

Model UV100

Model UV200

GENERAL

This product is designed to help disinfect the internal surfaces of heating, ventilation, and air conditioning systems. Bacteria and viruses that are in the air stream that passes through the system will also be reduced. The result is an improved level of indoor air quality for occupants and improved system hygiene.

The UV100/UV200 emits ultraviolet (UV-C) radiation at a frequency of 254 nanometers, which has been proven effective in arresting microorganisms such as viruses, bacteria, yeast and molds. This process either destroys the micro-organism or neutralizes its ability to reproduce.

UV100 and UV200 Ultraviolet Light Systems

Installation & Operation Manual

Features

- Reduces or prevents mold growth on HVAC coils, allowing them to operate at peak efficiency. Also greatly reduces bacteria, viruses, fungi, and yeasts.
- High output, long life UV-C lamps.
- Low maintenance and reduced costs.
- Multi-voltage electronic ballast.

Included Inside Box

- Germicidal ultraviolet light system
- UV lamp(s)
- Power cord
- Sheet metal screws (5)
- Installation & operation manual
- UV warning label for duct

Tools Required For Installation

- Electric drill
- Phillips screw bit or screwdriver
- 1.5" drill bit or holecutter
- Eye protection

Before Installing

- Read all instructions carefully. Failure to do so could damage the equipment or cause harm to yourself or others.
- Read all caution and warning labels.
- Only qualified technicians should perform the installation.

Specifications

Base Dimensions:

Model UV100 - 6 ⁷/₈"L x 11 ¹/₈"W x 2 ¹/₁₆"H

Model UV200 - 6 ⁷/₈"L x 14 ³/₁₆"W x 2 ¹/₁₆"H

Weight:

Model UV100 - 4 ¹/₂ lbs. Model UV200 - 6 ³/₄ lbs.

Electrical:

120V/240V, 50/60Hz, 1PH. 3A/250V fuse.

Operating Environment:

45° F - 150° F (Outside of duct.)

Listings:

FIFRA - File # 73316 (Federal Insecticide Fungicide Rodenticide Act)

UL Safety Agency - File #E213952

Specifications subject to change without notice.

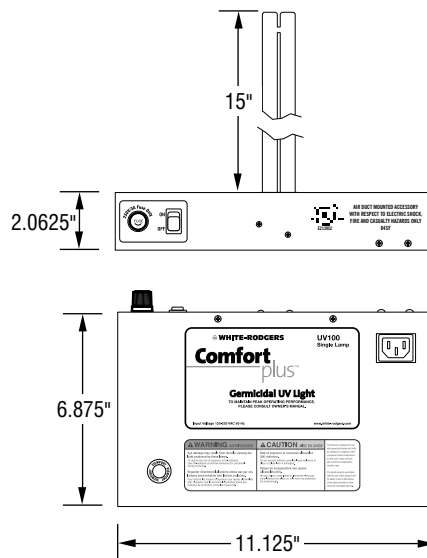


Sizing

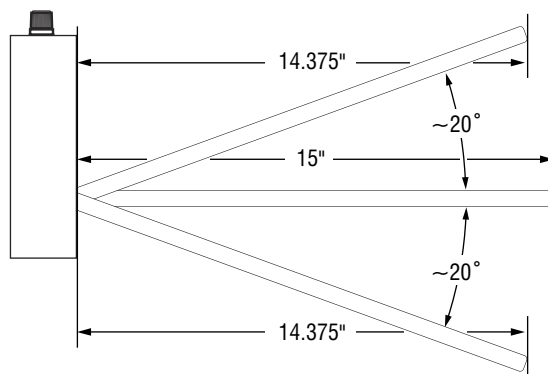
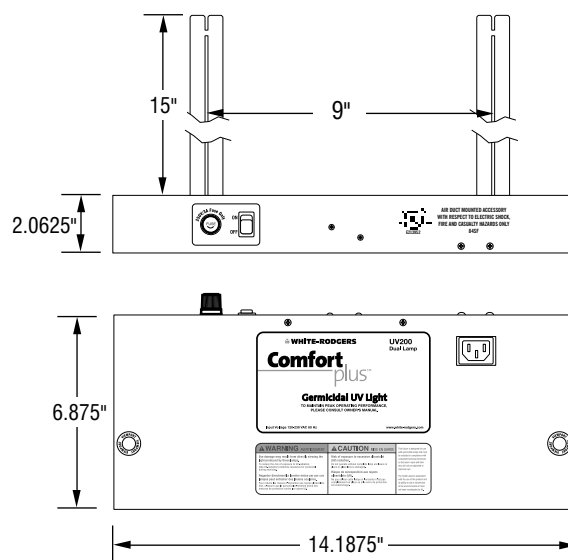
The UV100 is suitable for slab coil applications 3 tons or less, and 1200 CFM or less. Or where space permits only a single lamp.

