

KNK Force – Where Shapes Will Cut Using Sure Cuts a Lot

By Sandy McCauley
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If You're New to SCAL

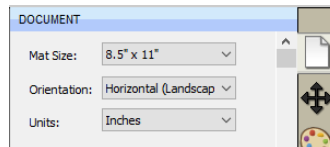
If you've not yet set up your Force to cut from Sure Cuts a Lot, please watch the following video by Darrel Farris:

<https://www.youtube.com/watch?v=ZcJj5l7TY34>

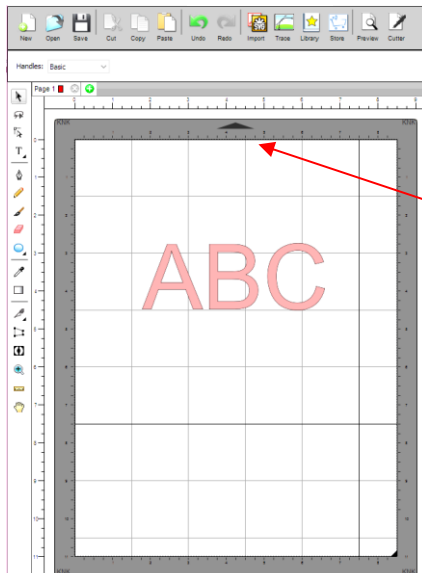
Overview

- There are 2 **Orientations** for cutting:
 - ◇ **Portrait** – Shapes will cut in the same orientation you see on the **Cutting Mat**
 - ◇ **Landscape** – Shapes will cut 90° clockwise to the orientation you see on the **Cutting Mat**
- There are 3 available **Cut Modes** when cutting to the KNK Force:
 - ◇ **WYSIWYG** – Shapes will cut relative to their position on the virtual Cutting Mat
 - ◇ **Origin Point** – Shapes will cut to align with the origin set before cutting
 - ◇ **Print and Cut** - Shapes will cut based on aligning the camera with printed registration marks (covered separately in a tutorial called *KNK Force Calibration Using Sure Cuts A Lot*)
- The **Orientation** is set on the **Document Panel**:

Select **Portrait** or
Landscape here

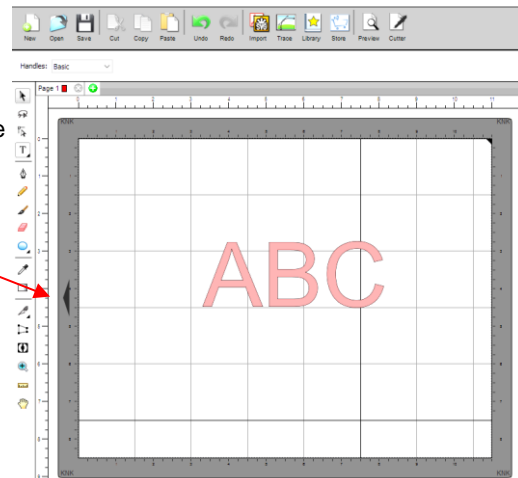


Portrait

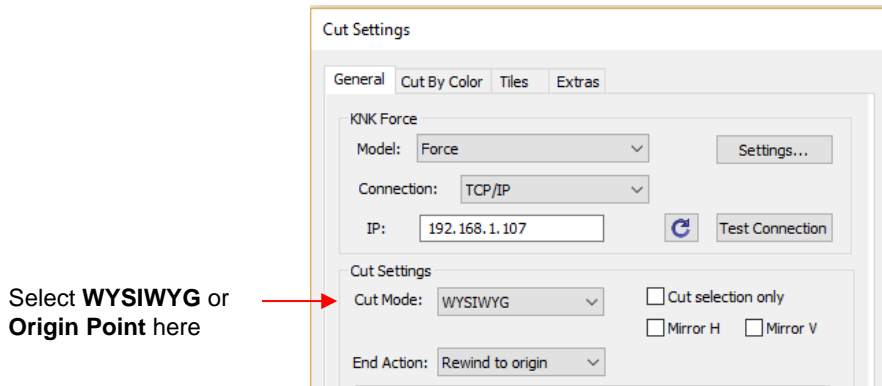


The black triangle shows the direction the actual cutting mat or back material (such as vinyl) should be fed into the Force

