

GrIP-Key makes games with lots of keyboard commands easier and more fun to play with your GamePad Pro.

The GrIPKey software allows you to assign keyboard commands to buttons on any GrIP-compatible game controller. You can save button definitions for up to 4 GrIP controllers in a control file called a *keyset* (or *set*) for each of your games.

While the GrIPKey software requires Windows™ 95, you can use the completed GrIPKey sets (including all the included preconfigured sets) with DOS games as well.

The Gravis Interface Protocol (GrIP) allows high-speed, two-way communication between your game and game controller through a standard PC game port. What does that mean? GrIP technology makes possible things such as automatic calibration, an unlimited number of controllers with an unlimited number of buttons and axes (6 degrees of freedom), force feedback, and more.

Your GamePad Pro includes a built-in Y-cable that allows you to connect two GamePad Pro pads to your standard game port. The GamePad Pro's GrIP capabilities allow each player to use as many as 10 independent buttons (depending on the number of buttons the game supports). Because of the basic limitations of the PC game port, standard joysticks and game pads support only 4 buttons' 2 buttons per player in a two-player setup. With GamePad Pro, you and a friend get 10 buttons *each*.

If you own a Gravis MultiPort, and purchase adapters for your GamePad Pro pads, you can connect as many as 4 GamePad Pro pads at once (or any combination of GamePad Pro pads and standard GrIP-Pads). In that case, each of four players can use up to 10 independent buttons. And the task of reading two GamePad Pro pads through the standard game port, or four GamePad Pro pads through a MultiPort, use 1\_5% of the CPU cycle time (compared to 12-14% for a standard joystick or game pad), allowing your games to operate at full speed.

As developers have tried to add more players, dimensions, and special functions to their games, they have been limited by the capabilities of the standard PC game port. Console game developers who port their games over to the PC have had to strip multi-player, multi-button features from the games to make them playable on the PC.

With the introduction of GrIP technology, all that has changed. GrIP allows developers to port arcade and console titles to the PC in their original format - not stripped down to accommodate the limitations of the PC game port.

Gravis has worked hard to ensure that every major game developer in the world has the tools to incorporate GrIP support into their games, and we've made it very easy to do. Because of that, GrIP support is now included in many popular new action and fighting titles for DOS, and support for Gravis GrIP is built into Windows 95 DirectInput.

Use GrIP Mode in Windows 95 and with any game that supports Gravis GrIP. This includes every Windows 95 DirectInput<sup>a</sup> game and a large selection of newer DOS games.

Also use GrIP mode any time you use a GrIPKey control set for keyboard emulation (for keyboard-controlled games).

With the GamePad Pro in GrIP Mode, you can use GrIPKey to assign keyboard commands to the GamePad's buttons and directional pad. Any game that has a lot of keyboard commands will be more fun - and easier to play - with the GamePad Pro.

The GrIPKey software requires Windows 95 (you need this software to create your own game control "set" files), but you can use the included preconfigured game control sets - and any new sets you create using GrIPKey - with any DOS or Windows 95 game by loading the GrIPKey set from the DOS command prompt using **GKLOAD**.

### **Enabling/Disabling Keyboard Emulation**

You can enable and disable Keyboard Emulation by clicking the Keyboard Emulation button on GrIPKey's [main toolbar](#) or using the GrIP Control Center task bar utility ([GCC](#)), in Windows 95.

Double-click the GrIPKey icon.

**1.Finding the Game's Keyboard Commands**

**2.Creating or Editing a GrIPKey Keyset**

**3.Entering a Game's Keyboard Commands**

**4.Assigning Game Commands to the GrIP Controller**

**5.Configuring the GrIP Controller**

**6.Printing a Reference Template**

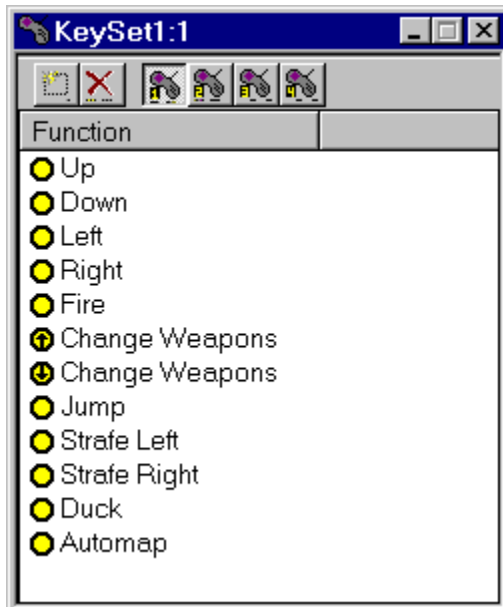
**7.Setting Up the Game for Keyboard Emulation**

**8.Playing the Game**

Look in your game's setup or manual for the keyboard commands used in the game.



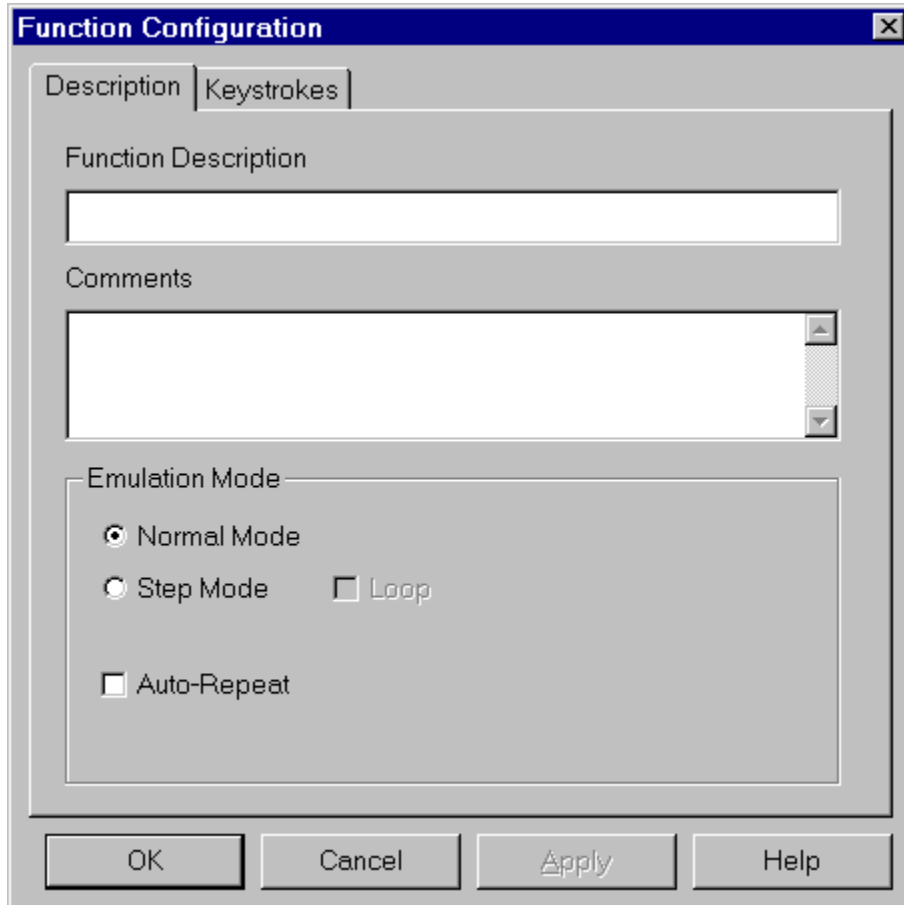
Click the New button, or choose File–New to open a new [Keyset window](#), where you can create and store a list of game commands.





