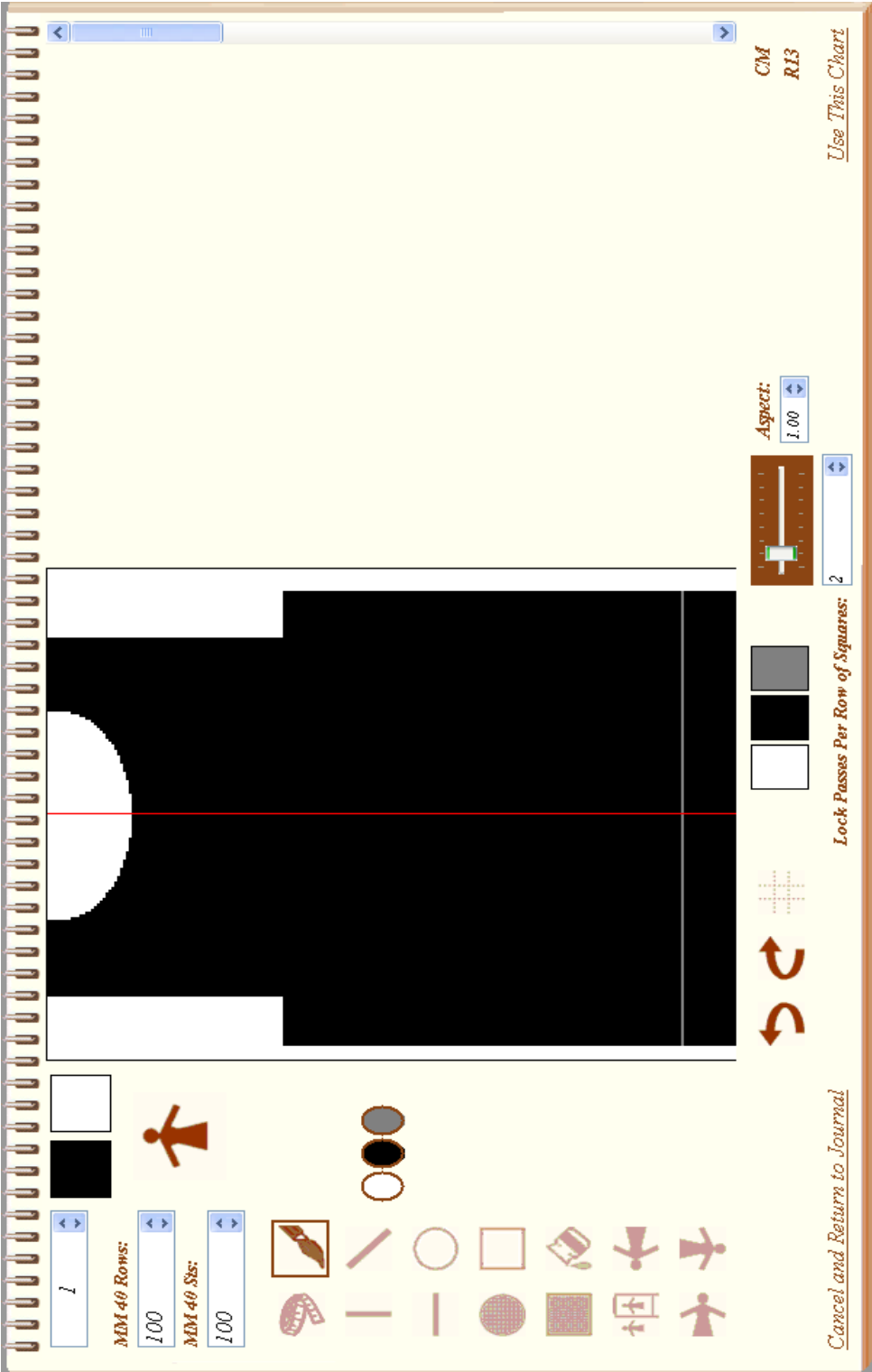# Sketchbook for Downloadable Charts

Overview

The sketchbook for downloadable charts allows you to draw a chart of a fabric piece so that it can be downloaded into the console.

Downloadable charts provide much the same functionality as the old PASSAP Form 6 software did. This feature is only available if your console supports downloading from the `FORM` prompt. If pressing the unlabeled key followed by the zero key does not bring up the `PC START` prompt then you will not be able to download a chart unless you upgrade the console with the most recent chip set. Please write support@passappal.com if you want a new chip set for your console.

Downloadable charts differ in a number of ways from traditional form programmes. Form programmes provide a great deal of flexibility. One programme can be used to generate multiple lengths and widths of the same base shape. The console determines the stitches and rows to be knitted from the measurements entered. Charts provide more precision and control. With charts, you draw the exact stitches and rows to be knitted. Both methods are similar in that they give the console enough information to display detailed knitting instructions as you knit the piece. Whether you use form programmes or charts is really a matter of personal choice. When you cannot find a form programme to match the shape you want to knit, a downloadable chart is an excellent option.

