



Jess, Wes and Abby Installation Guide

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Jess, Wes and Abby Installation Guide

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Welcome

Congratulations, you've just received a shiny new Jess, Wes or Abby! This guide provides the simple instructions you'll need to get set up quickly so you can start enjoying all the benefits Jess, Wes and Abby have to offer. If you're a visual person, we also have a training video available at https://www.proteinsimple.com/simple_western_videos.html to help you with setup.

We've added some attention phrases to help guide you through this manual:

NOTE	Points out useful information.
IMPORTANT	Indicates information necessary for proper handling and operation of Jess/Wes/Abby.
CAUTION	Cautions you about potentially hazardous situations that could result in injury to you or damage to Jess/Wes/Abby.
!WARNING!	Warns you that serious physical injury can result if the listed precautions aren't followed.

Unpack Jess/Wes/Abby

1. You'll find six white holders at the bottom of the box Jess/Wes/Abby arrived in (Figure 1-1).

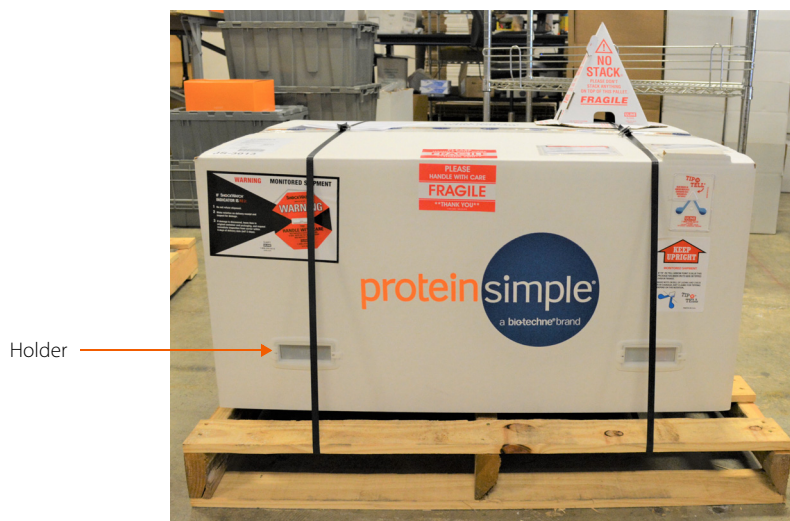


Figure 1-1: Holders on the box.

2. Flip the tabs of the holder back and pull towards you to open at the hinge (Figure 1-2 left). Then pull the whole holder out of the box (Figure 1-2 right). Do the same for the other five holders.

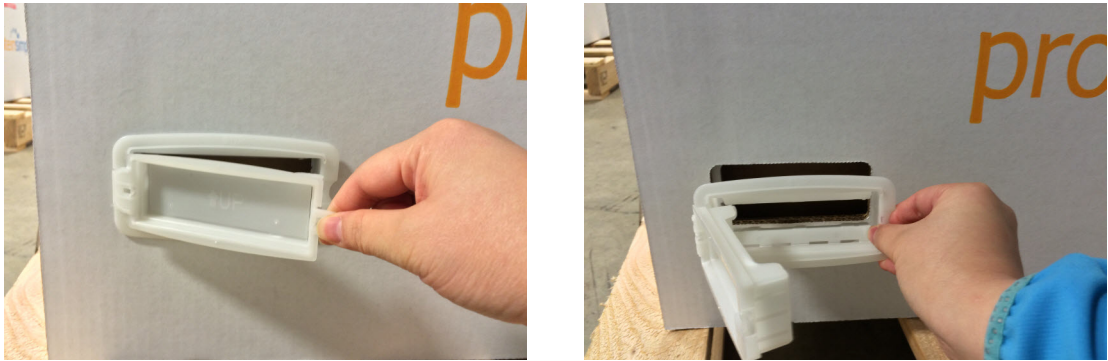


Figure 1-2: Flipping the holder tab back (left) and pulling the holder from the box (right).

3. Lift the box lid off (Figure 1-3) and Jess/Wes/Abby will be sitting there ready to install. You'll also find boxes containing your computer monitor (P/N 065-051) and an Accessory Kit (P/N 104-0012) (Figure 1-4).



Figure 1-3: Lifting the lid off the box.