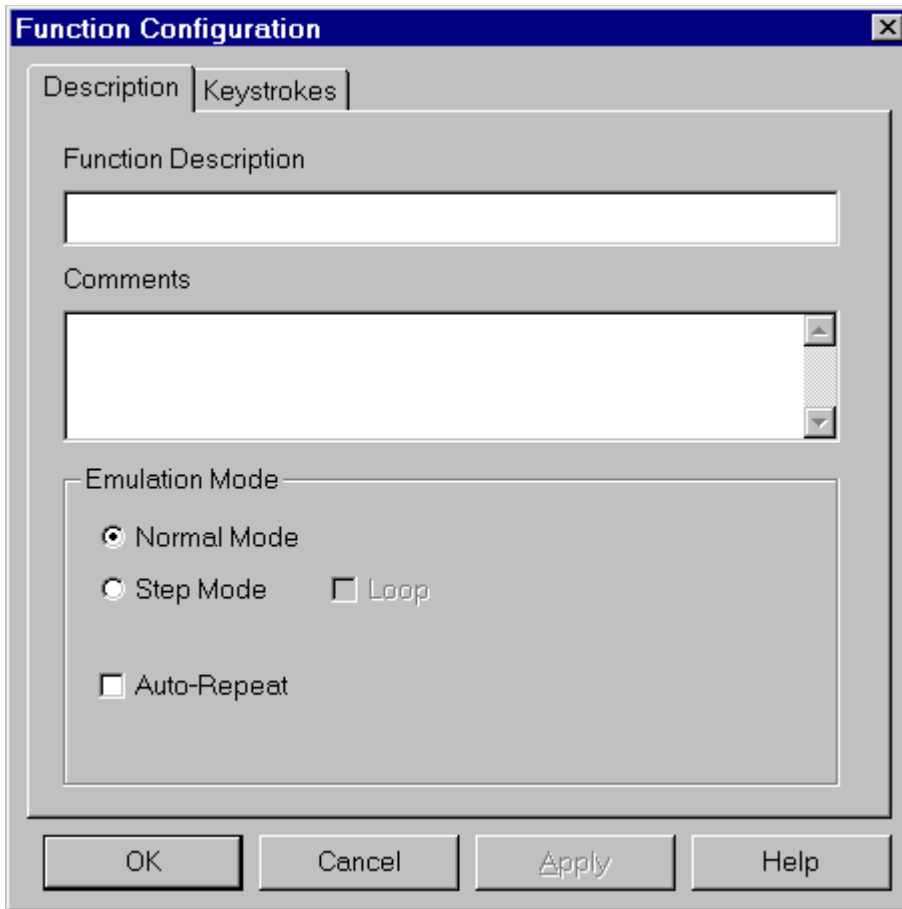
To enter the game's keyboard commands:

1. Click the Add New Function button in the [Keyset window](#). The [Function Configuration window](#) opens.



The image shows a 'Function Configuration' dialog box with a blue title bar and a close button. It has two tabs: 'Description' and 'Keystrokes', with 'Keystrokes' selected. The 'Description' tab contains a 'Function Description' text field and a 'Comments' text area. Below these is an 'Emulation Mode' section with three radio buttons: 'Normal Mode' (selected), 'Step Mode', and 'Auto-Repeat'. There are also two checkboxes: 'Loop' (next to Step Mode) and 'Auto-Repeat' (next to Auto-Repeat). At the bottom are four buttons: 'OK', 'Cancel', 'Apply', and 'Help'.

2. Type a description in the Function Description field.
3. Choose [Normal](#) or [Step](#) mode.  
If you selected Step, select [Loop](#) if you wish the keystroke string to repeat. (See example at left.)  
Select [Auto Repeat](#) if you wish a Normal keystroke string to repeat (for a turbo-fire effect).
4. Select the Keystroke tab.



For a Normal mode entry, enter a key or series of keys in the Press String field. If you wish, you can enter a second key or series of keys in the Release String field to be performed when you release the button.

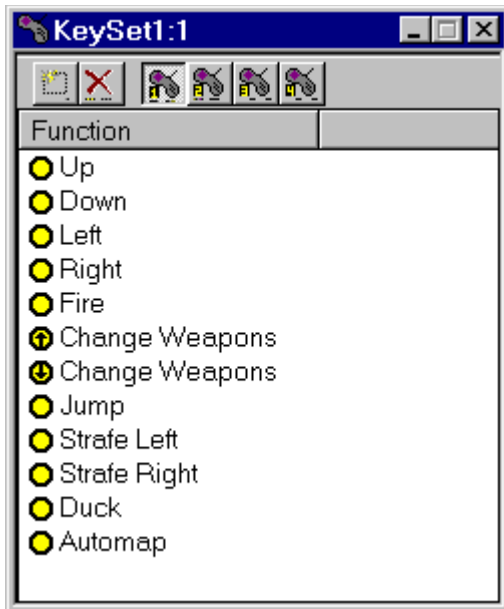
For a Step mode entry, click the Add New Step String button and enter a key or series of keys in the Enter Step String dialog. Repeat these steps for each game command in the Step series.

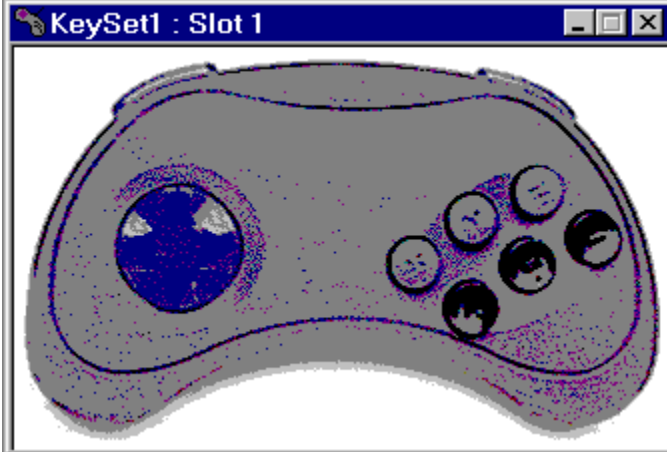
To move a line up or down in the Step dialog, select the line and press the “up” or “down” arrow buttons.