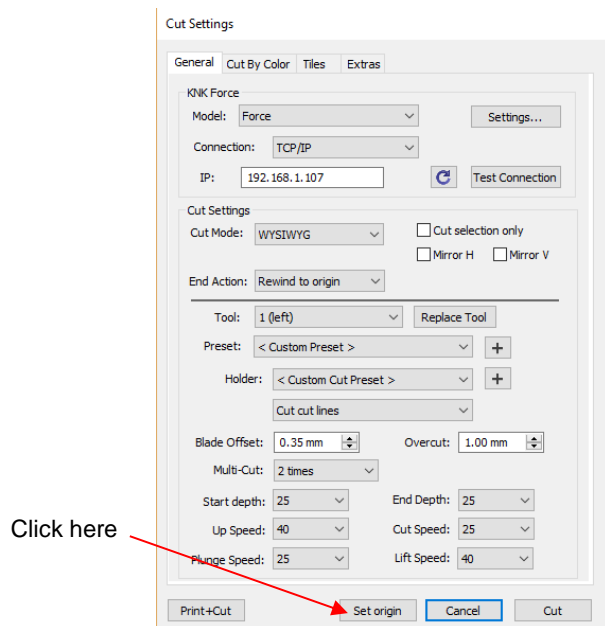
Landscape



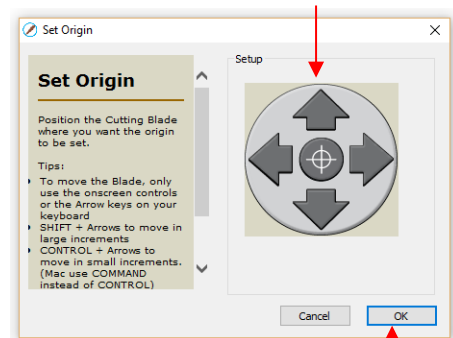
- The choice between **Portrait** and **Landscape** is a personal one – use whichever one makes the most sense to you. For long projects, such as for large vinyl cuts, **Landscape** is usually chosen because the project displays better on the computer monitor. However, you still have the option to use **Portrait**, if desired.
- The **Cut Mode** is set in the **Cut Settings** window:



- **IMPORTANT:** Both **Cut Modes** are based on setting an XY origin on the cutter. This origin is set by moving the tip of the blade (or pen or tool), on the left side, to the lower right corner of the mat grid or the material. To do this, click on this button in the **Cut Settings** window:



Click on these buttons or the keyboard arrows to move the blade tip to the lower right corner



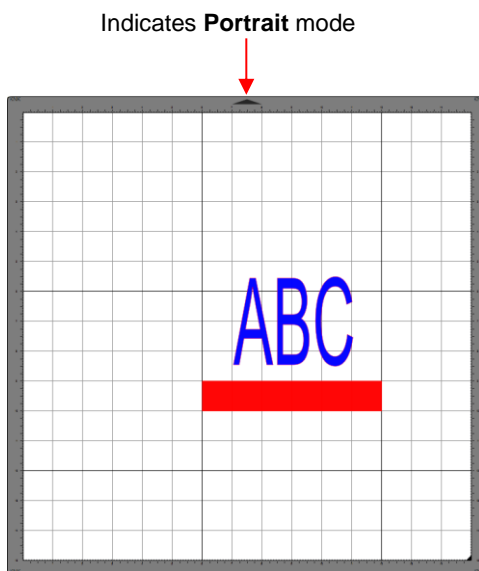
Click **OK** to set the origin at that location

- The following sections show where shapes will cut based on the possible combinations of **Cut Mode** and **Orientation**. Note that there are two ways to use WYSIWYG mode: one in which the virtual **Cutting Mat** is the same dimensions as the actual Force cutting mat. The other is to create a virtual **Cutting Mat** that matches the dimension of the material to be cut. Use whichever method makes the most sense to you.
- The best way to learn this material is to recreate what you see in these screen shots and test them out with the test pen and paper. Eventually, it will all make sense to you and, of course, there's help available if you need it:
 - ◇ KNK Force Yahoo group: https://groups.yahoo.com/neo/groups/KNK_Force/
 - ◇ KNK Force Facebook group: <https://www.facebook.com/groups/KNKForce/>
 - ◇ KNK Online Forum: <http://knkusa.com/forums/>

