



STBF Series

Upper Air Pendant UVC Fixtures

Models: STBF-12 | STBF-12-220
STBF-24

Document	STBF_OpMan
Effective Date	7/27/2021
Revision	1.0

U.S. EPA Establishment Number: 89568-IN-001



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Introduction

STBF-series units are designed for ceiling suspended (pendant mount) installation. The louvered design of these fixtures allows irradiation of upper air in an occupied space.

Technical Information

STBF-24

Input Voltage	120 VAC, 50/60 Hz
Power Cable Length	Eight (8) feet
Lamp Type	Germicidal slimline, GML-type
Lamp Quantity	Four (4)
Dimensions (L x W x H)	40" L x 40" W x 10.18" H

STBF-12 & STBF-12-220

Input Voltage	120 VAC/60 Hz or 220VAC/50Hz
Power Cable Length	Eight (8) feet
Lamp Type	Germicidal, self-ballasted
Lamp Quantity	Six (6)
Dimensions (Diameter x Height)	22" D x 13" H (Height does not include pendant arm)



Safety

CAUTION!

Ensure all power is turned off when servicing the unit. Never expose eyes or skin to UVC light from any source. Wear protective eyewear and cover all exposed skin.

Safety Considerations

Improper installation, adjustment, alteration, service, maintenance, or use can cause fire, electrical shock or other conditions which may cause personal injury or property damage. Consult a qualified installer, service agency, or your supplier for information or assistance.

WARNING:

Before installing fixture or performing maintenance or service on fixture, turn off main power switch to unit. Electrical shock can cause injury or death. There may be more than one disconnect switch.

CAUTION!

Do not touch lamp quartz without gloves. Damage to lamp may result. Oil from fingerprints will permanently etch quartz envelope of lamp, weakening structure and diminishing output. Clean lamp after handling.

CAUTION!

Lamps contain a small quantity of mercury. In case on lamp breakage, take proper precautions in clean-up and disposal.

It is recommended that a qualified technician perform the installation of the fixtures as per the guidelines.

Follow all safety codes, wear safety glasses and work gloves. Read all instructions thoroughly and follow any warnings or cautions attached to any accessed area. Consult local building codes and National Electrical Code (NEC) for special requirements.

Understand the signal words DANGER, WARNING or CAUTION. These words are universally used for overall safety. DANGER identifies the most serious hazards, which will result in severe personal injury or death. WARNING signifies hazards, which could result in personal injury or death. CAUTION is used to identify unsafe practices, which would result in minor personal injury or product and property damage.

Installation

- When choosing the site, make sure that it can be supplied with the necessary power and suitable physical access for service.
- Consult all applicable codes before installing.
- Check fixture label(s) for correct power requirements and supply the correct voltage from a suitable, protected (fused), and grounded power source.

CAUTION!

**Other voltages will void fixture warranty and do permanent damage to the entire unit.
Fixtures should be operated continuously for optimal results**

Recommended Fixture Mounting Height

Fixture	Fixture Mounting Height* (ft.)
STBF-24	12.5 ft
STBF-12	8.5ft
STBF-12- 220	8.5ft

**Fixture mounting height measurement is from floor to bottom of the louvers.*

CAUTION!

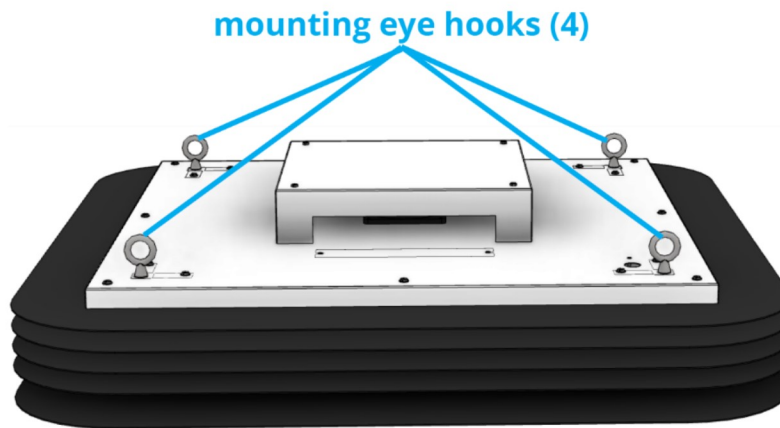
Never install units below minimum mounting height from the floor.

