



### Electronica EL400 Grid Hole Function

Congratulations on the purchase of your Electronica EL400 series mill kit. This article addresses how to perform the Grid Hole function. This function allows the user to program a grid of holes set along an angled line, which begin at a starting point designated by the user.

In order to indicate the correct direction, the EL400 display assumes you have set your scales up as follows: As you cut from left to right on your workpiece (the mill table slides left) the X axis scale should count positive. As you cut from front to back on your workpiece (the mill table slides forward) the Y axis scale should also count positive. While the function will ultimately work with a non-std setup, the following explanations might appear contradictory if the assumed scale directions are not adhered to.

DRO PROS also recommends changing the Zero Beep settings. See the "EL400 Zero Beep" library article, which allows you to reduce the sensitivity of the display beeping as you approach each point.

1. To access the Grid Hole function, push the Grid Hole button. It's the top right in the cluster of eight function buttons and has a picture of a grid of holes angled at approximately thirty degrees. The x axis display window will immediately read "Grid", then "EntCnt0" will be displayed on the y axis window. Note also that "fn" should light on the bottom of the display window in red, indicating you are in a function mode.

2. On the keypad, enter the x coordinate value of the first hole, followed by the "ent" key. The x axis display window will read "EntCnt1", and the y axis window will read "0".

3. On the keypad, enter the y coordinate value of the first hole, followed by the "ent" key. The y axis display window will read "PitCh H".

4. On the keypad, enter the x distance between holes, followed by the "ent" key. The x axis display window will read "PitCh y".

5. On the keypad, enter the y distance between holes, followed by the "ent" key. The x axis display window will read "ANGLE".

6. On the keypad, enter the desired angle of the grid, followed by the "ent" key. The y axis display window will read "hoLES H".

7. On the keypad, enter the number of holes along the x axis, followed by the "ent" key. The x axis display window will read "hoLES y".

8. On the keypad, enter the number of holes along the y axis, followed by the "ent" key.

The axis display windows will have an extra leading decimal on the far left of the display window, which is a visual reminder you are in a function mode. The "distance to go" to hole position 1 is displayed on the associated X and Y axis windows.

- To proceed to hole position 1, move your mill such that the associated axis windows "zero out".
- To sequentially advance to the next hole position, push the #6 key.
- To sequentially return to the previous hole position, push the #4 key.
- To check which hole the display is currently indicating, push the #8 key. To return to the normal screen, push the #8 key a second time.

9. To exit the Angle Hole function, push the "C" button.

Congratulations, you've now accomplished Angle Hole!  
**DRO PROS**