SANUVOX

Troubleshooting manual
for
Sanuvox SRMax Air Purifier

⚠ **WARNING**

Before servicing the unit, TURN OFF and disconnect unit from power source. Electrical shock may cause personal injuries or death.

Sanuvox Technologies, Montreal (Canada)
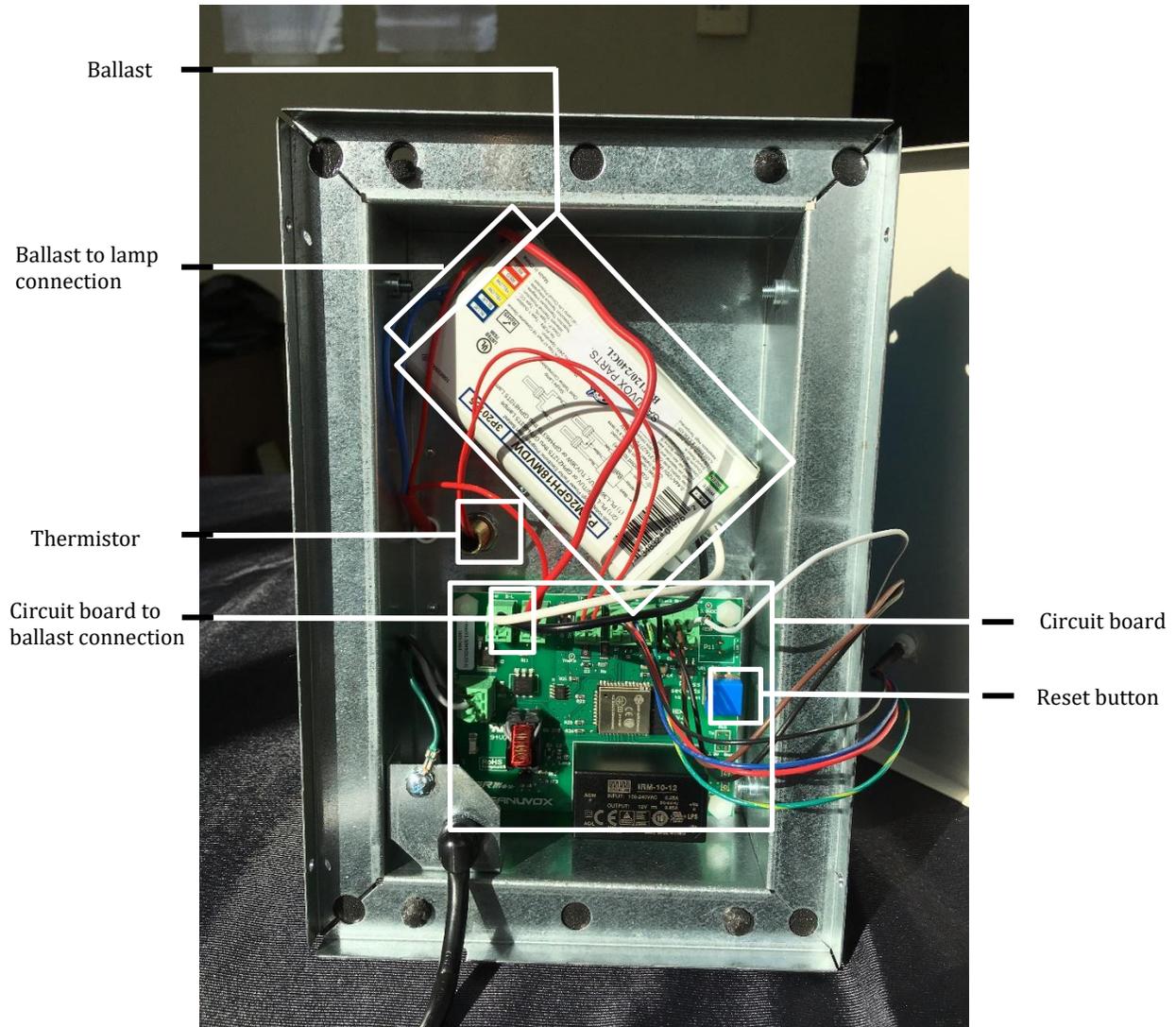www.sanuvox.com
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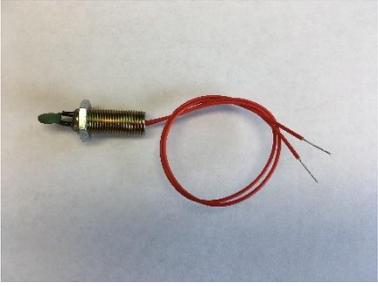
1. Tools required for troubleshooting

- Phillip screwdriver
- Ohmmeter
- 5/16" nutdriver

2. Identifying internal components inside SRMax

To access internal components of the SRMax, remove cover by following the Step-by-step instructions.

