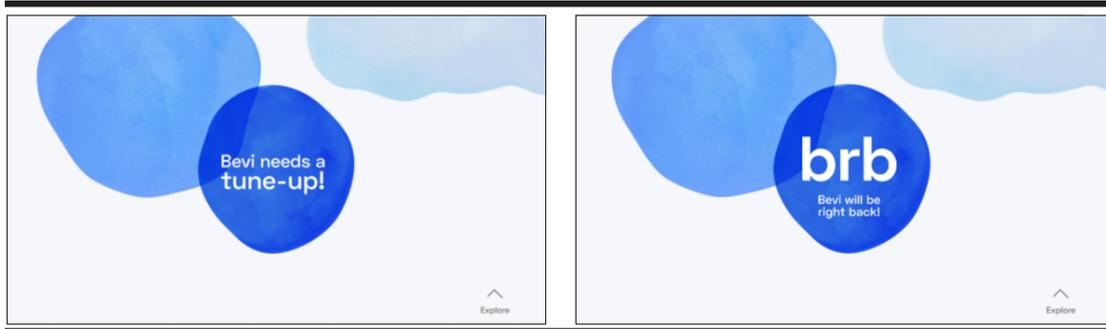


## [Guide] Bevi Alert Center - Control Board Communication Lost



### Overview

This document outlines how to diagnose and fix issues triggering one or multiple of the following control board-related alerts: **Power Module Comms Lost**, **BUC Board Comms Lost**, or **Door Board Comms Lost**.

Machine Alerts				
ALERT	MACHINE STATE	REPORTED	STATUS	
 BUC Board Comms Lost	Out of Order	10/12/21	Not Started	<a href="#">TROUBLESHOOT</a> 
 Door Board Comms Lost	Out of Order	10/12/21	Not Started	<a href="#">TROUBLESHOOT</a> 
 Power Module Comms Lost	Out of Order	10/12/21	Not Started	<a href="#">TROUBLESHOOT</a> 

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## Frequently Asked Questions

**Q: *What caused this alert?***

- A. *The Standup 2.0 has detected that communication from the Single Board Computer (SBC) to one or more of the other Standup 2.0 main Computer Boards has failed.*

**Q. *What do the different alert status mean?***

- A. *Not Started*- *The machine has detected the alert, but no service has been initiated to fix the issue.*
- B. *Open* - *Someone has tried to fix the issue, but it is still unresolved.*
- C. *Resolved* - *A technician has serviced the machine and the machine was working fine as of the date reported "Resolved"*

**Q. *What does the Button status mean?***

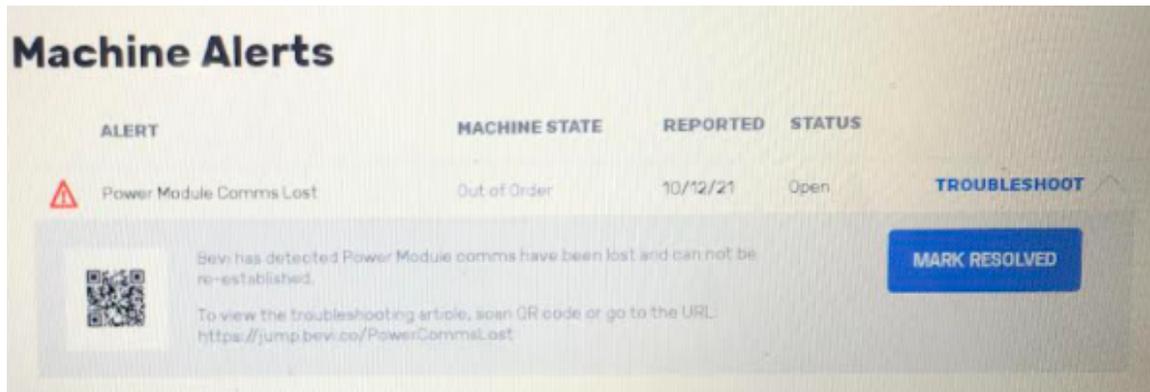
- A. *Troubleshoot* - *Selecting this button will take you to a troubleshooting document for this issue*
- B. *Resume Troubleshooting* - *This status means that a troubleshooting session was started and NOT completed and the Standup 2.0 is still reporting the issue*
- C. *Other messages* - *Any other note where the troubleshooting button would be is reflective of what the technician did to resolve the issue*

