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# DRO Readout Operation



## **Button Functions**

Legend	Function	Legend	Function
Mm/in/F	Change display to millimeters, inches, or fractions. Displays "in" or "mm" in the readout window.	Hold	Lock the current position in the display. (You probably do not want to use this button.) Displays "H" in the readout window when it is locked.
INC	Incremental mode. Press once to set zero. Hold for 5 seconds to exit Incremental mode. Displays "INC" in the readout window.	Preset	The Preset function. Displays a "P" in the readout window. Has no effect until you set a Preset value. See procedure below.
ወ	Power on and off	ORIGIN	Hold for 5 seconds to establish a fixed origin. This value will remain until you change it or replace the batteries.

# Using the DRO

This is a general procedure to get started using the DRO.

- 1. Mount your work piece on the mill table.
- 2. Find the X-axis zero edge of the work piece with an edge finder.
- 3. Press the INC button on the X-axis readout. The readout zeroes.
- 4. Raise the spindle so the edge finder clears the workpiece.
- 5. Move the X-axis half the diameter of the edge finder end (usually 0.001") towards the workpiece center.
- 6. Press the INC button on the X-axis readout. The readout zeroes with spindle centered over the edge of the workpiece.

#### Stacking the Readouts

Use the included thumbscrew to stack two or more readout units. Mount the stack on one of the arms using another thumbscrew.



#### Using the Preset Feature

The Preset feature lets you enter a dimension into the display. The value you enter is added to the distance from the Origin scale position and displayed. To set a preset value:

- 1. Hold the P button down for 5 seconds. A flashing "P" appears in the display and the current preset value appears in the display.
- 2. Hold the P button down for 2 seconds. The first digit flashes and the "P" appears steady.
- 3. Press the P repeatedly to increment the first digit. It will roll from 9 to 0 if you overshoot. Stop when you get to the value you want.
- 4. Hold the P button down for 2 seconds. The next digit flashes and the "P" appears steady.
- 5. Press the P repeatedly to increment the digit. It will roll from 9 to 0 if you overshoot. Stop when you get to the value you want.
- 6. Repeat steps 4 and 5 for the remaining digits.
- 7. When the last digit is set, hold the P button down for 2 seconds. A flashing "P" appears in the display and the new preset value appears in the display.
- 8. Press the P button once. The "P" appears steady and the display shows the sum of the Preset value and distance from the Origin scale position.

The Preset function does not work in Incremental mode. The Preset value you enter will remain until you change it or replace the batteries.

## What is the Preset function for?

Say your mill head cannot move all the way down so the spindle touches the mill table, but you want to use the top of the mill table as your origin for the Z-axis scale.

You can mount your scale so that it measures the range of travel of the spindle. Move the spindle down as far as it will go. Press the ORIGIN button to set the Origin position on your scale.

Now, measure the distance from the spindle to the table. Enter that value as the Preset value. When Preset is on ( "P" appears in the display), the scale will display the distance from the table to the spindle.