PURGE VIRUS
STAY SAFE and HEALTHY

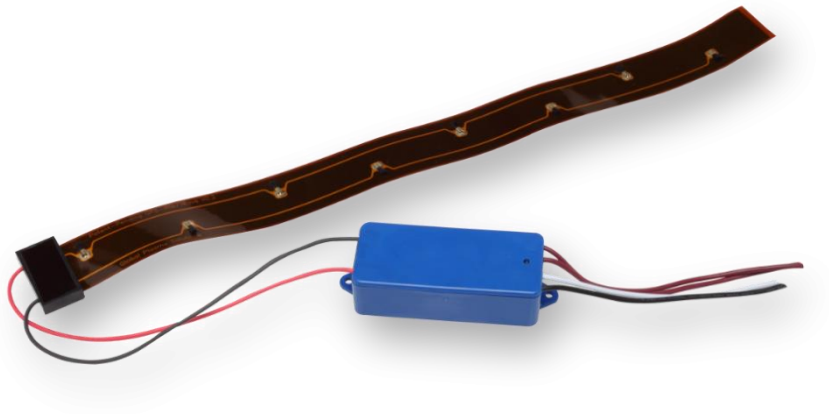
PV-PTAC-BPI-18 and PV-PTAC-BPI-36

Reducing the spread of COVID-19 includes PTAC Disinfection to clean the air in rooms that do not use HVAC systems with ducts. PTAC Units (Packaged Terminal Air Conditioner) are a type of self-contained heating and air conditioning system commonly found in:

Hotels – Motels – Senior Housing Facilities – Hospitals – Condominiums – Apartment Buildings – Add-on Rooms & Sunrooms.

PURGE VIRUS DOESN'T MAKE PTAC UNITS…WE RETROFIT THEM TO DISINFECT INDOOR AIR

(These devices are available to either purchase or purchase with installation.)



THE FIRST FLEXIBLE ION BAR AIR PURIFICATION DEVICE

PRODUCT DESCRIPTION

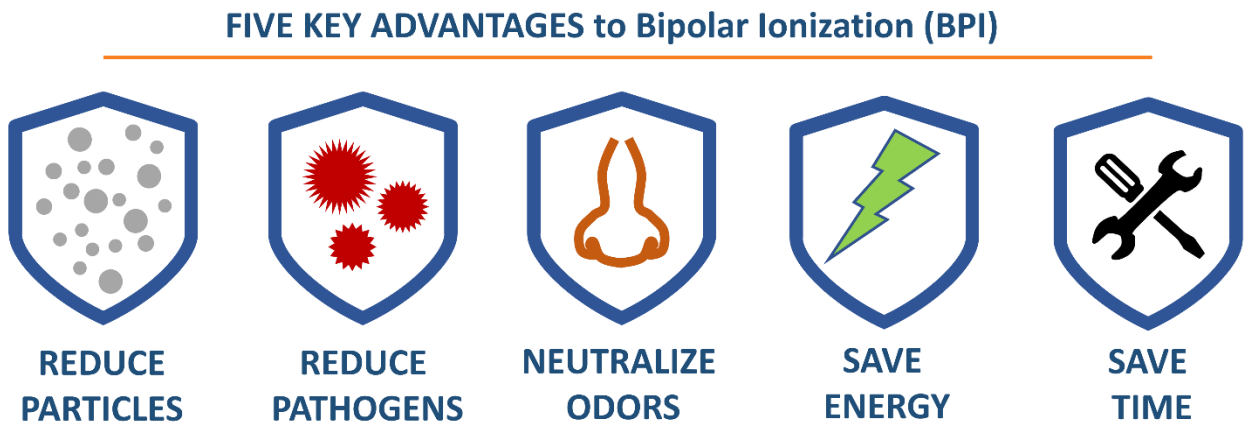
The **PV-PTAC-BPI-18/36** is available in 18-inch and 36-inch lengths. When ordering choose either PV-PTAC-BPI-18 or PV-PTAC-BPI-36. The "BPI" is for the Bipolar Ionization technology, which does not produce any ozone. Be careful purchasing other Bipolar Ionization devices that in most cases produce ozone, which is harmful to humans. These devices are made from a flexible chemical, heat and cold resistant Kapton® material containing a circuit with special carbon fiber ion emitters soldered into the circuit traces. What was a mechanism to

transport voltage and signals between solid objects has now been engineered to deliver the highest level of ionization with the least amount of energy in the most compact size.