## Required Tools & Materials

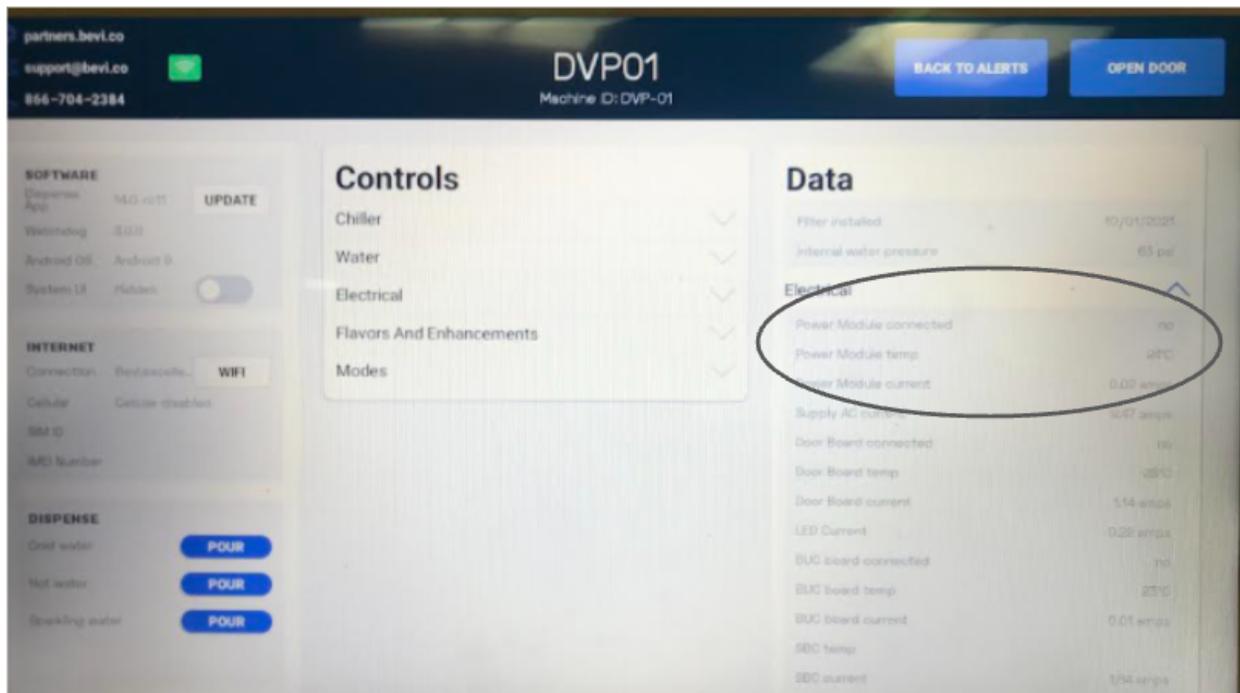
- *Access code to enter the service panel to the Standup 2.0 unit - 1986*
- *Number 2 Phillips Screwdriver*
- *Socket Set*
- *Multimeter*

**IMPORTANT: If you have all three boards with a Comms Lost alert message (as shown above), start with the Door Comms troubleshooting in Section 3.**

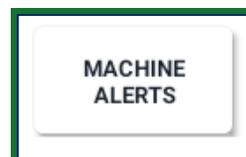
## SECTION 1: Power Module Comms Lost



### Task 1: Verify the issue in Troubleshooting Tools



1. Navigate to the **Machine Alerts** > **Troubleshooting Tools** section of the service panel.



2. In the **Data** section under **Electrical**, check that **Power Module Connected** is **No** and both **Door Board Connected** and **BUC Board Connected** are **Yes**.
3. Check this after each action to verify whether your troubleshooting has worked or not. **Power Module Connected** should be **Yes** when the issue is resolved.

## Task 2: Power cycle the machine

1. Turn off the machine by flipping the power switch on the upper rear of the machine, next to the power cord entry. Wait a minimum of 10 seconds.
2. Turn on the machine by flipping the same power switch. Allow the Bevi to fully boot (this may take a minute).
3. Enter the service panel by selecting “**Explore**” and then “**Service**” and entering the PIN code 1986. Navigate to “**Machine Alerts**” then “**Troubleshooting Tools**” to see if **Power Module Connected** is “**yes**”. If not, continue on to task 3.

## Task 3: Access the Power module by opening the top cover of the Bevi Standup 2.0

**Warning - Shock Hazard!!! The power module supplies 120VAC and 24VDC to various components of the Standup 2.0. Take precautions to prevent an electrical shock.**

1. Open the front door of the Standup 2.0 by entering the service panel: selecting “**Explore**” and then “**Service**” and entering the PIN code 1986.
2. Remove the three screws under the top lip of the cover - above the top flavor shelf
3. Remove the white plastic top cover by lifting up on the front of the cover



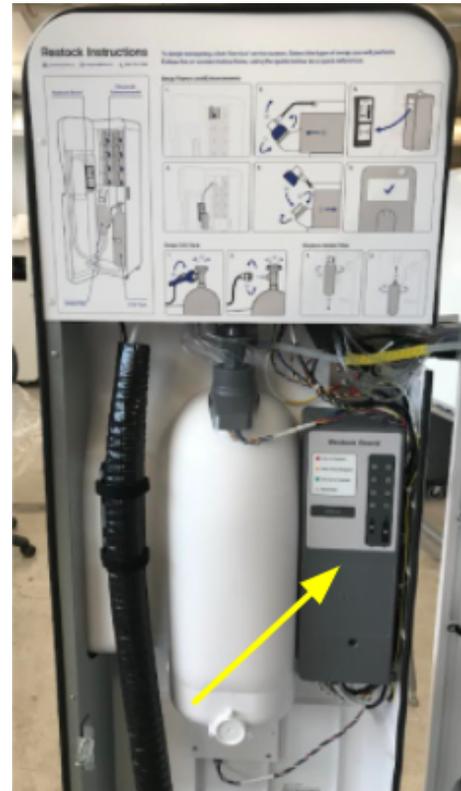
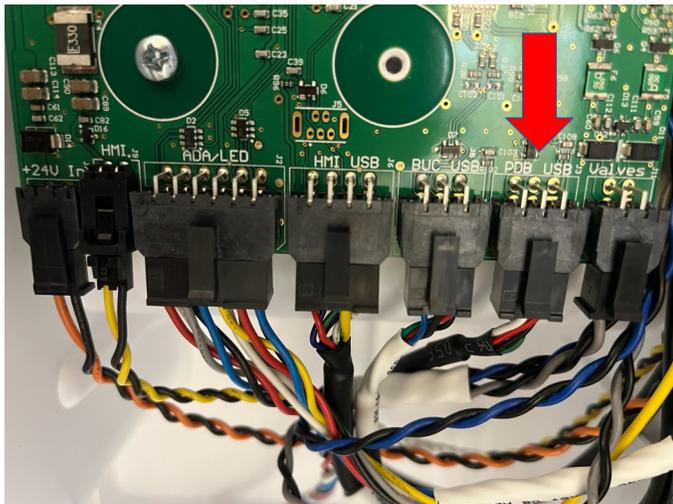


#### Task 4: Check the USB cable

1. Inspect the **USB PDB to DCB** cable on the left side of the Power Module. This cable has 5-pins and 4 connected wires. **NOTE: It is normal for 1 of the wires (usually black or white) to be free hanging as shown at right.** Unplug and replug the cable into the board to ensure the cable is fully seated (connector is latching).