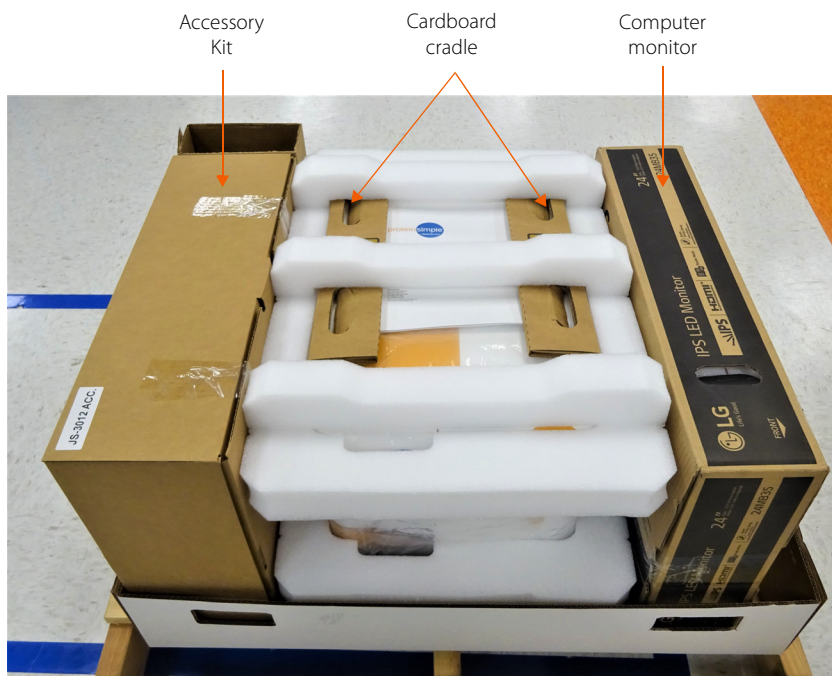


Figure 1-4: Items inside the box and cardboard cradle.



Figure 1-5: Lifting the system.

CAUTION

Take all standard precautions when lifting or moving Jess/Wes/Abby, and don't try to lift the instrument alone. Jess/Wes/Abby weighs 23 kg (50 lb), so find a buddy to help you remove the instrument from the package and place it onto your lab bench using the included cradle. Whenever moving Jess/Wes/Abby, use caution not to apply force to or lift by the white and orange door. Instead we recommend holding the instrument from the sides in order to avoid shifting the door alignment.

4. Inside the Accessory Kit box, you'll find the following parts needed to install Jess/Wes/Abby:
- Intel Nuc computer, PN 065-033
 - Country-specific power cord kit for Jess/Wes/Abby and monitor (see Table 1-1 for part numbers)
 - White HDMI cable, PN 042-769
 - Blue network cable, PN 011-393
 - Keyboard and mouse with 4 AAA batteries, PN 055-164
 - Lint-free wipes, PN 104-0031
-

NOTE: Check out Chapter 2 in the Jess/Wes/Abby User Guide for more details on computer, instrument, and environmental specifications and requirements. You can download those at http://www.proteinsimple.com/technical_library.html.

Power Cord Kit PN (Instrument and Monitor)	Country	Instrument Power Cable PN	Monitor Power Cable PN
055-302	North and Central America, Japan, Taiwan, Philippines, Saudi Arabia	23-11538-00	042-732
055-303	United Kingdom, Ireland, Singapore, Hong Kong	CORD-83221	CORD-83221
055-304	China, Australia	042-736	042-736
055-305	Denmark	042-738	042-738
055-306	Switzerland	042-740	042-740
055-307	Germany, France, Spain, Austria, Belgium, Netherlands, Portugal, Italy, Luxembourg, Korea	CORD-81641	CORD-81641
302-0004	India	302-0001	302-0001

Table 1-1: Power cord kit and individual cord reorder part numbers.

- Find a lab mate to help you lift Jess/Wes/Abby out of the box using the cardboard cradle that's around the instrument (Figure 1-4). We recommend holding the instrument from the sides in order to avoid shifting the door alignment (Figure 1-5). First, make sure the box is positioned close to the bench. Push through the cutout handles to get a good grip. Lift straight up as you place the instrument on your bench. Then, remove the plastic wrap.



Figure 1-6: Jess/Wes/Abby on the lab bench.

6. Plug the Jess/Wes/Abby power cable (see Table 1-1 for reordering region-specific kits or individual cord part numbers) and the blue network cable (P/N 011-393) into the instrument back panel (Figure 1-7). You'll connect the other end of the blue network cable to the computer later.

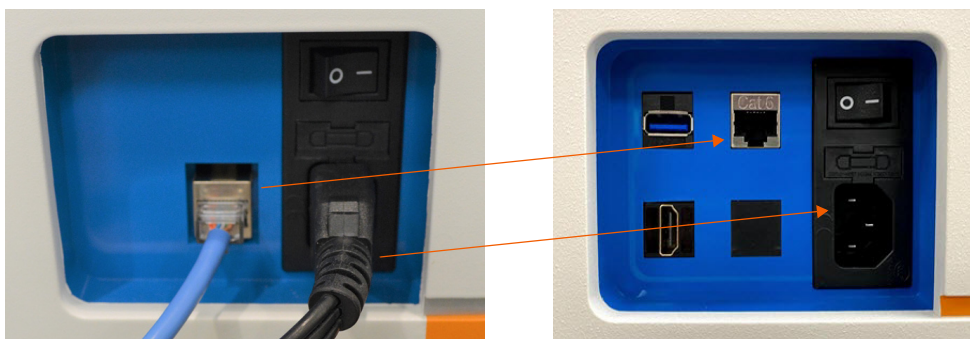


Figure 1-7: Power cable and blue network cable connections for Jess/Wes (left) and Abby (right).

