

Erica's Documentation: *Applications and Utilities for the iPhone and iPod touch*

ERICA SADUN

Copyright 2007 by Erica Sadun. All Rights Reserved.

SendSong

SendSong lets you browse through your onboard iPhone or iPod touch music libraries, play back the music it finds and share that music with others (of course, according to copyright law and fair use restrictions).

Downloading and Installing SendSong

You can download SendSong via **Installer.app**. Installer.app is an iPhone-based software installation program from Nullriver.com. (See <http://iphone.nullriver.com>.)

SendSong appears in the Multimedia section of the program. Tap Install > Multimedia > SendSong > Install. After installation, new versions may regularly appear in the Update tab.

Note: At this time, the 0.09 version of SendSong exists only to provide compatibility with 1.0.2 users.

Manual Installation

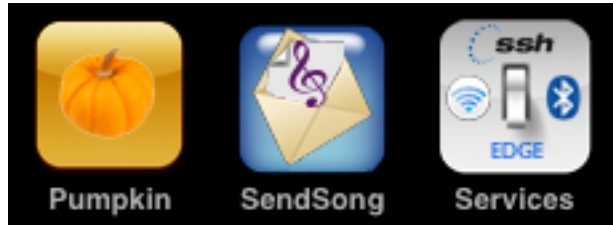
You can also install SendSong manually. Zipped updates regularly appear in the SendSong home folder on ericasadun.com. Navigate to <http://ericasadun.com/ftp/Applications/SendSong/> and download the latest archive. All updates are numbered. The biggest number is the newest version.

To manually install, download the archive, unzip (or untar) it to your desktop and use any of the many file transfer solutions (like sftp or afp) to copy the application to your iPhone. Make sure the actual *sendsong* application inside the SendSong.app folder has executable permissions. Use `chmod +x` or `chmod 755`.

Note: When looking at the SendSong.app bundle on a Macintosh, you will not be able to see inside its folder unless you select it and right-click (or control-click) the application and choose Show Package Contents from the pop-up menu.

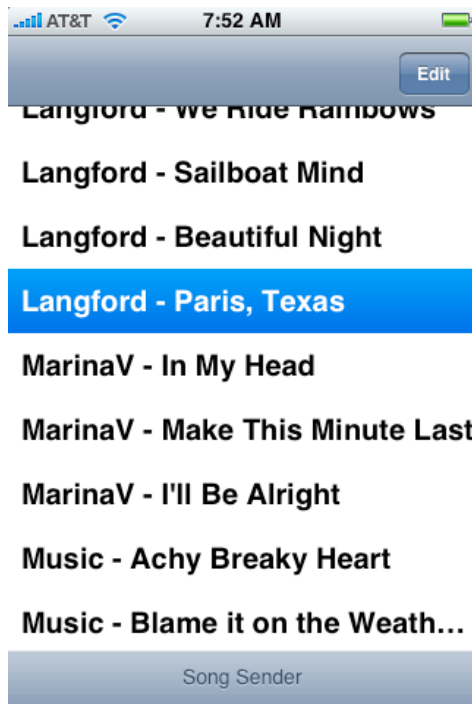
Launching SendSong

The SendSong icon looks like a music note in an envelope (see below). Tap the icon to open the SendSong program. The program launches, scans your Music Library and put together a list of all the songs it finds in that Library.



