Getting to Know Your SpaceOrb 360

Prepare yourself for the ultimate in 3D gaming action with the SpaceOrb 360 game controller. Featuring the unique omni-directional Spaceball PowerSensor, the SpaceOrb 360 is the first 3D controller to provide life-like six-axis 360 degree control in any and every direction. This unique technology not only lets you move as fast as you can think -- at BRAINSPEED -- but lets you perform outrageous combo moves like Circle Strafes, Diving Rolls, and SWAT Moves -- moves impossible with the keyboard, mouse, or joystick! You're about to unleash the awesome power, sizzling speed, and ultimate control of your SpaceOrb 360!

By now you've already plugged in your SpaceOrb 360 and installed the SpaceWare 4.8 for the SpaceOrb 360 software on your computer system. Now, you just want to PLAY! This Online Help includes information about customizing the SpaceOrb 360 to work with your games, running your games with the SpaceOrb 360, the SpaceOrb 360 program group items and what they do, and Troubleshooting and Technical information.

If you have not installed the software yet, see the instructions that came in the CD-ROM package for more information.

If you can't run a DOS game because of insufficient memory, see Memory Management for ways to use memory and disk space on your computer more efficiently.

If you need more help or want to know what is customizable, read through this online Help, check out the Readme icon in the SpaceOrb 360 program group, or read the Readme First file on the SpaceWare 4.8 for the SpaceOrb 360 software CD-ROM. If you have any problems during installation, refer to the Troubleshooter on your SpaceOrb 360 Online Help Contents tab.

{button More Information,AL(`alpha',0,`',`')}

For Information on Using Online Help, press F1.

Using the SpaceOrb 360

The SpaceOrb 360 uses a ball (the PowerSensor) for navigation and movement. The PowerSensor ball senses the force and direction applied through your fingertips and translates them into movement in your 3D game. You can find detailed information on how to hold and use the SpaceOrb 360 in the booklet Now There's a New Way to Move in 3D, Here's How that came with your SpaceOrb 360.

You can also use the Chicken Demo (available from **Start > Programs > SpaceOrb 360**) to fine tune your 3D moving skills. An Interactive Trainer, also available in the SpaceOrb 360 Program Group, gives you experience in moving around in 3D space. The Interactive Trainer and the Chicken Demo are not available in the FTP version of SpaceWare 4.8 for the SpaceOrb 360.

You should become accustomed to the SpaceOrb 360 in its vertical orientation (you hold the SpaceOrb with the Rapid Action Buttons C, D, E, and F facing you) before you experiment with the horizontal orientation (you hold the SpaceOrb with the Rapid Action Buttons C, D, E, and F facing up to the ceiling). You can change the orientation of both DOS and Windows 95 games in the SpaceOrb 360 Customizer. The graphic in the Customizer Online help shows the SpaceOrb in the vertical orientation. When you open the Customizer on your computer, it will display the SpaceOrb in the orientation you have chosen.

{button More Information,AL(`beta',0,`',`')}

Playing Games

Before you play any games with the SpaceOrb 360, disable any screen saver you may be using so it doesn't activate during your game.

For both DOS and Windows 95 games that are supported by the SpaceOrb 360, all you have to do to play a game and use the SpaceOrb is to double-click on the game icon and begin playing. The software automatically loads the correct configuration file and you can begin playing the game. In the case of DOS games, you can also launch the game by typing the name of the game's executable in the command line and pressing **ENTER**. There are things going on behind the scenes that make all of this possible. Generally, you won't need this information but you can read about it in General Functionality.

Windows 95 Games

All Windows 95 games that support a Joystick or Game Controller will work with the SpaceOrb 360. Many Windows 95 games have been *optimized*, or configured, to run with the SpaceOrb 360 so that you can open the game and immediately begin playing.

Before you play, **make sure**:

- the SpaceOrb 360 is selected as **Joystick 1** in the Joystick Properties dialog box of your Control Panel (**Start > Settings > Control Panel > Joystick**). If you have installed DirectX 5 on your system, you will have a Game Controller instead of a Joystick. See Control Panel Has a Game Controller, Not a Joystick for more information.
- the **Joystick** is selected within the game. Check the game instructions in the Customizer to see if there are special instructions for setting up a Joystick in your game.
- the SpaceOrb 360 Monitor program is running. When it is, the **SpaceOrb Monitor** icon appears in the task bar near the time. If the SpaceOrb 360 Monitor program is not running, select **Start > Programs > SpaceOrb 360 > SpaceOrb 360 Monitor**.

To Begin Playing:

Click on your Windows 95 Game icon. The configuration file loads automatically if your game is an optimized (supported) game or your have previously created a customized configuration file for it. If you want to change the way the SpaceOrb 360 buttons are mapped, that is done within the game you are playing. Changes to axis mappings, sensitivities settings, and game levels are made using the SpaceOrb 360 Customizer.

Non-optimized Windows 95 Games:

If you are planning to play a Windows 95 game that is not currently supported for use with the SpaceOrb 360, the SpaceOrb 360 program loads a default configuration file that lets you play your game. Because it is a default (generic) configuration file, axes and buttons may not work as you would like them to work. If that is the case, open the SpaceOrb 360 Customizer (double-click on the **SpaceOrb Monitor** icon in the task bar near the time or select **Start > Programs > SpaceOrb 360 > Customizer**), click on the **Add New Game Configuration…** button to begin creating a custom configuration file for your game. Refer to Add a New Game for step by step instructions.

After you have created a custom configuration file for the game, you can set the actions mapped to each axis and the sensitivity of each axis to a level that is comfortable for you. (Note: Button mappings for Windows 95 games are set inside the individual games, not in the Customizer.) Once you have created a custom configuration file for a game that is not optimized (supported) for use with the SpaceOrb 360, that file loads automatically whenever you play the game.

DOS Games

To begin playing:

If your game is an SpaceOrb 360 optimized (supported) game, double-click on the game icon or type its executable name in the command line and press **ENTER**. The software will load the game's configuration file and you can begin playing. Changes to button and axis mappings, sensitivities settings, and game levels are made using the SpaceOrb 360 Customizer.

If the SpaceOrb 360 doesn't work in your game, see the Troubleshooter.

Non-optimized DOS Games:

If your game is not an optimized (supported) game, it will not work with the SpaceOrb 360.

Spacetec IMC is continually adding new game configuration files to its web site. If you have Internet capabilities, you can connect to the Spacetec IMC Corporation web site by clicking on one of these hotspots to see if there is a configuration file for your game:

Web: www.spaceorb.com.

Email: spaceorb@spacetec.com

FTP: ftp://ftp.spacetec.com/pub/

If you send email, be sure to put **SpaceOrb 360** in the subject line.

Non-optimized Games

Windows 95 Games

If you are trying to run a non-optimized Windows 95 game, the SpaceOrb 360 software automatically uses a default configuration file. If the settings in the default configuration file do not work as you would like them to, you can create a customized configuration file for your game with the settings configured as you wish. Follow these steps to create a customized configuration file:

1. Open the SpaceOrb 360 Customizer window (**Start > Programs > SpaceOrb 360 > Customizer**, or double-click on the **SpaceOrb Monitor** icon in the task bar near the time).
2. Click on the **Add New Game Configuration…** button and follow the steps in Add a New Game to create a custom configuration file for your game.

DOS Games

If your game is not an optimized (supported) game, it will not work with the SpaceOrb 360. Spacetec IMC is continually adding new game configuration files to its web site. If you have Internet capabilities, you can connect to the Spacetec IMC Corporation web site by clicking on one of these hotspots to see if there is a configuration file for your game.

Email: spaceorb@spacetec.com

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If you send email, be sure to put **SpaceOrb 360** in the subject line.

SpaceOrb 360 Buttons

The SpaceOrb 360 gives you more than the ability to move in 3D space. It has six Rapid Action Buttons (RABs) that you can use for actions like firing weapons, opening doors, and viewing maps. The button actions, which are customizable, vary from game to game.

To view and change the button actions:

For Windows 95 Games

Open the game and make the changes you want. Button mappings for Windows 95 games can only be changed within the game. The Buttons Actions section in the SpaceOrb 360 Customizer is grayed out for Windows 95 games.

For DOS Games

Open the Customizer window (double-click on the **SpaceOrb Monitor** icon in the task bar near the time or choose **Start > Programs > SpaceOrb 360 > Customizer**).

The SpaceOrb 360 Customizer Motion/Action window displays the current actions mapped to each button on the SpaceOrb 360. To change a button mapping, make sure the game you want to change is selected in the Select Game list box, then click on the down arrow in the list box for the button you want to change. From the resulting list, select the action you want to assign to the button. Refer to Change Button Functions for step by step instructions.

You also have a **Reset** button, which is a tiny button on the back of SpaceOrb 360. If you find that you are moving or drifting in your game when nothing is touching the PowerSensor ball, press the **Reset** button. Make sure nothing is touching the PowerSensor ball when you press this button or you'll continue to drift. For best results, hold the SpaceOrb 360 in your selected orientation (vertical or horizontal) when you press **Reset**.

Click on this button to go to:

{button Getting to Know your SpaceOrb 360,JI(`sporb480.HLP',`Getting_to_Know_Your_SpaceOrb_360')}

SpaceOrb 360 Program Group

Once you install the SpaceWare 4.8 for the SpaceOrb 360 software from the CD-ROM, the SpaceOrb 360 Program Group (accessed by **Start > Programs > SpaceOrb 360**) includes:

- **Chicken Demonstration**
  Provides a simple interactive demonstration of moving an object with the SpaceOrb 360. This is not available in the FTP version of SpaceWare 4.8 for the SpaceOrb 360.
- **Game Setup Guide**
  Opens the Help file containing a list of all optimized DOS and Windows 95 games (at the time the file was created) and any special instructions you need to run the games.
- **Interactive Trainer**
  Provides an environment to give you experience in moving around in 3D space. This is not available in the FTP version of SpaceWare 4.8 for the SpaceOrb 360.
- **Readme**
  Opens a file containing late-breaking information and technical notes.
- **SpaceOrb 360 Customizer**
  Changes individual and global sensitivities, orientations, skill levels, and axis mappings.
- **SpaceOrb 360 Monitor**
  Starts up the SpaceOrb 360 Monitor for playing Windows 95 games. The **SpaceOrb Monitor** icon next to the time on your task bar indicates the ready state of the SpaceOrb 360. The SpaceOrb 360 monitors your operating system and runs the appropriate configuration file for known games. When you run a game that has a SpaceOrb 360 configuration file, it has been specifically "tuned" for the Windows 95 driver. This provides the appropriate game response for the pressure you apply to the PowerSensor ball.
- **SpaceOrb Promo**
  Provides an instructional presentation on how to user the SpaceOrb 360. This is not available in the FTP version of SpaceWare 4.8 for the SpaceOrb 360.
- **Uninstall SpaceOrb 360**
  Removes the SpaceOrb 360 directories and files from your system.
- **Users Guide**
  Opens this online SpaceOrb 360 User's Guide.

Choose the option you want by clicking on it.

Click on this button to go to:

{button Getting to Know your SpaceOrb 360,JI(`sporb480.HLP',`Getting_to_Know_Your_SpaceOrb_360')}

SpaceOrb 360 Customizer

You can use the SpaceOrb 360 Customizer to change the settings for individual DOS or Windows 95 games. When you make changes and save them, you create a customized configuration file for a game that loads each time you open that game.

