

# EGX-400/600 Hardware Setup Guide



#### EGX Series Hardware Setup Guide

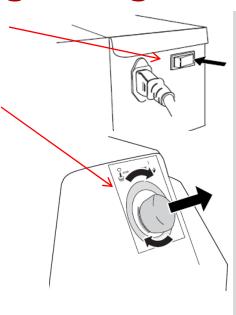
- This guide covers the basic setup for the Roland EGX-400/600 benchtop engravers.
- The setup covers Nosecone, Non-Nosecone and Scribing.
- For additional details and information on a particular configuration always refer to the Users Manual for your engraver.



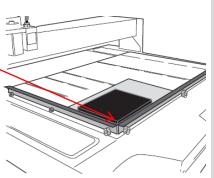
## EGX-400/600 Hardware Configuration for Nosecone Engraving



- Power the units primary power switch on the left rear of the unit.
- Turn the Emergency (secondary power) switch clockwise to power the unit on.
- The control panel will power on and display the model and boot version. Once completed the display will read "HIT ENTER KEY".
- At this point press the ENTER key to initialize the unit.
- Once the initialization is completed, the carriage will be located to the View position (Left rear).
- Place the adhesive sheet (AS-10) in the lower left corner of the table and place the material in the corner as well.









- On the control panel press the MENU key multiple times until you see the I/O, OTHERS, TEACHING, SELF menu.
- Using the arrow keys on the control panel move the cursor to OTHERS and press the ENTER key to enter the sub-menu.
- Press the MENU key multiple times until you see AUTO Z CONTROL.
- Using the arrow keys on the control panel move the cursor to ON and press the ENTER key to set the value (shown with brackets).
- Press the MENU key until you return to the main screen.

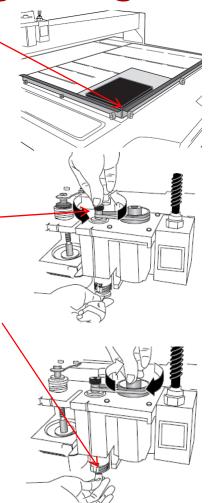


AUTO Z CONTROL

X 0 Y 0 Z 0 8000RPM

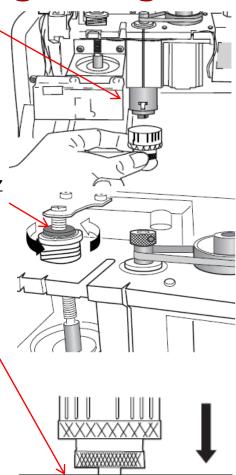


- Using the arrow keys on the control panel move the carriage so that the spindle unit is over the lower left corner of the material.
- Once the spindle is over the lower left corner of the material, press the XY ORIGIN SET button and press the ENTER key to set that as your origin point.
- Remove the cutter tool from the cutter knob (brass knob) and install the cutter knob on the top of the spindle assembly.
- Install the solid collet to the bottom of the spindle assembly and tighten it with the supplied spanner wrenches 17mm on the bottom of spindle and 10mm on the collet.
  - NOTE: Do not use the spanner wrench on the Top Spindle Nut as you will damage the bearings if you loosen or tighten it.



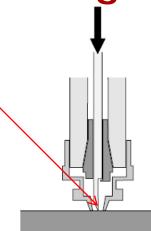


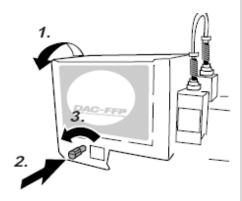
- Install the Nosecone assembly on the spindle assembly all the way up until it stops and then back off 2-3 full turns. This will allow you to set the depth for engraving.
  - <u>NOTE</u>: Be careful not to cross thread the nosecone to the spindle threads. Doing so will damage the spindle unit.
- Loosen the Z screw lock nut. This will allow the Z Axis to "float".
- Using the arrow keys move the nosecone over a flat area of the material.
- Using the Z- key lower the nosecone all the way down until the machine stops automatically.





- Insert the cutter gently until it touches the surface of the material and tighten it in place using the supplied hex wrench.
- Raise the Z Axis by using the Z+ key to clear the material.
- Rotate the nosecone counter clockwise to set the desired depth. Each tick mark is equal to 0.001" (0.0245mm). One full turn is equal to 0.025" (0.635mm).
- Close the spindle cover.
- Your machine is now ready for nosecone engraving.



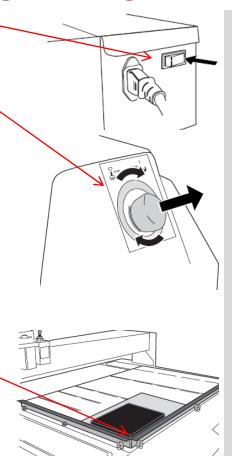




## EGX-400/600 Hardware Configuration for Non-Nosecone Engraving



- Power the units primary power switch on the left rear of the unit.
- Turn the Emergency (secondary power) switch clockwise to power the unit on.
- The control panel will power on and display the model and boot version. Once completed the display will read "HIT ENTER KEY".
- At this point press the ENTER key to initialize the unit.
- Once the initialization is completed, the carriage will be located to the View position (Left rear).
- Place the adhesive sheet (AS-10) in the lower left corner of the table and place the material in the corner as well.





- On the control panel press the MENU key multiple times until you see the I/O, OTHERS, TEACHING, SELF menu.
- Using the arrow keys on the control panel move the cursor to OTHERS and press the ENTER key to enter the sub-menu.
- Press the MENU key multiple times until you see AUTO Z CONTROL.
- Using the arrow keys on the control panel move the cursor to OFF and press the ENTER key to set the value (shown with brackets).
- Press the MENU key until you return to the main screen.



