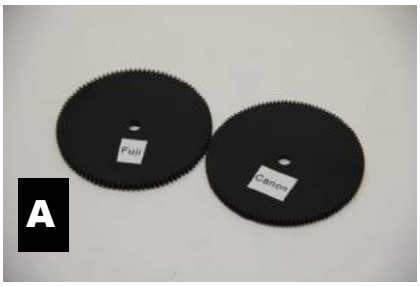
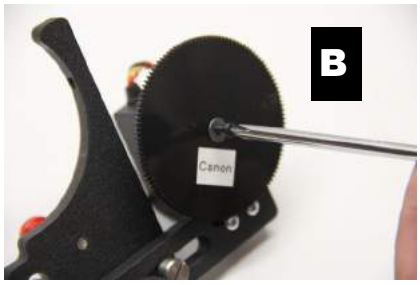
Calibrating your RFC-144 to your Canon or Fujinon Lens

The objective of this procedure is to insure you reach the full focus range of your lens. In order to accomplish this you'll need to inspect your lens' range and set the focus gear to the proper start and stop points. They are different for both Canon and Fujinon lens.

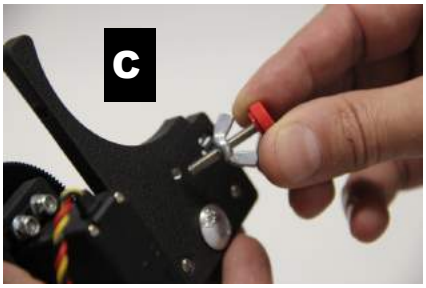
Note: Some lenses will have a shorter range of movement than the focus motor's range. If you experience this, then mark your slide control in the white area with a dry erase pen to denote the maximum movement of the slide control for each direction movement.

1. Install the proper gear (Fuji or Canon) for your lens to the servo motor using the provided washer and screw. See **Fig A&B**

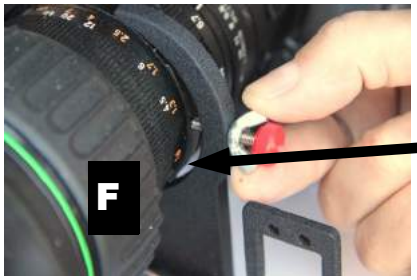




2. Remove the Mounting Screw from its stored position and attach the motor bracket to the side of the lens. Drive the red top screw several into the side of the lens . You should be able to drive it several turns and get a deep penetration. **See Fig C, D & E**



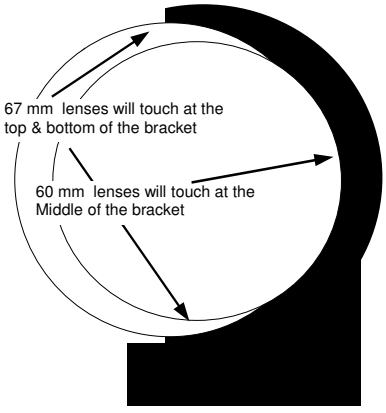
3. Use the wing nut to squeeze the bracket against the lens for a tight secure fit. **See Fig F**



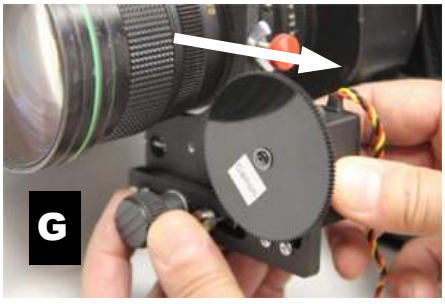
NOTE: Our focus bracket is uniquely designed to fit both 60 mm and 67 mm lens barrels.

On 67 mm lens, you will notice a secure fit on the top and bottom of the bracket . **You will see a gap between the lens and the bracket.**

The bracket will be secure with a firm tightening of the wing nut. Do not over tighten the wing nut.