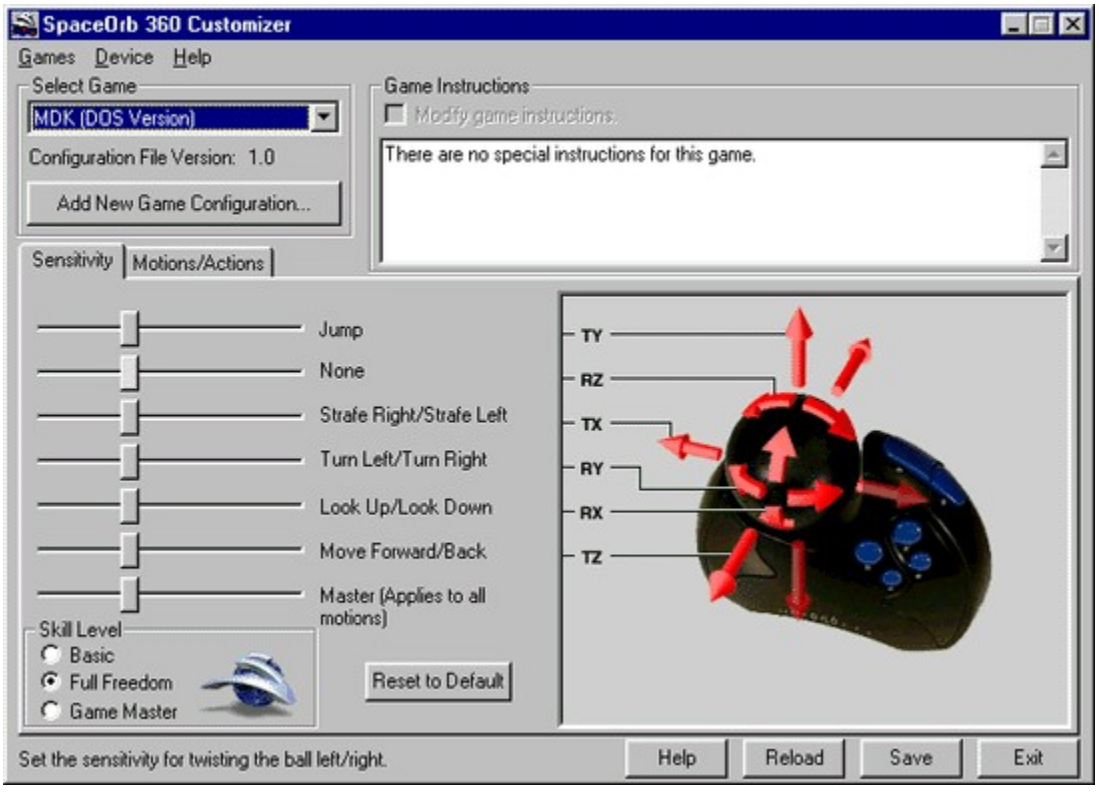
You can also make global changes from the SpaceOrb 360 Customizer by selecting **Global Changes** from the **Games** menu. Global changes affect all games, DOS and Windows 95. For more information about the menu items in the Customizer, see SpaceOrb 360 Customizer Menus.

In the SpaceOrb 360 Customizer Sensitivity window, the SpaceOrb graphic shows arrows (representing axis directions) projecting from the SpaceOrb. Lines extend from each arrow to a sensitivity slider showing the sensitivity setting for that axis and the action assigned to it. When you make a change to any of the axis settings, the Customizer highlights the affected axis. The SpaceOrb 360 graphic is shown in the orientation selected on the Motions/Actions window. In this graphics it is in the vertical orientation.

In the Skill Level box you can set the sensitivity to any one of these generalized levels:

- Basic - lower sensitivity, decreased acceleration, and a dampened rotational response
- Full Freedom - increased sensitivity, faster acceleration, and easier top speeds
- Game Master - most sensitive

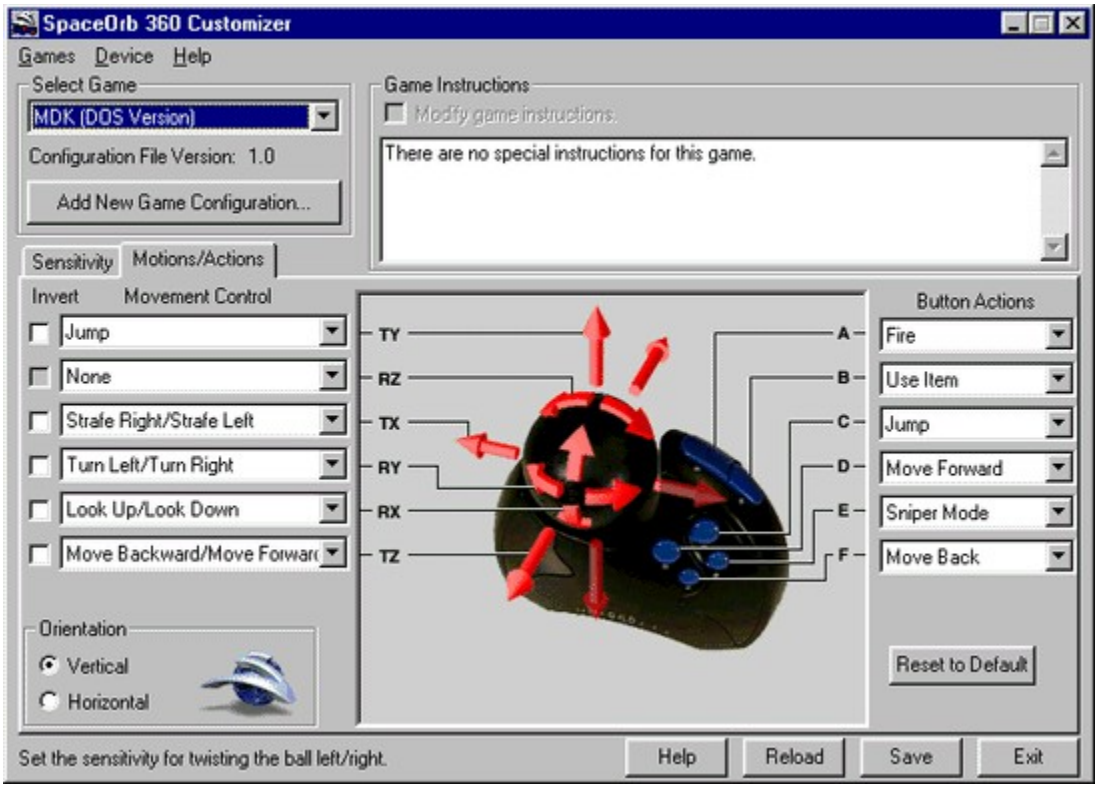
Click on any button or objects in the SpaceOrb 360 Customizer windows below for more information.



In the SpaceOrb 360 Customizer Motions/Actions window, the SpaceOrb graphic in the center of the window shows arrows (representing axis directions) projecting from the SpaceOrb. Lines extend from each arrow to a drop-down list containing movement options for that axis. When you make a change to any axis, the Customizer highlights the affected axis.

On the right side of the SpaceOrb 360 graphics, arrows attached to the buttons point to drop-down lists showing actions that are mapped to individual buttons if your game is a DOS game. If your game is a DOS game, you can click on the down arrow in any of the list boxes to change the action mapped to a button.

If the game is a Windows 95 game, the Button Actions section is grayed out because the buttons are mapped to actions within each game.



Using the SpaceOrb 360 Customizer

Follow these steps to create a customized configuration file or change the existing settings for your game:

1. Open the SpaceOrb 360 Customizer (**Start > Programs > SpaceOrb 360 > Customizer** or double-click on the **SpaceOrb Monitor** icon near the time in the task bar).
2. Click on the down arrow in the Select Game drop-down list box to see the list of games.
3. Select the game whose settings you want to customize or change.
4. Make the changes you want in any of the following areas:
   - Button Actions
   - Axis Mapping
   - Orientation
   - Sensitivity Settings
   - Skill Level
5. Save the changes by clicking on the **Save** button, or revert to the original default settings by clicking on the **Reload** button.
6. Click on **Exit** to close the Customizer.

If you need help about anything in the current Customizer window, click on the **Help** button at the bottom of the window.

If you want to create a customized configuration file for a non-optimized Windows 95 game, click on the **Add New Game Configuration…** button and follow the steps in Add a New Game.

If your game is a non-optimized DOS game, it will not work with the SpaceOrb 360. See Non-optimized Games for more information.

If you decide you want to exit the Customizer and leave the settings unchanged, click on **Exit**.

SpaceOrb 360 Customizer Menus

Most of the times you use the SpaceOrb 360 Customizer, you adjust game settings by using the options on the **Sensitivity** and **Motions/Actions** tabs.

The menus offer you additional setup options.

Games > Global Changes… lets you make changes that affect all games, both DOS and Windows 95. This option brings up the Global Changes for All Games dialog box in which you can set the SpaceOrb 360 orientation (Vertical or Horizontal) and the skill level (Basic, Full Freedom, or Game Master). A click on the desired button causes all configuration files to be set to that specific action. Before that happens, you are prompted with a notice that the conversion could take a while and are given an option to **Cancel** the changes.

Games > Remove User Added Games… removes any game you have added using the **Add New Game Configuration…** button in the Customizer. See Remove a User Added Game for more information.

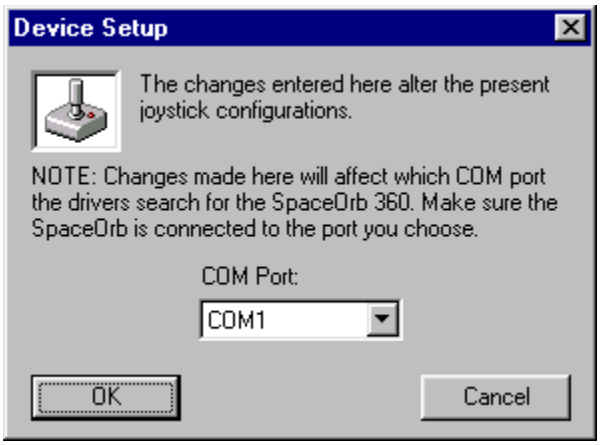
Games > Exit closes the Customizer. If you have not saved the new settings, you are prompted to save with a **Yes**, **No**, and **Cancel** option.

Yes saves the changes and then exits the SpaceOrb 360 Customizer.

No exits the SpaceOrb 360 Customizer without saving the changes.

Cancel leaves you in the dialog box to make further changes.

Device > Setup opens the dialog box shown below. You can use it to change the COM port to which you have the SpaceOrb 360 attached. It contains a drop-down list box listing all existing COM ports with the currently selected port in the edit portion of the list. You change COM ports by selecting another one from the list and clicking on the **OK** button to save the change. Make sure that the COM port you select is the one to which the SpaceOrb 360 is attached because the software doesn't check to see if the change is correct. The **Cancel** button exits the dialog box without saving.



Help offers three options: Customizer Help, About Customizer…, and Go to SpaceOrb.com.

Help > Customizer Help opens a topic giving step by step instructions for changing Orientation, Skill Level, Axis Mappings, Button Mappings (DOS games only), and Sensitivity settings.

Help > About Customizer… opens a dialog box, shown below, that contains information about the Customizer and a link to the SpaceOrb 360 web site.

If you have Internet capabilities, click on the **Go to Web Site!** button to launch your Web browser and load the SpaceOrb web page.

Help > Go to SpaceOrb.com launches your Web browser and loads the SpaceOrb Web page. It performs the same function as the **Go to Web Site!** Button in the About Customizer box.

Change Settings for All Games

Global changes affect ALL games. You can use the SpaceOrb 360 Customizer to change the device orientation and skill level settings for all games (DOS and Windows 95).

To make global changes to your games:

1. Select **Start > Programs > SpaceOrb 360 > Customizer** or double-click on the **SpaceOrb Monitor** icon on the task bar next to the time.
2. Open the **Games** menu and choose **Global Changes…** to get to this dialog box:

3. Select the Orientation setting (**Vertical** or **Horizontal**).
4. Select the Skill Level (**Basic**, **Full Freedom** or **Game Master**).

   Basic - lower sensitivity, decreased acceleration, and a dampened rotational response

   Full Freedom - increased sensitivity, faster acceleration, and easier top speeds

   Game Master - most sensitive

5. When you are done, click on **OK**.
   You will notice a status message telling you that files are being updated and it may take a while.
   You will have an option to **Continue** or **Cancel** the operation.
6. Click on **Exit** in the SpaceOrb 360 Customizer window to exit the Customizer.

Click on this button to go to:

{button Getting to Know your SpaceOrb 360,JI(`sporb480.HLP',`Getting_to_Know_Your_SpaceOrb_360')}

Change Individual Game Settings

You can change the sensitivity, orientation, skill level, and axis mappings for a specific Windows 95 or DOS game from the SpaceOrb 360 Customizer. You can use the Customizer to change button mappings for DOS games, but you change button mappings for Windows 95 games from within the game. The SpaceOrb 360 Customizer topic describes and shows (using pop-ups) the function of each section of the Customizer. The topic Using the SpaceOrb 360 Customizer walks you step by step through the process of changing any of the settings in the Customizer.

If you want to make global changes for Windows 95 and DOS games, refer to Change Settings for All Games for information about making global changes.

Click on this button to go to:

{button Getting to Know your SpaceOrb 360,JI(`sporb480.HLP',`Getting_to_Know_Your_SpaceOrb_360')}

Sensitivity

The Sensitivity settings affect how the SpaceOrb 360 responds to your touch. If you can't seem to turn or run fast enough, increase the sensitivity. If you feel things are happening too fast, decrease the sensitivity.

