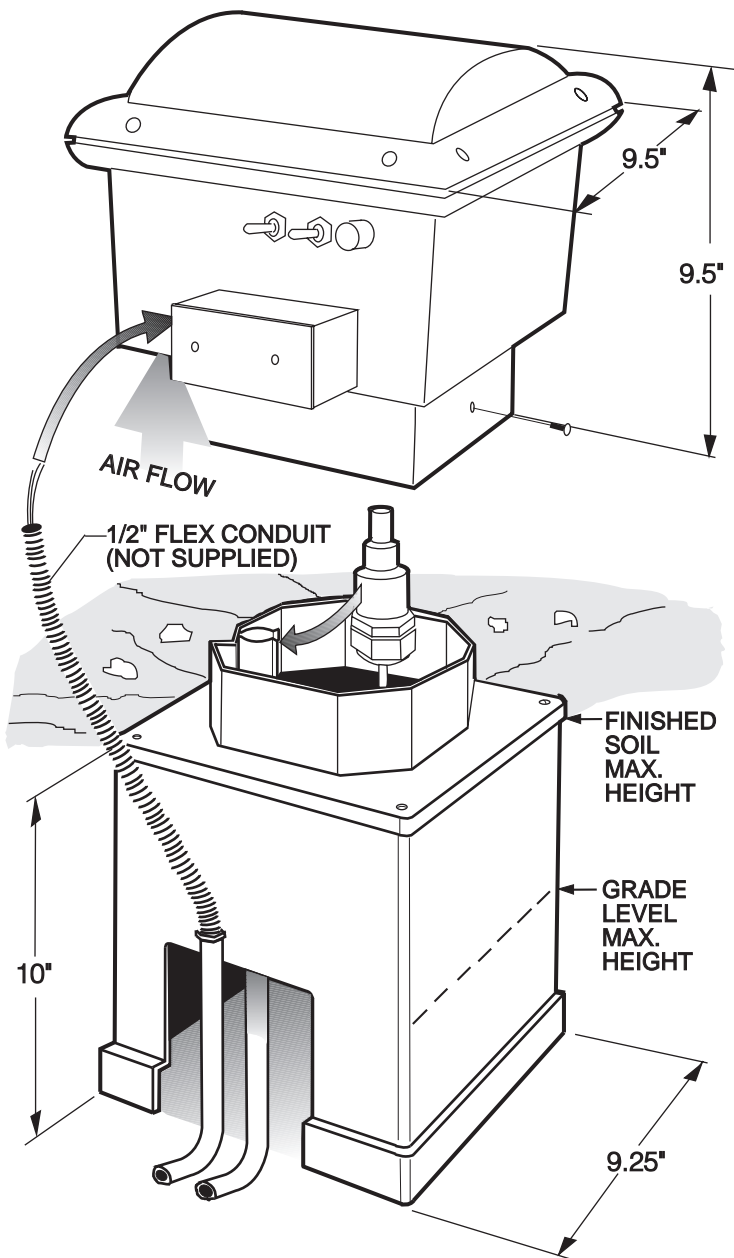




FS5 INSTALLATION MANUAL



SPECIFICATIONS

CONSTRUCTION

Case: Outdoor grade reinforced fiberglass
Ventilation: 50 cu ft/min air volume
Acoustic rating: 50dB(A)
Weight: 13 lbs.

ELECTRICAL

Voltage required: 120VAC 60Hz
Power consumption: 250 Watts max
Current usage: 2.0 amps

LAMPS

Type: Quartz-halogen; proprietary design
Lamp life: 700hrs average

WARRANTY

One year limited warranty, excluding lamp

LISTING

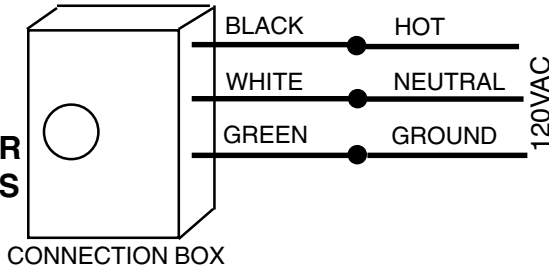
UL classification number 35Z1
UL file number E11725

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

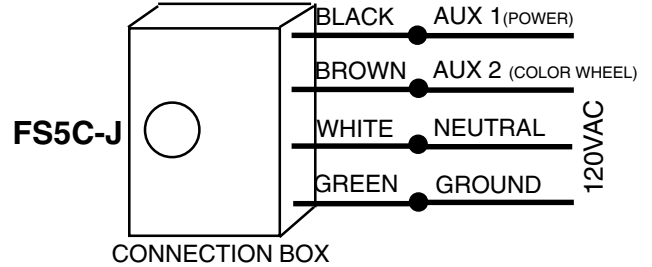
ELECTRICAL CONNECTIONS

SINGLE ILLUMINATOR

FS5
FS5C
FS5C-R
FS5C-S

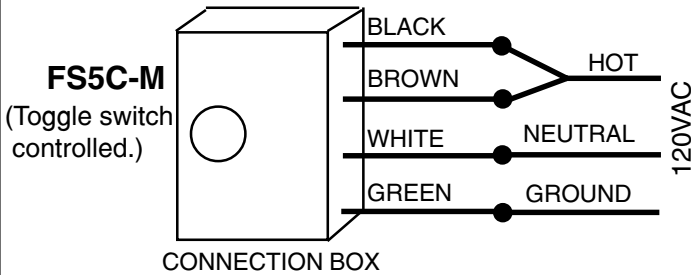


FS5C-J: AUTOMATIC CONTROL COMPATABLE
(JANDY, COMPOOL, AQUADYNE ETC.)



