

Gefen Matrix Switcher Keyboard Controller

User Manual

Windows • Mac OS

Release A2



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Important Notice

Gefen, LLC reserves the right to make changes in this documentation without prior written notice.

Operating Notes

- If using the Mac OS platform, go to *Preferences > Accessibility* and make sure that “Enable access for assistive devices” is enabled.

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The following software and libraries are included with this product and subject to their respective open source licenses:

- Qt

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Gefen Matrix Switcher Keyboard Controller

01 Getting Started

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Installing the Software

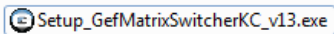
The Gefen Matrix Switcher Keyboard Controller is a free downloadable application from Gefen that allows a computer keyboard to be used to switch between sources. This application uses the Telnet protocol to control any Gefen switcher or matrix that uses IP control. To control any Gefen switcher or matrix, set the correct IP address and send the desired commands using the computer keyboard.

Windows Installation

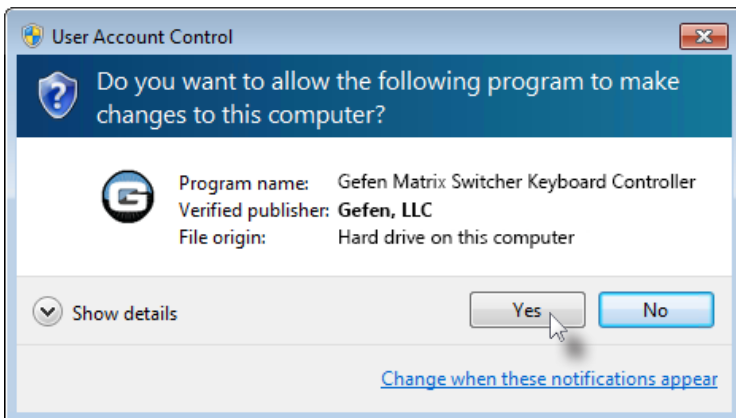
1. Download the `Setup_GefMatrixSwitcherKC_v13.zip` file from the Gefen Web site.
2. Double-click the .zip file to extract the files to the Desktop. There will be three files within the folder:

<code>Setup_GefMatrixSwitcherKC_v13.exe.exe</code>	(Windows installer)
<code>Setup_GefMatrixSwitcherKC_v13.exe.dmg</code>	(Mac installer)
<code>Gefen-Matrix-Switcher-Keyboard-Controller.pdf</code>	(User Manual)

3. Double-click the `Setup_GefMatrixSwitcherKC_v13.exe` file to launch the installation Wizard.



If the following dialog box is displayed, then click **Yes** to continue with the installation Wizard.



Installing the Gefen Matrix Switcher Keyboard Controller

- The **Welcome** dialog box will be displayed.
- Click the **Next** button.

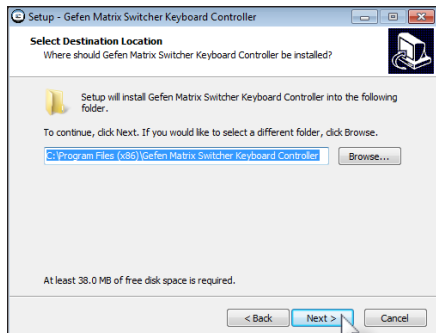


- The **Software License Agreement** dialog will be displayed.

Click the radio button next to **I accept the agreement**, then click the **Next** button.



- The **Select Destination Location** dialog will be displayed.



The default installation path is:

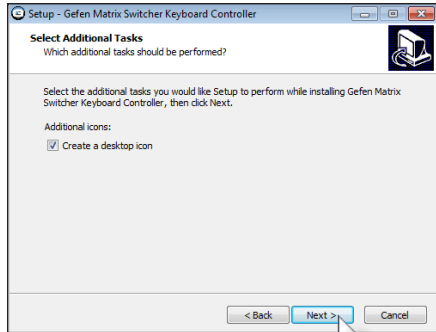
C:\Program Files (x86)\Gefen Matrix Switcher Keyboard Controller

- Click the **Browse...** button to change the installation path. Otherwise, click the **Next** button to continue with the default installation path.

