

INSTRUCTION MANUAL

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ABM International

**PANTOVISION
USER INTERFACE MANUAL**

ABM INTERNATIONAL, INC.

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Approved By:

United States Patent Office - Patent Pending 2011

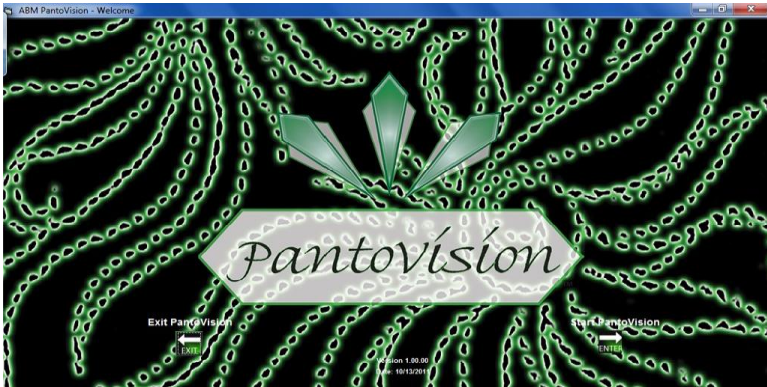
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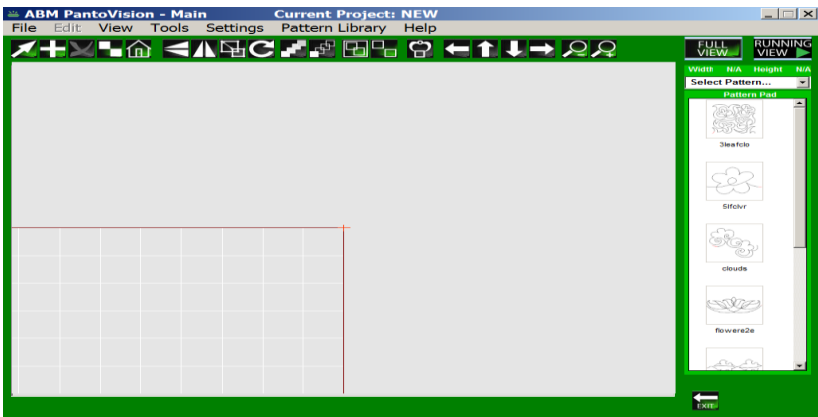
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The Startup Screen

The startup screen is the first screen that appears upon running the ABM PantoVision application. The user is given the option to Enter, or Exit the application.



1. **Enter:** Opens the viewport screen.

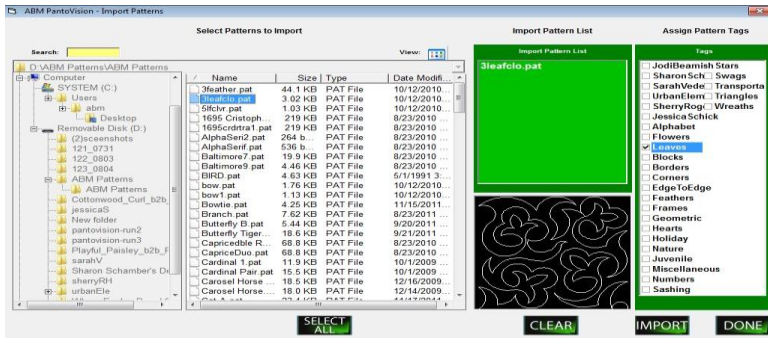


2. **Exit:** Terminates the PantoVision application and returns to Windows.

Import Patterns

Patterns are represented by a unique ID as well as their name, displayed in brackets.