1. Click OK, then repeat step 3 for each game command that you want to assign to a button on your GriP controller.

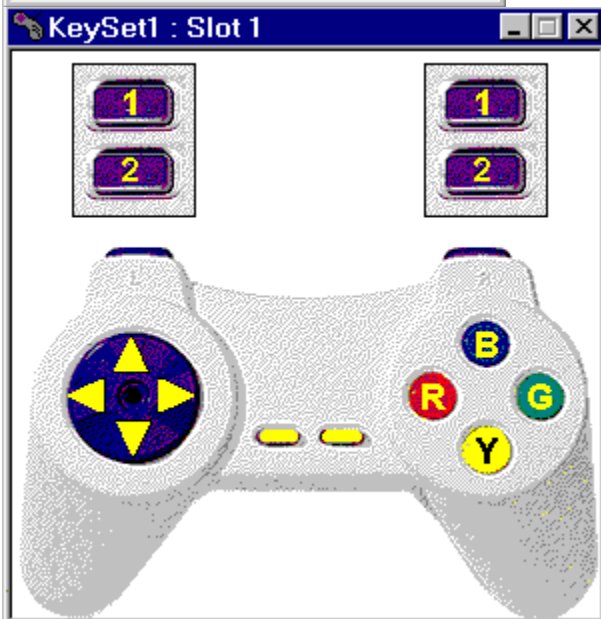
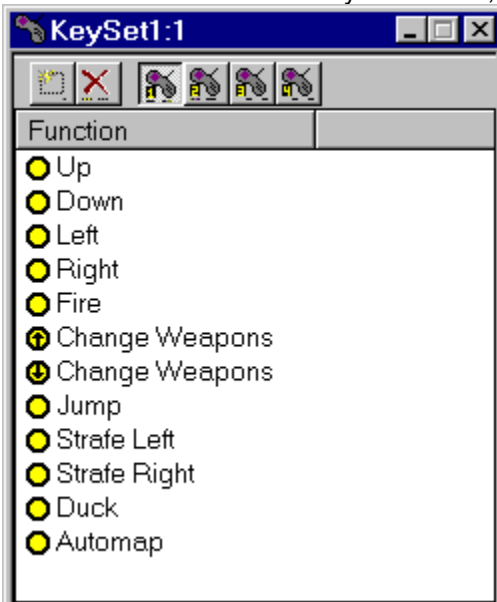
When all the game's commands are entered in the [Keyset window](#), you can assign them to buttons on your GrIP controller:

Click the numbered Show Controller button for the port where a GrIP controller is connected (or choose View\_Pad#). This opens a new window with an image of the controller.



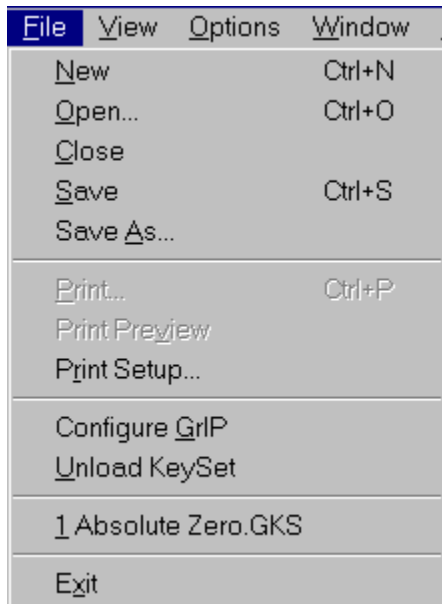


Select a function from the Keyset window, and drag it over top of a button on the controller image.





Select **File/Configure GrIP** to load the settings into your attached GrIP controllers.



Note: If you skip this step, keyboard emulation will not work. When you choose this option, Keyboard Emulation is automatically enabled and remains active until you disable it by clicking on the [Keyboard Emulation](#) button on the main toolbar or disable it in [GCC](#).



If you wish, you can select [File/Print](#) or click on the printer icon to print a reference map of your GrIPKey settings.

Start the game, and select Keyboard control in the game's Setup.

Put your keyboard aside and play the game! Use your printed reference template (if you printed one) to remind yourself of which functions you assigned to each button and each direction on the controller.

To edit a button, double-click on it to change the Function Configuration, or drag a new function from the [Keypset window](#) or from another button.

You can assign different button definitions to each GriP controller.



New - Open - Save - Cut - Copy - Paste - Print - Keyboard - About - Help

Emulation On/Off

### **New**

Click on the New tool to open a new, untitled GriP control [Keyset window](#).

### **Open**

Click on the Open tool to open an existing [Keyset window](#).

### **Save**

Click on the Save tool to save the active Keyset.

### **Cut**

Allows you to move a function from one [Keyset window](#) to another. Select a function in the active Keyset window, then click on the Cut tool to copy the function to the Clipboard and remove it from the Keyset window. Use this command in conjunction with [Paste](#).

### **Copy**

Allows you to copy a function from one [Keyset window](#) to another. Select a function in the active Keyset window, then click on the Copy tool to copy the function to the Clipboard. Use this command in conjunction with [Paste](#).

### **Paste**

Click in the destination [Keyset window](#), then click on the [Paste](#) tool to paste the function from the Clipboard.

### **Print**

Click on the Print tool to print a reference map of your button configurations.

### **Keyboard Emulation On/Off**

Click on this tool to turn keyboard emulation on and off. When you select [Configure GriP](#) from the File menu, Keyboard Emulation goes on automatically. To disable it, click this tool; to turn keyboard emulation back on again, click this tool again.

If you prefer, you can also turn keyboard emulation on and off from the Windows 95 task bar using the [GriP Control Center](#).

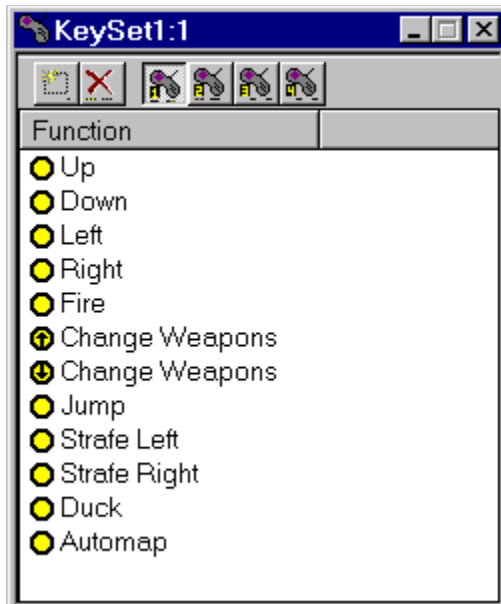
### **About**

Click on the About icon to check the version number of your GriPKey software.