Setup the computer

1. Mount the monitor stand onto the monitor base (Figure 1-8 left) by inserting the monitor stand into the base. Press down firmly on the stand until you hear a click (Figure 1-8 right).

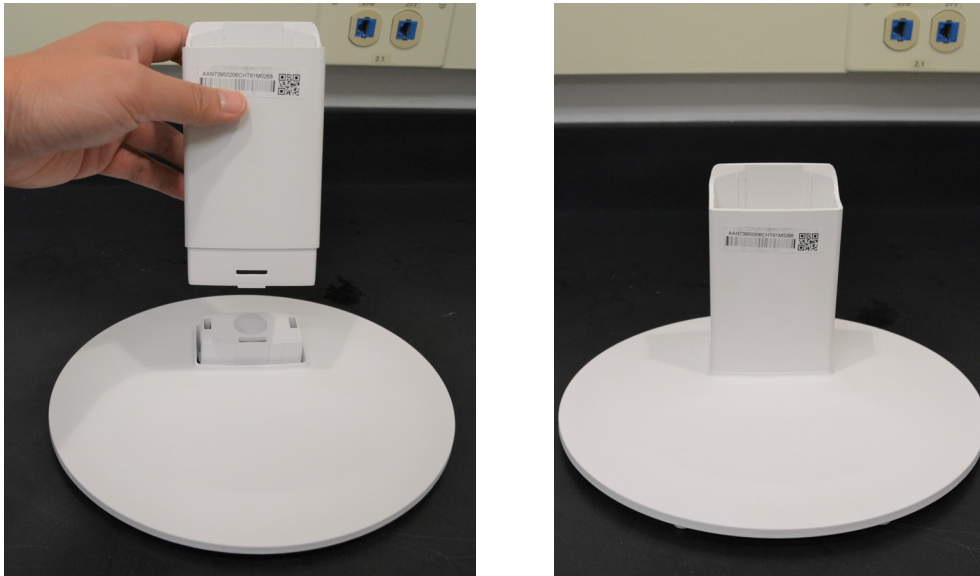


Figure 1-8: Monitor stand set up.

2. Insert the stand's brace into the clip at the bottom back of the monitor (Figure 1-9 left). Make sure the metal brace disappears inside the back of the monitor. You should again hear a click when the brace is locked into place (Figure 1-9 right).



Figure 1-9: Inserting the monitor onto the monitor stand.

3. Mount the Intel computer (Figure 1-10) onto the back of the monitor.
 - a. Remove the Intel Nuc computer from the blue box in your Accessory Kit.



Figure 1-10: How your computer arrives in the Accessory Kit.

- b. Turn the computer so that the HDMI port is on the right side (Figure 1-11, left).
 - c. Insert the screws on the back of the computer into the open slots in the black mounting bracket on the back of the monitor (Figure 1-11, right).

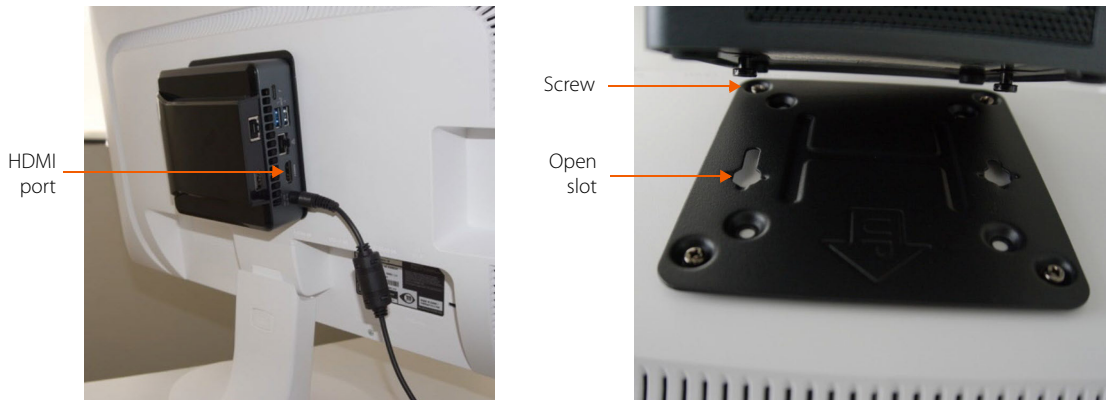


Figure 1-11: Correct computer orientation (left). Mounting the Intel computer to the monitor (right).

