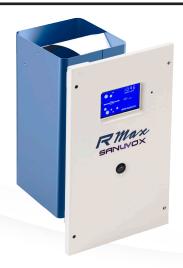


REGISTER YOUR WARRANTY





R MAX
WHOLE HOME UV AIR PURIFIER
Residential Model



IMPORTANT SAFETY INSTRUCTIONS READ AND SAVE THESE SAFETY INSTRUCTIONS BEFORE USING THIS PRODUCT.



Photos illustrating products are non contractual

Read and follow all instructions contained in the manual before using the product. Read the maintenance instructions before opening the UV unit or system. Failure to comply with these instructions may result in injuries or damage to the UV unit or system.

⚠ NEVER EXPOSE EYES OR SKIN TO AN OPERATING UV LAMP. ⚠

- Installation and servicing of UV units or systems (in an air conditioning system or not) can be hazardous. Only trained and qualified service personnel should install, repair or service equipment.
- Untrained personnel can perform basic maintenance functions such as replacing lamp(s) and/or filter(s). All other operations should be performed by trained service personnel.
- The unit is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.
 - ⚠ CAUTION: Unit is not a toy. Keep away from unsupervised children. Do not leave children unattended with the unit.
- 4. DO NOT hang onto the UV unit or system.
- Some UV units or systems could be heavy: Make sure you have a minimum of 2 people to safely move or install these UV units or systems, and make sure you adopt the most ergonomic position possible (use UV unit or system handles, if applicable).
- When installing or servicing an overhead UV unit or system, be careful not to fall off the stepladder. Furthermore, make sure the UV unit or system latches are always in place to prevent falling parts.
 - ▲ CAUTION: Some parts of some UV units and systems may open suddenly if the UV unit or system is installed high up without its locks.
- 6.1.THIS AIR CLEANER SHALL NOT BE INSTALLED ON THE HOT-AIR SIDE OF DUCT-TYPE SYSTEMS.
- Units that are obviously damaged must not be operated.

- CAUTION: When working on the UV unit or system, observe precautions on the literature, tags and labels attached to the UV unit or system, and all other safety precautions considered as best practices in the HVAC industry, if applicable.
- When applicable, local regulation may comprise more restrictive installation and/or certification requirements. The aforementioned requirements prevail on those of this document and the installer agree to conform to these at his own expense.
- Follow all the safety instructions outlined in this document and respect all local and national codes applicable.
- 11. All UV units or systems contain a UV-C source. Damage to the housing or unintended use of the UV unit or system may result in harmful UV-C leaks. UV-C may, even in little doses, cause harm to the eyes and skin.
- 12. Never expose eyes or skin to an operating UV lamp. Therefore, before installing or performing maintenance on the UV unit or system, TURN OFF AND DISCONNECT the UV unit or system from all power sources (there may be more than one switch to disconnect) and also disconnect the HVAC system, is applicable.
 - ⚠ CAUTION: Electrical shock may cause injuries or possibly death. FIRST AID INSTRUCTIONS: If injured, consult a doctor.
- 12.1. To reduce the risk of electric shock, this equipment has a grounding type plug that has a third (grounding) pin. This plug will only fit into a grounding type power outlet. If the plug does not fit into the outlet, contact qualified personnel to install the proper outlet. Do not alter the plug in any way.
- 12.2. The product is to be located so that connection can be made to the source of electrical supply without the use of an extension cord.

- UV rays may damage certain types of filters (polymer or plastic); please keep the UV unit or system light away from shining directly on plastic.
- 14. When installing or performing maintenance on the UV unit or system, it is recommended to wear safety gloves. In order to avoid reduced performance of lamp(s), do not touch lamp glass without gloves.
- 15. Just like conventional fluorescent lamps, UV lamps contain a small quantity of mercury: if a lamp breaks, clean and dispose of with care. UV lamps should be disposed/ recycled after use in the same way as any other fluorescent lamps. Contact and follow the specific instructions of your local and national authorities.
- 15.1. Dispose of unit or system according to the specific instructions and standards of your local and national authorities.
- 16. Use only specified SANUVOX branded replacement UV lamps for your UV unit or system. Use of any other lamps will void your warranty and can result in damage to the UV unit or system.
- Sanuvox UV units or systems are not waterproof. DO NOT INSTALL OUTDOORS OR IN WET LOCATION unless specified otherwise.
- 18. Use of this unit or system supplements, but does not replace, infection control best practices. Users must follow all these practices, particularly with regard to cleaning and disinfecting surfaces.