The Skill Level you select in the SpaceOrb 360 Customizer uses these basic sensitivity levels:

- Basic - lower sensitivity, decreased acceleration, and a dampened rotational response
- Full Freedom - increased sensitivity, faster acceleration, and easier top speeds
- Game Master - most sensitive

If you would like to refine the sensitivity even further for the skill level you chose, open the SpaceOrb 360 Customizer (**Start > Programs > SpaceOrb 360 > Customizer** or double-click on the **SpaceOrb Monitor** icon on the task bar next to the time), select the game you want to adjust, and click on the **Sensitivity** tab. You can adjust sensitivity settings for both DOS and Windows 95 games in the Customizer. Refer to Change Sensitivity Settings for step by step instructions.

The first six sensitivity sliders in the Customizer affect individual axes. Each slider's action is listed to the right and a line and arrow point to the axis to which that motion is attached. You can use any of these sliders to speed up or slow down a particular action.

To change sensitivity, drag the **Sensitivity** slider to the right for faster response or to the left for decreased response. To return to the default sensitivity settings for the current skill level, click on **Reset to Default**.

The Master slider (the last one) affects all actions.

Orientation

The SpaceOrb 360 is shipped set for **Vertical Orientation**. This means that you hold the SpaceOrb with the Rapid Action Buttons C, D, E, and F facing you. Some people prefer holding the SpaceOrb with the Rapid Action Buttons C, D, E, and F facing up toward the ceiling (the Horizontal Orientation).

You should become accustomed to the SpaceOrb in its vertical orientation (you hold the SpaceOrb with the Rapid Action Buttons facing you) before you experiment with the horizontal orientation (you hold the SpaceOrb with the Rapid Action Buttons C, D, E, and F facing up to the ceiling).

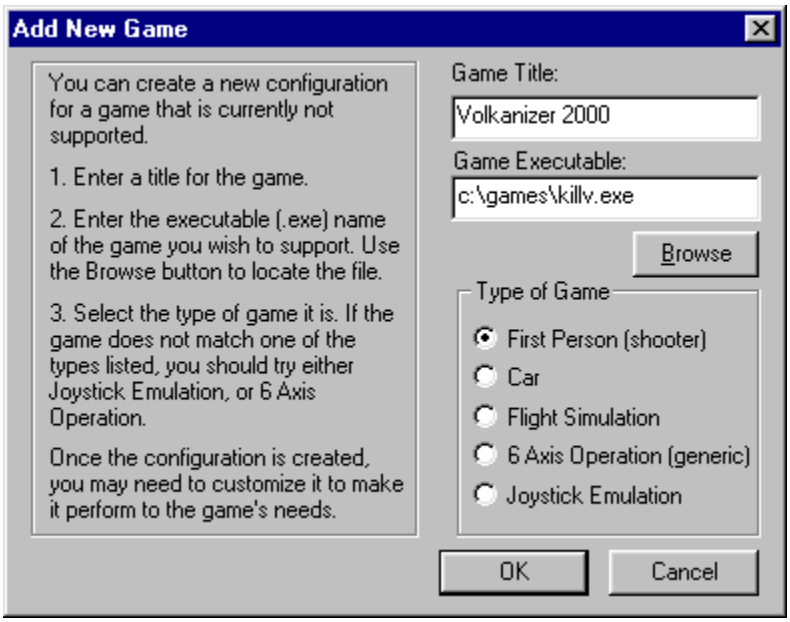
If you decide it is more comfortable for you to hold the SpaceOrb in the horizontal position, it is important that you change the orientation setting to Horizontal. A pushing motion on the PowerSensor ball held in the vertical position will initiate a different action when held in the horizontal position. The axis mappings are different for each orientation.

You can modify your orientation choice for any game level (Basic, Full Freedom, GameMaster). Refer to Change the Orientation for step by step instructions.

Add a New Game

If you are running a non-optimized Windows 95 game, the SpaceOrb 360 automatically loads a default configuration file that enables you to use the SpaceOrb 360 in the game. If you want to make changes in the way the SpaceOrb (using the default configuration file) interacts with your game, you can create a customized game configuration using the SpaceOrb 360 Customizer to change the SpaceOrb settings. Follow these steps to create a customized configuration file for your non-optimized Windows 95 game:

1. Open the SpaceOrb 360 Customizer (**Start > Programs > SpaceOrb 360 > Customizer** or double-click on the **SpaceOrb Monitor** icon in the task bar near the time).
2. Click on the **Add New Game Configuration…** button to bring up the Add New Game dialog box.



3. Follow the directions on the dialog box to provide information for the configuration file.
4. Click on **OK** to save the file.

Technical Note:
When you save the file, it is named **userX.scg** where **X** is a unique number.

After you click on **OK**, you can choose either the **Motion/Actions** or **Sensitivity** tab to make changes to the default settings as described in Using the SpaceOrb 360 Customizer. You change the button mappings within the game, not in the SpaceOrb 360 Customizer.

If you want to enter special instructions for the game you have added, the Modify Game Instructions checkbox is now active and, after checking the box, you can type instructions for the game in the Game Instructions edit box.

If you are trying to run a non-optimized DOS game, the SpaceOrb 360 will not work with it and you can't create a customized configuration file for it.

Spacetec IMC is continually adding new game configuration files to its web site. If you have Internet capabilities, you can connect to the Spacetec IMC Corporation web site by clicking on one of these hotspots to see if there is a configuration file for your game:

Web: www.spaceorb.com.

Email: spaceorb@spacetec.com

FTP: ftp://ftp.spacetec.com/pub/

If you send email, be sure to put **SpaceOrb 360** in the subject line.

Remove a User Added Game

If, after you have added a game using the **Add New Game Configuration…** button, you decide you would like to remove the game from the list, follow these steps:

1. Open the SpaceOrb 360 Customizer if it is not already open (**Start > Programs > SpaceOrb 360 > Customizer** or double-click on the **SpaceOrb Monitor** icon in the task bar near the time).
2. Click on **Games** in the SpaceOrb 360 Customizer menu.
3. From the drop-down list of menu options, select **Remove User Added Games…** to bring up the dialog box shown below.

4. Highlight the game in the list you want to remove and click on **Remove**.
5. Click on **OK** to return to the SpaceOrb 360 Customizer.

This dialog box allows you to remove any game for which you have added support using the Add New Game Configuration... button in the SpaceOrb 360 Customizer. When you remove a game, the game title is removed from the Select Game list and its configuration file (.scg file) is deleted.

Change Button Functions

Windows 95

When you are playing a Windows 95 game, you assign button functions from within the game you are running. The Button Actions section of the Sensitivity window is grayed out for Windows 95 games.

DOS Games

Use the SpaceOrb 360 Customizer to change the button functions for your DOS games.

To change button functions, open the SpaceOrb 360 Customizer if it isn't already open (**Start > Programs > SpaceOrb 360 > Customizer** or double-click on the **SpaceOrb Monitor** icon in the task bar near the time) and follow these steps:

1. Select the name of your game from the Select Game drop-down box.
2. Make sure the **Motions/Actions** tab is selected.
3. In the Button Action section of the window, click on the down arrow in the edit box of the button you want to change. A list of available button functions appears. As you pass your cursor over the edit boxes, the arrows and the buttons to which they apply change color.
4. Select the action you want to map to the button.
5. Change any other button action you want. You can map an action to more than one button.
6. Click on **Save** to save the changes to the game's configuration file. If you want to revert to the original default settings (including Movement Control), click on the **Reset to Default** button. If you want to exit the SpaceOrb 360 Customizer without saving the changes, click on **Exit**.

Change Axis Mappings

You use the SpaceOrb 360 Customizer to change axis mappings for Windows 95 and DOS games.

You map an action to an axis by clicking on the drop-down list attached to an axis (indicated by the line going from the drop-down box to the axis) and selecting an action for that axis. When you select an action for an axis, the Customizer highlights the affected axis.

To change an axis mapping, open the SpaceOrb 360 Customizer if it isn't already open (**Start > Programs > SpaceOrb 360 > Customizer** or double-click on the **SpaceOrb Monitor** icon in the task bar near the time), and follow these steps:

1. Select the name of your game from the Select Game drop-down box.
2. Select the **Motion/Action** tab.
3. Click on the arrow in the drop-down list box connected to the axis whose action you want to change.
4. Select the action you want mapped to the axis. If the selected action is mapped to another axis, you should change the action associated with that axis to avoid having the same action mapped to two axes. The Customizer highlights the axis you change.

   If you find that the movement is the reverse of what you expected, click in the checkbox to the left of the action to reverse its direction.
5. Click on **Save** to save the changes, and then **Exit** if you are ready to leave the SpaceOrb 360 Customizer.

Change Sensitivity Settings

You use the SpaceOrb 360 Customizer to change sensitivity settings for Windows 95 and DOS games.

You adjust the sensitivity settings to determine how the SpaceOrb 360 responds to the movements you make on the PowerSensor ball. For instance, if you wanted the **Roll Left/Right** movement slower than your other movements, you move the slider for **Roll Left/Right** to the left to slow the action. The actions mapped to each axis are assigned in the Motions/Actions window of the Customizer.

To change the sensitivity settings, open the SpaceOrb 360 Customizer if it isn't already open (**Start > Programs > SpaceOrb 360 > Customizer** or double-click on the **SpaceOrb Monitor** icon in the task bar near the time), and follow these steps:

1. Select the name of your game from the Select Game drop-down box.
2. Select the **Sensitivity** tab.
3. Adjust the slider for the action (axis) whose sensitivity you want to change. Move the slider to the left to reduce the sensitivity. Move it to the right to increase it. The axis whose sensitivity you change is highlighted.

   If you want to change the sensitivity for all axes, use the **Master** slider.

   If you want to revert to the default settings, click on the **Reset to Default** button in the Sensitivity window.
4. Click on **Save** to save the changes, and then **Exit** if you are ready to leave the SpaceOrb 360 Customizer.

   If you don't want to save the changes you made, click on **Exit** to close the Customizer without saving the changes.

Change the Skill Level

You use the SpaceOrb 360 Customizer to change the skill level for Windows 95 and DOS games.

You change the skill level to determine how the SpaceOrb responds to the movements you make on the PowerSensor ball.

To change the skill level of a game, open the SpaceOrb 360 Customizer if it isn't already open (**Start > Programs > SpaceOrb 360 > Customizer** or double-click on the **SpaceOrb Monitor** icon in the task bar near the time), and follow these steps:

1. Select the game in the Select Games drop-down list box whose sensitivity you want to change.
2. Select the **Sensitivity** tab.
3. Choose the **Skill Level** for the game from these options:
   - **Basic** - lower sensitivity, decreased acceleration, and a dampened rotational response
   - **Full Freedom** - increased sensitivity, faster acceleration, and easier top speeds
   - **Game Master** - most sensitive
4. Click on **Save** to save the changes, and then **Exit** if you are ready to leave the Customizer.

You can change the sensitivity of individual axes by selecting the **Sensitivity** tab and adjusting the sensitivity slider for a specific action. Because you can modify each axis beyond the default setting, it is possible to make a Basic setting have a greater sensitivity than the Game Master default settings.

If you want to change the Skill Level for all games, use **Global Changes…** from the **Games** menu in the Customizer.

If you are a new SpaceOrb user, you might find it helpful to use the Basic level to gain experience using the SpaceOrb.

Change the Orientation

You use the SpaceOrb 360 Customizer to change the SpaceOrb 360 orientation setting for both Windows 95 and DOS games.

To change the orientation setting, open the SpaceOrb 360 Customizer if it isn't already open (**Start > Programs > SpaceOrb 360 > Customizer** or double-click on the **SpaceOrb Monitor** icon in the task bar near the time), and follow these steps:

1. Click on the down arrow in the Select Games drop-down list box and choose the game whose orientation you want to change.
2. Select the **Motion/Action** tab.
3. In the Orientation box located below the axis mappings, select either **Horizontal** or **Vertical**.

   When you modify the movement associated with any axis, this in effect becomes a customization and a note appears over the Orientation box:

   Note:
   These settings have been modified from the default.
4. Click on **Save** to save the changes, and then **Exit** if you are ready to leave the SpaceOrb 360 Customizer.

If you want to change the orientation for all games, use **Global Changes…** from the **Games** menu in the Customizer.

Using the Sensitivity Window

Use the Sensitivity window to change the skill level or the sensitivity for any of the axes on the PowerSensor ball. The SpaceOrb 360 graphic in this window appears in the orientation you selected. The default is Vertical, with the Rapid Action Buttons C, D, E, and F facing you.

