S.R.Smith™

SYSTEM 2004™

INSTALLATION MANUAL

MAXIMUM SOIL HEIGHT: DO NOT ALLOW FILL TO EXCEED THIS LEVEL!
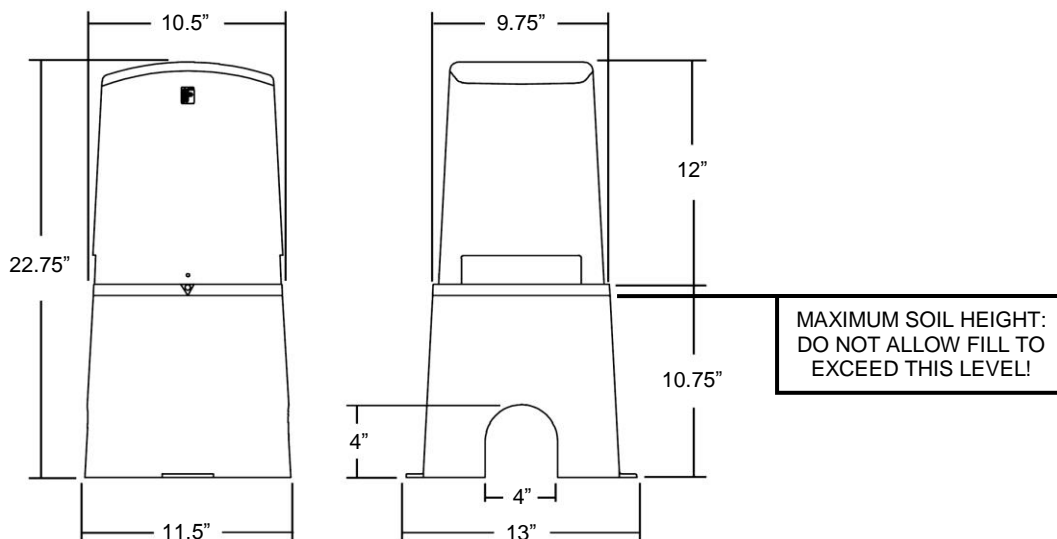
SPECIFICATIONS

CONSTRUCTION
Case: High Impact Polycarbonate
Ventilation: 110 cu ft/min air volume
Acoustic rating: 50dB(A)
Weight: 13 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: 250 Watts max
Current usage: 2.0 amps

LAMP
Type: Quartz-halogen, proprietary design
Lamp life: 700 hrs average
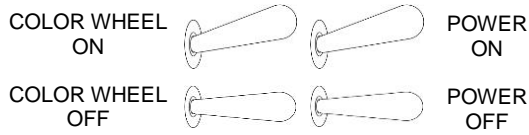
Listing
UL file number E220601

ELECTRICAL CONNECTIONS

2004

120v 60Hz ONLY

**IF A SELF-CONTAINED
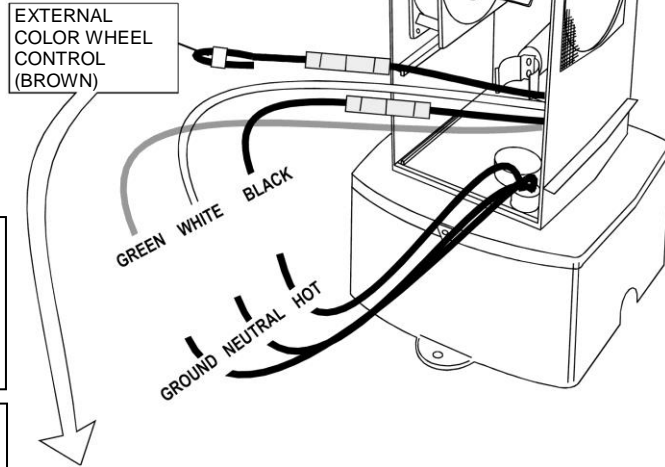REMOTE IS DESIRED, ORDER
THE OPTIONAL RM1**

TOGGLE SWITCH POSITIONS

MANUAL CONTROL

| COLOR WHEEL ON | | | POWER ON |
| COLOR WHEEL OFF | | | POWER OFF |

EXTERNAL AUTO CONTROL

COLOR WHEEL   POWER

OPTIONAL RM CONTROL

COLOR WHEEL   POWER

EXTERNAL
COLOR WHEEL
CONTROL
(BROWN)

GREEN   WHITE   BLACK

GROUND   NEUTRAL   HOT

**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 Color
Wheel toggle switch in the bottom position.**

Important Note: You only have to use a 3 wire installation if
using the existing toggle switch or the RM1 SR Smith
Controller. You must run a 4 wire service to the illuminator if
wiring external control system.