STBF-24 Mounting

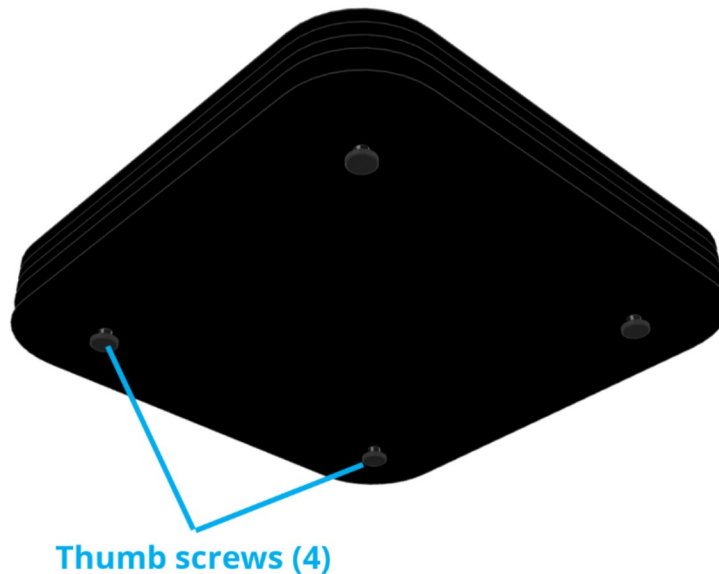
The STBF-24 fixture is designed as a high-bay type fixture and should be mounted a minimum of 12.5' from the finished surface of the floor

Suitable mounting locations should be determined via consultation with your American Ultraviolet representative to ensure even and adequate coverage of the upper air in the application area.

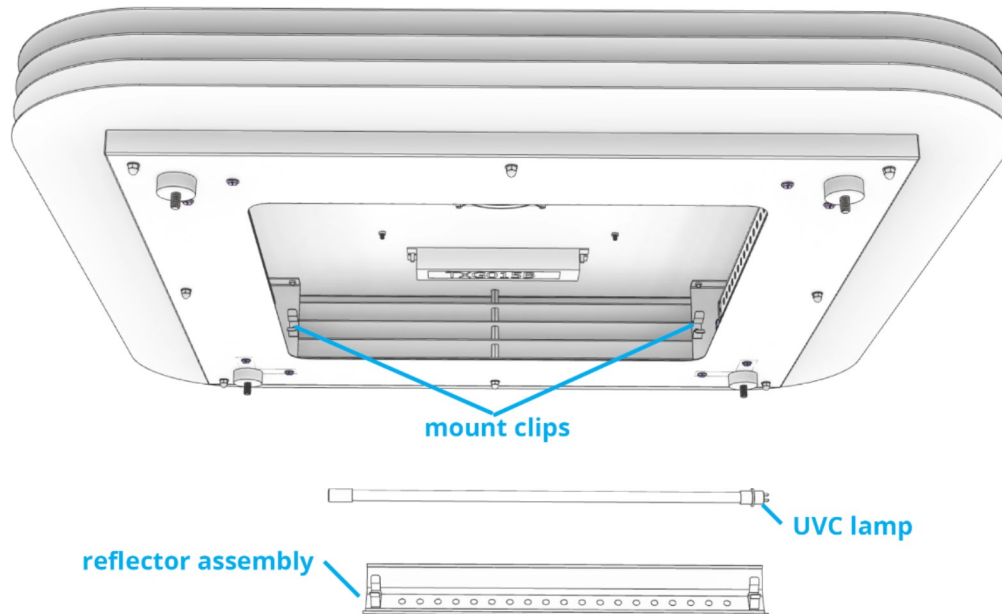
Once proper mounting location has been determined, the fixture shall be physically supported via the four (4) eye hooks located at each corner of the fixture.