Before you make changes to the skill level or any of the sensitivity sliders, check to make sure that the name of the game whose settings you want to change is shown in the Select Game list box. As you drag your cursor over the sliders, you see the axis affected by that slider change color. The motion or action affected by each slider is listed to the right of it.

The Skill Level box offers three settings:

Basic - lower sensitivity, decreased acceleration, and a dampened rotational response
Full Freedom - increased sensitivity, faster acceleration, and easier top speeds
Game Master - most sensitive

To increase the sensitivity of an axis independently of the Skill Level settings, move the slider to the right. To decrease the sensitivity, move the slider to the left. The last slider, the Master Slider, changes all axes.

If you want to discard your changes and revert to the default settings, click on the **Reset to Default** button.

For more detailed information, refer to Change the Skill Level or Change the Sensitivity Settings.

Using the Motions/Actions Window

Use the Motions/Actions window to set the orientation of the SpaceOrb 360, assign motions to axes and, in the case of DOS games, assign actions to the buttons on the SpaceOrb. Changes to the actions mapped to buttons for Windows 95 games are made within the game.

Before you make any changes, make sure the name of the game whose settings you want to change appears in the Select Game list box.

The Orientation setting refers to the way you hold the SpaceOrb. The Vertical orientation means that the Rapid Action Buttons C, D, E, and F are facing you. In the Horizontal position, the Rapid Action Buttons C, D, E, and F face up toward the ceiling. See Orientation for more detailed information. Refer to Change the Orientation for information about changing the orientation. The SpaceOrb graphic in this window appears in the orientation you have chosen. The default setting is Vertical.

In the Movement Control section of the window, you can change the movement assigned to any or all of the six axes on the PowerSensor ball. Refer to Change Axis Mappings for step by step instructions for changing the mappings.

To change the actions mapped (assigned) to any of the Rapid Action Buttons (DOS games only), follow the instructions in Change Button Functions. Changes to the actions mapped to buttons in a Windows 95 game are made from within the game.

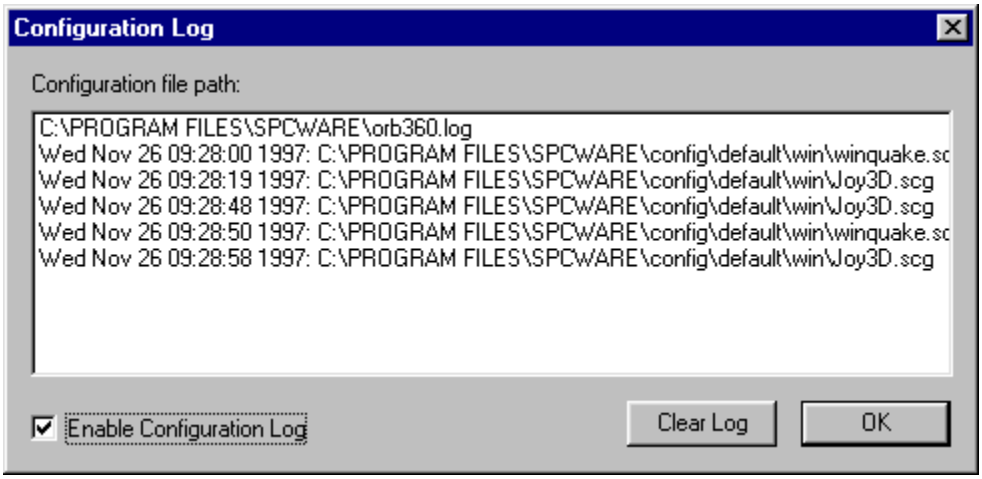
SpaceOrb 360 Monitor

The SpaceOrb 360 Monitor is used to automate the support of Windows 95 games. It runs in the background and its only visible presence is the **SpaceOrb Monitor** icon in the task bar near the time. Some of the Monitor's responsibilities include adding the names of new games to the game list that appears in the Customizer, and finding and loading the configuration file for games.

When you double-click on the **SpaceOrb Monitor** icon in the task bar, The SpaceOrb 360 Customizer opens, ready for you to change game functionality or create a customized configuration file for a game.

Right clicking on the **SpaceOrb Monitor** icon opens a pop-up menu with the following options:

- **About…**: Displays a dialog box describing the version of the Monitor program and the SpaceOrb software.
- **Customize…**: Opens the SpaceOrb 360 Customizer.
- **Scg Log**: Displays a list of all configuration files that have been loaded since the **Enable Configuration Log** button was checked. Because the checkbox defaults to no logging each time the Monitor is closed or exited (this includes turning your computer Off), you should open the Monitor and check the **Enable Configuration Log** check box when you want to create the log file. The information in this file can be very helpful if you need to contact Technical Support. The listing (written to a file called **orb360.log**) includes the path to each configuration file.



The **Configuration file path** list box contains the contents of the **orb360.log** file.
The **Enable Configuration Log** checkbox enables/disables the logging feature of the Monitor.
The **Clear Log** button clears the contents of the list box and deletes the **orb360.log** file.
The **OK** button closes the Monitor Scg.Log dialog box and exits the monitor.

- **Suspend/Resume** toggles the Monitor program On/Off. When the Monitor is suspended, no more games can be detected and all Windows 95 games will use the currently loaded configuration file.
- **Exit**: Closes the Monitor. No more games can be detected and all Windows 95 games will use the

currently loaded configuration file.

General Functionality

In general, the SpaceOrb software and the associated drivers handle the communication between the computer and the SpaceOrb 360 device. This software detects games as they are launched, compares the game name to a list of games supported by the SpaceOrb, and loads the game's configuration file if it is a supported game. If it is not a supported game, the software loads a default configuration file for Windows 95 games. If your DOS game is not a supported game, it will not work with the SpaceOrb 360.

The process varies somewhat for DOS and Windows 95 games.

For Windows 95 games, the software uses the SpaceOrb Monitor to detect game starts. If the game is a supported (optimized) game, the SpaceOrb Monitor loads its configuration file and the SpaceOrb driver begins passing data into the game via Direct Input. If the games is not a supported game, a default configuration file is loaded for the game each time you play it unless you create a customized configuration file for the game.

For DOS games, the software loads a driver (**spaceorb.exe**) via the **autoexec.bat** file as a TSR (Terminate Stay Resident) program that becomes active when a DOS game is launched. As a game is launched, its executable file name is compared to a list of executable files for games the software supports. If there is a match, the game's configuration file is loaded and data from the SpaceOrb is passed to the game's external control structure. Passing the SpaceOrb data into the game is done by a game specific driver. Each of the game drivers is embedded in the **spaceorb.exe** driver.

Memory Management

If you run a DOS game with the SpaceOrb 360, and the game reports **Insufficient memory**, you must free up some RAM (Random Access Memory) to provide more room in which to load the game. Use one of the following methods to free up some RAM:

Ÿ If you are running in DOS-only mode you probably don't need to use SmartDrive. SmartDrive loads from the **autoexec.bat** file in the root directory of your hard drive. To keep it from loading, edit the **autoexec.bat** file and find the line **`c:\windows\smartdrv.exe /x`**. Add **`rem`** in front of it, so that the line now reads **`rem c:\windows\smartdrv.exe /x`**. Restart your computer.

Ÿ Use a memory optimizer like DOS MEMMAKER. MEMMAKER examines system memory and catalogs the programs you have loaded to determine the maximum amount of memory you can free up. It configures your system to maintain that maximum amount.

Note:
MEMMAKER is not included with all Windows platforms.

To run MEMMAKER:

1. Type **`c:\windows\memmaker`** at the DOS prompt, and follow the prompts. For more information about MEMMAKER, type **`help memmaker`** at the DOS prompt.
2. To load EMM386, edit the **config.sys** file in the root directory of your hard drive, and add these lines at the top of the file:

   ```
   device=c:\windows\himem.sys
   device=c:\windows\emm386.exe noems
   files=60
   buffers=60
   shell=c:/command.com /p /e:1024
   ```

3. Restart your computer.

Ÿ Third party expanded memory managers (EMM) like QEMM have their own memory optimizers. QEMM's is called Optimize. If you use a third party EMM, please see its documentation for instructions on the use of its optimization program.

Ÿ Refer to your operating system or game documentation for additional information on freeing up memory.

Windows 95 COM Port Conflict Solution

A COM port conflict exists when a COM port is either configured incorrectly, used by another device, shares resources, or is disabled. Resolving a COM port conflict is a matter of adjusting the present COM port configuration, removing devices, or adding additional COM ports to your system. Follow these steps:

1. Open the control panel to your system by selecting **Start > Settings > Control Panel**.
2. Double-click on the **System** Icon. Select the **Device Manager** and **View device by type**.
3. Double-click on **Ports**.

Windows 95 displays the COM ports known to Windows 95.

Check the number of COM ports against the number you think you have. Remember that a modem can count for one COM port. Check to make sure there are no "!" or "X" over your COM Ports. If there are, these COM port conflicts will impact your ability to install the SpaceOrb 360. You could:

- Ÿ Use the Windows 95 Troubleshooter.
- Ÿ Remove the conflicting COM port and have Windows 95 reallocate it using the Add/Remove Hardware options.

See Moving the COM Port for more information about resolving COM port conflicts.

Modem Conflict

Many people have a COM port conflict because of their modem. Here's how to see what COM port your modem uses:

1. In the **Device Manager** (see above) double-click on **Modem**. The modem manufacturer's name should appear.
2. Double-click on the **Manufacturer's name**. A dialog box appears.
3. Select the **Resources Tab** on the Dialog Box.
4. Examine the selection of the COM port. For example, if the selection is COM 1 and you have the SpaceOrb plugged into the same COM port, either move the modem to another COM port or plug the SpaceOrb into another COM port and reinstall the SpaceWare 4.8 for the SpaceOrb 360 software. See Moving the COM Port.

Moving the COM Port

For Windows 95

Windows 95 introduced the Plug and Play specification by which Plug and Play-compatible cards can be configured through software.

Note:
You can't use this method to change the COM ports that come installed on your computer's mother board, with the exception of Plug and Play modems.

To change an IRQ or I/O address on a Plug and Play card, follow these steps:

1. Run the Windows 95 **Control Panel** program (**Start > Settings > Control Panel**).
2. Click on the **System** icon and select the **Device Manager** tab.
3. Double-click on **Ports**, and then double-click on the port whose settings you want to change.
4. Select the **Resources** tab. The IRQ and I/O address settings appear.
5. Remove the check mark from **Use Automatic Settings** if it is checked.
6. Select either the IRQ or I/O address setting, and then click on the **Change Setting** button.

If you need further assistance on changing IRQs, contact your computer manufacturer.

For DOS

The first step in DOS is to determine the number of COM ports on your system as seen by DOS. Unfortunately, sometimes DOS and Windows 95 do not agree. Here is how to check:

1. From the task bar, choose **Start > Shutdown > Restart the Computer in MS-DOS Mode?**. Click on **Yes**.
2. Run the FINDORB program (from the root directory of the SpaceWare 4.8 for the SpaceOrb 360 CD-ROM). The program will run a diagnostic check on the system.
3. Check the Number of COM ports listed (remember a modem can be seen as a COM port). Sometimes a COM port is disabled in the BIOS. If the COM ports do not match the number you think you have, you need to check the BIOS to ensure the COM port is turned on. See BIOS Checking.

If you need to move a DOS-based COM port see:

Reasons to Reassign IRQs and I/O Addresses
Determining IRQ and I/O Address Settings
Changing IRQ and I/O Address Settings

Do you Have Enough COM Ports?

Check to make sure you have enough available COM ports. If you don't have enough available COM ports, you have a few options:

- Install another COM (serial) port. They're reasonably inexpensive. Make sure you get one that can accept an IRQ value other than 3 or 4, so you can configure it not to conflict with your COM1 or COM2. This solution costs about $30-50, but lets everything run together. You won't need to unplug and replug various devices depending on which one you want to use. If you're not familiar with installing and configuring PC hardware, you might want to have your authorized computer service center do it for you.

- Buy a bus mouse. This kind of mouse comes with a separate card that you install in your computer. The mouse plugs into the card, rather than into a COM (serial) port. It is already configured for a different IRQ, so you don't have to worry about conflicts. This is probably the easiest solution to implement and work with, but it's also the most expensive option.
- Buy a PS/2 mouse if your mother board supports it and you don't already have one. A PS/2 mouse doesn't require the use of a COM port.
- Buy a COM 5 Card from Spacetec IMC. Contact Technical Support at 978-970-0440.

