DESIGN YOUR OWN HOME
Interior Design

IIGS version

IIGS version works with all
Apple IIGSs with 1 MB

System Requirements

Apple IIGS with 1MB of memory
Color Monitor
3.5" disk drive
(optional additional 3.5" or 5.25" drive)
Mouse Optional:
ImageWriter I or II, or LaserWriter printer

Copyright

Contents

Write Protecting Disks

You can write protect a disk to protect it from having data accidentally changed or destroyed. When a disk is write protected, you cannot save interior designs or any other kind of data on it. However, you can load designs from it, or copy files on it to another disk. Before you use the *Interiors* program disk, write protect it. Read on through this section to find out how.

If you look at a 3.5" disk from the back side, you'll see a write protect tab located near the top left corner. To write protect a disk, use a pencil or appropriate item to slide the tab upward so that the small hole under the tab is uncovered. You can slide the tab back down again to cover the hole if you want to save anything on the disk at a later time.

You can use this technique to protect final data disks as well. Remember though, the disk cannot have information written to it until the write protect has been disable (i.e. you slide the tab to cover the hole). An error message is shown if you try to save anything on a disk that is write protected, so don't write protect a working data disk that you'll need to save your designs on. Write protecting a disk does not protect it against physical damage, like spilling a liquid on it, for example, so you should keep backup copies of your designs on other disks as well.

Starting The Finder

The **Finder** program is provided with *Interiors* on your program disk. Among other things, the Finder lets you start *Interiors*, make backups, initialize data disks, and copy disks or files.

The first step to starting *Interiors* is to start the Finder. To do so, insert the *Interiors* program disk into your drive, turn off your computer (if it is on), wait for about 30 seconds, and turn it back on again. After a short time, the Finder screen appears.
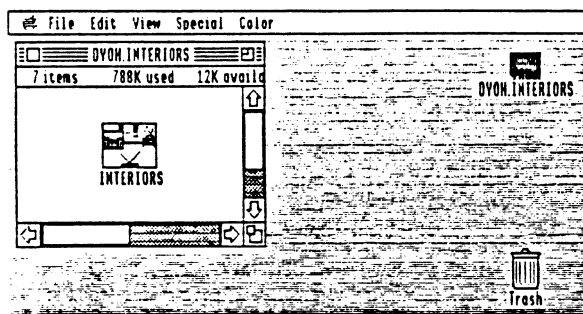
After the Finder starts, a window with the name **DYOH.INTERIORS** at the top of it opens automatically (see the previous illustration). If for some reason the window does not appear, you can open it yourself. To do so, use the mouse to move the arrow pointer onto the disk (or volume) icon that has the name **DYOH.INTERIORS** beneath it, then double-click the mouse button.

The *Interiors* application icon is inside the **DYOH.INTERIORS** window (if you had to open the window yourself, you may need to use the window's scroll bars to find the icon). It looks like the side view of a room with furniture inside it and has the name **INTERIORS** beneath it.
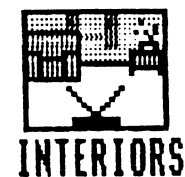
INTERIORS

Room designs you have created and saved to disk appear with a document icon when viewed from the Finder screen. The *Interiors* document icon looks like this:

MY.HOME

Note: The Finder will do much more than is covered in this user's guide. Please refer to your *Apple IIGS System Disk User's Guide* for detailed information about the Finder.

Making A Backup

Before you use *Interiors* for the first time, read this section and make a backup copy of your original *Interiors* disk. Then put your original disk in a safe place and use the backup for everyday use. If you damage your backup, you can make another one from the original.

This section describes how to use the Finder to make a backup. If you haven't started the Finder, refer to the previous section and do so before continuing, then work through the following steps to make a backup copy of *Interiors*.

1. If you have one drive, remove the *Interiors* program disk from your drive and insert a blank disk. For two drives, insert the blank disk into the second drive.

2. If the disk has never been used, you'll see a message asking if you want to initialize it, otherwise, the disk's icon and name will appear on the desktop. Skip to 3 in that case. For an unused disk, click **Initialize** to continue. When asked for a name, type **DYOH.INTERIORS2** and click **Ok**. Next, click **ProDOS** and **800k 2:1** to highlight the operating and disk size you need. Then click **Initialize** to start the initialization.

3. Once the initialization has completed, move the pointer onto the original *Interiors* disk icon, press and hold the mouse button, and drag the icon's outline onto the backup disk icon. Release the button. Read the confirmation message and click **Ok**. You'll see messages instructing you to exchange disks as needed if you have one drive.

4. When the copy process finishes, drag your original disk icon to the trash can (that's on the screen, not in your kitchen) and remove the disk from the drive.

5. Double-click on the name below the icon of your backup disk— on the name, not the icon. The name is **DYOH.INTERIORS2** if you did step 2 above using a blank disk. A box will appear around the name so you can type and change it. Change the disk's name to **DYOH.INTERIORS** and press **return**. Your backup copy is now ready to use (it doesn't hurt to write protect it like you did your original disk).

Now that you've made a backup copy of your original program disk, it's a good idea to make a backup copy of the *Interiors* data disk you received also. Follow the same procedure as described above to make a backup copy of the data disk. However, use the data disk's name and not the *Interiors* program disk name when you work through the above steps.

You should also create an additional data disk to store designs you want to save. To do so, insert a blank disk and click **Initialize** as described in step 2 above. Use an appropriate name for your data disk, **INTERIORS.DATA** for example. Continue as described above to initialize your data disk. Once initialized, it's ready for use. Please refer to your *Apple IIGS System Disk User's Guide* for additional help in initializing and duplicating disks.

Remember, backup copies are only for your own safe keeping. It is not legal to distribute copies of this or any other software without written permission from the publisher.

Starting Interiors

If you haven't started the Finder or made a backup, then you need to work through the preceding sections beginning with the "Getting Ready" section before continuing.

Next, make sure the **caps lock** key is NOT pressed. This key has a special function within *Interiors*. It's explained a little later.

To start *Interiors* from the Finder screen, insert your backup copy of the *Interiors* program disk into your disk drive. Then move the pointer onto the *Interiors* application icon and double-click. The application icon has the name **INTERIORS** beneath it. If you have trouble finding it, see the "Starting The Finder" section.

You can also start *Interiors* from the Finder and have a design that you are working on automatically load for you. To do so, simply double-click on the document icon above the name of the design that you want *Interiors* to open. Once *Interiors* loads and starts, it will automatically open the design. See the 'Starting The Finder" section for an illustration of the *Interiors* document icon.

Important: Read this if you started your computer from a disk other than the *Interiors* program disk. *Interiors* requires the 4.0 version of the system disk, or a later version. This is the true 16 bit GS Operating System (GSOS) and the first operating system that shows the **Welcome to the IIGS** screen as the Finder loads. If you start the Finder from a ROM disk, Hard Disk, or any disk other than the original *Interiors* program disk you received (or backup of it), **be certain you are using GSOS before launching *Interiors* or it will not operate properly.**

When *Interiors* starts, the screen looks like this:
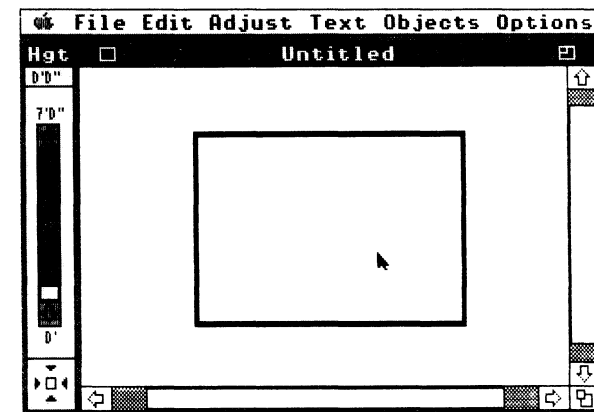
The Interiors Desktop

You can arrange the whole desktop to suit your own needs. All the windows are movable. To move a window, move the pointer onto its frame or background area, press and hold the mouse button to make an outline of the window appear, then drag the outline to a new location. Release the button and the window moves to the new position. The document window has precedence over other windows. If a window overlaps the document window, part or all of the overlapping window may disappear beneath the document window. You may need to move or re-size the document window to get to a hidden window.

As indicated above, you can change the size of the document window. Refer to the previous illustration. At the upper right corner, there is a small box called the *zoom box*. Move onto it and click to instantly enlarge the document window to fill most of the screen. A second click restores the original window size. Use the box at the lower right corner, referred to as a *size box*, to expand or shrink the document window to any size you want. To change the size, press and hold the mouse button, then drag the window outline inward or outward to the size you want and release the button.

The box at the upper left corner is called a *close box* and is described later. Don't use it yet.

Quitting Interiors

When you want to quit *Interiors*, first save your drawing to disk (if you want a permanent copy), then select **Quit** from the **File** menu. After *Interiors* quits, the Finder will start again. See the "Menus" chapter for more about how to save your designs.

Making Interior Designs

Information in this section is provided in a general context only. Read this section to gain insight into the overall design creation process, then work through the "Trying Out Interiors" section for a hands-on introduction to using *Interiors*.

The first thing you need to do to make an interior design is to create a room. However, when *Interiors* first starts, a default room is created for you. You can use it to become familiar with *Interiors* and refer to the "Creating A New Room" section for detailed information about creating your own rooms when you are ready. The default room is a top view of a rectangular room consisting of four walls. You can see it in the document window of the previous screen illustration (or on the screen).

Next you'll want to place doors, windows, and other furniture into your room. The next section, "Trying Out Interiors", shows how easy

it is to place furniture into the default room. Normally, you'll place and arrange furniture while viewing a room from the top. Then when the top view is the way you want, you can change to side views (you'll see more about this later).

Finally, you can do customizing or add finishing touches to your interior design. For example, you may want to change furniture's colors, textures, or size. You can use the finishing tools (also explained later) to customize the top or side views of your design.

Important: Customizing with the finishing tools should be the last step in creating a design since it's not possible to transfer finishing tool customization to a top or side view. Additionally, the top view of your design is the *master view*. All conversions to side views are generated from the top view, so if you make changes to a side view, they are not carried over to another side view or to the top view. You'll see a message asking if you want to save changes to disk before a view change is performed (i.e. when changes have been made using the finishing tools, or when changes have been made to a side view). You should save the changes at this time if you want to keep them, they are discarded if you click **No**.

Trying Out Interiors

For an introduction to many of *Interiors* features, read through and perform the following HANDS-ON exercises. Please refer to the previous screen illustration as needed throughout the first part of this section.

Placing Furniture

If you read the previous section, you'll remember that when *Interiors* first begins, a top view of a rectangular room is created for you. For now let's use the default room and experiment with adding furniture to it, but before continuing, get the command card that came with *Interiors* and keep it handy as a reference. You'll see more about it later.

The quickest way to add furniture to your design is to press the letter that corresponds to the piece of furniture you want. For example, go ahead and press the letter **A** to add an armchair to your room (see your command card). The four squares at each corner of the armchair are called *handles*. They indicate an object is selected. When an object is selected, you can perform some operation on it, possibly from the **Edit** or **Adjust** menus. This is explained in more detail later.

Now that you have added an armchair to your room, you can move it to the location you want. Try moving it near (but not on) the top wall. To do so, use the mouse to move the arrow pointer onto any part of the armchair, then press and hold down the mouse button.

Notice a dotted box appears around the chair. Move the mouse to position the dotted box slightly below the top wall and release the mouse button. When you release the button, the chair moves to the new location.

Now let's place a framed picture on the left wall of the room. First, press the letter **P**. Now, from the **Adjust** menu, select the **Rotate Left** item. This changes the picture's orientation so its front faces to the right, which is what we need for placing it on the left wall.

You should note that when furniture is first placed in a room, the front of the furniture is facing down. This is important to remember when placing furniture so it will have the proper orientation when you change to a side view of the room. For example, if you look at your room from the right side, you want to see the front of the picture, not the back or side of it. Position the tip of the arrow pointer onto the picture (between the handles—not on a handle), then press the button and move the picture to any location you want along the top of the left wall. Put the picture's outline directly on top of the wall and release the button.

Note: If you see a message saying that you can use handles to change object sizes when using the finishing tools (all explained later), it means you pressed the button on one of the picture's handles instead of between the handles. Simply click **Ok** and try again.

Next, we'll add a microwave cart and a microwave oven to the room (these also double for a TV stand and TV). The microwave oven sits on top of the cart. First, press the letter **N** to place the cart. Leave the cart where it is. Now, hold down the **option** key and press the letter **N** again. Notice that a different piece of furniture is selected when you hold the **option** key down. This is also true with the **shift** key. By using **option** and **shift** with letters, 52 additional furniture selections are possible.

Look at the height window at the left side of the screen and notice under the letters **Hgt** at the top of the window that the microwave defaults to a height of **2'8"** off the floor. This is the approximate height needed to make the microwave rest on top of the cart when you change to a side view (approximate because sometimes a little adjustment is needed after you change views). You can change the height of the microwave, or any furniture that is selected, with the scroll bar in the height window. For now, leave the microwave and cart as they are.

Your command card lists all the pre-drawn furniture objects and what letter keys to press for a given object. With a little use, you'll quickly become familiar with the keys and can easily add furniture directly to your rooms, or if you prefer, you can also choose furniture from the **Objects** menu (the "Menus" section explains how).