SAVE THESE INSTRUCTIONS

For any inquiries on a UV unit or system, contact:
Robert Smith
146 Barr St, Saint-Laurent
Quebec, CA, H4T 1Y4
1-888-726-8869
techsupport@sanuvox.com

Installation Date:	Installed by:
Installer Contact Info.:	





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ABOUT THE PRODUCT

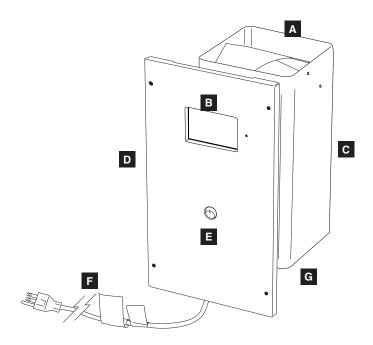
The R Max represents an evolution in whole home UV air purification. The high-efficiency patented design helps reduce airborne biological contaminants, while providing important user information on the 3" back-lit LCD display. Installed into the return or supply plenum, the Sanuvox proprietary process maximizes dwell (contact) time between the air and UV energy. With the ability to treat homes up to 4,000 sq.ft., the patented technology rapidly purifies the air and removes odors within the home.

For information or recommendations on how to size your specific application, please call SANUVOX at 1-888-726-8869.

COMPONENTS

How it Works

Contaminated air enters the R Max parallel to the UV 'J' Lamp, thus increasing contact time with the UV energy. The Turbulator spins and mixes the air around the UV 'J' Lamp. The UVC germicidal lamp helps reduce the biological contaminants. The Aluminum Reflector Chamber coated with cobalt amplifies the UV energy for optimal purification. Finally, the treated air circulates through the home.



- A. Turbulator & Air Inlet
- B. LCD Display
- C. Aluminum Chamber coated with cobalt (UV Lamp inside)
- D. Cover
- E. Power Switch
- F. Power Cord
- G. Air Outlet



SETUP & INSTALLATION

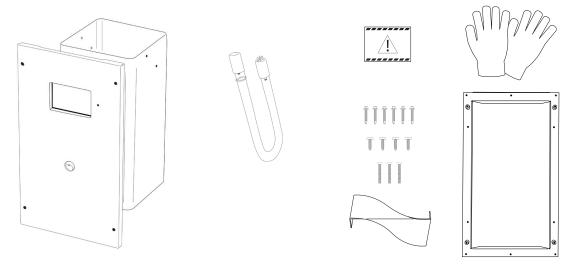
What you will need

A utility knife to unpack all components, a Phillips No.2 screwdriver, a measuring tape, a marker and a metal saw.

△ CAUTION: Handle your product with care to avoid breaking parts. Make sure you have a free and safe space to unpack, install and setup your product. Confirm you have access to the necessary power source for the product requirements (see unit or system label). If you have any questions regarding the installation instructions, call SANUVOX at 1-888-726-8869.

What's included

The R Max, a UV lamp and a basic installation kit.



The installation kit includes: a UV caution decal, a pair of cotton gloves, metal screws for frame (6), Phillips screws for cover (4), 8-32 screws for turbulator (3), a frame and a turbulator.

Step by Step Setup & Installation



- 1. **Prepare the R Max for installation.** Remove the contents from packaging. Only after you have visually inspected the UV lamp should you break the security seal on the underside of the cardboard sleeve.
 - ⚠ CAUTION: Before installing or performing maintenance on the unit or system, TURN OFF AND DISCONNECT the unit or system from all power sources (there may be more than one switch to disconnect).



Carefully slide the UV lamp out from the cardboard sleeve. Be sure to wear the cotton gloves (included) guaranteeing a clean lamp free from fingerprints.

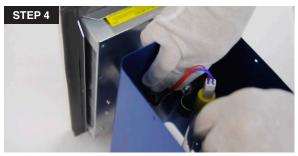
NOTE: Fingerprints on the lamp will negatively impact the UV output of the lamp.





3. While holding the porcelain end-cap (with 4 pins) in the clamp, carefully push the white connector onto the four pins. The plug is designed so that it can only be installed one way. You may have to rotate the socket 90° to line up the pins with the holes. The connector will fit into position.

NOTE: Too much force applied from the opposite end-cap may break the lamp.



