Understanding Charting
Use Charting to create a variety of charts using the data you provide.

Creating Data for a Chart
Use numeric data separated by tabs or spaces as charting data.

Cutting or Copying Existing Data
Use existing data to create a chart by cutting or copying it to the clipboard.

Typing Data into the Charting Data Dialog Box
Create the data you want to use for a chart as part of the charting function.

Editing Existing Data in the Charting Data Dialog Box
Edit the data you cut or copied to the Clipboard or data you typed in the Charting Data dialog box.

Understanding Chart Types
Understand the twelve types of charts.

Creating a Chart
Create a chart using the data in the Charting Data dialog box.

Setting Charting Defaults
Specify the pictures you want to display in the current chart and any picture charts you create in the future.

Setting Color Defaults
Use a mouse to specify the colors you want to display in the current chart and any picture charts you create in the future.

Deleting a Chart
Delete a chart in a frame, or delete both the frame and the chart.

Changing the Chart Type
Modify the appearance of a chart by changing the chart type.

Using Drawing to Modify a Chart
Use a mouse and the draw icons to move or modify selected objects, or create new objects in the chart.

Using a Chart Created in Another Application
Place a chart created in another application into an Ami Pro frame.

You can use the Ami Pro Charting function to create a variety of charts. Ami Pro creates the chart using data you provide. You can specify the type of chart you want; column, stacked column, bar, stacked bar, line, area, line and picture, pie, expanded pie, picture, and stacked picture charts. In addition, Ami Pro provides options for a legend, a grid, the colors that should be used in the chart, and the numbers that should display along the X or Y axis.

If there are colors or pictures you generally want to use for charts you create, you can specify charting color and picture defaults. In addition, you can edit a chart by changing the chart type or using Drawing to add text or modify the chart segments. Ami Pro also allows you to place a chart created in another application into a frame in an Ami Pro document.

See also:

Charting Contents
Creating Data for a Chart
Cutting or Copying Existing Data
Typing Data into the Charting Data Dialog Box
Editing Existing Data in the Charting Data Dialog Box

Ami Pro uses numeric data separated by tabs or spaces to create a chart in an empty frame. You can create data for a chart in two ways:

- Cut or copy data from main document text or a table in an Ami Pro document, or from another application, to the Windows Clipboard.
- Type the data directly into the Charting Data dialog box.

Guidelines for creating charting data

Follow these guidelines when you create data for a chart:

- Charting data must consist of numeric data separated by tabs or spaces. The numbers can be negative or exponential and can include decimal symbols. Ami Pro accepts currency symbols and commas, but does not use them in the chart.
- Columns must be separated by one or more spaces or a tab.
- The maximum number of columns and rows is determined by the size of the chart, which is limited to 5,000 columns and rows or available memory.
- If you want labels in any chart except a pie chart, type the label text in the first row, preceding any rows of numeric data.
- If you want to create labels that are numbers, such as the year 1992, type an underscore before the number: _1992. Ami Pro treats the numbers as text.
- If the labels contain multiple words, type an underscore between the words: Label_A. Ami Pro displays the underscore as a space in the chart.
- If you want labels or a legend included in a pie chart, type the text in the first column, preceding any columns of numeric data.

  Ami Pro uses the text for either a legend or a label, depending on the chart variation you select when you create the chart.

- If you want a legend included in any chart, type the legend text in the first column, preceding any columns of numeric data.
- Ami Pro accepts enhanced text, but does not use the enhancements in the chart.

  You can modify the attributes of text in a chart using the Drawing function.

See also:

You can use existing data to create a chart by cutting or copying it to the Clipboard.

To cut or copy existing data
1. Make the document that contains the data the active window.

   The data can be stored in an Ami Pro document or table, or in a file created in another application.
2. Select the desired data.
3. Choose Edit/Cut or Edit/Copy to place the data in the Windows Clipboard.
4. If necessary, make the document you want to contain the chart the active window.
5. If you want the frame to be a particular size, create or select an empty frame of the desired size where you want the chart to appear.
6. Choose Tools/Charting.