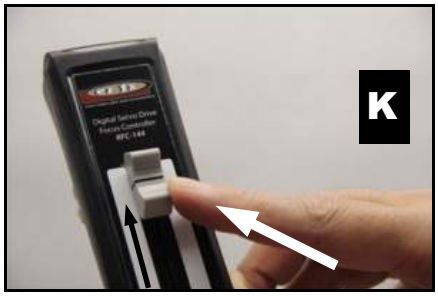
4. Loosen the large black thumb knob at the bottom center of the lens and slide the servo assembly away from the lens until it stops. **See Fig G**

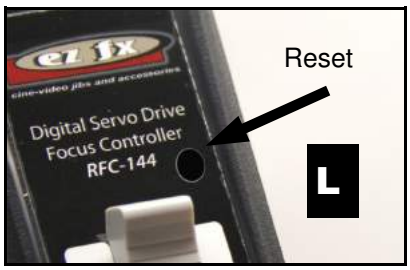


5. Connect the power supply and male end of the extension cable to the slider control. Connect the servo motor to the female end of the extension . **See Fig H&I**

NOTE: Canon & Fuji lenses have variable degrees of travel range on the focus rack. You will need to set up the system up for your particular lens travel range. Continue below.

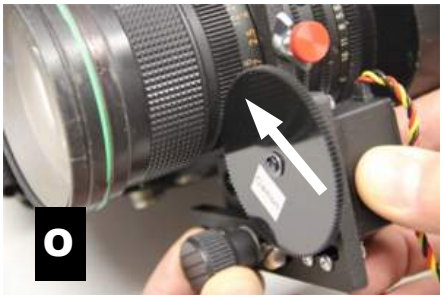
6. Power on and push the slider knob all the way to the top. Press the reset button to reset the system. This will erase any previous memory points (*slider must be all the way up*) **Fig J, K&L**

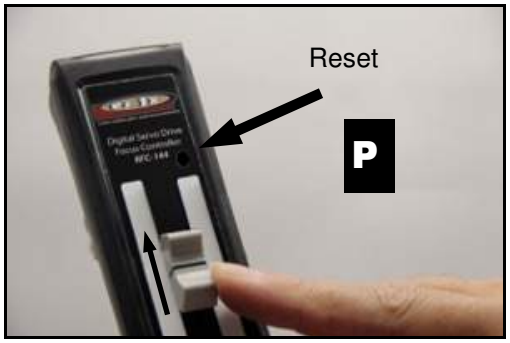




7. Slide the focus knob all the way to the bottom of slide track thus rotating the servo gear to the endpoint.
8. Before engaging the gears, manually rotate the lens gear to the opposite direction endpoint. **See Fig M&N**

9. Engage the gears by sliding the focus motor into the lens gear then tighten the black knob to secure it. If the gears don't mesh perfectly, rotate the focus ring on the camera slightly so the gears mesh. **See Fig O**
10. With the gears engaged, slowly push the slider up toward the top, racking the lens until you hit the end of the lens rack range. Note that the slider may only be a partial way up when you reach the end of the lens rack. This will vary depending on the lens .
11. At that point, press the reset button again and the system will now be set for the lens you are using. This allows you to use the full range of the slider track without the risk of hitting end rack point of the lens and causing the lens to jump gears or jerk the lens. **See Fig P&Q**





NOTE WHEN OPERATING

-The servo motor being used to drive the gear for the focus or zoom is designed for reasonable speeds not extreme moves with in the range of the travel of the lens. This will lead to the motor to continue humming when you have stopped the lens movement.

***OTHER USEFUL NOTES**:*

- Use the white stripes on the sides of the slider to mark focus points with a dry erase pen

- If for any reason you need to reverse the travel direction of the servo motor you may do so by removing the back cover on the control unit. Power the unit off. Remove the rear cover you will see a 4 pin header with a jumper on the middle two pins next to the slide potentiometer. Simply remove the jumper and place it on the outside two pins to the left side (or bottom of the RLC-144) of the header where it reads “REVERSE”.

- Do not jumper the right two pins as this will place the unit into program mode. This setting is for initial setup of the RFC-144 unit and should never have to be repeated again.

- The maximum voltage that should be applied to the RLC-144 control unit is 9volts DC. If you use a different power supply, determine its output voltage before connecting to the RFC-144 control unit.

- Power supplies of over 9 volts can damage the servo and void the warranty!