4. Slide the **UV lamp porcelain end-cap (with 4 pins)** in the aluminum tube of the unit, then through the clamp.



5. Once the UV lamp is inserted, release the clamp to fix the lamp in place.



6. Once the UV lamp is installed, place the turbulator inside the reflecting chamber securing it with 3 screws provided in the installation kit. It is important to note that the air should first flow through the turbulator before moving in front of the UV lamp.



Prepare the duct (return or supply) for installation. Evaluate the ideal area
for installing the air purifier. The reflection chamber should always be
parallel to the airflow. Ensure that the purifier will fit into the plenum and
position it keeping in mind to minimize plastic exposure to direct UV light.

⚠ CAUTION: Before installing or performing maintenance on the unit or system, TURN OFF AND DISCONNECT the unit or system from all power sources (there may be more than one switch to disconnect).





8. Use the included metal frame to trace the outline onto the duct. Allow for a 0.25" (6.35 mm) space around the marking as to allow the frame to sit properly in the duct. The duct opening window should have the following dimensions: 12.75" x 6.625" (304.8 mm x 152.4 mm).



9. Place the frame into the opening made in the duct and use the 6 metal screws provided in the installation kit to secure it in place. Use preferably 3 top and 3 bottom holes of the frame to insert the screws.



10. Finalize the R Max installation in the duct by placing the unit into the frame, guided with the alignment pins.





11. Secure the R Max to the frame with the 4 remaining screws located in the 4 corners of the R Max cover.



12. Use the power cord of the unit to plug into a wall outlet that provides the power, as indicated on the marking label of the product.

Then wait for one minute before turning on the unit.

You are now ready to power ON your new R Max and enjoy great air quality for you and your family.



OPERATION

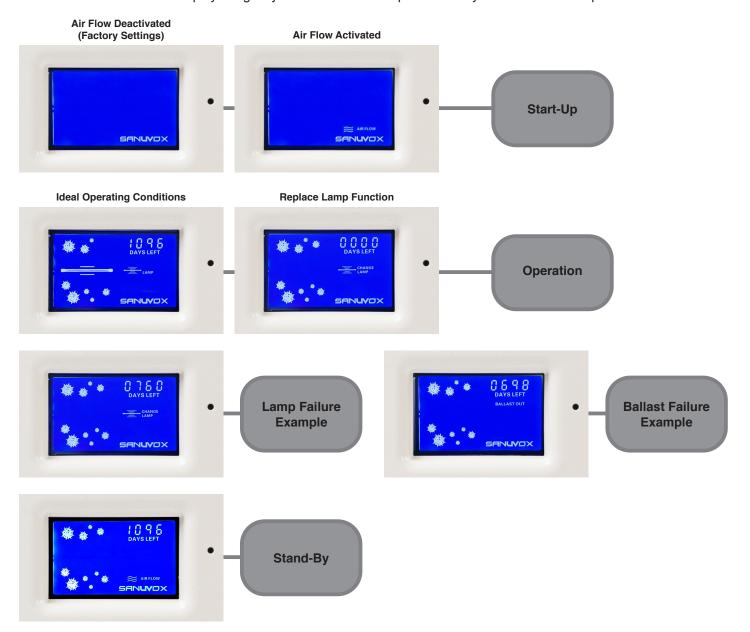
How to Operate your Product

The R Max is an automatic unit: once it's installed and plugged in, simply press the power switch to turn it ON. Wait approximately 40 seconds for the startup phase to be done and enjoy clean air in your home!

△ **CAUTION:** The suggested operating temperature range is 10 to 50°C (50 to 122°F). Operating the R Max outside this range will result in decreased performance. For optimal performance, air temperature moving through the reaction chamber should be in the range of 15 to 20°C (60 to 70°F).

How to Read the LCD Screen Display

The R Max's LCD Screen Display will give you real time status update about your unit and its lamp.



The number of days displayed in the images above are for reference only.



How to Activate "Airflow Detection" Function (Optional)

In "Default Mode" (power is ON and unit operates normally), the R Max lamp is always lit. If you activate the "Airflow Detection" function, the thermistor will detect airflow and automatically turn the lamp ON or OFF as needed.

NOTE: This function is only for a certain type of HVAC furnace. When used on HVAC units with variable speed fans, this function may cause strain on the lamp or even premature lamp failure. Your installer should know which mode is right for your unit.