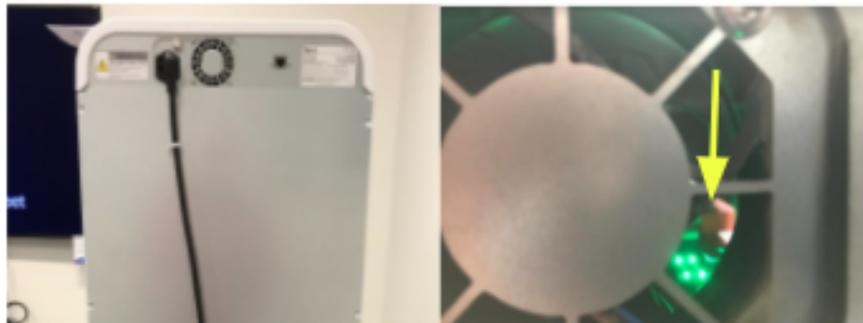


2. Open the Cover of the Door Board (Restock Board) by removing one screw at the bottom of the cover and lifting up.
3. Check the “USB PDB to DCB” cable (second from the right) on the bottom of the board is fully seated.
  - a. If cable is damaged, use Bevi replacement part number **105623-01**.



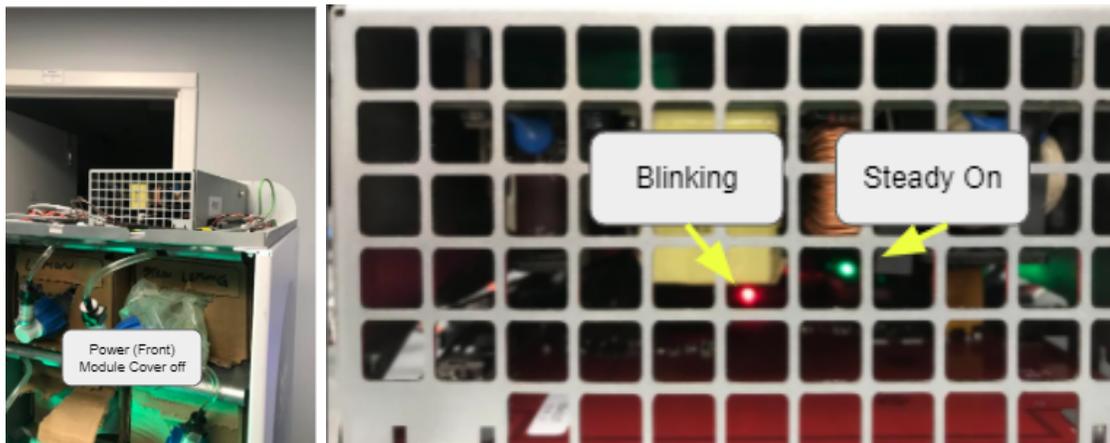
### Task 5 - Check the lights in the Power Module

1. Looking at the Standup 2.0 go to the upper back and look through the FAN Grill for 4 steady green LEDs



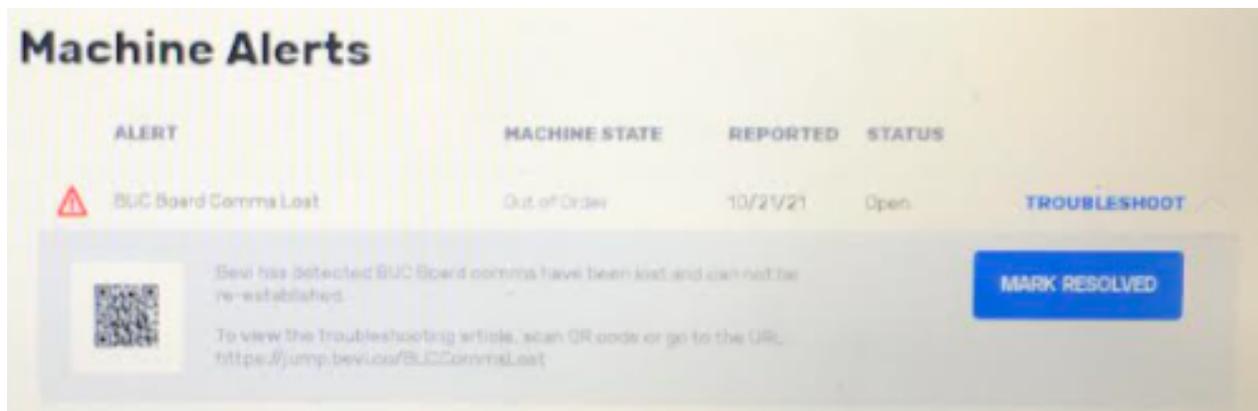
If lights are not working (while unit is on) - Replace the Power Module

2. If the lights above are working - Looking through the front verify that there is a steady Green light on the right and a “heartbeat”(blinking red and green light) in the center-left  
If lights are **not** working - Replace the Power Module, FRU 720-0101.