Reasons to Reassign IRQs and I/O Addresses

When a peripheral device like the keyboard needs to send data to the computer, it must interrupt the CPU to tell it that the data is coming. To do this, it uses an IRQ (Interrupt Request). The PC has 16 IRQs. Serial ports, also called COM ports, to which the SpaceOrb 360 connects, generally use IRQ 3 and 4. Interrupts cannot be shared but, by default, COM1 and COM3 use IRQ4 and COM2 and COM4 use IRQ3. This is why conflicts can arise when there are more than two COM ports on the computer.

To compound the problem, an internal modem is also designated a COM port. If a computer has two physical serial ports, specified COM1 and COM2, and a modem, specified COM3, it is possible that COM1 and COM3 will be set to use the same IRQ. If you plug a SpaceOrb 360 into COM1 without changing the modem's IRQ, the SpaceOrb will not work. If COM2 is already in use, the best way to resolve the conflict is to change the modem's IRQ to one that is unused. Be sure to choose an IRQ that is not being used by any other device.

It is also possible for a computer to have two COM ports and a modem, but the second COM port has been disabled to make way for the modem. If you want to connect the SpaceOrb 360 to the disabled COM port, you must enable the COM port, making sure it is set to use an IRQ that does not conflict with either COM1 or the modem.

An I/O address specifies the memory location of the channel by which data is sent from a device to the computer. The most commonly-used address scheme is (values in hexadecimal numbers):

COM1 - 3F8

COM2 - 2F8

COM3 - 3E8

COM4 - 2E8

See Changing IRQ and I/O Address Settings for more information.

Determining IRQ and I/O Address Settings

In DOS, the most common tool you can use to determine IRQ and I/O address assignments is the Microsoft Diagnostics program (**msd.exe** in the **\dos** directory). The program's interface consists of a series of labeled buttons. Each switch identifies a piece of information about the computer. Of primary importance are the buttons labeled **COM Ports** and **IRQ Status**. The **COM Ports** button shows how many COM ports are installed (including an internal modem if one is present) and the addresses used by each one.

The **IRQ Status** button shows, in table form, each IRQ, what uses it, and whether it has been detected in use. Sometimes the report can be confusing. For example, if you have an internal modem set up on COM3 using IRQ7, the IRQ Status table may list COM3 not detected on IRQ4, which is true, but may list IRQ7 as being used by LPT2, which may not exist.

In Windows 95, you can determine which IRQs and I/O addresses each COM port uses by running the Windows 95 **Control Panel** program, running the **System** applet, and selecting the **Device Manager** tab. Double-click on **Ports**, and then double-click on the port whose settings you want to determine. Click on the **Resources** tab. The IRQ and I/O address settings appear.

Changing IRQ and I/O Address Settings

To change IRQ settings in DOS, you generally need to set a jumper located on the serial port card. A jumper is a tiny piece of plastic with two metal-lined holes. The holes slip over two metal pins to close an electrical circuit. There are usually several sets of pins, and the set over which you slide the jumper determines which IRQ will be used. Sometimes the IRQ for each set of pins is labeled on the board, so it's easy to tell which IRQ you're choosing. If not, you will have to consult the documentation or contact the board's manufacturer.

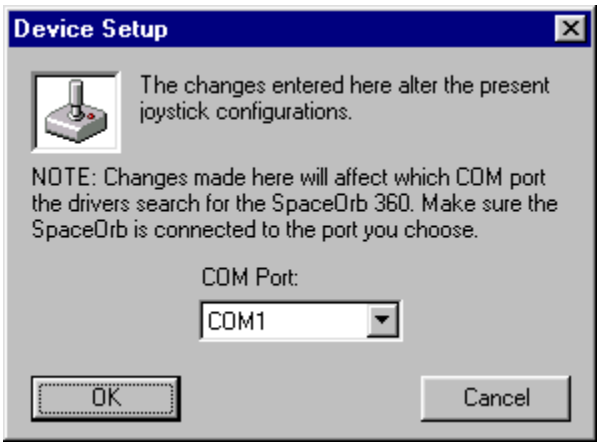
If the device whose IRQ you want to change is a Plug and Play device, you may be able to change its IRQ and I/O address through software. Please refer to your device's documentation to find out if this method will work for you.

For more information see Moving the COM Port.

Change COM Port

If move the SpaceOrb 360 to a different COM port, you must reset the SpaceOrb's COM port designation. To reset the COM port, follow these steps:

1. Open the SpaceOrb 360 Customizer (**Start > Programs > SpaceOrb 360 > Customizer** or double-click on the **SpaceOrb Monitor** icon in the task bar near the time).
2. Select the **Device** menu.
3. Choose **Setup** to get this dialog box:



4. Click on the Down Arrow in the COM Port drop-down list box and select the COM port to which you have moved the SpaceOrb.
5. Click **OK** to return to the Customizer window.
6. Click on **Save** to save the setting.

Low Power Resolution

On some low-power computers and laptops the SpaceOrb 360 can not be properly detected because these machines do not meet the COM port power requirements. The first thing you should try is push the **Reset** button.

To verify a low power condition once you can't move: remain in the game, unplug the SpaceOrb 360, and plug it in again. Can you now move with the SpaceOrb 360? If so, you are probably on the verge of supplying adequate power for a standard RS 232 (serial) COM port to the SpaceOrb 360.

If the problem persists, you can purchase a power adapter from Spacetec IMC Corporation. To order this from Spacetec, print this topic and use the order form below:

SpaceOrb 360 Power Adapter Order Form

Shipping Information:

Date: _____

Name: _____

Address:_____

Address:_____

City, State, and Zip Code:_____

- -

Order Information:

9V BATTERY ADAPTER

ORB-BA-1: QTY: _____ @ $8.50 $_____

AC (PLUG-IN) ADAPTER

ORB-AC-2: QTY: _____ @ $20.00 $_____

C.O.D. Fee (add $10.00) $_____

OUTSIDE USA (add $8.00) $_____

TOTAL $_____

- -

Payment Method: ___AMEX ___M/C ___VISA ___C.O.D. ___PREPAID

Credit Card Information:

Name: _____

Acct#: _____ exp _____

Phone#: _____

- -

Please enter the full name and address to which you want the adapter delivered. Select the kind of adapter. Complete the order cost. Check payment method.

If you are paying by credit card, please complete the credit card information section. Please fax the completed form to (978) 275-6200. If you are prepaying, please send the completed form together with your payment to:

Spacetec IMC Corporation
The Boott Mill
100 Foot of John Street
Lowell, MA 01852-1126

ATTN: Customer Service

BIOS Checking

WARNING

Altering the BIOS affects how a computer will run. Be very careful with the options you choose.

Altering BIOS settings incorrectly can result in system lockup or loss of data. Only someone with BIOS experience should modify BIOS settings if you determine you need to change the BIOS options to turn on a COM port.

Check to see if the COM ports are enabled on your computer. If a COM port is marked Disabled, you may have an internal modem that is using the settings normally assigned to that COM port. If you enable this COM port, make sure to set it to an IRQ and setting that will not conflict with your modem's current IRQ and setting.

SpaceOrb 360 and Mouse Share the Port

If you are using DOS only, you can use the SpaceOrb 360 and mouse on the same port. This method requires that you plug and unplug the devices when you want to exchange one for the other. While this method lets you use the SpaceOrb 360 right away and doesn't cost any money, it is awkward.

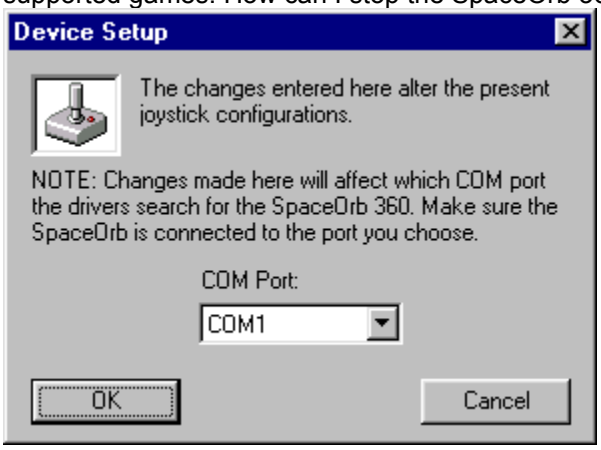
You can eliminate the need to plug and unplug the mouse and the SpaceOrb 360 by installing a switch box with which to select one device or the other.

COM 5 Card

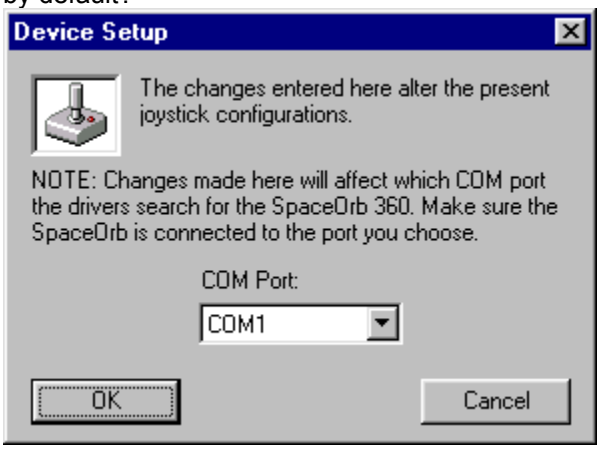
Spacetec IMC Corporation sells a COM 5 card that adds an additional COM port to your system. The COM 5 card supports addresses 238, 338, 2F8, and 3F8 with nine IRQ settings ranging from 2 to 15. This additional card enables you to configure the space Orb 360 on your system. To obtain the COM 5 card, call Technical Support.

FAQs About the DOS Driver

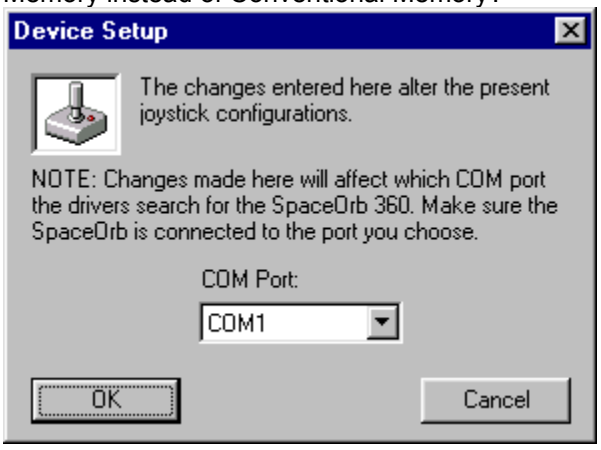
- When is the DOS driver loaded and why?
- What will happen if I remove the line containing **spaceorb.exe** from my **autoexec.bat** file?
- How can I unload the DOS driver from memory?
- I use the SpaceOrb 360 for several DOS games, but I want to use another controller for one of the supported games. How can I stop the SpaceOrb 360 from running in a single game?



- I want to use the SpaceOrb 360 for DOS games, but I don't want the DOS monitor loaded when my computer is turned on. How can I disable the DOS monitor by default?



- Is there a way to load the DOS driver into High Memory instead of Conventional Memory?



- Where is the DOS Game Launcher that was in previous versions of the SpaceOrb 360 software?

Technical Support

Spacetec IMC Corporation provides telephone technical support Monday through Friday 8:30 A.M. to 5:30 P.M. Eastern Standard Time. You can also check the Spacetec web site for technical information on the SpaceOrb 360.

TEL: (978) 970-0440

FAX: (978) 275-6200

If you have Internet access, you can send email or access the web site by clicking on the hotspots below:

Email: spaceorb@spacetec.com

Web: www.spaceorb.com

FTP: ftp://ftp.spacetec.com/pub/

If you send email, be sure to put **SpaceOrb 360** in the subject line.

Contacting Spacetec IMC over the Internet

Visit the Spacetec IMC Corporation web site to find the latest news and information about the SpaceOrb 360, new SpaceOrb 360-activated games, and upcoming events.

If you have Internet capabilities, you can connect to the Spacetec web site or send email by clicking on one of these hotspots:

Web site: www.spacetec.com

Email: spaceorb@spacetec.com

FTP: ftp://ftp.spacetec.com/pub/

If you send email, make sure you put **SpaceOrb 360** in the subject line.

This drop-down list displays a list of all games for the SpaceOrb 360, both the optimized games and any you have added.

Select this radio button if you want the Selected Game list to display all games optimized for use with the SpaceOrb 360.

Select this radio button if you want the Select Games list to display only those games that have been run since you installed the SpaceOrb 360 software.

