

How to replace the control panel/keypad

SCOPE:

This Procedure Guide provides proper written instructions to ensure standard methodology for replacing the control panel/keypad on a Power Breezer Mobile unit MK 4.

REVISION HISTORY

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1	Jan 10, 2023	Luis Canela	Original Document
2			

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Recommendations:

If after following the complete Instruction sequence and the problem persists, please contact Power Breezer customer service for assistance via phone at 1-844-233-5673 or by email at customerservice@Powerbreezer.com

Warnings:

- Any repairs on a Power Breezer® should be made only by authorized personnel or Power Breezer personnel. Any repairs/modifications by others will void the unit's warranty.
- Power Breezer has made every effort to ensure that the directions provided in this Instruction Guide are complete and accurate. Any attempt on the user's part to perform a do-it-yourself upgrade or repair will be solely at the reader's risk. Even when the Instruction Guide's instructions are carefully followed, the slightest misstep in disassembly or reassembly could result in further damage to the unit. If the user is unsure about how to diagnose/repair the unit as described in this Instruction Guide, please contact Power Breezer customer service for assistance at 1-844-233-5673 or customerservice@powerbreezer.com
- The information in this Instruction Guide is intended for use by individuals possessing adequate electrical, electronic, and mechanical experience, backgrounds, and skills. Power Breezer shall not be responsible for the interpretation of this Instruction Guide's information, nor will it assume any liability in connection with its use.

Cautions:

- System hazards include mechanical pinch points, electrical hazards, and tripping hazards. Service should be performed by those with an understanding of such hazards.
- Turn off and unplug the Cooling Unit before filling or emptying the water reservoir.
- Turn off and unplug the Cooling Unit before moving.
- Turn off and unplug the Cooling Unit before cleaning it.
- Always unplug the Cooling Unit by pulling on the plug and never on the cord.

- Do not insert fingers or other objects inside the fan head, doing so may cause bodily injury.
- Children can fall into an open water reservoir and drown, even in a small amount of water.
- Keep children away from the reservoir. Keep the reservoir lid on at all times.
- Closely supervise all nearby children and pets when using this Cooling Unit. Do not leave the Cooling Unit unattended.
- Children should never be permitted to play with the Cooling Unit.
- When possible, unplug the system for service actions. Take appropriate precautions against electrical hazards when servicing live circuits.
- Use only on an outlet protected by a ground-fault circuit interrupter (GFCI). Avoid using extension cords.
- Do not allow the plug to become wet. Do not plug in/out while your hands are wet. Doing so increases the risk of electric shock.
- Do not alter the plug in any way.
- If the power cord is damaged, do not attempt to repair it yourself. Contact Power Breezer customer service for assistance. 1-844-233-5673 | customerservice@Powerbreezer.com
- The Cooling Unit is not to be used by persons (including children) with a lack of experience and knowledge unless they have been given supervision or instruction.
- This Cooling Unit may be used by children aged 8 years and above and persons with reduced physical, sensory, or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the Cooling Unit safely and they understand the hazards involved.

When operating the Cooling Unit, use common sense. Stay clear of moving parts and only use water that is safe for drinking.

Materials Required:

- Control panel/Keypad
- Wire harness

Tools Required:

- 10mm socket
- 13mm socket
- Hand ratchet
- Small flat-down screwdriver
- Gloves

Persons Required:

- 1

Safety gear:

- Safety glasses
- Gloves
- Voltage Tester/Non-Contact Voltage Tester

Steps:

1. Proceed to turn the unit off with the circuit breaker and disconnect the power cord from the outlet.
2. Using the flat-down screwdriver, carefully separate the control panel from the unit. The control panel is attached with adhesive.

CAUTION:

Avoid damaging the wire connected to the control panel by pulling too hard.

3. Disconnect the control panel from the wire harness by pushing down on the tab and sliding out the connector.
4. Connect the new control panel by inserting the wire harness connector.
5. At this point, you may test the unit and ensure proper operation. If the test is passed, continue to **Step. 6**. If the test is failed, proceed to **Step. 7**.
6. Remove the adhesive protective tape on the control panel and firmly place it back into place. Hold it down for 30 seconds. Proceed to test the unit and ensure proper operation.
7. Using the 13mm socket, remove the two lower bolts holding the E-Box in place. (E-Box is located in the lower rear part of the mobile unit.) See Figure 1.

