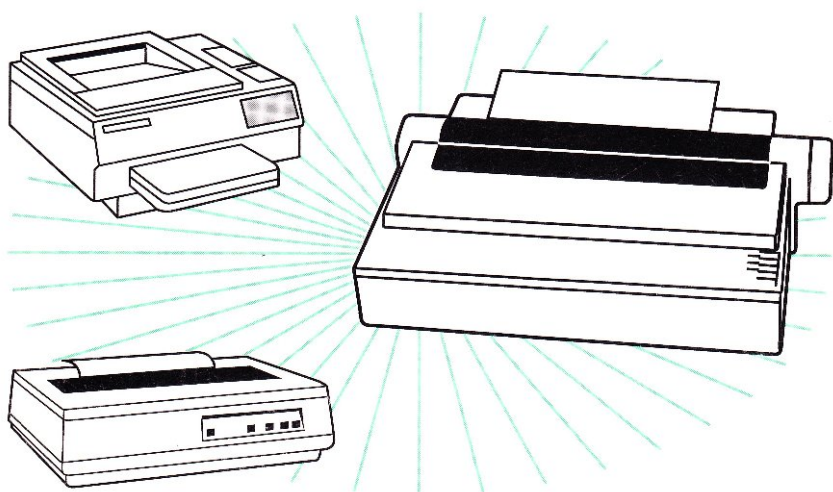


# *EXPRESS*

## **PRINTER SPOOLER**



**Save valuable time when printing to:**

- Apple ImageWriter or StyleWriter
- Hewlett-Packard DeskJets
- Hewlett-Packard LaserJets
- ANY other direct-connect printer!

**Seven Hills**  
S o f t w a r e

# Express

Congratulations on your purchase of Express! Be sure to complete and return the postage-paid registration card so we can notify you as new versions of this program become available.

Express™ lets you use your IIGS while you print! No more waiting until your printer finishes. Multiple files can be spooled, printed more than once, and deleted from the spool list. Express works with GS/OS compatible software like AppleWorks GS, GraphicWriter III, Platinum Paint, and others. The longer and more complex the document, the more time will be saved from waiting for the printer to finish.

Our goal was to make Express a very useful productivity tool and to make it valuable to you personally. By making a quality program available at a reasonable price and by not copy-protecting the disk, we think we have succeeded. We hope that you support our efforts and encourage future updates and products by not allowing your family or friends to copy Express. To borrow a phrase, "Just say no."

This manual and the software (computer program) described in it are copyrighted with all rights reserved. No part of the Express software or documentation may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, mechanical, photocopying, recording or otherwise, without the prior written permission of Seven Hills Software Corporation.

Apple, IIGS, GS and GS/OS are trademarks of Apple Computer, Inc.

Express © 1991-1992 Seven Hills Software Corporation.  
Express is a trademark of Seven Hills Software Corporation.  
All rights reserved. Printed in the U.S.A.

---

## Thanks To...

*Richard Bennett* for writing a better printer spooler than we expected. *Matt Deaiberage* and the other supportive people at Apple Computer. *Cameron Brawn, Chris Nelligan,* and *Wayne Short* for their early input and help beta testing. *All of our user group "Partners"* for their help beta testing and telling people about our products. *And you,* for supporting our IIGS publishing efforts!

---

## Limited Warranty

SEVEN HILLS SOFTWARE CORPORATION'S LICENSOR(S) MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, REGARDING THE SOFTWARE. SEVEN HILLS SOFTWARE CORPORATION'S LICENSOR(S) DOES NOT WARRANT, GUARANTEE OR MAKE ANY REPRESENTATIONS REGARDING THE USE OR THE RESULTS OF THE USE OF THE SOFTWARE IN TERMS OF ITS CORRECTNESS, ACCURACY, RELIABILITY, CURRENTNESS OR OTHERWISE. THE ENTIRE RISK AS TO THE RESULTS AND PERFORMANCE OF THE SOFTWARE IS ASSUMED BY YOU. THE EXCLUSION OF IMPLIED WARRANTIES IS NOT PERMITTED BY SOME STATES. THE ABOVE EXCLUSION MAY NOT APPLY TO YOU.

