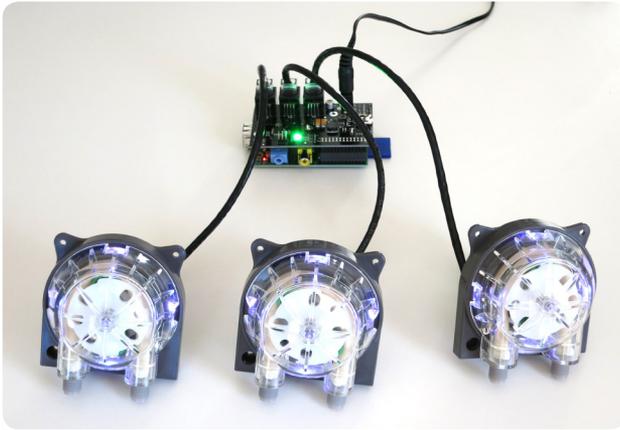


Getting Started Guide

Model Nos.

B101V1

B103V1



KICKSTARTER EDITION

Thanks for backing us!

Please Read Before Operating

Congratulations!

You are one of the first owners of a new enabling piece of technology. These precision Bartendro™ Dispensers and electronics are the same as what go into Bartendro™ cocktail bots. The applications don't stop at cocktails though, people have been coming up with many ideas from hydroponics to sno-cones. What will you come up with? Share your projects at:

www.partyrobotics.com/community/sharing

⚠ Important Precautions

- Not intended for medical use.
- Electronics may be sensitive to static dissipation. Observe proper precautions for handling.
- It is not recommended to keep clear tubing immersed in liquid for extended periods of time.
- Beige tube (inside the Dispensers) life is approximated to be 500 hours of use.
- If storing long term without use, remove beige tubing from dispensers to extend tube life.
- Dispensers may need to be periodically re-calibrated as tubing wears.
- Please drink and use responsibly.

Specifications

Max Flow rate: 700mL / min

Motor Operating Voltage: 24V

Minimum Dispense Volume: 2mL

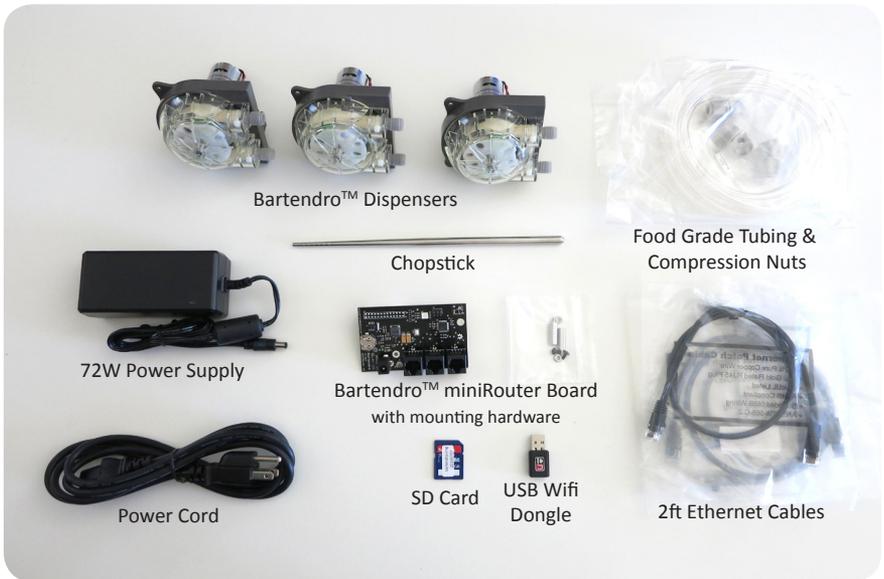
Repeatability: ±1mL

Dispenser Current Consumption at 24V: 350mA Typical, 500mA max

System Current Consumption at 24V: 0.5A Idle, 1A All dispensers on (B1)

0.5A Idle, 2A All dispensers on (B3)

Max Cable Length to Router Board: 10ft



What's Included:

