

## EZ Align Lamp Alignment Tool


These instructions assist KinExA® users with proper lamp alignment using the EZ Align tool.

**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 (P/N: 011020)
- 1.5 mm Ball Driver (P/N: 011015)
- EZ Align (P/N: 800510)
- Dielectric Grease (P/N: 231362)
- (Optional) Lamp Replacement (P/N: 511046)

### Procedure:

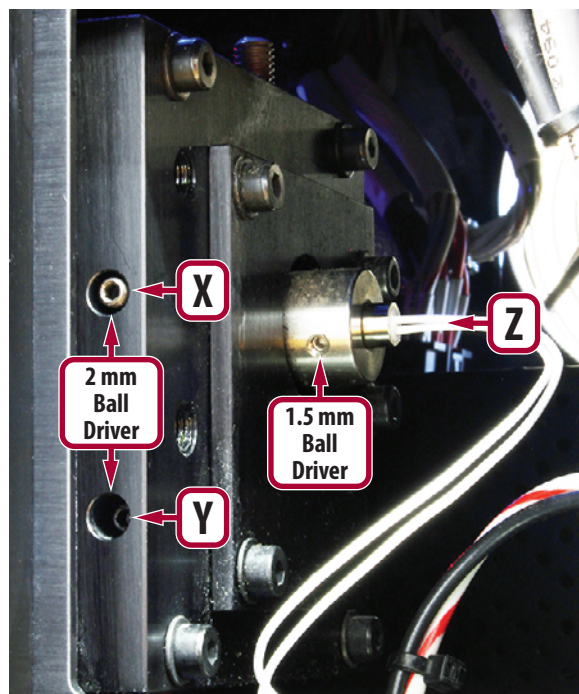
- Turn the lamp **OFF**, then unclip the flow cell and move it out of the way.
- Make sure the fluorescent target on the EZ Align has a light coating of dielectric grease and then clip it in place of the flow cell. Look at the EZ Align logo. It should be right side up and properly aligned (**Figure 1**).
- Open the lamp access door by removing the two 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, by grasping the white wires, until maximum signal is found and then tighten the set screw.

**Note:** Use the white wires to focus the lamp because the lamp casing can become hot. Avoid touching the lamp.

- Then to adjust the X and Y-Axis, manipulate the two 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. 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.
- Replace the lamp access door and secure the two 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.