



Setting up an Electronica 400 series Lathe Kit

Congratulations on the purchase of your Electronica 400 series lathe kit. This article addresses how to initialize the cross slide scale to 1 micron and change the cross slide to read in diameter rather than the default radius mode. These 'initialization' steps need only be accomplished once.

Before programming your display, make sure the scales are properly installed. The "hash marks" on the readhead and the scale body must be installed on the same 'side' or the display will flicker.

WARNING – Section 6.3 of the Electronica Operations Manual reads in part "Error Compensation is required during DRO installation..." This is an **incorrect statement** – It should read that Error Compensation is not required. Please remember the scales are already laser calibrated at the factory and any attempt by the user to calibrate them with anything less than a laser **WILL VOID ALL WARRANTIES**.

With the display on, **push the "wrench" button once** – it's the lower left most button on the display.

You should see "SELEct" on the display.

Push the "X" key once. The display should now read "LinEAr".

Push the "2" key once. The display should now read "SC 5.0". This is the current measuring resolution, which would indicate the display is initialized to read a 5 micron scale, which is incorrect.

Push the "4" key twice. The display should now read "SC 1.0". The display is now initialized to read a 1 micron scale, which is now 'correct'.

Push the "2" key once. The display should now read "dP 5.0". This is a user selectable display resolution, which if left as is, would cause the display window to "display" readings in 5 micron increments. While you could (if desired) leave it to display in only 5 micron increments, we're going to change it to read at our full cross slide resolution of 1 micron.

Push the "4" key twice. The display should now read "dP 1.0". The "X" axis window will now read at full resolution of 1 micron increments.

Push the "2" key once. The display will now read "rAd". This means the "X" axis will display in radius mode, which shows cross slide movement only, not how much material is being removed from your part. Most operators prefer to operate the cross slide in "Diameter" mode. To change this to "Diameter" mode, **push the "4" key once.** The display should now read "diA".

Push the "2" key seven times. The display should now read "SAv ChG".

Push the "ent" key once.

Push the "2" key twice. The display should now read "End".

Push the "ent" key once. The display should now be back in the normal operating mode. If you changed the cross slide to read in "Diameter Mode", the "X" axis should show a red circle with a slash next to it.

Congratulations, you're finished! Your settings are retained in memory, and need not be entered again.