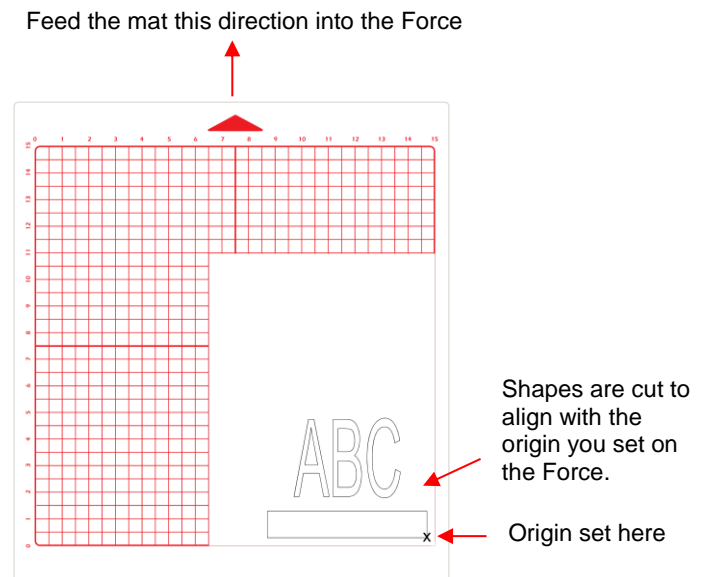
Origin Point

- This is the mode recommended for most applications as it economizes the use of your cutting materials.
- Shapes can be located anywhere on the virtual **Cutting Mat**. The shapes will be moved and aligned to cut with the origin you set on the material. As mentioned earlier, the origin is set using the position of the **blade tip** (or other tool installed on the left side). It is typically set just inside the lower right corner of the material being cut.
- When more than one shape will be cut, the shape closest to the origin will be cut at the origin and any other shapes will be cut the distance and direction from that shape as positioned on the screen. The following figures show examples of where images will cut. Use the arrow on the **Cutting Mat** as a guide to the direction to insert the actual mat or material into your Zing Air.

