Ozone Systems

Installation & Operation Manual

ComAir 20T

Commercial Indoor Air Purification System

ClearWater Tech, LLC.
Integrated Ozone Systems
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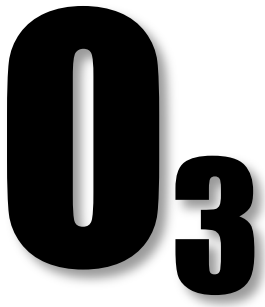


INTRODUCTION

This Installation and Operation Manual is written to assist in the installation, operation and maintenance of air purification systems manufactured by ClearWater Tech, LLC. This equipment has been designed using the most modern materials and technology available.

Please read this manual carefully and in its entirety before proceeding with any installation, operation or maintenance procedure associated with this equipment. Failure to follow these instructions could result in personal injury, damage to the equipment or reduced product performance.

In an ongoing effort to improve reliability and operating efficiency, ClearWater Tech may find it necessary to make changes to its products. Therefore, the information contained in this manual may not conform in every respect to earlier versions of ClearWater Tech ozone systems found in the field. If you have any questions, please contact your ClearWater Tech dealer or the ClearWater Tech service department.

TABLE OF CONTENTS

Safety Information

Always make sure the system is unplugged during installation or service procedures.

WARNING: THE ULTRAVIOLET LIGHT PRODUCED BY THE UV LAMPS IS HARMFUL TO THE EYES. DO NOT LOOK DIRECTLY AT THE LAMPS. SHOULD IT BECOME NECESSARY TO LOOK AT THE LAMPS, USE UV-PROTECTED SUNGLASSES.

IMPORTANT SAFETY INSTRUCTIONS

When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

1. **READ AND FOLLOW ALL INSTRUCTIONS.**
2. **Connect to a grounded, grounding type receptacle only.**
3. **Warning – To reduce the risk of electrical shock, replace damaged cord immediately.**
4. **Warning: For indoor use only. This unit is not intended for outdoor use.**
5. **Do not look at the UV lamps. Ultraviolet light is harmful to the eyes.**
6. **Fully install unit in the duct before plugging it into power.**
7. **SAVE THESE INSTRUCTIONS.**

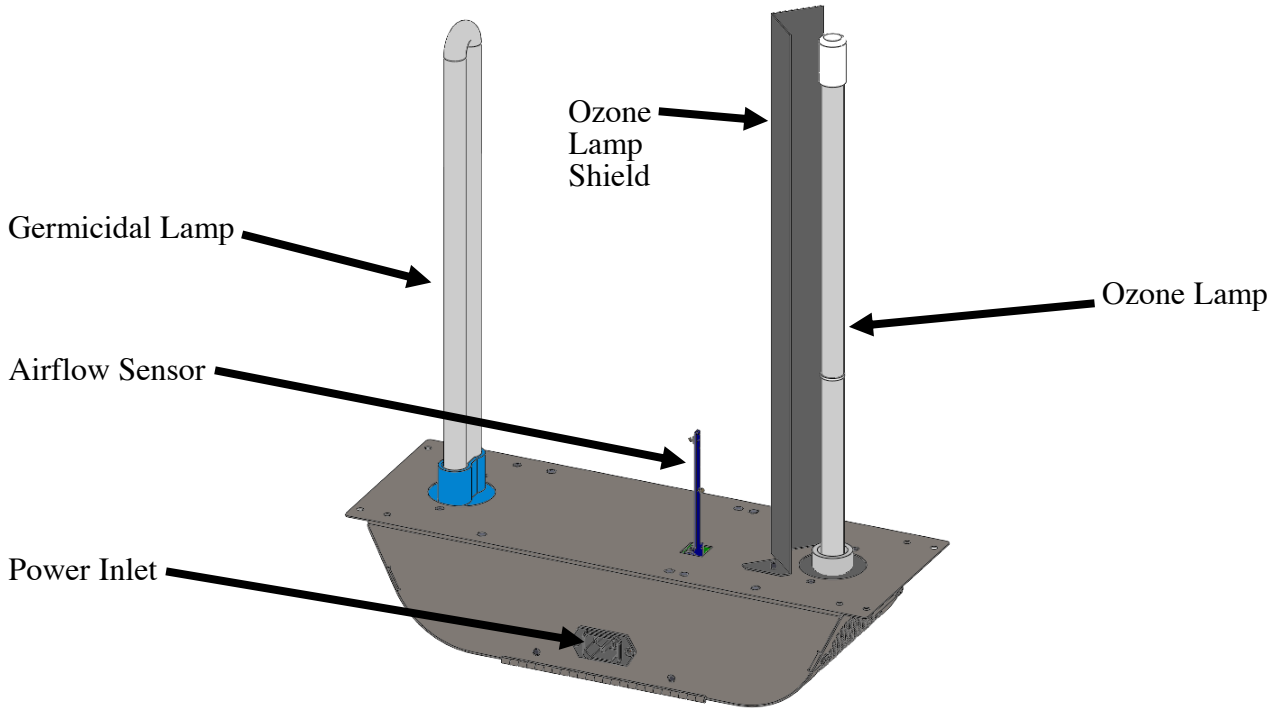
Theory of Operation/Product Description

The ComAir 20T is designed to help remove pathogens and odors ranging from food, tobacco smoke, pets, and other objectionable smells that may be present in your business or residence.

This system from ClearWater Tech utilizes two different Ultraviolet lamps creating UV light at two distinct wavelengths. The ozone lamp creates light at 185nm, which is easily absorbed by oxygen molecules. This added energy causes the oxygen molecules to break apart into single oxygen atoms, which then combine with other oxygen molecules to create ozone. Ozone is the world's most powerful natural oxidizer. It is effective at oxidizing pathogens (bacteria, viruses, mold, etc.), as well as VOCs, odor, smoke, and allergens.