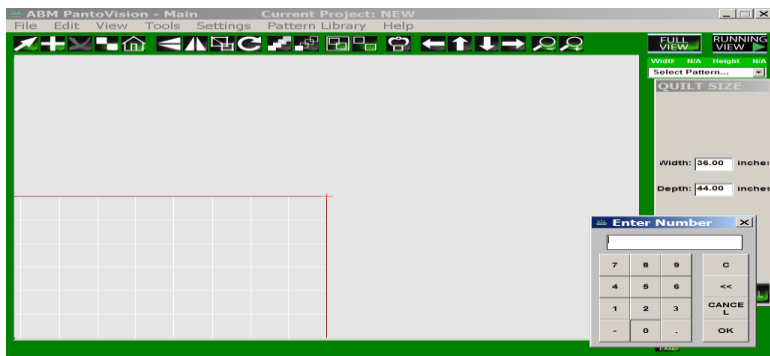
1. **To import included PantoVision patterns:** insert ABM PantoVision thumb drive into USB port.
2. **To import purchased patterns:** insert USB drive with downloaded files into USB port.
3. **Open Import Pattern Screen:** click on “Pattern Library” tab, click “Import Pattern”.



4. **Open Pattern File:** in the left hand window go to “Computer”, then “Removable Disk”, open PantoVision Pattern file, or the file containing purchased downloaded pattern files.
5. **Choose Patterns to Import:** from the list of patterns in the second window choose the patterns to import by double clicking on the file. The file name will appear in the green box along with an image of the pattern in the black box. Choose as many patterns as desired to import.
6. **Tag Patterns:** choose tags for the patterns being imported in the right hand window. *Note: see Tagging Patterns pg. 13 for more tagging information.*
7. **Import:** by clicking on the “Import” icon. Then click “Done” to return to PantoVision application.

Setting Up

1. **Create Quilt Grid:** click on the “Settings” tab, click “Quilt Size”, enter and accept quilt dimensions.



2. **Home Quilt Grid:** move sewing machine head to upper right corner of quilt top and click the “Home” icon.

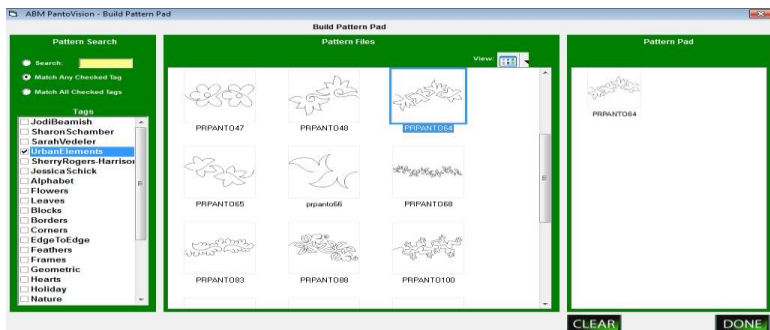


This will position the quilt grid on screen to the quilt top.

Adding Patterns

3. **Open Build Pattern Pad:** screen by clicking on “Add Pattern” icon




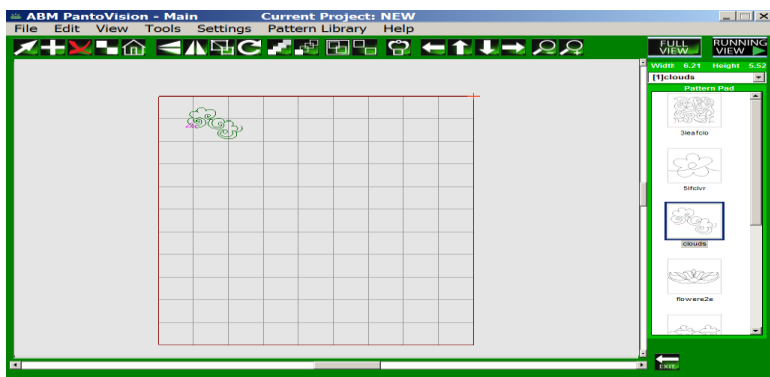


- 4. Pattern Files:** stored in the Pattern Library will all display in the center window.
- 5. Search:** narrow a search by selecting: “Search”, to search alphabetically by entering first few letters of pattern title; “Match Any Checked Tag”, for a broader search of many selected tags; “Match All Checked Tags”, for a very specific pinpointed search of selected tags.
- 6. Select Patterns:** to add to the Pattern Pad for possible use on the current project by double clicking the pattern chosen. Then the pattern will show up in the right hand window. Choose as many patterns as desired. Click “Done” to return to Viewport Screen.
- 7. The Pattern Pad:** can be cleared by selecting the “Clear” button.