   Ami Pro displays the Charting dialog box with an example chart using the data you cut or copied.

See also:

Charting Contents
Creating a Frame Manually

You can create the data you want to use for a chart as part of the charting function.

To type data into the charting data dialog box

1. If you want the frame to be a particular size, create or select an empty frame of the desired size where you want the chart to appear.

2. Choose Tools/Charting.

    Ami Pro checks the Clipboard to see if it contains data. If the Clipboard does not contain data, Ami Pro displays a message. Choose OK.

3. Type the data Ami Pro should use to create the chart. The text should be in columnar format with spaces separating the columns.

    Keyboard: Press SPACEBAR to separate columnar values. Press ↓ to move from one row to another. Press ENTER only when you finish typing the charting data.

4. Choose OK.

    Ami Pro displays the Charting dialog box, which contains an example chart using the data you specified.

See also:

Charting Contents
Creating a Frame Manually
Editing Existing Data in the Charting Data Dialog Box

You can edit the data you cut or copied to the Clipboard, or typed in the Charting Data dialog box.

To edit existing data in the charting data dialog box

1. Select the frame that contains the chart.

   Shortcut: Double-click the chart to display the Charting dialog box and go to step 3.

2. Choose Tools/Charting.

   If the changes you want to make are extensive, you can type the data in a document and then copy it to the Clipboard. When you display the Charting Data dialog box, select any existing data you want to change. Press SHIFT+INS or CTRL+V to paste the new data. Ami Pro uses the new data when it generates the chart.

   If you use Drawing to edit a chart, the next time you double-click the chart Ami Pro changes to Draw mode. If you later edit the chart using any of the Charting options, the next time you double-click the chart Ami Pro displays the Charting dialog box. Ami Pro chooses the last function you used on the chart.

3. Choose Data.

4. Make the desired changes.

   Ami Pro displays the Charting Data dialog box, which shows the current charting data in columnar format.

   If you want to insert a new row of data, place the insertion point at the left margin in the desired location and press CTRL+ENTER.

   Ami Pro moves the existing data down one line.

   Editing the data in the Charting Data dialog box does not affect the original data you copied to the Clipboard.

5. Choose OK to return to the Charting dialog box.

   Ami Pro displays an example chart using the modified data.

See also:

Charting Contents
Typing Data into the Charting Data Dialog Box
Creating a Drawing

Ami Pro provides twelve types of charts, including column, stacked column, bar, stacked bar, line, area, line and picture, pie, expanded pie, picture, and stacked picture charts. The charting data displays in different ways depending upon the chart type you select.

Ami Pro can create a chart with the row data displaying in different colors or the column data displaying in different colors. You can specify how you want the colors to be used.

Column or Stacked Column

In column charts, Ami Pro displays the values in the first column of data on the left side of the chart, and the values in the last column of data on the right side of the chart. The row values display from left to right in each set.

In stacked column charts, Ami Pro displays the values in the first row at the bottom of each set, and the values in the last row of data at the top of each set. The column values display from left to right in the chart.

Bar or Stacked Bar

In bar charts, Ami Pro displays the values in the first column of data at the bottom of the chart, and the values in the last column of data at the top of the chart. The row values display from bottom to top in each set.

In stacked bar charts, Ami Pro displays the values in the first row of data on the left side of each data set, and the values in the last row of data on the right side of each data set. The column values display from bottom to top in the chart.

Line or Area

In line charts, Ami Pro displays the values in the first column of data on the left side of the chart, and the values in the last column of data on the right side of the chart.

In area charts, Ami Pro displays the values in the first column of data on the left side of the chart, and the values in the last column of data on the right side of the chart. The row values display from bottom to top in the chart.

If you want to create a line, area, or line and picture chart, the charting data must include more than one column or row of values.