- d. Press down to secure.
4. Plug the computer power supply into the computer (Figure 1-12).



Figure 1-12: Plugging the computer power supply into the computer.

5. Attach the correct plug adapter to the computer power cord plug (Figure 1-13).



Figure 1-13: Attaching the international plug adapter to the power cord plug.

6. Plug the power supply directly into a wall outlet.
7. Connect the keyboard/mouse USB dongle to the Intel computer.
8. Connect the HDMI cable between the Intel computer (Figure 1-14 left) and the monitor (Figure 1-14 right).



Figure 1-14: Connecting the HDMI cable to the computer (left). Connecting the HDMI cable to the monitor (right).

9. Connect the computer to Jess/Wes/Abby by connecting the blue Ethernet cable you already plugged into the back of the instrument to the lower Ethernet port in the Intel computer (Figure 1-15, left).
10. Connect the monitor power cable to the monitor and push firmly for a snug fit to avoid a loose connection. (Figure 1-15, right).

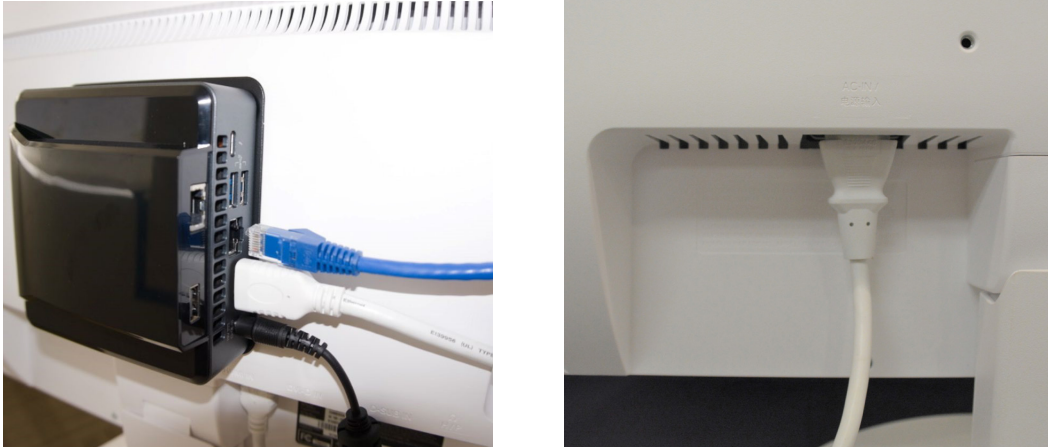


Figure 1-15: Connecting Jess/Wes/Abby to the computer (left). Connecting the power cable to the monitor (right).

11. Install the keyboard and mouse batteries.
12. **Optional.** If you want to add Jess, Wes or Abby's computer to your local network, you can connect your intranet Ethernet cable to the upper Ethernet port (Figure 1-16) in the Intel computer and then connect the other end of the cable to your network.



Figure 1-16: Connecting the intranet Ethernet cable to the Intel computer.

Connect PC to Jess/Wes/Abby

1. Turn Jess/Wes/Abby on by flipping the power switch on the back (Figure 1-17, left). The front indicator light will be **Magenta** during startup and will turn **Blue** when the instrument is ready to go.
2. Turn on the computer by pressing the power button on its lower left side. The power button will turn **Blue** when the computer is on (Figure 1-17, right).



Figure 1-17: Turning on Jess/Wes/Abby (left). Blue light on the Intel Nuc computer (right).

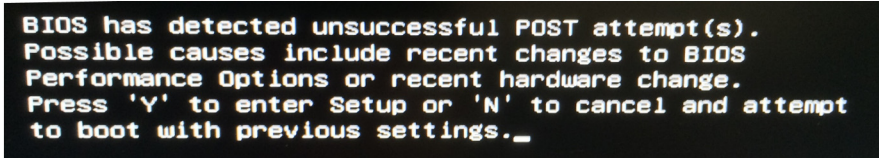
3. Turn on the monitor by pressing the white power button on the bottom right corner (Figure 1-18). The button is **White** when it's on.



Figure 1-18: Turning on the monitor.

4. Here are a few messages we run into from time to time just in case you see one. But if you don't, just move on to the next step.

- If you get a *BIOS has detected unsuccessful POST attempt(s)* message (Figure 1-19), select **N** for No and the computer will continue its normal startup.

A black screen with white text. The text reads: "BIOS has detected unsuccessful POST attempt(s). Possible causes include recent changes to BIOS Performance Options or recent hardware change. Press 'Y' to enter Setup or 'N' to cancel and attempt to boot with previous settings._"

```

BIOS has detected unsuccessful POST attempt(s).
Possible causes include recent changes to BIOS
Performance Options or recent hardware change.
Press 'Y' to enter Setup or 'N' to cancel and attempt
to boot with previous settings._

```

Figure 1-19: BIOS error.