IN NO EVENT WILL SEVEN HILLS SOFTWARE CORPORATION'S LICENSOR(S), AND THEIR DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS BE LIABLE TO YOU FOR ANY CONSEQUENTIAL, INCIDENTAL OR INDIRECT DAMAGES (INCLUDING DAMAGES FOR LOSS OF BUSINESS INFORMATION, AND THE LIKE) ARISING OUT OF THE USE OR INABILITY TO USE THE SOFTWARE EVEN IF SEVEN HILLS SOFTWARE CORPORATION'S LICENSOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. BECAUSE SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. SEVEN HILLS SOFTWARE CORPORATION'S LICENSOR'S LIABILITY TO YOU FOR ACTUAL DAMAGES FROM ANY CAUSE WHATSOEVER, AND REGARDLESS OF THE FORM OF THE ACTION (WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), PRODUCT LIABILITY OR OTHERWISE), WILL BE LIMITED TO \$50.

IN NO EVENT WILL SEVEN HILLS SOFTWARE CORPORATION, ITS DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS BE LIABLE TO YOU FOR ANY CONSEQUENTIAL, INCIDENTAL OR INDIRECT DAMAGES (INCLUDING DAMAGES FOR LOSS OF BUSINESS INFORMATION, AND THE LIKE) ARISING OUT OF THE USE OR INABILITY TO USE THE SOFTWARE EVEN IF SEVEN HILLS SOFTWARE CORPORATION HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. BECAUSE SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU. SEVEN HILLS SOFTWARE CORPORATION'S LIABILITY TO YOU FOR ACTUAL DAMAGES FROM ANY CAUSE WHATSOEVER, AND REGARDLESS OF THE FORM OF THE ACTION (WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE), PRODUCT LIABILITY OR OTHERWISE), WILL BE LIMITED TO \$50.

---

## About Seven Hills Software

---

### No Copy Protection

We don't believe in copy protection—all it does is impair the honest user's ability to use software to its fullest. We strive to provide high quality products at reasonable prices. We hope you will support our efforts by not allowing your family or friends to copy this software.

---

### Postage-Paid Registration

Be sure to complete and return the postage-paid registration card so we can notify you as new versions of this program become available. Updates are always reasonably priced.

---

### Questions and Comments

We always welcome feedback—if you have any questions, comments, or suggestions for improving this product, please let us know! In addition, we would like to hear your ideas for new programs.

---

### Contacting Us

For orders and product information call (904) 575-0566 from 9 a.m. to 5 p.m. ET, Monday-Friday.

For technical questions about a specific product call (904) 576-9415 from 11 a.m. to 5 p.m. ET, Monday-Friday.

Contact us electronically for fastest written communication:

America Online, AppleLink, GEnie: SevenHills

CompuServe: 75300,1743

FAX: (904) 575-2015

To contact us the "old-fashioned way," write to:

Seven Hills Software  
2310 Oxford Road  
Tallahassee, FL 32304-3930

# Notes

## Important Notice!

Express is the result of two years hard work in overcoming many technical issues. We know you will be happy with the result.

Please encourage your friends to purchase their own copy of Express. This type of direct support from you, our loyal customer, is the best way you can help us continue publishing innovative products for the Apple IIs.

Thank you.

# Table of Contents

## Getting Started

Things You Need To Know .....	3
Requirements .....	3
Keys on Your Keyboard .....	3
Steps .....	3
Installing Express .....	4
Activating Express .....	5
Checking the Version Number .....	6

## Reference

The Main Window .....	9
Spooling Options .....	10
Initial Spool Status .....	10
ImageWriter I .....	11
Express Inactive .....	11
Creating a Spool File .....	12
A Note About Printing Speed .....	12
Printing Spooled Files .....	14
Print Mode .....	14
Print Queue .....	15
Print Status .....	17
Common Questions and Answers .....	18

## Index

# Notes

## Getting Started

We know you are anxious to start using Express, but please read this section first because it leads you through several important steps which you need to do only once:

- Learning conventions and terminology
- Installing Express onto the startup hard disk drive

After this section is the *Reference* section which covers every aspect of Express.

# Notes

## Things You Need To Know

---

---

### Requirements

To use Express you need:

- An Apple IIGS
- A hard disk drive with System Software 5.0.4 (or later) installed.
- One 3.5" disk drive (needed to access the 3.5" disk that came with this package).
- A IIGS-specific program that works with System Software 5.0.4 or later (e.g. AppleWorks GS, GraphicWriter III, Platinum Paint, etc.).
- A direct-connect printer (Express turns itself off and does not spool files destined for a networked printer).

---

---

### Keys on Your Keyboard

Keys on the keyboard are referred to by the name printed on them (*Delete*, *Option*, *A*, etc.). The Command key is shown as ⌘.