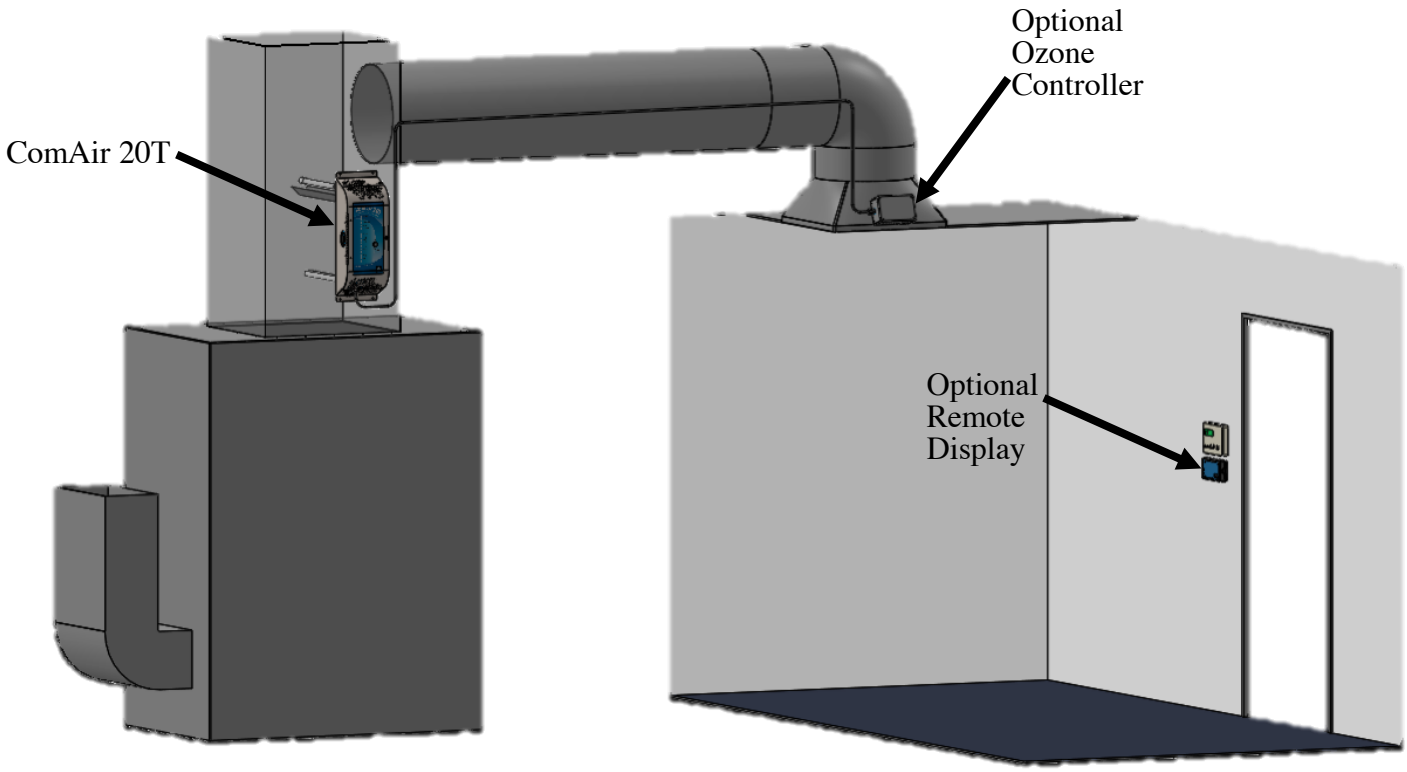
The germicidal lamp creates light at 254nm, which is absorbed by DNA molecules in unwanted pathogens. The extra energy disrupts the DNA molecule inhibiting the pathogen from reproducing.

Figure 1 – ComAir 20T External Components



The ComAir 20T is designed to install easily into the air duct, placing the ozone UV lamp, germicidal UV lamp, and an airflow sensor into the air stream. As air passes through the air duct the airflow sensor will initiate power to both UV lamps. Incoming air will first pass by the high-powered germicidal UV lamp. Pathogens in the air stream will be sterilized as the Ultraviolet light disrupts their DNA. As the air continues to travel down the duct the air will pass by the ozone lamp where a small amount of ozone will be created in the airflow. This ozone will then travel with the air through the ducting where its oxidation of pathogens and other contaminants takes place.

Figure 2 – Typical ComAir 20T Installation



An optional ozone sensor allows the ComAir 20T to regulate the ozone output levels produced within the ducting. This ensures safe environmental levels in the occupied space. An optional remote display allows the ComAir 20T to be monitored and controlled in a more convenient location.

Installation Procedures

Unpacking

Carefully remove the parts from the package. The lamps are fragile and proper care must be taken when removing packaging that is placed around them.

DO NOT TOUCH THE LAMPS WITH YOUR BARE HANDS AS OILS FROM YOUR HANDS CREATE "HOT SPOTS" WHICH REDUCE THE LAMP LIFE. In case of contact with the lamp, wipe the lamp clean with a soft cloth dampened with rubbing alcohol.

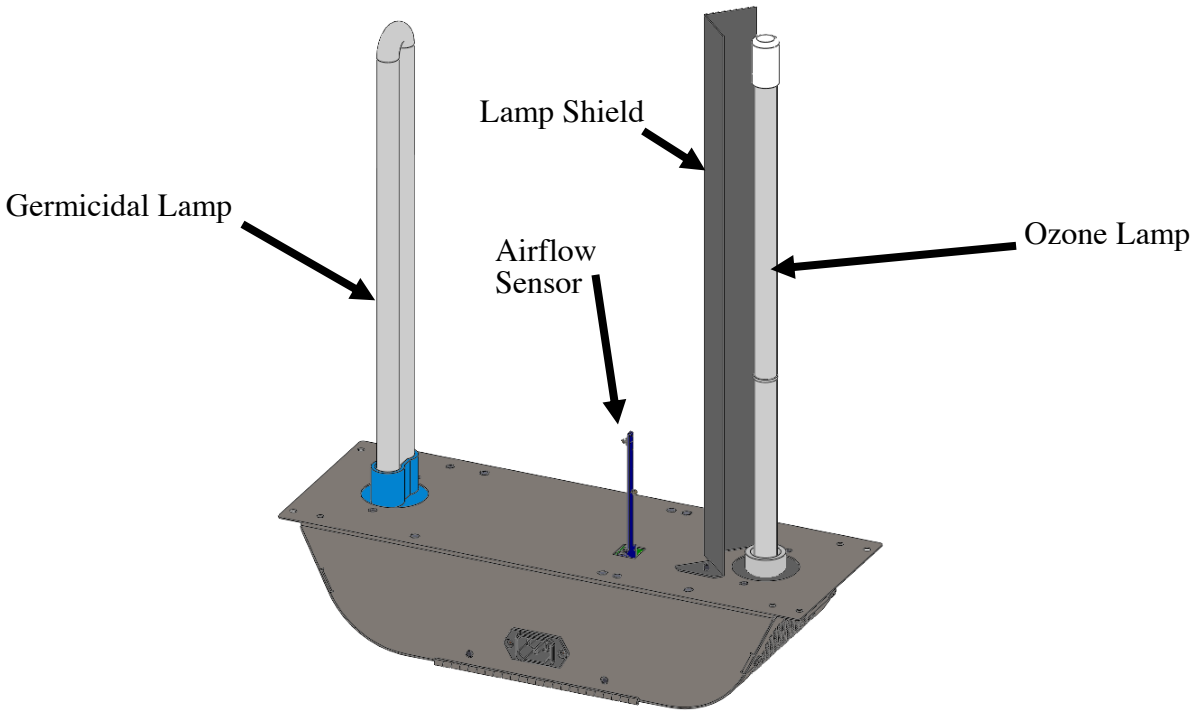
In addition to this manual, check to make sure you have all of the following parts:

- ComAir 20T
- Ozone Lamp
- Germicidal Lamp
- Lamp Shield
- Airflow Sensor PCB
- Self-tapping Screws (Quantity 4)
- Installation Template
- Power Cord

Assembling the ComAir 20T

1. Remove the screws from the cover of the unit and open the cover.
2. See figure 3 for locations of components. Install lamp shield by using the hardware that is attached to the main unit. Attach the shield to the main unit and tighten the two nuts.
3. Install the Ozone lamp
   a. Loosen the lamp lock nut from the lamp holder by turning it counterclockwise and remove.
   b. Remove the metal washer and the rubber bushing from the lamp holder and install the rubber bushing on the lamp base.
   c. Slide the lamp into the lamp opening. Handle lamp by the end cap.
   d. Re-install the metal washer and lamp lock nut.
   e. Carefully tighten the lamp lock nut.
   f. Connect the lamp connector to the end of the lamp.
   g. Make sure the other side of the lamp connector is inserted completely on the daughter board lamp pins.
4. Install the Germicidal lamp
   a. Remove nuts and washers from the mounting studs.
   b. Place the two rubber washers on the mounting studs first.
   c. Slide the lamp into the main unit and align so the mounting ears on the lamp go through the mounting studs on the main unit.
   d. Install the hard-plastic washers and nuts.
   e. Tighten the nuts snugly, but do not over tighten
   f. Connect the lamp connector to the end of the lamp.
   g. Make sure the other side of the lamp connector is inserted completely on the main ballast board lamp pins.
5. Insert the Airflow Sensor PCB into the hole on the bottom of the unit. The sensor connector is keyed so it can only go in one way.
6. Make sure the ribbon cable is inserted completely in the main ballast board and the control board on the cover.