### **Help**

Click on the Help tool, then point with the Help pointer at a menu, tool, or window for context-sensitive Help.

The Keyset window allows you to develop a list of game functions and assign them to buttons on your GriP controller.



You can create or open as many Keysets as you like. You may wish to create separate Keysets with different commands for each controller.

[Opening a New Keyset Window](#)

[Opening an Existing Keyset Window](#)

To open a new Keyset window, click the [New](#) button on the main toolbar, or choose [New](#) from the File menu.

To open an existing Keyset window, click the [Open](#) button on the main toolbar or choose [Open](#) from the File menu, then select a Keyset file from the dialog.



You will do all your button programming in the Function Configuration window.

**Opening the Function Configuration Window**

**The Description Tab**

**Function Description**

**Comments**

**Emulation Mode**

**Normal Mode**

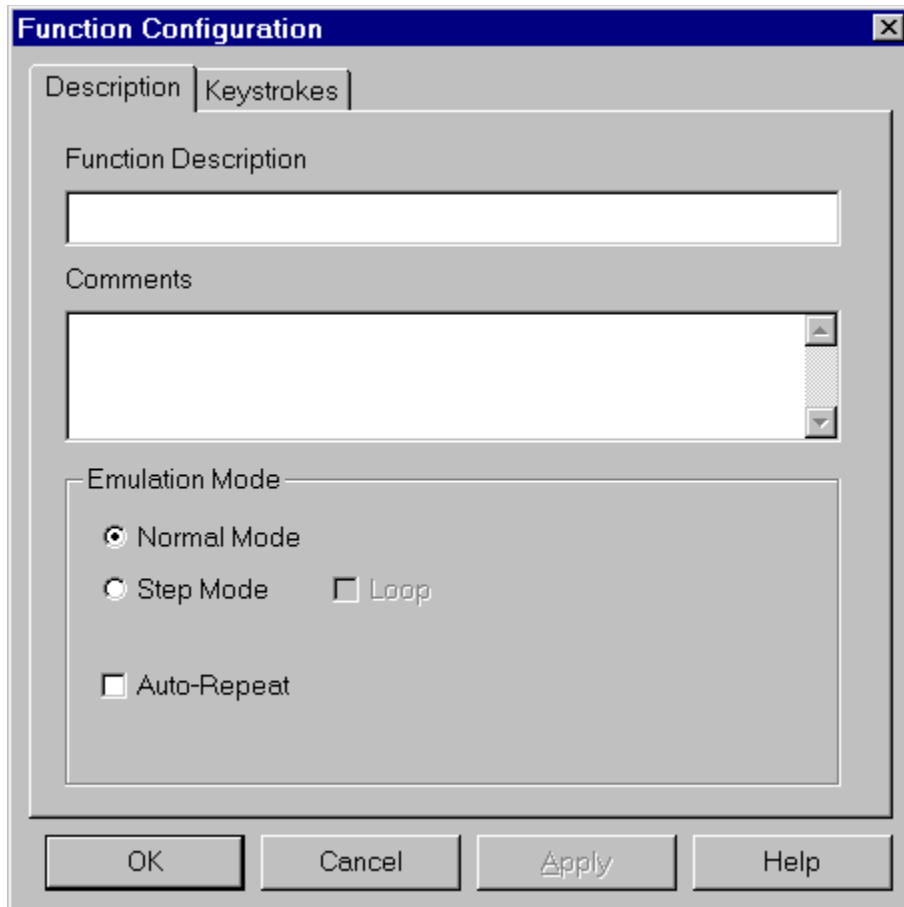
**Step Mode**

**Loop**

**Auto-Repeat**

Choose Edit/Add Function..., or click on the [Add New Function](#) button in the active Keypad window.

You can also open a Function Configuration window for a specific button by double-clicking on the button in the [Controller window](#) or by right-clicking on the button and selecting Properties.



The image shows a 'Function Configuration' dialog box with a blue title bar and a close button. It has two tabs: 'Description' and 'Keystrokes', with 'Keystrokes' currently selected. The dialog contains a 'Function Description' text field, a 'Comments' text area with a scrollbar, and an 'Emulation Mode' section with three options: 'Normal Mode' (selected with a radio button), 'Step Mode' (unselected with a radio button), and 'Auto-Repeat' (unselected with a checkbox). The 'Loop' checkbox is also present and unselected. At the bottom, there are four buttons: 'OK', 'Cancel', 'Apply', and 'Help'.

**Function Configuration** [X]

Description | Keystrokes

Function Description

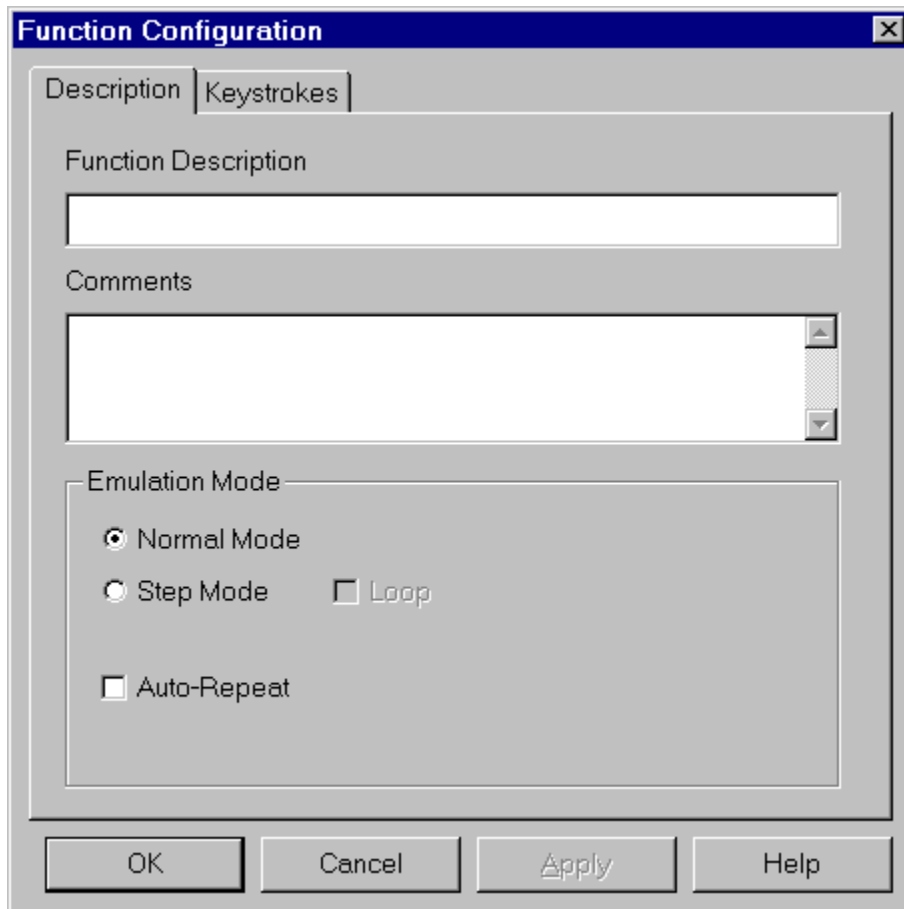
Comments

Emulation Mode

- Normal Mode
- Step Mode  Loop
- Auto-Repeat

OK Cancel Apply Help

Enter a descriptive label for the game command function in this field.