---

---

### Steps

Steps you should follow are indented and numbered. For example:

- ① Use Express.
- ② Increase your productivity.

## Installing Express

Installing Express is easy...just follow these steps:

- ① Start up your hard disk drive and your Apple IIGS just as you usually do.

When you reach the point where you can launch an application,

- ② Insert the "Express" disk into a 3.5" disk drive.
- ③ Launch the "Install" program.
- ④ When you are asked to do so, type your full name and click the OK button. The original Express disk must *not* be write-protected (you should *not* be able to see through the hole in the upper-right corner of the disk).

Soon Apple's Installer window is displayed. The scroll box on the left side of the window contains the "script" that is used to install Express.

- ⑤ The "Install Express" script is already highlighted, so just click the Install button and Express and its icons are copied to the disk that was used to start up the computer.
- ⑥ After Express is installed successfully, click the Quit button to quit Apple's Installer.
- ⑦ Click the Restart System button to restart the computer.
- ⑧ Eject the original Express disk and store it in a safe place.


## Activating Express

After installation, Express is located in the System:CDEVs folder on your hard disk drive. Normally Express will be activated automatically whenever you start your Apple IIGS (an icon appears on the startup screen when it is loaded). Because you restarted the system after installing Express, it has been activated and is ready to use.


For future reference, you can prevent Express from loading by holding down the Option key when you start the computer (if you are using System Software 6.0 an X appears on top of the Express icon).

If you prevent Express from loading, then later decide you want to use Express, you do not have to restart the computer. Instead, follow these steps to activate Express without restarting:

### Using System Software 5.0.4:

- ① Choose Control Panel from the  (Apple) menu.
- ② Click the Express icon once to open it.

### Using System Software 6.0:


- ① Choose Control Panels from the  (Apple) menu.
- ② Click the Express icon once to highlight it.
- ③ Click the Open button.

---


## Checking the Version Number

To see the program version number and other information:

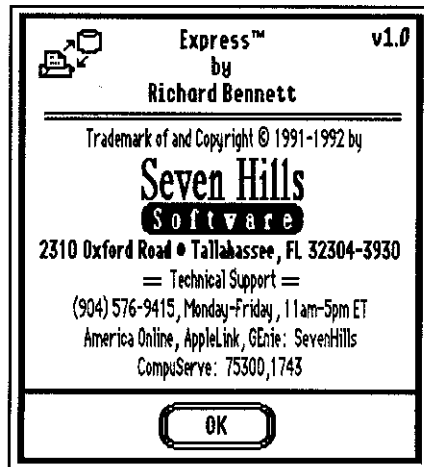
### Using System Software 5.0.4:

- ① Choose Control Panel from the  (Apple) menu.
- ② Click the Express icon once to open it.
- ③ Click the Help button at the lower-left of the dialog box.

### Using System Software 6.0:

- ① Choose Control Panels from the  (Apple) menu.
- ② Click the Express icon once to highlight it.
- ③ Click the Help button.

Under either system you will see a dialog box similar to the following:



*The Express Help dialog box*

# Reference

The *Reference* section describes all the features found in Express. This section is organized for reference—use it to learn about a specific feature.

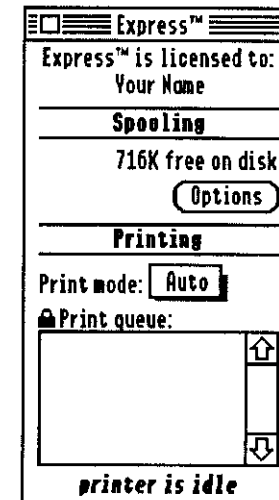
A particular topic or command also can be found in the Table of Contents or Index.



# Notes

## The Main Window

The main Express window has two major areas: "Spooling" (printing files to the hard disk drive) and "Printing" (printing the spooled files on the printer).

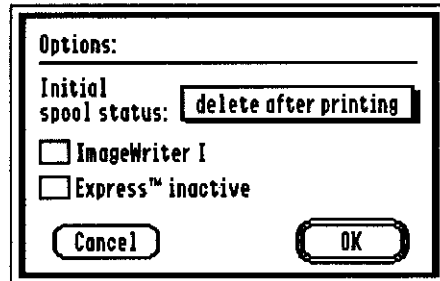


*The main Express window*

---

## Spooling Options

Click the Options button, or type  $\text{C}\text{O}$ , to display various spooling options:



*The Options dialog box*

---

### Initial Spool Status

The Initial Spool Status popup menu is used to specify the setting that will be assigned to each spool file when it is created (whenever you print from an application).