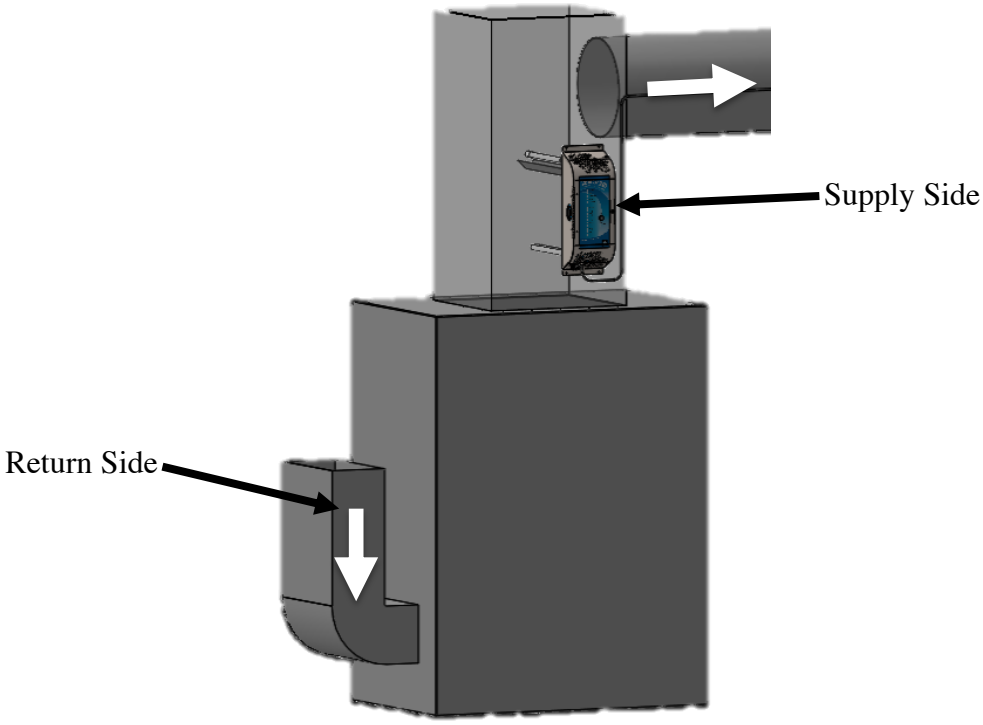
Figure 3 – Assembled ComAir 20T



Picking an Installation Location

The ComAir 20T may be installed either in the main return duct or the main supply duct as shown in the Figure 4 below. When installing on the supply side, locate it as far away from the heating source as practical while remaining in the main air stream.

Figure 4 – ComAir 20T Installation Locations



ComAir 20T Installation

While performing installation procedures all power to the unit must be 'Off' and there should be no airflow through the heating/cooling system.

1. A template may be used for installation of the ComAir 20T. The template is included in the shipping box. Refer to figure 4 for mounting locations.
2. If possible, install the ComAir 20T so the airflow passes over the germicidal lamp first and then passes over the ozone lamp. The cover can be reversed by removing the hinge nuts and attaching the hinge cover to the opposite side of the chassis. This will allow the cover to be oriented so it is easy to read and operate the unit once it is installed.

Figure 5 – How to Flip the Cover Orientation

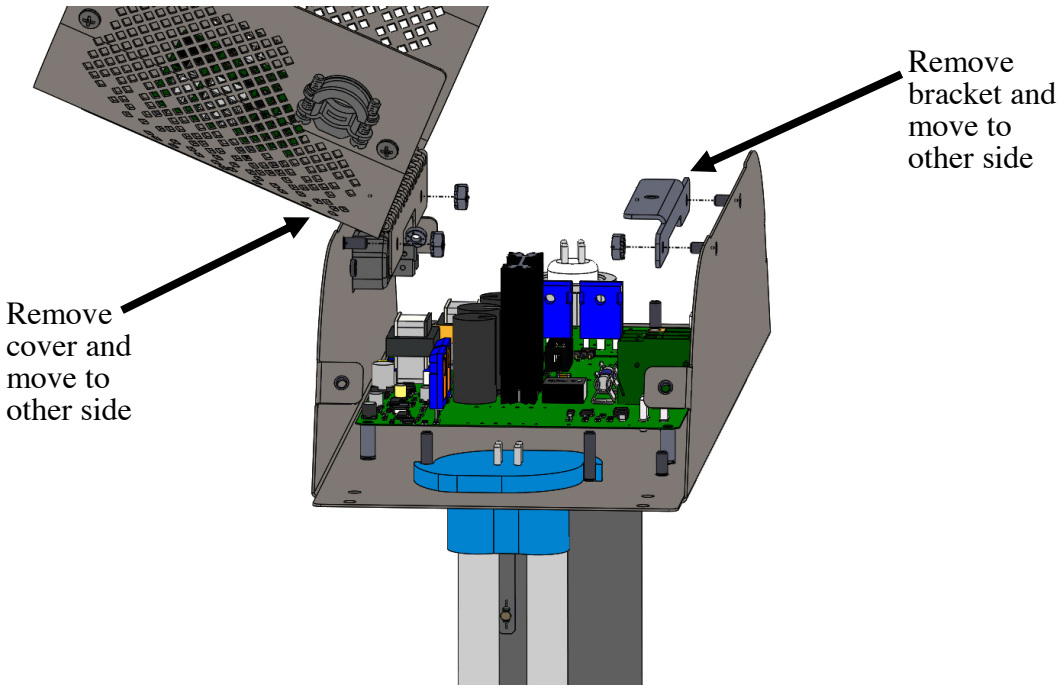
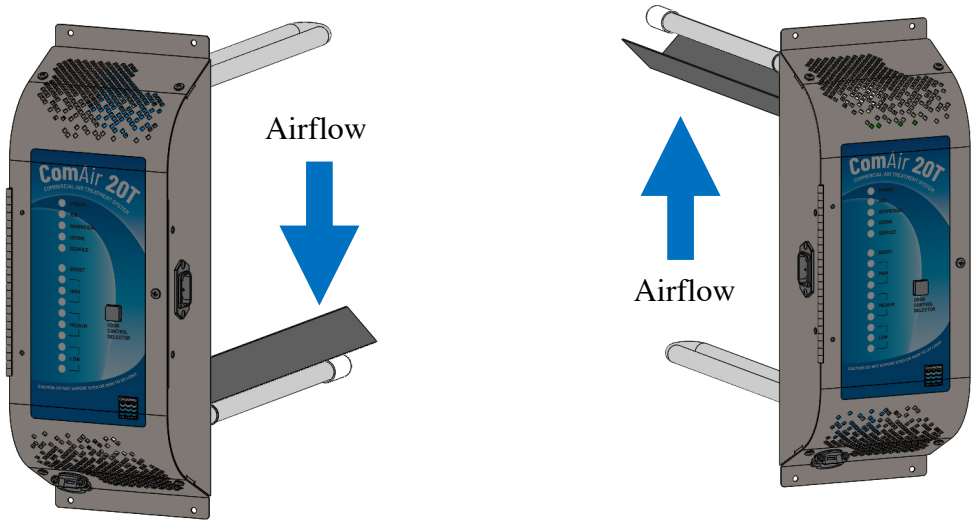
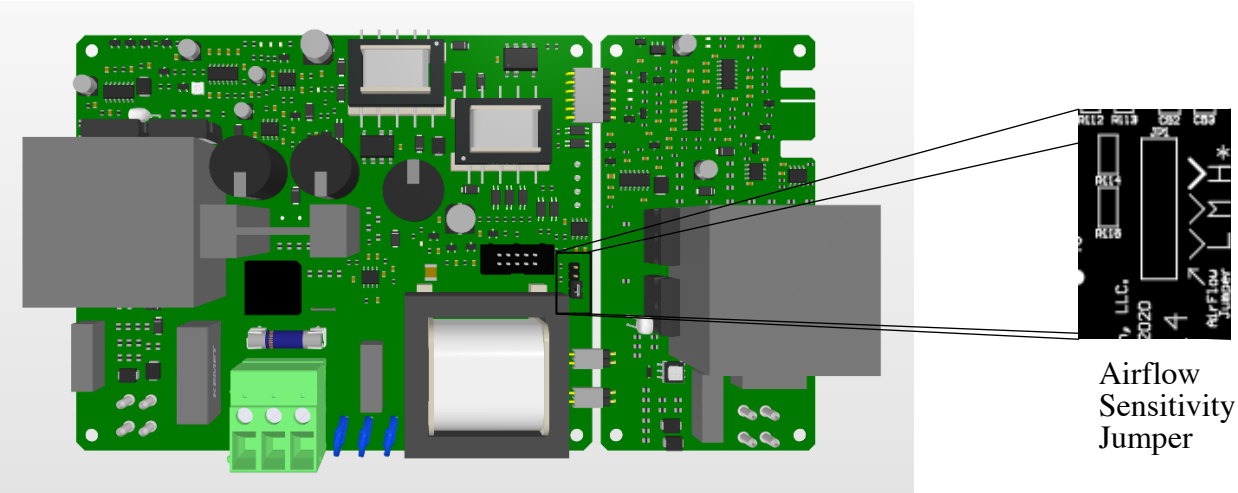