Place a check in the box to the left of an action to reverse its direction.

This edit box displays any instructions that are specific to the game shown in the Select Game drop-down list box. If the game is one you have added, the Modify Game Instructions checkbox is active and you can add instructions for a game you have added.

Click on this button to create a configuration file for a non-optimized game. It opens a dialog box that will guide you through the process. Click on Add a New Game to see the step-by-step process.

Click here to see a list of actions that can be mapped to Button A on the SpaceOrb 360 for a DOS game. Button mapping for Windows 95 games is done from within the game. The Button Actions are grayed out for Windows 95 game configuration files.

Click here to see the list of actions that can be mapped to Button B on the SpaceOrb 360 for a DOS game. Button mapping for Windows 95 games is done from within the game. The Button Actions are grayed out for Windows 95 game configuration files.

Click here to see a list of actions that can be mapped to Button C on the SpaceOrb 360 for a DOS game. Button mapping for Windows 95 games is done from within the game. The Button Actions are grayed out for Windows 95 game configuration files.

Click here to see a list of actions that can be mapped to Button D on the SpaceOrb 360 for a DOS game. Button mapping for Windows 95 games is done from within the game. The Button Actions are grayed out for Windows 95 game configuration files.

Click here to see a list of actions that can be mapped to Button E on the SpaceOrb 360 for a DOS game. Button mapping for Windows 95 games is done from within the game. The Button Actions are grayed out for Windows 95 game configuration files.

Click here to see a list of actions that can be mapped to button F on the SpaceOrb 360 for a DOS game. Button mapping for Windows 95 games is done from within the game. The Button Actions are grayed out for Windows 95 game configuration files.

Click on this button to reset the currently displayed options to their default values.

Use this button if you are dissatisfied with the changes you made and want to return to the previously saved settings. You can then continue to customize the file if you wish.

Use this button to save the changes you made to the configuration file.

Click on this button to exit the SpaceOrb 360 Customizer.

Click on this first drop-down list to choose an action to map to the axis indicated by the line and arrow to the right of the edit box. The axis affected by this drop-down list box is highlighted.

Click on this second drop-down list to choose an action to map to the axis indicated by the line and arrow to the right of the edit box. The axis affected by this drop-down list box is highlighted.

Click on this third drop-down list to choose an action to map to the axis indicated by the line and arrow to the right of the edit box. The axis affected by this drop-down list box is highlighted.

Click on this fourth drop-down list to choose an action to map to the axis indicated by the line and arrow to the right of the edit box. The axis affected by this drop-down list box is highlighted.

Click on this fifth drop-down list to choose an action to map to the axis indicated by the line and arrow to the right of the edit box. The axis affected by this drop-down list box is highlighted.

Click on this sixth drop-down list to choose an action to map to the axis indicated by the line and arrow to the right of the edit box. The axis affected by this drop-down list box is highlighted.

Shows current sensitivity setting for the first action listed in Movement Control. Move the slider left to decrease sensitivity, right to increase it. The axis affected by the change is highlighted.

Shows current sensitivity setting for the second action listed in Movement Control. Move the slider left to decrease sensitivity, right to increase it. The axis affected by the change is highlighted.

Shows current sensitivity setting for the third action listed in Movement Control. Move the slider left to decrease sensitivity, right to increase it. The axis to which the movement and sensitivity are mapped is highlighted.

Shows current sensitivity setting for the fourth action listed in Movement Control. Move the slider left to decrease sensitivity, right to increase it. The axis affected by the change is highlighted.

Shows current sensitivity setting for the fifth action listed in Movement Control. Move the slider left to decrease sensitivity, right to increase it. The axis affected by the change is highlighted.

Shows current sensitivity setting for the sixth action listed in Movement Control. Move the slider left to decrease sensitivity, right to increase it. The axis affected by the change is highlighted.

Use this option to set the sensitivity for all movements listed in Movement Control. Move the slider left to decrease sensitivity, right to increase it.

Offers you three choices for skill level:

Basic - lower sensitivity, decreased acceleration, and a dampened rotational response

Full Freedom - increased sensitivity, faster acceleration, and easier top speeds

Game Master - most sensitive

This menu item brings up the dialog boxes to change global settings or remove a user added game, and an Exit option to leave the Customizer. See SpaceOrb 360 Customizer Menus for more information.

The Device menu offers a Setup option in which you can change the COM port for the SpaceOrb 360. For more information see SpaceOrb 360 Customizer Menus.

Help opens a topic giving step by step instructions for changing Orientation, Skill Level, Axis Mappings, Button Mappings (DOS games only), and Sensitivity settings.

Use these options to indicate how you would like to hold the SpaceOrb 360 while playing games. In the Vertical orientation, the Rapid Action Buttons C, D, E, and F face you; in the Horizontal orientation, they face the ceiling. In this graphic, the SpaceOrb 360 is in the Vertical position.

This graphic shows the SpaceOrb 360 in the selected orientation. The arrows on the PowerSensor ball indicate movements you make on the ball. They point to the axis arrows which indicate the direction of the resulting movement. The axis arrows and buttons are connected by lines to the actions mapped to them. When you make a change in the mappings, the affected axis is highlighted.

This graphic shows the SpaceOrb 360 in the selected orientation (vertical in this instance). The arrows on the PowerSensor ball indicate movements you make with the ball. The arrows on the PowerSensor ball point to the axis arrows which indicate the direction of the resulting movement. The axis arrows point to the slider which controls the sensitivity for that axis. When you make a change in the sensitivity, the affected axis is highlighted.

Click here to access help information specific to the active window (Motions/Actions or Sensitivity).

Advanced Troubleshooting Contents

Select one of the options below for assistance:

Troubleshooter

When you can't figure out what's wrong with your SpaceOrb 360 installation or you have a problem using the SpaceOrb 360 after installation, use this Troubleshooter. It will help you identify and resolve problems. Answer each question by clicking on the button for your answer. You will then proceed to the next question or solution.

Did the problem occur during installation or while you were playing a game?

{button ,JI(`sporb480.HLP',`Is_your_SpaceOrb_360_securely_plugged_in')} During installation

{button ,JI(`sporb480.HLP',`What_kind_of_game_are_you_trying_to_run')} While playing a game

Installing from Windows 95

1. Make sure the SpaceOrb 360 is plugged into an available COM port.
2. Insert the SpaceWare 4.8 for the SpaceOrb 360 software CD-ROM into your CD-ROM drive.
3. Click on **Start** in the task bar and select **Run**. Make sure D:\SETUP.EXE appears in the **Open:** edit box. If it does not, click on **Browse** and locate the SETUP.EXE file. When D:\SETUP.EXE appears in the **Open:** box, click on **OK** to begin the installation process. If you install from another drive, substitute that drive letter for D.
4. Answer all the screen prompts and *read all screen text*. Select all the defaults.
5. After Windows 95 Setup is complete, remove the CD-ROM from the drive, return it to its case, and store in a safe place.

Not sure what type of game

If you are not sure what type of game your game is, try the following:

- Check your game box for supported operating system.
- Restart your computer in MS-DOS mode. Try to run your game from your DOS command line. If it runs, it is a DOS game, otherwise it will tell you it requires Windows 95 to run.

Check in the Game Setup Guide (**Start > Programs > SpaceOrb360 > Game Setup Guide**) to see a list of currently supported Windows 95 and DOS games.

Game Configuration

Ÿ Check your buttons for your specific game to see that they are mapped the way you want them.

If it is a Windows 95 game, open the game and check the button mappings.

If it is a DOS game, use the SpaceOrb 360 Customizer (**Start > Programs > SpaceOrb 360 > Customizer** or double-click on the **SpaceOrb Monitor** icon in the task bar near the time) to make changes to the button mappings. See Change Button Functions for step by step instructions.

Ÿ Check to make sure the configuration file for your game contains the settings you think it has. If your game is an optimized game, you might try resetting all options to the default settings and rerunning your game.

In the SpaceOrb 360 Customizer, the **Reset to Default** button in the Motions/Actions window resets everything except the Orientation to the default values. In the Sensitivity window, the **Reset to Default** resets everything in that window to its default setting. Save the changes.

The game is configured incorrectly

Ask the following questions:

- Are you attempting to run the game without the SpaceOrb 360?
- Is your sound card configured correctly? Some games will not run unless the sound card is configured properly.
- Did you check your environment space? You may need to increase your environment space if you are running Windows 95.

If you need to increase your environmental space, follow these steps:

1. Right click on the icon you use to launch your DOS game (for example: Quake.exe).
2. In the Properties dialog box select the Memory tab.
3. In the Initial Environment pull-down, select 4096. This will increase the amoung of environment space available for your DOS game.

If you launch your DOS game from a DOS shortcut on your desktop, follow the instructions above but right-click on the DOS shortcut icon instead.

Problems running a Windows 95 game

Make sure Joystick is selected in the game as the Controller option in your game.

Make sure the SpaceOrb 360 is selected in your Joystick Properties dialog box in the Control Panel (**Start > Settings > Control Panel > Joystick**). If you have installed DirectX 5 on your system, you have a Game Controller in the Control Panel instead of a Joystick, follow the instructions in Control Panel Has a Game Controller, Not a Joystick if you need to make changes.

Check the Game Setup Guide (**Start > Programs > SpaceOrb 360 > Game Setup Guide**) or the Game Instuction box in the SpaceOrb 360 Customizer for any special instructions for setting up your game. Some games require you to configure the axes and buttons inside the game itself.

Is your SpaceOrb 360 securely plugged in?

{button ,JI(`sporb480.HLP',`Did_the_software_fail_to_auto_detect_the_SpaceOrb_360')} YES

{button ,JI(`sporb480.HLP',`SpaceOrb_360_is_NOT_plugged_in')} NO

SpaceOrb 360 is NOT plugged in

Plug the SpaceOrb 360 into an available COM port. Then reinstall the SpaceWare 4.8 for the SpaceOrb 360 software.

Reinstalling the SpaceOrb 360 Software

If you need to reinstall the software, follow these steps:

1. Plug the SpaceOrb 360 into an available COM port.
2. Insert the SpaceWare 4.8 for the SpaceOrb 360 software CD-ROM into your CD-ROM drive.
3. Click on **Start** in the task bar and select **Run**. Make sure D:\SETUP.EXE appears in the **Open:** edit box. If it does not, click on **Browse** and locate the SETUP.EXE file. When D:\SETUP.EXE appears in the **Open:** box, click on **OK** to begin the installation process. If you install from another drive, substitute that drive letter for D.
4. Answer all the screen prompts and *read all screen text*. Select all the defaults.
5. After Windows 95 Setup is complete, remove the CD-ROM from the drive, return it to its case, and store in a safe place.

SpaceOrb 360 has been detected but the Joystick Properties dialog box says the SpaceOrb 360 is not correctly connected

It is possible to temporarily lose access to your COM port after multiple installations of SpaceWare 4.8 for the SpaceOrb 360 software or if other windows were open during your installation. To remedy this situation, reboot your computer.

The SpaceOrb 360 can only be connected to ONE joystick at a time. Check Joystick Properties (**Start > Settings > Control Panel > Joystick** icon) first to make sure the SpaceOrb 360 has not been connected to any other joysticks:

1. Select each joystick (1 - 16) and see if SpaceOrb 360 is selected for any joystick other than Joystick 1.
2. Remove any duplicate settings for the SpaceOrb 360.

Note:
If you have installed DirectX 5 on your system, you will have a Game Controller in the Control Panel instead of a Joystick. Follow the steps in Control Panel Has a Game Controller, Not a Joystick if you need to make changes.

COM Port Conflict Resolution

These resolutions assume that your SpaceOrb 360 was plugged in during SpaceWare 4.8 for the SpaceOrb 360 software installation. If it was not, please plug in the SpaceOrb 360 and reinstall the software.

A COM port conflict exists when a COM port is either configured incorrectly, used by another device, shares resources, or is disabled. Resolving a COM port conflict is a matter of adjusting the present COM port configuration, removing devices, or adding additional COM ports to your system.

To solve the conflict, try the Windows 95 solutions first. If you still have a conflict, try the DOS solutions.

Moving Problems

If you have problems moving with the SpaceOrb 360, find your problem in the list below and click on the button to the left of the problem for possible solutions:

{button ,JI(`sporb480.HLP',`Can_t_move_in_the_direction_I_want')} I can't move in the direction I want.

{button ,JI(`sporb480.HLP',`Moving_too_fast_out_of_control')} I am moving too fast; I am out of control.

{button ,JI(`sporb480.HLP',`Can_t_move_but_can_fire')} I can't move but I can fire.