The UV200 is suitable for slab coil, A-coil, and return air applications, where space permits dual lamps.

UV100



UV200



INSTALLATION

This device installs in the air handling system. Select a mounting location that will allow enough clearance for the lamp to be installed and replaced easily.

A 120V or 240V electrical outlet is required. Optional 240V power cord (P/N 212107-00) is required for 240V operation. Any modification to the supplied power cord will void UL safety listing and White-Rodgers warranty.

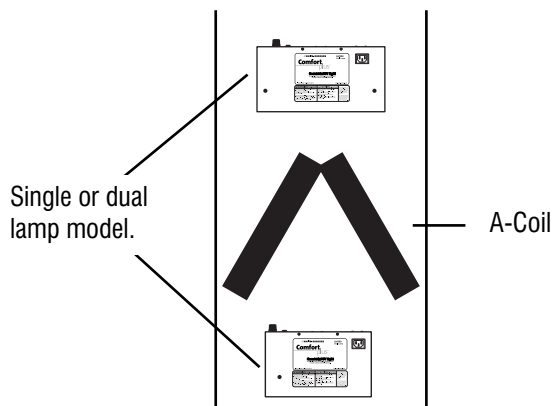


Fig. 1 Device may be mounted before or after A-coil in either horizontal or vertical air handling systems.

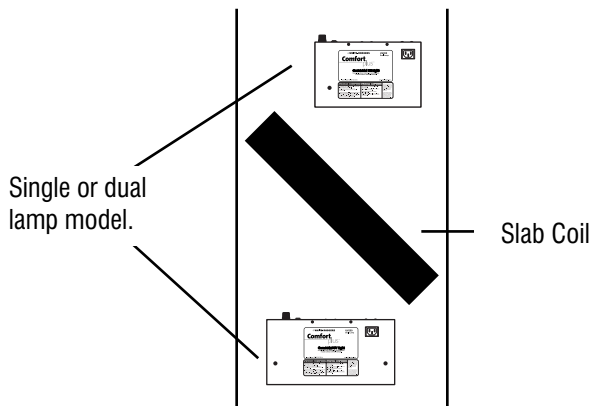


Fig. 2 Device may be mounted before or after slab coil in either horizontal or vertical air handling systems.



CAUTION

UV-C Light May Degrade Plastic and Rubber. Shield exposed plastic drain pans, wire insulation, flex duct, or other plastic/rubber components from UV-C light.

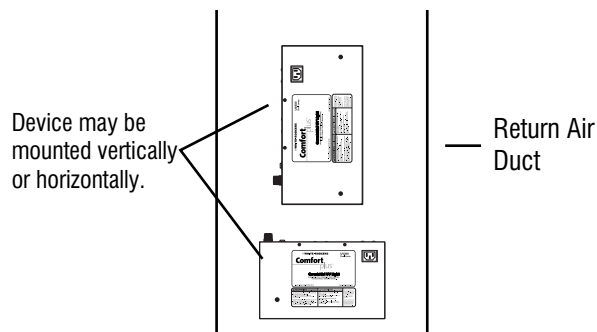


Fig. 3 Mounting for airstream irradiation in return air flow.

Special Installation Notes

- Do not install in closet return grille applications.
- Do not install in outdoor applications.
- Do not expose wiring or plastic parts to UV-C light.
- Do not install beneath a humidifier.

Selecting Lamp Bracket (Fig.4)

This device comes packaged with both a straight-mount lamp bracket and an angle-mount lamp bracket pre-installed. Choose the mount appropriate for your application and store the unused mount for possible future use. Brackets are secured with knurled nuts.