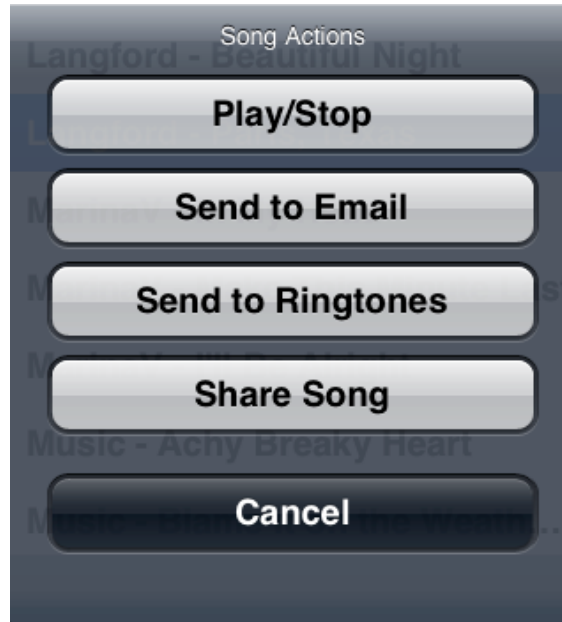
The Main Application

The SendSong application screen is very simple. You have a list of songs, you have an edit button and that's about all. Normally, the artists names are not listed with the song titles. Mine are because I obsessively add them to all my songs in iTunes—but that's a personal quirk not a program feature.



Playing and Sharing Songs

Tapping a song name brings up a list of options for you to apply to that song. These options are as follows:



Play/Stop – Tap this to start or stop music playback of the selected track. Playback always starts at the beginning of the track and there are, at this time, no scrubber controls or any fast forward/reverse/pause features.

Send to Email – Selecting this option launches your onboard mail program, creates a new message and attaches the song to that outgoing mail. You leave the SendSong program and enter the Mail program.

Send to Ringtones – Choose this option to add your song to your iPhone as a ringtone. Using the expertise of a hacker named Roxfan, SendSong works to add your song in such a way that it works reliably. You *must* reboot your phone after adding ringtones in order to allow the iPhone system to properly load your new music. Otherwise, the iPhone will play Marimba instead of your custom ringtones.

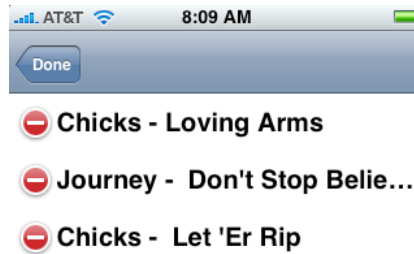
Share Song – Tap this option to begin sharing the selected track via Bonjour, Apple's zero configuration networking. At this time, you get little or no feedback that the program is doing anything but it is. Another iPhone or iPod touch or even a Macintosh can connect to your iPhone after you select Share Song and wirelessly copy that file.

Note: To receive a shared file you must be running SendFile on the iPhone (<http://ericasadun.com/ftp/Applications/SendFile/>) or FileCatcher on the Macintosh (<http://ericasadun.com/ftp/EricaUtilities/>). Both are available on my ericasadun.com site.

Cancel – Tap cancel to leave this menu without performing any of these actions.

Managing Ringtones

Tap the Edit button at the top of the SendSong screen to open the Ringtone Editor. Here, all your custom ringtones appear in a list as shown here.



Warning! Deletion is permanent!

- **Deleting a Ringtone.** To delete a custom ringtone from your iPhone, tap the red circled minus tag next to any name. A Delete button appears. Tap the button to confirm your delete request or tap anywhere else on your screen to cancel without deleting that ringtone.
- **Leaving Edit Mode.** Tap Done to leave edit mode after making your changes.

Deletion is permanent and you cannot immediately undo your changes. You must instead return to SendSong and re-add your ringtones after removing them.

Restoring Ringtones after an iTunes Sync

When iTunes kills your Ringtones.plist after a sync, just run SendSong. SendSong always makes a back-up copy of your ringtones and restores it when launched.

Leaving the Program

Tap your Home button (the physical button at the bottom of your iPhone or iPod touch that is marked with a white square) to leave SendSong and return to your Home screen.

SendSong does not continue to run in the background. Tapping Home quits the program. So any songs that are playing stop and any file sharing you have set up terminates.

Known Bugs

SendSong does not yet support searching and sorting. All your songs appear in the order they were added to iTunes. SendSong *will* crash during scrolling with large iTunes libraries. I don't have SendSong check for how big your music library is. So if your library is modest, SendSong doesn't crash. If it is big, it does. This is a known issue and I am working on fixing it.