SIZING TO HVAC SYSTEMS:

PV-PTAC-BPI-18: **0-2400 CFM / 1-6 Tons**
The 18 inch flexible ion bar can be used on **coils up to 30 inches wide**.
PV-PTAC-BPI-36: **0-3200 CFM / 1-8 Tons**
The 36 inch flexible ion bar can be used for **coils up to 48 inches wide**.
For coils beyond the ionizer length, simply center the ionizer on the coil to make sure the ionization best covers the coil width.

BENEFITS



1. Particle Reduction and Smoke Control
2. Pathogens killed (Bacteria, Viruses, Mold), Helps to Control Allergens/ Asthma*, Prevents Dirty Sock Syndrome
3. Odors neutralized by destroying Volatile Organic Compounds (VOCs)
4. Energy Savings of 30% by Reducing Outdoor Air Intake by up to 75%, reduces pressure loss by keeping coils clean without more expensive Ultraviolet (UV) system
5. Requires No Maintenance!

*These statements are based on numerous customer testimonials provided to the manufacturer and have not been evaluated by the FDA.

- > 35 Million +/- Ions/cc per Foot
- Fold-to-Length Circuit
- Local LED Power Indication
- Integral Building Automation System (BAS) Alarm Contacts
- Velcro® for Easy Installation

COMMERCIAL APPLICATIONS

PTACs

Plus:

- Traditional Split Systems
  Ducted Modules
- Ductless Mini Splits
- Air Handlers
- Fan Coils
- Ceiling Cassettes

SPECIFICATIONS

Input Voltage: 110VAC - 240VAC

Power: 5 Watts

Frequency: 50/60Hz

Voltage Output: 2KV

Ion Output: >200M ions/cc per foot

Power Unit Dimensions: 1”H x 1.75”W x 3.75”L

Dimensions:

PV-PTAC-BPI-18: 1.5”W x 18”L x 0.05”H

PV-PTAC-BPI-36: 1.5”W x 36”L x 0.05”H

Weight: 0.5 lbs for 18”/ 0.54 lbs for 36”

Alarm Relay Rating250VAC/ 1A

Electrical Listing: UL, cUL, CE

Alarm Contact: Dry Contact with LED Status

Airflow Capacity: 0 - 3,200 CFM or 8 tons

Temperature: 40°F to 140°F

Compliance & Certifications: UL 2998, UL 867, IAQP, OSHPD Seismic (OSP)

Standard Features: Comes in 18” or 36” fixed lengths, fold-to-length circuit, local LED power indication with integral control relay for BAS interface, hook and loop tape for easy installation and a wide voltage input range of 110VAC to 240VAC.

Installation, Operation and Maintenance Manual

Installation: The **PV-PTAC-BPI-18/36** are highly versatile ion devices that is designed to be installed on the cooling coil in ductless AC systems or PTACs. The device requires no replacement parts and it can be integrated into wall or ceiling cassette indoor coils of ductless mini-splits, PTAC units or other systems where there may not be enough room to install other products between the filter and coil. **The 18 inch flexible ion bar can be used on coils up to 30 inches wide. The 36 inch flexible ion bar can be used for coils up to 48 inches wide.**

For coils beyond the ionizer length, simply center the ionizer on the coil to make sure the ionization best covers the coil width. Simply peel off the paper backing to the ionization bar and stick it across the width of the coil. Connect the appropriate leads of the device to 110VAC to 240VAC, peel off the power supply paper backing and mount. Reassemble the equipment and turn on power to the unit.