The image shows a 'Function Configuration' dialog box with a blue title bar and a close button. It contains two tabs: 'Description' and 'Keystrokes', with 'Keystrokes' selected. The 'Description' tab is active, showing a 'Function Description' text field and a 'Comments' text area. Below these is an 'Emulation Mode' section with three radio buttons: 'Normal Mode' (selected), 'Step Mode', and 'Auto-Repeat'. There is also a 'Loop' checkbox next to 'Step Mode'. At the bottom are four buttons: 'OK', 'Cancel', 'Apply', and 'Help'.

Function Configuration

Description | Keystrokes

Function Description

Comments

Emulation Mode

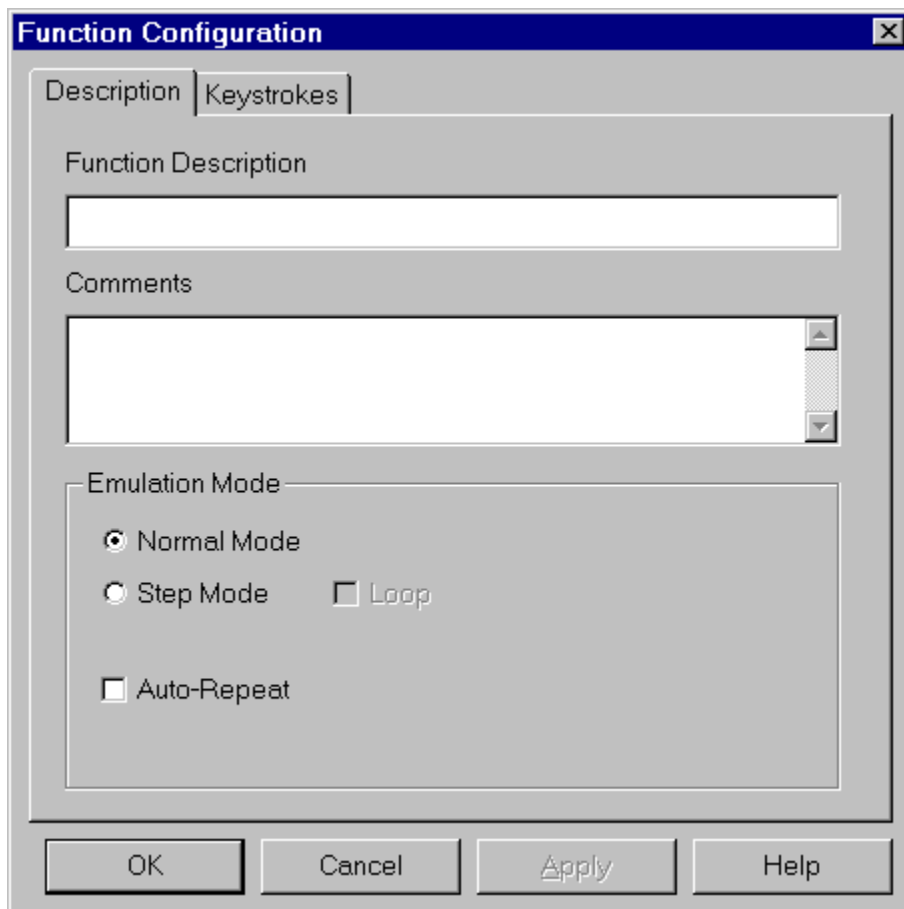
Normal Mode

Step Mode  Loop

Auto-Repeat

OK Cancel Apply Help

If you like, you can use this field to enter more descriptive comments about the game command in this field.



The image shows a 'Function Configuration' dialog box with a blue title bar and a close button. It contains two tabs: 'Description' and 'Keystrokes'. The 'Description' tab is active. Inside the dialog, there are three main sections: 'Function Description' with a single-line text input field; 'Comments' with a multi-line text area and scrollbars; and 'Emulation Mode' with three options: 'Normal Mode' (selected with a radio button), 'Step Mode' (unselected with a radio button), and 'Auto-Repeat' (unselected with a checkbox). The 'Step Mode' option has a 'Loop' checkbox next to it. At the bottom of the dialog are four buttons: 'OK', 'Cancel', 'Apply', and 'Help'.

Function Configuration

Description | Keystrokes

Function Description

Comments

Emulation Mode

Normal Mode

Step Mode  Loop

Auto-Repeat

OK Cancel Apply Help

**Function Configuration** [X]

Description | Keystrokes

Function Description

Comments

Emulation Mode

- Normal Mode
- Step Mode     Loop
- Auto-Repeat

OK    Cancel    Apply    Help

Select a mode for the function:

Pressing a button configured with this function in Normal mode will have exactly the same effect in the game as pressing the keys on the keyboard.

Step mode allows you to program a single button with a series of game commands (keystroke “Step strings”) that are always executed in the same order—or reverse order (for instance, cycling through a collection of weapons).



The Loop option lets you cycle, or “loop” through a series of keystroke step strings. This example demonstrates the difference between the results of pressing a button configured in Step mode with and without Loop:

*Function Configuration:*      Step string #1: A  
   Step string #2: B  
   Step string #3: C  
   Step string #4: D

<i>Button Functions:</i>	<i>Step with Loop:</i>	<i>Step without Loop:</i>
1st button press	A	A
2nd button press	B	B
3rd button press	C	C
4th button press	D	D
5th button press	A	D
6th button press	B	D

...and so on.

Auto-Repeat is a “turbo-fire” option that lets you set a keystroke string to repeat rapidly and continuously for as long as you continue to press the button. Auto-Repeat is not available with Step mode.