More Information about SendSong

- **Home.** SendSong is hosted at <http://ericasadun.com/ftp/Applications/SendSong/>
- **Cost.** SendSong is currently distributed freely and without charge. If you use the program and would like to donate, you can send paypal contributions to erica@mindspring.com.
- **Author.** This program was written by Erica Sadun

SendFile

SendFile is an application that was written on request to allow you send files from a central library by email. The idea is that some people need to carry certain documents, reports, audio and other materials around with them and shoot them off by email on request. I made a deal. I'd write the program in exchange for donations to Faith In Practice. Faith in Practice is a non-profit volunteer organization that provides free surgical, medical and dental assistance to impoverished adults and children in Guatemala.

From there, SendFile continued to develop and grow. The latest version allows you to share your files wirelessly by Bonjour zero-configuration networking as well by email, and to play back any audio you receive or store in your Media/Documents folder.

Downloading and Installing SendFile

You can download SendFile via **Installer.app**. Installer.app is an iPhone-based software installation program from Nullriver.com. (See <http://iphone.nullriver.com>.) SendFile appears in the Utilities section of the program. Tap Install > Utilities > SendFile > Install. After installation, new versions may regularly appear in the Update tab.

Manual Installation

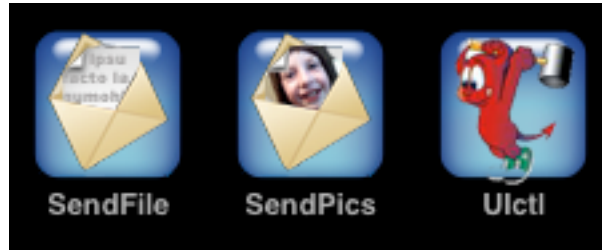
You can also install SendFile manually. Zipped updates regularly appear in the SendFile home folder on ericasadun.com. Navigate to <http://ericasadun.com/ftp/Applications/SendFile/> and download the latest archive. All updates are numbered. The biggest number is the newest version.

To manually install, download the archive, unzip (or untar) it to your desktop and use any of the many file transfer solutions (like sftp or afp) to copy the application to your iPhone. Make sure the actual *sendfile* application inside the SendFile.app folder has executable permissions. Use `chmod +x` or `chmod 755`.

Note: When looking at the SendFile.app bundle on a Macintosh, you will not be able to see inside its folder unless you select it and right-click (or control-click) the application and choose Show Package Contents from the pop-up menu.

Launching SendFile

The SendFile icon looks like a letter in an envelope (see below). Tap the icon to open the SendFile program. The program launches, scans your `/var/root/Media/Documents` folder and puts together a list of the files it finds there.

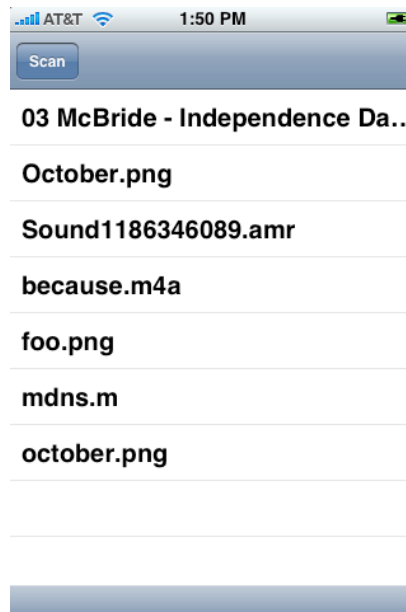


Populating Media/Documents

At this time, you must add your files to `/var/root/Media/Documents` by hand. I wrote a few Mac utilities to help with this (see <http://ericasadun.com/ftp/MacUtils/>) and you can use any other iPhone file solution, including sftp, afp, sshfs. If you're a Mac user, you can also use Bonjour to fill up your Documents folder. Use my ShareFile utility on the Mac (see <http://ericasadun.com/ftp/EricaUtilities/>) and then catch your files directly in SendFile.