Origin Point – Portrait Mode

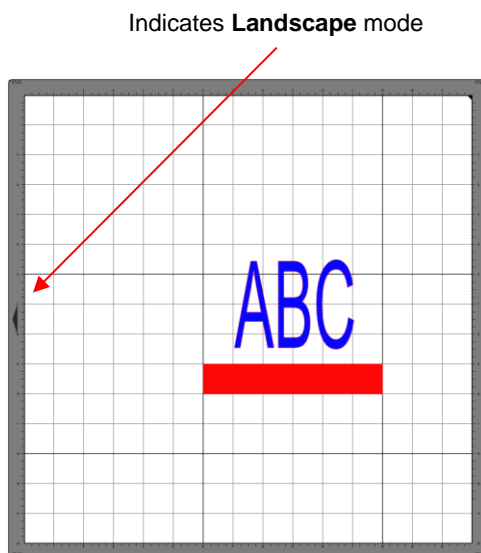


Location of shapes in SCAL

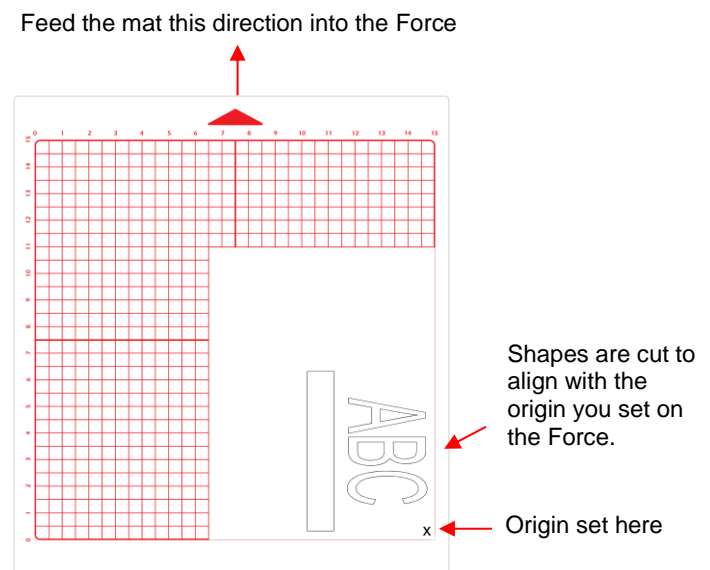


Where shapes are drawn or cut on material

Origin Point – Landscape Mode

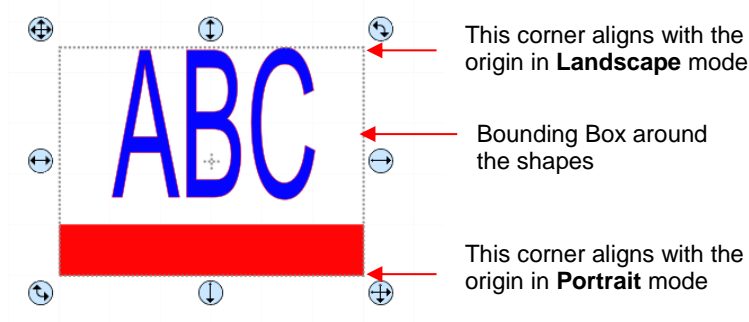


Location of shapes in SCAL

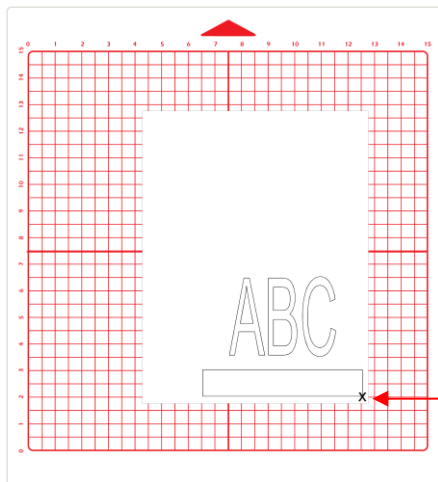


Where shapes are drawn or cut on material

- Note that the alignment is based on the bounding box of the shapes:

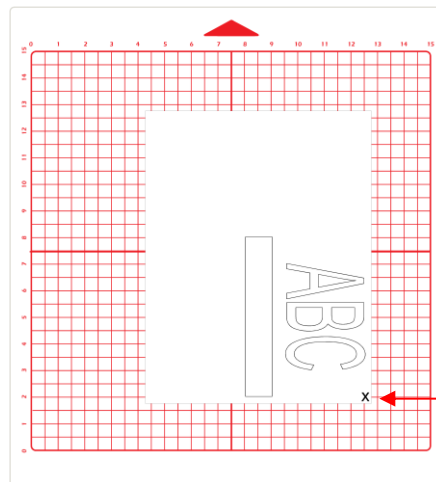


- Also note that the material can be located anywhere on the cutting mat because you are setting the origin on the material itself. It is usually advisable to set that origin just a little ways inside the corner of the material so that you do not inadvertently cut off the edge.



