

Supplemental Lessons for iPunch

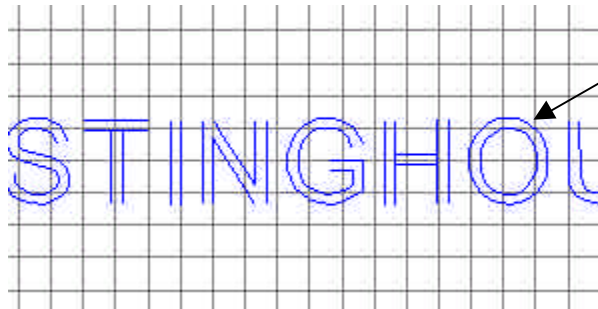
Lettering Lesson 1: Working With Small Lettering – the Short Version (applies to both iPunch 8.5 and iPunch@Home)

Background: The quality of your embroidered text will be one of the benchmarks that your work will be judged by – strive for the best! Small lettering (generally, text ½ inch to ¼ inch in height), however, is hard to sew with great quality.

The Short List

Follow these directions to understand and hopefully more effectively create smaller text, at least to the limits that can practically be done with embroidery.

1. **Troubleshooting: Make sure the stems of the letters are at least 1mm wide.** Use the grid tool (go to Tools..Options to set units and spacing to mm and 1.0 x 1.0).



In this example, if stitches filled this text object only to the edges, the satins would be too narrow to sew well. You can tell because against the background 1 x 1 mm grid squares, the stems are much narrower than a block of the grid.

Interior loops: Make sure that the space in “interior loops” are also at least 1 x 1 mm in area or larger; a similar problem also applies to the inside of an “O” or a “b” or “a”, but even worse – as the needle repeatedly sews inside the loop, more and more holes in the interior of the loop cause more and more damage to the fabric that is supposed to stay and show that interior space.

2. **Potential Solutions:** Any stems that are narrower than 1 block will need to be enlarged by either of the following methods:
 - a. **Use the Small Lettering Recipe.** This will set stitch lengths, external compensation, and density (span).
 - b. **Additional External Compensation** – by default the value on the recipes is 0.2mm. Try adding more – try .4 or .6 – this often has dramatic results.
 - c. **Try to resize the letters as much as you can without exceeding your customer’s maximum size limits.** Often there is “empty space” you can take advantage of between letters or words.
 - d. **Try a simpler font.** Sometimes you’ll have to explain to your customers that the detail in fancier fonts cannot sew well at smaller sizes, because fancier fonts have stems of different widths. Some stems will sew well while others will not, unless you sew the text at a large enough size (often larger than you need)
 - e. **Modify the design.** Sometimes your customer will be flexible enough to allow modifications to the design that will allow larger text or less text.