**Function Configuration** [X]

Description | Keystrokes

Function Description

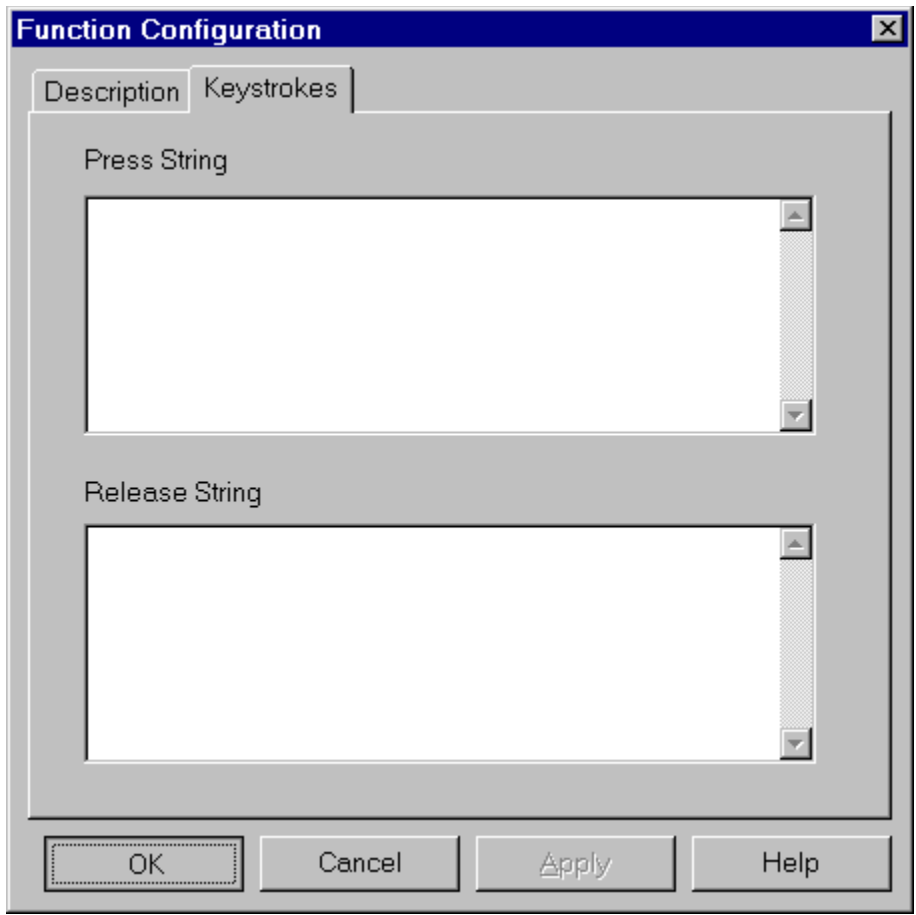
Comments

Emulation Mode

- Normal Mode
- Step Mode  Loop
- Auto-Repeat

OK Cancel Apply Help

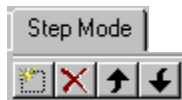
[Normal Mode Entries](#)  
[Step Mode Entries](#)



[Press String](#)  
[Release String](#)

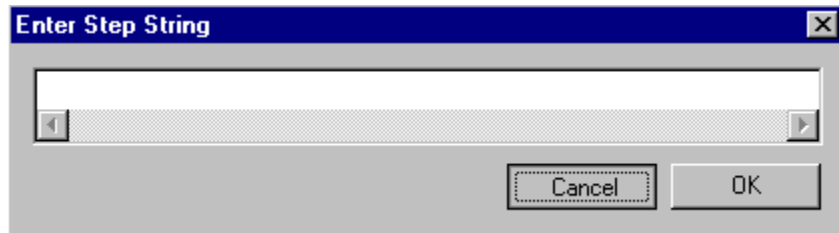
In this field, you can enter a separate keystroke or keystrokes to be sent to the game when you press a button on the GriP controller.

In this field, you can enter a separate keystroke or keystrokes to be sent to the game when you release a button.



Add New String - Delete String - Move Selected Step Down - Move Selected Step Up

Click on this to open a New Step String window.



Click on this to delete the currently selected Step string.

Moves the selected Step string up in the list.

Moves the selected Step string down in the list.

### [Editing a Step String](#)

Double-click on the step string to open the editing window. Select the keystrokes that you want to change, then press Delete to delete them, or type new keys to replace them.



The Controller windows (labeled Keyset # – Slot #) correspond to the GrIP controllers attached to Ports 1 and 2 of a standard PC game port or to Ports 1–4 of a GrIP MultiPort.



You can assign the functions in the [Keyset window](#) to the buttons and direction controls on your GrIP controller by dragging them from the Keyset window to this Controller window.

[Opening a Controller Window](#)

[Editing a Button Configuration](#)

[Unmapping a Single Button](#)

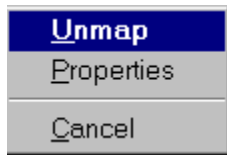
[Unmapping All Buttons](#)

[Changing Controller Types](#)

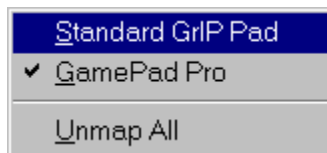
- Click the Controller# buttons in the Keypad window to display a programming window for the controller attached to that port.
- Choose a Pad# from the View menu.

Double-click on a button in the Controller window (or right-click on it and select Properties) to open its Function Configuration window.

Right-click on a button and select Unmap to unmap the function currently assigned to it. (This unmaps the function from the button but leaves the function definition intact in the KeySet window.)



Right-click in an empty portion of the Controller window, then select Unmap All from the pop-up window to unmap all the functions from the buttons and direction controls in the active Controller window.



When you first open the Controller window, the software polls your game port or MultiPort to determine which type of controller you have connected. If you wish to change controller types, right-click in the Controller window, and select the controller type you prefer.



**File Menu**

**Edit Menu**

**View Menu**

**Options Menu**

**Window Menu**

**Help Menu**

<u>F</u> ile	<u>V</u> iew	<u>O</u> ptions	<u>W</u> indow
New			Ctrl+N
<u>O</u> pen...			Ctrl+O
C <u>l</u> ose			
<u>S</u> ave			Ctrl+S
Save <u>A</u> s...			
<u>P</u> rint...			Ctrl+P
Print <u>P</u> review			
Print <u>S</u> etup...			
Configure <u>G</u> rlP			
<u>U</u> nload KeySet			
1 Absolute Zero.GKS			
<u>E</u> xit			

New

Open

Close

Save

Save As

Print

Print Preview

Print Setup

Configure GrIP

Unload Keyset

Exit



Opens a new, untitled GrIP control set.

Opens an existing set. Select a set file from the file dialog box.

Closes the active set.