Step by Step Function Activation





1. If your unit is powered ON, start by turning OFF the power switch.



2. Use a small object similar to a paper clip and insert it into the reset hole in order to be able to press the reset button.





3. First turn ON the power switch and then, press the reset button. You have 5 seconds from the moment the unit is powered to press the reset button to activate the airflow detection. Every time you press the button you will notice the word "AIR" appears or disappears from the bottom right corner of the LCD screen. Once "AIR" appears on the screen, wait for the lamp to turn on so that the setting is saved.



4. From now on, the R Max will only activate the lamp when the thermistor detects airflow in your duct system.

NOTE: The unit software is programmed to keep the lamp ON for 10 minutes after the airflow has completely stopped.



How to Reset your Product and its Lamp Timer

After installing a new lamp, make sure the timer function is reset.

Step by Step Product and Lamp Timer Reset



1. To reset the lamp timer the unit needs to be powered and turned ON. The LCD status should be on 'Stand-by' or 'Active'.



2. Use a small object similar to a paper clip and insert it into the hole in order to be able to press the reset button.





3. Press and hold the reset button for a minimum of 3 seconds. When releasing the reset button, the counter will be reset and the "Days Left" on the LCD screen will reset to 1096 days.



MAINTENANCE

How to Replace Lamp(s)

Replacing lamps on the R Max is quick and easy. Simply turn off the power source, remove unit from duct, remove and dispose of old lamp, replace with new Sanuvox branded UV lamp, replace unit in duct and turn power source back on. See below for detailed step by step instructions.

△ CAUTION: In order to avoid reduced performance of lamp(s), do not touch lamp glass without gloves.

Step by Step Lamp Replacement



1. Take the R Max out from the ductwork by removing the 4 screws located on the cover (4 corners) that hold it to the frame.



2. Remove the turbulator to access the lamp.



3. Remove the old UV lamp from the lamp socket by opening the retaining clamp and pulling the UV lamp out of the reflector chamber.

NOTE: UV lamps should be disposed/recycled after use, as any other fluorescent lamps. Contact and follow your local and national authorities' specific instructions.



4. **Prepare the new lamp.** Remove the contents from packaging. Only after you have visually inspected the UV lamp should you break the security seal on the underside of the cardboard sleeve.





Carefully slide the new UV lamp out from the cardboard sleeve. Be sure
to wear the cotton gloves (included) guaranteeing a clean lamp free
from fingerprints. Fingerprints on the lamp will negatively impact the UV
output of the lamp.



6. While holding the porcelain end-cap (with 4 pins) in the clamp, carefully push the white connector onto the four pins. The plug is designed so that it can only be installed one way. You may have to rotate the socket 90° to line up the pins with the holes. The connector will fit into position.

NOTE: Too much force applied from the opposite end-cap may break the lamp.



7. Slide the **UV lamp porcelain end-cap (with 4 pins)** in the aluminum tube of the unit, then through the clamp.



8. Once the UV lamp is inserted, release the clamp to fix the lamp in place.



Once the new UV lamp is installed, replace the turbulator inside the reflecting chamber, and replace R Max into duct.

Then, reset your product and its lamp timer (see page 9).



How to Clean your Product

For optimal performance, the lamp(s) and reflecting chamber should be kept free of dust and residue deposit. Clean when necessary with mild soap or alcohol. Always spot test the cleaner to make sure it does not damage the surface.

▲ CAUTION: Under no circumstance should water be sprayed or splashed onto the product.

STORAGE

The R Max is an in-duct unit working continuously and automatically and therefore, requires no specific storage.

ULTRAVIOLETS

Ultraviolet wavelengths (UV) emitted by Sanuvox units and systems are identical to ultraviolets produced by the sun. UVC damage nucleic acids (DNA/RNA) of microorganisms, which inactivates them. Unlike conventional UV lamps on the market, Sanuvox units and systems use a patented process that delivers a maximum dose of UV to the moving air stream or surfaces.

△ CAUTION: Never expose eyes or skin to an operating UV lamp.

ELECTRICAL RATINGS, POWER CONSUMPTION & AVAILABLE VOLTAGE

The product is rated at 120/240 VAC, 50/60 Hz and 48 W. See product label to confirm power consumption of your specific unit or system.