Installing the Gefen Matrix Switcher Keyboard Controller

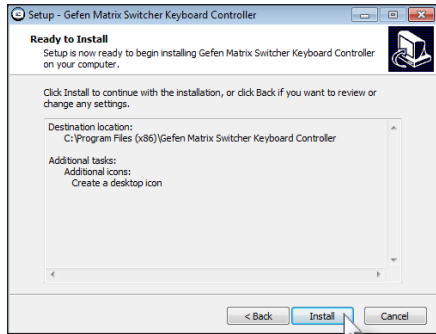
9. The **Select Additional Tasks** dialog will be displayed.

By default, the **Create a desktop icon** check box is selected. If a desktop icon is not desired, check this box to deselect this task. Otherwise, click the **Next** button to continue.



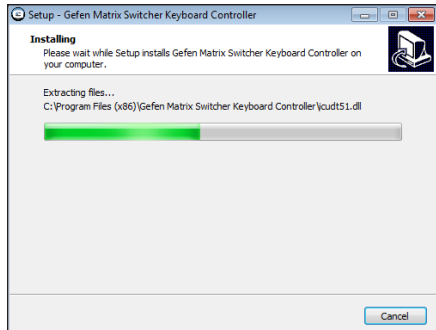
10. The **Ready to Install** dialog will be displayed.

Click the **Install** button to begin the installation process.



11. The installation Wizard will begin installing the Gefen Firmware Upgrade Tool.

To cancel the installation procedure, click the **Cancel** button.



Installing the Gefen Matrix Switcher Keyboard Controller

11. After a few moments, the **Finish** dialog will be displayed.



The **Launch Gefen Matrix Switcher Keyboard Controller** check box will be checked. To launch the Gefen Discovery Tool, click the **Finish** button.

To launch the application at a later time, click the **Launch Gefen Matrix Switcher Keyboard Controller** check box to remove the check mark, then click the **Finish** button.

Mac OS Installation

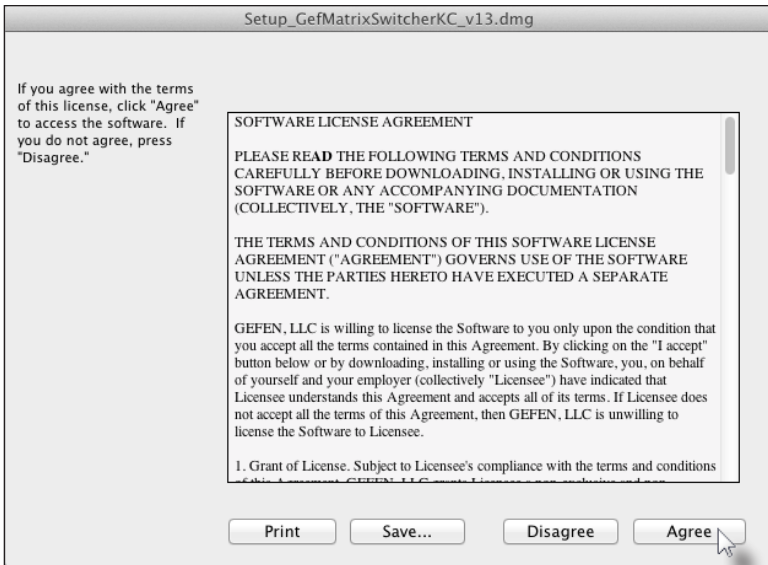
1. Download the Setup_GefMatrixSwitcherKC_v13.zip file from the Gefen Web site.
2. Double-click the .zip file to extract the files to the Desktop. There will be three files within the folder:

Setup_GefMatrixSwitcherKC_v13.exe.exe (Windows installer)
Setup_GefMatrixSwitcherKC_v13.exe.dmg (Mac installer)
Gefen-Matrix-Switcher-Keybaord-Controller.pdf (User Manual)

