

kulturBOT Instruction Manual

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Version 2.0

Last Updated: April 17, 2015

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1 Getting Started

Hello there! You have been tasked with taking care of my kulturBOT! Welcome to the team! We are glad to have you with us. Here are some things to get you started working with kulturBOT.

1.1 Quick Facts

Twitter Profile: @kulturBOT

Facebook Profile: Facebook Homepage

Expected Battery Life: 3 Hours.

Expected Charge Time: 3 Hours.

DO NOT LIFT kulturBOT BY THE HANDLES OF THE STRAINER

- Instead lift the robot from the white base.

1.2 my kulturBOT's Anatomy

my kulturBOT is made from a version of the iRobot Create which is directly related to the popular in house robotic vacuum cleaner. Hidden under the front of the strainer, kulturBOT has three buttons. These three buttons are used to control various functions of kulturBOT. Refer to Figure 1 for the names of these buttons. Also take note of the names of the LED's.

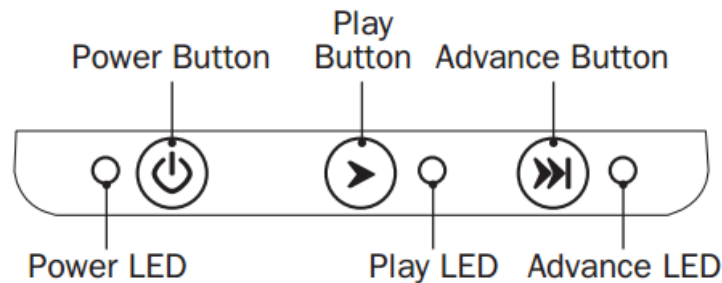


Figure 1: Three Buttons Found Under Strainer

1.3 Turning kulturBOT on.

1. Press the **Power Button**. The **Power LED** should now be green and you will hear a *beep*.
2. The main white Dome light will also turn on when kulturBOT is on.

1.3.1 Is kulturBOT turned on?

To determine if kulturBOT is on, observe the **Power LED**. If it is **Green**, kulturBOT is on. If it is **Orange/Amber** kulturBOT is on but needs to be charged (See Section 2.3). If the **Power LED** is not on, kulturBOT is either off or the batteries are dead.

The main Dome light will also be on when kulturBOT is on.

1.3.2 Restarting kulturBOT

From time to time you will need to restart kulturBOT . To restart kulturBOT:

1. Press the **Power Button**. The **Power LED** should now be off.
2. Press the **Power Button** again. The **Power LED** should now be green and you will hear a *beep*.
3. After around 20 seconds kulturBOT will start moving.

1.4 Virtual Walls

Use the virtual walls to prevent kulturBOT from leaving a room or getting too close to delicate items. To turn them on press the power button on the front so the green LED is illuminated.

NOTE: The walls will only stay on for 45 minutes at a time and must be turned on again when the LED turns off.

2 Normal Operation

The following outlines how to get my kulturBOT operating normally.

2.1 Using the my kulturBOT Unit

First ensure kulturBOT is turned on. Refer to 1.3.1.

1. The main dome light should be on - it is a bright white LED array (which is very hard to miss).
2. There is a small green LED on the printer which should be blinking once every 2 seconds. This indicates the printer is functioning properly.
3. The unit will then operate on its own - repeating a stop - go - stop -print cycle until it is powered down or its batteries have died.

2.2 Stopping my kulturBOT

1. Wait until kulturBOT has temporarily stopped moving. This should happen every 45-60 seconds. It is best to turn kulturBOT off just after a poem has printed. Press the power button once to turn off kulturBOT. The main dome light should be off.
2. It is important my kulturBOT **is not turned off shortly after being turned on**. This may cause corruption of the onboard memory - before turning it off wait until kulturBOT has moved.

2.3 Charging my kulturBOT

1. Determine if the kulturBOT unit is on. Refer to Section 1.3.1
2. IF kulturBOT **is on**, stop it if it is running (See Section 2.2).
3. Plug kulturBOT into the provided wall adapter. The chargingoutlet on kulturBOT is on the right rear side section.
4. The main dome will light up and about 10 seconds after it is plugged in the Red Printer Status light will fade slowly indicating it is charging. Note: **The red light will still fade on and off even when kulturBOT is fully charged.**

3 Normal Behaviour

This section will describe the "loop" which kulturBOT follows. If kulturBOT is behaving in any other way, it should be stopped and restarted.

1. After turning on, kulturBOT will *beep* and start moving.
2. After 45 seconds, kulturBOT will stop. The robot may play a song if it deems it necessary.
3. After 90 seconds, kulturBOT will *beep* and start moving again.
4. This cycle will repeat a few times until kulturBOT comes to a stop and the Red Light Bar by the printer starts flashing.
5. A poem will then print and the light bar will continue to flash for 20 seconds allowing adequate time for the print to be collected by a bystander.

The robot will then reboot and repeat the cycle.

When kulturBOT is stopped, it will do one of three things:

1. Make loud robot noises.
2. Print a poem.

3. Do nothing.

After 3 hours kulturBOT should be charged. See Section 2.3.

4 Maintenance

4.1 Replacing the paper

If you noticed a purple/pink streak in the prints - the paper is low and should be replaced soon. Note: The paper can be feed line by line by pressing the small black button on the top of the printer.