**Delete After Printing:** The spool file will be deleted from disk after the file is printed. This is the standard setting (when you print a document it is spooled to the hard disk, printed in the background, then the spool file is deleted from the disk).

**Keep After Printing:** When you print a document it is spooled to the hard disk and printed in the background. After it is printed the spool file's status changes to "don't print." This option is useful for documents you print frequently but rarely change. To reprint the document later, just change the status to "keep after printing" and it will be reprinted.

**Don't Print:** The spool file is not printed and remains on the disk until you either change the file's status to "delete after printing" or you manually delete the file. This option is useful if you want to print documents to disk but don't want them to print on the printer immediately.

---

### ImageWriter I

The "ImageWriter I" checkbox should be checked if you are using an ImageWriter I printer.

The setting of this checkbox matters only when are using the "ImageWriter" printer driver. Therefore, if you switch between a DeskJet and an ImageWriter I you can leave this option on all the time. Likewise, if you switch between a DeskJet and an ImageWriter II you can leave this option off all the time.

---

### Express Inactive

The "Express Inactive" checkbox turns Express completely off (no spooling and no background printing will occur). If a file is currently printing it will be re-queued when you click OK. This option is usually *not* checked.

---

## Creating a Spool File

After configuring Express for your particular printer, printing from any GS/OS application (e.g. AppleWorks GS, GraphicWriter III, Platinum Paint, etc.) automatically creates a spool file in an Express.Spools folder.

The way you print is identical to the way you've been printing in the past (usually you choose Print from an application's File menu). There will be only two differences:

*ImageWriter and ImageWriter LQ printer drivers:* Special printing options (e.g. color, feeder bins) are always available instead of being dimmed when they don't apply.

*All printer drivers:* When you click OK to begin printing, the familiar "printing" messages will appear on the screen just as they always have. However, the printer won't begin operating immediately. Instead the printer data is "spooled" to disk<sup>1</sup>.

After spooling a document to disk, the file begins printing in the background while you continue to work (unless you specified options to delay printing until later).

---

## A Note About Printing Speed

**Express does *not* increase the speed of a printout!** In fact, the time it takes to get a final printed page with Express will be slower than without Express (spooled files are printed in the "background" so *your activity* takes precedence).

**The important point is that with Express you get *control* of your computer back sooner.** This means that you can print a file and as soon as it is spooled to disk you will have control of your computer—no matter how long it takes for the document to print. You can print other documents, and can even quit one application, start another, and print from there!

---

<sup>1</sup> If you started a standalone computer the Express spool files are stored in the \*:System:Express.Spools folder. If you started your computer via an AppleShare network the spool files are stored in an Express.Spools folder inside your user folder.

Express also provides additional benefits. For example, if you have a document that you print often but don't modify often, you can print that file to disk once. From then on to get additional copies you just print the spooled file...you don't even have to start the application that created the document!

Here are some examples of the time savings with Express. The times are measured from clicking "OK" in the Print dialog box to the time control of the computer is regained.

Document Information (all printed on an ImageWriter II)	Without Express	With Express
1 page in GraphicWriter III, best quality	1:35	:35
1 page in Platinum Paint, standard quality	1:30	:52
2 pages in AWGS page layout, best quality	8:49	3:02
2 pages in GraphicWriter III, best quality	6:15	3:00
9 pages in AWGS word processor, fast quality	3:31	1:43
43 pages in AWGS database, standard quality	21:16	6:00

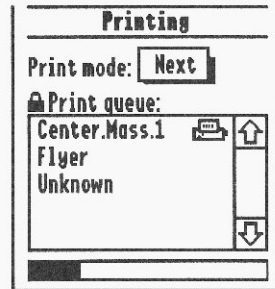
While the exact time that you will save cannot be determined<sup>2</sup>, testing has shown that you will *always* get control of your computer back sooner with Express than without.

---

<sup>2</sup> Because it depends on the amount of memory available at the time, the speed of your hard disk drive and controller card, which printer driver you're using, what quality setting is chosen, which application you are printing from, and other factors.

## Printing Spooled Files

After spooling one or more files to disk (by printing from an application just as you always do), you can view the progress of the file being printed, or change the status of some of the spooled files.



