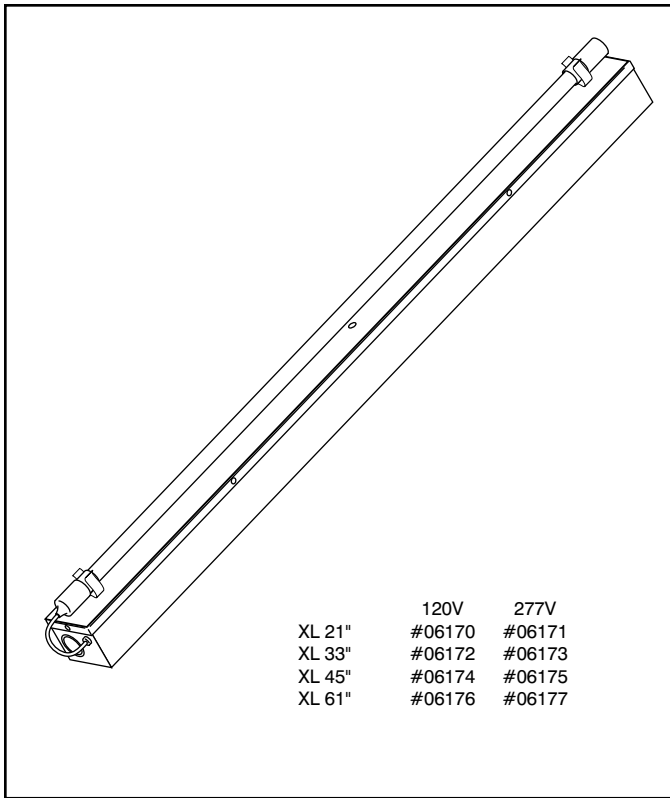


DUST FREE® BIO-FIGHTER® XL *Germicidal Ultraviolet Light*

Installation & Operation Manual



	120V	277V
XL 21"	#06170	#06171
XL 33"	#06172	#06173
XL 45"	#06174	#06175
XL 61"	#06176	#06177

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 Bio-Fighter® emits ultraviolet(UV-C) radiation at a frequency of 254 nanometers, which has been proven effective in damaging the DNA of microorganisms such as viruses, bacteria, yeast and molds. This process either destroys the microorganism or neutralizes its ability to reproduce.

FEATURES

- Reduces or prevents mold growth on large commercial HVAC coils, allowing them to operate at peak efficiency. Also destroys bacteria, viruses, fungi, and yeasts.
- High output, long life UV-C lamps.
- Low maintenance and reduced costs.
- Available in 120V or 277V models.
- Electronic ballast design.

INCLUDED INSIDE BOX

- Bio-Fighter® XL ultraviolet light system
- UV lamp
- Installation & operation manual
- Registration card
- UV-C warning label for duct

BEFORE INSTALLING

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

⚠ CAUTION

Professional Installation Only.

Only a qualified technician should install and maintain UV-C lighting or service equipment in which it is installed. Improper installation could cause human injury or equipment damage. Always disconnect electrical power prior to any HVAC maintenance. THIS INCLUDES FILTER MAINTENANCE.



PO Box 519
Royse City, TX 75189
PH: 1-972-635-9564
[Http://www.dustfree.com](http://www.dustfree.com)

Base Dimensions

MODEL	DIM. A	DIM. B	DIM. C
XL 21	24"	3.375"	2.5"
XL 33	36"	3.375"	2.5"
XL 45	48"	3.375"	2.5"
XL 60	64"	3.375"	2.5"

Weight:

- XL 21" - 3.9 lbs.
- XL 33" - 4.6 lbs.
- XL 45" - 6.4 lbs.
- XL 60" - 8.3 lbs.

Electrical:

120V, 50/60Hz, 1PH. Optional 277V, 50/60Hz, 1PH.

Operating Environment:

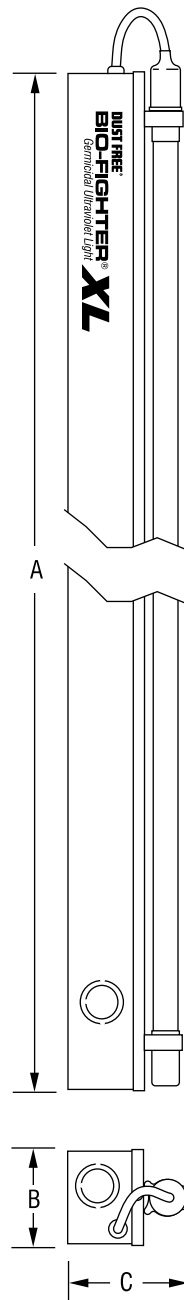
45° F - 150° F (Outside of duct.)

Listings:

FIFRA - File # 73316
 (Federal Insecticide Fungicide Rodenticide Act)
 Specifications subject to change without notice.