MULTIPLE SYNCHRONIZED ILLUMINATORS

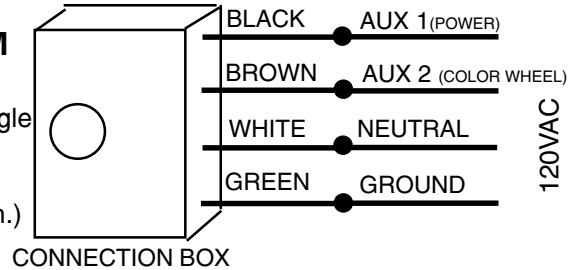
FS5C-M: FOR MANUAL COLOR WHEEL CONTROL WITH TOGGLE SWITCHES



FOR AUTOMATIC COLOR WHEEL CONTROL
(JANDY, COMPOOL, AQUADYNE ETC.)
OR REMOTE SWITCHING

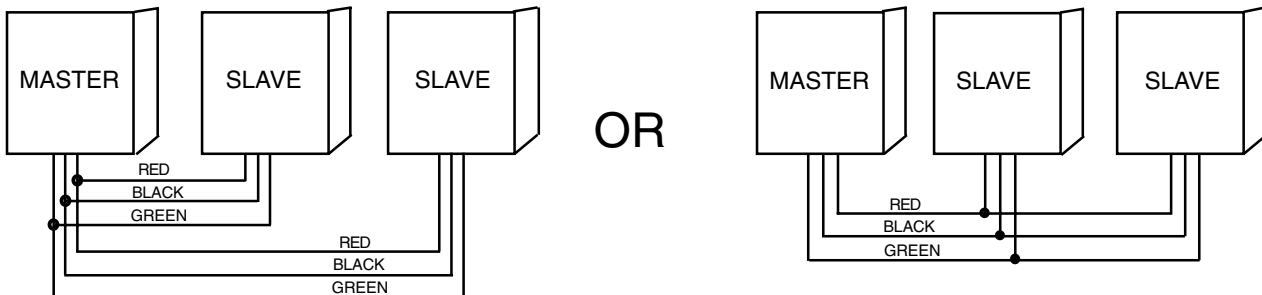
FS5C-M

Note:
(Both toggle switches must be left on.)



SYNCHRONIZED LOW VOLTAGE WIRE HOOK UP

USE 18 GAUGE 3-CONDUCTOR SHIELDED CABLE (BELDON 8770 OR SIMILAR)



NOTE: Low voltage wires must **not** be run in same conduit as high voltage wires.

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 electrical conduit

INSTALLATION GUIDELINES

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

- 1) SEE TO OUR GENERAL INSTALLATION MANUAL FOR FIBER AND CONDUIT INSTALLATION IN THE POOL. THIS MANUAL COVERS THE FS5 SERIES ILLUMINATOR INSTALLATION ONLY.**
- 2) CUT THE FIBER CONDUITS SO THEY WILL ENTER THE INSTALLATION BASE APPROXIMATELY HALF WAY. PULL ALL FIBERS THROUGH THE TOP OF THE INSTALLATION BASE.**
- 3) FOLLOW THE PORT ASSEMBLY AND FIBER POLISHING PROCEDURES ON THE BACK OF THIS MANUAL. SNAP THE PORT INTO THE CLIP ON THE INSTALLATION BASE. MAKE SURE IT SEATS FIRMLY AGAINST THE TOP OF THE CLIP.**
- 4) PLACE THE ILLUMINATOR ON THE INSTALLATION BASE. SECURE THE ILLUMINATOR WITH THE TWO SCREWS SUPPLIED.**
- 5) TRANSITION THE RIGID ELECTRICAL CONDUIT TO FLEXIBLE CONDUIT AND ATTACH TO THE CONNECTION BOX ON THE SIDE OF THE ILLUMINATOR. THIS WILL ALLOW THE ILLUMINATOR TO BE REMOVED EASIER FOR SERVICE.**
- 6) BACKFILL HALF WAY 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.**



CHANGING THE LAMP



Remove the four screws securing the lid.



MAKE SURE THE ILLUMINATOR IS COOL! Use your finger to slide out the socket/lamp assembly.



Pull the lamp free from the socket. Install the new lamp by pushing the pins into the socket. **DO NOT TOUCH THE FILAMENT OR THE LAMP WILL BURN OUT PREMATURELY.**



Slide the new lamp with the socket back into the bracket. The lamp should sit **FLAT** on the bracket for maximum light transmission.