The Main Application

The SendFile application does not have many features. You have a list of files and, on starting, a Scan button. The files appear in Unix order: numbers, followed by capitalized letters in alphabetic order, followed by lower case letters. If space permits, you see the file extension as well as the full name of the file.



File Menu Options

Tap on any file in order to view the file options shown here. These include Email File, Share File, and Play Audio in the current release. The Play Audio option appears only for files with a recognized audio extension (.amr, .m4a, .mp3, etc). Here is a quick run down of these options and what they do.

- **Email File** – Selecting this option closes SendFile and creates the draft for a new letter in Mail with the file as attachment. To use this option, your file name must *not* contain spaces. So you can email “October.png” but not “03 McBride – Independence Day.m4a”.
- **Share File** – This option allows you to wirelessly share the selected file using Bonjour. The file name turns green to indicate which file will be shared when your iPhone or iPod touch is contacted by client.
- **Play Audio** – This option appears only for audio files, whose extensions match the list of known file types: M4A, MP4, AMR, M4P, and so forth. Selecting this option begins playback of the song. At this time there is no scrubber bar and no way to stop playback other than to pick another audio file to play or to leave the program.

Scanning for Shared Files

The **Scan** button in the top-left corner of your screen allows you to search for and request a shared file. iPhone/iPod programs that currently support file sharing include SendFile, SendSong, and the command-line utilities catch and throw. You can also use one of my Macintosh utilities (<http://ericasadun.com/ftp/EricaUtilities/>) to share files to and to catch files shared from the iPhone or iPod touch.

For example, you might share a song from SendSong on one iPhone and use SendFile’s scan feature to capture that song, which you can then play back using Play Audio.

How Scanning Works

After tapping Scan, the button disappears. A progress wheel appears on the top-right of your screen in the navigation bar area. This progress wheel tells you that the program is looking for shared files. After catching a file, the program stores the new item in `/var/root/Media/Documents`, reloads the file list and re-displays the Scan button. You can treat a captured file just like any other. You can share it, play it, and email it.

Leaving the Program

Tap your Home button (the physical button at the bottom of your iPhone or iPod touch that is marked with a white square) to leave SendFile and return to your Home screen. SendFile won’t run in the background. Tapping Home quits the program. So any songs that are playing stop and any file sharing you have set up terminates.

Known Bugs

SendFile does not yet support file edits—you must manually delete files from the folder through sftp or iPhuc or some other access program. SendFile does not support folders either. You must include all your files at the top level /var/root/Documents/Media folder. Do not try to send files with spaces in their names. It just won't work right now although I hope to have a fix soon.

More Information about SendFile

- **Home.** SendFile is hosted at <http://ericasadun.com/ftp/Applications/SendFile/>
- **Cost.** SendFile is charity-ware. If you use this program, please make a contribution to <http://www.faithinpractice.org>. **Faith in Practice** is a non-profit volunteer organization that provides free surgical, medical and dental assistance to impoverished adults and children in Guatemala. When donating, please use FIP number 9951. This number refers to my friend Monique's sister's group and will help buy medical supplies for their next trip. Please send your pledges and your donation receipts to erica@mindspring.com.
- **Author.** Erica Sadun wrote this program.

SendPics

SendPics was written to do one thing: it allow users to email photos in full resolution. The iPhone automatically scales photos before attaching them to email. People wrote to me asking if I could help them get around this limitation. They wanted to be able to send the pictures they snapped to Flickr or to photo processing centers without subjecting them to resizing. That's why I put together SendPics.

SendPics does not browse the files you have synched from iPhoto. It only accesses the digital camera image (DCIM) folder on your iPhone—and yes, this utility is meant strictly for the iPhone. So why not synched photos? Simple answer: It's really really easy to get access to pictures you have shot and really really tedious and annoying to get access to the photo database for pictures you have synched. Because of this, SendPics is limited. In a nutshell: if you shoot it, you can send it with full resolution. If you sync it, you can't. At least, you can't from your iPhone. You can always just go back to your computer and send pictures from there.