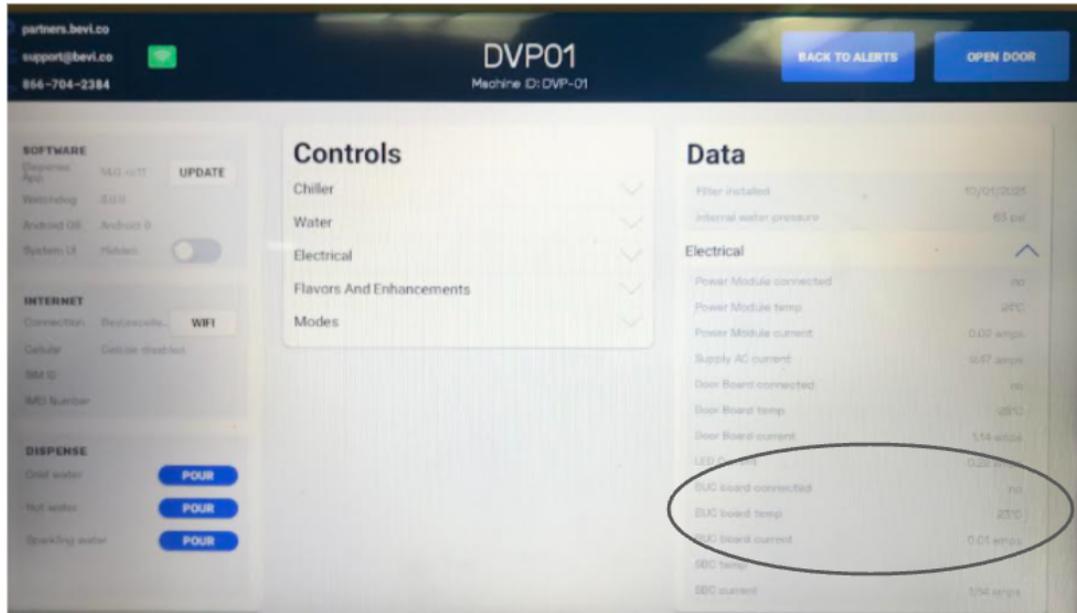


If all lights are on, the power module may still be your issue - check connections again and, if issue persists, replace the Power Module.

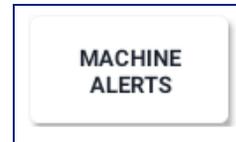
## SECTION 2: BUC Board Comms Lost



## Task 1: Verify the issue in Troubleshooting Tools



1. Navigate to the **Machine Alerts** > **Troubleshooting Tools** section of the service panel.



2. In the **Data** section under **Electrical**, check that **BUC Board Connected** is **No** and both **Door Board Connected** and **Power Module Connected** are **Yes**.
3. Check this after each action to verify whether your troubleshooting has worked or not. **BUC Board Connected** should be **Yes** when the issue is resolved.

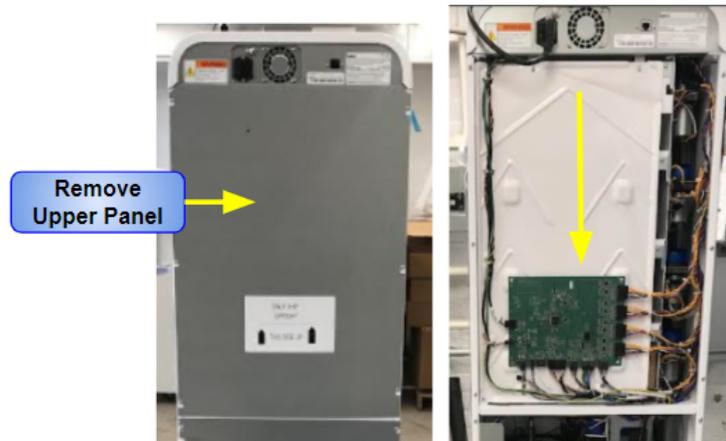
## Task 2: Power cycle the machine

1. Turn off the machine by flipping the power switch on the upper rear of the machine, next to the power cord entry. Wait a minimum of 10 seconds.
2. Turn on the machine by flipping the same power switch. Allow the Bevi to fully boot (this may take a minute).
3. Enter the service panel by selecting **Explore** and then **Service** and entering the PIN code 1986. Navigate to **Machine Alerts** then **Troubleshooting Tools** to see if **BUC Board Connected** is **yes**. If not, continue on to task 3.