Changing Room Views

If you have not done so, work through the previous section, "Placing Furniture", before continuing.

Now that you have some furniture in the room, let's see how everything looks from various side views. At the bottom of the height window on the left side of the screen, you'll see these icons for changing to a different view of your room:
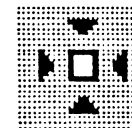
The box in the center represents the top view of your room and the triangular icons surrounding it, side views. So to see a side view of your room from the bottom (or south), go ahead and move the pointer onto the bottom triangular icon and click. In a few seconds, the room and furniture changes to the selected side view. You can add furniture to side views (and move it) in the same fashion as you did on your top view. However, the top view is the master view. All side views are generated from it, so if you want to keep changes to a particular side view, you need to save them to disk before changing to a different view. This lets you customize each view to suit your own needs.

Now, view your room from the left by clicking on the icon at the left side. Notice here that the picture you placed on the left wall does not appear in the view. Furniture placed on top of an outer wall doesn't appear when you view your room from the direction of that wall. That way, the back sides of furniture that is located on walls, such as windows, curtains, etc., aren't stuck in the middle of your side view. This is important to remember. You shouldn't allow furniture such as chairs and sofas to overlap walls unless you don't want them to appear in a side view (when viewed from the direction of the outer wall they overlap).

Next, move onto the icon on the right and click to view your room from the right side. Now you see the picture on the opposite wall as you should.

Go ahead and experiment changing to other views if you want. You can click on the box in the center to change back to the top view of your room. Before beginning the next section, change to a south (bottom) view of your room again.

Setting Furniture's Height Above The Floor

This section continues where the previous sections left off. If you have not done so, work through the previous sections before continuing.

Did you notice that the microwave appears on top of the microwave cart in your side views. Its default height above the floor is set so that it will. As with the microwave, all pre-drawn furniture that is above the floor is set to a default height off the floor when *Interiors* starts. You are not limited to the default height however, simply select a piece of furniture (click on it), then go to the height window and set its height as desired.

To demonstrate this, move the pointer onto the microwave and click to select it. If it's selected, four handles should appear at its corners. Now, move the pointer onto the top arrow inside the height window. Press and hold down the mouse button and let the height increase several inches (the exact amount doesn't matter), then release the button. Notice the microwave is moved higher from the floor as it is adjusted to the new height. You can set the height of any furniture in the same fashion. However, if you set the height while viewing your room from the top, the furniture won't change position. Instead, the new height is remembered and you'll see the effect it has when you change to a side view. If you move furniture in a side view, **Interiors** assumes you are positioning it backward or forward in the room and not changing its height from the floor.

If you want to, experiment more with using the scroll bar to adjust the microwave's height. The arrows adjust the height more slowly and the shaded area above or below the box between the arrows more quickly. Or, you can move onto the scroll box between the arrows, hold the mouse button down, and drag the box upward or downward, then release the button to change the height.

When ready, read on to see how you can customize interior designs with the finishing tools.

Using The Finishing Tools

This section assumes you have worked through the preceding sections beginning with "Placing Furniture". If you have not done so, you should work your way here through the preceding sections before continuing.

The finishing tools let you customize furniture or add custom drawing, colors, patterns, and text to your room design. The finishing tools include both drawing tools and color tools. To begin, select **Use Finishing Tools** from the **Options** menu. When asked if you want to save changes, click **No** since this is only an example room for trying out *Interiors*. Note that even though we are currently working with the bottom view (or south view) of a room, it's possible use the finishing tools with any view. Just change to the desired view before using the finishing tools.

After you select **Use Finishing Tools**, the height window disappears and the finishing tools' windows appear. Here is how the screen looks:
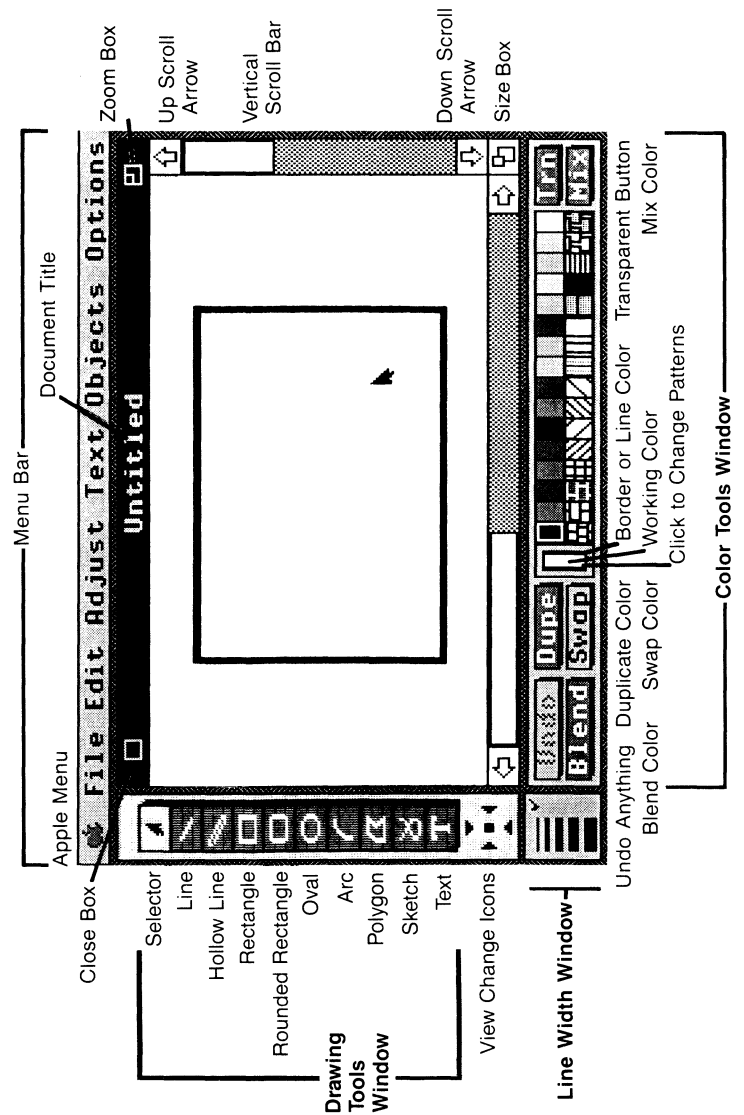
Using The Selector Tool

The **Selector Tool** lets you select objects and change them, or move them to a new location. You can select furniture objects or objects you've drawn with the drawing tools (see the "Drawing Tools" chapter for more about them). For now, we'll leave the furniture objects alone and experiment with some of the finishing tools.

Begin by referring to the preceding screen illustration and select the **Rectangle Tool**. To select it, move the pointer onto it and click.

Move into some blank area outside of your room, press and hold the mouse button, then move the mouse to create a rectangle. Do the same to create a second rectangle so you'll have two rectangular objects that look similar to these:
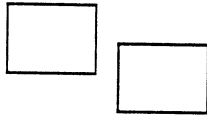
Exact locations and sizes aren't important here. The rectangles will only be used to explore some of the finishing tools. Now choose the Selector Tool (click on it). Notice the last rectangle you drew has handles at each corner like your furniture did earlier.

The handles indicate an object is *selected*. Later you'll see how you can use them to change objects' sizes. Don't click anywhere in the drawing area or you may *unselect* the rectangle and we need it selected for now.

Move your pointer to the color palette and try clicking on various colors and patterns. Notice how the interior of the selected rectangle changes to the color or pattern you click on. It's that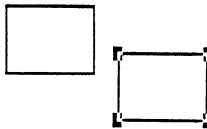 simple to experiment with various color or pattern combinations in your room designs, whether it is with objects you draw, like the rectangles, or existing furniture, like the armchair. Try holding the **apple** key down when you click on a color or pattern. It lets you change an object's border color or pattern.

Now click on the **transparent button** (with the letters **Trn**) by the top right side of the colors to show only the object's border (i.e. make it transparent). Click on any color or pattern to make the object solid again.

You can change the border width just as easily by clicking on a different size in the line width window. Click on the widest line in the line width window. Notice that the size of the rectangle remains the same—only the width of its border changes.

To see how objects are unselected, click on a blank, or unused, area inside the drawing window. The rectangle's handles disappear. Select it again by moving onto it and clicking. To select both rectangles at once (or multiple objects), hold the **apple** key down and click on the second rectangle. Now click on a color and notice both objects take on the color. Any change you make (by clicking on colors, changing line thickness, or whatever) affects ALL selected objects.

You can also select multiple objects with a dotted box referred to as a **selection box**. To do so, move the pointer beyond the top left corner of the objects to be selected—the blank screen area outside of any object, or in this case, outside of the two rectangles. Hold the mouse button down and drag the resulting dotted box to the lower right corner of the objects to be selected. Release the button. All the objects that are within the selection box are selected and will have handles. Click on any blank area of the screen to unselect all selected objects.

As you've already seen, you'll often need to move objects to another location. You can move one object or many objects at once. To move the two rectangles you drew, select them both as described above. Then move onto either rectangle. Press and hold the mouse button and move the dotted outline of the objects to a new location. Release the button. To move a single rectangle, first click on a blank area to unselect both rectangles, then move the pointer onto the rectangle, hold the button down and drag its dotted outline to a new position. Then release the button.

Suppose you want to remove one or more objects from your design. That's easy. Just select the object(s) you want to delete, then press the **delete** key or choose **Clear** under the **Edit** menu. You can delete all objects by choosing **Select All**, then pressing **delete** or choosing **Clear**. **Undo** will restore deleted objects if you don't make any other changes before selecting it.

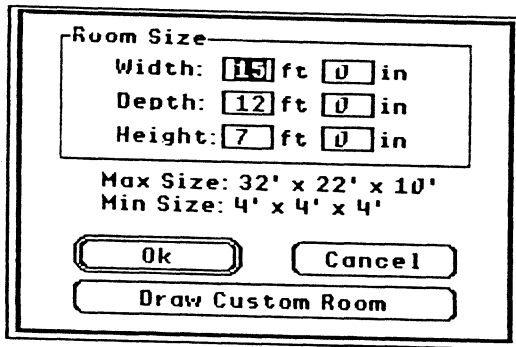You can perform many other operations on objects that are selected. They are described in detail in other sections of this user's guide. In general, you can use items in the **Edit**, **Adjust**, and **Text** menus on selected objects.

Go ahead and experiment with changing furniture colors and using the finishing tools. When you are ready, read on to see how to create a new room and learn more about other *Interiors* features.

Creating A New Room

There are basically two kinds of rooms you can create, a square, rectangular-type room, or an irregularly-shaped custom room. To create a rectangular room, you need only to specify a room's dimensions. To create a custom room, you can draw the room's walls to your liking.

Whichever kind of room you want to create, you can begin one of several ways. You can go to the **File** menu and select **New** or **Close**, or you can click on the **close box** at the top left corner of the document window. Once you've used any of these methods, you'll see the following dialog:

```
┌──────────────────────────────────┐
│  ┌─Room Size─────────────────┐   │
│  │    Width: [15] ft [0] in   │   │
│  │    Depth: [12] ft [0] in   │   │
│  │    Height:[7] ft [0] in    │   │
│  └──────────────────────────┘   │
│       Max Size: 32' x 22' x 10'  │
│       Min Size: 4' x 4' x 4'     │
│                                  │
│     ( Ok )      ( Cancel )       │
│     ( Draw Custom Room )         │
└──────────────────────────────────┘
```

Creating A Square Or Rectangular Room

To create a square or rectangular room (after selecting **New**, **Close**, or clicking the **close box**), simply type the dimensions of the room. Use the *tab* key to move from one dimension box to another for typing, or click on a box to move to it. You can use the *arrow* keys to move within the text inside a box and the *delete* key to remove text.

Click **Ok** to erase your original room and furniture and draw a new room using the new dimensions, or click **Cancel** to retain your original room and furniture.

Creating A Custom Room

To create a custom room, select **New** or **Close** from the **File** menu, or click the **close box**, then click **Draw Custom Room**. The screen changes and looks like this:
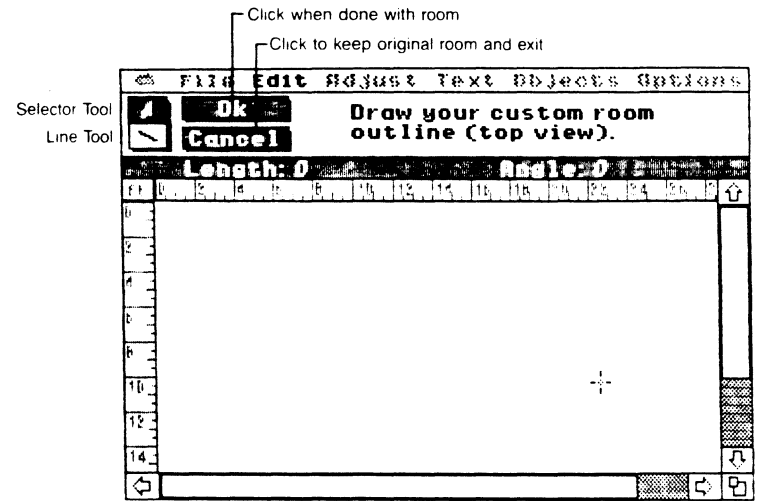
Notice that you now have two drawing tools below the menus near the left side of the screen, the **Selector Tool** and a **Line Tool**, for drawing and editing room walls. The drawing window contains rulers and measurements so you can easily make the room any size you want. You can also use some items from the **Edit** menu, such as **Undo** and **Clear**, to aid in drawing an outline of your room.