Create a Pantograph

1. **Place Pattern:** on the quilt grid by double clicking the (*double finger tap on screen*) chosen pattern on the Pattern Pad. The Pattern will be "attached" to the needle crosshair on the screen. To drop the pattern, either double


click the pattern or click the "Drop" icon. 

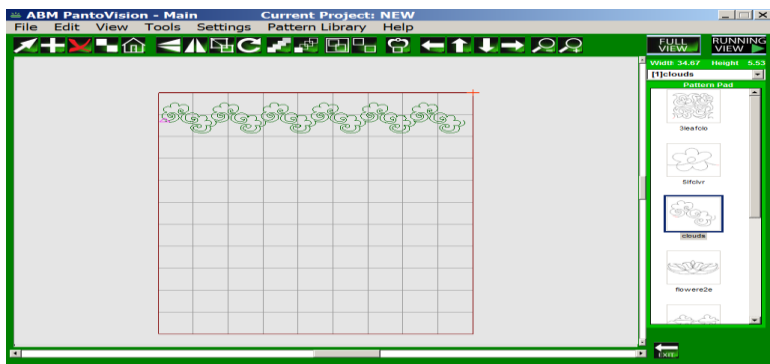



2. **To Delete:** a pattern from the quilt grid, select the pattern and

click the "Delete" icon. 

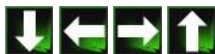
3. **Make a Pantograph:** to fit across the width of your quilt grid by double


clicking the pattern to select it; and then click the "More Repeats" icon  until the width is reached.

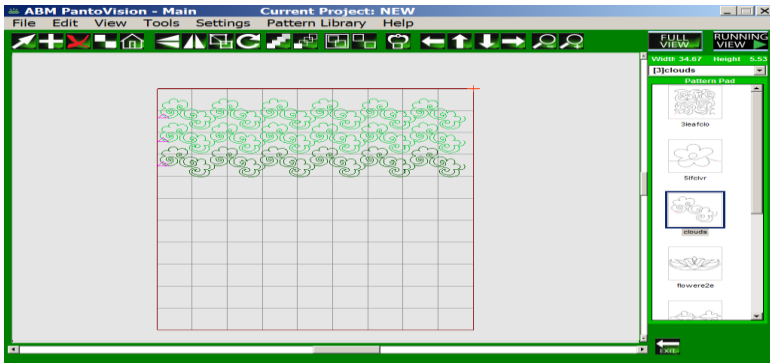



4. **Reposition the Pantograph:** by double clicking the pattern to highlight (dark green), then drag the pattern by dragging finger on touchpad or click the "Grab" icon  to move with the sew head.

5. **Make fine adjustments:** by pressing the "Nudge" arrows.




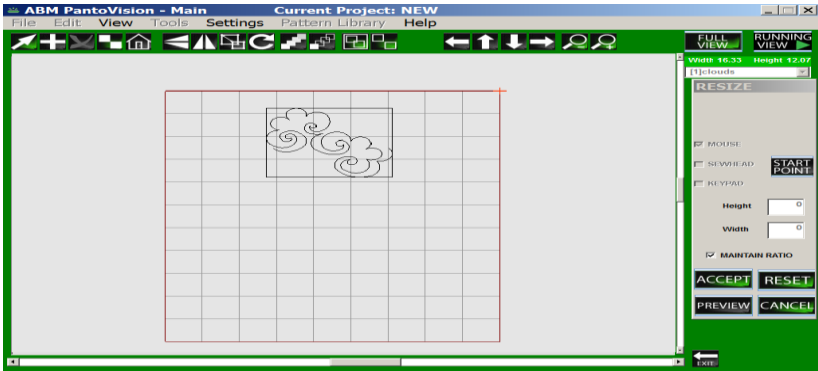
6. **Add More Rows:** using the "Copy"  function.



7. **Adjust groups:** of rows by using the "Group"  feature before moving sets of positioned rows.

Resize

To resize single patterns, pantograph rows, or groups of rows, select pattern then click the "Resize" icon  to open the resize dialog.



Choose the method you would like to use to resize your pattern.