NOTE: IF YOU EXPERIENCE A PROBLEM, PLEASE CONTACT CUSTOMER SERVICE FIRST OR SEE YOUR WARRANTY. DO NOT RETURN THE PRODUCT TO THE ORIGINAL PLACE OF PURCHASE. DO NOT ATTEMPT TO OPEN THE PRODUCT OR TAMPER WITH ITS COMPONENTS WITHOUT CONTACTING CUSTOMER SERVICE FIRST. DOING SO MAY VOID YOUR WARRANTY AND CAUSE PERSONAL INJURY OR DAMAGE TO THE PRODUCT.

TROUBLESHOOTING

If your product is not working properly, refer to the following.

What you will need

A Phillips No. 2 screwdriver, an ohmmeter and a 5/16" nutdriver.

Internal Components

To access R Max internal components, see step by step instructions of the **Ballast Box Opening on page 14 (A)**.

- A. LCD Screen Display Circuit Board
- B. Reset Button
- C. Status LED Connections (ballast and lamp)
- D. Thermistor
- E. Power Switch
- F. Ballast





Problem	Possible Cause	Solution
Screen doesn't turn ON.	 There is no power to the electrical outlet. The On/Off switch is not ON. Power cord is damaged. LCD screen circuit board is damaged or defective. 	 Test the outlet to make sure there is power by plugging in another electrical appliance. Turn the switch to the ON position. Check the power cord for damage and replace if damaged. Visually inspect the LCD screen circuit board and look for damage/burn marks
Screen indicates "Airflow" and lamp icon is not irradiating out.	- There is no airflow or insufficient airflow in the ductwork.	 Turn the fan ON or set a higher speed to increase airflow circulating in the ductwork. If airflow is not sufficient to be detected by thermistor, remove airflow detection. See Thermistor Bypass instructions on page 16 (D).
Screen indicates "Ballast Out".	 Connection issues at the ballast level for ballast status signal (left side of ballast). Connection issues at the circuit board level for ballast status. Issue with power supply to ballast. Defective ballast. 	 Check connections to ballast and circuit board for the 2 red wires connected into the Optional 2.5V LED connectors of the ballast (right side). Check the wire connections at the ballast and at the lamp (plug). Check lamp continuity. See Ballast or Circuit Board Validation on page 15 (C).
At any moment; screen indicates "Change Lamp".	 Connection issues at the ballast level for lamp status signal (right side of ballast). Connection issues at the circuit board level for lamp status. Connection issues between the ballast and the lamp (plug). Defective lamp. 	 Check connections to ballast and circuit board for the 2 yellow wires connected into the Optional 2.5V LED connectors of the ballast (right side). Check the wire connections at the ballast and at the lamp (plug). Check lamp continuity. See UV Lamp Continuity Test instructions on page 14 (B).
When screen indicates "0000 Days Left" and alternates between "Lamp Expired"and "Change Lamp".	- The UV lamp has exceeded its 3-year lifespan.	 Get a genuine replacement lamp and reset the counter to 3 years. See Product and Lamp Timer Reset instructions on page 9.
Screen indicates "EC1" and blinks ON and OFF.	- The thermistor is not connected The thermistor is damaged or defective.	- Check thermistor connections - Replace thermistor
Screen indicates "EC2" and blinks ON and OFF.	- The thermistor is damaged or defective.	- Replace thermistor
Lamp burnt before the elapsed 3 years.	 Overcycling of the UV lamp due to excessive start/stop of the variable speed fan. 	 Replace lamp and bypass thermistor. See Thermistor Bypass instructions on page 16 (D).

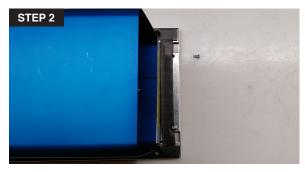
Contact your contractor for all your needs in terms of replacement parts: power cord, circuit board, LCD screen, ballast, UV lamp, thermistor, etc.



A. Step by Step R Max Ballast Box Opening



1. Take the R Max out from the ductwork by removing the 4 screws located on the cover (4 corners) that hold it to the frame.

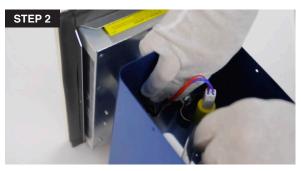


2. Place the R Max face down on a flat surface and remove the 4 screws (2 top and 2 bottom) that attach the cover to the ballast box.