The goal here is to draw an outline of your custom room by drawing the walls to the appropriate lengths. You do not need to be absolutely precise connecting the corners and making the walls straight. The program will automatically scan the walls and connect corners which you may not have exactly connected. It will straighten walls which you may have drawn slightly crooked. Larger gaps or diagonal lines are assumed intentional and left as they are. The **Selector Tool** and the **Line Tool** work the same as when using the finishing tools. See the "Trying Out Interiors" section and the next chapter, "Drawing Tools", for detailed information about them.

In general, to draw a wall, click on the **Line Tool**, move to the drawing area, press and hold down the mouse button, and move the mouse to drag a wall to the desired length and location, then release the

button. You can click the **Selector Tool** and use it to move, lengthen or shorten, delete, or copy walls (lines).

Once you've created an outline of your room, click **Ok** to keep it, or click **Cancel** to exit and keep your original room. After you click **Ok**, type the ceiling height you want for your custom room. Use the *tab* and *delete* keys as needed and click **Ok** when the height is correct. Now, all your original walls and furniture are deleted and your new room is drawn and ready for furniture, or ready to examine from side views. You can select **Change Room** from the **Edit** menu to change an existing room and keep existing furniture.

Interiors is designed to work with a single room at a time and not an entire house or group of rooms. However, depending on your particular objective, you may be able to draw dividing walls or multiple rooms and get the desired result. You'll need to draw the walls and cycle through the various views (after clicking **Ok**) to determine if the results are satisfactory. As mentioned above, you can use **Change Room** to make modifications to existing walls. You also have the option of deleting walls, adding walls, and doing other customizing using the finishing tools. In addition, there is room divider furniture which may be useful in some rooms (you'll find these with the **Other** objects on your command card and under the **Objects** menu).

One more note about drawing custom rooms: when *Interiors* starts, auto scrolling is enabled. That means when you draw a wall and go beyond the bottom or right side of the drawing window, your drawing is automatically scrolled to make more space for you to draw. If you prefer, you can go to the **Options** menu and disable this feature before you begin to draw a custom room.

2—Drawing Tools

You can use the drawing tools to add custom drawing or text to your room design. They are part of the finishing tools and appear in two windows at the left side of the screen after you select **Use Finishing Tools** from the **Options** menu. However, one tool, the **Selector Tool**, is the active tool when viewing your room from the top and sides. It's used for selecting, moving, and manipulating your furniture. You should read the "Selector Tool" section even if you don't need the other tools right away.

Here are the drawing tool windows:
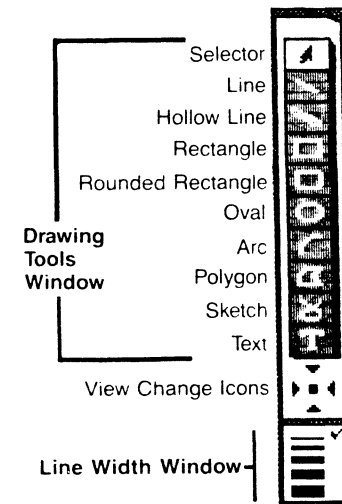
The large window contains tools which let you choose the kind of object you want to draw. The smaller window lets you choose the width of lines or object's borders. To make a tool active, or select a line width, move the pointer onto it and click.

Line Widths

A check mark indicates the current working line width. Lines and objects' borders are drawn with the current working width. If the **Selector Tool** is active, the line widths and border widths of selected objects are also changed when you click on a new width.

Selector Tool

The **Selector Tool** lets you choose objects for moving, re-sizing, changing colors, border widths, or many other operations described later in the "Menus" chapter. Though the **Selector Tool** becomes visible as a tool only after selecting **Use Finishing Tools**, it is in reality the tool that is active for selecting and placing furniture while viewing your room from the top and sides, so it's best to read this section even if you don't have an immediate need for using the finishing tools. Also, work through the "Trying Out Interiors" section for a hands-on guide to placing and moving furniture, and using the **Selector Tool**.

Selecting Objects

When the **Selector Tool** is active, your pointer remains an arrow, even when it is over the drawing window. The pointer's **hot spot**, the part that is used to determine what you have selected, is the tip of the arrow.

To select a larger solid object, move the arrow onto it and click. When choosing a small object among closely-spaced objects or lines, carefully place the tip of the arrow exactly on the object you want to select and click. If an object is transparent, place the tip of the arrow on the object's border and click.

Four small squares, called handles, appear at each corner of selected objects (lines have a handle at each end). If you are trying to select a small or transparent object and handles do not appear, re-position the tip of the arrow and try again. When selecting among closely-spaced objects, if handles appear on an object other than the one you want, click on a blank area of the screen to clear the handles and try again.

Note: In some situations, handles can cancel each other out. Handles are drawn by reversing the colors on the screen under a given handle. That way they can efficiently and quickly be erased by reversing the colors a second time rather than by erasing the handles and redrawing the objects. The only drawback is that occasionally two handles may occupy precisely the same location. In this case, when the second handle is drawn, it reverses the colors that were already reversed from drawing the first handle. This has the effect of erasing the first han-

dle instead of drawing a second one. The object(s) are still selected, and treated as such, even though one or more handles may not appear. This happens infrequently and if you watch closely when it does, you'll see the handles flash briefly on the screen indicating they are actually being drawn.

Here are some examples of selected objects:

You can hold the **apple** key down and click on additional objects to make multiple selections. You can also select multiple objects with a dotted box referred to as a **selection box**. To do so, move the pointer to the top left side of the objects to be selected. Hold the mouse button down and drag the resulting dotted box to the lower right corner of the objects to be selected. Release the button. If any portion of an object falls within the selection rectangle, it is selected. Click on any blank area of the screen to unselect all selected objects, or click on an object without holding the **apple** key to select it and unselect all others.

Features that need at least one object selected in order to work will operate on all objects that are selected. For example, if two objects are selected and you click on a color, both objects take on the color.

In general, items from the **Edit**, **Adjust**, and **Text** menus operate on selected objects. In fact, most items in these menus remain disabled (dimmed) and unusable until one or more objects have been selected. Each item is described fully in the *Menus* chapter.

Moving Objects

When the **Selector Tool** is active, you can move objects by dragging them to a new location. To do so, move the pointer over an object, then press and hold the mouse button. When a dotted outline of the object appears, move the outline to the new location of the object and release the button.

You can move several objects at once by selecting all the objects you want to move, moving the pointer directly over any one of them, and dragging the outline to a new location. All objects moved at the same time will remain in the same configuration relative to each other.

Sizing Objects

This feature applies only after you have selected **Use Finishing Tools**. You can change the size of furniture objects or any other kind of object then.

To change the size of a selected object, move the pointer onto one of its handles. Press and hold the mouse button. When a dotted outline of the object appears, drag the object to a new size. For example, to enlarge a rectangle downward and to the right, use the handle on its bottom right corner and drag down and to the right to the desired size.

```
Drag
```
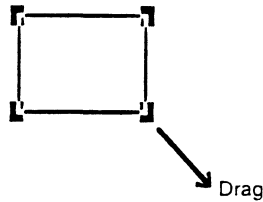
Size an object back down by moving the dotted outline inward. Change the size in other directions by dragging with a different handle.

Select **Undo** at the left side of the colors window or under the **Edit** menu to reverse the last change made. **Undo** is described fully in the "Menus" chapter.

Line Tools

The **Line Tool** and the **Hollow Line Tool** are for drawing straight lines. As mentioned earlier, you can change the line width by choosing a new width from the line width window below the tools. If the **Selector Tool** is active, the line widths of selected objects are changed also.

To draw lines, move the pointer to the starting point of the line, press and hold the mouse button while moving the mouse to drag the line to the desired end point, then release the button. You can draw straight lines at perfect 45 or 90 degree angles by pressing the *apple* or *shift* key before you begin the line.

To change the working color for lines (the color used to draw the line), hold down the *apple* key and click on the color or pattern you want for the line. Do the same to set the border color for hollow lines. Click on a color to select the interior color for hollow lines (normally white). This method of selecting colors is used for other objects as

well (see a complete explanation in the "Color Tools" chapter). Again, if the **Selector Tool** is active, the colors of selected objects are also changed.

Note: A hollow line does not become hollow unless the line size is at least 3 dots high and it is transparent. As indicated above, you can also fill hollow lines with patterns or colors.

Rectangle, Rounded Rectangle, Oval, And Arc Tools

As their names imply, you can use these tools to draw rectangles, rounded rectangles (rectangles with round corners), circles or ovals, and arcs. You can change their border widths by clicking a new size below the drawing tools. You can change their border and fill colors or patterns the same way as described for lines above (see "Color Tools" for more).

To use these tools, place the pointer where you want one edge of the object to begin. Press and hold the mouse button, drag the object to the size and orientation you want (you can drag any direction from the start point), then release the button.

You can also make objects transparent (only their borders are drawn) by clicking on the **transparent button** with the letters **Trn** at the top right corner of the colors' window. Click on any color or pattern to make objects solid again.

Transparent Button

To draw arcs (you would normally draw these transparent - see above for how), drag downward to draw the top part of a circle, and upward to draw the bottom part. For example, you can create the following arc by dragging down and to the right.

To draw perfect circles with the oval tool, squares with the rectangle tool, or 90 degree arcs with the arc tool, press the *apple* or *shift* key before you begin to draw.

Polygon Tool

Use this tool to create a polygon, or many-sided, object. To draw a polygon, move the pointer to its start point and click. Move to the first line's end point (and next line's start) and click again. Continue this sequence until you've completed the object by ending at your original start point, or double click anywhere to end and have the last polygon line automatically completed for you.
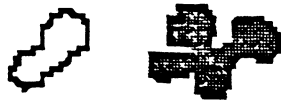
As with most other objects, you can change a polygon's border width or make it transparent.

The following are all examples of polygons:

Sketch Tool

This is a flexible drawing tool used to create irregularly-shaped objects or regions. Here are some examples:

To sketch, move the pointer to the start position, press and hold the mouse button, and move the mouse. Release the button to stop. Remember, this tool still creates an object entity so it's desirable to end the sketch where you begin (as with polygons). If you release the button elsewhere, the object is completed for you with a straight line back to the start.

If you don't want a border on your sketched object (or any object), simply set the border color to the same color or pattern as the interior color; by holding the *apple* key down and clicking on the color or pattern you want for the border.

Keep in mind that a good deal of memory is required to maintain a sketched object. All its points must be remembered and redrawn when the object is moved, or if it needs to be redrawn for any reason. This can drastically slow the process of refreshing the drawing window.

It is wise to use this tool only when really needed, and to use the other drawing tools instead when they are appropriate. When you need to sketch, complete the bulk of your drawing first and draw the sketched areas last so you aren't burdened with slow window refreshes for your entire drawing job. Also, the smaller the sketches, the better. If the **Polygon Tool** will work, use it. Though not as fast as objects like squares and circles, polygon objects still redraw much faster than sketched objects.

Text Tool

Use this tool to add text or labels to your drawing. Move the pointer to the spot you want to begin typing and click the mouse button. You'll see a flashing bar cursor appear. Go to the keyboard and type your text. Press the *delete* key if you make a mistake. When you have finished typing, you can simply select a different tool. The text you typed will be converted and kept as a single object.

If you want to continue typing but in a different location, use the mouse to select the new location and click. The last text you typed is kept as an object and you can begin typing a new text object as before.

You can press the *return* key to end a line of text and start a new line below the previous line.

Select **Choose Font** from the **Text** menu to set the size, style, or type of font you want for your text. You can make size, style, or font changes to existing text by selecting it (with the **Selector Tool**), then using the **Choose Font** item and making the desired changes. See "Choose Font" in "Chapter 4" for a complete description.

Change the color of text by clicking on a color at any time while typing or before you begin typing, and for existing text, change the color by selecting the text (with the **Selector Tool**) and clicking on a color.

3—Color Tools

The color tools are available after you select **Use Finishing Tools** from the **Options** menu. Then, they appear near the bottom of the screen and look like this:

Undo Anything Duplicate Color   Border or Line Color   Transparent Button
   Blend Color   Swap Color   Working Color   Mix Color
                       Click to Change Patterns
—————— **Color Tools Window** ——————
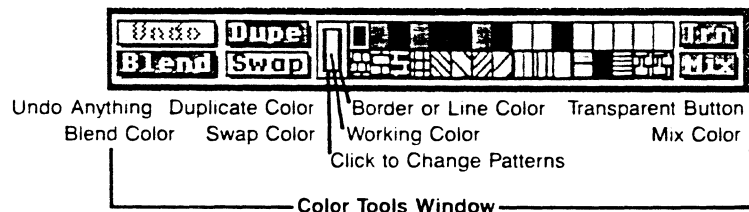
Each item in the color tools window is described in the following sections. Please refer back to this illustration as needed.

Selecting Colors

The current color (or pattern) selected for drawing is referred to as the **working color**. The currently selected working color is shown at the left end of the color palette.

To change the working color, click on the desired palette color or pattern. If the **Selector Tool** is active, a click on a color will also change the color of selected objects.