3. Double-click the Setup_GefMatrixSwitcherKC_v13.dmg file to mount the disk image.



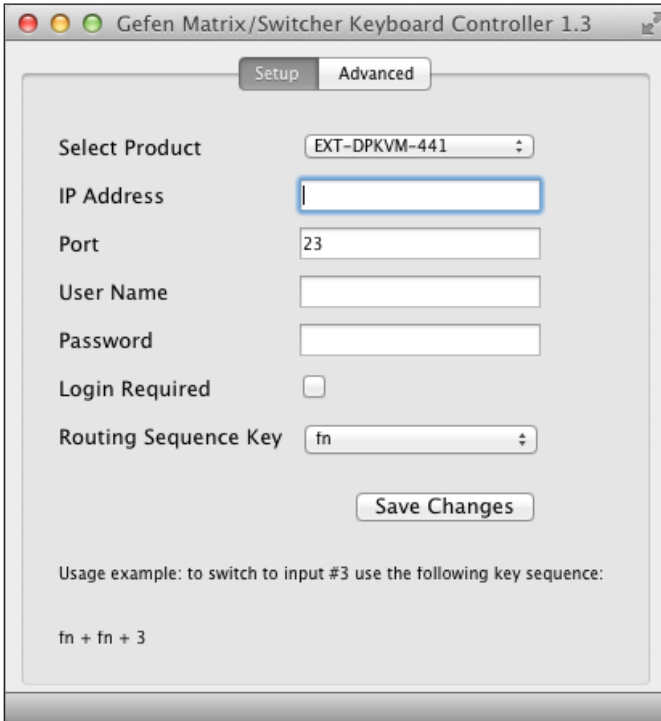
4. The following Software License Agreement dialog will be displayed:



5. Click the **Agree** button.

Installing the Gefen Matrix Switcher Keyboard Controller

6. After a few moments, the GefMatrixSwitcherKC application will appear within the GefMatrixSwitcherKC folder.
7. Drag-and-drop the GefMatrixSwitcherKC application to the desired location on the Mac.
8. Double-click on the GefMatrixSwitcherKC icon to launch the Gefen Matrix Switcher Keyboard Controller application:



9. Refer to the next section for information on operating the Gefen Matrix Switcher Keyboard Controller.

Gefen Matrix Switcher Keyboard Controller

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Basic Operation



NOTE: Both the PC and Mac platform of the Gefen Matrix Switcher Keyboard Controller software are functionality identical, except where noted. The following examples are taken from the PC platform.

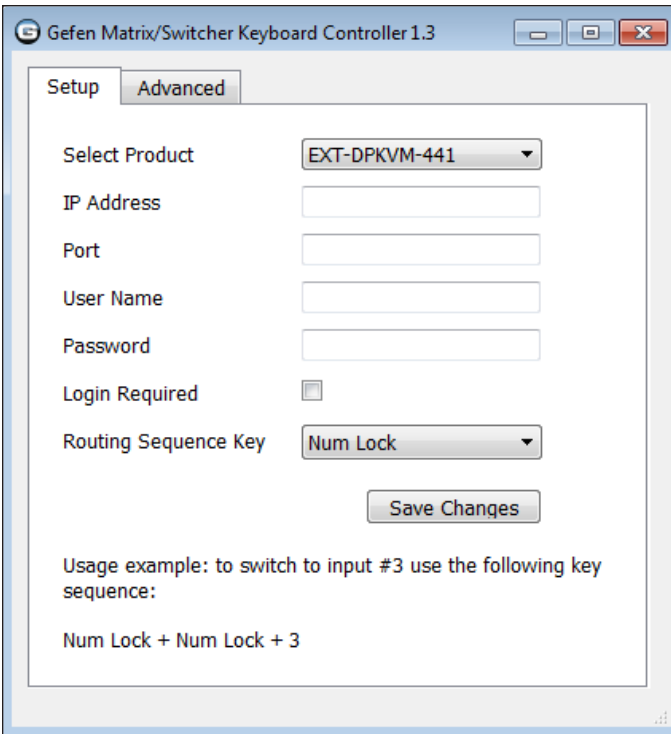
Connecting to a Matrix or Switcher

1. Launch the Gefen Matrix Switcher Keyboard Controller from the Start Menu or using the shortcut from the Windows® Desktop.



