


Setting the Cutting Conditions

The cutter has four conditions that can be preset to cut different materials. For example, COND1 can be set for pen plotting, COND2 can be set for high-performance vinyl. Press buttons 1-4 when the cutter is in READY mode to select a corresponding condition. To change the parameters with the condition, be sure the cutter is in the condition you would like to change. Below are the steps to set the condition parameters properly.

 **Tip:** After installing the blade and blade holder, collect the different materials you will be cutting (i.e. intermediate, high performance, different brands.) As explained above, set each condition accordingly to each material. COND1 might be set for high performance, COND2 might be set to intermediate or reflective. Or, set each condition to the type of cutting you will be doing (ie. set COND1 for normal cutting, whereas set COND2 for small or intricate cutting).

Perform a test cut.

1. After installing the vinyl or media, select the condition and move the cutting tool to an area to test cuts and press TEST.
2. The LCD will display three choices TEST1, TEST2, and CUTTING PRO.
3. Press button 1 for TEST1.
4. A triangle within a square will be cut.

Testing for FORCE


Remove the square while trying to leave the triangle.

1. Press the CONDITION button.
2. A black blinking cursor will appear next to the FORCE value.
3. If the **square releases easily but pulls up the triangle** then press the UP ARROW button to increase the value by 1.
4. OR
5. Looking at the back of the media, if there are **indentations or the blade has cut completely through the backing** then press the DOWN ARROW BUTTON to decrease the value by 1
6. Press ENTER
7. Repeat the instructions above starting from step 1.

Testing the OFFSET.

For an explanation of OFFSET, review "[What is the OFFSET value?](#)"

1. Look at the corners of the square. If the corners are rounded, the value is too low, increase the OFFSET value. If the corners are spiked, the value is too high, decrease the OFFSET value.

 **Note:** With our newer cutters, offset is a blade choice. For example, if you were using the CB09U blade, you would select the 09U as your offset. To change this value press the side arrow keys until your blade appears. This will automatically set the offset to the appropriate value. If you feel the offset for the blade you are using is not exact, you can increase the value next to the blade offset by pressing the up and down arrow keys.

2. To change the OFFSET press the CONDITION button.
3. Press the 3 button for CUTTER OFFSET.
4. To increase the value, press the UP ARROW button

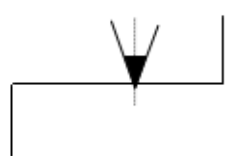


What is the OFFSET value?

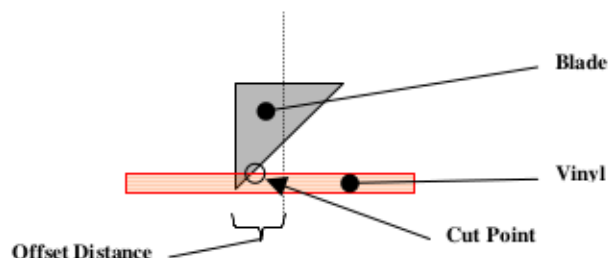
The offset value is the distance the plotter sends the blade past each corner. Notice the picture of the pen and the dashed line in the middle of the pen in figure below:




This dashed line is what is called the center point. When the plotter is told by the computer to move to a certain coordinate, the plotter will move the center point to the coordinate. This works well with a pen since the center point meets perfectly with the pen point.



In contrast, the cutting blade is different. The enlarged drawing in the figure below shows that the location of the cutting point is behind the center point.



This means that the plotter must maneuver the center point beyond the corner to achieve square corners.

 **Tip:** To further test the offset value, with your software, draw a circle and send it to the plotter. If the stop and start points of the circle do not meet, raise or lower your offset by 1.