Note: The angle bracket is useful in applications where the duct is narrower than 16".

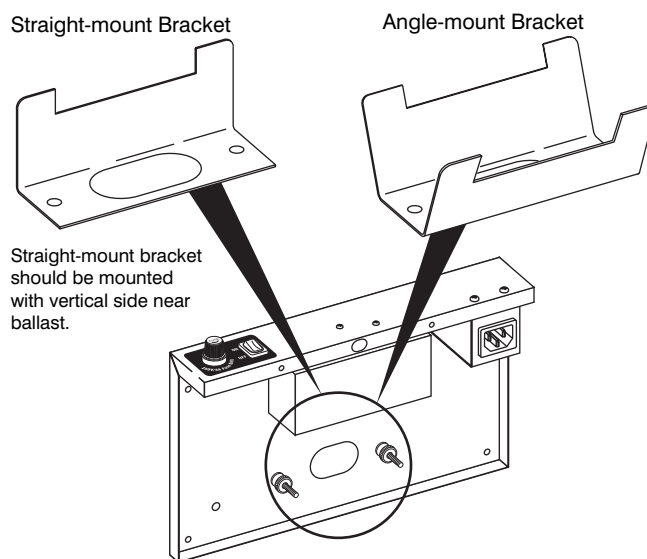


Fig. 4 Configure device to use either the straight-mount lamp bracket or the angle-mount lamp bracket.

IMPORTANT:

The device must be installed in compliance with all national and local electrical and mechanical codes. Failure to do so will void UL safety listing and White-Rodgers warranty.

Standard Mounting (Fig.5)

Remove the cover of the device and mount the base to the air handling system using the included sheet metal screws.

Using the mounted base as a template, use a 1.5" bit or holecutter to make the lamp hole(s) required. Use a 1/4" bit to drill viewport hole(s).

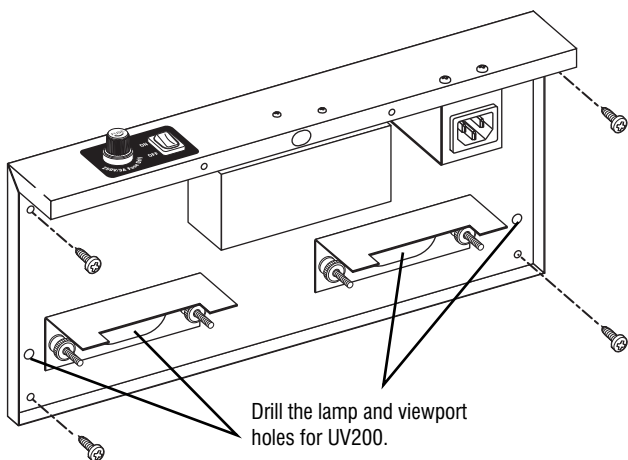
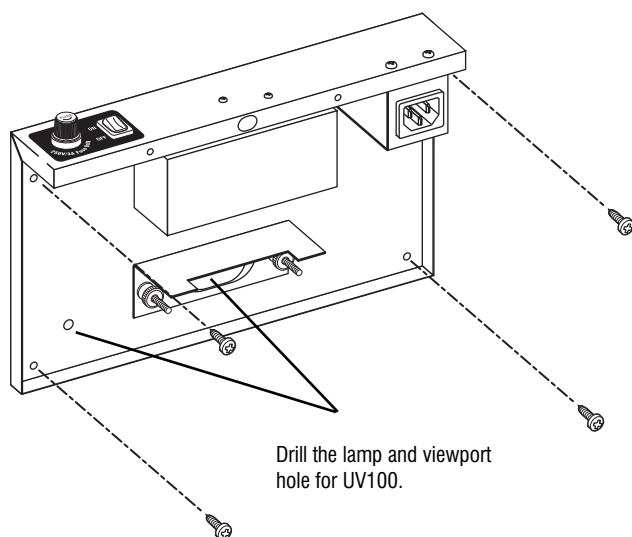


Fig. 5 Mount the device using included sheet metal screws.

Fiberboard Mounting (Fig.5)

For fiberboard installations two sheet metal straps, suitable length #6 or #8 screws/nuts are required (not included). See template on page 5 for strap construction.

