

Initial Setup & Preparation, KinExA 4000

The following instructions may be used to prepare a KinExA[®] 4000 for use.

INTERFACE AND POWER CONNECTIONS

1. Plug the power cord into the instrument (**Figure 1A**).

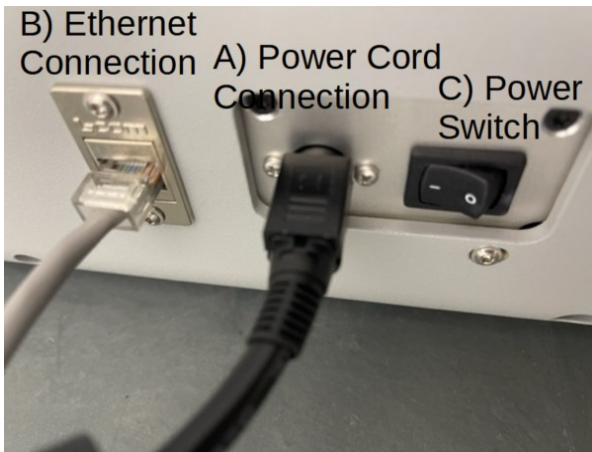


Figure 1. A) Power Cord Connection B) Ethernet Connection C) Power Switch.

Note: Power cords may either connect directly, or via a power brick (**Figure 2**).



Figure 2. Power Brick.

2. Connect the instrument to the computer.

- Plug one end of the Ethernet cable into the back instrument panel (**Figure 1B**) and the other into the computer.
- Configure the IP address for the Ethernet Port on your computer. Set the IP address to:
 - **192.168.79.0**

Note: If no Ethernet port is available on the computer, use an Ethernet/USB adapter. (**Figure 3**).



Figure 3. USB/Ethernet Adapter.

Note: KinExA 4000 users connecting to an external network will require a second Ethernet connection with a subnet other than "192.168.79.0". Please contact Sapidyne technical support before selecting a new subnet. For computers without a second Ethernet port, use an Ethernet/USB adapter for the network connection.

3. Turn the instrument on with the power switch (*Figure 1C*).

Note: Be aware that the yellow "Busy" and red "Error" lights on the Indicator Panel must turn off (*Figure 4*), and the green "Ready" light be illuminated before using the instrument (*Figure 5*).



Figure 4. "Busy" and "Error" Lights.



Figure 5. "Ready" Light.

4. If the computer does not already have KinExA Pro software installed, install the latest version. Please contact a Sapidyne Representative to request new software.
5. To prepare the computer to run a KinExA instrument please refer to *4000 Computer Setup Checklist (HG263)*.

BUFFER AND CALIBRATIONS

1. Place buffer on the instrument.

- Open the Plumbing Panel on the left side of the instrument. Unravel the Buffer Line and feed it through the bottom right hole, then wedge the Waste Line Elbow over the top of the Buffer Line. See **Figure 6**.
- Place the Buffer Line into a container containing buffer (1-3 liters is common), making sure the Buffer Line is submerged in liquid.
- Connect the Waste Line to the Waste Line Elbow on the left side of the instrument.
- Introduce buffer in all lines. Click on the Buffer Change  icon and follow the on screen prompts.
- Click the Fast Rinse  icon. Change the number of cycles to 5 and click **Start**.



Figure 6. Buffer Line and Waste Line Elbow.

- Check your Flow Cell for bubbles by opening the Reflector Arm and/or by looking at the camera feed of the Flow Cell. If air bubbles are found, try to remove them by:
 - Run a Backflush.
 - Run a Fast Rinse.
 - **GENTLY** flick the Flow Cell.
- Open the Control Panel and perform an Aspiration Pump Syringe Purge. This will remove the bubbles in your Syringe Barrel.

2. Calibration: In the KinExA Software, select *Tools > Calibration > Autosampler*. Follow the step-by-step instructions in the software to calibrate the instrument. Calibrations should be done in this order:

- Sipper Tube.
- Standards Rack.
- Wash Station: Buffer and Waste.
- Bead Reservoirs: Reservoir 1-4.
- Sample Racks.

Note: “Sipper Tube” calibration can be used to check the alignment of the Sipper Tube at any time.

3. The instrument is now ready to run experiments.