{button ,JI(`sporb480.HLP',`Can_t_move_at_all')} I can't move at all.

{button ,JI(`sporb480.HLP',`My_hand_gets_tired')} My hand gets tired.

Technical Problems

To find out more about the problems listed below, click on the button to the left of the statement.

{button ,JI(`sporb480.HLP',`Out_of_Memory')} The message **Out of Memory** appeared.

{button ,JI(`sporb480.HLP',`New_Hardware_Found_dialog_box_appeared')} The **New Hardware Found** dialog box appeared.

{button ,JI(`sporb480.HLP',`Did_the_SpaceOrb_360_Move_Anything_in_the_DOS_Game?')} I tried to play a DOS 3D game and the SpaceOrb 360 doesn't work in it.

{button ,JI(`sporb480.HLP',`Not_Working_Now')} My SpaceOrb 360 doesn't work or was working and is now not responding.

{button ,JI(`sporb480.HLP',`Drifting')} Drifting occurs on screen without my touching the PowerSensor.

{button ,JI(`sporb480.HLP',`Doesn_t_Move_the_Way_I_Think_It_Should')} I played a Windows 95 game, but the SpaceOrb 360 doesn't seem to move the way I think it should.

{button ,JI(`sporb480.HLP',`Joystick_Not_Connected_Correctly')} I configured my SpaceOrb 360 to the appropriate COM port, but Windows 95 still says my joystick is not connected properly.

{button ,JI(`sporb480.HLP',`SpaceOrb_360_not_detected_please_select_a_COM_port')} The message **SpaceOrb 360 not detected, please select a COM port** appeared.

{button ,JI(`sporb480.HLP',`You_Have_Limited_Available_COM_Ports')} You have limited available COM ports.

{button ,JI(`sporb480.HLP',`Moved_SpaceOrb_360_to_a_Different_COM_Port')} I moved my SpaceOrb 360 to a different COM port and now it doesn't work.

{button ,JI(`sporb480.HLP',`During_Setup_you_got_a_message_that_you_didn_t_have_a_Microsoft_Joystick_Driver')} During Setup you get a message that you do not have a Microsoft Joystick driver.

Technical Notes

Error Messages

Can't move in the direction I want

Ÿ Make sure you are trying to move the way you were taught in the Interactive Trainer for Windows 95.

Ÿ Press the **Reset** button. Be sure to release the PowerSensor ball before you do.

Ÿ Light fingertip pressure is all you need to move or spin.

Ÿ Make sure your fingers are in the correct positions.

Ÿ Check the Orientation; you could be holding the SpaceOrb the wrong way.

Ÿ If you are moving in a direction opposite to what you intend, open the Customizer, select the Motions/Actions tab and put a check in the box to the left of the action whose direction you want to reverse.

Ÿ Not all games support every motion that the SpaceOrb 360 allows. Make sure the motion you want is supported by the game.

Ÿ For non-optimized Windows 95 games, the SpaceOrb 360 uses a default configuration file. You may need to change the settings. For information on creating a customized configuration file for your game, see:

Using the SpaceOrb 360 Customizer
Add a New Game

Moving too fast; out of control!

Ÿ Apply less pressure to the PowerSensor. You'll move or spin slower, with better control.

Ÿ Open the SpaceOrb 360 Customizer (**Start > Programs > SpaceOrb 360 > SpaceOrb 360 Customizer** or double-click on the **SpaceOrb Monitor** icon in the task bar near the time), make sure your game is selected in the Select Game list box, select the Sensitivity tab and try one or more of these adjustments:

- Try the Basic skill level setting. See Change the Skill Level for more information.
- Adjust the Master Sensitivity Slider in the Customizer by moving the slider to the left to decrease the sensitivity of the SpaceOrb 360 for all actions in the game.
- Adjust individual sliders to change the sensitivity of the actions of the selected game. See Change the Sensitivity for step by step instructions.

Can't move, but can fire

Ÿ Unplug the SpaceOrb 360 and plug it in again.

Ÿ You may have a power problem.

Ÿ Call Technical Support.

Can't move at all

Ÿ Did you accidentally perform a move not supported in your game? If it's not supported and you attempt it, you may not move at all. Check the information about your game in the Game Instruction box in the SpaceOrb 360 Customizer (**Start > Programs > SpaceOrb 360 > SpaceOrb 360 Customizer** or double-click on the **SpaceOrb Monitor** icon in the task bar near the time).

Ÿ Make sure you are holding the SpaceOrb 360 in the appropriate orientation.

Ÿ Try exiting the game and then loading it again.

Ÿ Refer to the Troubleshooter.

My hand gets tired

Ÿ Light fingertip pressure is all you need on the PowerSensor to move fast.

Ÿ Relax your grip on the SpaceOrb 360 base.

Ÿ Open the SpaceOrb 360 Customizer (**Start > Programs > SpaceOrb 360 > SpaceOrb 360 Customizer** or double-click on the **SpaceOrb Monitor** icon in the task bar near the time), make sure your game is selected in the Select Game list box, select the Sensitivity tab and try one or more of these adjustments:

- Choose a higher Skill Level
- Adjust the Master Sensitivity Slider by moving the slider to the right to increase the sensitivity of the SpaceOrb 360 for all actions in the game
- Adjust individual sliders to change the sensitivity of the actions of the selected game. See Change the Sensitivity for step by step instructions

autoexec.bat file too long

I got a message that a line in my **autoexec.bat** file was too long.

Edit your **autoexec.bat** file and remove any directories that you no longer use from the **Path** line until you have enough room to add the **\spcware** directory.

WARNING:

DO NOT remove any Windows 95 directories.

Out of Memory

The message **Out of Memory** appeared.

You need a **device=c:\windows\emm386.exe** statement in your **config.sys** file. See Memory Management for more information and instructions on how to use EMM.

New Hardware Found dialog box appeared

1. When the dialog box (Select which driver you want to install for your new hardware) appears, select **Driver from disk provided by hardware manufacturer**.
2. On the Install From Disk dialog box, select your CD-ROM drive.
3. On the Select Device dialog box, select **Spacetec SpaceOrb 360**.
4. On the Copying Files dialog box, click on **OK**.

Not Working Now

My SpaceOrb 360 does not work or was working and is now not responding.

- Try out the Troubleshooter.
- Make sure the SpaceOrb 360 cable is securely plugged into your computer's COM port.
- For a Windows 95 game, make sure the SpaceOrb 360 is selected in Windows 95 as a joystick and that the SpaceOrb 360 is selected in your game. If you have installed DirectX 5 on your system, you will have a Game Controller in the Control Panel instead of a Joystick. Follow the instructions in Control Panel Has a Game Controller, Not a Joystick if you need to make changes.

Drifting

Drifting occurs on screen without my touching the PowerSensor.

Press the **Reset** button (located on the underside of the base). Make sure that nothing is touching the PowerSensor when you press this button. Make sure you are holding the SpaceOrb 360 in the right orientation.

SpaceOrb 360 doesn't work in this game

Ÿ Not all DOS games are supported. Check the SpaceOrb web site for a list of supported games and their drivers.

Ÿ Read the Readme file that came with your game for special settings.

If you have Internet access, you can send email or access the SpaceOrb web site by clicking on the hotspots below:

Email: spaceorb@spacetec.com

Web: www.spaceorb.com

FTP: ftp://ftp.spacetec.com/pub/

Doesn't Move the Way I Think It Should

I played a Windows 95 game, but the SpaceOrb 360 doesn't seem to move the way I think it should.

Check in the Game Setup Guide to see if you game has been configured (optimized) by Spacetec IMC. If your game does not appear on the list and it is a Windows 95 Game, it is using a default configuration file as a source of the settings for the SpaceOrb 360.

To improve the game play, you can:

- Check the Spacetec web site to see if a configuration file is available for your game.
- Create a customized default configuration file for the SpaceOrb 360 in the SpaceOrb 360 Customizer. Follow the steps in Add a New Game to create a customized configuration file for your game.

If you have Internet access, you can send email or access the Spacetec web site by clicking on the hotspots below:

Email: spaceorb@spacetec.com

Web: www.spaceorb.com

FTP: ftp://ftp.spacetec.com/pub/

If you send email, be sure to put **SpaceOrb 360** in the subject line.

Joystick Not Connected Correctly

I configured my SpaceOrb 360 to the appropriate COM port, but Windows 95 still says my joystick is not connected properly.

- It is possible to temporarily lose access to your COM port after multiple SpaceWare 4.8 for the SpaceOrb 360 software installations or if other windows were open during your installation. To remedy this situation, reboot your computer.
- The SpaceOrb 360 can only be connected to ONE joystick at a time. Check the Joystick Properties dialog box (**Start > Settings > Control Panel > Joystick**) first to make sure the SpaceOrb 360 has not been connected to any other joysticks:
    1. Select each joystick (1 - 16) and see if SpaceOrb 360 is selected for any joystick other than Joystick 1.
    2. Remove any duplicate settings for the SpaceOrb 360.

    If you have installed DirectX 5 on your system, follow the instructions in Control Panel Has a Game Controller, Not a Joystick to make changes.

You Have Limited Available COM Ports

The SpaceOrb 360 Mouse Driver lets you use the SpaceOrb as a mouse device with most mouse-supported DOS applications and games.

It is possible to add a COM port to your system. See the information in COM 5 Card.

SpaceOrb 360 not detected, please select a COM port

The message **SpaceOrb 360 not detected, please select a COM port** appeared.

Make sure the SpaceOrb 360 is properly connected to your computer. If it is not, please plug in the SpaceOrb 360 and reinstall the software.

If your SpaceOrb 360 is properly connected to your computer, you probably have a COM port conflict. This is the most frequent reason for failure to detect the SpaceOrb 360. A COM port conflict exists when a COM port is either:

- Configured incorrectly
- Used by another device
- Sharing resources
- Disabled

To resolve a COM port conflict you need to adjust the present COM port configuration, remove a device, or add a COM port to your system. Click on one of the links below for more information:

- Resolve the COM Port conflict in Windows 95 solutions or DOS solutions.
- Purchase a COM 5 card from Spacetec IMC to alleviate the COM port conflicts.
- Contact Technical Support at 978-970-0440.

To close the **SpaceOrb 360 not detected, please select a COM port** message box, click on the  . Once you click on the

 the rest of the software will install onto your system.

Please be aware that until the COM port conflict is resolved the SpaceOrb 360 will not function on your system. The Advanced button will provide more information about the IRQs of your system.

Moved SpaceOrb 360 to a Different COM Port

I moved my SpaceOrb 360 to a different COM port and now it doesn't work.

Open the SpaceOrb 360 Customizer (**Start > Programs > SpaceOrb 360 > Customizer** or double-click on the SpaceOrb Monitor in the task bar near the time) and follow these steps:

1. From the **Device** menu, select **Setup**.
2. Click on the COM Port drop-down list box and select the COM port to which you moved the SpaceOrb 360.
3. Click on **OK** to close the Device Setup dialog box.
4. Click on **Exit** to close the Customizer.

For more information about changing COM ports, see Moving the COM Port.

Joystick was not turned on in the game

If the SpaceOrb 360 works in other games but not in the one you are trying to run, make sure you selected the SpaceOrb 360 as the Joystick (or the Game Controller if you system is using DirectX 5) in the Control Panel and that the Joystick is turned on inside the game. One of the menu options (this varies from game to game) should bring up a dialog box in which you can choose the Joystick as the controller for playing the game.

See the Game Setup Guide (**Start > Programs > SpaceOrb360 > Game Setup Guide**) for individual game setup instructions.

Windows 95 game does not support direct input

There are some Windows 95 games that do not support any direct input from a playing device. This game could be one of them.

The SpaceOrb is not selected as a joystick in the Control Panel

To use the SpaceOrb 360 as the game controller, it must be selected as the Joystick in the Control Panel. To select it, follow these steps:

1. Click on **Start** in the task bar and choose **Settings > Control Panel**.
2. Click on the **Joystick** icon.
3. Select **Joystick 1** in the Current Joystick drop-down list box.
4. In the Joystick Configuration box, click on the down arrow in the drop-down list box and select **Spacetec SpaceOrb 360** from the list of available joysticks.
5. Click on **OK** to close the Control Panel.

Note:
If you have DirectX 5 installed on your system, see Control Panel Has a Game Controller, Not a Joystick for instructions.

Game Configuration File

If the game you are running is an optimized game and does not function as desired, try the following:

- Check the Game Instruction box in the SpaceOrb 360 Customizer to see if there are special setup parameters.
- Check to make sure the sensitivity settings are not set to the slowest setting in the Customizer.
- Check the Movement Controls in the Customizer to verify the motions are mapped to the correct axes.