### Task 3 - Access the BUC board

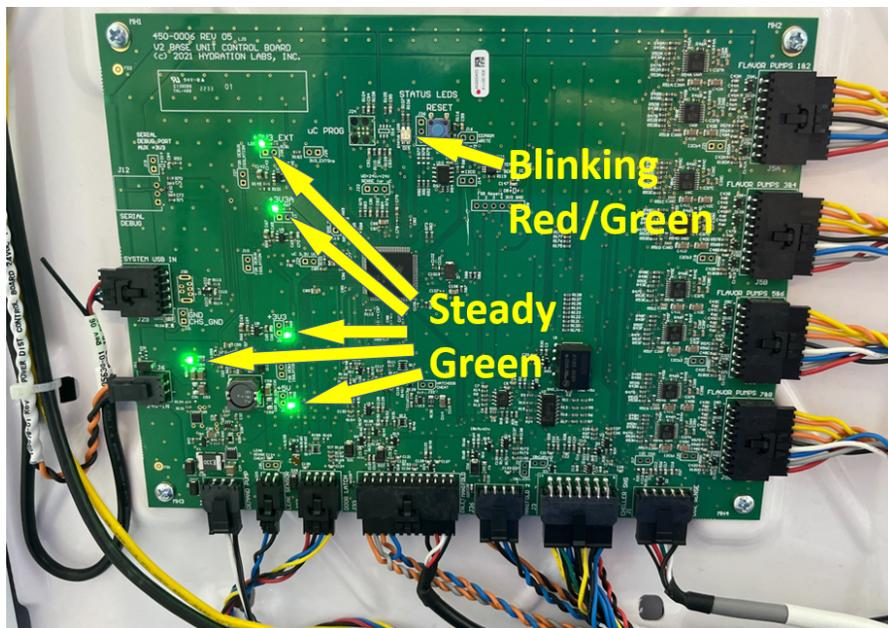
**Warning - Shock Hazard!!! The power module supplies 120V AC and 24V DC to various components of the Bevi Standup 2.0. Take precautions to prevent an electrical shock.**

1. Using a Philips screwdriver, loosen the 6 screws along the edges of the upper back panel.
2. Slide the panel up and pull out to remove.
3. The BUC Board is mounted in the bottom of this section.