- If the monitor displays *No Cable Connected!* (Figure 1-20), check to make sure your monitor is configured for the correct cable input.

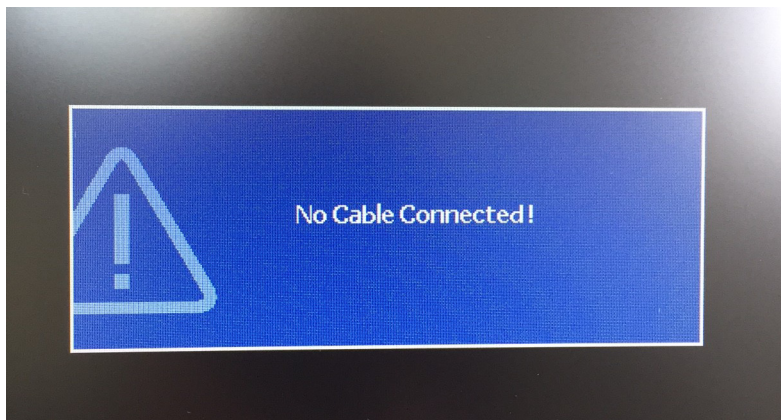


Figure 1-20: No Cable Connected message.

There are five buttons on the right side of the monitor.

- Press the Enter button to change the input (Figure 1-21).
- Push the buttons next to the up and down arrows until **HDMI** is highlighted.
- Push the Enter button to select **HDMI**.



Figure 1-21: Monitor buttons to bring up video input menu.

- d. The monitor should now show the computer startup screen or desktop.
- e. Press the Menu button to exit the menu.
5. Launch Compass by double-clicking the desktop shortcut (Figure 1-22).



Figure 1-22: Compass desktop icon.

6. Connect Jess/Wes/Abby to Compass by going to the Instrument menu and clicking **Connect** (Figure 1-23). Then, select your instrument and hit **Connect** (Figure 1-24).

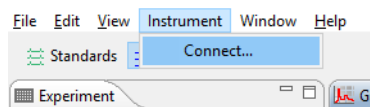


Figure 1-23: Connecting Jess/Wes/Abby to the computer.

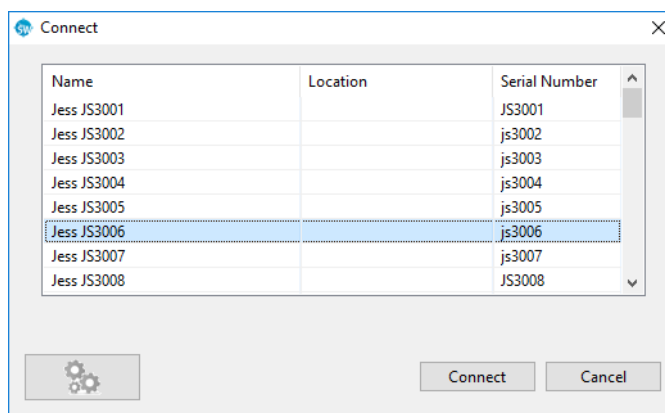


Figure 1-24: Selecting Jess/Wes/Abby to connect the computer.

Configure the computer

1. Adjust the computer clock to your local time.
2. Set up Jess, Wes or Abby's instrument clock to match your local time. In the Instrument menu, select **Properties** then click **Set to PC time** (Figure 1-25).

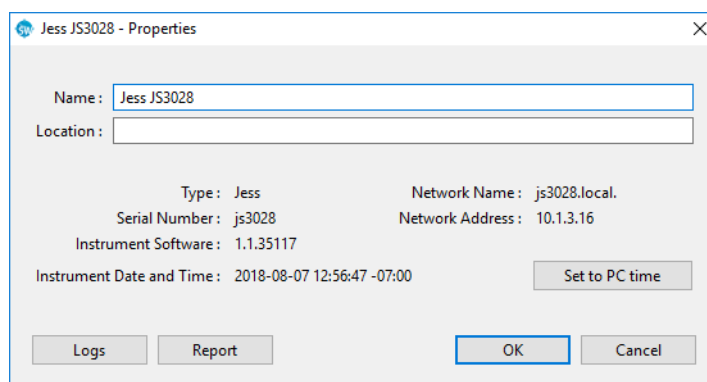


Figure 1-25: Setting up the instrument clock so it matches your local time.

Check that you have the latest version of Compass

1. Make sure your computer is networked.
2. In the Help menu, click **Check for Updates** (Figure 1-26).

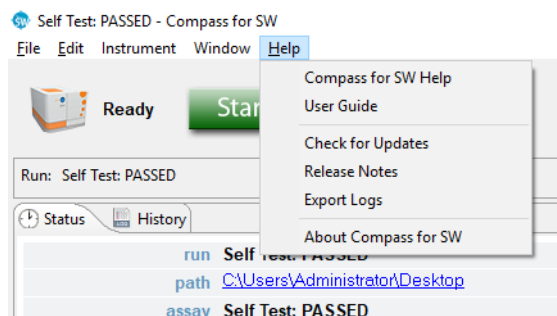


Figure 1-26: Check for the latest Compass updates.

