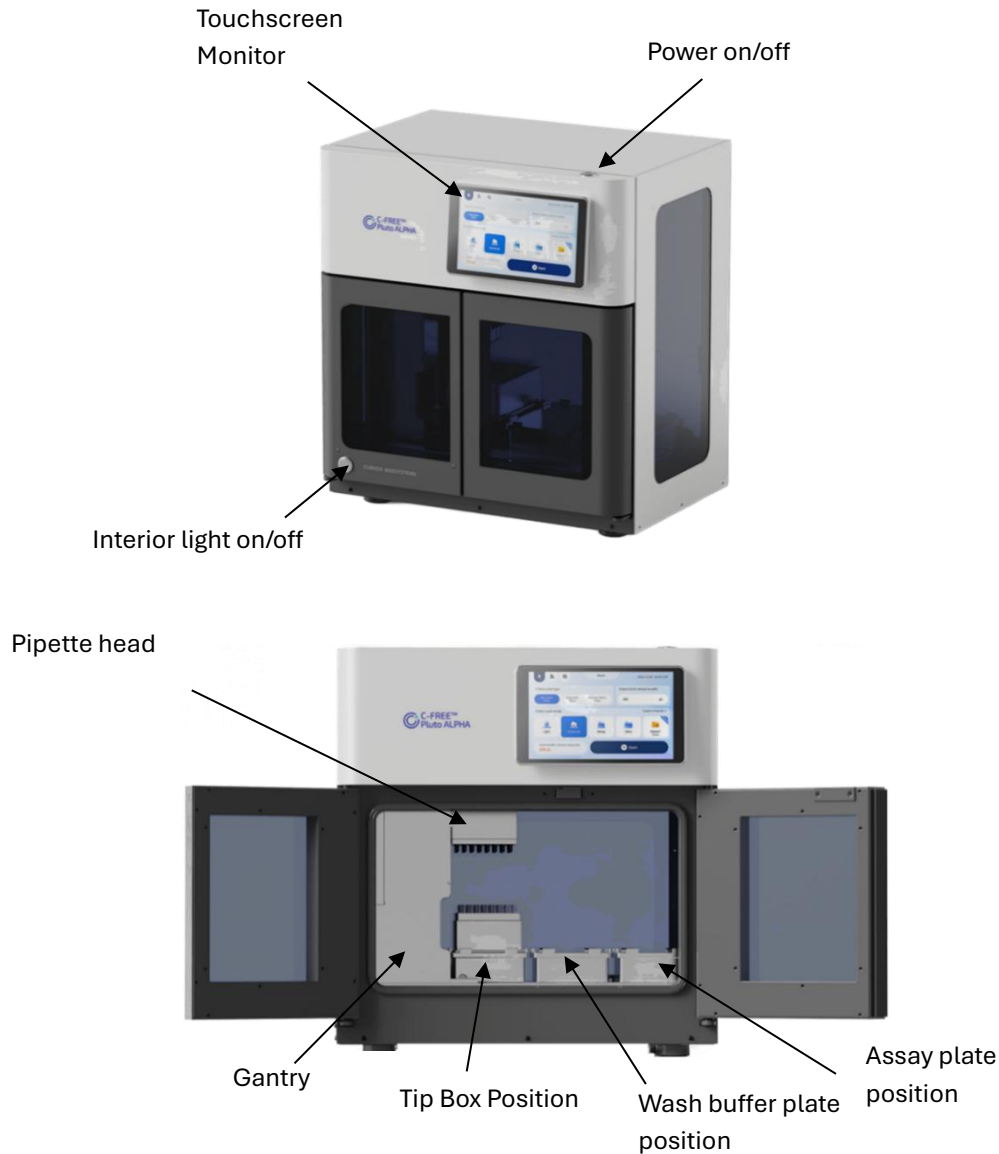![CURIOX - BIOLOGY AT ITS BEST]

Pluto Alpha Quick Start Guide v2.0

1. Overview

Pluto Alpha is a touchscreen-operated instrument designed for efficient washing of assay plates. This guide will help you set up and operate the instrument quickly.