Portrait mode

Origin set here



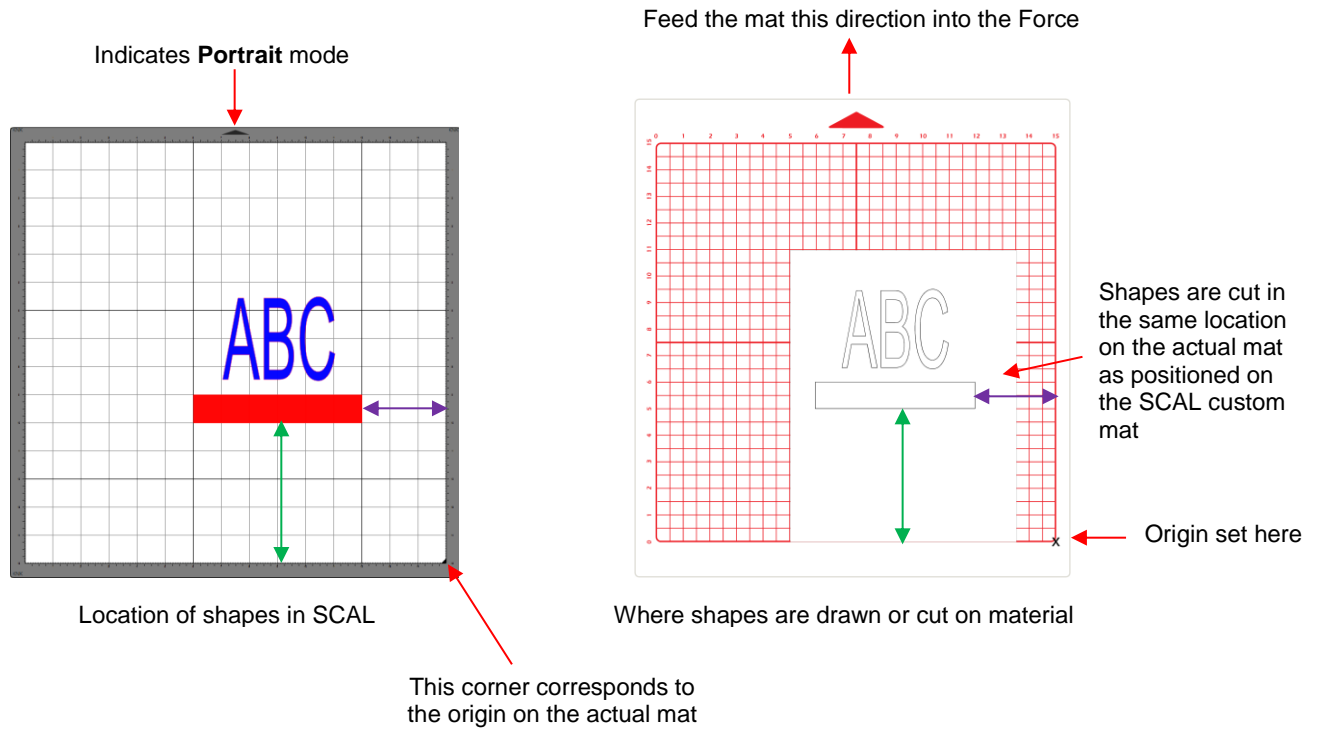
Landscape mode

Origin set here

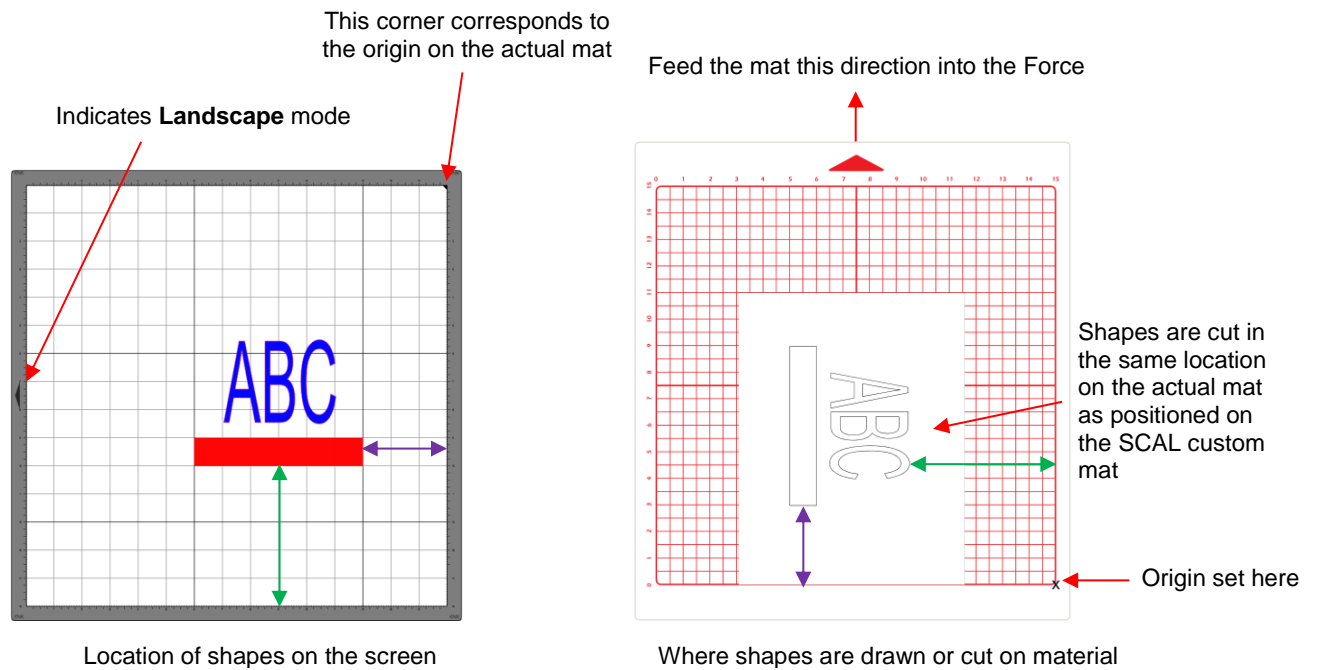
WYSIWYG

- This is the mode recommended when you need to cut shapes in very specific locations on your material (such as the center front of a greeting card).
- Shapes are cut based on where they are located on the virtual **Cutting Mat**. There are two methods used:
 - ◇ **Cutting Mat Method:** The virtual **Cutting Mat** dimensions should match those of the grid on the actual cutting mat. The origin is set in the exact lower right corner of the mat's grid. The material needs to be placed on the cutting mat so that it covers the area where the shapes will be cut.