1. **MOUSE:** will resize the pattern using touch by finger (or mouse) on the touch pad. Touch the desired start point and touch or drag finger to the desired end point. Click "Preview" and then "Accept" or "Cancel".
2. To choose a different method of resizing, click the "Reset" button. Then choose "Sewhead" or "Keypad".
3. To resize using the **SEWHEAD:** move the sewhead to the desired location for the upper left corner of the pattern, click "Start Point", then pull the sewhead down and to the right until the desired size is achieved. Click "Accept" or "Cancel".
4. To resize using the **KEYPAD:** click on the "Height" or "Width" window and enter preferred dimensions using the popped up keypad. Click "OK", "Preview" then either "Accept" or "Cancel".
5. Deselect the **MAINTAIN RATIO:** to resize without maintaining the ratio with any of the resize options.

View

Adjust your View: using the "Zoom" icons, or click "Full View" button to quickly view the entire quilt layout.



Zoom in to the needle position



Zoom out from the needle position.





Shows full quilt grid on viewport screen. This is the preferred selection for laying out patterns. Zoom in or out as preferred. Use slider bars to adjust viewing position of grid on the screen.




Shows the selected pattern at approximately actual size and render other patterns and grid invisible. This view is used for quilting your pantograph.

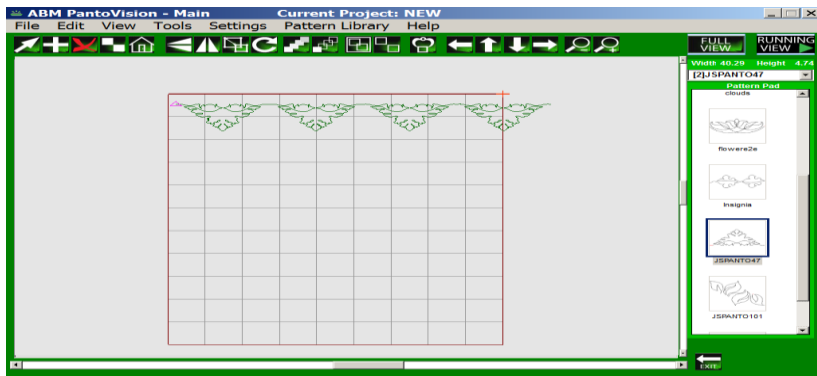
Advancing and Repositioning



This works best if the user has two or more pantograph pattern rows placed on the quilt grid, more if they have offset rows.

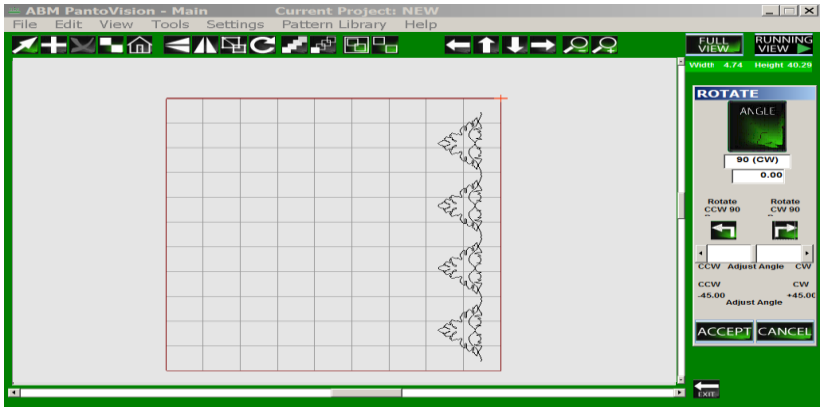
1. Prepare to advance the quilt by making sure at least two rows of pantographs positioned on the screen quilt grid.
2. Place the sewhead at the start point of the last pantograph row quilted on the quilt. Put the needle in the down position on the start point. The start point is marked at the start of the pattern on the screen with a pink triangle.
3. **Grouping:** If your pantographs are grouped, "Ungroup" them at this time. Click on the uppermost row that corresponds in position with the last row quilted. This will highlight (dark green) the row. Click "Group" and click on the rest of the patterns to group them.
4. **Grab:** the group by using the "Grab" icon  this will attach the grouped rows by the start point of the first selection of the grouped rows to the needle point.
5. Advance the quilt with the needle remaining down.
6. Secure Advanced Quilt then Drop the pantograph row group using the "Drop" icon 

Rotate

First select a pattern, row, or group, then click the “Rotate” icon  to open the Rotate Dialog.