Figure 6 – Cover Orientation Options



3. Attach the installation template to the ductwork using tape.
4. Cut out openings in ductwork for the unit. See template for steps and recommended tools.
5. There are 4 mounting holes provided inside the cover and 4 mounting holes provided on the outside of the unit. Either set of holes are acceptable to use. Position the ComAir 20T into ductwork and secure with the self-tapping screws provided, using a 5/16" nut driver.
6. Close the cover and secure with the cover screws.
7. Connect main power to a non-switched power supply (90-265 VAC). Note: On initial startup, the 'Power, Air, Germicidal, Ozone and Low' lights will remain on for 30 to 120 seconds. After this time the 'Air, Germicidal and Ozone' lights will turn 'Off'. If the lights do not turn 'Off', the airflow sensitivity might need to be adjusted to be less sensitive. The system can be set for L - Low Sensitivity (more airflow is required to turn the system 'On'), M - Medium Sensitivity and H - High Sensitivity (less airflow is required to turn the system 'On'). See figure 7 below for location of airflow sensitivity jumper.

Figure 7 – Airflow Sensitivity Jumper



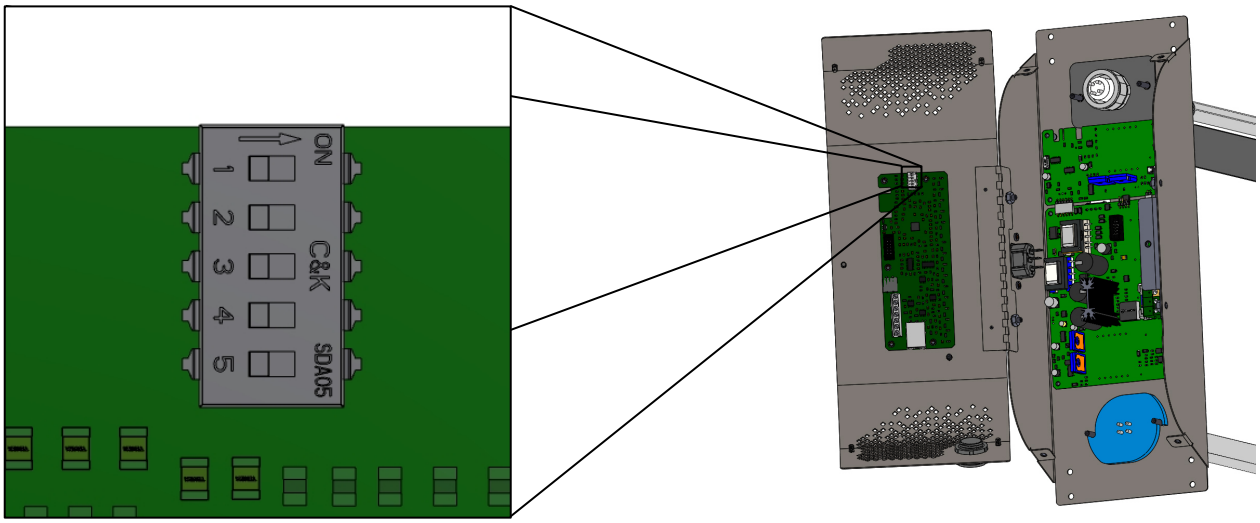
8. Turn 'On' heating/cooling system and allow it to operate for five minutes, at this time the 'Air, Germicidal and Ozone' lights should illuminate. If the lights do not turn 'On', the airflow sensitivity might need to be adjusted to be more sensitive. See figure 7 for the airflow sensitivity jumper.
9. Turn 'Off' heating/cooling system, the ComAir 20T will shut-down within 5 to 30 seconds. After this time the 'Air, Germicidal and Ozone' lights will turn 'Off'. The 'Power' and 'Low' lights will remain on when unit is not in operation.
10. The ComAir 20T is now ready for use.

    Note: Ozone air treatment occurs only when air is circulating through the heating/cooling system. For maximum effectiveness and continuous air purification, turn the thermostatic controller switch from the 'AUTO' position to the 'ON' position. The switch is located on the thermostat. Open windows or doors and dirty ductwork may diminish the unit's effectiveness.

Setting the ComAir 20T

Inside the cover on the Control Board are 5 dip-switches that allow the Control Board to be configured for your particular installation.