When drawing occurs, unless objects are transparent, the working color is used to fill objects' interiors. To change the border color of objects, press the **apple** key before you click on a color or pattern.

The working color is framed by the working border color in the box at the left side of the color palette. The lines in the line width window are also drawn with the working border color.

You can make the border color the same as the working color to create objects without contrasting borders.

Selecting Patterns

Patterns are selected and used the same as any color. They can be used for object borders or fill colors. There are 48 patterns available at any one time, and more can be created, saved to disk, and loaded as needed. See the "Menus" chapter to find out how.

Sixteen patterns are shown in the color tools window. Click on the working color box at the left side of the patterns to cycle through the next sixteen patterns.

Undo Button

Undo was placed in the color tools window for quick, easy access. This **Undo** works in exactly the same way as the one under the **Edit** menu. Use it to reverse the last change made to colors or your drawing. In most instances you can click it again to reverse the **Undo** also, or toggle between the last change made and the state before the change was made. When **Undo** is not available, it is dimmed.

Note that all other buttons in the color tools window relate to colors only.

Dupe, Swap, And Blend Buttons

You can use the three buttons, **Dupe, Swap**, and **Blend**, in the color tools window to change or arrange palette colors. Click on a button to highlight it (lighten its color) and activate it for use.

Note: The two colors on each end of the palette (black, dark gray, light gray, and white) are reserved to maintain the integrity of the screen display and windows. They are included in the palette so you can use them in your drawing.

Dupe

Dupe (duplicate) lets you copy one palette color over another. To duplicate a color: click on **Dupe**, move the pointer onto the color you want to duplicate, press and hold down the mouse button, then slide the color's outline to the location where you want a duplicate and release the button. Objects on the screen which were the destination color become the new color. Click on **Undo** to reverse the change. You may duplicate one of the four reserved end colors (see the above note) to another unreserved color location, but you may not move a color onto any of the four reserved end colors.

Swap

Use **Swap** to exchange the position of two colors without altering either color. Each color is moved to the other's position in the palette. This causes objects on the screen which are drawn with the colors to have their colors swapped also.

To exchange colors: click on **Swap**, move the pointer onto one of the colors, press and hold the mouse button, then slide the color's outline over the color you want to exchange it with and release the mouse button. You can click on **Undo** to reverse the change. The four reserved end colors may not be involved in a **Swap**.

Blend

Blend is a feature that lets you create a series of intermediate colors between two target colors (how is explained a little later). All the colors between two target colors gradually blend from the first target color into the second target color. For example, if you choose the dark gray on the left side of the palette as the first target color and the light gray on the right side as your second target color, all the palette colors between them will turn to gradient shades of gray. Again, the two reserved colors on each end of the palette may not be changed by a blend, although a blend may include dark or light gray for a total of 14 squares that can be involved in a blend, and 12 that can be changed by a blend.

You can use **Dupe** or **Swap** to position target colors in the palette before blending. For example, you might move red (with **Dupe**) next to the dark gray color and place white four squares to its right, then blend between the two for varying shades of red. Then you might move green next to the last white target color, and put light blue 4 squares to its right, then blend between them creating 2 separate blends in the palette.

To get the maximum number of intermediate colors from **Blend**, use **Dupe** or **Swap** to move the target colors to each end of the 12 changeable color squares. Many more variations are possible. Go ahead and experiment. You can always click **Undo** and reverse the last change made, or restore the standard colors by selecting **Default Colors** under the **Options** menu. Remember that objects on the screen (and patterns) that were any of the original colors will take on **Blend** changes also.

To **Blend**: click on **Blend**, move onto either one of the two target colors that you want to **Blend** between, press and hold the mouse button, slide the color's outline to the second target color, and release the button. Again, you can do repeated blending, and use **Dupe** or **Swap** to arrange the color palette as desired.

Changing Palette Colors Via Mix

To change the amount of Red, Green, or Blue (RGB) in a palette color, click on the **Mix** button at the right end of the color tools window.

A window will appear with 3 scroll bars. Click on one of the colors in the palette to choose a working color. This working color will be shown below the scroll bars. Use the scroll bars to change the color's RGB mix, or level. Each Red, Green, or Blue level can range from 0 to 15 for a total of 4096 possible colors. Click on the scroll bar arrows to change the mix slowly. As the chosen working color changes, you'll see the same color on the palette change, and also any objects on the screen that are the working color will change.

You can click on another palette color to make it the working color and change it, or when you're finished changing colors, click on the mix window's close box (or anywhere on the drawing window) to remove the mix window.

Making Objects Transparent

The remaining color tool lets you draw transparent objects. Transparent objects consist of borders without any interior fill color. You can see through transparent objects—objects underneath them are visible.

To draw transparent objects, move the pointer onto the transparent button at the right side of the color palette and click. The button has the letters **Trn** on it. Now objects you draw will be transparent. Click on a pattern or color to draw solid objects again.

4—Menus

This chapter describes the pull-down menus along the top of the screen. To pull a menu down, place the arrow pointer on top of its title, then press and hold the mouse button down. A list of menu choices will appear beneath the menu title. To select a menu item, continue to hold the mouse button down, then move the mouse downward. Menu choices are highlighted as the pointer passes over them. Release the mouse button to select the highlighted menu item. Menu items you cannot use at the moment are dim. If you select a dimmed item, a help message is shown informing you what is needed for its use.

You can select many often-used menu items from the keyboard. Those items are indicated with an *apple* symbol and a keyboard character. Here are some examples:

```
┌─────────────────────┐
│ Edit                │
├──────────────┬──────┤
│ Undo         │  ⌂Z  │
├──────────────┼──────┤
│ Cut          │  ⌂X  │
│ Copy         │  ⌂C  │
│ Paste        │  ⌂V  │
│ Clear        │      │
│ Select All   │  ⌂A  │
├──────────────┼──────┤
│ Lock         │  ⌂L  │
│ Unlock       │  ⌂U  │
├──────────────┼──────┤
│ Group        │  ⌂G  │
│ Ungroup      │  ⌂H  │
├──────────────┼──────┤
│ Info         │  ⌂I  │
└──────────────┴──────┘
```

To make a menu selection from the keyboard, press the *apple* key along with the appropriate keyboard character. In the above illustration, if you wanted to choose **Select All**, you would hold down the *apple* key and press the letter **A**. Keyboard selections are performed just as if you had pulled down the menu and made them with the mouse. You do not need to press the *shift* key if the character is on the upper part of a key.

Apple Menu

The **Apple** menu (it's an apple symbol at the upper left corner) contains an **About** item and the names of *desk accessories* you can use. These are explained next.

About

This choice shows information about *Interiors* such as the copyright date, the company that published it, and the programmer's name.

Desk Accessories

Desk accessories are normally short programs you can choose that do some specific task (like a clock, calculator, simple game, or puzzle). A list of available desk accessories are added to the **Apple** menu. Choose them like any other menu item.

The choices you have depend on what desk accessories are in the **SYSTEM/DESK.ACCS/** folder of the disk you used to start your computer.

File Menu

New

Select **New** when you want to erase your current interior design and create a new room. You are given the opportunity to save changes to your existing design (see **Save** below) or cancel before you begin creating a new room. Refer to the section "Creating A New Room" in the "Getting Started" chapter for details on creating the room.

Open

Open displays a catalog of the current drive and lets you load an existing interior design. You are given the chance to save your current design if changes have been made (see **Save**).

Note: If a design has text objects (from using the finishing tools), **Interiors** tries to use the same fonts they were originally created with. The same fonts must be available in the **/SYSTEM/FONTS/** folder of your startup disk so the Font Manager can load and install them. If the Font Manager cannot load the desired font, the nearest matching font is used instead.

Close

Close lets you erase your current interior design and create a new room. **Close** and **New** are implemented identically by *Interiors*. Both are included for completeness. As always, you'll have a chance to save your current design if changes have been made since the last time

you saved it. Refer to the section "Creating A New Room" in the "Getting Started" chapter for details on creating a new room.

You can also click the *close box* at the upper left corner of the document window to perform a **Close**.

To end your editing session, use **Quit** rather than **Close**.

Save

Choose **Save** to save a copy of your interior design to disk. If your design is untitled, a dialog appears so you can name it. You should give your interior design a unique name and not save it with **Untitled** as its name.

If your design is already named because you have saved it during the current session, or because you loaded it (with **Open**) from a library or other data disk, you are not prompted for a new name. The current name is used and the save is performed immediately. This lets you quickly save an updated version of your drawing.

Warning: Any previous version of your design with the same name will automatically be replaced with your current design when you use **Save**. It's assumed that you intentionally want to update the previous version on your data disk. To protect a previous version, use **Save As** (see below) to give your current interior design a different name, especially when you want to save a different view of your design as a separate file. You can use ".T", ".N", ".S", etc., at the end of your name for different views of your design (for top, north, south, east, west).

Use **Save** frequently while you are creating a design so you'll always have a recent backup of it stored safely on disk. To do a fast save, hold down the **apple** key and press the letter **S**. Be sure to leave your work disk in the drive so *Interiors* can save your design successfully. If you remove your current work disk and insert a different disk and select **Save**, you'll get a volume not found error since a complete pathname for saving ProDOS files includes the disk (volume) name. You need to use **Save As** to save to a different disk.

Frequent saves provide added protection in case a power failure occurs or your computer quits working for any reason. If you update your disk version often, you'll lose only a few recent changes and not your entire design or hours of work.

Save As

Use **Save As** to save your interior design under a different name, or to save it to a different disk or directory folder. You'll want to use **Save As** to give different side views of your design their own unique names and save them as separate files if you have customized them,

or used the finishing tools on them. For example, you might use **Living.S** for a room's south view and **Living.N** for its north view. If you don't need any special customizing of side views, save only the top view of your design. The top view is the master view and is always saved with any other view. This means you'll use less disk space if you save only the top view and use it to generate the side views the next time you **Open** the design.

After the save, the name above the document window is changed to your design's new name. Any future saves with **Save** (above) are performed using the new name.

You can use **Save As** to save a copy of important interior designs on more than one disk for added protection in case one disk is inadvertently damaged.

Revert

This reloads the last version of your design that was saved to disk. You can use **Revert** if you've made changes since last saving your design and decide you don't want them. This choice remains dim and unselectable until you make changes to an interior design after using **Open** or **Save**.

Scan

Scan lets you look at the interior designs in a disk's directory. Select **Scan**, then open any design in the specific directory you want to scan by double-clicking on the design's name, or click on its name and on the **Open** button. When you open a file, it lets *Interiors* know which "directory" you want to scan.

All the interior designs in the directory are shown sequentially. The first design you see may not be the one you opened, but it will appear before the scan is finished.

A design is shown with the view that was current when the design was saved. The name of the currently scanned design is shown at the bottom of the screen. When you are ready to continue, click **Previous** to see the design you saw prior to the current design, or **Next** for the design following the current one, or click **Quit** to stop scanning. You can also press the **esc** key to quit. If you go beyond the *start* or *end* of the directory, scanning continues from the opposite end.

Save Paint File

To save your interior design as a standard unpacked Apple IIGS paint file (file type $C1) that can be loaded by most popular paint programs, choose **Save Paint File**.

You cannot reload designs that are saved as paint files so if you want to use your interior design again later with *Interiors*, be sure to also

save it the normal way with **Save** or **Save As**. Paint programs use bit-mapped pictures, not objects you can select, move, and change as with *Interiors*.

Delete

Use this to delete files that you don't want on a disk. To delete a file, click on its name, then click on **Open**. If the name is correct, click **Ok** to perform the delete, or click **Cancel** to relist the files for another selection.

After deleting a file, you can continue deleting more files, or click **Cancel**, rather than on a file's name, to quit.

Note: Delete lets you delete only files. If you open a folder, it's opened so you can see the files within it. A folder cannot be deleted using *Interiors*. To delete a folder, quit *Interiors* and use the Finder. If a folder is empty, no files are listed. Click **Close** to exit the folder.
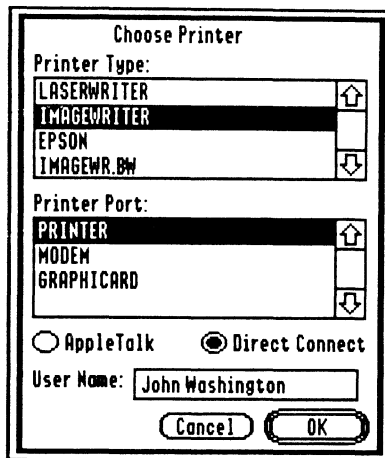
Choose Printer

Before printing, you should select **Choose Printer** to let *Interiors* know what kind of printer you have and what port it's connected to.

You need to use **Choose Printer** only once each editing session, and then only if you want to print a hard copy of your interior design.

Important: You may also need to go to the *Control Panel* and let your computer know what port is used. See "Appendix B" for help setting up the Control Panel for printing.