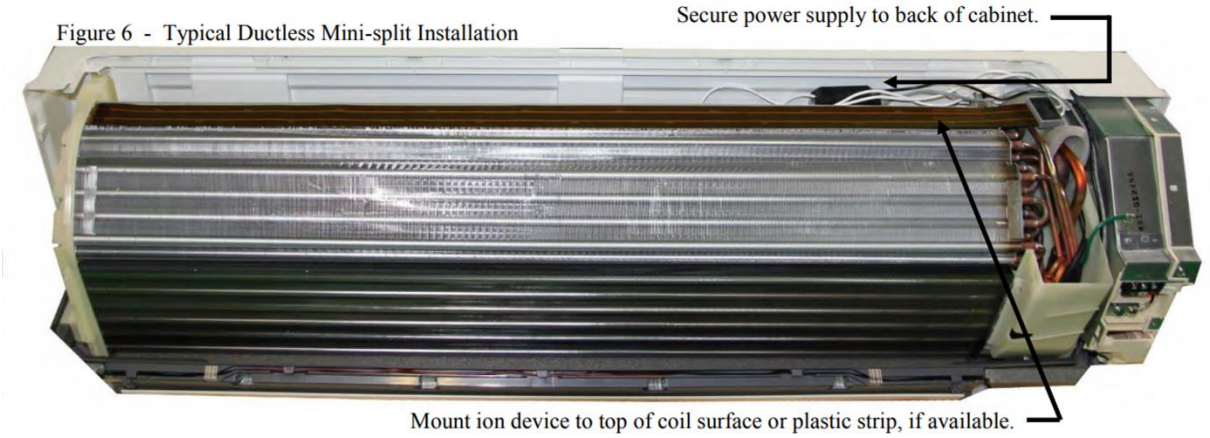
Ductless Mini-Split and PTAC Mounting and Wiring Instructions:

1. Turn power off to the ductless mini-split or PTAC.

2. Remove the filter screens and cover, exposing the coil surface and power box.

3. Peel paper backing off ion strip and adhere it to the finned surface. Some ductless mini-split units are provided with a plastic strip along the top of the coil. If the plastic strip is provided, mount the ion bar to the plastic strip. Refer to Fig 6. CAUTION: Keep emitter tips away from loose wires or anything grounded.

Figure 6 - Typical Ductless Mini-split Installation



4. Each AHU brand will have different space restraints for the power supply. Find an appropriate place to mount the power supply and remove the paper backing. Press the power supply firmly to the mounting location. See Fig 6.

5. Run wires to the electrical compartment. Connect the black wire to 110-240VAC and the white wire to neutral. For 208-240VAC installations, connect the white wire to the other hot leg, depending on power supplied.

Ductless Mini-Split and PTAC Mounting and Wiring Instructions Continued:

7. Trim wires to length and connect to the appropriate power terminals, normally L1 and L2. Secure wires properly with wire ties or other NEC approved methods.

8. Replace cover and filter screens.

Operation:

1. Turn power on to AHU.

2. The ion device will be powered when power is applied to the AHU. Note: the ion device is designed to remain energized 24/7 and does not have to cycle with the fan.

3. Once power is applied, the integral LED will illuminate proving the device is active.

BAS Alarm Operation:

1. The purple wires connect to the integral alarm relay. When the unit is powered and there are no faults, the alarm contacts will be closed. When there is a fault, the contacts will open.

Maintenance:

1. Remove power from the AHU and remove the required parts to access the ion bar. Confirm the ion bar power supply LED is not illuminated. It is good practice to ensure all voltage is removed from the ion bar to take a screwdriver with insulated handle and touch a carbon fiber brush brass connector on one side to another on the opposite side. This will discharge any remaining voltage that could cause a potential shock hazard during maintenance.

2. Use a wet wipe or damp cloth to clean the ionizer bar. A soft bristle brush, like a toothbrush, can also be used to clean debris from ion emitters. Do not expose the ion bar to corrosive cleaners.