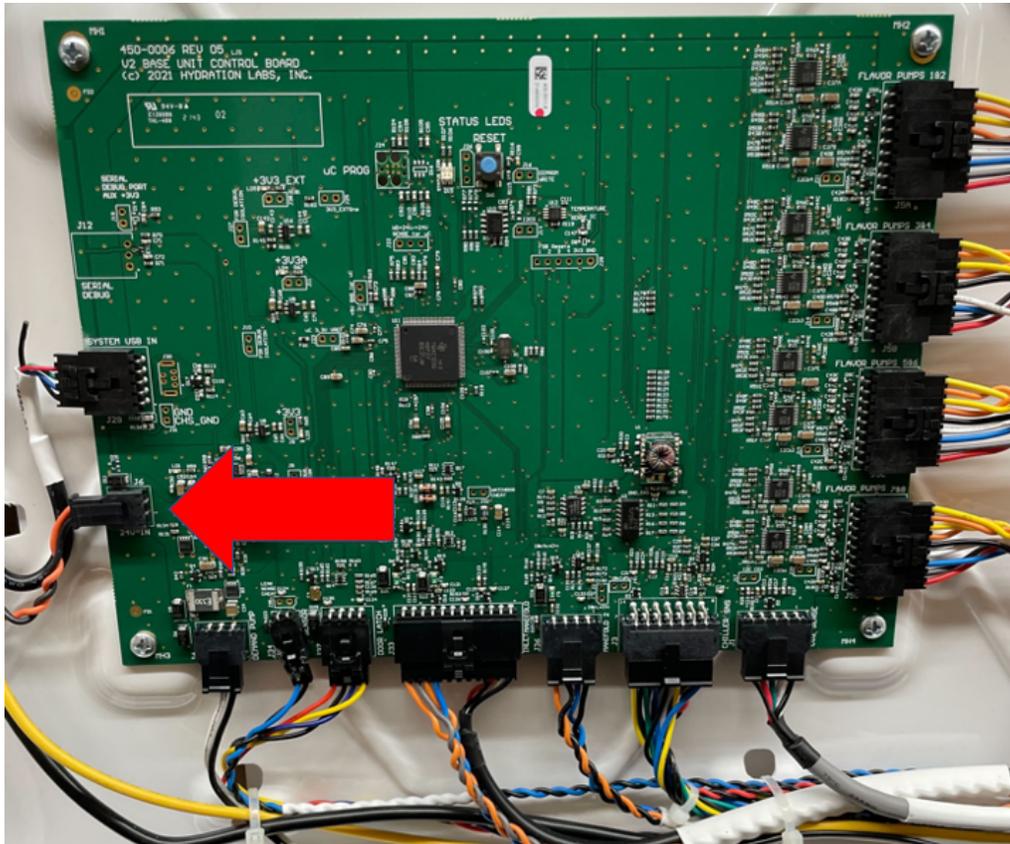


### Task 4: Check the indicator lights

1. There should be 5 steady green lights and one blinking light Green/Red - this is called the "Heartbeat" of the board.



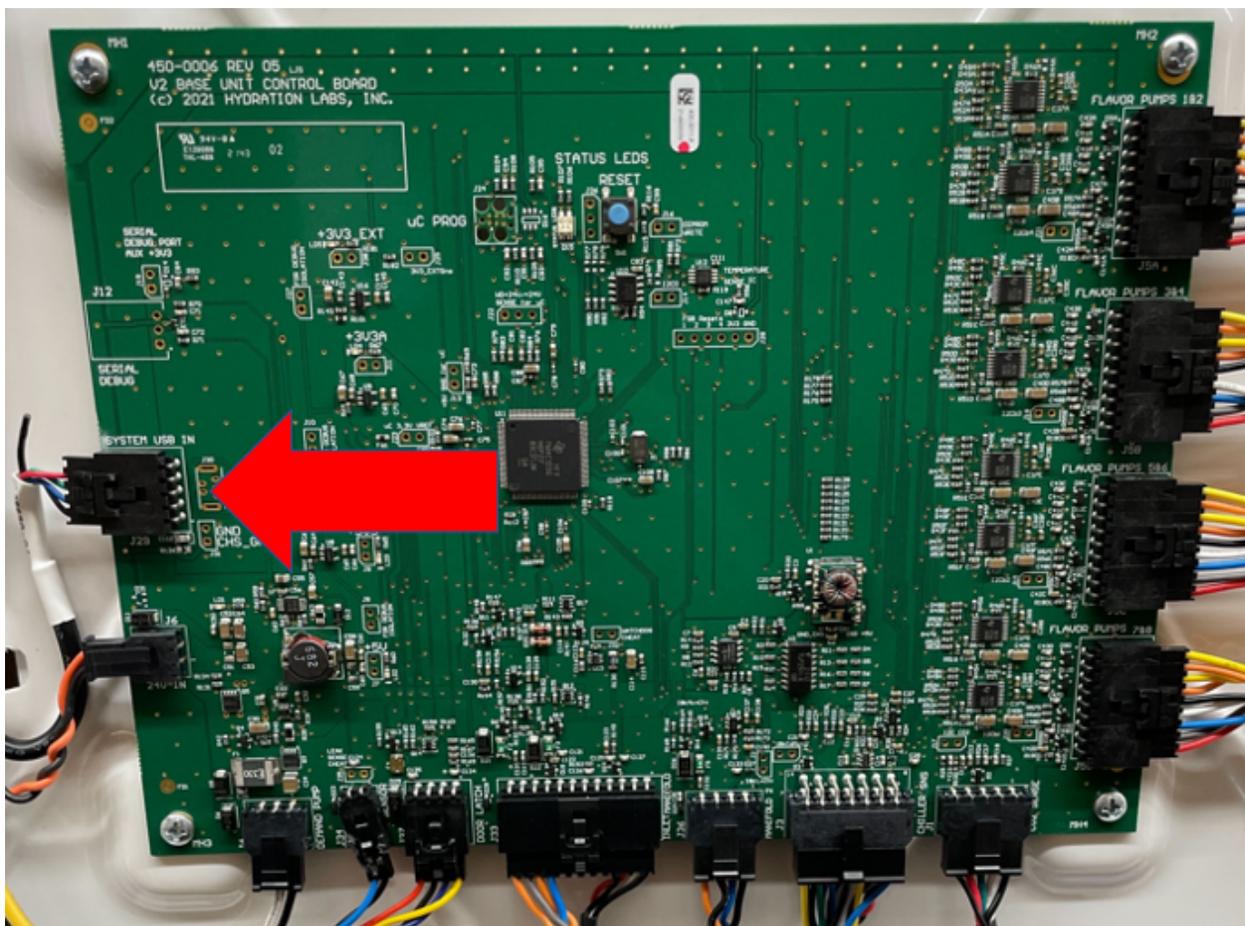
2. If one or more lights are not working do the following:
  - a. If all lights are off, check all connections to the board. Check the Orange/black 2-conductor power cable on the left edge of the board marked **24V In** to see that it is snug and plugged in correctly.



- b. If you have a multimeter, carefully measure the voltage across the pins of the connector to see if there is 24V coming from the cable into the board.
  - i. If there is 24V coming in - replace the board
  - ii. If there is not 24V coming in:
    1. With the door open, access the Power Module by removing 3 screws in the machine top cover and lifting the front.
    2. Use a multimeter to see if 24V is coming from the Power module by tracing the cable to its connection on the Power Module. Disconnect the cable at the power module.

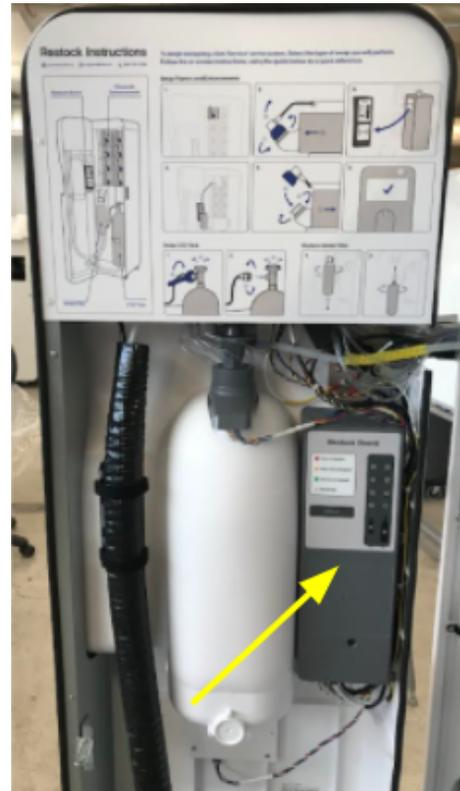
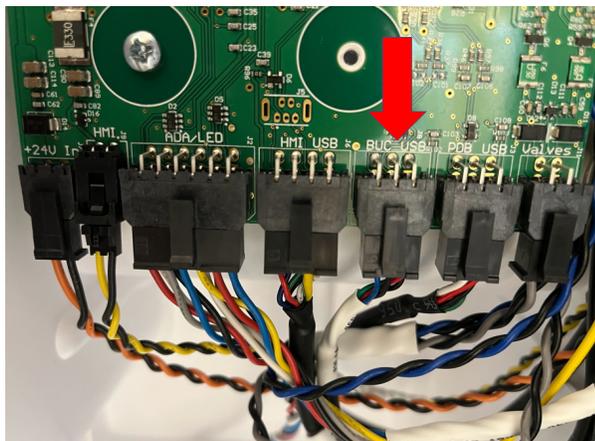
3. If there is not 24V coming from the power module, replace the power module.
4. If there is 24V coming from the Power module, replace the cable 105578-01 “CABLE POWER DIST CONTROL BOARD 24VDC TO BUCB.”

