



Print & Cut Adjustment
Insure Correct Output with the
Print-Cut Adjustment
Know Before You Print

Print-Cut Adjustment - Know Before You Print

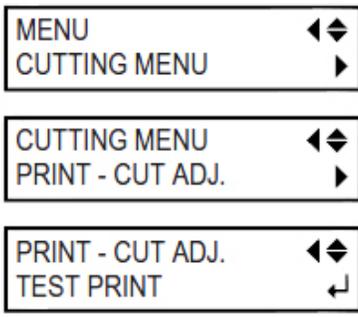
The function of the Print Cut Adjustment is to realign the printing and cutting features of the printer. Due to environmental conditions, different media types or other variables this will have to be adjusted periodically. It is important to perform this adjustment before print and cut applications to insure output is correct. Perform this adjustment using the same media and temperature settings you plan on using to output your work.



Note: The **XC** and **VP** printer/cutter models it is especially important to make sure the **Bidirectional** adjustment is accurate. This is because the adjustment is factored in for print and cut accuracy. Always perform the **Bidirectional** adjustment before starting any Print & Cut adjustment procedures.

Performing the Print-Cut Adjustment

The first step in performing the **Print-Cut Adjustment** is setting up the media that will be used.



- A. Once the media is set up press the **Menu** key and press the **Down Arrow** until **Cutting Menu** is displayed. Press the **Right Arrow** to enter this menu.
- B. Press the **Down Arrow** until **Print Cut Adj.** is shown.
- C. Press the **Right Arrow** to enter this menu, at this time **Test Print** will be shown. Press **Enter** to perform the **Print-Cut Adjustment**.

The following will be printed and cut:



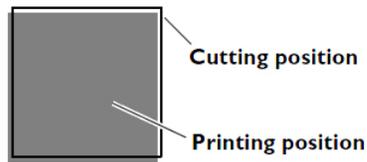
Note: On the **SP** and **SC** series devices there is a different version of this test pattern. Please skip to the last section of this document for information on the adjustment procedure for these types of machines.

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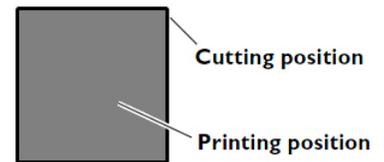
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Reviewing the Print-Cut Test Pattern

Three boxes are printed then cut across the width of the media. To review the Print-Cut test results remove the cut portion of the graphic from the media in all three positions. Once the cut area is removed from the test pattern if there is an offset area an adjustment needs to be performed.



Cutting position and printing position are misaligned.



Cutting position and printing position are aligned.

Figure 1

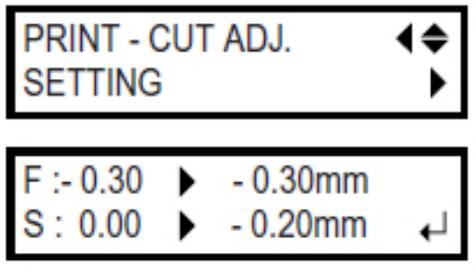


On the sample shown above the test pattern sample with the cut area removed would appear this way. This would indicate that the cut lines need to be adjusted down and to the right.

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Adjusting the Print-Cut Test Pattern

If an adjustment needs to be made to correct the Print-Cut Alignment perform the following steps:



Current > New

- Press the **Down Arrow** until **Print-Cut Adj - Setting** is shown.
- Press the **Right Arrow** to enter the **Print-Cut Adj, - Setting** menu.
- Press the **Arrow** keys to adjust the setting according to the results from the test print. The distance shown is the movement of the Cut Line.

Hint: The distance shown is what the Cut Line will move in mm. On the sample shown in **Figure 1** the **Down and Right Arrow** would need to be pressed several times to correct the output.