A pop-up window will let you know if there is a newer version of Compass available (Figure 1-27). To download, just click **Finish** and the software will automatically download. You can also go to www.proteinsimple.com/compass/downloads/ to manually download Compass.

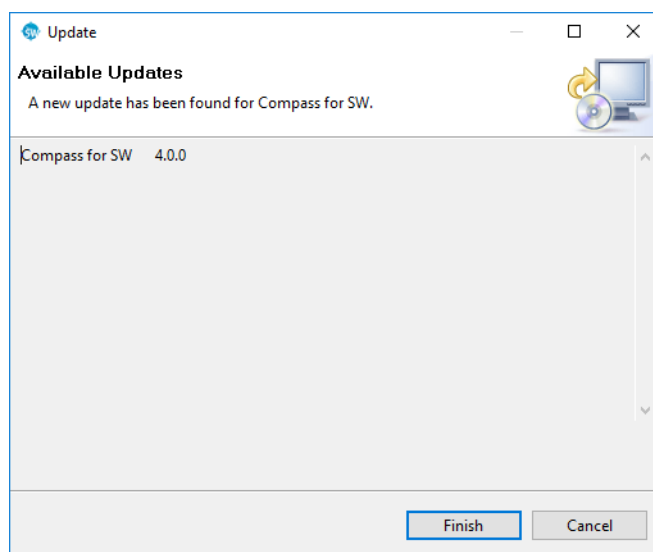


Figure 1-27: The pop-up you'll see only if there is a newer version of Compass available.

NOTE: The Check for Updates option in Compass for Simple Western won't update to version 4.0.0. You'll need to download the installer from the ProteinSimple website at <http://proteinsimple.com/compass/downloads/> and then perform a full installation.

Open and Close the Door

Touch the sensor pad on top of the door to open it.



Figure 1-28: *Opening the door.*

Close by firmly pushing near the edge of the door closest to the instrument name until you feel it close.



Figure 1-29: *Closing the door.*

Level Jess/Wes/Abby

1. Make sure Jess/Wes/Abby is on a level surface.
2. Place the leveler in the center of the microplate holder, parallel to the front of the holder.
3. Adjust the instrument's front left foot by rotating clockwise to lower, or counter clockwise to raise the left side.

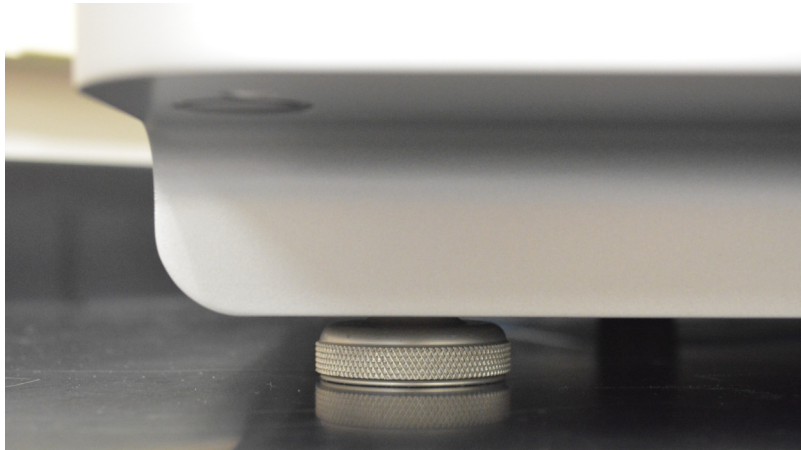


Figure 1-30: Leveling foot.

4. When the bubble inside the leveler is centered, Jess/Wes/Abby is level.

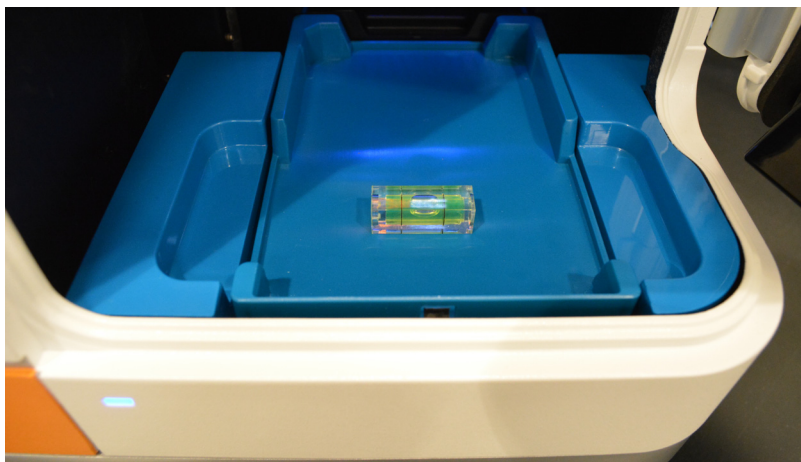


Figure 1-31: Bubble in center of leveler.