The Printing area in the main Express window

*TIP: If you don't like the thermometer color, click on the "Printing" title while the thermometer is visible.*

## Print Mode

There are three modes for controlling how Express prints spooled files:

**Off** (⌘P): Express will not print any spooled files (printing still creates a spool file; the spooled files just aren't printed by Express). If a file is currently printing it will be re-queued, and you should turn the printer off and back on to reset it for the next print job. *NOTE: To turn Express off completely (i.e. no spooling and no printing) click the Options button and check the Express Inactive checkbox.*

**Next** (⌘N): Express looks in the print queue to determine if any spool file needs to be printed. If one is found, Express prints it, then switches the print mode to Off. This allows you to print a single file at a time. In the example above, after the "Center.Mass.1" file is finished printing, the print mode will be switched to Off.

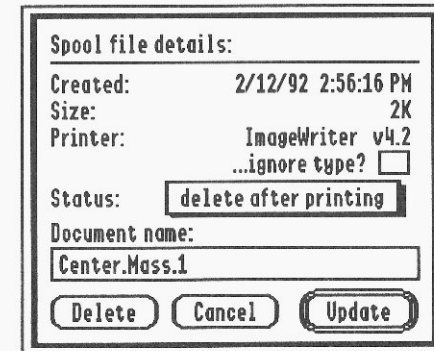
**Auto:** Express constantly looks in the print queue to determine if any spool file needs to be printed. If one is found, Express prints it and starts looking for the next file. This is the default print mode because it allows you to spool several files to disk and Express will print each file without any intervention from you.

## Print Queue

The print queue displays the document names of the files that have been spooled to disk. The documents are listed in chronological order (from the oldest spool file to the newest spool file). *NOTE: Some applications and desk accessories do not provide the name of the document, so the name is "Unknown."* This is not a problem with Express; the application is just not providing the document name<sup>3</sup>.

When a particular file is being printed, a small printer icon (🖨️) is displayed in the list. Also, a thermometer appears below the print queue box to indicate how much of the file has been printed.

Double-clicking an item in the Print Queue presents a dialog box that displays more information about the spooled file. *NOTE: To view information about several files, hold down the Shift or ⌘ key to select a range of files, then double-click on one of the highlighted files.*



The Spool File Details dialog box

This dialog shows the spool file creation date, time, size, and the printer driver that was chosen at the time.

The Status popup menu shows the status of this particular spool file (see "Initial Spool Status" in the Spooling section for complete descriptions of the available options).

<sup>3</sup> Most of our existing products do not provide the document name, but they will in a future update. If you have other applications that show "Unknown" documents, ask that program's author/publisher to incorporate the "PrSetDocName" call when printing.

The Document Name edit box displays the name of the document. Many applications don't relay the name of the document they're printing so the name is often "Unknown."

## Changing Spool File Details

When the Print Mode is "Off" the spool type, document name, and the Ignore Type option can be changed. Click the Update button to record any changes you make. *NOTE: If the Print Mode is "Next" or "Auto" and Express is active, a padlock icon (🔒) appears next to the Print Queue list title to indicate that you cannot edit information or delete a file. (You can still view information about a spooled file, but only the Cancel button can be chosen.)*

To change the status a spool file, select a new choice from the popup menu.

To change the name of a spool file, edit the existing name or delete the whole name and type a new one.

To delete a spool file, click the Delete button. The file is immediately removed from the print queue (no confirmation is needed).

## Ignore Type Checkbox

A spool file is created by intercepting information that is on its way to the printer. At that point the information is printer-specific, meaning it consists of information that only that particular type of printer can interpret correctly.

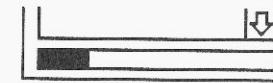
Using Express it is possible to print several documents with one printer driver chosen, then choose another printer driver and print additional documents. When Express examines the print queue for spooled files that need to be printed, it skips files that were created when a different printer driver was chosen (the document names are also dim).

For example, if you print three files with the ImageWriter printer driver, then choose the Epson printer driver, any spooled files intended for the ImageWriter are dimmed in the list and are not printed until you switch back to using the ImageWriter driver. Normally this is desired because sending ImageWriter-specific printer codes to an Epson printer would produce gibberish on the printout.

However, in certain cases you might want to override this feature and print a file that was intended for one printer on another printer. For example, if a friend gives you a spool file created with the ImageWriter printer driver, but you have an ImageWriter LQ, Express would not normally print the file. But by checking the Ignore Type checkbox Express will print the file on your ImageWriter LQ (which works because the LQ supports the plain ImageWriter print codes).

## Print Status

Below the print queue list is an indicator that shows the current status of Express.