Remove the cover and use the base as a template for drilling or cutting lamp and viewport holes into the fiberboard. Use a 6" holecutter to make access holes to attach the straps to the base.

Note: Do not make lamp holes smaller than 1.5".

Attach base as shown in Fig. 6.

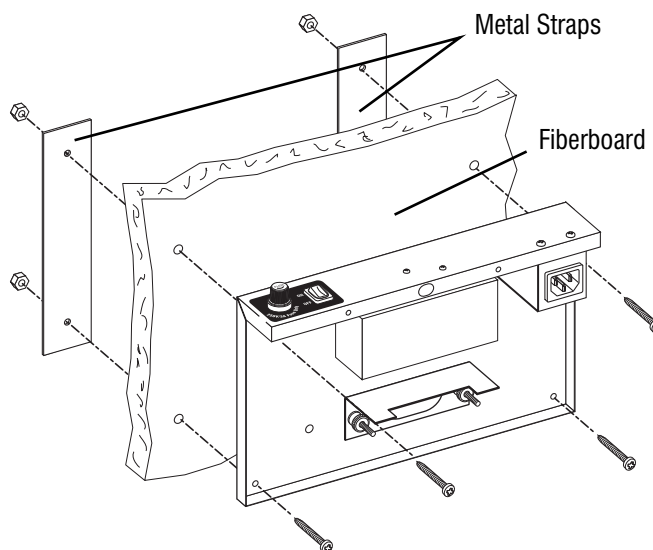


Fig. 6 Mount the device to metal straps using #6-#8 screws/nuts. (Straps and needed screws are not included.)