Tech Tip: In the Setting screen there are two letters, F and S. The F stands for Feed Direction. This is the direction the material feeds and is adjusted with pressing the Up or Down key moving the cut line toward the back or front of the machine respectively. The S stands for Scan Direction. This is the movement of the Cutting Carriage to the Left or Right and is adjusted by pressing the Left or Right arrow keys to move the cut line to the Left or Right respectively.

- Press **Enter** to save the value chosen. Once **Enter** is selected the value on the **New** side will jump over to the **Current** side.
- To exit this screen press the **Menu** key.
- To check the results perform another **Print-Cut Adjustment Test Print** as highlighted earlier in the document. Readjust if needed.

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Adjusting the Print-Cut Test Pattern

If there are inconsistent results or the test prints appear correct but the actual job doesn't come out correctly check the following items.

Blade - The blade should visibly come to a sharp point. If it is rounded or broken off it needs to be replaced.

Cutting Strip - This provides a smooth surface for the blade to cut on. If there is damage to the cutting strip and a groove has been cut into the surface it should be replaced.

Blade Holder - The blade holder has a small pivot bearing which can wear out or get dirty over time. Remove, inspect and clean the blade holder and replace if needed. Often there will be scraps of vinyl stuck inside the Blade Holder causing poor results.

Test Cut - The test cut should be performed before any cut job. This is performed by pressing the Test Cut key or scrolling to Test Cut in the Function key depending what printer model you have. This allows the user to check the cut pressure and offset before printing and cutting a job.

1. Check the shape of the test pattern.
 - Q. The cut shape is distorted.
 - A. Reduce the cutting speed.

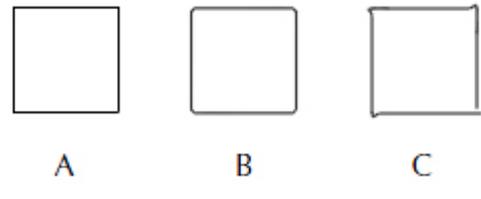
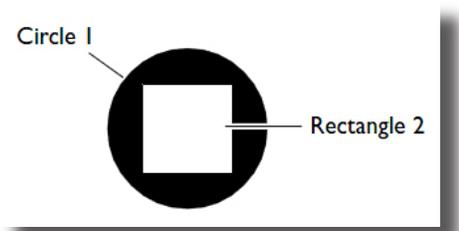
2. Peel off circle 1.
 - Q. Rectangle 2 also peels off.
 - A. Increase the blade force.
 - Q. Some uncut areas remain.
 - A. Reduce the cutting speed.

3. Peel off rectangle 2.
 - Q. The blade trace is indistinct. (The blade should leave faint traces on the backing paper)
 - A. Increase the blade force.
 - Q. The blade trace is too deep and cuts into the backing paper.
 - A. Reduce the blade force.

4. Check the shape of rectangle 2.

The shape is correct in figure A.

 - Q. The corners are rounded, figure B.
 - A. Increase the amount of blade offset.
 - Q. The corners have "horns", figure C.
 - A. Reduce the amount of blade offset.



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Performing the Print-Cut Adjustment on SP & SC model printers