Gefen Matrix
Switcher
Keyboard
Controller

2. After a few seconds, the Gefen Matrix Switcher Keyboard Controller interface will be displayed.

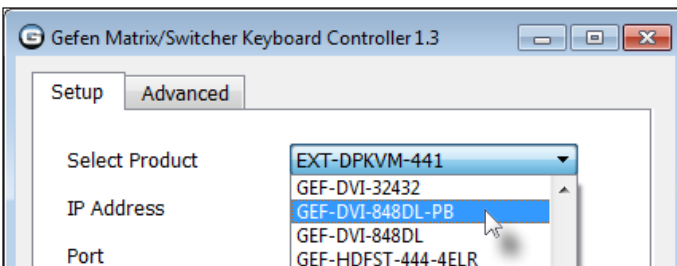


3. Click the **Select Product** drop-down list, at the top left of the interface, to select the product that is connected to the computer running the Keyboard Controller software.

The following Gefen products are supported:

- 4x1 DisplayPort KVM Switcher (EXT-DPKVM-441)
- 8x1 DisplayPort KVM Switcher (EXT-DPKVM-841)
- 16x16 DVI Crosspoint Matrix (EXT-DVI-16416)
- 8x8 Crosspoint Matrix for HDMI (EXT-HDFST-848CPN)
- 4x4 Seamless Matrix for HDMI (EXT-HD-SL-444)
- Multiview Seamless Switcher (EXT-HD-MVSL-441)
- 16x16 3GSDI Matrix (GEF-3GSDI-16416)
- 16x16 3GSDI Matrix w/ Push Button Controls (GEF-3GSDI-16416-PB)
- 8x8 DVI KVM Dual Link Matrix w/ Push Button Control (GEF-DVIKVM-848DL-PB)
- 16x16 DVI Matrix with Front Panel Push Button Control (GEF-DVI-16416-PB)
- 32x32 DVI Matrix (GEF-DVI-32432)
- 8x8 DVI Matrix with Front Panel Push Button Control (GEF-DVI-848DL-PB)
- 8x8 DVI Dual Link Matrix (GEF-DVI-848DL)
- 4x4 Matrix for HDMI w/4 ELR-POL Outputs (GEF-HDFST-444-4ELR)
- 8x8 Matrix for HDMI w/4 ELR-POL (GEF-HDFST-848-4ELR)
- 8x8 Matrix for HDMI w/8 ELR-POL Outputs (GEF-HDFST-848-8ELR)
- 16X16 Modular Matrix For HDMI w/ HDCP (GEF-HDFST-MOD-16416)
- 32X32 Modular Matrix For HDMI w/ HDCP (GEF-HDFST-MOD-32432)
- 32x32 Modular Matrix (GEF-MOD-32432)
- 4x1 Switcher for HDMI 4K x 2K (GTB-HD4K2K-441)
- 4x2 Matrix for HDMI 4K x 2K (GTB-HD4K2K-442)
- 4x4 Matrix for HDMI 4K x 2K (GTB-HD4K2K-444)
- 6x2 Matrix for HDMI 4K x 2K (GTB-HD4K2K-642)
- 8x8 Matrix for HDMI (GTB-HDFST-848)

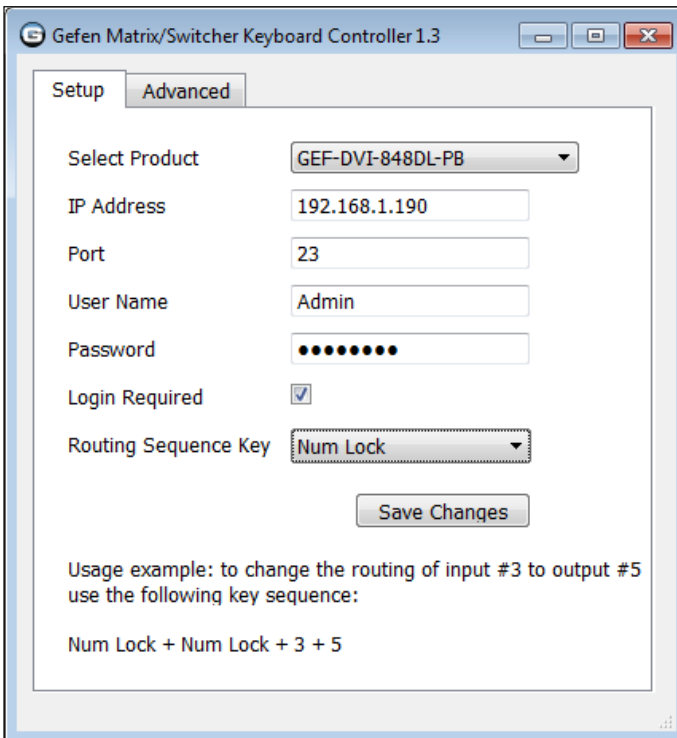
4. For this example, we will select GEF-DVI-848DL-PB from the **Select Product** drop-down list.