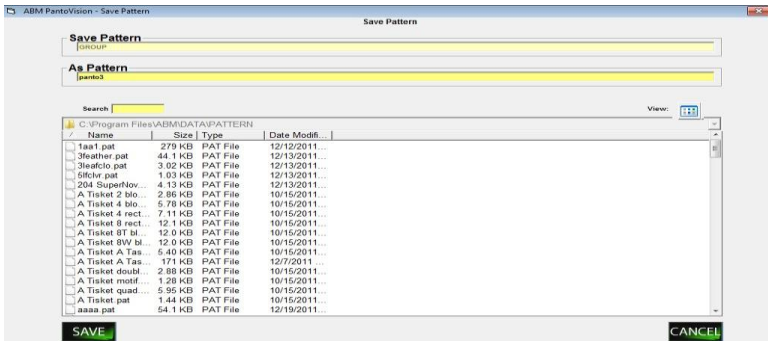
Rotate: selected pattern using “90 degree” icons   or nudge to desired angle using the “Adjust Angle” slider bar. Click “Accept” or “Cancel”.



Save Patterns

Save Patterns, rows, or groups as new patterns.

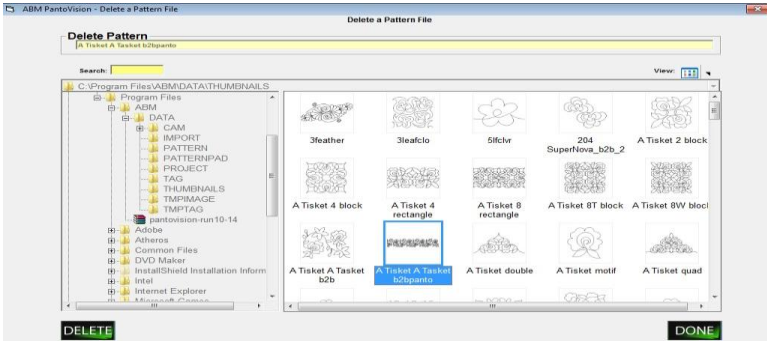
1. Select pattern, row or group desired. Under tabs click “File”, then “Save” and Save Pattern File to open Save Pattern screen.



Rename new pattern in As Pattern text box. Click “Save”. Viewport screen will reopen with prompt confirming pattern saved. Click “OK” and continue.

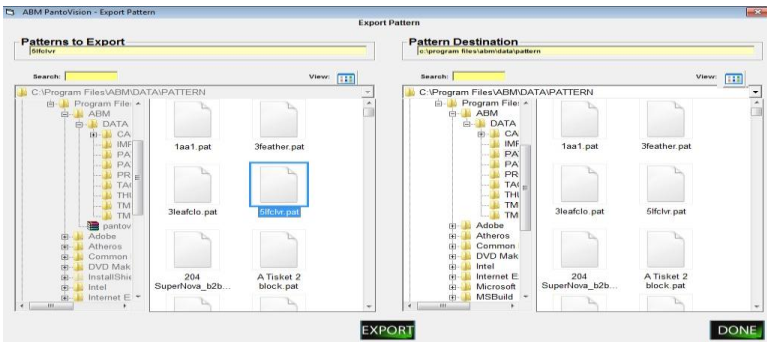
Delete Pattern Files

To Delete pattern files, under tabs click “File”, “Delete”, Delete Pattern Files to open Delete Files screen. Select pattern file you wish to delete then click “Delete” button. Then click “Done”.



Export Patterns

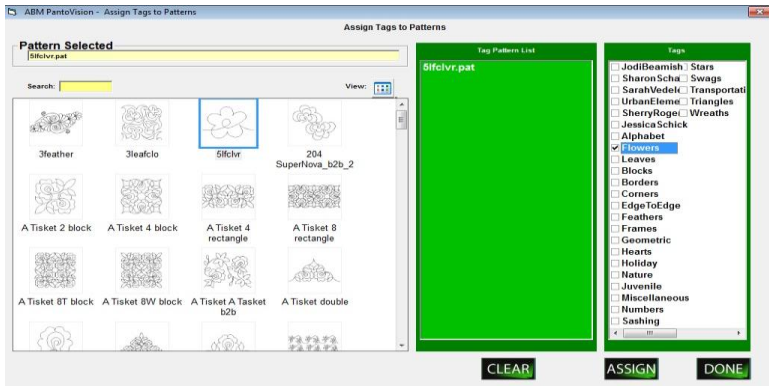
To export patterns, under tabs click “File”, “Export”, Export Pattern to open Export Pattern screen.



