RS4000 Panel Servo Speed Selection

**Speed Selection Components:**
The yellow arrow illustrates the select button.
The red arrow illustrates the setting display.

**Tools needed for install:**
#3 Phillips screwdriver to open panel.

The components illustrated above are located to the right hand center of the panel main board. With power applied to the panel and the master power switch turned on, the display indicated by the red arrow will indicate either a ‘1’ or a ‘2’ depending on what was last selected. By default ‘2’ is set from the factory.
The RS4000 Panel has two possible settings for driving the servo motor during operation. The difference between the two settings is very simple. Setting ‘1’ drives the servo at full speed any time the sensor calls for a correction. Setting ‘2’ ramps up from half speed to full speed over 3 seconds any time the sensor calls for a correction. This ramp up allows the system to more accurately make fine adjustments without overcorrection.

Setting ‘1’ is intended for old servo assemblies with the ¾-10 standard pitch linear jack screw. Servo assemblies with the ¾-10 jack screw move at a much slower speed than the new servo assemblies and are usually considered to be too slow to correct themselves when the sensor calls for a change in setting ‘2’. For reference, generally all of the older servo assemblies will be yellow in color. If you are not sure if your servo has been painted or updated, loosen the clamp on one end of the bellows and look inside.

Setting ‘2’ is intended for new servo assemblies with the updated ¾-6 acme pitch linear jack screw. Servo assemblies with the ¾-6 jack screw move twice as fast as the old servo assemblies. You can use either setting ‘1’ or setting ‘2’ with a new servo. However, if conditions are not favorable, setting ‘1’ may cause the servo to overcorrect when the sensor calls for a change. Continual overcorrection will cause the system to seem nervous and unable to settle in on the laser. For this reason we generally recommend using setting ‘2’. For reference, new servo assemblies are grey in color.