After selecting **Choose Printer**, you'll see this dialog:

```
┌──────────────────────────────────┐
│          Choose Printer          │
│  Printer Type:                   │
│  ┌────────────────────────┬──┐   │
│  │ LASERWRITER            │⇧ │   │
│  │ IMAGEWRITER            │  │   │
│  │ EPSON                  │  │   │
│  │ IMAGEWR.BW             │⇩ │   │
│  └────────────────────────┴──┘   │
│  Printer Port:                   │
│  ┌────────────────────────┬──┐   │
│  │ PRINTER                │⇧ │   │
│  │ MODEM                  │  │   │
│  │ GRAPHICARD             │  │   │
│  │                        │⇩ │   │
│  └────────────────────────┴──┘   │
│  ○ AppleTalk   ● Direct Connect  │
│  User Name: │John Washington │   │
│       ( Cancel )  (  OK  )       │
└──────────────────────────────────┘
```

AppleTalk. Select this as your printer port if you are using a LaserWriter.

Direct Connect. Choose this option if your printer is connected directly to your computer.
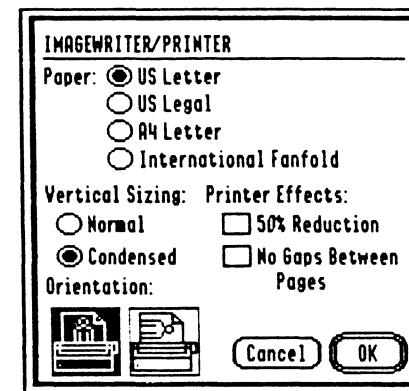
User Name. Type your user name if you are using AppleTalk.

Select **AppleTalk** or **Direct Connect** as indicated above, then click on the name of the printer and port you are using. Click **Ok** to keep the new settings or click **Cancel** to retain your original settings.

Page Setup

Use **Page Setup** to set the paper size and way you want your design printed. This is optional. Standard settings are used if you don't change them.

The ImageWriter **Page Setup** dialog looks like this:

```
┌──────────────────────────────────┐
│  IMAGEWRITER/PRINTER             │
│  ────────────────────────────    │
│  Paper: ● US Letter              │
│         ○ US Legal               │
│         ○ A4 Letter              │
│         ○ International Fanfold   │
│  Vertical Sizing:  Printer Effects: │
│  ○ Normal          □ 50% Reduction │
│  ● Condensed       □ No Gaps Between │
│  Orientation:           Pages     │
│  ┌──┐ ┌──┐                        │
│  │▓▓│ │▓▓│      ( Cancel )  ( OK ) │
│  └──┘ └──┘                        │
└──────────────────────────────────┘
```

US Letter. This is the default paper setting. It's for paper that's 8½ by 11 inches.

US Legal. Use this option for paper that's 8½ by 14 inches.

A4 Letter. This option is for European standard paper. Its size is 8¼ by 11⅔ inches (210 by 297 mm).

International Fanfold. This option is for the ImageWriter only. It's the International standard size of 8¼ by 12 inches (210 mm by 12 inches).

B5 Letter. This option is for the LaserWriter only (see the next dialog illustration). Its paper size is 15 by 11 inches (250 by 176 mm).

Normal. This setting prints designs with the same proportions they have on the screen.

Intermediate. Use this to print designs approximately two thirds their normal size (for the LaserWriter only).

Condensed. Designs printed with this option are about half their normal height. This option causes a design's width/height ratios to distort, so don't use this option unless you have a special need for that effect.

50% Reduction. Designs are printed at half their normal width and height.

No Gaps Between Pages. Printing is continuous without page breaks when this option is selected.

Portrait. Designs are printed with the same upright orientation they have on the screen.

Landscape. Select this option to print sideways (turned right 90 degrees).

Here is the LaserWriter dialog followed by options that differ from the above descriptions:
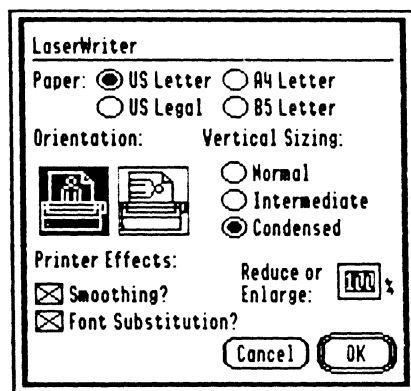
**Printer Effects.** These LaserWriter options are for bit mapped fonts and are ignored.

Reduce or Enlarge. You can type a number from 25 to 200 to reduce or enlarge your printout. A value of 100 is normal size (100% of image). 200 enlarges a design to twice its size (100% X 2 = 200%), and 50 reduces a design to half its normal size (100% / 2 = 50%).

Print

Select **Print** to set the number of copies you want, whether to print in color, and to print an interior design.

Warning: before you print, be sure to use **Choose Printer** (above) or your computer may hang up, forcing you to reboot the computer.

This is the dialog you'll see for the ImageWriter:
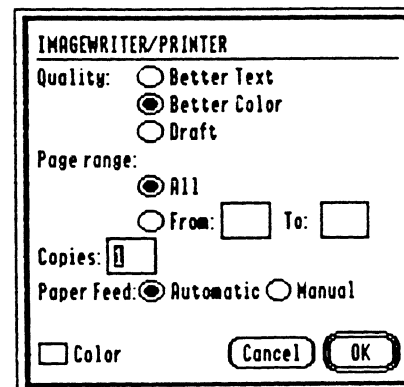
Better Text. This option doubles the printer resolution. It produces the best quality text and lines. However, fewer colors are available. Use this option when the quality of lines, black and white patterns, and text is more important than a wider range of colors.

Better Color. More colors and better shades of gray are produced with this option, but the printer resolution is lower than with **Better Text** so lines are more coarse and text may not be as readable.

Draft. Don't use this option. It's used for dumping text straight to the printer and isn't used for graphic drawings.

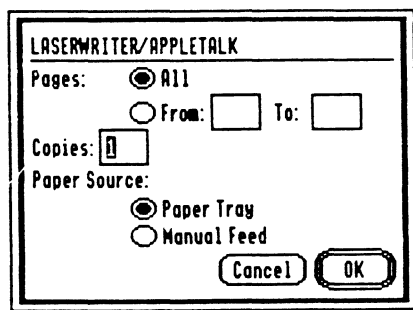**Page Range.** This option is ignored. An entire design is always printed.

Copies. Type the number of copies you want to print. The computer automatically moves the printer's paper to the next page and prints each copy (if **Paper Feed** is set to Automatic—see below).

Automatic. Used for continuous paper. The computer advances the printer's paper and continues to print if you are printing multiple copies.

Manual. If printing multiple copies, you are prompted before each copy, and can continue to print or stop.

Color. If you have an ImageWriter II and a color ribbon, you can select this option to print designs in color. An ImageWriter I can't print in color, so you shouldn't use this option with an ImageWriter I.

Here is the print dialog you'll see for the LaserWriter.

```
┌─────────────────────────────────┐
│ LASERWRITER/APPLETALK           │
│ Pages:    ◉ All                 │
│           ○ From: ☐  To: ☐      │
│ Copies: ⬚                        │
│ Paper Source:                   │
│         ◉ Paper Tray            │
│         ○ Manual Feed           │
│          ( Cancel )  ( OK )     │
└─────────────────────────────────┘
```

Pages. As with **Page Range** for the ImageWriter, this option is not used.

Copies. Type the number of copies you want to print. If you need to, use the *tab* key to move to the copies' box to type a number (or click on the box).

Paper Tray. You can use this option if you have a paper tray.

Manual Feed. Use this option for feeding single sheets of paper by hand.

To Start Printing. Once you have all the **Print** options set as desired, click **Ok** to start printing. Remember to make sure your printer is on and ready for printing.

You can press the *apple* and *period* keys to stop printing in progress, or when a drawing has completely printed, press them to save time and avoid waits for the printing sequence to end.

Be sure your computer's Control Panel settings are set to the right slots for your printer or your computer may hang up when you try to print. See "Appendix B" if you need help setting the Control Panel.

If you decide not to print, click **Cancel**.

Quit

When you are completely finished using *Interiors*, select **Quit**. You are given the chance to save recent changes before quitting.

Edit Menu

All the choices under **Edit** except **Change Room** work with furniture objects or custom drawn objects that have been selected with the **Selector Tool**. Before using most of the menu items discussed here, you must select one or more objects.

To select an object **when using the finishing tools**, click on the **Selector Tool** to activate it (it's the arrow at the top of the tools window), then move onto an object and click to select it. If you are not using the finishing tools, simply move onto a piece of furniture and click to select it. Press the *apple* key before clicking to select more than one object at once.

For additional help selecting objects, do the "Trying Out Interiors" section in chapter 1, and see "Selecting Objects" in chapter 2, "Drawing Tools". Also note that some items under the **Edit** menu are available only when you are using the finishing tools and are dim otherwise.

Undo

You can use **Undo** to reverse the last change made to your design, or when using the finishing tools, the last change made to your color palette also. In most instances you can select it again and reverse the **Undo**. When using the finishing tools, this **Undo** works the same as the **Undo** in the color tools window.

Cut

Cut removes objects from your design and places them in a clipboard file. You must click on objects to select them before you choose **Cut**. The current directory of the disk you used last is used for the clipboard file. Any objects which were already in the clipboard file are replaced.

Be sure the disk is ready and in the drive or the **Cut** will be unsuccessful and an error will be reported. If you change your mind and want to restore your objects, click **Undo**.

You can select **Paste** to put the objects back into your current interior design, or open a different design and choose **Paste** to put them into it (see "Paste").

Copy

Use **Copy** to store a duplicate of selected objects in the clipboard file. Click on objects to select them before you choose **Copy**. The objects you copy replace any objects already in the clipboard file. Your design is not changed.

You can select **Paste** to put the objects back into your current interior design or another design at a later time (see below).

Paste

Choose **Paste** to copy all the objects in the clipboard file (on the disk you used last) into your drawing. The objects are automatically selected so you can easily move the pasted objects where you want them. Click **Undo** to remove pasted objects.

Note: You cannot put side views of furniture into top views or top views of furniture into side views. A message telling you this is shown if you try. You can put any view of furniture or any other objects into your design when using the finishing tools.

Select All

Choose **Select All** or press *apple* and the letter **A** to quickly select every object in your drawing. You might want to do this to change the border color, working color, or line width for all objects, or to unlock, lock, move, or delete all objects at once.

Lock

First click on one or more objects to select them, then choose **Lock** to keep them from being moved or changed. Locked objects cannot be moved, grouped, deleted, or changed in any way (except with **New** or **Close** for starting a new interior design).

Objects that are locked have a small key-like symbol above their top left *handle* (after you've clicked on them to select them). The only editing operation that will have an effect on locked objects is **Unlock**.

This feature can be quite useful. For example, you may want to lock some furniture so you can arrange other furniture nearby without accidentally changing the furniture objects you don't want changed.

See the note below pertaining to room walls.

Unlock

First, click on one or more locked objects to select them, then choose **Unlock** so they can again be manipulated and changed.

Note: Room walls are automatically locked. You can unlock and change them after selecting **Use Finishing Tools** from the **Options** menu, or by choosing **Change Room** under the **Edit** menu.

Group

You can use this feature after you select **Use Finishing Tools** from the **Options** menu.

Group converts a collection of objects that you have selected with the **Selector Tool** into a single grouped unit. All the pre-drawn furniture objects are examples of grouped objects. You must have more than one object selected before you can use **Group**. For help selecting objects, see "Using The Selector Tool" in the "Trying Out Interiors" section of chapter 1, and also "Selecting Objects" in chapter 1.

Objects' screen coordinates and sizes are not changed by grouping them. The grouped objects are treated as a single object until they are ungrouped. This means if you select a grouped object, then click on a color, all the individual objects within the group take on the color.

You can use **Ungroup** (below) to separate grouped objects and change a single object within a group, then regroup them again afterwards. This is important to remember because when you are using the finishing tools, you can ungroup pre-drawn furniture objects and customize them any way you like, or you can create your own custom furniture objects and save them to disk for use in other interior designs (see the "Objects" menu section for more).

Ungroup

This item is available when using finishing tools. It separates grouped objects into their individual component objects. You need to click on a grouped object to select it before choosing **Ungroup**. See "Group" above for more.

Change Room

You can select **Change Room** to change an existing room's wall outline. This item differs from creating a new room in that existing furniture is kept after you make changes to your room.

After you select **Change Room**, you'll see the same dialog appear as when you create a new room. However, the **Draw Custom Room** button changes to **Edit Custom Room**. The options in the dialog work the same as for creating a new room. If you change the room's dimensions and click **Ok**, you'll get a rectangular room (even if you previously had a custom room) set to the specified dimensions. If you click **Edit Custom Room**, the editing screen and existing walls appear so you can change them as desired. See "Creating A New Room" in chapter 1 for details on drawing and editing walls.

When you've finished changing your room's outline and go back to the design screen, your original furniture is redrawn. However, you may need to re-position furniture depending on the changes you made to your room's walls.

Note: If your room is a custom drawn room, and not rectangular,

the dimensions shown in the dialog text boxes represent the outside
boundaries of your room.

Adjust Menu

All the choices under **Adjust** work with objects that have been selected
and have visible handles. Work through the "Trying Out Interiors"
section of chapter 1 and see "Selecting Objects" in chapter 2 if you
need help selecting objects.

Move To Top/Bottom

These two choices let you rearrange the stacking order of objects
that you've selected. You can select an object and place it beneath
(or behind) another object with **Move To Bottom**, or move a selected
object in front of another object with **Move To Top**.

When viewing your room from the side, these items are dimmed. Fur-
niture objects in side views are automatically placed behind or in front
of other furniture objects according to their depth in the room.