Line and Picture

In line and picture charts, Ami Pro displays the values in the first column of data on the left side of the chart, and the values in the last column of data on the right side of the chart. The row values either display with the same picture or on the same line.

You can specify the pictures you want Ami Pro to use every time you create this type of chart.

Pie or Expanded Pie

In pie and expanded pie charts, Ami Pro uses only the values in the first column of data to draw the chart, even if additional columns of data exist.

If the Pie or Expanded Pie chart displays only one value, select Flip Data in the Charting dialog box.

If the first column of data contains label information, Ami Pro uses the values in the second column to draw the chart and displays the labels as descriptions for the data.

Picture or Stacked Picture

In picture charts, Ami Pro displays the values in the first column of data on the left side of the chart, and the values in the last column of data on the right side of the chart. The row values display from left to right in each set.

In stacked picture charts, Ami Pro displays the values in the first row of data at the bottom of each set, and the values in the last row of data at the top of each set. The column values display from left to right in the chart.

You can specify the pictures you want Ami Pro to use every time you create this type of chart.

See also:

Once there is data in the Charting Data dialog box, you can create a chart. You can create a frame of the desired size before accessing Charting or choose Tools/Charting and let Ami Pro create the frame using the current settings in the Create Frame dialog box.

To create a chart

1. Place the desired data in the Charting Data dialog box.

   If you want labels along the X or Y axis of a chart, you must type the label text in the first row, preceding any rows of numeric data. The labels appear along the X axis in all charts except stacked bar charts, where they appear along the Y axis. If you want labels or a legend included in a pie chart, type the text in the first column, preceding any columns of numeric data.

   You can cut or copy existing data into the Clipboard or type the data into Charting Data dialog box when Ami Pro prompts you.

2. If you want the frame to be a particular size, create or select an empty frame of the desired size where you want the chart to appear.

3. Choose Tools/Charting.

4. Select a Chart Type.

   Ami Pro displays pictorial examples of the available types of charts in the Charting dialog box.

5. Click a Chart Type or press SPACEBAR to display the color and text variations for that type of chart.

   Ami Pro can create a chart with the row data displaying in different colors or the column data displaying in different colors. For pie charts, label text can display inside a legend, outside the pie, or not at all.

6. Select the desired chart Options.

   Legend
   Displays any text in the first column of data as a legend in the chart. Ami Pro vertically centers the legend text in a small frame to the right of the chart.

   If there is no text in the first column of data and you select Legend, Ami Pro uses 1st, 2nd, etc. as the legend text.

   Grid
   Displays dashed grid lines behind the chart. The lines align with the values on the axis of the chart, and may be horizontal or vertical, depending upon the chart type you select.

   3D
   Displays the chart with a multidimensional effect using the depth you specify. You can specify any number between 1 and 100.

   Perspective
   Enhances the 3D effect in the chart.

7. If you want to change the order of the colors in the color set bar, select the color you want to move and drag it to the desired position in the set.

   Ami Pro uses the colors in the color set bar when it creates the chart. The first row or column of data displays in the first color, the second row or column displays in the second color, and so on, for each row or column of data you are charting.

   Depending upon the chart type you select, Ami Pro displays the color in the new position in the color set bar and shifts the positions of the other colors.

   If you have a mouse, you can select a different color set or replace any color in the color set.

8. Specify the desired Axis options.

   Automatic
   Ami Pro automatically places numbers on the X or Y axis of the chart based on the data in the

Charting Data dialog box.

Inc
Ami Pro places numbers on the X or Y axis of the chart based on the increment you specify.

Ami Pro automatically adjusts the increment if it does not provide sufficient space to display the minimum and maximum numbers you specify.

Min
Ami Pro displays the number you specify as the minimum number on the X or Y axis of the chart.

Max
Ami Pro displays the number you specify as the maximum number on the X or Y axis of the chart.