Touchscreen Monitor

Power on/off

Interior light on/off

Pipette head

Gantry

Tip Box Position

Wash buffer plate position

Assay plate position

2. Components

- **Touchscreen Monitor** - User interface for controlling operations.
- **Power Button** - Turns the instrument on and off.
- **Interior Light** - Controls internal lighting.
- **Pipette Head** - Holds and transfers pipette tips.
- **Gantry** - Mechanism that moves the pipette head.
- **Tip Box Position** - Holds pipette tip box for the operation.
- **Assay Plate Position** - Holds assay plate for washing.
- **Wash Buffer Plate Position** - Holds wash buffer plate for washing operations.

3. Unpacking
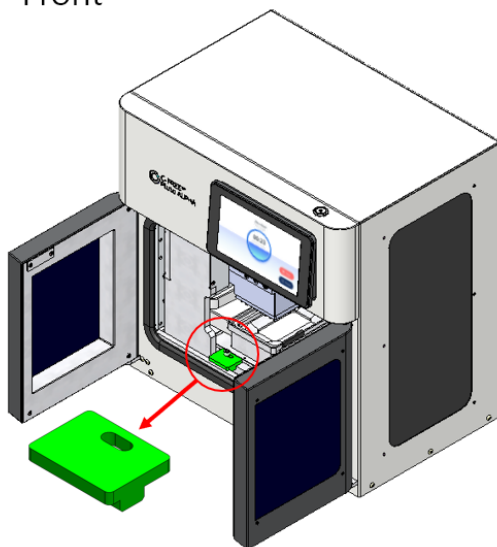
Upon receiving the Instrument:

1. Remove all packaging materials and protective tapes.
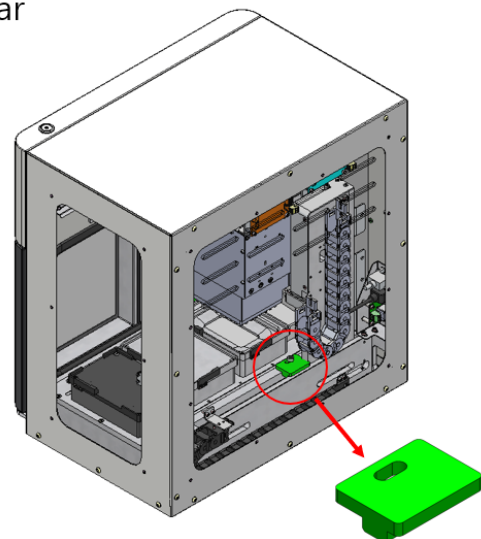2. Detach the transportation lock(x2) to enable gantry movement.

⚠ **CAUTION** — Remove transportation locks (x2)
After removing the transportation locks(x2), manually move the gantry and confirm that it moves smoothly and normally.

Front   Rear

Remove transportation lock to allow gantry to move

4. Setup

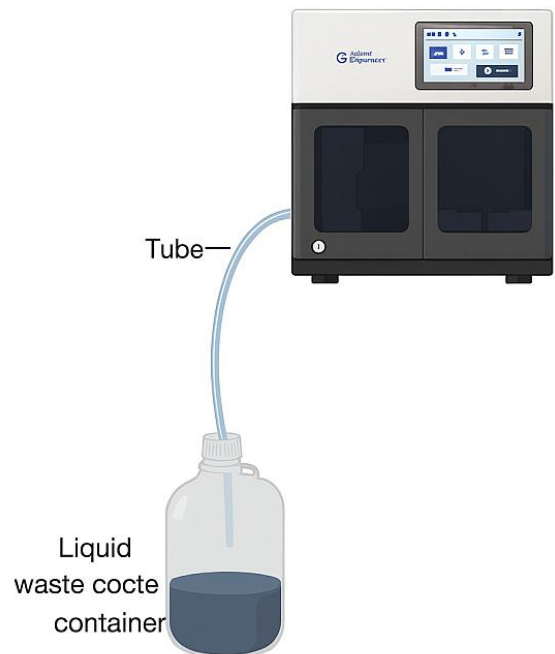1. Placement: Place the instrument on a sturdy, level surface at tabletop height.
2. Drain Tubing Installation:
    - 2.1 Connect the drain tubing to the Alpha drain tubing connector
    - 2.2 Using lab glass bottle (GL45 neck opening) as drain container
        - Screw the provided cap bottle onto the glass container opening