Figure 8 – Control Board Dip Switches



Moving from the top of the control board down:

Table 1 – Control Board Dip Switch Settings

Switch	When Positioned Left (Off)	When Positioned Right (On)
Switch 1	The ten LEDs will indicate the signal level coming into the control board from the ambient ozone controller inputs.	The ten LEDs will indicate the current mode of the ComAir 20T.
Switch 2	The ComAir 20T will expect a signal from an ambient ozone controller to regulate the ozone output.	The ComAir 20T will not use an ambient ozone controller to regulate the ozone output. It will provide output equal to 25%, 50%, 75% or 100% of the max lamp output determined by Mode setting.
Switch 3	The ambient ozone controller connected to the ComAir 20T provides a continuous voltage or current signal proportional to the ozone. For example, the controller provides a 0-5V signal with 0 volts equal to 0 ppm ozone, and 5 volts equal to 0.5 ppm of ozone.	The ambient ozone controller connected to the ComAir 20T provides a relay signal. The relay is closed when the ozone level is below the set point set on the controller, and open when the ozone level is above the set point set on the controller.
Switch 4	The ambient ozone controller connected to the ComAir 20T is in a higher range: 0-5V with 5V = 0.5ppm Or 4-20mA with 20mA = 1ppm	The ambient ozone controller connected to the ComAir20T is in a lower range: 0-2V with 2V = 0.1ppm Or 4-20mA with 20mA = 0.1ppm

Switch 5	The ComAir 20T is ready to communicate with the Remote Display through the RJ-45 connector	The ComAir 20T is sending serial data through the RJ-45 connector that can communicate with an external serial device.

Adjusting the ComAir 20T – Without Ambient Ozone Controller

The output level adjustment push button is on the front cover. The settings are low, medium, high and boost. Press the button on the cover of the unit to cycle the settings from low to boost and then back to low. The unit will default to the low setting on initial power up.

Table 2 – Mode Selection Guidance, Without Ambient Ozone Controller

Mode	**Ozone Output %**	**HVAC Unit Capacity**	**Space Square Footage**
Low	25%	5 - 8.75 Tons	1500 – 2600 ft^2
Medium	50%	8.75 – 12.5 Tons	2600 – 3750 ft^2
High	75%	12.5 – 16.25 Tons	3750 – 4900 ft^2
Boost	100%	16.25 – 20 Tons	4900 – 6000 ft^2

Note: Buildings with heavy tobacco smoke or other strong odors can use higher settings than the recommendations in Table 2.

When the ComAir 20T is in low mode, the ozone lamp will cycle ‘On’ and ‘Off’ every 5 minutes. This is to create an ozone output level lower than is possible by simply dimming the ozone lamp. While in this mode, the ozone lamp indicator LED will flash.

Adjusting the ComAir 20T – With Ambient Ozone Controller

An optional ambient ozone controller is available that detects the ozone concentration in the duct of the heating/cooling duct. These instructions will describe how to correctly connect and use the ClearWater Tech ambient ozone controller. If a different ozone sensor is used, please refer to the instruction manual for that sensor, as well as “Setting the ComAir 20T” section above to properly set up the sensor with the ComAir 20T.

The ComAir 20T will read the signal from the controller and adjust the Ozone output to maintain a constant ozone level. The connections for the controller are on the ComAir20T Control Board mounted to the cover. The cover must be opened to access the Control Board. A three-conductor cable with wire sizes of 22 gauge or thicker is recommended for the connection. The cable should be routed through the strain relief mounted on the cover of the ComAir 20T. See figure 11.

The ambient ozone controller supplied by ClearWater Tech should be mounted on the closest supply register to the ComAir 20T. The sensor box requires a hole in the duct for the sensor to fit into and two holes to be drilled for the attachment to the duct with sheet metal screws. A template that can be used to locate the holes is provided with the controller.

Table 3 – CWT Ambient Ozone Controller Connections

ComAir 20T Connection	Controller Connection	Suggested Wire Color
12V	V+	Red
GND	GND	Black
Sig/Relay 0-5V	0-5V	Green

To use the ambient ozone controller, the switches on the ComAir20T Control Board must be set correctly:

Table 4 – Dip Switch Settings to use CWT Ambient Ozone Controller

Switch	Position	Setting
Switch 1	Right (On)	LEDs Show Mode
Switch 2	Left (Off)	Controller Connected
Switch 3	Left (Off)	Controller is Continuous Signal
Switch 4	Left (Off)	Controller is Higher Range

Switch 5 will be set based on whether a remote display is connected, or if the ComAir 20T is communicating to a serial device. See the "Setting the ComAir 20T" section.

Once the system is powered up, the desired ozone output can be selected using the button on the cover of the ComAir 20T or optional Remote Display. Holding down the button on the cover or optional Remote Display for 3-4 seconds activates Boost Mode. After 30 minutes the ComAir 20T will automatically go back to the mode it was in before it went into Boost Mode.

Table 5 - Mode Selection Guidance, With Ambient Ozone Controller

Level	Ozone Output
Low	0.03 ppm
Medium	0.05 ppm
High	0.08 ppm
Boost	Sensor is ignored, maximum output for 30 minutes.

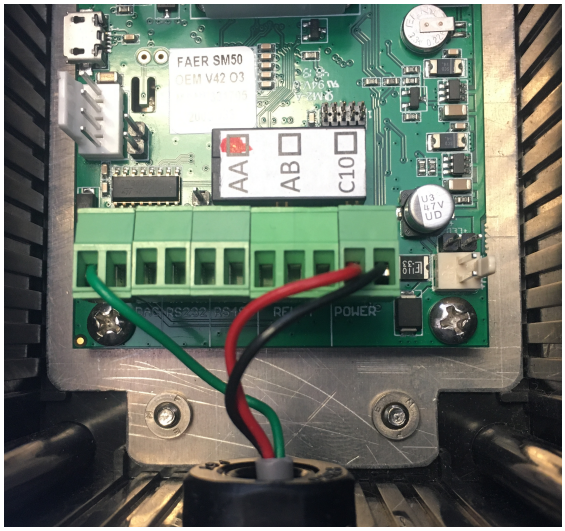
If during operation, the controller detects levels over the desired ozone mode selection set point (see Table 5 above), the Ozone lamp will begin to dim. If the Ozone lamp is as dim as possible and the controller is still detecting ozone above the desired ozone level, the ComAir 20T will turn off the Ozone lamp until the ozone level drops below the desired ozone mode selection set point. While in this mode the ozone lamp indicator LED will flash.

Optional Accessories – Remote Display and Ambient Ozone Controller

An optional remote display is available. The remote display provides all of the indicator lights and an output level selection button that can be placed in a convenient location. It is connected to the ComAir 20T by a cable with RJ45 connectors. Plug one end of the cable into the end of the Remote Display (see figure 9) and the other end into the RJ45 connector on the ComAir 20T Control Board mounted to the cover (see figure 11). Route the RJ45 cable through the strain relief on the cover. The cover must open to access the Control Board.

Figure 9 – Remote Display

Figure 10 – Ambient Ozone Controller



Internal Wiring

Maintenance

The lamp cleaning schedule is determined by air quality. The recommended cleaning interval is every 12-months. The "Service" lamp will illuminate when the unit has operated for two years and this indicates that the lamps should be replaced.

DO NOT TOUCH THE LAMPS WITH YOUR BARE HANDS AS OILS FROM YOUR HANDS CREATE "HOT SPOTS" WHICH REDUCE THE LAMP LIFE. In case of contact with the lamp, wipe the lamp clean with a soft cloth dampened with rubbing alcohol.