Clean the Door Liner (Jess Only)

The door liner must be cleaned before every run with Jess to avoid fluorescence of contaminants during image capture.

1. Open Jess' door to reveal the door liner (glossy black finish area behind the door).

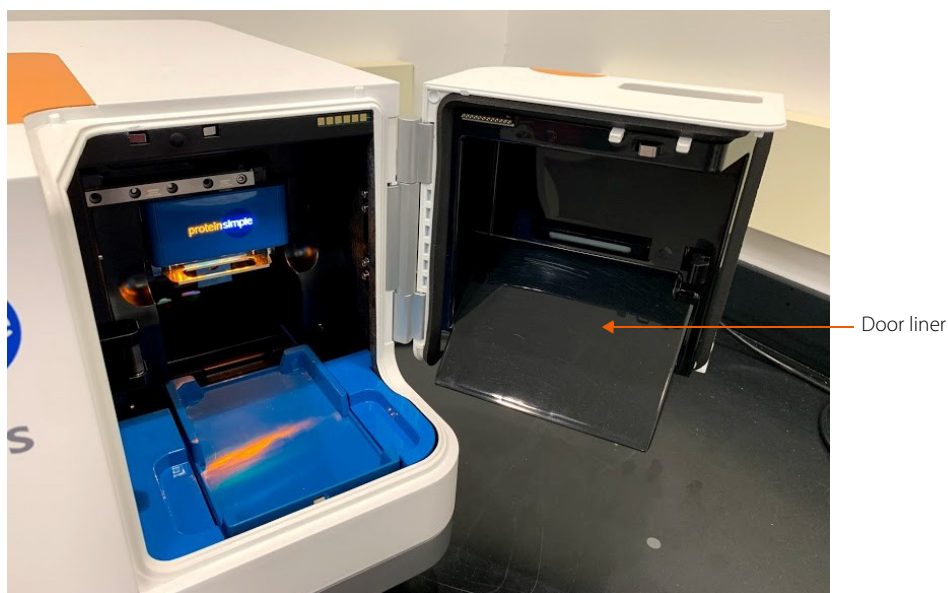


Figure 1-32: Jess door liner.

2. Spray 70% isopropyl alcohol onto one of the provided Polyester Cleanroom lint-free wipes (PN 104-0031) or equivalent.
3. Carefully wipe down the door liner with the moist wipe. Avoid touching the door liner with your hands.
4. Wait 30 seconds for the solvent to evaporate before using Jess.

Run the Self Test

Running the Self Test checks that the instrument is ready for action.

1. Make sure Jess/Wes/Abby has been on for at least 10 minutes.
2. Open Compass.
3. In the Instrument menu, click **Self Test** (Figure 1-33).

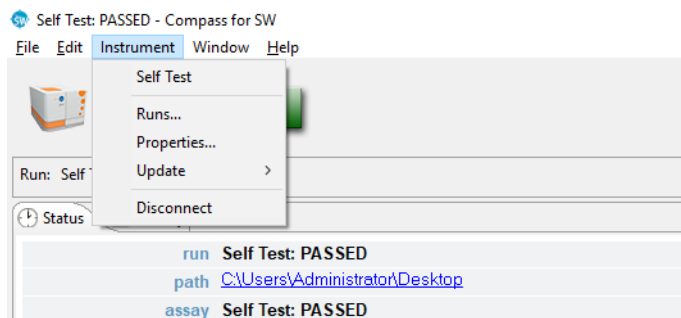


Figure 1-33: Starting a Self Test.

It will take up to 30 minutes to run the test.

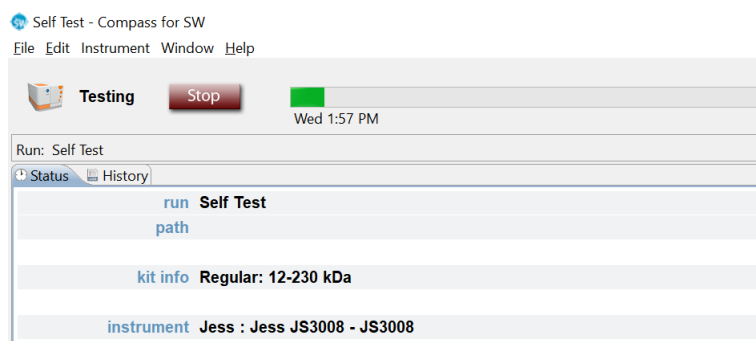


Figure 1-34: Jess/Wes/Abby running a Self Test.