Express is currently printing a spooled file. The thermometer shows how much of the file has been sent to the printer (i.e., when it's full, the file is done). *NOTE: To indicate which file is currently printing, a small printer icon (🖨️) is displayed in the print queue.*



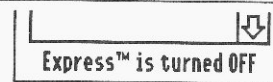
Express is capable of printing, but it is not printing anything right now. There are several possible explanations for this status:

- ⇒ There are no spooled files so there is nothing to print.
- ⇒ The Print Mode is "Off" so Express won't attempt to print any files.
- ⇒ There are spooled files, but the status of each file is marked "don't print."
- ⇒ There are spooled files marked to print, but they are intended for a printer other than the printer currently chosen in the Control Panel.



The program you are currently using has not started the Print Manager, so Express cannot print. For example, ShrinkIt-GS does not start the Print Manager, so printing ceases whenever you use that application.

*NOTE: Using System Software 5.0.4, printing will stop when you use Apple's Finder. Under System Software 6.0, printing will continue when you use the Finder.*



You checked the "Express Inactive" checkbox in the Options dialog box. Express won't spool files to disk and it won't print files in the background.

In this state, the printing process will be exactly as it was when Express was not installed.

## Common Questions and Answers

*Please contact Seven Hills' technical support if this section doesn't answer **your** question!*

---

### A document was printing in the background, then I started AppleWorks Classic. When I returned to GS/OS Express started printing the file from the beginning. Why can't it continue?

Whenever you launch ProDOS 8, Express is automatically turned off. If a file was currently being printed when ProDOS 8 was launched then it is "re-queued" for printing upon return to GS/OS. Because ProDOS 8 applications do not use the Print Manager, they do things to the printer that Express is never aware of.

When you launch ProDOS 8 in the middle of an Express printout, you should turn the printer off and back on, and set the paper correctly (otherwise anything you print from ProDOS 8 could be garbled). We also recommend doing this before quitting back to GS/OS to ensure the printer and paper are ready to start a fresh printout.

---

### A document was printing in the background, but then I quit to Apple's Finder and it stopped. Why?

The Finder does not start the Print Manager because it doesn't do any printing. If the Print Manager is not started Express cannot continue printing. As soon as you open an application that starts the Print Manager, background printing will begin.

*NOTE: The Finder in System Software 6.0 does not start the Print Manager either, but it does provide a way for Express to start it and shut it down as necessary, so printing will continue when you quit to Apple's Finder with System Software 6.0.*

If you are comfortable using a resource editor you can edit an application's "tool startup" resource (if it has one) to include starting the Print Manager. Use caution—this should be done only on a backup copy of the application!

---

### I printed a document but it didn't start printing in the background. What's wrong?

Open the Express CDEV.

*Is there a new entry in the print queue?* If not, either Express was inactive, the application did not use the Print Manager for that print, or a network printer was chosen.

If there is a new file, then the print *was* spooled to disk. In that case...

*Does the file have a printer icon next to it, and is the thermometer filling?* If so, Express is printing the file in the background, and your printer is probably turned off (or the printer cable is not fully connected).

*Is the Print Manager active?* Some applications start the Print Manager only when they are printing, then shut it down immediately. You can still print as many files as you wish, and they will be spooled to disk; they just won't print until you start an application that leaves the Print Manager active all the time.

*Is the Print Mode popup menu set to "Off"?* If so, Express will spool files, but will not print them in the background.

*Did you change printer drivers?* If you spool a file with the Epson printer driver, then switch to the ImageWriter driver, Express won't print the Epson spool file (the file will be dim in the print queue list). When you switch back to using the Epson printer driver, the Epson spool file(s) will be printed.

---

### Why are some documents "Unknown"? That isn't very informative.

We agree! However, it is up to the *application* to tell the Print Manager the name of the document it is printing. Express just asks the Print Manager what the document name is. If the application didn't supply one, then the Print Manager tells Express the name is "Unknown."

The solution is to contact the author/publisher of the application and request they incorporate the "PrSetDocName" call when printing...*unless it's a product published by Seven Hills Software*. We are already aware that most of our applications do not supply the document name to the Print Manager, so you do not need to contact us. We will be correcting this as new versions of our software are released.

---

### **Sometimes Express starts printing my document before it has finished spooling, and other times it waits until it the whole document is spooled. What's going on?**

Express starts printing a document *only* when it has been told the document is complete. However, some applications (AppleWorks GS, HyperCard IIGS) create a new document for every page they spool. So when one of these applications finishes a *page*, Express is told that the *document* is finished.