How to Reduce the Length of the Flexible Ion Bar:

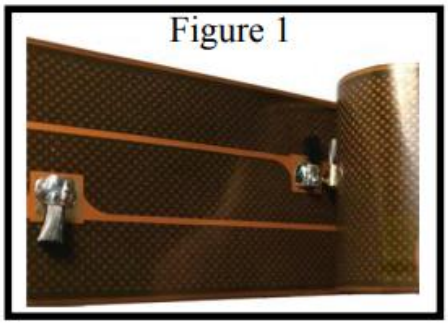
1. Measure how much past the end of the coil the flexible ion bar extends.

2. Bend the bar back on top of itself (DO NOT bend under with the sticky backing

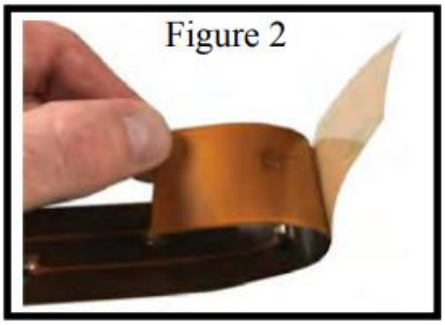
facing each other) so the brush pairs on the top will lay next to the brush pairs

on the bottom, shown in Figure 1. The brass housings should be touching.

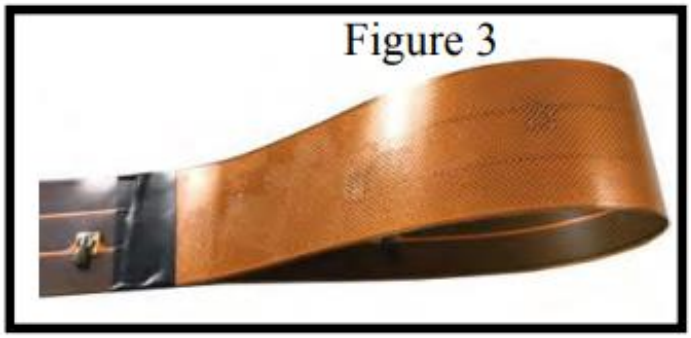
Figure 1



3. Peel the backing off of the ion bar and press it down to the cooling coil starting at the power entry side of the device. DO NOT press down on the end of the ion bar that will need folded to shorten the length. See Figure 2.

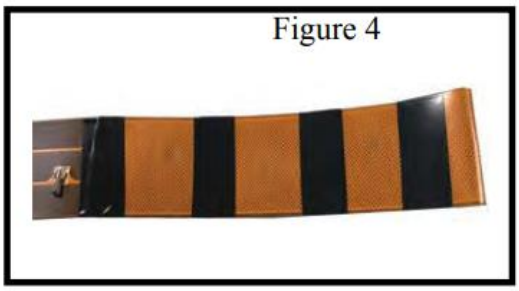


4. Fold the ion bar back to achieve the length required, lining up the bottom and top layer brush pairs as shown in Figure 1, and place a piece of electrical tape across the joint. See Figure 3.



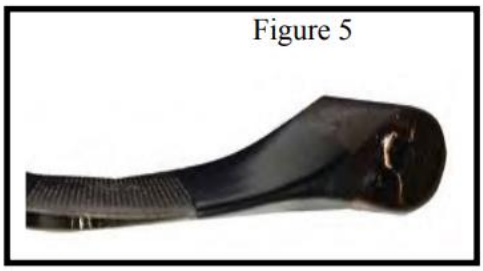
How to Reduce the Length of the Flexible Ion Bar Continued:

5. Continue to use electrical tape down the ion bar towards the end, making sure that the tape joints are between the brush pairs. DO NOT allow the tape to cover the brush pairs. Figure 4.



6. DO NOT crease the end of the ion bar flat. As a guide, use a #2 Phillips screwdriver inside the fold joint to ensure the proper bend is achieved. See Figure 5.

Figure 5



7. Once the flexible ion bar has been folded and taped to the length required, push it down on the coil.

8. A successful fold procedure will create “pockets” for the carbon fiber brushes to emit the ions.