B1	B3	Part No.	Item
1	3	A007V1	Bartendro™ Dispenser (includes two compression nuts)
1	1	M101V1	Chopstick (tubing replacement tool)
1	1	A016V1	Bartendro™ miniRouter Board (with hardware to mount Raspberry Pi)
1	1	E007V1	SD Card
1	1	E005V1	USB WiFi Dongle
1	1	E008V1	24V, 72W Power Supply & Power Cord
1	1	TXXXV1	Food Grade Tubing (~5ft per dispenser)
1	3	C024V1	Ethernet Cables (2ft each)

Quick Start Instructions

You will need:

- AC Outlet
- Raspberry Pi Board
- Device with Web Browser (phone, tablet, laptop, etc)
- Wired Networking Router (for software updates)
- Computer (for software updates)

Hardware Setup:

1. Make sure the Raspberry Pi is securely connected to the miniRouter Board and is supported with standoffs. Take care not to damage the header if removing the board. (gentle rocking works best)
2. Attach the provided SD Card and USB WiFi dongle to the RPI.
3. Connect Dispensers to the miniRouter Board using the provided ethernet cables. Note that ethernet cables are only used for convenience and commonality, the ethernet protocol is not used.
4. Port numbers on the miniRouter Board should be noted when plugging into a new Dispenser. The numbers can optionally be written down in the white box on the back of each dispenser.
5. Connect the Power Supply to the miniRouter Board and the Power Supply to an AC outlet. The Raspberry Pi will begin to boot.
6. Once the Dispenser's LEDs begin to fade in and out (about 1 minute), the system is ready for use. If they don't get to this state, see the Troubleshooting section on page 8.
7. Mount the dispensers appropriately. See dimensions on page 7.
8. Attach clear tubing to the dispensers using the provided compression nuts. Make sure to budget about 5ft per pump. Cut an angle into the bottom of the Dispenser's input tubing to prevent it from attaching to the bottom of the bottles. See video at partyrobotics.com/docs.

Getting Started with the User Interface

Connect to your bot:

1. Using a WiFi enabled device, find the “bartendro” WiFi network by looking for it in your settings and connect to it.
2. Once connected (up to ~30 sec the first time) you will need to go to a web browser, such as Chrome, and type in any web address. You will automatically be redirected to the Bartendro user interface (UI).
3. The main menu may or may not have drinks populated. To tell the bot which ingredients are present, you will need to log into the admin screen. You may do this by either searching for the hidden link at the bottom left corner of the main menu, or typing bartendro/admin in the address bar of your browser.

When prompted use the default:

Name: bartendro

Password: boozemeup

Note: Your login name and password can be modified by changing a file on the Raspberry Pi. Instructions on page 7.

Once connected to Bartendro you will have access to the following:

Admin

Admin - Dispensers: Controls ingredient selection for each dispenser from a drop down menu. Ingredients come from the “booze” tab. Choose wisely, your drink options depend on it! Note that taking manual control comes with responsibility. The “clean” button will indiscriminately dispense all of your booze if pressed by accident and you will be a sad panda. Each dispenser can individually be toggled on and off by using the “turn on”/“turn off” buttons and small increments can be dispensed using the “dispense xxmL” button (helpful when priming). The “liquid levels” button forces a check of liquid levels, but this only works if the feature is enabled. See page 7.

Admin - Drinks: Displays the drink list and allows you to make your own custom recipes. Select “add booze” and pick from the list of ingredients. The minimum number of parts is 1 and parts should be whole numbers, or will otherwise be rounded. All fields are required. Make sure to press save for your drink to be stored.

Admin - Booze: Displays the ingredient options and allows you to add your own custom ingredients. Adding the type, whether alcohol, sweet, or tart will allow for customizations in the drink menu.

Admin - Liquid Out: Liquid sensing is disabled by default. Only B7 and B15 kits come with these sensors. Sensors can be soldered on if desired, and sensing enabled using the steps in page 7.

Main Menu

Menu: This is where your drinks are available for selection. The list automatically updates depending on what is loaded in the dispensers screen. Note that the menu may appear differently depending on the number of dispensers detected.

Menu - Drink Customization: After you select your drink from the menu a second screen will display allowing you to customize your drink. You will have the option to modify size, and depending on the ingredients, strength and sweetness / tartness.

Cleaning and Maintenance

All tubing should be cleaned regularly.