5. Enter the IP address of the product in the **IP Address** field.
6. Enter the Telnet listening port in the **Port** field. The default port is 23.

The next step is only required if a user name and password are used to access the Gefen product over a network. If the Gefen product is not configured to ask for login credentials, then skip to step 8.

7. Enter the user name and password, used by the device, into the **User Name** and **Password** fields, respectively.



The screenshot shows the 'Gefen Matrix/Switcher Keyboard Controller 1.3' window with the 'Advanced' tab selected. The configuration fields are as follows:

Field	Value
Select Product	GEF-DVI-848DL-PB
IP Address	192.168.1.190
Port	23
User Name	Admin
Password	••••••••
Login Required	<input checked="" type="checkbox"/>
Routing Sequence Key	Num Lock

Below the fields is a 'Save Changes' button. At the bottom of the window, there is a usage example:

Usage example: to change the routing of input #3 to output #5 use the following key sequence:
Num Lock + Num Lock + 3 + 5

8. Select the key to be used as the “routing key” from the **Routing Sequence Key** drop-down list.

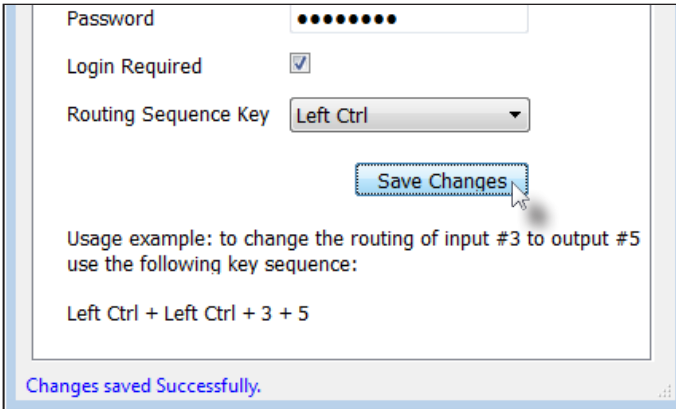
Currently, **Num Lock** is selected. For this example, we will select the **Left Ctrl** key.

The screenshot shows a web interface for configuring the Gefen Matrix/Keyboard Controller. The 'Routing Sequence Key' dropdown menu is open, showing the following options: Num Lock, Caps Lock, Left Ctrl, Right Ctrl, Left Alt, and Right Alt. A mouse cursor is pointing at 'Left Ctrl'. Below the dropdown, there is a usage example: 'Usage example: to change the routing of input #3 to output #5 use the following key sequence: Num Lock + Num Lock + 3 + 5'.

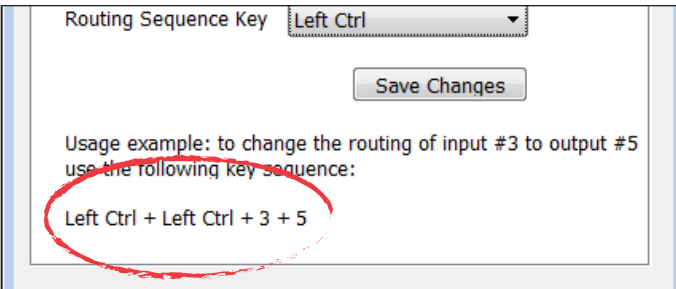
The Mac OS platform offers the following Routing Sequence Keys from the drop-down list: **fn**, **Ctrl**, **Option**, **Left Shift**, and **Right Shift**.

The screenshot shows the Mac OS application window titled 'Gefen Matrix/Switcher Keyboard Controller 1.3'. The 'Advanced' tab is selected. The 'Routing Sequence Key' dropdown menu is open, showing the following options: fn (checked), Ctrl, Option, Left Shift, and Right Shift. Below the dropdown, there is a usage example: 'Usage example: to change the routing of input #3 to output #5 use the following key sequence: fn + fn + 3 + 5'.