Cap for drain bottle

   - Place the glass bottle in a designated space on the floor.
   - Connect the other end of the drain tubing to only one of the connectors of the cap

   - 2.3 Using other container types as drain container
      - Place the other end of the drain tubing within the opening of the container
      - Ensure drain tubing is **always above waterline** throughout its usage
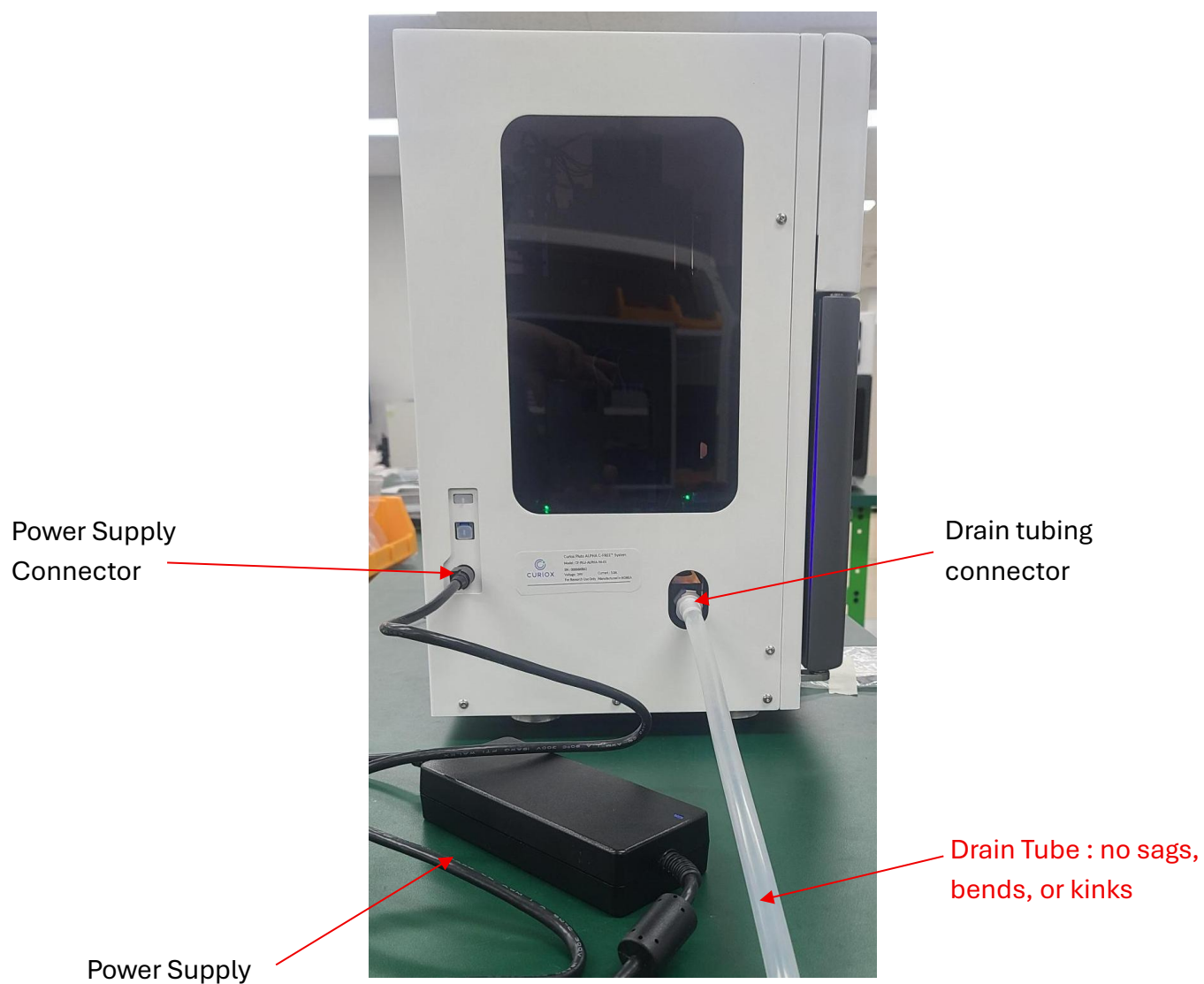   - Ensure the tubing is free of kinks for optimal drainage.