Because the "document" is finished, Express starts to print the spooled file. But then the application begins printing the next page.

This is not a bug. The only negative side-effect is that instead of a single document name being listed in the Express CDEV's print queue there will be one item for each page of the document.

---

### **The manual said "if a friend gives you a spool file..." How do you do that, and why would I want to?**

In the Finder you can drag an Express spool file into and out of the Express.Spools folder whenever you like.

If you create a document in an application your friend doesn't own, but you want him to be able to print the document, you can print the document to disk using Express. Turn Express Off, then copy the spool file to a disk for your friend (or send it to him via modem). *NOTE: Your friend still must own Express in order to print the file...do not give him the Express CDEV!*

---

### **Why does spooling become slower when I print large documents?**

If Express starts printing the current document before it has finished spooling, it slows down because it is doing *two* things at once...spooling *and* printing (see the previous question).

Also, if you have a very large number of spooled files (more than about 200) in the "Express.Spools" folder, you could notice a delay whenever Express updates its print queue list (which happens even if the Express CDEV is not open).

---

### **A document was spooled to disk, but then my computer hangs. Is this Express?**

Probably not... Most likely the printer is just not selected. When Express prints in the background, it tells the port driver "send this information to the printer." At that point the port driver is in control and will not return until the data has been sent. If the printer is not selected, the port driver will sense the printer is busy and it will wait forever for the printer to become "unbusy," which looks like the computer has "hung."

The solutions: Check your printer to verify it is selected. If it is, try de-selecting it then re-selecting it. If that doesn't work, check the printer cable to be sure both ends are attached firmly. If that isn't the problem, try turning the printer off for a few seconds then turning it back on. Finally, restart the computer if all else fails. If the problem continues, please contact Seven Hills Software.

---

### **When I print from my application, why does it go straight to my printer instead of being spooled?**

*Is the Express CDEV installed and activated?* See the "Activating Express" section of this manual, then try printing again.

Open the Express CDEV. *Is there a message that says "Express is turned off"?* If so, the "Express Inactive" checkbox is turned on (in the Options dialog box).

*Are you printing from ProDOS 8 or from an application that does not use the IIGS Print Manager?* Express works only with GS/OS software that uses the Print Manager. Any software that prints directly to a printer *without* using the standard IIGS printer drivers will be bypassing Express, so no spooling will occur.

*NOTE: Some IIGS-specific applications use the Print Manager for some printouts, but use other methods for other printouts. Express only spools the documents that are printed via the Print Manager.*

---

### **The printer name shown when editing a file doesn't always correspond with what is currently selected in the Control Panel. Why not?**

The printer name shown when editing a file is the printer that was active when the document was *created*, not the printer that is currently chosen. See the "Ignore Type Checkbox" section of this manual.

---

### Why does the Express printout have garbage on it?

Inactivate or remove Express from your system and print again. If the problem still shows up it is not Express. If the problem goes away, try again with Express installed.

Is the currently chosen printer the same as the one used when the file was spooled? Double-click the print queue entry to see what printer name is shown.

If spurious characters (technically known as “crud”) appear on the printout, check your Control Panel’s Printer Port settings. Often turning on the Xon/Xoff setting will cure this problem (all other settings, except perhaps the Baud rate, should be checked).

If “crud” appears only when switching between applications, try using a copy of the original System Disk with Express *only*. If the problem goes away check your INITs and desk accessories (and please let us know which one is the culprit). If the problem persists please contact Seven Hills Software.

---

### Is there a quicker way to open the Express CDEV?

There is, but only when you are using Apple’s Finder with System Software 6.0 (or later). You can drag the Express CDEV out of the System:CDEVs folder and place it onto the Finder’s desktop. When you want to open Express, just double-click its icon! *TIP: This works for any CDEV.*

If you’re not in the Finder and you want to switch frequently between Express and the application you are using, most applications will let you open the Express CDEV and leave it open. To switch between the application and Express, just click in an appropriate window.

---

### Express was saving me lots of time, but then I added WestCode’s Pointless™ CDEV and now printing is very slow. Is there a conflict?

No. Printing with Pointless will be slower because Pointless creates every point size that is requested from a TrueType outline. The process of creating a IIGS font from a TrueType outline takes much longer than what you’re familiar with (Apple’s fast bitmap scaling routines). However the results are worth the wait!