CLEANING THE LAMPS: Recommended every 12 months

1. Disconnect Main Power to the ComAir 20T.
2. Remove the screws from the cover of the unit and open.
3. Ozone Lamp: Disconnect the lamp connector from the end of the ozone lamp.
4. Loosen the lamp lock nut from around the end of the lamp by turning it counterclockwise and remove (pliers may be required).
5. Remove the metal washer.
6. Remove lamp by grasping the rubber bushing around the end of the lamp. With a gentle rocking motion, loosen the bushing from its seat and carefully slide it straight out.
7. Using a soft cloth dampen with rubbing alcohol, wipe down the ozone lamp. If there is a large buildup of dust particles, you may wish to use a can of compressed air first to remove the majority of the dirt.
8. Slide the ozone lamp back into the lamp opening. Handle lamp by the end cap.
9. Re-install the metal washer and lamp lock nut. Carefully tighten the lamp lock nut.
10. Reconnect the lamp connector to the end of the lamp.
11. Germicidal Lamp: Remove the lamp connector.
12. Remove screws and washers that hold the lamp to the main unit.
13. Slide the lamp out.
14. Using a soft cloth dampen with rubbing alcohol, wipe down the ozone lamp. If there is a large buildup of dust particles, you may wish to use a can of compressed air first to remove the majority of the dirt.
15. Make sure the rubber washers on the mounting studs are in place and not damaged. If they are damaged replace before reinstalling the germicidal lamp.
16. Slide the germicidal lamp in.
17. Install the plastic washers and nuts on the mounting studs. Tighten the nuts snugly.
18. Reconnect the lamp connector.
19. Close the cover and secure with screws
20. Plug the power cord into the wall outlet.

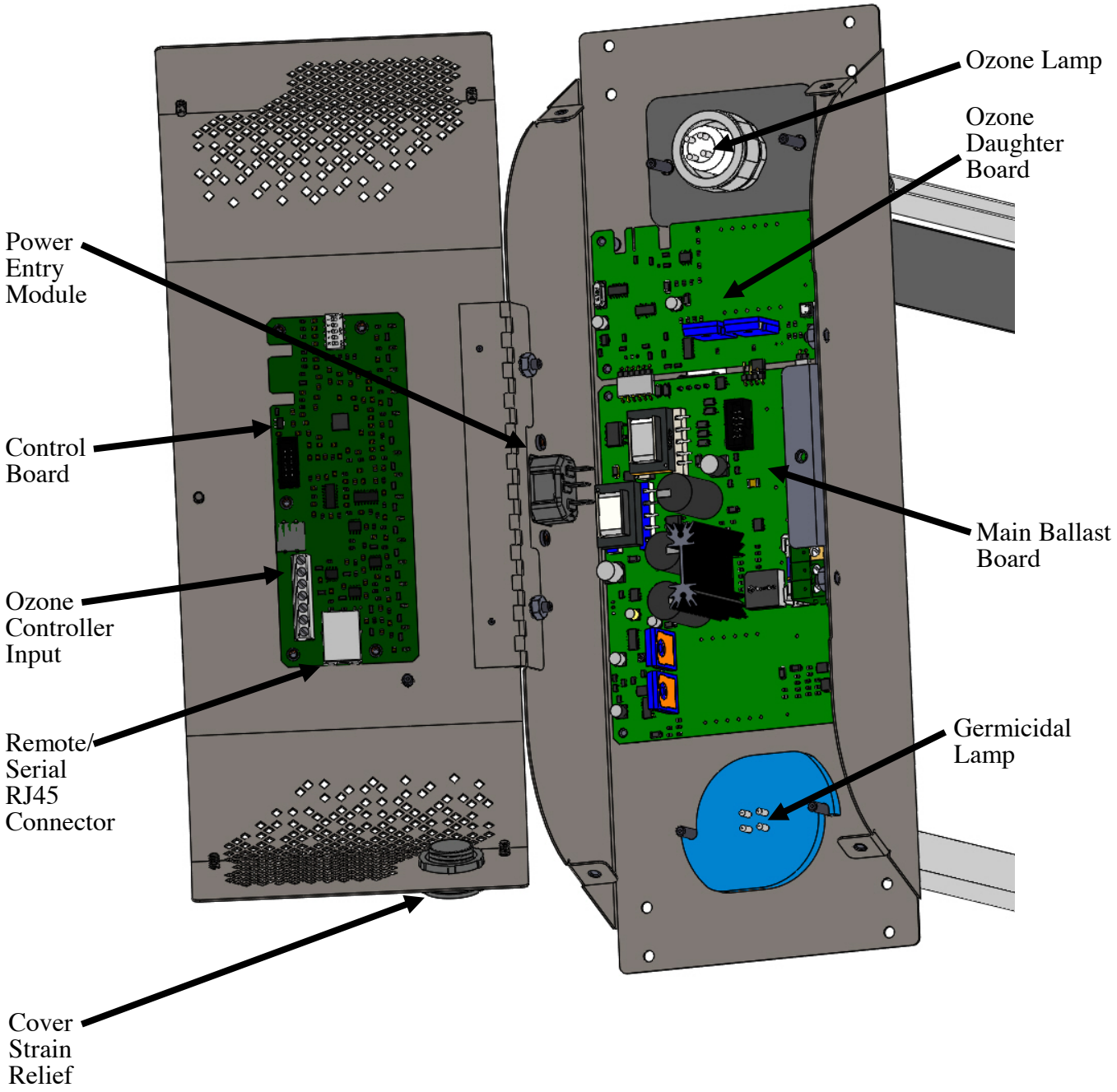
REPLACING THE LAMPS: Recommended every 24 months

NOTE: Use only ClearWater Tech-approved lamps for replacement. Standard off-the-shelf lamps are not compatible with your ClearWater Tech ComAir 20T unit.

1. Disconnect Main Power to the ComAir 20T.
2. Remove the screws from the cover of the unit and open.

3. Ozone Lamp: Disconnect the lamp connector from the end of a lamp.
4. Loosen the lamp lock nut from around the end of the lamp by turning it counterclockwise and remove (pliers may be required).
5. Remove the metal washer.
6. Remove lamp by grasping the rubber bushing around the end of the lamp. With a gentle rocking motion, loosen the bushing from its seat and carefully slide it straight out.
7. Remove the rubber bushing from the old lamp and install it on the new lamp.
8. Slide the new lamp back into the lamp opening. Handle lamp by the end cap.
9. Re-install the metal washer and lamp lock nut. Carefully tighten the lamp lock nut.
10. Reconnect the lamp connector to the end of the lamp.
11. Germicidal Lamp: Remove the lamp connector.
12. Remove screws and washers that hold the lamp to the main unit.
13. Slide the lamp out.
14. Make sure the rubber washers on the mounting studs are in place and not damaged. If they are damaged replace before installing the new lamp.
15. Slide the new lamp in.
16. Install the plastic washers and nuts on the mounting studs. Tighten the nuts snugly.
17. Reconnect the lamp connector.
18. Close the cover and secure the cover with the screws.
19. Plug the power cord into the wall outlet.
20. Reset service timer by pressing ozone output level button and holding it for approximately 20 seconds. After 5 seconds, the LEDs will begin to turn on one at a time until all 10 lower LEDs are on. Once they all turn on the service LED will turn off.