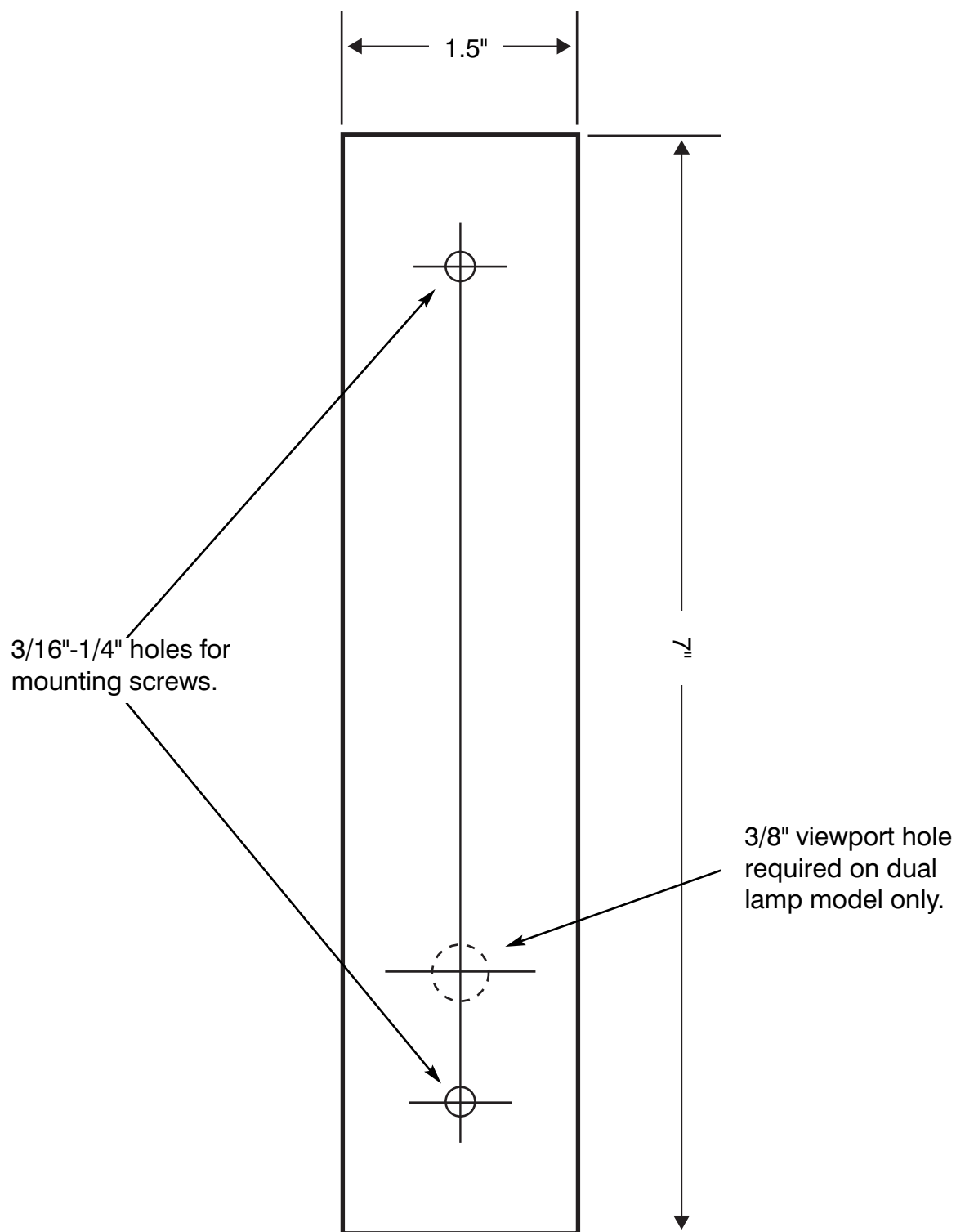
CAUTION

Sharp Edge Hazard.

Be careful of sharp edges on device and HVAC equipment while installing the device. Personal injury may result.

Fiberboard Mounting Strap Template

Use this template to construct strap from minimum 26 gauge metal. Make strap no wider than 1.5". Wider strap may obstruct viewport hole on single lamp models.



Installing The Lamp

To maximize the efficiency and life of the UV-C lamp, clean each lamp prior to installation. Use isopropyl alcohol and cotton cloth to wipe dust and fingerprints from the lamp.

1. Gently insert the lamp 2/3 of the way into the lamp hole.
2. Attach lamp to electrical connector by inserting the front of the lamp into the connector first then gently snap the back of the lamp in place. (Fig. 7)
3. Insert the lamp fully, making sure the electrical connector seats properly into the lamp bracket. (Fig. 8)

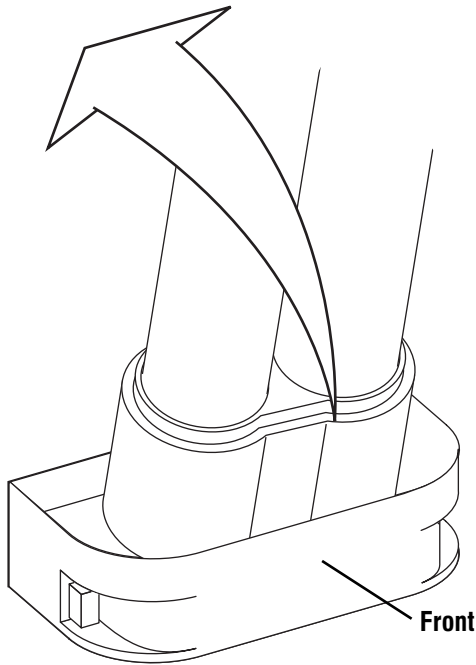


Fig. 7 Attach lamp to connector by inserting the front of the lamp first then snapping the back of the lamp into place.

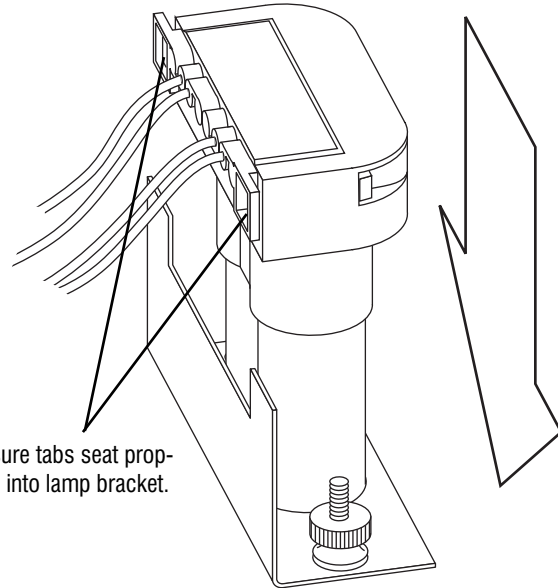


Fig. 8 Insert the lamp fully, making sure the electrical connector seats properly into the lamp bracket.