9. If you want to reverse the way Ami Pro uses the data to create the chart and legend, select Flip Data.

    If you select Flip Data, Ami Pro reverses the column and row values and the label and legend text.

    Ami Pro displays the example chart using the flipped data.

10. Choose OK.

    Ami Pro creates the chart in the frame. It uses abbreviations for the numbers along the X or Y axis: K for thousands, M for millions, B for billions, and so on.

    You can adjust the size and position of the legend frame using the Drawing function.

See also:

Charting Contents
Creating Data for a Chart
Creating a Frame Manually
Setting Color Defaults
Deleting a Chart
Changing the Chart Type
Using Drawing to Modify a Chart

If you select a line and picture, picture, or stacked picture chart type in the Charting dialog box, you can specify the pictures and colors you want to display in the current chart and any picture charts you create in the future. The pictures can be any AmiDraw file copied to the AMIPRO\DRAWSYM directory during the installation, or any drawings you created and saved as AmiDraw files.

You can select separate default pictures for line and picture and for picture or stacked picture chart types. In line and picture charts, Ami Pro uses the pictures to represent the points on the lines. In picture and stacked picture charts, the pictures represent the actual charting data.

To set charting defaults

1. Select a frame that contains a chart.
2. Choose Tools/Charting.
3. Select line and picture, picture, or stacked picture as the Chart Type.
4. Choose Pictures.
5. Select a picture next to one of the numbers.

   The picture displays with a box around it.

   Each number represents a data set, which contains the values in a single row of charting data. You can use between 1 and 16 data sets in a chart.
6. Choose Drawing.
7. Specify the directory that contains the AmiDraw file you want to use as a picture in the chart.
8. Specify the name of the draw file you want to use for the data set.

   If you specify a path, Ami Pro automatically displays a list of the AmiDraw files in that directory the next time you display the Drawing dialog box.

   Ami Pro displays the picture in the example box.
9. Choose OK to return to the Charting Pictures dialog box.

   Ami Pro displays the picture next to the number of the data set you selected.

   The pictures you specify affect the current chart and any charts you create in the future. The pictures do not affect any charts you previously created.

   If you decide you do not want to use a particular picture in the chart, select that picture in the Pictures dialog box and choose Default. Ami Pro displays the original picture next to the number of the data set.
10. Choose OK to return to the Charting dialog box.

    Ami Pro displays a picture for each data set in the example chart. If there are more than 16 data sets, Ami Pro repeats the pictures.

See also:

Charting Contents
Saving a Drawing or an Object as a Graphic File
Understanding Chart Types

You must have a mouse to set color defaults.

To set color defaults

1. Select a frame that contains a chart.
2. Choose Tools/Charting.
3. Click the arrow in the Color Set bar to display additional color sets.
4. Select the desired color set by clicking on any color in that set.

   Ami Pro replaces the existing colors in both the color set bar and the example chart with the color set you select.

   You can rearrange the colors in the color set. Select the color you want to move and drag it to the desired position in the set.

5. If you want to replace a color in a color set with either a different color or a fill pattern, double-click the desired color or fill pattern in the color set bar or box.
6. Specify the desired color or fill pattern.
7. Select the desired Pattern.

   If you select a different color set, or you change any colors in the color set box, the colors you specify affect the current chart and any charts you create in the future. The colors do not affect any charts you previously created.

8. Choose OK to return to the Charting dialog box.

   Ami Pro replaces the existing color in both the color set and the chart with the color and fill pattern you select.

See also:

Charting Contents
Setting User Setup Defaults
Understanding Chart Types

You can delete a chart in a frame, or delete both the frame and the chart.

To delete a chart

1. Select the frame that contains the chart you want to delete.
2. Choose Tools/Drawing.
3. Click the Select All command icon.
4. Press DEL.

   Ami Pro deletes the chart.