      ⚠ **CAUTION** — Tube Installation

      Keep the tubing as straight as possible and ensure there are no sags, bends, or kinks to maintain proper waste drainage.

      Use only the required length and cut off any excess tubing.
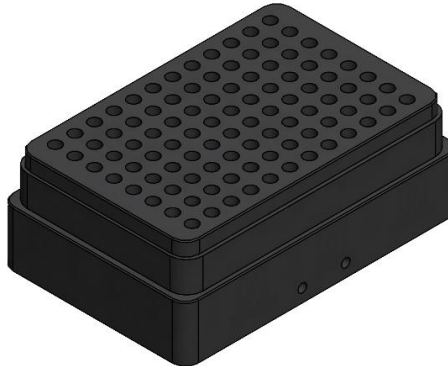
5. Power Connection:

1. Connect the power supply cable to the power supply connector.
2. Turn on the instrument and verify that the touchscreen monitor is operational.

Power Supply Connector

Power Supply

Drain tubing connector

Drain Tube : no sags, bends, or kinks

6. Pluto Wash Operation

Preparing for Wash:

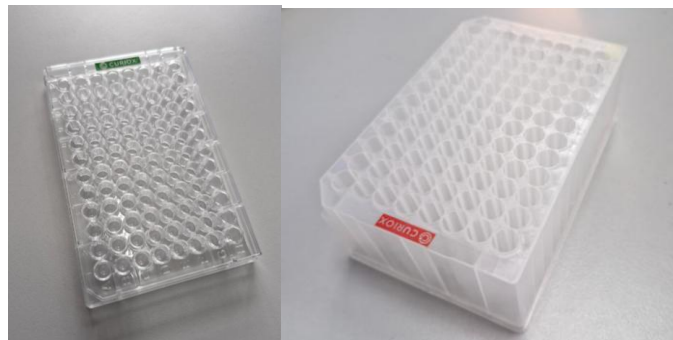1. Transfer pipette tips to the metal tip box accordingly.

Metal Tip Box

2. Place the tip box onto the **Tip Box Position**.
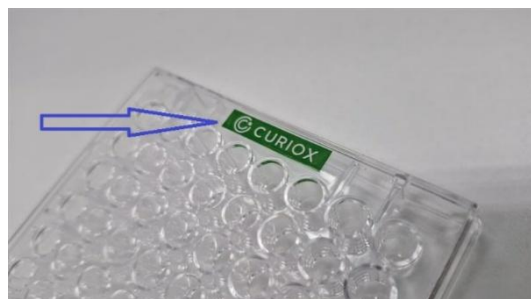3. Fill the Pluto wash buffer plate with the appropriate amount of wash buffer.

4. Position the wash buffer plate onto the **Wash Buffer Plate Position**.
5. Prepare the assay plate (MTP or DWP) with the necessary content.

Note:
- Only Pluto MTP and DWP are supported in Pluto Alpha.