### Task 5 - Check the USB communication cable



1. Reseat the System USB cable coming into the Board (it is directly above the 24V cable). **NOTE: It is normal for 1 of the wires (usually black or white) to be free hanging as shown at right.**
2. Trace the USB cable back to the Door Control board, inspecting for damage.

3. Open the Cover of the Door Board (Restock Board) by removing one screw at the bottom of the cover and lifting up.
4. Check the “USB BUCB to DCB” cable (third from the right) on the bottom of the board is fully seated.
  - a. If cable is damaged, use Bevi replacement part number **105630-01** “CABLE USB BUCB TO DCB”..

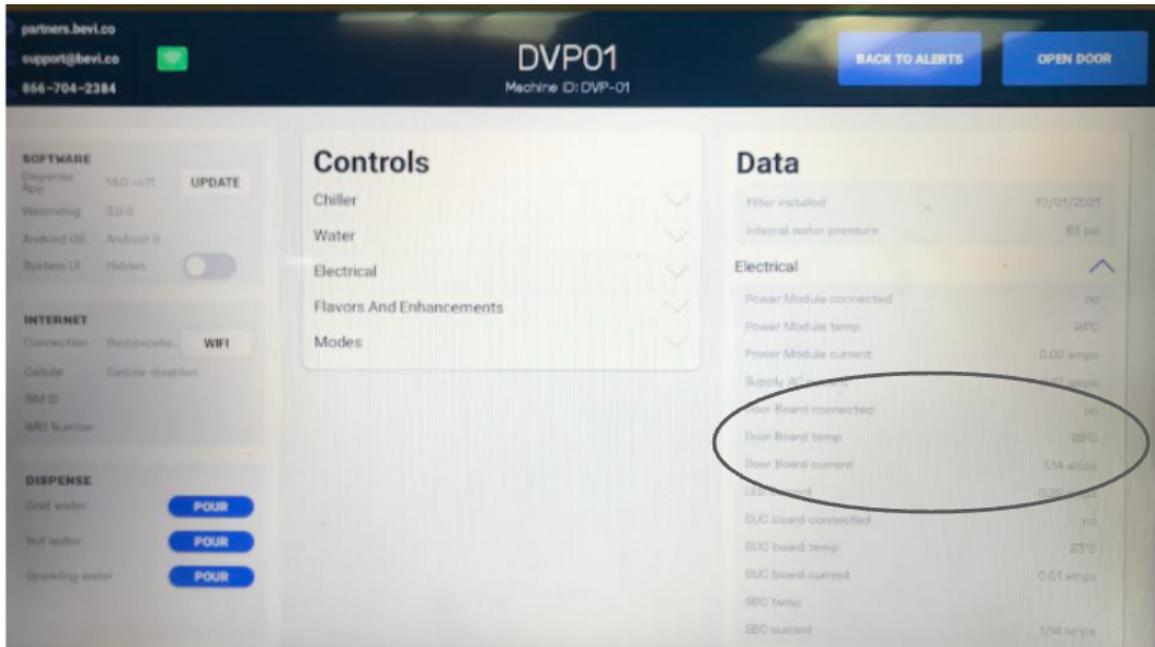


## SECTION 3: Door Board Comms Lost

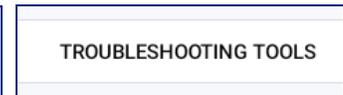
### Task 1: Verify the issue in Troubleshooting Tools

Machine Alerts				
ALERT	MACHINE STATE	REPORTED	STATUS	
 BUC Board Comms Lost	Out of Order	10/21/21	Not Started	<a href="#">TROUBLESHOOT</a>
 Door Board Comms Lost	Out of Order	10/21/21	Not Started	<a href="#">TROUBLESHOOT</a>
 Power Module Comms Lost	Out of Order	10/21/21	Not Started	<a href="#">TROUBLESHOOT</a>

***NOTE: Door Comms issues will always trigger three Comms Lost alerts because this board contains the system USB hub***



1. Navigate to the **Machine Alerts** > **Troubleshooting Tools** section of the service panel.



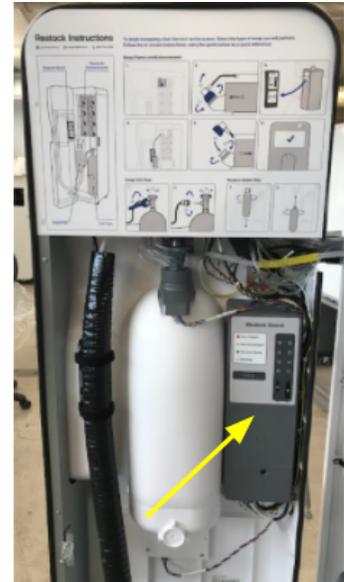
2. In the **Data** section under **Electrical**, check that **Door Board Connected**, **BUC Board Connected**, and **Power Module Connected** all are **No**.
3. Check this after each action to verify whether your troubleshooting has worked or not. All 3 boards should read as connected (“**Yes**”) when the issue is resolved.

## Task 2: Power cycle the machine

1. Turn off the machine by flipping the power switch on the upper rear of the machine, next to the power cord entry. Wait a minimum of 10 seconds.
2. Turn on the machine by flipping the same power switch. Allow the Bevi to fully boot (this may take a minute).
3. Enter the service panel by selecting “**Explore**” and then “**Service**” and entering the PIN code 1986. Navigate to “**Machine Alerts**” then “**Troubleshooting Tools**” to see if **Door Board Connected** is “**yes**”. If not, continue on to task 3.