Rotate Left/Right

When viewing your room design from the top, or when using the
finishing tools, use these menu items to rotate objects that you've
selected left or right 90 degrees.

In the case of side views, furniture is rotated left or right to its adja-
cent side view. For example, if you are looking at the front of a chair
and rotate it right, you'll be looking at the right side of the chair after
the rotate.

Note: The command key for selecting the **Rotate Right** menu item
from the keyboard is the vertical bar on the right side of the *space
bar* and NOT the letter **I**, which it might be mistaken for when pull-
ing the **Adjust** menu down. This means you can hold the *apple* key
down and press the vertical bar to select the **Rotate Right** item. The
rotate command keys are logically placed on the left and right side
of the **space bar**.

Flip Horizontal/Vertical

When viewing your room design from the top, or when using the
finishing tools, you can use these items to flip the orientation of
selected objects from left to right (horizontally) or top to bottom
(vertically).

In the case of side views, **Flip Vertical** is dimmed and **Flip Horizontal**
changes to **Flip Opposite**, which flips a furniture object to its op-
posite view. For example, if you were looking at the front of a chair
and selected **Flip Opposite**, the front view of the chair would change
to a back view.

Text Menu

Items under the text menu let you choose the kind and size of text
you want to use, or let you rearrange text within your interior design.
However, **Text** menu items are finishing tool features and are dim
until you select **Use Finishing Tools** under the **Options** menu.

Choose Font

Use **Choose Font** to pick the font you want for typing text with the
Text Tool. You can also set the font's size and style.

The changes you make are used the next time you type using the
Text Tool. If the **Selector Tool** is active and you've selected one
or more text objects, settings made with **Choose Font** also affect the
selected text objects. This lets you change the size, style, or font of
existing text.

After you select **Choose Font**, the following dialog appears:
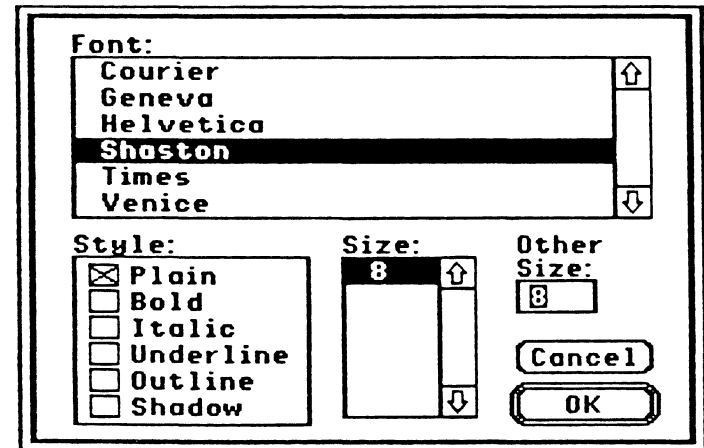
Font. When *Interiors* begins, the font for the **Text Tool** is defaulted
to the system font. The default system font is called **Shaston**.
Remember its name in case you want to use it again after you have
changed fonts. Its default size is 8, and its default style is **Plain**.

To choose a font, click on its name. The chosen font is highlighted
(darkened). If you need to, use the scroll bar arrows to scroll the list
of font names.

Note: The fonts you can choose from are in the /SYSTEM/FONTS/
folder of the disk that you started your computer with. These names
are listed in the **Choose Font** dialog.

Style. A font's style refers to the way a font looks. **Style** choices include **Plain**, **Bold**, **Italic**, **Underline**, **Outline**, and **Shadow**. Here's how they look:

Plain

Bold

Italic

<u>Underline</u>

Outline

Shadow

You can use all the styles at once except **Plain**, which cancels all other styles (it's plain). Also, **Underline** is not supported for the system font, **Shaston**.

To select a style, click the box next to its name. A second click unselects it.

Size. To select or change the size of a font, click on a number in the **Size** catalog (the larger the number, the bigger the text), or type a number in the **Other Size** box. The fonts look best at the cataloged sizes, but you can specify other sizes. The nearest matching font is scaled to the size you want.

When all the settings are what you want, be sure your start-up disk, normally the *Interiors* program disk, is in the drive so the Font Manager can load the font you have chosen from the **/SYSTEM/FONT/** folder, then click **Ok** to install the new font and use any size or style changes that you have made. If the Font Manager cannot load the chosen font, it will default to the nearest matching font it can find. Click **Cancel** to discard any changes and keep the original font, size, and style.

Arrange

This menu item works with objects that have been typed using the **Text Tool** and have been selected with the **Selector Tool**. It's dimmed if no text objects are selected.

If you need help selecting objects, work through the "Trying Out Interiors" section in chapter 1 and see "Selecting Objects" in chapter 2. See the "Text Tool" section of chapter 2 for how to type and create text objects.

After selecting **Arrange**, the following dialog appears:

```
┌─────────────────────────────────┐
│ Arrange Text                    │
│ ┌─Horzontal─┐   ┌─Vertical─┐    │
│ │ ☐ As Is   │   │ ☒ As Is  │    │
│ │ ☐ Left    │   │ ☐ Top    │    │
│ │ ☒ Center  │   │ ☐ Center │    │
│ │ ☐ Right   │   │ ☐ Bottom │    │
│                                 │
│    (  Ok  )        ( Cancel )   │
└─────────────────────────────────┘
```
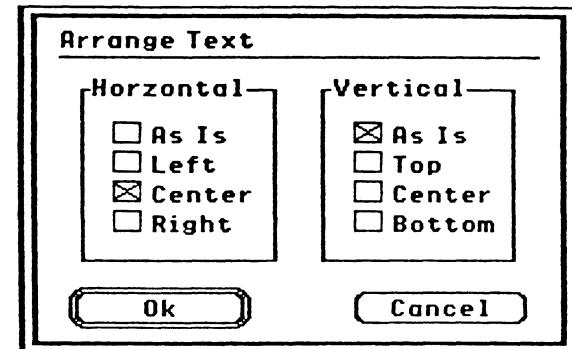
Options in the dialog window are selected when an **X** appears in the box beside them. Click on the box to select an option.

Horizontal Options. Use these options to arrange selected text horizontally (left—right) on your interior design page, not just within the document window. You can use **See Full View** under the **Options** menu to examine the results.

Use **As Is** to keep your text where it is horizontally or select **Left**, **Center**, or **Right** to position text at the left edge, in the center, or at the right edge of your drawing, respectively.

Vertical Options. These arrange text vertically (top - bottom) on your drawing page. Here again, you can use **As Is** for no change, or select **Top**, **Center**, and **Bottom** to position the text as desired.

Objects Menu

Just as the name of this menu implies, items under it let you choose pre-drawn furniture objects. When you select these items, a dialog appears so you can see and choose a specific furniture object (except for some items related to custom objects—they are explained later). Your choices will include only top views of furniture when you are working with the top view of your room, side views of furniture when you are working with a side view of your room, and all views when using the finishing tools.

A box encloses the furniture object that will be chosen if you click the mouse button. Move the mouse so the box encloses the object you want, then click. Furniture is placed in the center of the document window so you can easily move it to the location you want.

Each letter on the keyboard corresponds to more commonly used pieces of furniture. In addition, you can press **option** or **shift** and a letter for another 52 furniture choices. To add furniture objects to your drawing, simply press the letter corresponding to the object you want. When possible, the first letter of an object's name is used. For example, **C** for **chair** or **D** for **door**. Sometimes **option** or **shift** (or the previous or following letter in the alphabet) gives you another version of the same object. For your convenience, a quick reference card is included with *Interiors* showing what furniture corresponds to what keys.

If you are working on the top view of your room and press a key to add a piece of furniture to your design, you get a perpendicular orientation of the furniture. You can get a diagonal orientation of the furniture by pressing the **caps lock** key down before pressing the key(s) for the furniture. In the case of side views, you get the furniture's left side rather than its front when you press **caps lock** down.

When a letter is pressed, the corresponding object is placed in your interior design as described above so you can position it. Note that when placing furniture into top views, the front is always facing downward when the furniture is first added to your design. This is obvious with a piece of furniture like a sofa, but isn't with some furniture. The China Top, for example, has an overhang at the top, so when viewed from the top, the back looks identical to the front. However, when viewed from the side, the front has drawers. You'll need to set the back/front orientation correctly so the furniture will convert to side views properly. You can use the flip and rotate items from the **Edit** menu to change furniture orientation, and it's easy enough to go back to your top view and change the orientation when you find it is incorrect on a side view, or if you prefer, you can also change the orientation on side views.

Other menu items let you create and save your own custom objects for later use. The remaining choices in the **Objects** menu let you choose custom objects, save new ones, clear (delete) them, or load and save them to disk. Each of these are described below.

Custom

The remaining items in this section that work with custom objects are finishing tools features. You can use them after you select **Use Finishing Tools** from the **Options** menu.

Custom lets you pick a custom object and add it to your interior design. However, before you can pick a custom object, you must create some or load them from disk. See "Save To" below for how to create your own custom objects. You can use the **Load From Disk** menu item to load existing custom objects from disk (see below also). Your program disk has some sample custom objects that you can load and experiment with.

Once you have created or loaded some custom objects, select **Custom** to use them. The way you choose which custom object you want to use is the same as the way you choose a pre-drawn furniture object. When the objects you can pick from are drawn, use the mouse to move the selection box and enclose the one you want, then click. The chosen object appears in the center of the document window. It is automatically selected so you can easily move it where you want it (see "Moving Objects" in chapter 2 for help moving).

You can also select up to 26 custom objects from the keyboard. To do so, press the **control** key and a letter. The letter **A** selects the first custom object, the letter **B** the second, and so on. You can create your own command cards, or lists, of which keys correspond to what objects. You may select up to 26 custom objects in any one custom object file, but you can have any number of custom object files and load them from disk as needed, or you can select additional objects by choosing **Custom** under the **Options** menu when there are more than 26 objects.

After you choose **Custom**, if more objects are available than will fit in the dialog window at one time, a **More** button is shown. Click on it until you have seen all the objects or the one you want. When the last object is shown, they are shown again beginning with the first one.

Save To

You can create your own custom objects and use **Save To** to save them to memory. Once saved, select **Custom** (above) to use them in your drawing as needed. If you want to keep your custom objects permanently, **be sure to use *Save To Disk* below before you quit *Interiors***. You are given the chance to save new or changed custom objects after you select **Quit** from the **File** menu. You can load custom objects saved to disk and use them again later or in other drawings with **Load From Disk**.

Save To lets you save only grouped objects as custom objects. To create and save a custom object, you must first draw it. After selecting **Use Finishing Tools** under the **Options** menu, you can use any of the drawing tools to draw a custom object, or you might modify an existing furniture object and save it as a custom object.

Once your custom object is drawn, click on the **Selector Tool**. Now *select* all the individual objects that make up your custom object so you can group them into one object. Either press the **apple** key and click on each object until they are all selected, or move the pointer outside the objects, press and hold the mouse button, drag the dotted box around all of the objects, then release the button to select

them all. Once selected, choose **Group** from the **Edit** menu to group them into a single object. Now you can choose **Save To** and save your grouped object as a custom object.

You can use this feature to create your own libraries of custom objects that you can load and use in your interior designs as needed.

Clear Some

You can delete one or more unwanted custom objects. To do so, select **Clear Some**.

Choose objects you want to delete the same way you choose them to use in your design. Use the mouse to move the selection box and enclose the object you want to clear, then click. Do the same to clear more objects or click **Cancel** when done.

Warning: Use care clearing custom objects. You cannot recover an object once it has been cleared!

Clear All

Choose **Clear All** to delete all custom objects. You are given a chance to change your mind before the clear takes place. Be sure that you no longer want any of the custom objects before you do the clear. **You cannot recover the cleared custom objects!**

Load From Disk

Use **Load From Disk** to load custom objects from disk. You can load the sample custom objects supplied on your program disk for experimentation, or load objects you created and saved with the **Save To Disk** item described below.

Before the load occurs, you are given the option of clearing any existing custom objects or adding the objects you're going to load to them. This lets you merge custom object files together or load more than one group of objects at a time.

Once the objects are loaded, you can select **Custom** (see above) to use them.

Save To Disk

To permanently keep custom objects you've created, use this menu choice. The standard disk dialog will appear and let you name a file for your objects.

You can create as many files of custom objects as you want and save them for later use in your drawings.

Before quitting *Interiors*, be sure to use **Save To Disk** to save custom objects you want to keep. Any objects that are not saved to disk are lost when you select **Quit** or turn off your computer.

Options Menu

See Full View

Select **See Full View** when you want to see your whole interior design approximately as it will appear when printed on paper, but the quality of a printout will be better than what you see on the view screen, and the text will be more readable also. Click the mouse or press any key to end the view.

Use Finishing Tools

This item lets you access drawing tools and colors tools for customizing and adding finishing touches to your interior design. You can use the finishing tools on any view of your design (i.e. top or side views).

To use the finishing tools, click on the view icons and view your room from the desired view, then select **Use Finishing Tools**. The screen changes and new windows with drawing tools and color tools appear. An illustration of the finishing tools screen is shown in the "Trying Out Interiors" section of chapter 1.

Changes you make to your design with the finishing tools cannot be transferred to other views. However, you can save your finished design to disk and **Open** it again later, then make additional changes to it if you want, or change back to any of the other views as they originally were before you made finishing changes. Side views are created from your original top view.