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 2004 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.
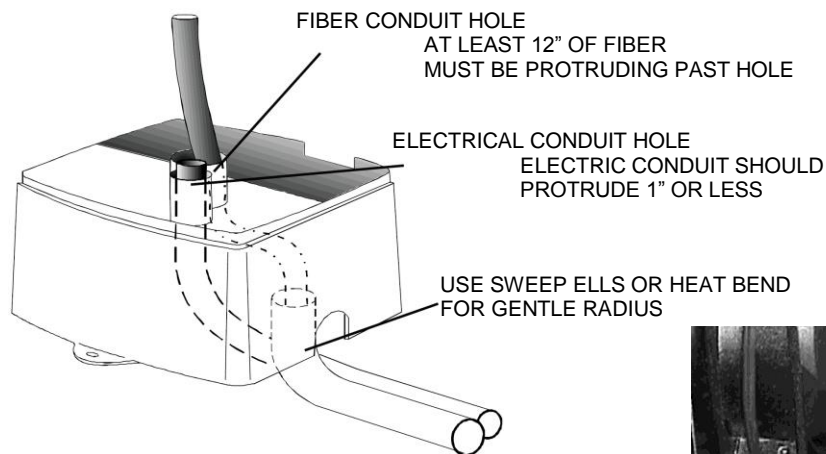

FIBER CONDUIT HOLE
AT LEAST 12" OF FIBER
MUST BE PROTRUDING PAST HOLE

ELECTRICAL CONDUIT HOLE
ELECTRIC CONDUIT SHOULD
PROTRUDE 1" OR LESS

USE SWEEP ELLS OR HEAT BEND
FOR GENTLE RADIUS

FIG A

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
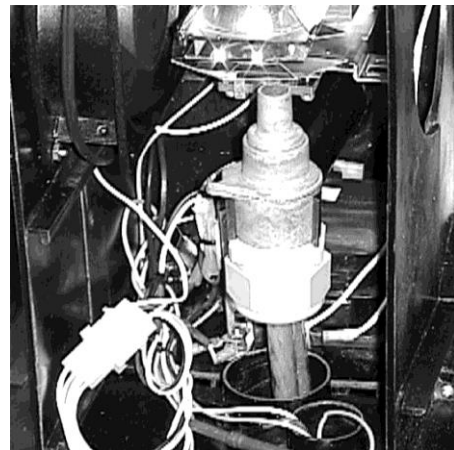- Flexible PVC pipe
- Black poly pipe
- Any other suitable conduit

FIG B

PORT ASSEMBLY/FIBER TERMINATION

A) Insure that the total fiber count of all fiber tubings is 400 or less. If you have more than 400 individual fibers, you will need a second illuminator. The maximum capacity of the System 2000™ series port is 400 fibers (optional CCS-450 for expanding fiber capacity to 450 fibers sold separately).

SMALL   MEDIUM

UP TO 100 FIBERS   101 TO 200

LARGE   XTRA LARGE

TIP SIZES   201 TO 300   301 TO 400
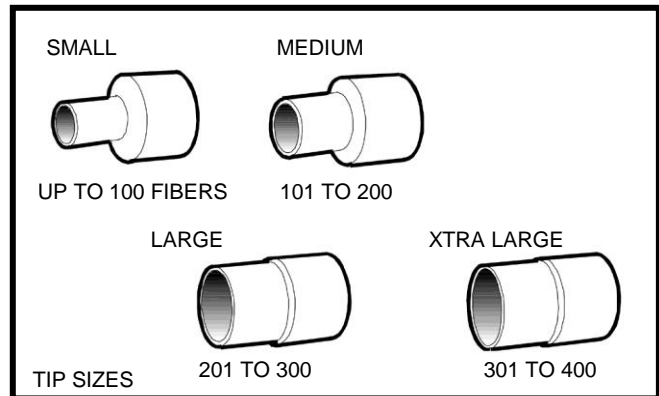
B) Insert the proper size tip into the port and twist with pliers to lock (fig. 1).

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

1. LOCK PORT TIP   2. STRIP BACK OUTER CASING 4"

3. PUSH FIBERS THROUGH FIBER PORT BACK
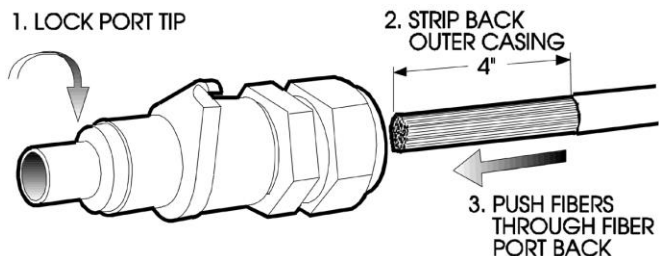
D) Insert the bare fibers into the port so ALL fibers protrude past the port tip (fig. 3). Tighten the port compression nut down on the fiber casing (fig. 4).
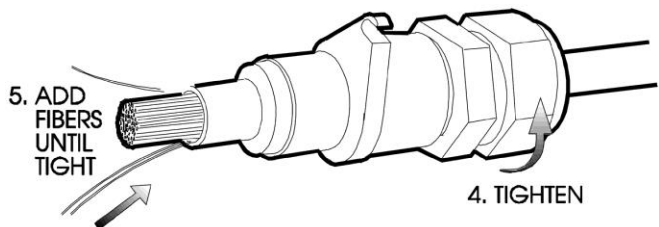
E) IMPORTANT: If the port tip is not completely full, insert scrap individual fibers into the tip until it is completely full (fig. 5). This will keep the lit fibers perpendicular to the lamp, and prevent the fibers from overheating.

5. ADD FIBERS UNTIL TIGHT

4. TIGHTEN

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.

6. APPLY STEADY DOWNWARD FORCE WITH HOT KNIFE DO NOT SAW BACK AND FORTH