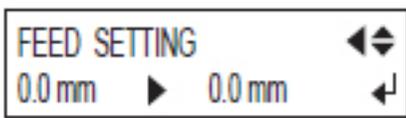
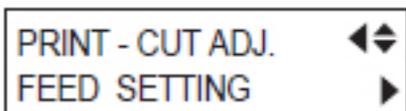
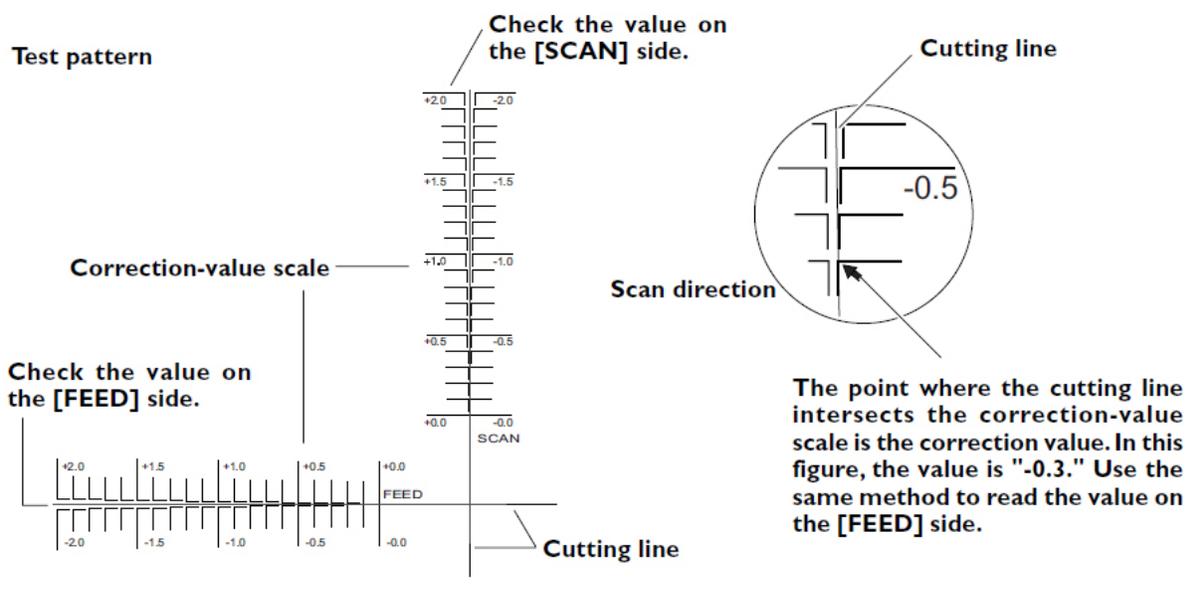
The Print-Cut adjustment on these model printers appears in a different manner than it does on newer model printers. The same basic tenants remain the same, the process is realigning the printing and cutting features.

Tech Tip: The **Environmental Match** compensates for minor changes in environmental conditions that can adversely effect cut performance. Perform the **Environmental Match** before starting the **Print-Cut Adjustment**. See your User Manual for details on this process.

The first step in performing the **Print-Cut Adjustment** is setting up the media that will be used.

A. Once the media is set up press the **Menu** key and press the **Down Arrow** until **Cutting Menu** is displayed. Press the **Right Arrow** to enter this menu.

B, Press the **Down Arrow** until **Print Cut Adj.** is shown.



C. Press the **Right Arrow** to enter this menu, at this time **Test Print** will be shown. Press **Enter** to perform the **Print-Cut Adjustment**. The following will be output from the printer.

D. Choose the values for both the **Scan and Feed** directions. The value is determined by where the cut line crosses the grid.

E. Press the **Down Arrow** till the **Feed Setting** menu is displayed.

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Performing the Print-Cut Adjustment on SP & SC model printers

- F. Press the **Right Arrow** to enter the **Feed Setting** menu.
- G. Press the **Up or Down Arrow** to change the value to match the setting shown on the grid and press **Enter** to save the value.
- H. Press the **Down Arrow** to **Scan Setting** and Press the **Right Arrow** to enter the **Scan Setting** menu.
- I. Press the **Up or Down Arrow** to change the value to match the setting shown on the grid and press **Enter** to save the value.

Tech Tip: There is no need to run the Print-Cut Adjustment after you have made the changes. If you do run the pattern again it will appear exactly the same as it previously did. **The cut line on the grid does not move after a change is made to the settings.** When you change the settings the machine is offsetting the cut shown to the adjustments you have made when out putting an actual job. Therefore an actual job will need to be printed and cut to test the adjustments that have been made.

Further Support

Please see the Print Cut Accuracy document for more hints for increasing print and cut quality. Should further support be needed or any additional questions arise about the processes in this document please contact your local supporting dealer. As always, thank you for choosing Roland.