4. If the Self Test doesn't pass the first time:
 - a. Turn Jess/Wes/Abby off and back on. Then rerun the Self Test after the indicator light turns **Blue**.
 - b. If the Self Test still doesn't pass, select **Instrument** from the main menu, click **Properties** and click **Logs** to open a list of recently performed Self Tests (Figure 1-35).

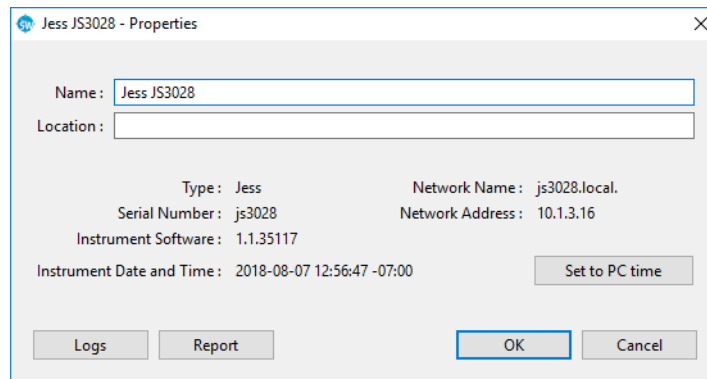


Figure 1-35: Accessing the Self-Test Log in Compass.

- c. Select the most recent Self Test and click **View** (Figure 1-36).

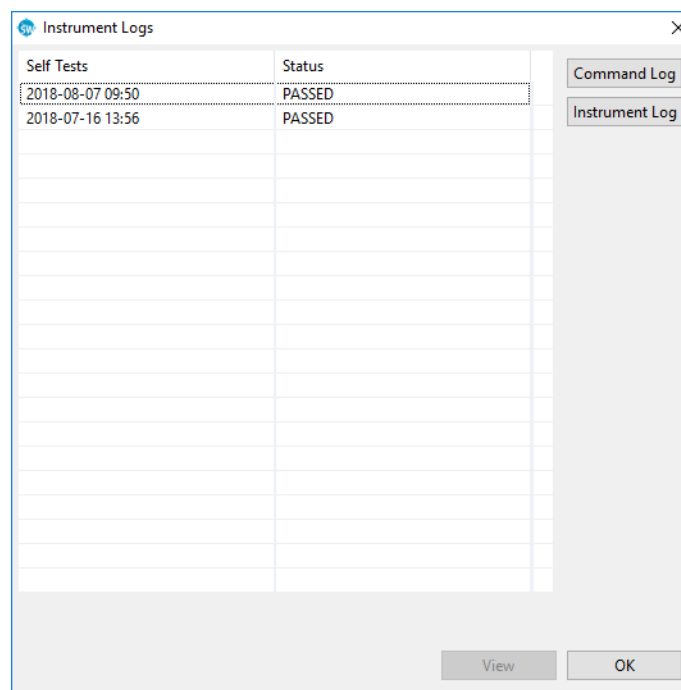


Figure 1-36: Selecting the Self-Test file.

- d. Save the file as a .txt file and send it to Protein Simple Technical Support at support@proteinsimple.com for help (Figure 1-37).

Self test: js3028_2018-08-07_09.50.52_PASSED.txt

Name	Start	Duration (sec)	Result	Failure Reason
Vacuum Leak	09:49:44	66.078	PASSED	
Unregulated Vac level	09:49:31	12.244	PASSED	
Red Background and Filter Check	09:48:23	67.596	PASSED	
IR Background and Filter Check	09:43:14	307.591	PASSED	
Green Background and Filter Check	09:42:06	67.486	PASSED	
Fluor LED Detection	09:41:43	21.927	PASSED	
Amber LED Detection	09:41:20	21.928	PASSED	
Blue LED Detection	09:40:57	21.893	PASSED	
White LED Detection	09:40:34	21.963	PASSED	
Light Leak Detection	09:34:17	376.242	PASSED	
Lamp Motor	09:33:14	61.512	PASSED	
Chamber Heater	09:31:18	114.645	PASSED	
Chamber Temperature Spec	09:31:17	0.003	PASSED	
Ambient Temperature Spec	09:31:16	0.003	PASSED	
Camera Cooling	09:31:15	0.002	PASSED	
Dark Masters	09:31:15	0.003	PASSED	
Camera	09:31:14	0.304	PASSED	
Voltage Calibration Confirmation	09:31:04	0.000	PASSED	
EE Voltage	09:31:04	9.277	PASSED	
Lamp On	09:20:22	640.818	PASSED	
Blot Holder Sensor	09:20:21	0.003	PASSED	

Save File As... Cancel

Figure 1-37: Self Test file save as a .txt file.

Once the Self Test passes you've successfully installed Jess/Wes/Abby!