   When you delete a chart, Ami Pro only allows another chart or drawing to be placed into that frame. If you want to use text or another type of picture, you can delete both the frame and the chart by selecting the frame and pressing DEL.

See also:

Charting Contents
Sizing a Frame
Using Graphics Scaling
Modifying the Shape of an Object
Saving a Drawing or an Object as a Graphic File
Understanding Chart Types

You can modify the appearance of a chart by changing the chart type.

To change the chart type
1. Select the frame that contains the chart you want to modify.
   Shortcut: Double-click the chart and go to step 3.
2. Choose Tools/Charting.
3. Select a different Chart Type.
   Ami Pro changes the example chart.
4. Choose OK.
   Ami Pro creates the new chart in the frame.

See also:

     Charting Contents
     Sizing a Frame
     Using Graphics Scaling
     Modifying the Shape of an Object
     Saving a Drawing or an Object as a Graphic File
     Understanding Chart Types

An Ami Pro chart is an AmiDraw file. Each value in the data used to create the chart is a separate object within the chart. If you have a mouse, you can use any of the draw icons to move or modify selected objects, including text objects, or create new objects in the chart.

If you use Drawing to edit a chart, the next time you double-click the chart Ami Pro changes to Draw mode. If you later edit the chart using any of the Charting options, the next time you double-click the chart Ami Pro displays the Charting dialog box. Ami Pro automatically chooses the last function you used on the chart.

To use Drawing to modify a chart

1. Select the frame that contains the chart you want to modify.
2. Choose Tools/Drawing.
3. Ami Pro displays the draw icons across the top of the screen. The chart is now composed of draw objects.
4. Select the desired objects in the chart and modify them using the draw icons.

    You can add text to a chart and move or size the legend in the chart using the draw icons.

    For greater flexibility when you are modifying a chart, deselect Snap To until you move the chart segments to the desired position.

You can save the changes to an AmiDraw file.

If you modify a chart using Drawing and then use Charting to recreate the chart, Ami Pro retains any new objects you created, but does not retain the modifications you made to the objects created when the chart was generated.

See also:

Charting Contents
Modifying the Shape of an Object
Saving a Drawing or an Object as a Graphic File
Sizing a Frame
Using Graphics Scaling
Understanding Chart Types

You can place a chart created in another application into an Ami Pro frame by:

- Importing a chart stored as a graphic file that Ami Pro supports
- Pasting a chart using the Windows Clipboard

  You can use the Drawing function to edit a chart if you import or paste it while you are in Draw mode.

- Paste Linking a chart in another Windows application to a selected empty frame in Ami Pro, if the other application supports DDE or OLE

To import a chart stored as a file

1. Make the Ami Pro document you want to contain the chart the active window.
2. Create or select an empty frame of the desired size where you want the chart to appear.

   You can choose Tools/Charting and let Ami Pro create the frame using the current settings in the Create Frame dialog box.
3. Choose File/Import Picture.
4. Select the desired File type.
5. Specify the file name of the chart you want to import.
6. Choose OK.

   Ami Pro displays the chart in the frame.

To paste a chart from another application

1. Make the document that contains the chart the active window.
2. Select the chart.
3. Choose Edit/Copy to copy the chart to the Clipboard.
4. Make the Ami Pro document you want to contain the chart the active window.
5. Create or select an empty frame of the desired size where you want the chart to appear.

   You can choose Tools/Charting and let Ami Pro create the frame using the current settings in the Create Frame dialog box.
6. Choose Edit/Paste.

   Ami Pro displays the chart. If you want to choose the format for the pasted picture, you can choose Edit/Paste Special.

See also:

Charting Contents
Importing a Drawing
Creating a Link from an Ami Pro Document
Importing a Picture
Using Paste Special

Column ———   ——— Stacked Column

Bar ———   ——— Stacked Bar

Line ———   ——— Area

Line and Picture ———   ——— Line and Picture

Pie ———   ——— Expanded Pie

Picture ———   ——— Stacked Picture