If you have Internet capabilities, you can connect to the Spacetec IMC Corporation web site by clicking on one of these hotspots:

Web: www.spaceorb.com

Email: spaceorb@spacetec.com

FTP: ftp://ftp.spacetec.com/pub/

If you send email, be sure to put **SpaceOrb 360** in the subject line.

The game is not a Windows 95 optimized game

If the game is not an optimized Windows 95 game (not supported by the Spacetec software), the SpaceOrb 360 uses a default configuration file for the game. Check the Spacetec web site to see if there is a configuration file for your game. If there is none, see Non-optimized Games for information on how to create a customized configuration file for your game.

If you have Internet access, you can send email or access the Spacetec web site by clicking on the hotspots below:

Email: spaceorb@spacetec.com

Web: www.spaceorb.com

FTP: ftp://ftp.spacetec.com/pub/

If you send email, be sure to put **SpaceOrb 360** in the subject line.

Did the software fail to auto-detect the SpaceOrb 360?

{button ,JI(`sporb480.HLP',`COM_Port_Conflict_Resolution')} YES

{button ,JI(`sporb480.HLP',`Did_the_Joystick_Properties_dialog_box_say_Not_correctly_connected')} NO

Did the SpaceOrb 360 move anything in the Windows 95 game?

{button ,JI(`sporb480.HLP',`Is_the_game_a_Spacetec_optimized_game')} YES

{button ,JI(`sporb480.HLP',`Did_you_turn_on_the_Joystick_inside_your_game')} NO

Is the game a Spacetec optimized game?

If you aren't sure if it is a Spacetec optimized game, you can check by looking in the Game Setup Guide which contains a complete list of optimized games at the time this help file was created.

{button ,JI(`sporb480.HLP',`Did_you_rerun_the_game')} YES

{button ,JI(`sporb480.HLP',`Non_optimized_Games')} NO

Did you rerun the game?

{button ,JI(`sporb480.HLP',`Game_Configuration_File')} YES

{button ,JI(`sporb480.HLP',`Rerun_the_game')} NO

Rerun the game

Close the game and then rerun it. Sometimes the SpaceOrb software needs to initialize the game the first time it is opened.

Did you turn on the Joystick inside your game?

{button ,JI(`sporb480.HLP',`The_SpaceOrb_is_not_selected_as_a_joystick_in_the_Control_Panel')}
YES

{button ,JI(`sporb480.HLP',`Joystick_was_not_turned_on_in_the_game')} NO

Could you shoot but not move?

{button ,JI(`sporb480.HLP',`Low_Power_Resolution')} YES

{button ,JI(`sporb480.HLP',`Game_Configuration_File')} NO

Did the Joystick Properties dialog box say "Not correctly connected"?

{button ,JI(`sporb480.HLP',`SpaceOrb_360_has_been_detected_but_the_Joystick Properties_dialog_box_says_the_SpaceOrb_360_is_not_correctly_connected')} YES

{button ,JI(`sporb480.HLP',`What_kind_of_game_are_you_trying_to_run')} NO

What kind of game are you trying to run?

{button ,JI(`sporb480.HLP',`Did_the_SpaceOrb_360_Move_Anything_in_the_DOS_Game?')} DOS Game

{button ,JI(`sporb480.HLP',`Did_the_SpaceOrb_360_move_anything_in_the_Windows_95_game')} Windows 95 Game

{button ,JI(`sporb480.HLP',`Not_sure_what_type_of_game')} Don't Know

During Setup you got a message that you didn't have a Microsoft Joystick Driver

Make sure your version of Windows 95 is set up to handle joysticks. Go to the Windows 95 **Start > Settings > Control Panel**. If you cannot find a Joystick icon in the window that appears, you need to load it.

Follow these steps to load the Microsoft Windows 95 joystick driver:

1. Go to the Windows 95 **Start > Settings > Control Panel** and double-click the **Add New Hardware** icon.
2. Click on the **Next** button when the opening screen appears.
3. Select **No** when asked if you want to search for new hardware and then click on **Next**.
4. Select **Sound, video, and game controllers** and click on **Next**.
5. Select **Microsoft** as the manufacturer, **Gameport Joystick**, and click on **Next**.
6. Click on **Next** again and then **Finish**.

Use this section to change the skill level for your game. Choose one of the following that best meets your needs:

Basic - lower sensitivity, decreased acceleration, and a dampened rotational response

Full Freedom - increased sensitivity, faster acceleration, and easier top speeds

Game Master - most sensitive

The three skill levels:

Basic - lower sensitivity, decreased acceleration, and a dampened rotational response

Full Freedom - increased sensitivity, faster acceleration, and easier top speeds

Game Master - most sensitive

Control Panel Has a Game Controller, Not a Joystick

If you have installed DirectX 5 (Direct Input 5.0) your Control Panel will have a Game Controller instead of a Joystick.

If your Control Panel has a Game Controller, follow these steps to add or change the Game Controller:

1. Click on the **Game Controllers** icon to open the Game Controllers dialog box.
2. Select the **Advanced** tab. This window lists game controllers by the Controller ID.
3. Highlight the Controller ID #1 and click on **Change**. The SpaceOrb 360 must be assigned to Controller #1.
4. Select the **Spacetec SpaceOrb 360** from the list of Game Controllers and click on **OK**.
5. Select the General tab and make sure the Spacetec SpaceOrb 360 is listed in the first position and that the Status column contain an OK. If you want to check to make sure the SpaceOrb is working correctly, click on the **Text** button.
6. Click on **OK** to exit the Games Controller dialog box.

Non-supported DOS Games

The SpaceOrb 360 will only work with supported games. If you are not sure yours is a supported game, open the SpaceOrb 360 Customizer to see a list of supported games.

Enabling the DOS Monitor

You can enable the DOS monitor by typing the following command from the **spcware** directory:
`spaceorb /e`

Adding spaceorb.exe to the autoexec.bat File

The SpaceOrb 360 software v4.8 installation program should have added a line in your **autoexec.bat** file that would run the **spaceorb.exe** in the **spcware** directory. The line should look like:

```
C:\SPCWARE\SPACEORB.EXE
```

or

```
C:\PROGRA~1\SPACEORB.EXE
```

If the line is not there, add one containing **`spaceorb.exe`** along with the path to your **spcware** directory. Reboot your computer and the DOS driver should load properly.

Does Your autoexec.bat File Contain spaceorb.exe?

Your **autoexec.bat** file should have a line that contains **spaceorb.exe**. Does it?

{button ,JI(`sporb480.HLP',`Technical_Support')} YES

{button ,JI(`sporb480.HLP',`Adding_spaceorb.exe_to_the_autoexec.bat_File')} NO

Is the DOS Driver Running?

The DOS driver should be running. If you aren't sure, you can check by typing the following command from the **spcware** directory: **`spaceorb /i`**

{button ,JI(`sporb480.HLP',`Is_the_DOS_Monitor_Enabled?')} Running

{button ,JI(`sporb480.HLP',`Does_Your_autoexec.bat_File_Contain_spaceorb.exe?')} Not Running

Is the DOS Monitor Enabled?

If you aren't sure the monitor is enabled, type the following command from the **spcware** directory:
`spaceorb`

{button ,JI(`sporb480.HLP',`Technical_Support')} Enabled

{button ,JI(`sporb480.HLP',`Enabling_the_DOS_Monitor')} Not Enabled

Did the Splash Screen Appear?

Did the Splash screen appear immediately before the game started?

{button ,JI(`sporb480.HLP',`Check_Game_Instructions')} YES

{button ,JI(`sporb480.HLP',`Is_the_DOS_Driver_Running?')} NO

The Splash screen is similar to the following:

SpaceOrb 360 Driver/Monitor Copyright 1997-1998
Version 4.8 (1.0) Spacetec IMC Corporation
Current devices: Device 0: (defined by Windows 95)

Interrupt Vector: 0x69
Defined Devices: 1
Available Devices: 1
Monitor: Enabled
Mouse Emulation: Off

Check Game Instructions

Check the game instructions in the SpaceOrb 360 Customizer to see if there are special instructions for running your game. Did that solve the problem?

{button ,JI(`sporb480.HLP',`Technical_Support')} NO

If your game is not listed in the SpaceOrb 360 Customizer Select Games list, it is not a supported game and will not work with the SpaceOrb 360.

Is the Game a Supported Game?

If you are unsure whether or not your game is a supported game, open the SpaceOrb 360 Customizer and check the Select Games list for the name of your game.

{button ,JI(`sporb480.HLP',`Did_the_Splash_Screen_Appear?')} Supported

{button ,JI(`sporb480.HLP',`Non-supported_DOS_Games')} Not Supported.

Do the SpaceOrb 360 Buttons do Anything in the Game?

{button ,JI(`sporb480.HLP',`Are_You_Playing_the_Game_in_a_DOS_Window_or_in_Windows_95?')} YES

{button ,JI(`sporb480.HLP',`Is_the_Game_a_Supported_Game?')} NO

Are You Playing the Game in DOS Mode or in Windows 95?

{button ,JI(`sporb480.HLP',`Low_Power_Resolution')} Windows 95

{button ,JI(`sporb480.HLP',`Low_Power')} DOS Mode

Low Power

You may be experiencing a brownout. Hold the reset button for 3 seconds and release it. If that did not remedy the problem, see Low Power Resolution.

Did the SpaceOrb 360 Move Anything in the DOS Game?

{button ,JI(`sporb480.HLP',`Game_Configuration_File')} YES

{button ,JI(`sporb480.HLP',`Do_the_SpaceOrb_360_Buttons_do_Anything_in_the_Game?')} NO

During Setup you got a message that you didn't have a Microsoft # Joystick Driver

Make sure your version of Windows 95 is set up to handle joysticks. Go to the Windows 95 **Start>Settings>Control Panel**. If you cannot find a Joystick icon in the window that appears, you need to load it.

Follow these steps to load the Microsoft Windows 95 joystick driver:

1. Go to the Windows 95 **Start>Settings>Control Panel** and double-click the **Add New Hardware** icon.
2. Click on the **Next** button when the opening screen appears.
3. Select **No** when asked if you want to search for new hardware and then click on **Next**.
4. Select **Sound, video, and game controllers** and click on **Next**.
5. Select **Microsoft** as the manufacturer, **Gameport Joystick**, and click on **Next**.
6. Click on **Next** again and then **Finish**.

Beta Release

This information will be provided in the final release.

The install program adds a line to your **autoexec.bat** file usually located at the root of your **C**: drive. The line added runs a program named **spaceorb.exe**. This loads the TSR (Terminate Stay Resident) driver before Windows 95 is started. This enables you to use the SpaceOrb 360 with supported DOS games with no additional steps. You can just run the game and the TSR will automatically configure the game and SpaceOrb 360 for that game.

Note:
The SpaceOrb 360 DOS driver must be loaded before Windows 95 is started.

You will be unable to use your SpaceOrb 360 with DOS games. The driver is designed to be loaded before Windows 95 is started. By removing that line from your **autoexec.bat** file, you will free up 33K of conventional memory but you will loose support for DOS games. If you remove this line from your **autoexec.bat** file, the driver will remain in memory until you reboot your computer.

Note:
Removing this line from your **autoexec.bat** file will not affect the SpaceOrb 360 in Windows 95 games.

Remove the line containing **spaceorb.exe** from the **autoexec.bat** file and reboot your computer. After you reboot your computer you will not be able to use the SpaceOrb 360 with any DOS game. Windows 95 games will be unaffected by this.

Before running the game, you can disable the SpaceOrb 360 DOS Monitor (the functionality of the SpaceOrb 360 DOS driver that detects DOS game starts) by typing the following command from the **spcware** directory: **`spaceorb /d`**

This disables the DOS Monitor for any game you run after typing the command. You can then run the game as you normally would.

To re-enable the DOS Monitor, type the following command from the **spcware** directory:
`spaceorb /e`

You can disable the DOS monitor by default by editing the line in your **autoexec.bat** file that contains **spaceorb.exe**. By adding **/d** to the end of the **spaceorb.exe** line, you can disable the DOS monitor.

For example:

```
C:\SPCWARE\SPACEORB.EXE /d
```

or

```
C:\PROGRA~1\SPACEORB.EXE /d
```

No.

It's no longer needed. The DOS driver has a built-in monitor that automatically supports DOS games. To run a supported game with the SpaceOrb 360, simply run the game.

Shows the version number of the currently loaded game configuration file.