IMPORTANT:

The device must be installed in compliance with all national and local electrical and mechanical codes. Failure to do so will void ETL safety listing and Dust Free warranty.



⚠ WARNING

UV Light Hazard.
 UV-C light can cause temporary or permanent loss of vision, and sunburn. To prevent exposure, do not install device in any applications that allows UV-C light to be visible after installation.

⚠ CAUTION

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

UNPACKING THE BIO-FIGHTER® XL

The XL is packaged with a clear protective film covering the polished aluminum reflector. This film must be removed prior to operation. First remove the lamp from the lampholders and lay to the side. Then peel the film from the reflector.

PLACEMENT OF THE BIO-FIGHTER® XL

Each foot of fixture length will irradiate a three square foot area. For example, one five foot Bio-Fighter® XL can irradiate 15 square feet of surface area. To maximize efficiency of the UV-C light, each fixture should be placed 18-22 inches from the surface to be irradiated. Ensure no plastic parts or wire insulation is exposed, and that wherever the unit is placed, no light can be seen after installation.

INSTALLING THE BIO-FIGHTER® XL

Remove the lamp from the fixture and remove the cover. Mounting holes are pre-cut in each fixture making installation a bolt-on procedure using sheet metal screws or proper mounting hardware depending on installation. Uni-strut is commonly used to mount the unit.

CONNECTING TO POWER

With cover removed, use a screwdriver to remove one of the unit knockouts. Locate the ends of the wires and push through this hole. Connect the black wires to proper power and the green wire to ground.

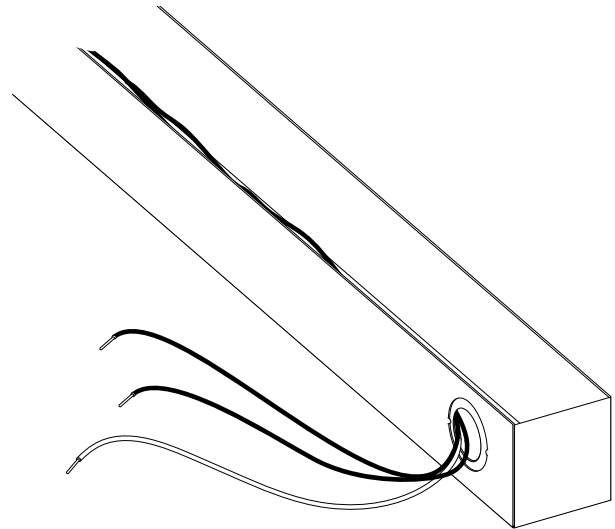
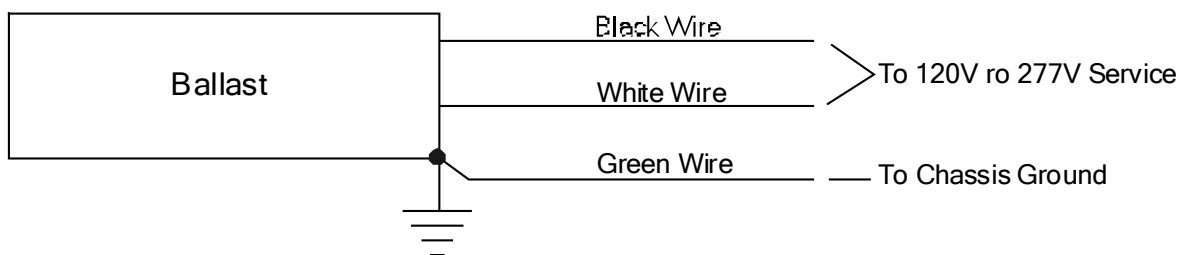


Fig. 1 Remove a knockout and connect black wires to proper power and connect green wire to ground.

Power Input Wiring Diagram



⚠ WARNING

Mercury Hazard. Do Not Break.

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

⚠ WARNING

Electrical disconnect required.

Areas where UV fixtures are installed must have access panel/door disconnect switches installed. Never view UV-C light without protective eyewear. See UV-C warning on page 2.

IF THE LAMP DOES NOT ILLUMINATE

- Check that the lamp connector is securely attached to lamp.
- Check that proper power is being supplied to the device, and that switch lights when turned on.

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. *Allow lamp to cool 10 minutes before touching.*
4. Disconnect the electrical connector to the lamp and remove the lamp from the lampholders.
5. Connect replacement lamp to electrical connector and place lamp in lampholders.
6. Reconnect power.
7. Verify operation.

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:

Dust Free® 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

Description	P/N
21" Replacement UV-C Lamp	06180
33" Replacement UV-C Lamp	06182
45" Replacement UV-C Lamp	06184
61" Replacement UV-C Lamp	06186
120V Replacement Ballast	06192
277V Replacement Ballast	06193

WARNING

Burn Hazard.

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

WARNING

Mercury Hazard. Do Not Break.

Each UVC bulb contains a small amount of Mercury. May cause redness or irritation. Use proper disposal techniques in case of breakage.