10. Click the **Save Changes** button to confirm the current settings.



11. The “Changes saved Successfully” message will appear at the bottom of the dialog.
12. Near the bottom of the dialog, under the **Setup** tab, is a sample keystroke sequence:



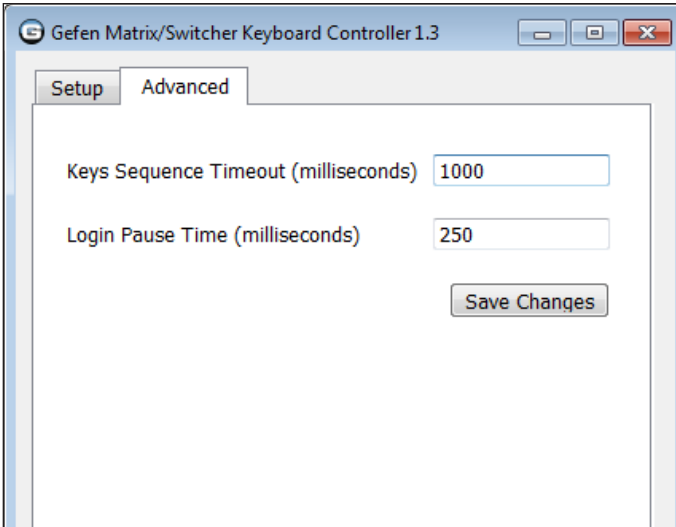
In order to switch Input 3 to Output 5, press and release the CTRL key, twice, on the left side of the keyboard. Then, press 3 and 5 on the keyboard. The numbers can be entered using the numeric keypad or by using the number keys near the top of the keyboard.



IMPORTANT: If using the Mac OS platform, go to *Preferences* > *Accessibility* and make sure that “Enable access for assistive devices” is enabled.

Setting Timeouts

1. Click the **Advanced** tab, near the top of the dialog.



2. Change the time (in milliseconds) for the key sequence in the **Keys Sequence Timeout** field, if necessary.

By default, the Keys Sequence Timeout is 1000 milliseconds (1 second). If the time interval between keystrokes exceeds 1 second, then the key sequence will not be sent. The maximum value is 999999999.

3. Change the login timeout (in milliseconds) in the **Login Pause Time** field, if necessary.





NOTE: This value is only applicable if login credentials are required in order to connect to the matrix / switcher. Refer to step 7 on page 12 for details on using login credentials.

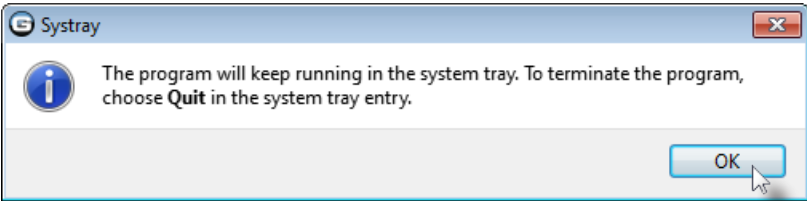
By default, this value is set to 250 milliseconds (1/4 second). If the login time exceeds this value, then the Keyboard Controller software will not connect to the Gefen device. The maximum value is 999999999.

4. If any changes were made, click the **Save Changes** button.

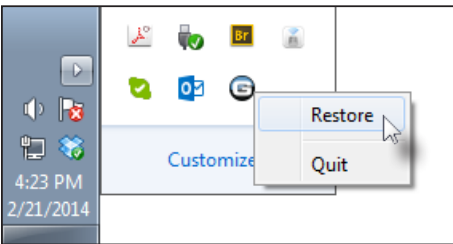
Minimizing / Restoring the Dialog (Windows only)

When the Keyboard Controller dialog is closed or minimized, it is placed in the System Tray (Windows platform only).

1. Click the  or  icon in the top-right corner of the dialog.
2. The following dialog will be displayed:



3. Click the **OK** button. The application will still function but is now hidden in the System Tray.
4. To restore the dialog, go to the System Tray, right click the Gefen icon to display the context menu, then select **Restore**.



Terminating the Application (Windows only)

1. Follow the instructions, above, for minimizing the application.
2. To exit (terminate) the application, go to the System Tray, right click the Gefen icon and select **Quit** from the context menu.

Stretch it. Switch it. Split it. Gefen's got it. ®

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