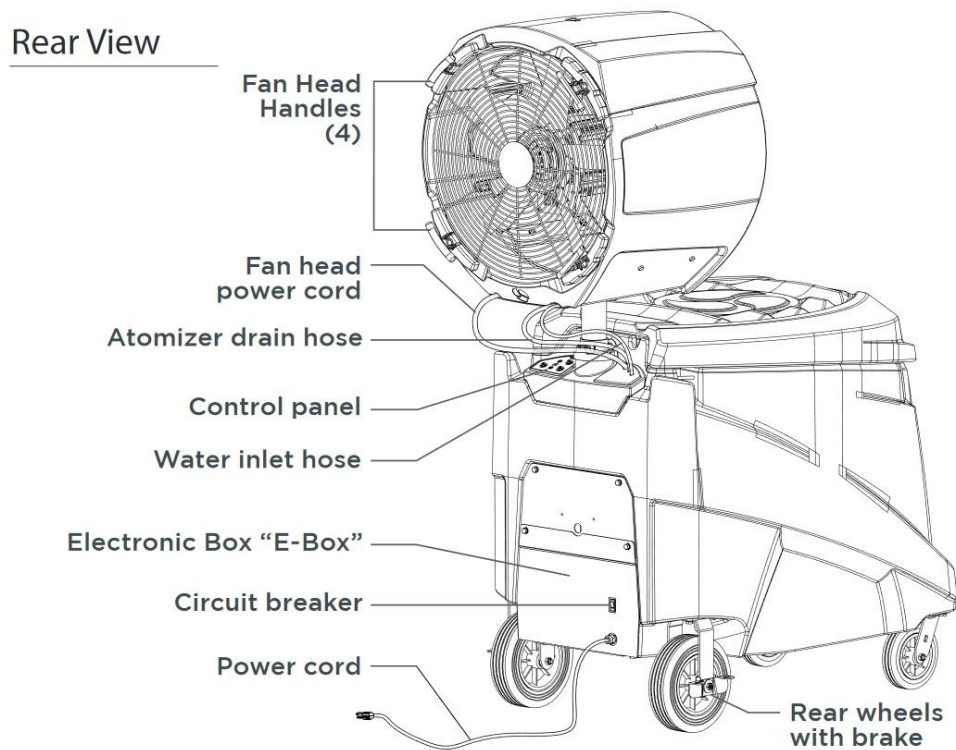


Figure 1

8. Gently slide the E-Box out of the mobile unit and place it upside down.
9. Using the 10mm socket, remove the two bolts keeping the E-Box closed.
10. **WARNING:** For the next step, wear gloves that will electrically isolate you from the electrical components inside the E-Box.
11. Next, you must identify the wires for the control panel/keypad. See Figure 2.

Control Cable:

1	+12 V Speed Reference: SR	DC Block
2	+12 V Controller Power: C+	DC Block
3	-12 V Controller Gnd: C-	DC Block
4	Fan Control: FC	Fan relay #1
5	Atomizer/Pump Control: WC	Atom./Pump relay #1
6	Rotation Control: RC +12 V	DC Block
7	Fan Speed Signal: FS + 12 V	DC Block

Figure 2

12. **IMPORTANT:** Make a note of where the wires are connected to the E-Box.
 For Example, T7 Top Orange, T7 Bottom Yellow, T8 Bottom Blue, T13 Bottom Green and T14 Bottom Red. See Figure 2 & Figure 3.