### Task 3: Access the Door Board

1. Open the Cover of the Door Board (Restock Board) by removing one screw at the bottom of the cover and lifting up.

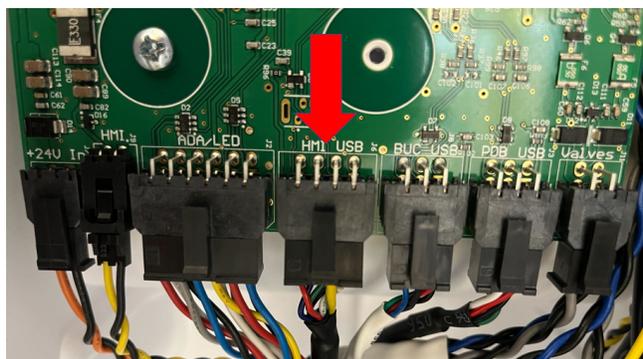


### Task 4 - Check the Door Board lights

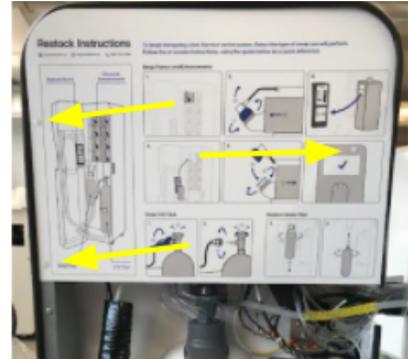
1. Check for a “heartbeat” light (blinking Red/Green) in the Center of the Board

**NOTE: There may be other lights in the consumable status area (10 LEDs) Disregard these for this exercise.**

2. If you see a heartbeat:
  - a. Check the cable **USB DCB to HMI** (fourth from the right) is fully seated. If cable is damaged, use Bevi replacement part number **105621-01 “CABLE USB DCB TO HMI”**..



- b. Check the other end of the cable
- i. Remove the instruction panel on the back side of the door by prying the three plastic rivets with small pliers or a flat head screwdriver underneath the head of the rivets.



- ii. Remove the plastic cover over the Single Board Computer by squeezing the cover gently on both sides to release the side tabs.



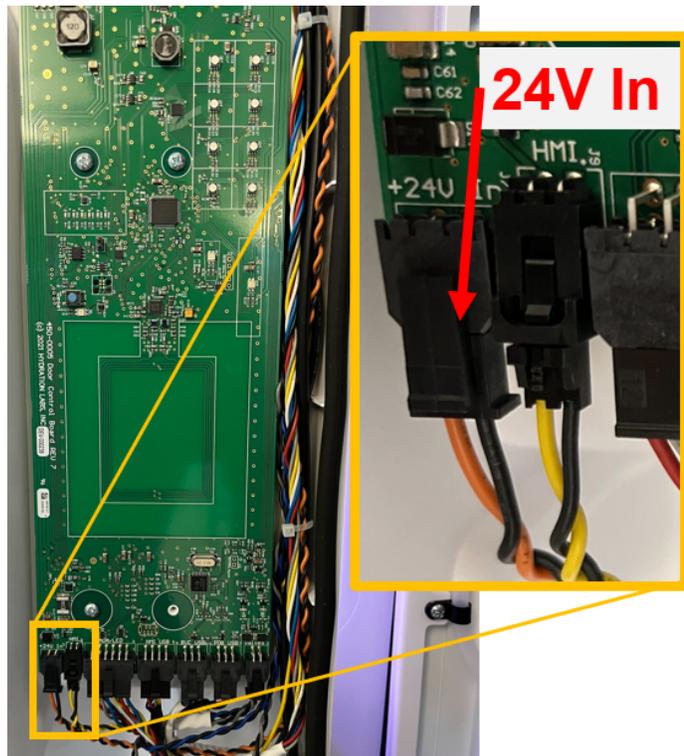
- iii. Check the USB A connector located on the bottom is fully inserted into either of the mating slots.
- iv. If issue per persists, one of the following three items will need to be replaced:
- CABLE USB DCB TO HMI (105621-01)
  - FRU - DOOR CONTROL BOARD (720-0112)
  - FRU - COMPUTER BOARD (720-0103)



## Task 5 - If heartbeat is not present

**Warning - Shock Hazard!!!** The power module supplies 120V AC and 24V DC to various components of the Standup 2.0. Take precautions to prevent an electrical shock.

1. Using a multimeter, check the +24V In connector on the cable to see if there is 24V coming into the Door board
2. If there is 24V coming in and no heartbeat, replace the Door board: FRU - DOOR CONTROL BOARD (720-0112)
3. If there is not 24V coming in:
  - a. Open the Power Module Cover by opening the door and removing 3 screws in the top cover. Lift the front upward to remove
  - b. Use your multimeter to see if 24V is coming from the Power module by tracing the cable to its connection on the Power Module. Disconnect the cable at the power module.
  - c. If there is not 24V coming from the power module, replace the power module FRU 720-0101
  - d. If there is 24V coming from the Power module, replace the cable 105613-01: CABLE PWR PDB 24VDC TO DCB.



## Log your service to clear the Alert

It is important to resolve the machine alert in order to clear the Alert and return the machine to normal operation. After you have performed the service required, navigate to the original alert and select “Mark Resolved”. From there, resolve the alert by following the instructions and marking the service with the appropriate action. (see screens below) Marking it correctly will help us eliminate this issue in the future, so please be accurate with your description.

If you are unable to resolve the issue, leave the alert open, otherwise if you resolve the issue WITHOUT fixing it, the alert will return and disable the machine.