- 1) Install lamps by removing bottom panel via four (4) thumb screws.



- 2) Attach each of the four (4) reflector assemblies to each of the four (4) UVC lamps.



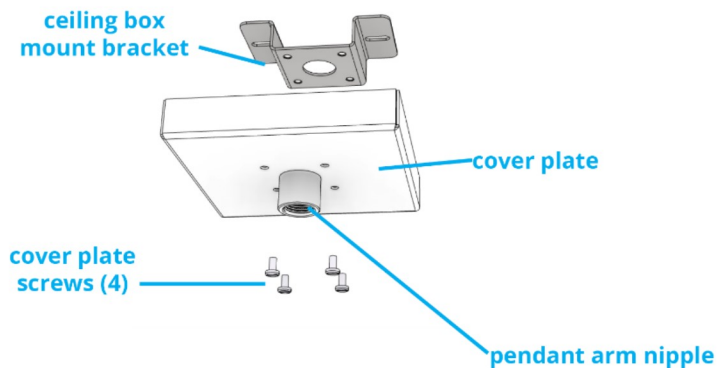
- 3) Attach lamp & reflector assemblies to mount clips inside fixture as shown above.
- 4) Attached one lamp socket to 4-pin end of each lamp, making certain the lamp is fully engaged in the socket.
- 5) Replace bottom panel and thumb screws.
- 6) Wiring should be run per local electrical code to bring power to the fixture power cord.

STBF-12 and STBF-12-220 Mounting

Suitable mounting locations should be determined via consultation with your American Ultraviolet representative to ensure even and adequate coverage of the upper air in the application area.

Once proper mounting location has been determined, the fixture shall be physically supported via the provided mounting bracket that is designed to mount to a standard ceiling electrical box.

- 1) Select appropriate length pendant arm and attach to fixture via threaded coupling on top of fixture.



- 2) Attach cover plate to top of pendant arm via threaded pendant arm nipple on cover plate.

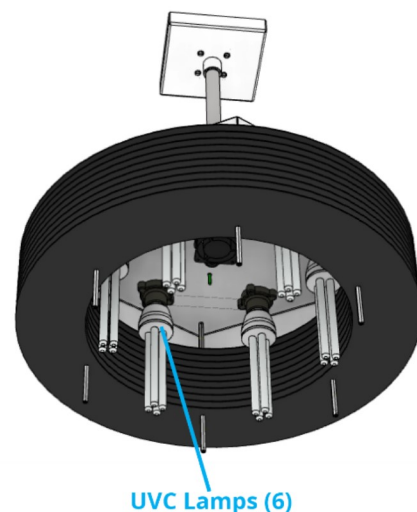
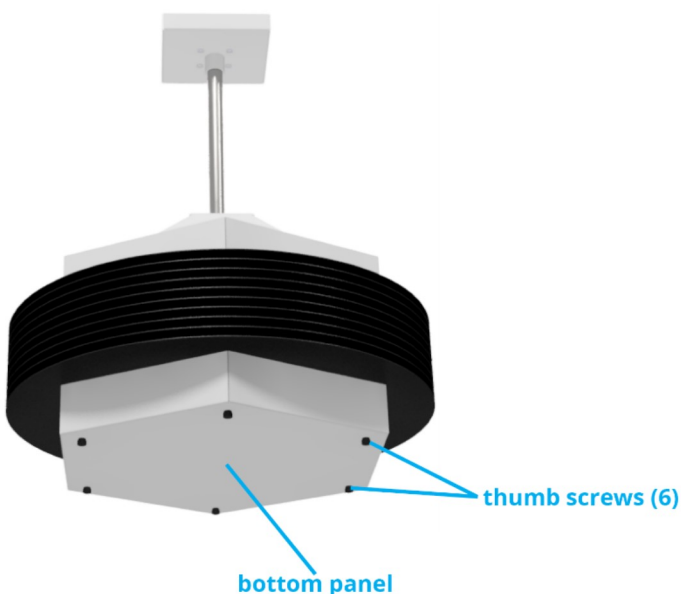
- 3) Run wiring from fixture, through selected pendant arm and cover plate.