Figure 11 – Main Components

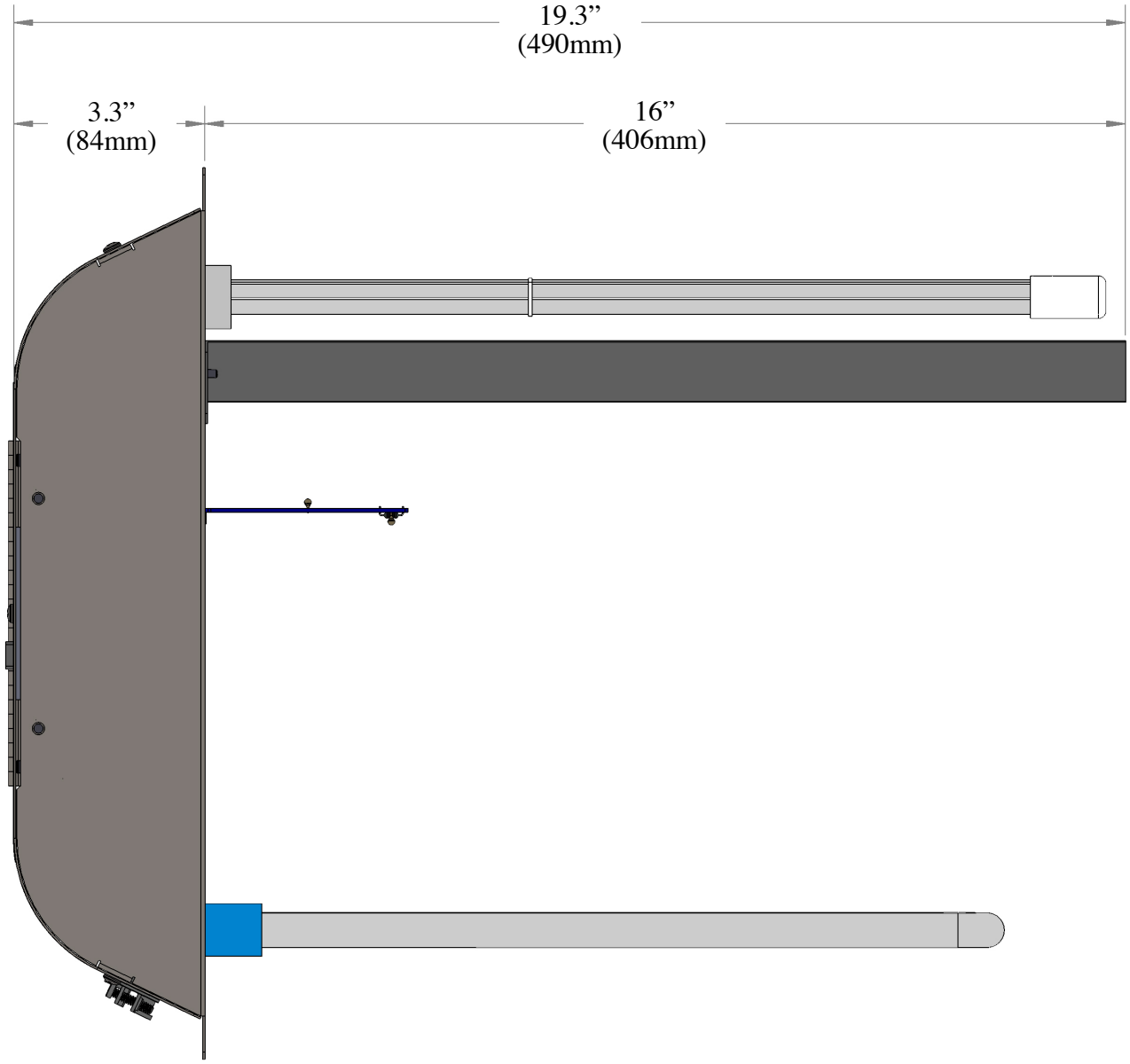


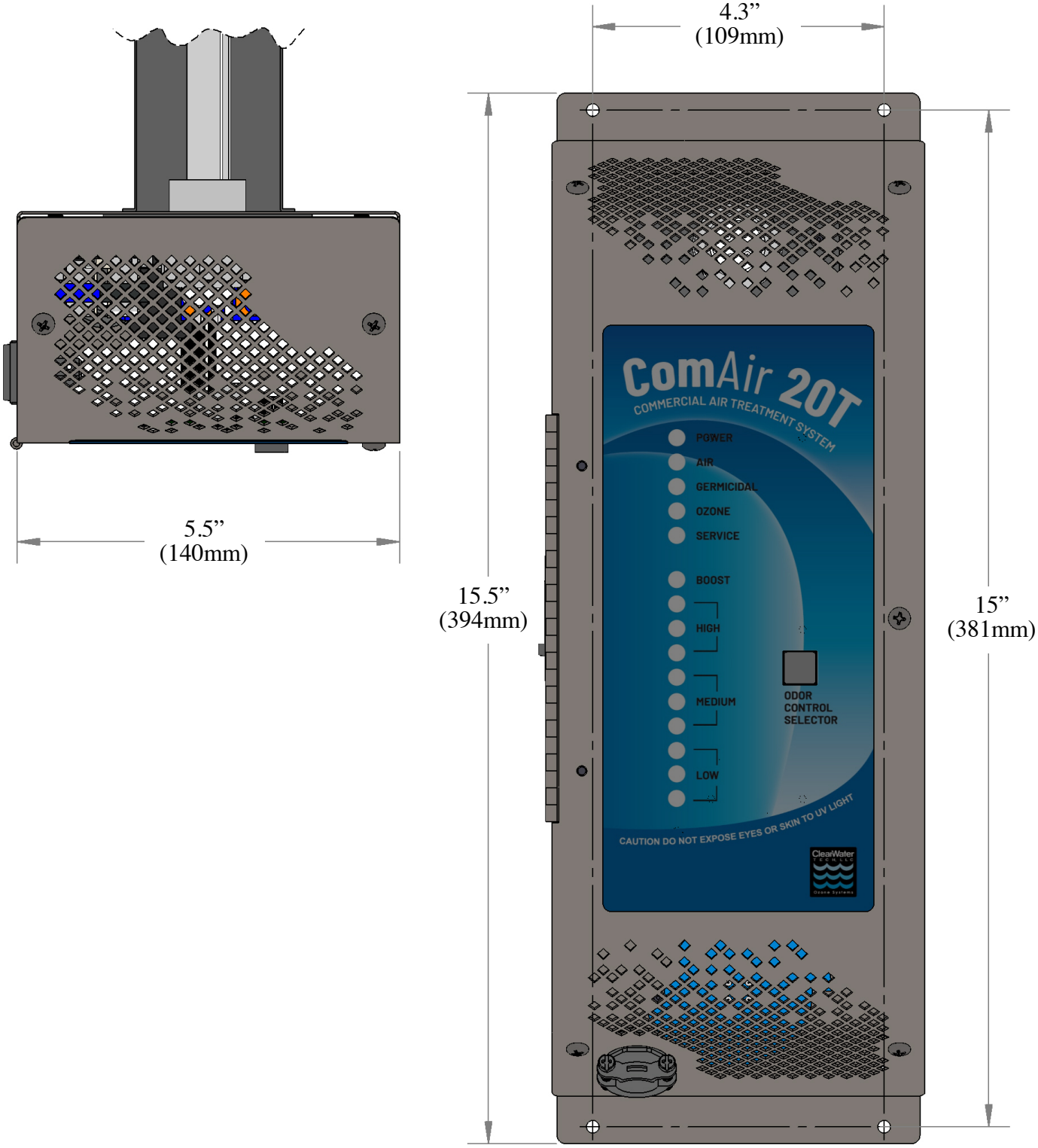
Troubleshooting

Problem/Symptom	Possible Cause	Solution
No Power	• No power to system • Fuse blown	• Check main power to system • Check fuse, replace if blown
Unit Doesn't Turn on With Airflow	• No airflow present • Airflow sensitivity needs adjustment	• Check the HVAC system to ensure it is supplying airflow • Adjust the airflow sensitivity jumper to be more sensitive.
Unit Doesn't Turn off with no Airflow	• HVAC system is on • Airflow sensitivity needs adjustment	• Check the HVAC system to ensure the airflow is off. • Adjust the airflow sensitivity jumper to be less sensitive.
Ozone LED is blinking	• The control board will occasionally turn off the ozone lamp to reduce the ozone output. When this happens the ozone LED will blink.	• This is normal, there is no problem
Ozone LED is not turning on	• No airflow present • Blue shutdown LED illuminated • Yellow shutdown LED illuminated • Red shutdown LED illuminated • If there is a problem with the ozone lamp the ozone LED will not illuminate and the service light will begin to blink.	• Check the HVAC system to ensure it is supplying airflow • Control board is shutting down the ozone lamp. • Lamp filaments are damaged, replace the ozone lamp • High ambient temperature. • Replace the ozone lamp
Germicidal LED is not turning on	• No airflow present • Blue shutdown LED illuminated • Yellow shutdown LED illuminated • Red shutdown LED illuminated • If there is a problem with the germicidal lamp the germicidal LED will not illuminate and the service light will begin to blink.	• Check the HVAC system to ensure it is supplying airflow • Control board is shutting down the germicidal lamp. • Lamp filaments are damaged, replace the germicidal Lamp • High ambient temperature. • Replace the germicidal lamp

Appendix A – Specifications

Power	90-265VAC, 50/60Hz 1.2 – 0.6 A, 180W
Ozone Lamp	185nm Hot Filament, 20,000 hour life
Germicidal Lamp	254nm Hot Filament, 20,000 hour life
Airflow @ 80F	High Sensitivity ~75 ft/minute airflow Medium Sensitivity ~190 ft/minute airflow Low Sensitivity ~350 ft/minute airflow
Serial Output	9600 bits per second baud rate 8 bits, no parity
Output Voltage	12V, 0.5A Max
Voltage Input	0-5V, < 0.1mA
Current Input	4-20mA Isolated Circuitry




4.3”
(109mm)
5.5”
(140mm)
15.5”
(394mm)
15”
(381mm)
ComAir 20T
COMMERCIAL AIR TREATMENT SYSTEM
POWER
AIR
GERMICIDAL
OZONE
SERVICE
BOOST
HIGH
MEDIUM
LOW
ODOR
CONTROL
SELECTOR
CAUTION DO NOT EXPOSE EYES OR SKIN TO UV LIGHT

Appendix B – Parts List

Description	Part Number
Airflow Sensor	CCA1182SA
Ozone Lamp	LA15
Germicidal Lamp	LAHV92
Lamp Shield	CWT1178
Fuse	FUS15
Main Ballast Board	CCA1814SA
Ozone Daughter Board	CCA1815SA
Control Board	CCA1816SA

Appendix C – Warranty Information

ClearWater Tech, LLC. Limited Two-Year Warranty

Summary of the Warranty

ClearWater Tech, LLC ("CWT") makes every effort to assure that its products meet high quality and durability standards and warrants the products it manufactures against defects in materials and workmanship for a period of two (2) years, commencing on the date of original shipment from CWT, with the following exceptions: 1) The warranty period shall begin on the installation date if the installation is performed within 90 days of the original shipment from CWT; 2) The warranty period shall begin on the date of the bill of sale to the end user if the installation date is more than 90 days after the original shipment date. Repairs and replacement parts provided under this warranty shall carry only the unexpired portion of this warranty of 90 days, whichever is longer.

Warranty Validation and Registration

To validate the warranty, the product must be registered either by; filling out the warranty card provided and returning it to CWT by mail or registering the product on-line at warranty.cwtozone.com. Scanning the QR Code, with a mobile device, will link directly to the Product Warranty Registration form located on the CWT website.