1. Ensure my kulturBOT is **off**.
2. Open the printer by pulling up the small tab.



Figure 2: Opening printer paper compartment

3. Remove the remaining paper spool.
4. Open a new paper spool and remove the first layer.
5. Place the spool such that **LOOSE END ON THE BOTTOM OF THE SPOOL**. Ensure there is an excess length of paper on the bottom of the spool.
6. Press the printer cover down firmly. The tab will move back into place on its own.
7. Rip off the extra length of paper. This leaves a clean edge for the next print.



Figure 3: Placing spool in compartment

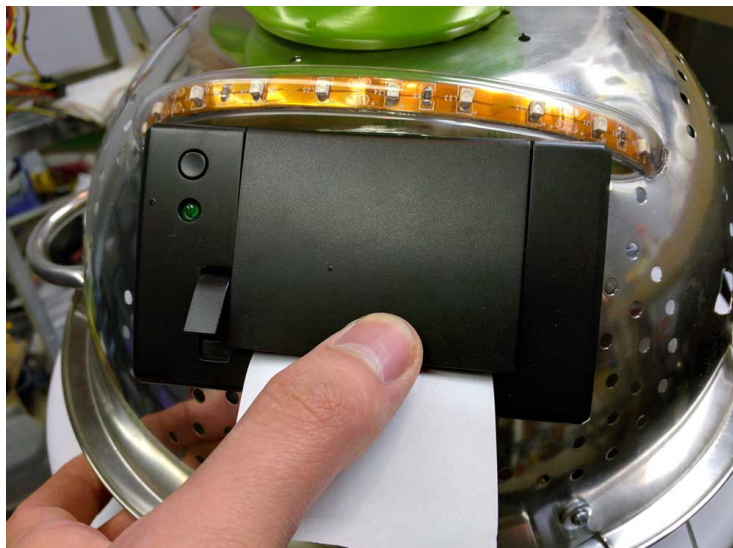


Figure 4: Closing paper compartment

5 Preparing for shipping

Remove the flag by firmly pulling it upwards about 2 inches. Then point the flag horizontally and pull it out.



Figure 5: Flag Pole - Horizontal

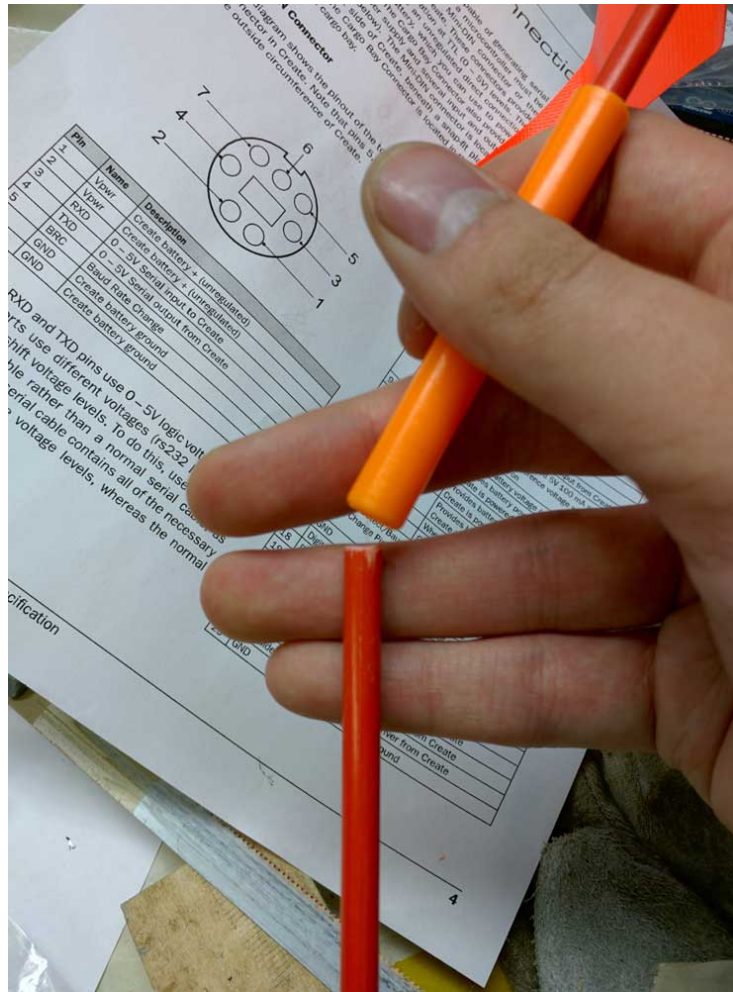


Figure 6: The flag can be broken down into two pieces (in a camping pole like fashion) for shipping.

5.1 Removing the Battery

The battery should be removed before shipping or long term storage.

1. Ensure my kulturBOT is turned off and unplugged from its charger.
2. Carefully lift up the front of the unit and observe the bright yellow orange battery pack.
3. Gently push the tabs on the side inwards and slide the battery pack out.



Figure 7: How to remove battery

6 Troubleshooting

6.1 kulturBOT is moving but no longer stopping!

Try to catch the robot and lift it up by the base. **DO NOT LIFT kulturBOT BY THE HANDLES OF THE STRAINER** This will cause to the robot to stop moving.

6.2 kulturBOT printed an error message!

Uh oh! The on board memory may need to be replaced!!!

6.3 kulturBOT won't turn on.

kulturBOT batteries are probably dead. See the instructions in Section 2.3.

6.4 kulturBOT has become self aware!

Well .. I'll take your word for it; but it is now your problem!

6.5 Something else has happened!

Try restarting everything. Laptop, kulturBOT, and anything else. If you are still having issues contact Colin Gagich - colin.gagich@gmail.com