You can work through the "Trying Out Interiors" section for some hands-on experience with the finishing tools. You'll find complete details on all the drawing tools, color tools, and on creating custom objects in other chapters of this user's guide. See "Drawing Tools" in chapter 2 for a description of the drawing tools and help using them. Read chapter 3, "Color Tools", for help with those. Consult other sections of this chapter, "Menus", for information on creating custom objects, using text, and editing patterns.

Show/Hide Rulers

Choose **Show Rulers** if you want visible rulers. When rulers are visible, this item changes to **Hide Rulers** so you can remove them.

Numbers on the rulers represent real-world distances in the scale you are using (see "Scale").
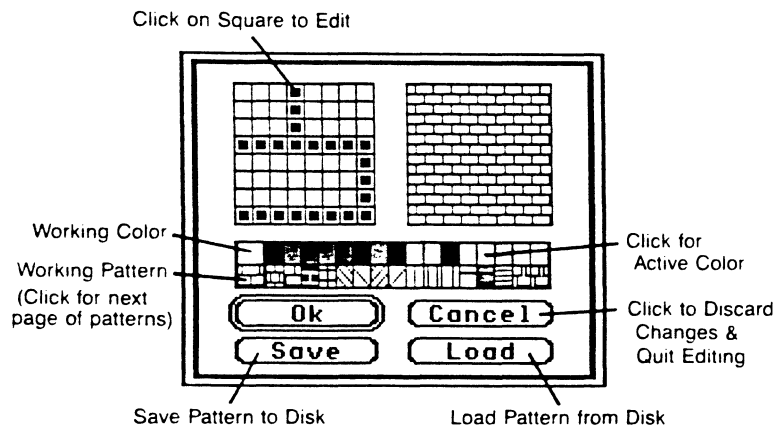
Show/Hide Measurements

This is a finishing tools feature. It is enabled after you select **Use Finishing Tools**.

if you draw beyond the bottom or right side of the window, your drawing is automatically scrolled. This lets you more easily draw objects that are larger than the window viewing area.

If you don't want to use **Auto Scroll**, select this item to disable it. When disabled, you can use the scroll bars to scroll your drawing if you need to. Click on the scroll bar arrows for small moves, in the page area (beside the box) for larger moves, or drag the scroll bar box to position your drawing as desired.

Patterns

If you are using the finishing tools, you can choose **Pattern** to change existing patterns or to load patterns from disk. After selecting this item, this dialog appears:

Click on Square to Edit

Working Color
Working Pattern
(Click for next page of patterns)

Ok   Cancel
Save   Load

Click for Active Color
Click to Discard Changes & Quit Editing

Save Pattern to Disk   Load Pattern from Disk

To edit a pattern, click on the pattern you want to change to make it the working pattern, then click on the color you want to use. Move the pointer onto the pattern square that you want to change and click (in the large, fat pixel box on the left). You can hold the button down and move the mouse for continuous drawing. Squares under the pointer change to the working color. The reference area in the large box on the right is updated for a true size perspective of your changes.

You can get the next page of patterns by clicking on the working pattern square that's next to the line of patterns in the palette.

To copy patterns, move onto the pattern you want to copy, then press and hold down the mouse button. Move the pattern's outline to the new location and release the button. You can drag the outline off the left or right end to copy to the next page of patterns.

Click **Save** to save a permanent copy of your patterns to disk, or click **Load** to load patterns that you have previously saved.

If you click **Cancel**, all changes made to the patterns are discarded, the pattern dialog disappears, and your original patterns are restored.

If you click **Ok**, all changes to the patterns are kept, the pattern dialog disappears, and your working patterns on the palette are redrawn using the newly-changed patterns. Until you make other changes, you can still click **Undo** to restore your original patterns.

Default Patterns

When using the finishing tools, this menu item initializes the palette patterns to the default patterns, the same patterns that existed when *Interiors* first began. Select **Undo** to reverse this selection.

Default Colors

When you are using the finishing tools, **Default Colors** initializes the palette colors to the colors they were when *Interiors* started. Click **Undo** to reverse this selection.

Memory

This item is provided so you can monitor your memory usage. The amount of free memory available for use, the largest continuous block of free memory, and the amount of memory currently used by your interior design drawing are shown.

When the free memory gets below approximately 40K or the largest block gets below approximately 25K, be sure to save a current copy of your drawing to disk. If either of these values go much lower than this, you'll see a dialog warning you that your memory is getting dangerously low.

Save your drawing to disk, and it's best to save a backup copy on a different disk also. Then if you can, free up more memory by reducing your RAM disk size if you are using a RAM disk. Remember to turn your computer off and restart so the new RAM disk settings will take effect.

Appendix A

Error Messages

No clipboard file

This error indicates there isn't an *Interiors* clipboard file on the last disk that you used. It may occur if you try to **Paste** before you have used **Cut** or **Copy**. Use **Cut** or **Copy** to create a clipboard file and place (cut or copy) objects into it, then don't change disks before you use **Paste**. If you need to switch disks, do it before you perform the initial **Cut** or **Copy** since the working disk is used for the clipboard file. You can make another disk the working disk by cataloging it (with **Open** for example), then clicking cancel.

Object file I/O

You'll see this only when *Interiors* first starts if no pre-drawn objects can be loaded. You can click **Ok** and still have limited use of *Interiors* (you can't use pre-drawn objects or change views but the finishing tools are available). To avoid this error, if you've copied *Interiors* to a different volume or Hard Disk, be sure the **INTERIORS.DATA** folder resides in the same folder as the *Interiors* application and that it contains a good copy of the **INTERIORS.OBJS** file.

Pattern file I/O

You'll see this only when *Interiors* first starts if no patterns can be loaded. You can click **Ok** and still have limited use of *Interiors* (the default patterns for the pre-drawn objects will not be available). To avoid this error, if you've copied *Interiors* to a different volume or Hard Disk, be sure the **INTERIORS.DATA** folder resides in the same folder as the *Interiors* application and that it contains a good copy of the **INTERIORS.PATS** file.

A 1MB+ system is needed

This is shown at start-up if your computer doesn't have enough free memory for *Interiors* to start.

ProDOS (GSOS) I/O

The operating system was unable to read or write data to disk. The reason may vary. The disk may be physically damaged or have had data on it compromised in some way.

Write protect

A disk is write protected and cannot be written to. Remove it from the drive and disable the write protect tab. See Chapter 1 for how.

Volume or Path not found

This might occur if you switch disks or remove a disk from the drive and try to do a **Save**, **Cut**, or **Copy**. See the "No clipboard file" section above and "Save" in the "Menus" chapter for related information. Use **Save As** to save to a different disk.

Volume full

There isn't any more room on the disk. You'll need to save to a different disk or initialize (with the Finder) another data disk to use. See the "Getting Started" section in Chapter 1 for help making data disks.

Invalid directory

The directory or subdirectory on the disk has probably been compromised. You'll likely need to use the Finder and Copy all the files you can to another disk, then initialize the bad disk again.

Out of memory

You don't have enough free memory to do whatever it is you are trying to do. If you are using a RAM disk, you may be able to set it to zero or reduce its size to free more memory.

Appendix B

Setting The Control Panel For Printing

This section helps you set the Control Panel for printing. If you have already started *Interiors*, you'll need to save any existing design since you'll have to restart your computer after working through this section. Please consult your *Apple IIGS Owner's Guide* for more information about the Control Panel.

1. If your computer is on, press the **apple**, **control**, and **esc** keys simultaneously to access the Desk Accessories menu. If your computer isn't on, hold down the **option** key and turn it on, then at the resulting menu, press 1 and go to step 3.

2. Use the up or down arrow key to highlight the **Control Panel** item and press **return**.

3. Use the up or down arrow key to highlight the **Slots** item and press **return**.

4. Now, use the arrows to highlight **Slot 1** if your printer cable is plugged into the printer port at the back of your computer, or **Slot 2** if it is plugged into the modem port.

5. Use the right arrow key to change the highlighted slot as follows. Set **Slot 1** to **Printer Port** if your printer is connected to the printer port. Set **Slot 2** to **Modem Port** if your printer is connected to the modem port. Set the highlighted slot to **Your card** and **Slot 7** to **Built-in AppleTalk** if you are using a LaserWriter or an AppleTalk network (a LaserWriter uses an AppleTalk network setup).

6. Press **return** to keep the new settings, highlight **Quit** and press **return** again to exit.

7. Turn your computer off and wait about 30 seconds before turning it back on. You need to turn your computer off to initialize the system with the new Control Panel settings. Refer to the "Getting Started" section for help in restarting.

Appendix C

Setting Your RAM Disk To Zero

Interiors requires a minimum of 1024K (1MB) of free memory to operate, so to ensure enough memory is free, set your RAM disk size to zero. The following steps show you how.

1. If your computer is on, press the **apple**, **control**, and **esc** keys at the same time to access the Desk Accessories menu. If your computer is off, hold down the **option** key and turn it on.

2. If you began with your computer off, press 1 to select **Control Panel**. If your computer was on, then at the Desk Accessories menu, use the **arrow** keys to highlight **Control Panel** and press **return**.

3. Use the up and down **arrow** keys to highlight **RAM Disk** and press **return**.

4. Use the right and left **arrow** keys to set both the minimum and maximum RAM disk sizes to zero and press **return**.

5. Turn off your computer so the new settings will take effect. Now you can start *Interiors* as described at the beginning of this user's guide.

Appendix D

Installing Interiors On A Hard Disk

1. Use the Finder to copy the **Interiors** application file to the desired Hard Disk folder. You can use an existing folder or create a new folder.

2. Copy the entire **Interiors.Data** folder that resides on the program disk (not the data disk) to the same folder on the hard disk that contains the application file.

3. Copy the **Interiors.Icons** file inside the **Icons** folder of the original *Interiors* program disk to the **Icons** folder of the boot volume on the Hard Disk so the Finder will use the *Interiors* program and document icons if you boot from the Hard Disk.

Appendix E

Side Views of Sample Rooms
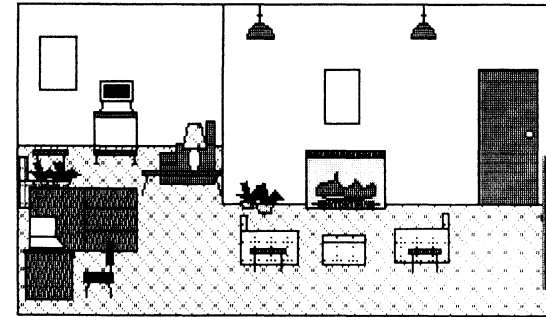
Living Room 1
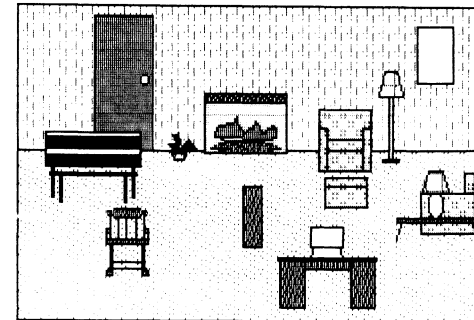
Living Room 2
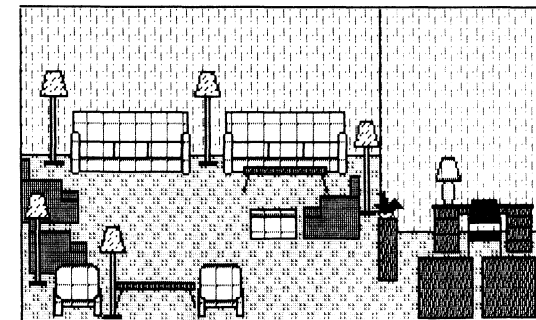
Large Living Room 1
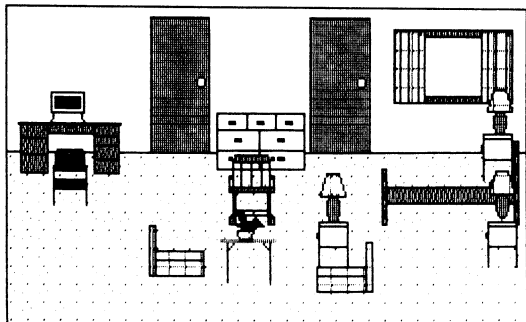
Bedroom
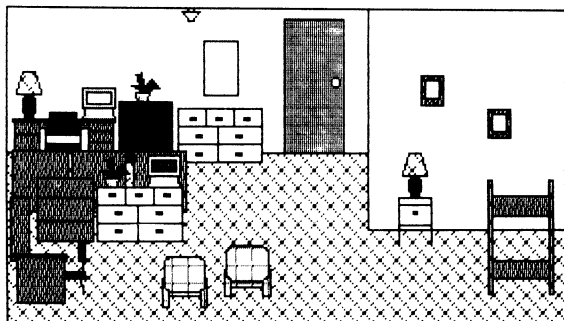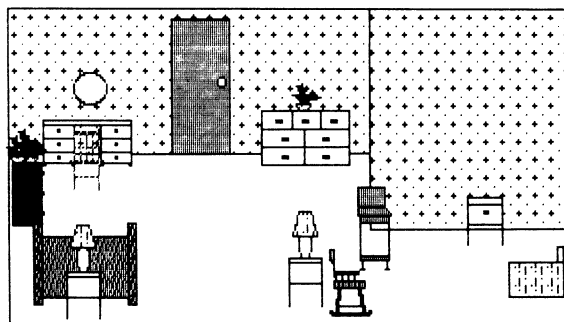
Bathroom 1