Note: SendPics scans for both DCIM/100APPLE and 101APPLE. Most iPhones use one or both of these folders to store photos.

Downloading and Installing SendPics

You can download SendPics via **Installer.app**. Installer.app is an iPhone-based software installation program from Nullriver.com. (See <http://iphone.nullriver.com>.) SendPics appears in the Multimedia section of the program. Tap Install > Multimedia > SendPics > Install. After installation, new versions may regularly appear in the Update tab.

Manual Installation

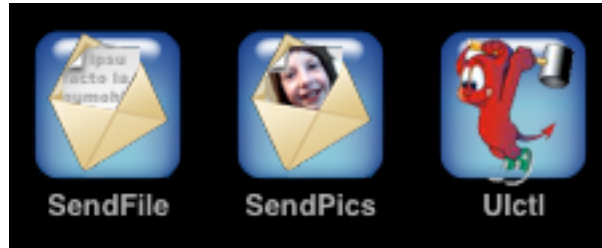
You can also install SendPics manually. Zipped updates regularly appear in the SendPics home folder on ericasadun.com. Navigate to <http://ericasadun.com/ftp/Applications/SendPics/> and download the latest archive. All updates are numbered. The biggest number is the newest version.

To manually install, download the archive, unzip (or untar) it to your desktop and use any of the many file transfer solutions (like sftp or afp) to copy the application to your iPhone. Make sure the actual *sendpics* application inside the SendPics.app folder has executable permissions. Use `chmod +x` or `chmod 755`.

Note: When looking at the SendPics.app bundle on a Macintosh, you will not be able to see inside its folder unless you select it and right-click (or control-click) the application and choose Show Package Contents from the pop-up menu.

Launching SendPics

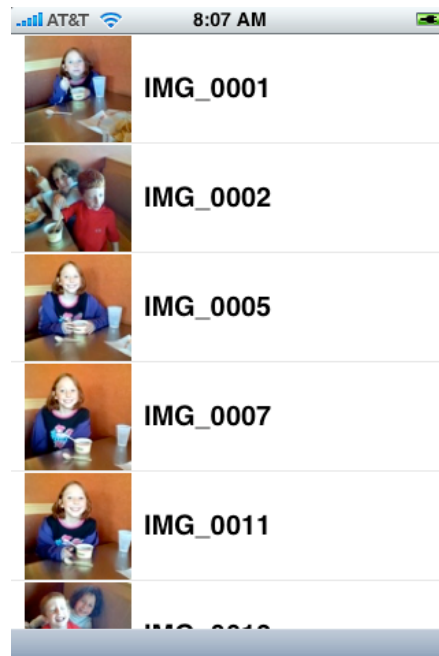
The SendPics icon looks like a photo (of a small boy wearing a bear costume) in an envelope (see below). Tap the icon to open the SendPics program. The program launches, scans your DCIM folder and puts together a list of the photos it finds in the 100APPLE and 101APPLE subfolders.



The Main Application

The SendPics application offers you a list of images, each with a thumbnail and file name. You can scroll up and down the list of files by dragging and flicking the list. Images appear in chronological order, from the earliest, which have lower image numbers, to the latest. Since file names all follow the standard DCIM format (IMG_####), thumbnails convey the actual contents. Tap any thumbnail to bring up a file options menu.

Note: Yes, I'm considering ditching the file names and using much larger thumbnails—maybe in an update.



File Menu Options

Tapping on any file offers a very simple menu:

- **Email File** – This option tells SendPics to launch Mail, create a new draft and attach the picture to that draft. SendPics closes and Mail launches.
- **Cancel** – Tap Cancel to return to the SendPics screen without emailing the file.

Leaving the Program

Emailing any photo causes you to leave SendPics. If you want to quit SendPics without sending mail, tap Home. That is the physical button at the bottom of your iPhone or iPod touch that is marked with a white square. Tapping Home returns you to your iPhone Home screen.

