

Design Studio.Getting Started with the Design Studio. Kniterate: The Unofficial Guide Robert Warner

Chapter 1. Introduction Chapter 1. Introduction Chapter 1. Introduction Who is this for? You saw the marketing materials for the Kniterate, and you went and bought one, and now you have a very large machine sitting in your studio collecting dust, because the thought of trying to make it do anything is daunting Youve seen the marketing material, and you want to potentially buy one for yourself. If these apply to you, great! This guide is for you. This guide is designed to take you from novice to...slightly more than a novice. Notesid="ftnte1"; 1. As the author, I can confidently say that Ive reached slightly more than novice status. Join me on this journey! And if you see something along the way that can help others, thats fantastic. I want the feedback and the suggestions. This is a living document, and in the spirit of openness, lets make sure that we have complete documentation in this exciting new world of material production! Chapter 2. Kniterate Design Studio Chapter 2. Kniterate Design Studio

Chapter 2. Kniterate Design Studio Getting Started with the Design Studio This is going to be a purposefully misleading chapter. Dont worry - this isnt the only time I will do this. Chances are, this is going to be the first introduction to working with KCODE. KCODE is a low-level language based on GCODE, a standard language developed in the 1950s for use with machine cutting tools. The basic premise, of course, is that you have a physical machine that needs to be told how to move the needles, the jacks, the carriages, and the yarn feeders, to produce output that the user is expecting. Unfortunately, KCODE isnt particularly user friendly. GCODE is, quite simply, the low-level mathematical language used to control CNC machines. There have been many variants over the years, but the concepts remain the same. You have a blade, or other apparatus, that only moves in one direction. Then, you have a plate, that moves on three axis (or more, depending on how complex the machine is). The plate has to move in controlled defined directions, to create the final piece. KCODE is the same. The machine itself doesnt know, for example, where various yarn feeders are - the KCODE instructions tell the machine where to go to get the feeders from. Telling the machine to knit Fair Isle means nothing to a Kniterate; instead, in the KCODE, you would define the needle sequence, and which color should be applied to each needle.