Welcome to CorelDRAW for Tactile Graphics. CorelDRAW is a comprehensive vector-based drawing and graphic-design program for the graphics professional. It is also used by many tactile graphics illustrators throughout the U.S. and Canada to create graphics to be output on microcapsule paper, Tiger embosser, and other special production methods.

In this presentation, you will become familiar with the basic terminology and concepts of CorelDRAW as well as tactile graphics, and learn to use the tools provided by CorelDRAW to create tactile graphics.

CorelDRAW version X5 is used in this presentation. Similar features might be available in previous releases but may not be fully applicable.

What you will learn

This presentation will discuss the following topics:

- Components of a Tactile Graphic
- Vector vs. Bitmap graphics
- Workspace of CorelDRAW
- Working with a Template
- The Shape Tool
- Types of Line Segments
- Types of Nodes
- Working with Nodes
- Drawing Curves and Shapes
- Manipulating Objects
- Tips and Tricks
Components of a Tactile Graphic

All information in the print graphic that is to be included in the tactile graphic may be categorized into one of the following:

- **Area**
  - Represent regions with specific significance
  - Minimum area: 1/4 square inches
- **Line**
  - Represent linear information on an illustration (outline, path, direction)
  - Minimum length: 1/2 inch for a primary line
- **Point**
  - Represent specific locations
  - Easy to recognize: square, circle, and triangle
  - Minimum size: 1/4 inch when comparing items
- **Label**
  - Identify areas, lines, and/or points.
  - May be used to represent an area or a point
  - Long labels may be substituted with a key

Vector vs. Bitmap

**Vector** graphic is an image generated from mathematical descriptions that determine the position, length, and direction in which lines are drawn.

- Shapes, curves, lines, etc. are based on mathematical equations.
- There is no loss of quality when resizing.

**Bitmap** graphic is an image composed of grids of pixels or dots.

- Raster images are based on pixels with unique colors.
- Resizing raster images can result in an image looking pixilated.
Workspace of CorelDRAW

When you launch CorelDRAW, the application window opens containing a drawing window.

CorelDRAW Application Window

Application commands are accessible through the menu bar, toolbars, property bar, dockers, and toolbox. The property bar and dockers provide access to commands that relate to the active tool or current task. The property bar, dockers, toolbars, and toolbox can be opened, closed, and moved around your screen at any time.

- **Toolbars** consist of buttons that are shortcuts to menu commands, e.g. open or save a document, copy, cut, paste, redo, undo, etc.

- **Property bar** displays controls that are commonly used with the active tool or for the task you’re performing. The content of property bar changes depending on the tool or task.
- **Dockers** display the same types of controls as a dialog box, e.g. command buttons, options, and listed boxes. Dockers can be either floating (undocked), or attached (docked) to either side of the application window.

- **Status bar** displays information about selected objects, e.g. color, fill type, outline, etc.

- **Toolbox** contains tools for drawing and editing graphics. Some are visible by default, others are grouped in flyouts.
Working with a Template

A tactile graphic template contains tactile graphic components to assist in tactile drawing.

• Page size: 11.5 by 11 inches
• Guidelines indicate page margins
• 40 by 25 braille cells background matches embossed braille for easy planning
• Placement of running head and page numbers
• Commonly used textures, lines, curves, arrows, and points
• Customization of CorelDRAW workspace for tactile drawing
  o Turn off spell checking and QuickCorrect function
    ▪ Option > Workspace > Text > Spelling
    ▪ Option > Workspace > Text > QuickCorrect
  o Character formatting
    ▪ Font: braille or swell braille
    ▪ Size: 24 pt
  o Paragraph formatting
    ▪ Line spacing: 110%
  o Snap to function often needs to be turned off for precision
The Shape Tool

The shape tool is one of the most frequently used tools in CorelDRAW. Its function depends on the type of object being reshaped. Shape tool is the standard tool for manipulating nodes.

Types of line segments

A segment is a line of two nodes. There are two types of segment:

- **Line**: Straight segment. Line nodes have no control handles.
- **Curve**: Nodes have control handles for adjustment.

A line can be converted to a curve without noticeable change in appearance, but it displays control handles that you can move to change the segment’s shape.

Types of nodes

Nodes are the points at each end of a line or curve segment. There are three types of nodes:

- **Cusp**: Sharp transition. Control handles are independent of one another.
- **Smooth**: Smooth transition. Control handles move together but extend independently.
- **Symmetrical**: A smooth transition with symmetrical and opposite control handles.

Editing curve by manipulating nodes

- Select and move nodes
- Add and delete nodes
- Break curve and join two nodes
- Extend curve to close and close curve
- Stretch or scale, skew or rotate, and align nodes

Drawing and editing objects

- Transformations: position, rotate, scale, size, skew
- Shaping: weld, trim, intersect, simplify, front minus back, back minus front, boundary
Tips and Tricks

- **Welcome Screen and Quick Start Window** provides options for setting new document and helpful resources.
- **Tooltips** provide information about the icons and buttons found in the program. To view a tooltip, position the pointer over an icon, button, or application control.
- **Hints docker** provides instant information about the tools in the toolbox.
- **Text toolbar** contains commands for formatting and aligning text.
- **Color palette**: Left-click a color swatch to choose a fill color. Right-click one to choose an outline color.
- **Select Tool**
  - Rectangular or freehand mode
  - Select multiple objects by holding down Shift key
  - Ctrl – constrain
  - Shift – from center
- **Useful shortcuts**
  - + – duplicate
  - Z – zoom
  - F4 – zoom to all objects
  - Shift + F4 – zoom to page
  - Shift + F2 – zoom to selected object
- **Dimensioning lines** provide accuracy in drawing.