Select pattern and destination file. Click “Export” then “Done”.

Tag Patterns

To tag patterns, under tabs click “Pattern Library”, then Tag Patterns to open Assign Tags to Patterns screen.



1. To Select pattern, double click the pattern thumbnail. The pattern file name will then show in the green box.
2. Select Tags as desired and then click “Assign” then “Done”. If adding tags to a previously tagged pattern choose all tags desired for the selected pattern as new tagging procedure will overwrite any previous tags for that pattern.
3. Click “Clear” to remove patterns from the green box.

Master Tags

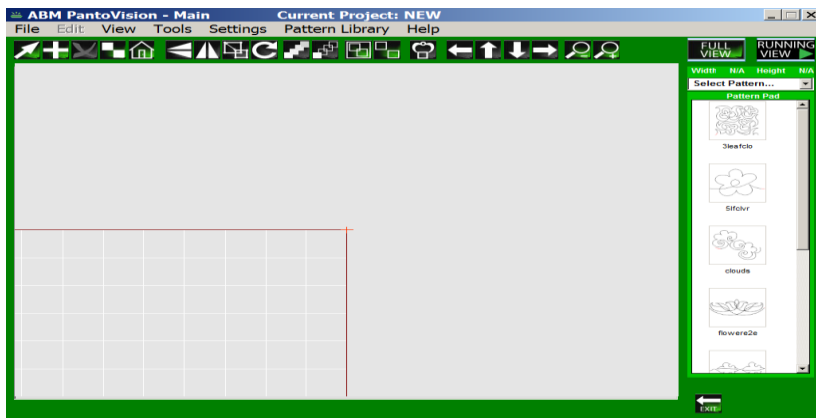
Edit your list of master tags by clicking “Pattern Library” tab, then “Master Tags”.



1. Insert new tag by clicking "Insert" then typing new tag name in text box. Click "Accept" or "Cancel".
2. Change a tag by clicking on the tag name, then click "Change" and type the new name that the tag should be changed to, then click "Accept" or "Cancel".
3. Delete a tag by clicking on the tag name then click "Delete". Click "Accept" or "Cancel".

Viewport

The viewport window shows the arrangement of patterns in the active project on a virtual representation of the machine's sewing area. It also features selection tabs, an icon toolbar, and a pattern pad.



Gridlines are visible to assist in positioning and sizing patterns. They are defined as follows:

blue	4 inches
white	one inch
dark gray	one quarter inch (only visible at high magnification)
red	outer edges of the sewing area

Clicking anywhere in the viewport will cause the viewport to center on that location, when the Needle View is selected.

Tab Bar: allows for function selections included on icon tool bar as well as more function selections that are used less frequently.

Pattern Pad: displays patterns selected for possible use on current project.

Icon Tool Bar: contains icon touch buttons for quick access to functions used frequently.

Icon Key



Select: activates selection function and deactivates active zoom selection.



Add Pattern: opens Build Pattern Pad screen to enable placement of patterns to the Pattern Pad.



Delete: deletes pattern, row, or group that is selected on screen.



Copy: places copy of selected pattern, row, or group on screen.



Home: positions upper right corner of quilt grid to needle position.



Flip: flips the selected pattern upside-down.



Mirror: creates a mirror of the selected pattern sideways.



Resize: opens dialog box for resize options to resize selected pattern.



Rotate: opens dialog box for rotate options to rotate selected pattern.



More Repeats: adds another pattern and attaches to selected pattern to create rows.



Less Repeats: removes patterns from row one at a time.



Group: patterns to make them editable as one pattern.



Ungroup: patterns that have been grouped and this will cause the patterns to become unrelated and individually editable.



Grab: attaches the start point of the selected pattern to the sewhead needle.



Drop: releases the pattern from the sewhead needle.



Nudge Left: moves selected pattern to left in small increments.