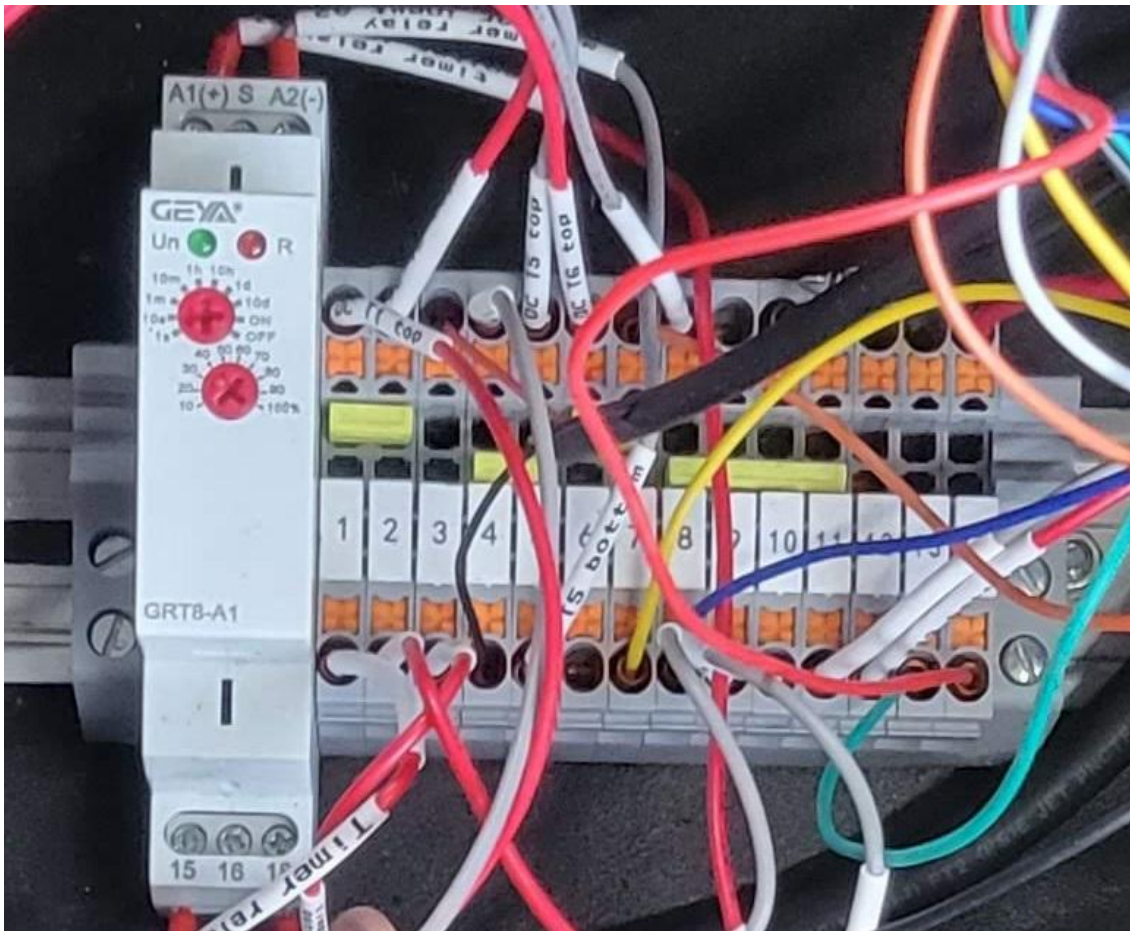


Figure 3

13. Using the small flat-down screwdriver, remove the wires. To remove the wires push down with the screwdriver on the orange pin next to the wire you wish to remove. The wire should slide out with little force.

(On older connectors, utilize the screwdriver to push down into the hole next to the wire you want to remove.)

14. Remove the old wire harness by routing the cable back into the water tank. This can be done by gently pulling the cable from the E-Box towards the control panel/keypad.
15. Disconnect the harness from the control panel/keypad holder, same as **Step. 3**.
16. Connect the new wire harness to the control panel by gently plugging the connector.
17. Route the new wire harness back down to the E-Box.

18. Reconnect the wires to the E-Box. Make sure to refer to the notes taken in **Step. 12** as not to incorrectly wire the control panel/keypad. Using the small flat-down screwdriver to push down on the orange pin and slide the wire into place. Then release the orange pin, and test a secure fit by gently pulling on the wire.

(On older connectors, utilize the screwdriver to push down into the hole next to the wire you want to insert.)

19. Carefully inspect all the wires are properly connected and close the E-Box.
20. Place the E-Box upside down and slide the cover on, ensuring that the two notches on the side slide into place.
21. Using the 10mm socket, place back the two small bolts securing the E-Box close.
22. Place the E-Box back underneath the water tank, and using the 13mm socket, place back the two bolts securing the E-Box to the water tank.
23. Remove the adhesive protective tape on the control panel and firmly place it back into place. Hold it down for 30 seconds.
24. Test the unit and ensure proper operation.

If you have questions and or problems applying the procedures found in this guide, please contact Customer Service by email at customerservice@powerbreezer.com or by phone at 844-233-5673.