- 4) **Make certain all power to ceiling box is disconnected!**

- 5) Wiring should be run per local electrical code to bring power to the

fixture wiring.

- 6) Attach assembled fixture to mount bracket with the provided screws.
- 7) Remove bottom panel of fixture via six (6) thumb screws and screw in all (6) UVC lamps to the lamp sockets as you would a standard light bulb.
- 8) Replace bottom cover and thumb screws.
- 9) Power to the fixture may now be turned on.





Electrical Installation

- Once wired properly, switch on power to fixture(s)
- Each lamp will have a blue “glow” which indicates that fixtures are operating as designed.

CAUTION!

UV lamps to be viewed only with proper protection for eyes and all exposed skin.



Operation

Fixtures should remain “on” at all times. Cycling fixtures on/off with a timer is not recommended and can severely shorten effective lamp life.

Maintenance

Fixture maintenance for the STBF series consists of scheduled lamp replacement and cleaning of the reflector mounted behind the lamps (STBF-24 only).

- The slimline-type lamp used in the STBF-24 is designed for an effective life of 17,000 hours (approximately 2 years). Lamps must be changed at or before 17,000 hours to maintain designed efficacy.
- The self-ballasted lamps used in the STBF-12 and STBF-12-220 are designed for an effective life of 9,000 hours (approximately 1 year). Lamps must be changed at or before 9,000 hours to maintain designed efficacy.

Lamp Replacement

- 1) Switch unit off and turn off power/unplug unit
- 2) Remove bottom panel of unit using the thumb screws
- 3) Remove old lamps
- 4) Wearing lint-free gloves, install new lamp
- 5) Remove any dust or fingerprints from lamp and reflector (behind lamp) with isopropyl alcohol and a lint-free cloth.
- 6) Replace bottom panel.
- 7) Turn power back on/plug unit back in and switch unit on.

Caution!

UV lamps to be viewed only with proper protection for eyes and all exposed skin.

Spare Parts

Part Number	Description
GML1024	Replacement lamp for STBF-24
GML550	Replacement lamp for STBF-12 – 120V/60Hz
GML560	Replacement lamp for STBF-12-220 – 220V/50Hz
TXG015B	Electronic ballast for STBF-24 fixtures



Commissioning

Fixture Commissioning Checklist

It is recommended that the items below be reviewed and completed as part of an installation and start up commissioning plan

Installation

- Has anything changed on the site after initial fixture specifications and purchase?
- If yes, review specifications to ensure fixtures are correct for the site
- Were all required permits obtained prior to installation?
- Has fixture been installed as per published guidelines and manufacturer instructions using a qualified technician?
- Have all recommended safety signs or labels been applied in the correct location for maximum visibility?

Commissioning

- Perform radiometer readings utilizing a calibrated radiometer and record results
- Verify readings conform to published ASHRAE/NIOSH output standards for effectiveness and safety.
- Adjust fixture as required to meet published standards.
- Provide training for safe operation to personnel involved in the operation and maintenance of the unit
- Provide written safety instructions (if applicable) along with contact information for questions or concerns

Maintenance

- Train maintenance personnel how to perform lamp inspections, cleaning of the fixture, and lamp replacement
- Set schedule for lamp inspection, cleaning, and replacement.
- It is recommended that periodic radiometer testing be performed to ensure performance is completed. Every 6 months is a recommended interval to start.
- It is recommended in the first 90 – 120 days that personnel working daily on the site be surveyed to ensure there are no cases of eye strain or physical discomfort

Decommissioning

- In the event the fixture needs to be removed, please arrange for qualified technicians to de-energize and safely secure electrical power prior to removing
- Recycle lamps, ballasts and metals as per local codes