## **EZ Align Lamp Alignment Tool**

These instructions assist KinExA® users with proper Lamp alignment using the EZ Align Tool on 3200 Instruments.

Note: This procedure has been developed to work with the red filter set. For aligning the Lamp with other filter sets see How to Guide 204 *Lamp Replacement and Alignment* (HG204).

## **Tools Needed:**

- 2 mm Ball Driver (011020)
- 1.5 mm Ball Driver (011015)
- EZ Align (800510)
- Dielectric Grease (231362) /or
- Index Matching Fluid (231363)

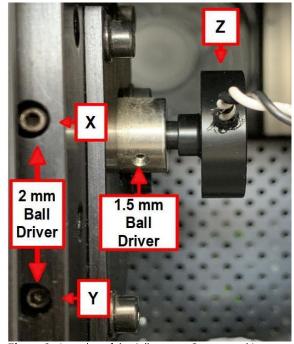
## **Procedure:**

- Turn the *Lamp* **OFF**, then unclip the *Flow Cell* and move it out of the way.
- Make sure the fluorescent target on the *EZ Align* has a light coating of *Dielectric Grease* or *Index Matching Fluid* and then clip it in place of the *Flow Cell*. Look at the EZ Align logo. It should be right side up and properly aligned (**Figure 1**).
- Open the *Lamp Access Door* by removing the [2] *Thumb Screws*.
- Turn the Lamp ON.
- Open KinExA Pro and click on the **Read Meter** icon [ located in the *tool bar*. You can also access this feature by selecting it from the *instrument tab*. This opens the real-time excitation graph that allows visual feedback of alignment adjustments. While observing this screen, X-Y-Z adjustments (**Figure 2**) can be made until the voltage is maximized.
- · Press Start.
- To adjust the Z-Axis, loosen the *Set Screw* (**Figure 2**) using the *1.5 mm Ball Driver*. Move the *Lamp* in and out until maximum signal is found and then tighten the *Set Screw*.

- To adjust the X and Y-Axis manipulate the [2] *Adjustment Screws* shown in **Figure 2** using the *2 mm Ball Driver*. Adjust both *Screws* until maximum signal is found.
- When finished, remove the EZ Align Tool. Make sure to clean it and the Flow Cell Groove with Denatured Alcohol.
- When replacing the *Flow Cell*, remember to add a small dab of *Dielectric Grease* or *Index Matching Fluid*.
- Replace the *Lamp Access Door* and secure the [2] *Thumb Screws*.



**Figure 1.** Orientation of the EZ Align Tool installed in the Flow Cell Groove.



**Figure 2.** Location of the Adjustment Screws and Lamp Set Screw behind the Lamp Access Door.