B. Step by Step UV Lamp Continuity Test



1. Take the R Max out from the ductwork by removing the 4 screws located on the cover (4 corners) that hold it to the frame



2. Remove the UV lamp from the lamp socket by opening the retaining clamp and pulling the UV lamp out of the reflector chamber.



3. Using an ohmmeter place 1 probe on 1 of the 4 pins and by sensing the 3 remaining pins, one should have continuity. Make sure the 2 remaining pins also have continuity. When both sets of pins test good for continuity, it can be assumed that the lamp is good.



C. Step by Step LCD Screen Circuit Board Bypass (Ballast or Circuit Board Validation)

1. Open the R Max ballast box: see step by step instructions of the Ballast Box Opening on page 14 (A).



2. Locate the power input to the circuit board (N,L) as well as the ballast input (B-N,B-L).



3. Disconnect L and B-L and join them together using twist-on wire connectors



4. Disconnect N and B-N and join them together using twist-on wire connectors



5. Place the unit on the ground and make sure that you don't have direct line of sight with the lamp. Plug the power cord directly in a power outlet and the UV lamp will light up if both UV lamp and ballast are still functional.



6. After the test is completed, unplug the unit and replace the wires in their original position. Black wire from the power cord connects into L and white wire from the cord connects into N. Black wire going to the ballast connects into B-L and white wire going to the ballast connects into B-N.



D. Step by Step Thermistor Bypass

1. Open the R Max ballast box: see step by step instructions of the Ballast Box Opening on page 14 (A).





2. Plug in the R Max to a power source and turn the switch to the ON position. In the first 5 seconds from powering the unit ON, click the Reset button once. By doing so, you'll see "Air flow" appear on the screen. By clicking again, "Air flow" will disappear from the screen. Once your selection is made, wait 5 seconds for the setting to be recorded by the circuit.

WARRANTY

You should first read all instructions before attempting to use this product. For this warranty to be valid, keep a copy of the proof of purchase.





UV lamp	3 years
Ballast	3 years
Electronic components	3 years

A. This limited warranty applies to repair or replacement of product found to be defective in material or workmanship. This warranty does not apply to damage resulting from abusive, unreasonable use or supplemental damage. Defects that are the result of normal wear and tear will not be considered manufacturing defects under this warranty.

SANUVOX IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

Some jurisdictions **do not** allow the exclusion or limitation of incidential or consequential damages or limitation on how long an implied warranty last, so the above limitations or exclusions may not apply to you. This warranty gives specific legal rights, and you also may have other rights which vary from jurisdiction. This warranty applies only to the original purchaser of this product from the original date of purchase.

- B. At its option, SANUVOX will repair or replace this product if it is found to be defective in material or workmanship.
- C. This warranty does not cover damage resulting from any unauthorized attempts to repair or from any use not in accordance with the instruction manual.
- D. This warranty does not cover the filters, pre-filters or other accessories (if included), except for material or workmanship defects.

Call us toll-free at 1-888-726-8869 or email: info@sanuvox.com

Please be sure to specify product name.

NOTE: IF YOU EXPERIENCE A PROBLEM, PLEASE CONTACT CUSTOMER SERVICE FIRST OR SEE YOUR WARRANTY. DO NOT RETURN THE PRODUCT TO THE ORIGINAL PLACE OF PURCHASE. DO NOT ATTEMPT TO OPEN THE PRODUCT OR TAMPER WITH ITS COMPONENTS WITHOUT CONTACTING CUSTOMER SERVICE FIRST. DOING SO MAY VOID YOUR WARRANTY AND CAUSE PERSONAL INJURY OR DAMAGE TO THE PRODUCT.

CUSTOMER SERVICE

TO ORDER REPLACEMENT PARTS

PLEASE CONTACT YOUR CONTRACTOR OR SANUVOX CUSTOMER SERVICE

Toll-Free Phone #: 1-888-726-8869

Email: info@sanuvox.com
Website: www.sanuvox.com

Please be sure to specify product name.

Replacement parts for this product

BST120/277GLR	Ballast with multi-voltage input of 120-277 VAC, 50/60 Hz
LMPHGJ105	T6 High Intensity (UVC) 10.5" 'J' shaped UV lamp
ELC-PCB-13-2	LCD screen circuit board
SUBASSY-ELCTER2	Subkit replacement thermistor for Max Series

⚠ WARNING: Use only specified SANUVOX branded replacement UV lamps with your unit or system. Use of any other lamps will void your warranty and can result in damage to the unit, system and/or lamp(s).