1. Empty what remains in the tubes by turning on the dispensers. You may use the “turn on,” “dispense xxmL” or “clean” button to do this.
2. Fill a pitcher with hot soapy water and place the input tubes in it after they’ve been drained. Place a separate container underneath the spout to collect the soapy water. Press the “clean” button on the admin > dispensers screen and this will cycle through each dispenser.
3. Repeat step 2 but with clean water in the pitcher. Sanitizing solutions may also be used.
4. Finally, run the clean cycle again with no liquids. This will empty the tubes of liquid and prepare it for its next use.

The inner beige dispenser tubing should be replaced after 500 hours of use and removed if storing for prolonged periods of time.

Getting under the hood:

There are several settings that aren't exposed through the UI yet but can be changed by modifying the config.py file on the Raspberry Pi. Things like: use of liquid level sensors, display units, default size, taster buttons, the requirement to be logged in to dispense, etc.

To modify these settings:

1. Plug an ethernet cable from the RPI into a wired networking router. We've disabled the ability to do this wirelessly for security reasons.
2. Use a terminal window on a Mac or Linux box, or use a program like putty.exe in Windows to SSH into the bot. You may want to log into your networking router to discover the RPI's IP address.

Once connected,

login as: bartendro
password: hackme!

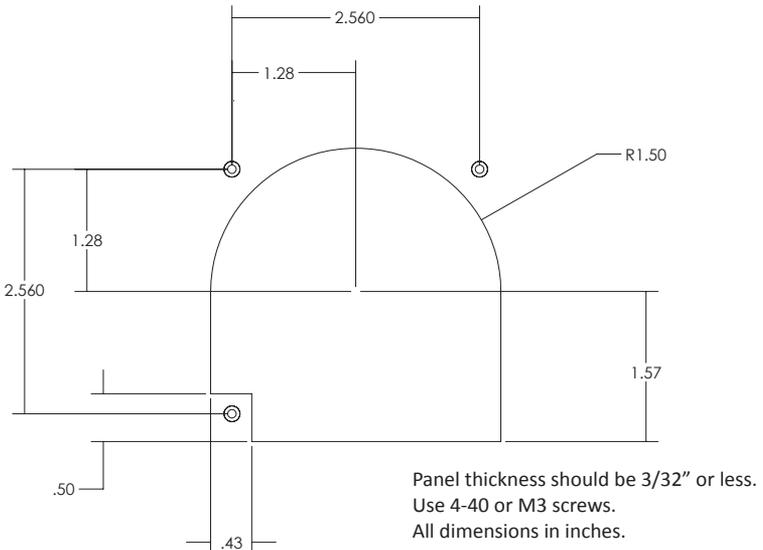
You can use vi to edit:

```
bartendro@bartendro ~ $ vi bartendro/ui/config.py
```

Save the file and power cycle for changes to take effect.

See partyrobotics.com/docs for more detail.

Dispenser Mounting Interface



Troubleshooting

Dispenser LEDs are blue and /or green after power up

This is normal, LEDs will remain in this mode until proper communication with dispensers is established (about 1 min). If not getting there, make sure SD card is properly seated

Dispenser LEDs are flashing red

A current limit has been triggered on a dispenser, press the “reset” button in the admin > dispensers page to restore proper operation. Check tubes for blockage.

Air bubbles in tubes, or dripping

This is a sealing issue. Make sure tubing properly protrudes from the grey compression nuts by about 1/4”. The chopstick tool is handy for this. Make sure the compression nuts are tightened so that only one or two threads are visible.

Drinks not showing up in Main Menu

Check to make sure an ingredient is selected and saved for each dispenser and that there is a drink that uses those ingredients. Make sure liquid level sensors are disabled. See page 7.

Still Having Issues?

Try searching the forums at partyrobotics.com/forums. Post your questions so that others may learn from your issues. If stuck, email us at: support@partyrobotics.com

More documentation at:

www.partyrobotics.com/docs

Warranty

We’re here for you! If you have made modifications to your hardware or software and are having technical issues, we will be glad to attempt to resolve them with you. If an item was damaged in shipping, or is otherwise defective or malfunctioning, please email us right away and we will do our best to make things right on a case-by-case basis.