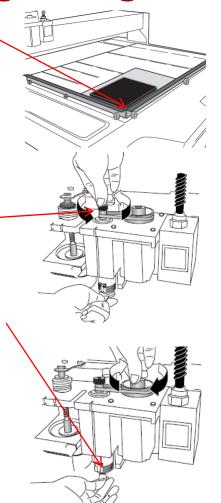
NOTES:

AUTO Z CONTROL
ON ><OFF>

X 0 Y 0 Z 0 8000RPM

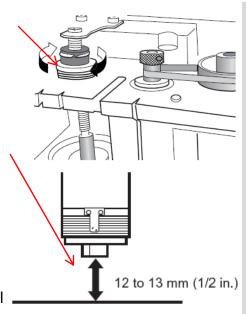


- Using the arrow keys on the control panel move the carriage so that the spindle unit is over the lower left corner of the material.
- Once the spindle is over the lower left corner of the material, press the XY ORIGIN SET button and press the ENTER key to set that as your origin point.
- Remove the cutter tool from the cutter knob (brass knob) and install the cutter knob on the top of the spindle assembly.
- Install the solid collet to the bottom of the spindle assembly and tighten it with the supplied spanner wrenches 17mm on the bottom of spindle and 10mm on the collet.
- NOTE: Do not use the Spanner on the Top Spindle Nut as you will damage the bearings if you loosen or tighten it.





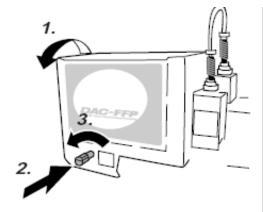
- ❖ Tighten the Z screw lock nut. This will lock the Z Axis in place.
- Using the arrow keys move the nosecone over a flat area of the material.
- Using the Z- key lower the nosecone just above the material approximately 0.5" (12-13mm)
- Insert the cutter gently until it touches the surface of the material and tighten it in place using the supplied hex wrench.
- Press the Z ORIGIN SET key on the control panel to bring up the Z setting menu.
- Using the arrow key move the cursor to Z0 and press the ENTER key to set the value as your surface.



SET Z1 **Z**0 Z2 SURFACE < 0 >



- Close the spindle cover.
- Your machine is now ready for non-nosecone engraving.

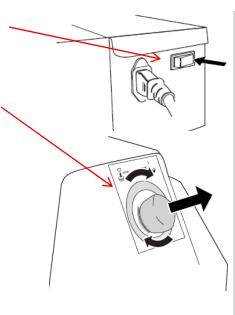




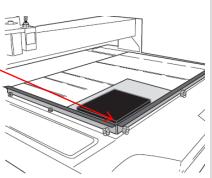
## EGX-400/600 Hardware Configuration for Scribing



- Power the units primary power switch on the left rear of the unit.
- Turn the Emergency (secondary power) switch clockwise to power the unit on.
- The control panel will power on and display the model and boot version. Once completed the display will read "HIT ENTER KEY".
- At this point press the ENTER key to initialize the unit.
- Once the initialization is completed, the carriage will be located to the View position (Left rear).
- Place the adhesive sheet (AS-10) in the lower left corner of the table and place the material in the corner as well.









- On the control panel press the MENU key multiple times until you see the I/O, OTHERS, TEACHING, SELF menu.
- Using the arrow keys on the control panel move the cursor to OTHERS and press the ENTER key to enter the sub-menu.
- The first item in the sub menu is REVOLUTION.
- Using the arrow keys on the control panel move the cursor to OFF and press the ENTER key to set the value (shown with brackets).
- Press the MENU key multiple times until you see AUTO Z CONTROL.
- Using the arrow keys on the control panel move the cursor to ON and press the ENTER key to set the value (shown with brackets).
- Press the MENU key until you return to the main screen.



NOTES:

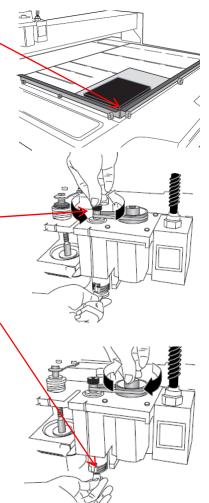
REVOLUTION ON OFF>

AUTO Z CONTROL →ON> OFF

X 0 Y 0 Z 0 8000RPM



- Using the arrow keys on the control panel move the carriage so that the spindle unit is over the lower left corner of the material.
- Once the spindle is over the lower left corner of the material, press the XY ORIGIN SET button and press the ENTER key to set that as your origin point.
- Remove the cutter tool from the cutter knob (brass knob) and install the cutter knob on the top of the spindle assembly.
- Install the solid collet to the bottom of the spindle assembly and tighten it with the supplied spanner wrenches 17mm on the bottom of spindle and 10mm on the collet.
  - NOTE: Do not use the spanner wrench on the Top Spindle Nut as you will damage the bearings if you loosen or tighten it.





- Loosen the Z screw lock nut. This will allow the Z Axis to "float".
- Using the arrow keys move the nosecone over a flat area of the material.
- Using the Z- key lower the collet until the tip is approximately ¼" to ½" (5-10mm) from the surface of the table.
- Insert the diamond scribing tool until the tip touches the surface of the material and lock it in place using the supplied hex wrenches.
- Close the spindle cover.
- Your machine is now ready for scribing.