Port Assembly / Fiber Termination

1) Insure that the total fiber count of all fiber tubings is 330 or less. If you have more than 330 individual fibers, you will need a second illuminator. The maximum capacity of the FS5 port is 330 fibers.

2) Insert the proper size tip into the port (fig. A)

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

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

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

6) Hot knife the fibers

OR for maximum brightness;

Cut and polish the fibers-Insert the fiber cutoff wheel (fig. D) into a drill. Place the drill on a stable surface (tool box, brick, etc.), and turn on the drill. Guide the fibers into the cutoff wheel slowly, so the fibers are trimmed approximately 1/8" from the port tip (fig. F).

7) Remove the cutoff wheel and insert the polishing drum. Place the COARSE (320 grit) band on the drum. Apply a generous amount of water to the band (fig. G), and turn the drill on.

8) Run the fiber tip up and down over the polishing band and rotate the port in your hand at least 5 times to get an even polish. Polish the fiber tip until it is smooth to the touch. This step should take 10-15 seconds.

9) Remove the COARSE band and place the MEDIUM (600 grit) band on the drum. Apply a generous amount of water to the band, and turn the drill on.

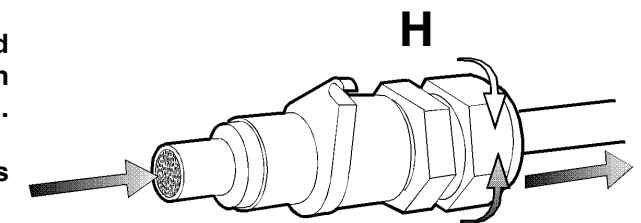
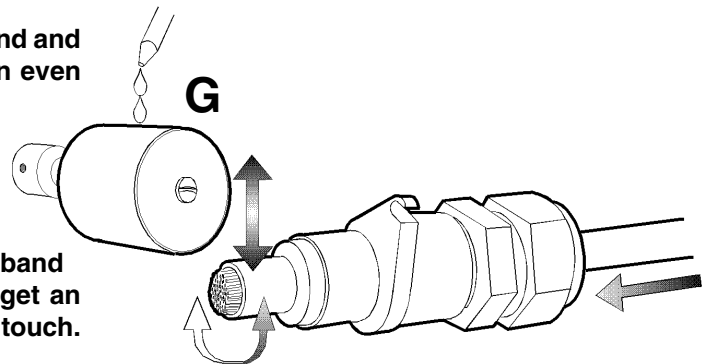
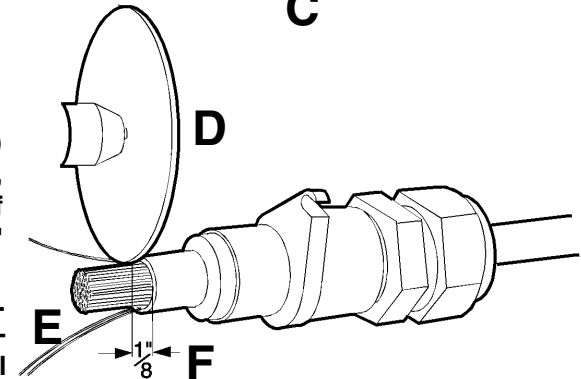
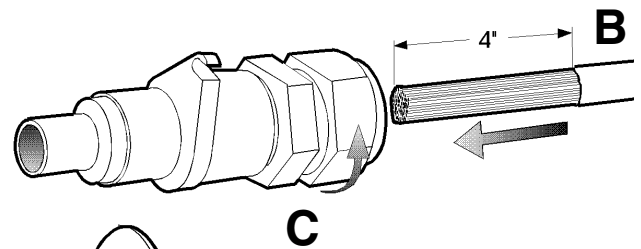
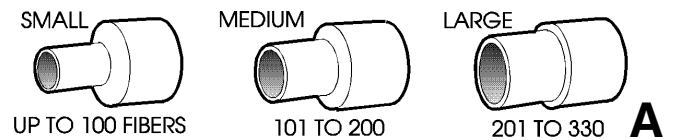
10) Run the fiber tip up and down over the polishing band and rotate the port in your hand at least 5 times to get an even polish. Polish the fiber tip until it is smooth to the touch. This step should take 10-15 seconds.

11) Remove the MEDIUM band and place the FINE (1200 grit) band on the drum. Apply a generous amount of water to the band, and turn the drill on.

12) Run the fiber tip up and down over the polishing band and rotate the port in your hand at least 5 times to get an even polish. Polish the fiber tip until it is smooth to the touch. This step should take 20-30 seconds.

13) Take care not to touch the port tip with the polishing bands to avoid getting metal fragments between the fibers.

14) Loosen the port compression nut and slide the fibers back so they are flush with the port tip. Tighten the port compression nut (fig. H).



Fiberstars, Inc.

2883 Bayview Drive Fremont, CA 94538 USA
(800) 327-7877 (510) 490-0719 Fax (510) 490-3247

www.fiberstars.com

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