Nudge Up: moves selected pattern upward in small increments.



Nudge Down: moves selected pattern downward in small increments.



Nudge Right: moves selected pattern to right in small increments.



Zoom Out: to see larger view of sew area.



Zoom In: to see more detailed view of sew area.



Full View: shows full view of quilt width in viewport window.



Running View: zooms to the actual size of the selected pattern and then hides the remaining patterns and the grid from the running mode.

Quick Start Installation Guide

Introduction

The PANTO Encoder Interface is a simple USB2.0 compliant device that captures 32 bit encoder positions values from 2 externally connected quadrature encoders. These positions can be easily read by a PC application via the USB 2.0 full speed virtual serial com port.

Packing List

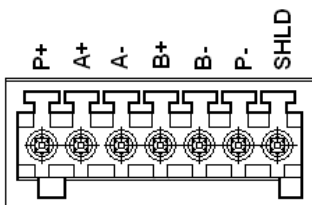
The PANTO Kit comes packed in the box with the following item:

- PANTO Encoder Interface Module
- USB 2.0 A to B communication cable.
- 2 Mating Quick connect push on encoder connectors.
- USB Memory Stick with driver and software.

Encoder Interface

Connecting the Encoders

The PANTO Encoder Interface supports various encoder wiring and voltage options. The Encoder power must be in the range of 5V to 24V DC. Both encoder inputs must be powered from the same voltage and is usually the voltage supplying power to the encoders.



Installation of PANTO Encoder Interface on a PC

Minimum System Requirements

- A Pentium Based Personnel Computer
- Microsoft Windows Operating System Version 7 or Newer
- 512MByte Ram

Step1: Run Install PantoVision.EXE install file.

On the CD provided run the file Install PantoVision.EXE. This will copy any necessary drivers and the PantoVision application "C:\Program Files\ABM\Panto".

Step2: Connect PANTO Encoder Interface to a PC

Connect USB Cable provided between the PANTO Encoder Interface and the PC.

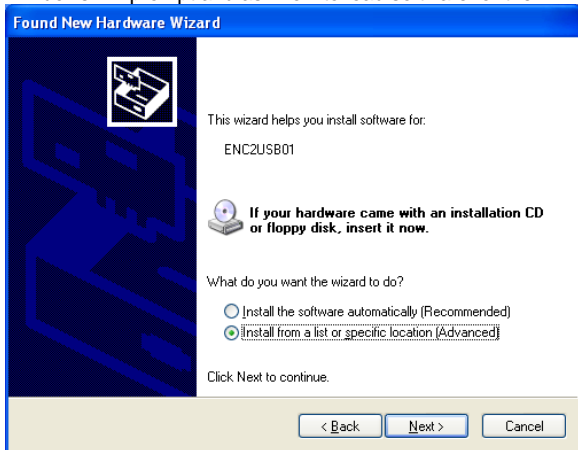
Step3: Installing the USB Driver

When the USB Cable is plugged into PC, windows will detect "New Hardware Found". A popup box similar to the following will be displayed. Select 'No, not at this time and press next.



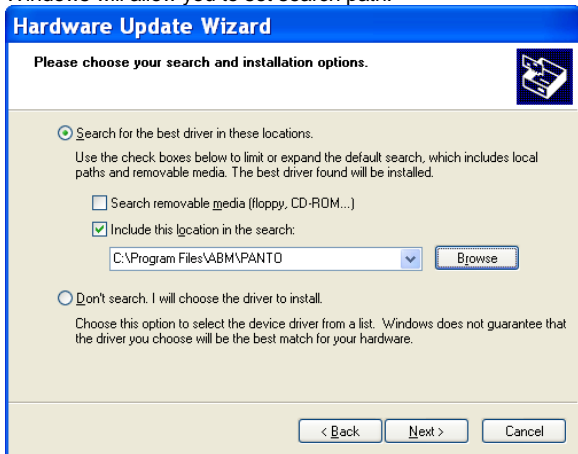
Select 'No, not at this time and press next.

Windows will prompt and ask how to load software for the PANTO.



Select "Install from a list or specific location" and press next.

Windows will allow you to set search path.



Include the search path where you installed the application in step 1.

Notice:

For Technical assistance call ABM at 888-99Quilt.

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