

# Supplemental Lessons for iPunch

## Digitizing Lesson 1: Gradient Fills

These lessons have been created as a supplement to the iPunch software User's Guide to provide users of iPunch software with further insight into the tools and concepts for digitizing, editing and lettering in iPunch. Be sure to

### Working With the Gradient Fill Stitch Type

Your iPunch software comes with a special stitch type of fill stitch that gradually varies the density (span) value, creating a color gradient, as shown on the right. This works especially well when sewing such a fill stitch on top of another fill stitch of a different color.

#### How to Create the Gradient Fill Stitch

The gradient fill stitch is created just like a regular fill stitch. The steps are as follows:

- (1) Draw closed objects for the outer shape and any interior "cutouts" if desired. Ensure that all of these objects and only these objects are selected. For example, if you've drawn a circle with an interior circle for a cutout, the program prompt at the bottom should read, "2 objects selected".
- (2) **Choose the Gradient Stitch** Type from the submenu of fill types as shown on the right.
- (3) **Press ENTER.** You should be prompted for In and Out points if you've done everything right.
- (4) **Set In and Out points.** It is important to set these at the edges of the object – we'll go over this later in this document.

**Suggestion:** For a color fade effect to It is best to generate a regular fill stitch on the same object to sew before the gradient fill. Ensure that the both fill stitches sew at the same angle.

#### Special Options/Parameters for Gradient Fill Stitch

iPunch provides stitch settings that let you adjust the look of the gradient fill stitch:

?? **Density (Span) Settings:** iPunch generates the gradient fill stitch to start sewing at the highest density, which is set by the Span setting (default = 0.20) and fills towards the opposite end with each succeeding row increasingly further apart until it is at the density represented by the Maximum Span setting (default = 1.00) at the opposite end of the shape. You can adjust how dense or light the fill stitch appears by adjusting these values. Remember that the higher the value, the lighter the density, and vice-versa. See the settings boxes in Figure 3 on the right.

?? **Gradient Mode Setting:** By default, the gradient fill stitch generates with the highest density at the top and the lowest density at the bottom. The Gradient Mode, found in the Options bar, lets you choose these 3

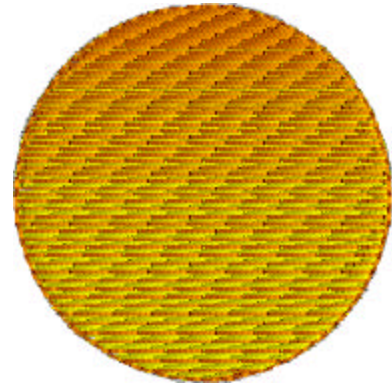


Fig.1 Example of Gradient Fill

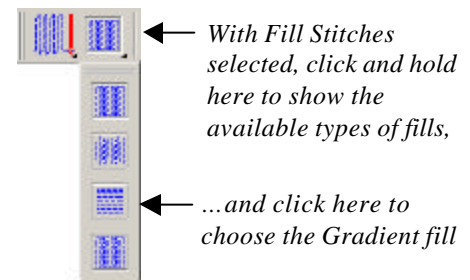


Figure 2

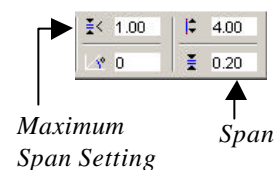


Figure 3

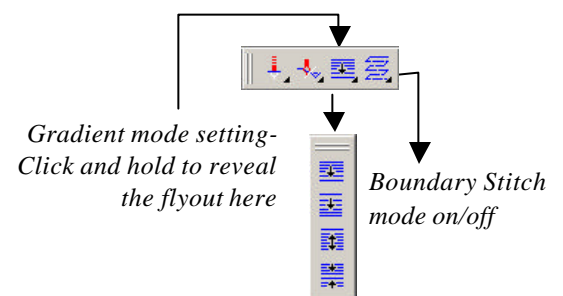


Figure 4

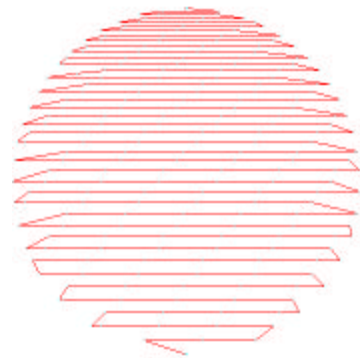
additional modes: (1) light at the top to dense at the bottom; (2) dense in the center, light at the top and bottom edges; (3) light in the center and dense at the top and bottom edges. See Figure 4.

- ?? **Boundary Stitch Setting (on/off):** By default, Boundary Stitch mode is switched off. By turning this on, iPunch causes the edge stitches of the gradient fill to follow the edge of the object, providing a cleaner edge, as shown in the illustration on the lower right. This setting is also available for regular fill stitches, but is not practical because of the short stitches it would otherwise create. On the other hand, it works well for gradient fill stitch. See icon on previous page in Figure 4.

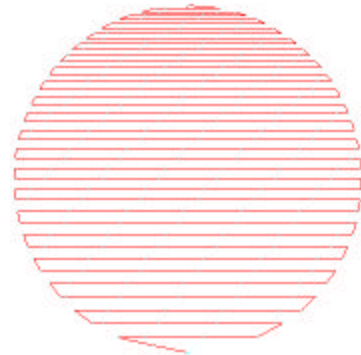
#### **“Do”s and “Don’t”s with the Gradient Fill Stitch**

The gradient fill stitch can produce dramatic, impressive color fades with very little work. To keep things simple, however, follow these “do’s and “don’t”s

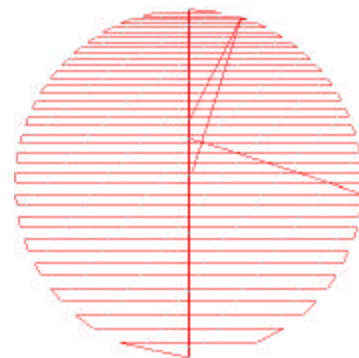
- ?? **Minimum Size:** Ensure that the area of the gradient stitch is at least 1½ square – if it is too small, there will not be enough rows of thread in the stitch group to smoothly render a gradient. For this reason, there is no automatic gradient tool for satin lettering.
- ?? **Avoid Pathing Stitches** – As with other fill and satin stitch groups, iPunch creates running or connecting stitches if the shape or in and out points require that the stitch group be broken up into 2 or more segments. While these rarely show underneath a regular fill or satin, the light portions of a gradient fill stitch show these connecting stitches underneath, leaving undesirable results as shown in Figure 7.
- o **Placement of In and Out points** – By placing the In and Out points at the head and foot of the fill stitch, iPunch will not need to draw such pathing stitches as shown in Figure 7. For example, the gradient fill on the right should have its In and Out points at top and bottom respectively, or bottom and top – not in the middle.
  - o **Avoid Complex Fills** – Since complex fills (i.e. fills with cutouts or holes) have more than 1 section, try to break the fill up into sections yourself so that you can control the pathing stitches.
  - o **Edit Pathing Stitches Out** – If you are unable to avoid either of the 2 situations above, you can use the Stitch Editor to move those pathing stitches to the side, along the edge of the fill.



**Figure 5: Gradient Fill - Boundary Stitch Off**



**Figure 6: Gradient Fill - Boundary Stitch On**



**Figure 7: With In point placed at center and Out point at center-right.**

