returned to Fiberstars or any Fiberstars Authorized Service Center.

The RM6000 remote control; has a separate warranty and does not fall under this 6004/6004-AS illuminator warranty coverage.

This warranty applies only to the original owner for as long as they own the 6004 / 6004-AS illuminator. This warranty is non-transferable.

RE-LAMPING INSTRUCTIONS

FOR 6004 SERIES

LAMP

Type: Metal-Halide, proprietary design

P/N: Y20-6000

Tools required: - #2 Philips screwdriver

WARNING

TURN OFF INCOMING POWER TO THE ILLUMINATOR BEFORE PERFORMING ANY WORK ON THIS PRODUCT. ALLOW LAMP TO COOL BEFORE REPLACEMENT.

Relamping Instructions

- 1) Remove Illuminator cover, by removing 2 screws, 1 on front and 1 on back.
- 2) Disconnect the wires from the lamp assembly to the internal connector as depicted below.
- 3) Remove the securing hardware, comprised of two screws and washers. Replacement hardware is supplied with lamp assembly.
- 4) Install your new lamp by reversing the above steps.