To obtain validation of the 2-year limited warranty; the CWT product(s) must be installed and operated within usage parameters stated, and service intervals performed as specified in the product(s) I/O manual. Failure to do so will void warranty.

Items Excluded from the Warranty

This warranty does not extend to any product and/or part from which the factory assigned serial number has been removed or which has been damaged or rendered defective as a result of:

- An accident, misuse, alteration or abuse
- An act of God such as flood, earthquake, hurricane, lightning or other disaster resulting only from the forces of nature
- Normal wear and tear
- Operation outside the usage parameters stated in the product user's manual
- Use of parts not sold by CWT
- Service or unit modification not authorized by CWT
- Check valve/solenoid valve failure
- Damage which may occur during shipping
- Service or maintenance not outlined within the I/O manual

Oxygen systems and Ozone sensors have a one (1) year warranty. Equipment not manufactured by CWT will carry the OEM's factory warranty

Obtaining Service Under the Warranty

Any product and/or part not performing satisfactorily may be returned to CWT for evaluation. A Return Goods Authorization (RGA) number must first be obtained by either calling or writing your local authorized dealer, distributor or CWT direct, prior to shipping the product. The problem experienced with the product and/or part must be clearly described. The RGA number must appear prominently on the exterior of the shipped box(es). The product and/or part must be packaged either in its original packing material or in comparable and suitable packing material, if the original is not available. You are responsible for paying shipping charges to CWT and for any damages to the product and/or part that may occur during shipment. It is recommended that you insure the shipment for the amount you originally paid for the product and/or part.

If, after the product and/or part is returned prepaid and evaluated by CWT, it proves to be defective while under warranty, CWT will, at its election, either repair or replace the defective product and/or part and will return ship at lowest cost transportation prepaid to you **except for shipments going outside the 50 states of the United States of America**. If upon inspection, it is determined that there is no defect or that the damage to the product and/or part resulted from causes not within the scope of this limited warranty, then you must bear the cost of repair or replacement of damaged product and/or part and all return freight charges. Any unauthorized attempt by the end user to repair CWT manufactured products without prior permission shall void any and all warranties. For service, contact your authorized dealer or distributor or CWT direct at (805) 549-9724.

Exclusive Warranty

There is no other expressed warranty on CWT products and/or parts. Neither this warranty, nor any other warranty, expressed or implied, including any implied warranties or merchantability of fitness, shall extend beyond the warranty period. Some states do not allow limitation on how long an implied warranty lasts, so that the above limitation or exclusion may not apply to you.

Disclaimer of Incidental and Consequential Damages

No responsibility is assumed for any incidental or consequential damages; this includes any damage to another product or products resulting from such a defect. Some states do not allow the exclusion or limitation of incidental or consequential damages, so that above limitation or exclusion may not apply to you.

Legal Remedies of Purchaser

This warranty gives you specific legal rights and you may also have other rights, which vary from state to state.

THIS STATEMENT OF WARRANTY SUPERSEDES ALL OTHERS PROVIDED TO YOU AT ANY PRIOR TIME.