Labels on the image:
- Ballast
- Ballast to lamp connection
- Thermistor
- Circuit board to ballast connection
- Circuit board
- Reset button

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![Sanuvox logo - PURIFYING AIR AT THE SPEED OF LIGHT™]

3. List of parts for replacement

Sanuvox PN	Description	
BST120/240GL	Ballast	
MSCELC20-1	Circuit board	
MSCTER2	Thermistor	
LMPRGXJ65	6.5in regular intensity UV lamp	

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4. Troubleshooting summary table

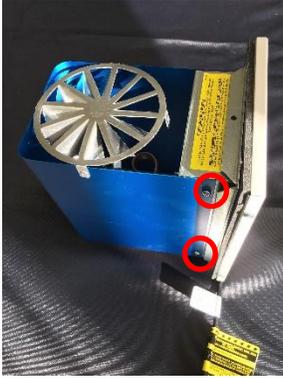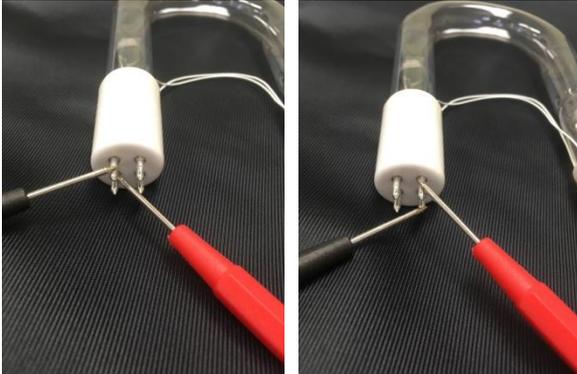| Problem	Possible causes	Try …
On/Off button internal LED is not lit	- There is no power to the electrical outlet - The On/Off button is not pressed ON - Power cord is damaged - Circuit board is damaged or defective	- Test the outlet to make sure there is power by plugging in another electrical appliance - Press the switch to the ON position - Check the power cord for damage and replace if damaged (contact Sanuvox) - Visually inspect the circuit board and look for damage/burn marks - Contact Sanuvox to replace circuit board and thermistor together
Status LED is Orange	- The lamp has reached its 3 year lifespan	- Get a genuine replacement lamp and reset the counter to 3 years (refer to reset procedure)
Status LED is Red with 2 flashes	- Connection issues between the lamp and the ballast - Connection issues between the ballast and circuit board (power supply) - Defective lamp - Defective ballast	- Verify that the connections between lamp and ballast (also ballast and circuit board) are secured - Test lamp continuity (refer to lamp test procedure) - Contact Sanuvox to replace UV lamp - Contact Sanuvox to replace ballast
Status LED is Red with 3 flashes	- Thermistor is not connected - Thermistor is damaged or defective	- Check thermistor connections - Contact Sanuvox to replace thermistor
Status LED is Red with 4 flashes	- Thermistor is shorted	- Contact Sanuvox to replace thermistor
Status LED is Blue with heartbeat	- Airflow detection activated, waiting for airflow	- Change the fan setting for higher speed - Reposition the SRMax in the ductwork where the airflow is unobstructed - By-pass the thermistor (refer to thermistor by-pass procedure)
Status LED is blank	- Start-up not completed - Defective LED	- Wait 5-10 seconds for start-up to complete - Contact Sanuvox to replace LED
Lamp burned before the 3 years elapsed	- Over cycling of the UV lamp due to excessive start/stop of the variable speed fan	- Contact Sanuvox to replace lamp and by-pass thermistor (refer to thermistor by-pass procedure)

5. Step-by-step instructions

⚠️ **WARNING** Before performing any of the instructions below, make sure the unit is turned OFF and unplugged from power.
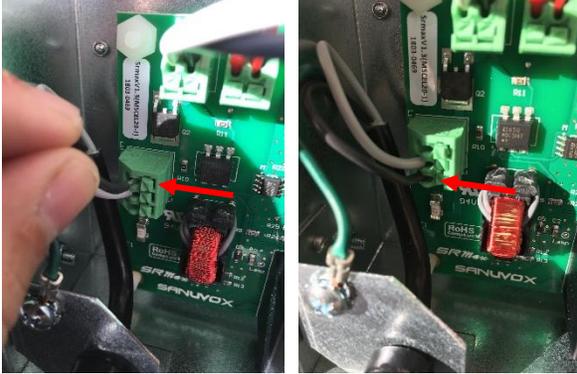
5.1 Open the SRMax ballast box

Step	
1. Take the SRMax out from the ductwork by removing the 4 screws located on the cover (4 corners) that hold it to the frame	
2. Place the SRMax down on a flat surface, remove the 4 screws that attach the cover to the ballast box and pull the cover off	

5.2 Test UV lamp continuity

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

2. Take the reflector off by removing the 4 screws that hold it to the ballast box and remove the lamp connector from the lamp	
3. Using an ohmmeter place 1 probe on 1 of the 4 pins and by sensing the 3 remaining pins, 1 should have continuity. Make sure the 2 remaining pins also have continuity.	

5.3 By-pass circuit board (test ballast and UV lamp together)

Step	
1. Open the SRMax ballast box	Refer to instructions above
2. Unplug from the circuit board the line (black) from the power cord. See picture to the left. Insert black wire from the power cord into connector identified "Bypass". See picture to the right.	
3. 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 the UV lamp and ballast are still functional.	

4. After the test is completed, unplug the unit and replace the black wire from the cord in its original position (Line).	

5.4 By-pass thermistor

Step	
1. Open the SRMax ballast box	Refer to instructions above
2. Plug in the SRMax to a power source and turn ON the unit by pressing the power button. In the first 5 seconds from powering the unit ON, click the Reset button once. By doing so, you'll see the status LED turn Blue meaning the airflow detection is activated. By clicking again within 5 seconds, LED will turn White meaning that airflow detection is deactivated.	

5.5 Resetting lamp timer

Step	
1. Open the SRMax ballast box	Refer to instructions above
2. Plug in the SRMax to a power source, press the switch to the ON position and wait 10 seconds before next step.	
3. Press and hold the reset button for 3 seconds until the counter sets itself back to 1096days (3 years)	