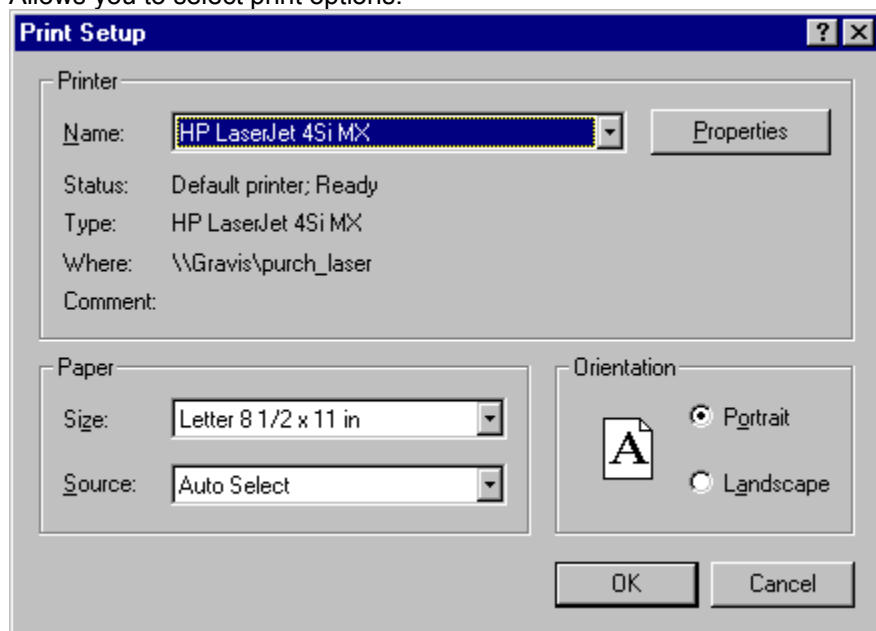
Saves the active set.

Saves a copy of the active set with a new name that you specify.

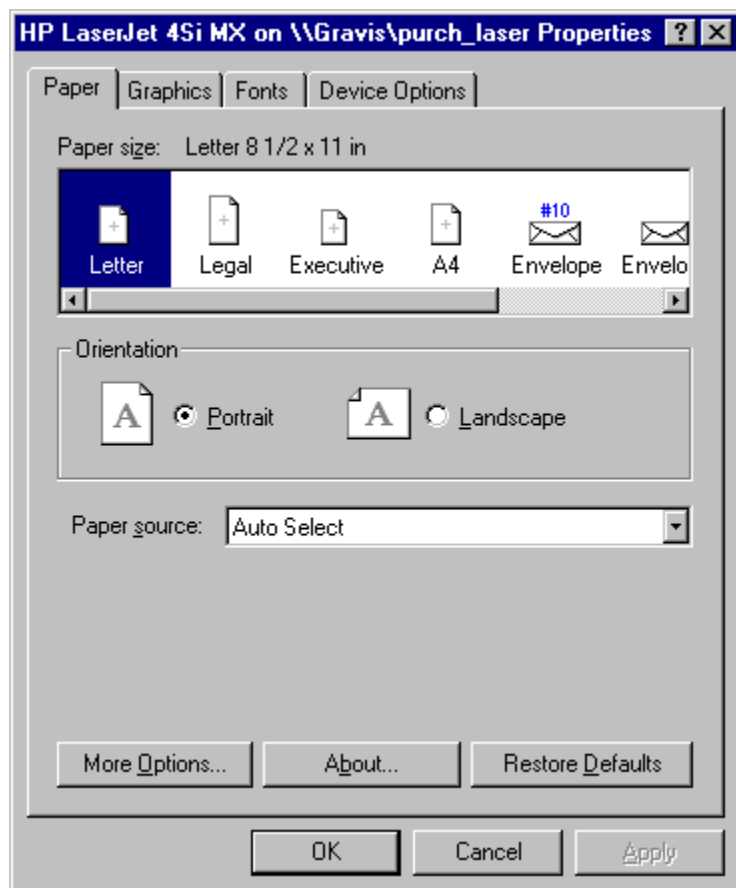
Prints a reference chart of your button configuration.

Allows you to view a preview of the reference chart on screen before you print.

Allows you to select print options.

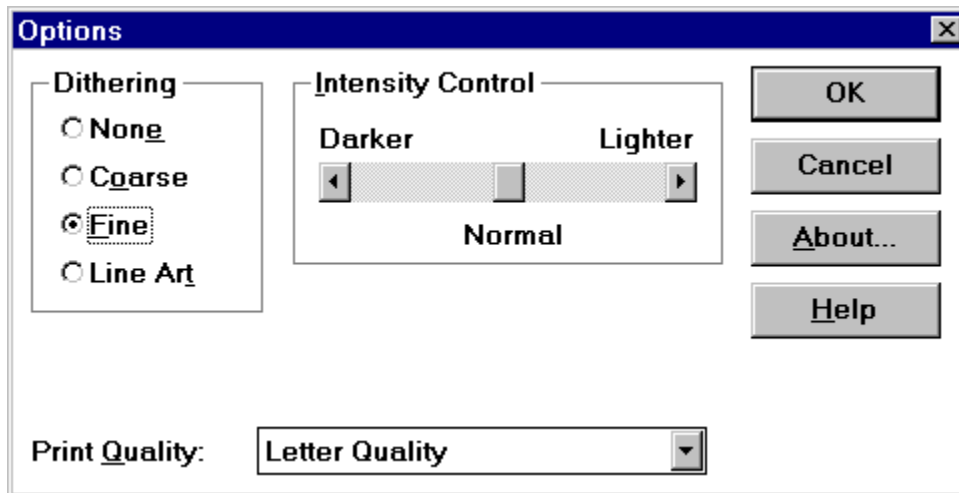


The Properties button brings up a screen where you can select additional paper and printer options.





For image type selections, click the More Options... button.



For the fastest printing, and for printers with limited graphics support, a Line Art option is available. For a more realistic image, select one of the Dithering options.

If you like, you can also control the intensity/brightness of the printed image using the Intensity Control slider.

Select Letter- or Draft-quality output from the Printer Quality dropdown box.

Loads the settings in the active GriPKey set into the GriP driver. Once you have selected this option, the GriP controllers' buttons will function according to the GriPKey set.

Clears the configuration of the GRIP controller.

Quits the program.

<u>E</u> dit	<u>V</u> iew	<u>O</u> ptions	<u>W</u> indow
<u>U</u> ndo		Ctrl+Z	
<u>C</u> ut		Ctrl+X	
<u>C</u> opy		Ctrl+C	
<u>P</u> aste		Ctrl+V	
<u>A</u> dd Function			
<u>D</u> elete Function			

Undo

Cut

Copy

Paste

Add Function

Delete Function

Undoes the last action.

Allows you to move a function from one Keyset window to another. Select a function in the active Keyset window, then select Cut to copy the function to the Clipboard and remove it from the Keyset window. Use this command in conjunction with Paste.