Express has nothing to do with the speed at which Pointless operates. However, here are three tips to speed up the printing process when you are using Pointless:

- Add lots of computer memory so after a font is created it will be able to stay in memory longer. If the font is still in memory the next time it’s requested, Pointless won’t have to create it again.
- Use an accelerator, such as a TransWarp GS™ or a Zip GS™ so when Pointless does have to create a font it will do it as quickly as possible.
- Don’t throw away all your existing IIGS bitmap fonts in favor of TrueType outlines! If no bitmap fonts exist, Pointless must create each and every size you need. However, if you keep common bitmap sizes (9, 10, 12, 18, 24, 36, 48, etc.) in your System:Fonts folder, those sizes can be loaded quickly from disk. Also, the bitmap versions of small sizes (e.g. 9, 10) will usually look better than the TrueType version of those same sizes.



# Notes

## Index

This index attempts to reference all the topics you might look up. If you are looking for a particular topic and can't find it, please let us know so we can incorporate it in the next printing of the manual.

### A

Activating Express *5*  
Answers *18*  
Apple's Finder *18*  
AppleWorks Classic *18*  
AppleWorks GS *20*  
Auto *14*

### C

CDEVs *5*  
Changing Spool File Details *16*  
Checking the Version Number *6*  
Common Questions and Answers  
*18*  
Control Panels *5*  
Creating a Spool File *12*

### D

Delete After Printing *10*  
Don't Print *10*

### E

Express Inactive *11*  
Express Is Turned Off *17*  
Express Off *11*

### F

Finder *18*

### G

Getting Started Section *1*

### H

Hardware Requirements *3*  
HyperCard IIGS *20*

---

---

**I**

Ignore Type *16*  
ImageWriter I *11*  
Inactivating Express *11, 17*  
Initial Spool Status *10*  
Installer Program *4*  
Installing Express *4*  
Instructions *3*

---

---

**K**

Keep After Printing *10*  
Keyboard *3*  
Keys *3*

---

---

**L**

Loading Express *5*

---

---

**M**

Main Window *9*

---

---

**N**

Next *14*

---

---

**O**

Off *11, 14, 17*  
Options *10*

---

---

**P**

Pointless *23*  
Print Manager Inactive *17*  
Print Mode *14*  
Print Queue *15*  
Print Status *17*  
Printer Is Idle *17*  
Printing *14*  
Printing Speed *12, 23*  
Problem Solving *18*  
ProDOS 8 *18, 21*

---

---

**Q**

Questions *18*

---

---

**R**

Requirements *3*

---

---

**S**

Solving Problems *18*  
Speed *12, 23*  
Spool File Details *15, 16*  
Spooling Options *10*  
Status *17*  
Steps *3*

---

---

**T**

Thermometer *17*  
Troubleshooting *18*  
Turning Express Off *11, 17*

---

---

**U**

Unknown *19*

---

---

**V**

Version Number *6*

*Notes*

*Notes*

*Notes*

*Notes*

*Notes*

*Notes*

*Notes*

# Express

Express™ gives you full control of your Apple IIGs while your printer is working! Express is a “must have” for all IIGs owners who want to stop wasting valuable time. And it’s easy to use...just choose “Print” like you normally do with your programs and Express “spools” your document to disk without any additional commands. You get control of your computer back in a fraction of the time it used to take! Once spooled, documents are automatically printed in the background while you continue to use your computer.

Express works with AppleWorks GS, GraphicWriter III, Platinum Paint, and other GS/OS compatible software (not 8-bit software like Classic AppleWorks 3.0). You can even switch between programs while the printer is working. Multiple files can be spooled, printed more than once, and deleted from the spool list. The longer or more complex the document, the more time you save!

<b>Sample Test Results* (all printed on an ImageWriter II)</b>	<b>Without Express</b>	<b>With Express</b>
1 page in GraphicWriter III, best quality	1:35	:35
1 page in Platinum Paint, standard quality	1:30	:52
2 pages in AWGS page layout, best quality	8:49	3:02
2 pages in GraphicWriter III, best quality	6:15	3:00
9 pages in AWGS word processor, fast quality	3:31	1:43
43 pages in AWGS database, standard quality	21:16	6:00

\*Times vary depending on the hardware and software used.

Express requires an Apple IIGs and a hard disk drive. It works with all direct-connect printers (not with networked printers).

Suggested retail is only \$39.95



**Seven Hills**  
**S o f t w a r e**  
Tallahassee, Florida • 904-575-0566