Large Bedroom 1
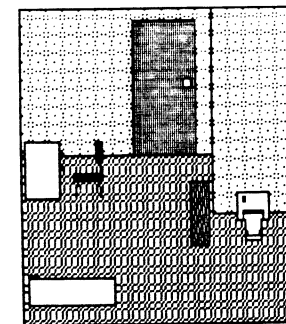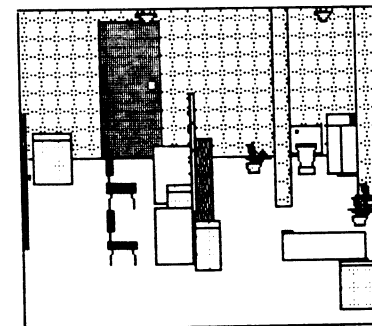
Bathroom 2

Large Bedroom 2
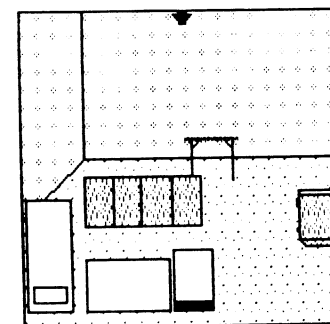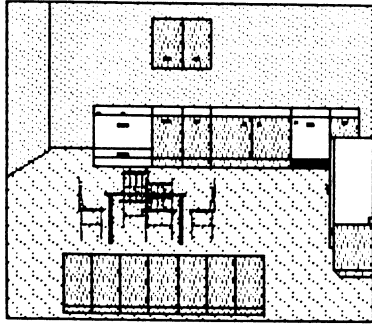
Kitchen 1

Kitchen 2
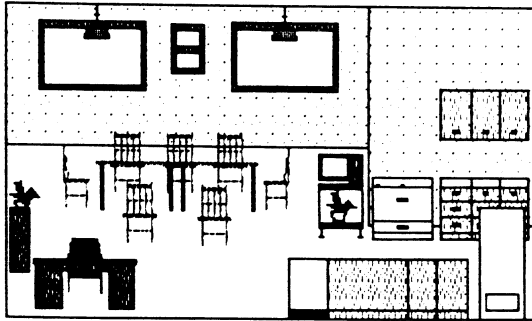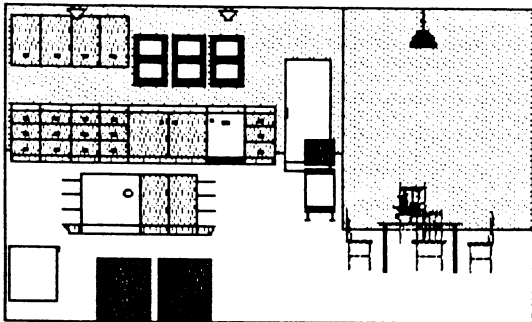
Dining Room 1

Large Kitchen 1
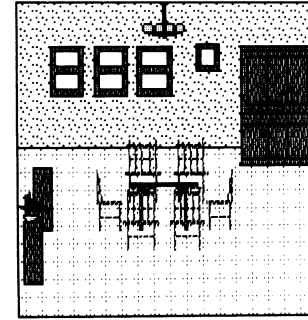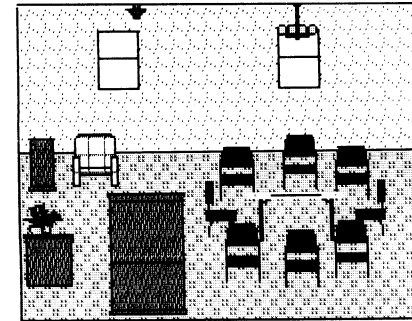
Dining Room 2

Large Kitchen 2
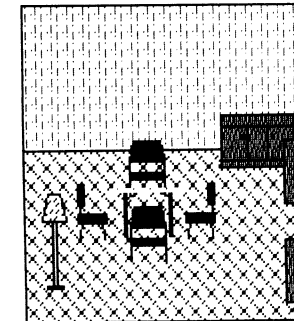
Dining Room 3
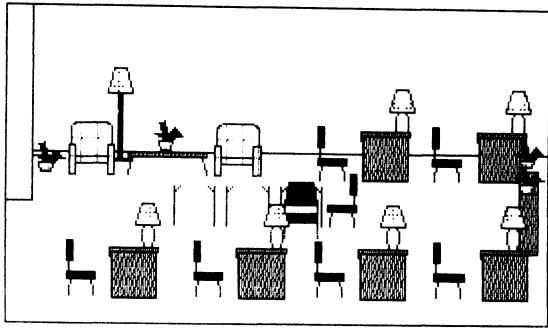
Work Area 2
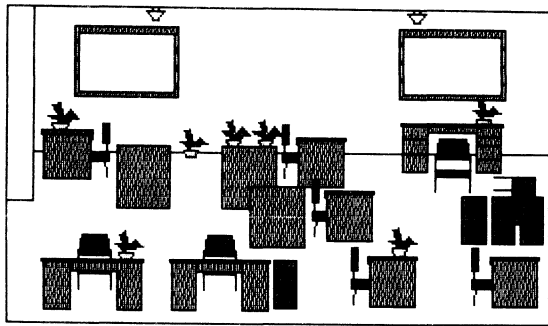
Work Area 3
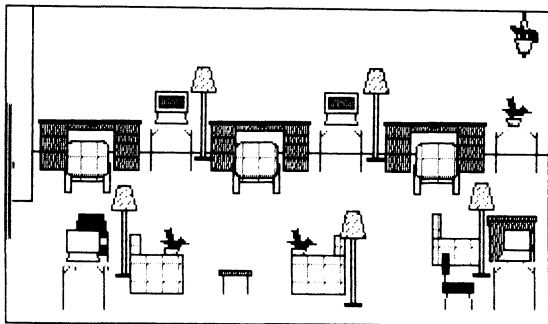
Work Area 4

Appendix F

Extra Copies of Command Cards

KITCHEN   *GS Interiors*

OBJECT	KEY	DIMENSION Depth Width Height (Distance from floor)			TOP VIEW
Cabinet Drawers	K	24	18	36	◻
Cabinet (high)	Opt-K	14	18	30 (4'6")	◻
Cabinet (low)	Shf-K	24	18	36	◻
Counter End	Opt-J	24	12	36	◻
Dishwasher	Opt-D	24	24	36	◻
Freezer	Opt-F	28	48	32	◻
Microwave/TV Cart	N	20	26	32	◻
Microwave/TV	Opt-N	20	26	16 (2'8", sits on cart)	◻
Refrigerator	Opt-R	28	24	60	◻
Sink (dbl)	J	24	48	36	◻
Range	Shf-R	24	36	36	◻
Table	Opt-G	48	48	30	◻

CAPS LOCK DOWN: Diagonal of object on top view
: Left side on side views

LIVING ROOM   *GS Interiors*

OBJECT	KEY	DIMENSION Depth Width Height (Distance from floor)			TOP VIEW
Armchair	A	28	28	30	▢
Coffee Table	Shf-E	20	48	15	▭
Fireplace	F	5	48	36	—
Lamp	L	16	16	28 (1'6", sits on E. table)	◎
Ottoman	O	26	26	18	▢
Piano	Shf-A	60	56	40	◹
Recliner	R	35	30	37	▱
Sofa	S	32	72	36	▭▭
Modular Sofa	Opt-S	34	22	30	▯
Modular Sofa End	Shf-S	34	28	30	▯
Wood Stove	Shf-Q	28	20	28	▯
End Table 1	E	32	22	26	▯
End Table 2	Opt-E	32	22	18	▯
Game Table	G	32	32	28	▢

DINING ROOM   *GS Interiors*

OBJECT	KEY	DIMENSION Depth Width Height (Distance from floor)			TOP VIEW
Buffet	Opt-H	17	44	32	⹀
Cabinet (high)	Shf-I	14	32	30 (5')	▭
China Top	Shf-H	17	44	40 (2'6", sits on Buffet)	⹀
Cupboard	Shf-J	18	40	68	▭
Light (hanging)	Shf-L	24	24	24 (5'7")	⊞
Table 1	T	40	56	28	⊞
Table 2 (round)	Opt-T	48	48	28	◯
Table 3 (rounded)	Shf-T	40	56	28	⬭

CAPS LOCK DOWN: Diagonal of object on top view
: Left side on side views

BEDROOM
GS Interiors

OBJECT	KEY	DIMENSION Depth Width Height (Distance from floor)			TOP VIEW
Bed (double)	B	60	80	40	
Bed (single)	Opt-B	36	80	30	
Beds (bunk)	Shf-B	39	80	68	
Dresser (double)	Opt-U	20	52	33	
Dresser (single)	U	20	32	38	
Table (bedside)	Shf-U	18	20	28	
Vanity	Opt-V	18	52	28	
Vanity (w/mirror)	V	21	52	42	

CAPS LOCK DOWN: Diagonal of object on top view
: Left side on side views

BATHROOM
GS Interiors

OBJECT	KEY	DIMENSION Depth Width Height (Distance from floor)			TOP VIEW
Bathtub 1	Y	32	60	16	
Bathtub 2	Opt-Y	52	52	16	
Bathtub 3	Shf-Y	52	52	18	
Hamper	H	16	24	30	
Mirror (lighted)	Shf-M	5	36	36 (2'6", sits on Sink 2)	
Shower 1	Opt-X	30	30	76	
Shower 2	Shf-X	32	30	76	
Sink 1	Z	22	34	33	
Sink 2	Opt-Z	22	36	34	
Sink 3	Shf-Z	33	36	36	
Toilet	Shf-V	24	20	28	

OBJECT	KEY	DIMENSION Depth Width Height (Distance from floor)			TOP VIEW
Bar, Stools	Shf-G	38	48	36	
Bookcase	Opt-A	12	32	38	
Chair 1	C	22	20	33	
Chair 2	Opt-C	16	20	36	
Curtain	X	5	19 (2'8")	42	
Desk	Shf-D	30	60	30	
Door	D	3	36	80	
Ceiling Lt Fixture	Opt-L	12	12 (6'6")	9	
Light 2 (hanging)	I	16	16 (5'5")	24	
Lamp (floor)	Opt-I	16	16	56	
Mirror	M	1	31 (5')	18	
Round Mirror	Opt-M	1	20 (5')	20	
Picture (framed)	P	1	14 (4'6")	18	
Picture, Mirror	Opt-P	1	24 (4')	16	

OBJECT	KEY	DIMENSION Depth Width Height (Distance from floor)			TOP VIEW
Plant (potted)	Opt-O	19	16	18 (1'6", sits on E. table)	
Plant (hanging)	Shf-O	12	12	28 (5'6")	
Poster, Mirror	Shf-P	1	22	33 (3'6")	—
Rocking Chair	Shf-C	28	26	40	
Computer/TV	Shf-N	20	20	20 (2'6", sits on desk)	
Window 3 (picture)	Shf-W	3	62	42 (2'8")	—
Window 1 (framed)	W	3	20	30 (3'6")	—
Window 2 (plain)	Opt-W	1	25	36 (3')	—
File Cabinets	Shf-F	26	14	28	
Room Divider 1	Q	3	96	72	
Room Divider 2	Opt-Q	3	72	72	

**CAPS LOCK DOWN: Diagonal of object on top view
: Left side on side views**

MENU COMMAND KEYS

⌘A	= Select All	⌘U	= Unlock
⌘B	= Move to Bottom	⌘V	= Paste
⌘C	= Copy	⌘W	= View
⌘F	= Choose Font	⌘X	= Cut
⌘G	= Group	⌘Z	= Undo
⌘H	= Ungroup	⌘~	= Rotate Left
⌘K	= Close	⌘|	= Rotate Right
⌘L	= Lock	⌘"	= Flip Horizontal
⌘M	= Show/Hide Measurements	⌘:	= Flip Vertical
⌘N	= New		
⌘O	= Open		
⌘P	= Print		
⌘Q	= Quit		
⌘R	= Show/Hide Rulers		
⌘S	= Save		
⌘T	= Move to Top		

OBJECT GROUPS

⌘1	= Living room
⌘2	= Dining room
⌘3	= Bathroom
⌘4	= Kitchen
⌘5	= Bedroom
⌘6	= Other
⌘0	= Custom
⌘+	= Save to

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Write or call us for more information.

LIMITED WARRANTY,
DISCLAIMER OF WARRANTIES,
AND LIMITATIONS OF LIABILITIES

If you have read the manual and you are having trouble with the program, please follow the procedure below to get help.

1. Read ALL of the enclosed sheets (if any) included in the program box.
2. Contact your dealer for further information and help with the operating system and finder. This program works only with the operating system supplied with it.
3. Did you mistakenly erase your data disk?

If you're sure you've done everything correctly (or you're positive you've erased your data), read the first paragraph of the Warranty statement, above.

Then, *before you do anything else, CALL* us for assistance. If *we* determine that there is something wrong with your disk, we'll give you a Return Authorization number for a return, and will instruct you regarding payment if you are beyond the warranty period.

And Be Patient...