Connect Power And Check Operation

With the cover replaced, attach the power cord to the device and connect to 120V or 240V power. Optional 240V power cord (P/N 212107-00) is required for 240V operation. The device power switch must be turned on and device checked for operation using the view-port. The lamp(s) should be radiating a bright blue light.

OPERATION

Under normal conditions the device should be operated continuously to extend the life of the lamp(s), and to increase the effectiveness in disinfecting the location selected. A convenient power switch is located on the device, and should be turned off before any maintenance on the device or HVAC system is performed.

CAUTION

Clean lamp(s) prior to installation.
Failure to remove dirt and fingerprints from the lamp(s) could shorten their lifespan.

WARNING

UV-C Light Hazard.
UV-C light can cause temporary or permanent loss of vision, and sunburn. Take precautions to protect eyes and skin from direct exposure.

MAINTENANCE AND TROUBLESHOOTING

- Check that the lamp connector is securely attached to lamp.
- Check that the fuse is in good working order. Replace if necessary.
- Check that proper power is being supplied to the device and that switch lights when turned on.
- Lamps should be cleaned every six (6) months to remove any dust accumulation on the bulbs that might lessen the effectiveness of the UV-C light. The Comfort Plus™ UV-C light bulbs have a service life of 9,000 hours, or approximately 375 days.

Lamp Replacement (Annually)

The lamp should be replaced annually even if it appears to be operating normally. UV-C energy production diminishes over time.

1. Obtain the correct replacement lamp for your model.
2. Disconnect power to the equipment.
3. Open the cover of the device. *Allow lamp to cool 10 minutes before touching.*
4. Detach the electrical connector from the lamp bracket and disconnect the lamp.
5. Carefully remove the UV-C lamp and replace it with the new lamp. Refer to page 6 for instructions. Be sure to clean the lamp of dust and fingerprints prior to installation.
6. Close the cover of the device.
7. Reconnect power.
8. Verify operation.

WARNING

Burn Hazard.

During replacement, allow lamps to cool 10 minutes before removing them. Personal injury may result.

WARNING

Mercury Hazard. Do Not Break.

Each UV-C lamp contains a small amount of Mercury. May cause redness or irritation. Use proper disposal techniques in case of breakage.

Fuse Replacement

1. Disconnect power cord.
2. Unscrew the knob marked "Fuse" and remove fuse.
3. Install new fuse and screw knob back in place. Use a 3A/250V fast-acting glass fuse.
4. Reconnect power cord.

Lamp Disposal

Dispose of your spent UV-C lamps at your local recycling center. You may also send your spent lamps in the same container you received your replacement lamps to:

White-Rodgers UV Lamp Reclamation
1112 Industrial Park Drive
Royse City, TX 75189

Proper Clean-Up Technique In Case Of Lamp Breakage

- Wear protective gloves, eyewear and mask.
- Sweep the broken glass and debris into a plastic bag, seal the bag, and dispose of properly. Contact your local waste management office for proper disposal.
- **Do not use a vacuum cleaner. Do not incinerate.**

Replacement Parts	Part No.
UV-C Lamp	UVP-06207
Electronic Ballast (UV100)	UVP-06212
Electronic Ballast (UV200)	UVP-06213
Power Cord (120V)	UVP-212261-00
Power Cord (240V)	UVP-212107-00
Power Cord Receptacle	UVP-212106-00
Cover Interlock Switch	UVP-212108-00
Lighted On/Off Switch	UVP-750-0026-001
Fuseholder	UVP-212225-00
Fuse	UVP-750-0108-001

Do I still need an air filter?

Yes. The Comfort Plus™ UV-C lamp is designed to be used in addition to a dust filter or electronic air cleaner and the filtration of dust particles will also aid in keeping the bulb(s) of the Comfort Plus™ UV-C lamp unit clean. However, filters are inefficient at dealing with microscopic bacteria, molds, and viruses and are incapable of preventing mold from growing on a surface. The Comfort Plus™ UV-C lamp contributes significantly to the reduction of the small microbial organisms that pass through filters and into the general air system.



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212744-00 Rev. 1A 4/03