 - ◇ **Material Method:** The virtual **Cutting Mat** dimensions should match those of the material being placed on the actual cutting mat. The origin is set in the lower right corner of the material regardless of where the material is placed on the mat. In the example later on, the material is assumed to be letter size (8.5" x 11").
- In the following diagrams the purple and green arrows are used to indicate the equivalent distances between the shapes and the origin on the virtual **Cutting Mat** and on the actual mat.

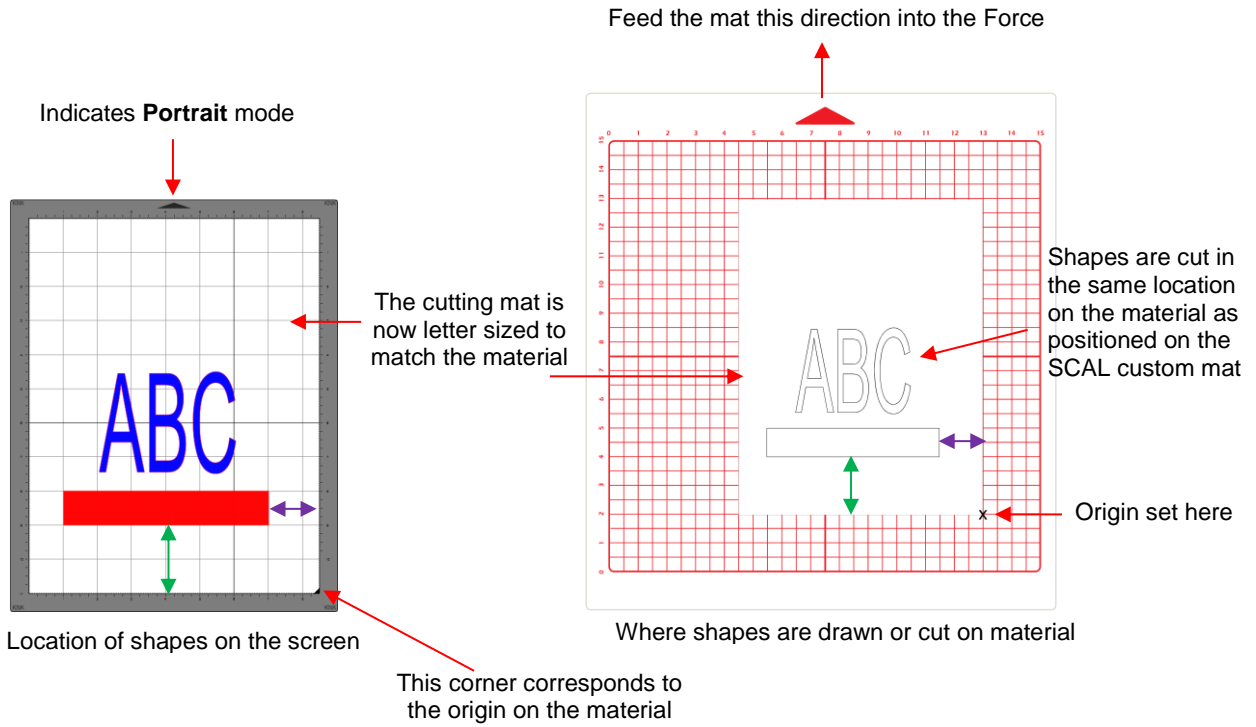
WYSIWYG – Portrait – Cutting Mat Method



WYSIWYG – Landscape – Cutting Mat Method



WYSIWYG – Portrait – Material Method



WYSIWYG – Landscape – Material Method