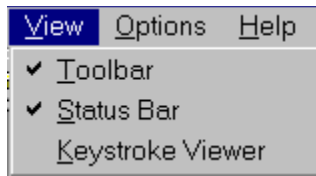
Allows you to copy a function from one Keyset window to another. Select a function in the active Keyset window, then select Copy to copy the function to the Clipboard. Use this command in conjunction with Paste.



Use this menu option in conjunction with Cut or Copy. Click in the destination Keyset window, then select Paste to paste the function from the Clipboard.

Opens a [Function Configuration window](#) that is not tied to a specific button.

Deletes the selected function from the Keyset window.



Toolbar

Status Bar

Keystroke Viewer

Pads #1-4

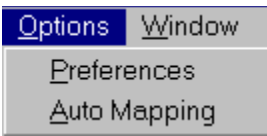
Select this option to display the [main toolbar](#) on screen.

Select this option to display the Status Bar at the bottom of the screen. By default, this is selected.

Select this option to open the Keystroke Viewer window to test your controller's configuration. Then pick up your GriP controller and press a button; you should see the keystrokes configured to that button in the Viewer window.

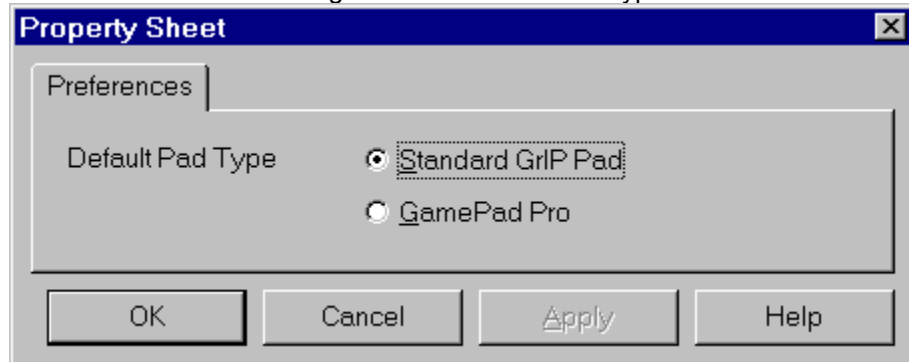
Select these options to display Controller programming windows for each of the connected controllers.





**Preferences**  
**Auto-Mapping**

Select Preferences to change the default controller type.



Auto-mapping saves you the “mouse-work” of dragging functions from the Keyset window to the Controller window. To use it:

1. Select Options/Auto Mapping.
2. Select the first function in the Keyset window list.
3. Pick up your GriP controller, and press the button where you would like that function.
4. GriPKey automatically selects the next function in the list. Press the button where you would like the second function, and continue through the end of the Keyset list.

Use the options in the Window menu to select the window you want to be active and to arrange the open windows on your screen.

[Tip of the Day...](#)

[Help Topics](#)

[Go to Gravis Home Page](#)

[About GrIPKey](#)

Displays a tip.

Opens the GriPKey Help file. Select a topic from the Contents list.

If you are connected to the Internet, selecting this option will open your Internet browser application and take you directly to the Advanced Gravis Home Page ([www.gravis.com](http://www.gravis.com)).



If you ever need to contact Gravis for technical support, first select this option to check the version number of your GRIPKey software.

GKLOAD is a DOS command-line utility for loading GrIPKey Keysets. While the GrIPKey software requires Windows 95, the GKLOAD utility allows you to configure your GamePad Pro with a GrIPKey set from a DOS command prompt. That means that you can use your GrIP controller to play any keyboard-controlled DOS game.

**Note: GKLOAD does not work in a DOS box; it requires DOS v6.x or earlier or Windows 95 MS-DOS Mode.**

### **To load a GrIPKey set into your GamePad Pro using GKLOAD:**

1. In DOS, change to your \GRAVIS\GRIP directory.
2. Type: GKLOAD [setname] <Enter>

(where “setname” is the name of a GrIPKey set)

When you return to Windows 95, GKLOAD disables keyboard emulation (returning your GamePad Pro to standard GrIP mode) and unloads itself from memory.

The GriP Control Center (GCC) is a Windows 95 task bar utility that allows you to check the status of your connected controllers and turn [Keyboard Emulation](#) on and off.

[Starting GCC](#)

[Enabling/Disabling Keyboard Emulation](#)

[Automated Joystick Mode Switching](#)

GCC is run automatically every time Windows 95 starts up. A small GCC icon appears on the task bar. To start the program, click on the task bar icon.



The GrIP Control Center window opens.



The status window should display a message, letting you know what devices it finds attached to your game ports or MultiPort ports. **If there is a problem with your mode selection, GCC will tell you, and the icon on the task bar will flash.**

The Keyboard Emulation on/off checkboxes allow you to disable and re-enable Keyboard Emulation from the task bar—without starting the GrIPKey software.



If you have not configured your GrIP controller with a GrIPKey set (which you do by choosing [Configure GrIP](#) from GrIPKey's File menu or by using [GKLOAD](#)), these options will be unavailable.

If GCC tells you to switch to GamePad Mode while your GamePad Pro is configured with a GrIPKey set, or if your MultiPort switches into Emulation Mode while you are using a GrIPKey set, you should disable the Automated Joystick Mode Switching option in [GCC](#).



This option is selected by default, and in most cases, you should leave it selected. When this option is enabled (selected), the GrIP driver will automatically put the GrIP MultiPort (if there is one attached) into GamePad Emulation mode when a game tries to access the joystick port directly. If a GamePad Pro is attached and this situation occurs, GCC will pop up a message, instructing you to switch the pad's mode switch into GamePad Mode.

This option can occasionally cause problems when you are using a GrIPKey set to play a game in keyboard emulation.

Nothing happens when I try to play a game.

Mode-switching problems with GrIPKey

Buttons don't fire properly or at all.

- Make sure that the GamePad Pro is connected securely to Port A on your game card and that the game port is enabled. If you have two GamePad Pro pads, connect the second one to the built-in Y-cable on the first pad.

If you have a GrIP MultiPort, follow the instructions in the MultiPort User's Guide for connecting controllers.

- If you are using GrIPKey for keyboard emulation, put the pad in GrIP mode and make sure you have chosen [Configure GrIP](#) from GrIPKey's File menu or loaded a keyset using [GKLOAD](#).
- See the User's Guide for more troubleshooting help.



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This option can occasionally cause problems when you are using a GrIPKey set to play a game in keyboard emulation.

- No matter how you have configured the buttons, you cannot press the Select and Start buttons at the same—if you try, the Start button will always take precedence.
- Make sure you have the buttons set up the way you want them to work:
  - If you are using GrIPKey, make sure that you have selected [Configure GrIP](#) from the File menu. You can use the [Keystroke Viewer](#) (in GrIPKey's View menu) to test the pad's configuration.
- See the User's Guide for more detailed troubleshooting help.