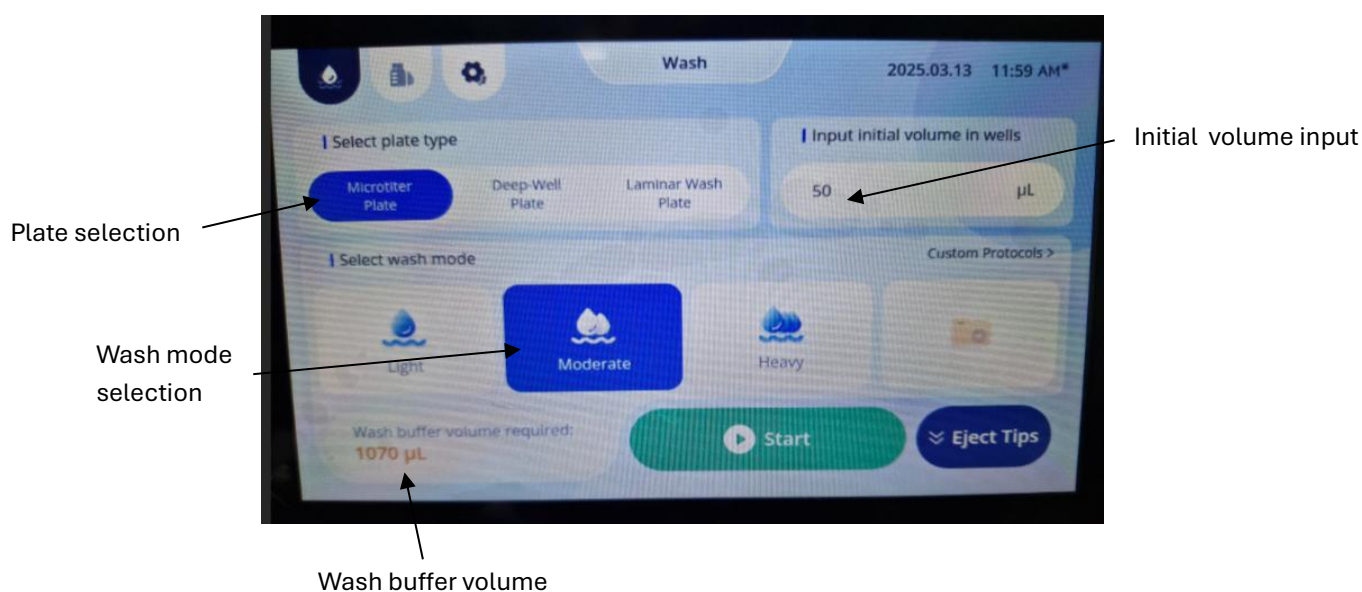6. Place the assay plate onto the **Assay Plate Position**.
7. To start the Wash:
    7.1 On the touchscreen menu :
- Select Assay plate type (MTP or DWP)
- Select Wash mode (Light, Moderate, or Heavy)
- Enter the Assay plate initial volume input

    7.2 Check that the wash buffer volume in the plate meets the minimum required volume displayed on the screen.

    7.3 Press '**Start**' to begin the washing process.

Note:
- On the first use, pipette tips will be automatically loaded from the tip box.
- Tips will remain on the pipette head unless manually ejected.

⚠ **CAUTION** — Do not open the door while operating
Do not open the door or insert hands into the instrument during operation.

7. During Operation

1. **Pausing:** Press the **'Pause'** button to temporarily stop the operation.
2. **Resuming:** Press **'Resume'** to continue the process.
3. **Stopping:** Press **'End'** to discard the operation.
4. The display will show a countdown timer indicating the remaining wash time.

Operation Countdown timer

Pause

8. End of Operation

1. Remove the assay plate.
2. Remove the wash buffer plate.
3. (Optional) Eject pipette tips if needed.

9. End-of-Use Maintenance

1. Eject the pipette tips.
2. Remove the tip box.
3. Pour water or ethanol down the waste tray to clean the discharge line.
4. (Optional) Remove the waste tray for additional cleaning.

Your Pluto Alpha is now ready for use!

For additional troubleshooting and advanced features, refer to the full user manual.