The preceding page shows a sample chart. When sketching charts keep in mind the following facts:

- You are drawing the exact stitches and rows you want to knit. Needle L90 is the left most square in the sketch area. Needle R90 is the right most square. Each row of square represents 2 or more rows of passes of the locks. The number of row passes to enter is dependent on the knit technique you intend to use. For example a 4-color fair-isle pattern may require as many as 8 passes.

- To cast on, draw a horizontal row of stitches over the desired number of needles (squares) anywhere in the sketch area. The cast-on row must be one continuous line of stitches. There must not be any gaps since the console will allow only one cast on.

- The shape must be drawn in solid black with no holes or slits. There may only be one neckline since the console will only allow the piece to be divided once.

- Changes in pattern are represented by a gray horizontal line with a width of one row that crosses the entire piece as show in the example

on the preceding page. During knitting, you will receive the **ABC** prompt for each pattern change specified with a gray line.

- The first gray line represents the change from the cast-on technique to stitch pattern A. A second gray line represents when to switch to stitch pattern B and so on.
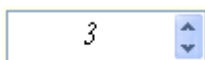
Tool Modes

The behavior of the various drawing tools are dependent on the modes selected for them.

You may draw using either the left or right mouse button. This allows you to have two colors available at all times.   The assigned colors are shown in the two small squares at the top of the sketchbook.

You may specify the color of each mouse button by left or right clicking on a color in the color palette area. Black represents a stitch; white, no stitch. Gray is used to draw a pattern change line.

Set the line thickness to your preference. You may set it between 1 and 10 squares wide.

Click the symmetry mode icon to if you wish to draw symmetrically. Anything you draw will be reflected over the red vertical line dividing the "L" needles from the "R" needles. Two-way symmetry is excellent for ensuring that the shaping is identical on both the left and right sides of the garment. Clicking the symmetry mode icon a second time will return the drawing tools to the normal drawing mode.
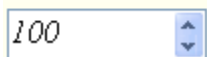
MM 40 Rows:

MM 40 Sts:

Enter your gauge information in the *MM 40 Rows* and *MM 40 Sts*. The gauge information is used in conjunction with the tape measure tool to convert measured squares into centimeters.

Lock Passes Per .

Row of Squares:

Lock Passes Per Rows of Squares indicates how many times you will move the lock for one complete iteration of the knit technique you intend to use. For example, stockinette would require 2 passes. A 3-color fair-isle pattern typically requires 6 passes.

Drawing Tools

All drawing tools work similarly. Select your preferred drawing tool. Move your cursor to the drawing area. Press either the left or right mouse button and then drag the cursor to the desired location. Release the mouse button to complete the drawing. The following drawing tools are available:

	Tape Measure-- Click in the drawing area to set the starting point. Drag to the location you want to measure. The measurement in centimeters will appear in the lower right corner under the drawing area.
	Paintbrush-- Drag across drawing surface to paint individual stitches.
	Line Tools-- Click in the drawing area to set the starting point. Drag and release to set the end point.
	Ellipse Tools-- Click in drawing area and drag to size ellipse.
	Rectangle Tools-- Click in drawing area and drag to size rectangle.
	Flood Fill Tool-- Click in drawing area to replace color under the cursor and surrounding area with your chosen color.
	Mirror Tool-- Click in drawing area and drag to select region to mirror. Release mouse button to create mirror image.
	Turn Tools-- Click in drawing area and drag to select region to turn. Release mouse button to turn 90°. Any "empty" area left behind after turning will fill in with the fill color associated with the mouse button.

	Flip Tool-- Click in the drawing area and drag to select region to flip. Release mouse button to flip image.

Additional Features

The undo button will undo your drawing to the last action that you took. Ten levels of undo are available. You may click the redo button if you want to undo the "undo."

Click on the grid icon to display a grid over the drawing area. Clicking on the icon a second time removes the grid.

Use the magnifier to enlarge the stitches in the drawing area.

Change the aspect ratio to more closely simulate what your fabric piece will look like knitted. An aspect greater than one will result in stitches that are wider than they are long. An aspect less than one will result in stitches longer than they are wide.

The size in centimeters of the line or shape being drawn is shown in the lower right area of the sketchbook. The current cursor position is also displayed as a left or right needle position.

Click *Use This Chart* to save the chart to the form programme page of the journal. The sketchbook will close and you will return to the journal.

Click *Cancel and Return to Journal* to close the sketchbook and return to the journal without saving.

See the chapter on on E6000 Programming and knitting for information on how to download a chart into your console.