Tips and Tricks

Many photo-hosting and printing services allow you to upload pictures using e-mail. Check with your host or printing service to see if it offers this option.

For **Flickr**, visit <http://flickr.com/account/uploadbyemail>. Flickr will assign you a “secret” e-mail address. Mail photos from your iPhone to that address, and they automatically load into your Flickr account.

For **Costco**, mail your images to save@mycostcophotos.com. You’ll receive a confirmation letter at the address you used to send the message. The confirmation includes a link to the Costco Photo Center web site, where you can order prints.

Known Bugs

SendPics only sends pictures from your DCIM folder. This excludes any pictures synced to your iPhone from your Windows PC or Macintosh. The thumbnails are fairly small and the file names are not especially informative. SendPics does not offer Bonjour sharing or any features other than email.

More Information about SendPics

- **Home.** SendPics is hosted at <http://ericasadun.com/ftp/Applications/SendPics/>
- **Cost.** SendPics is distributed freely and without charge. If you use the program and would like to donate, you can send paypal contributions to erica@mindspring.com.
- **Author.** Erica Sadun wrote this program.

XLaunch

XLaunch makes it easy for you to launch applications and customize SpringBoard, your iPhone's home screen. At this time, XLaunch is an iPhone only application. A version for iPod touch will be released in the near future.

Downloading and Installing XLaunch

You can download XLaunch via **Installer.app**. Installer.app is an iPhone-based software installation program from Nullriver.com. (See <http://iphone.nullriver.com>.)

XLaunch appears in the System section of the program. Tap Install > System > XLaunch > Install. After installation, new versions may regularly appear in the Update tab.

Manual Installation

You can also install XLaunch manually. Zipped updates regularly appear in the XLaunch home folder on ericasadun.com. Navigate to <http://ericasadun.com/ftp/Applications/XLaunch/> and download the latest archive. All updates are numbered. The biggest number is the newest version.

To manually install, download the archive, unzip (or untar) it to your desktop and use any of the many file transfer solutions (like sftp or afp) to copy the application to your iPhone. Make sure the actual *xlaunch* application inside the XLaunch.app folder has executable permissions. Use `chmod +x` or `chmod 755`.

Note: When looking at the XLaunch.app bundle on a Macintosh, you will not be able to see inside its folder unless you select it and right-click (or control-click) the application and choose Show Package Contents from the pop-up menu.

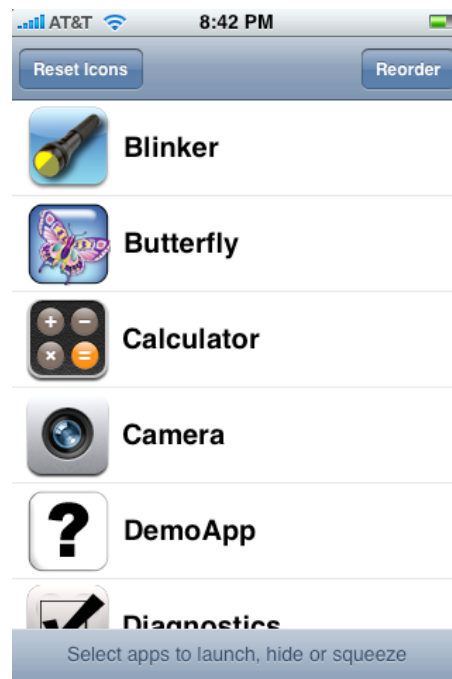
Opening XLaunch

The XLaunch icon looks like a BSD Daemon with a waiter's service tray. Tap it to open the XLaunch program. Once opened, XLaunch scans your /Applications and /var/root/Applications folders looking for the programs on your iPhone. At the same time, it reads the M68AP.plist file from /System/Library/CoreServices/SpringBoard.app. XLaunch uses this file to determine how your applications are ordered, which ones are visible, which ones are hidden, and which appear on your button bar.



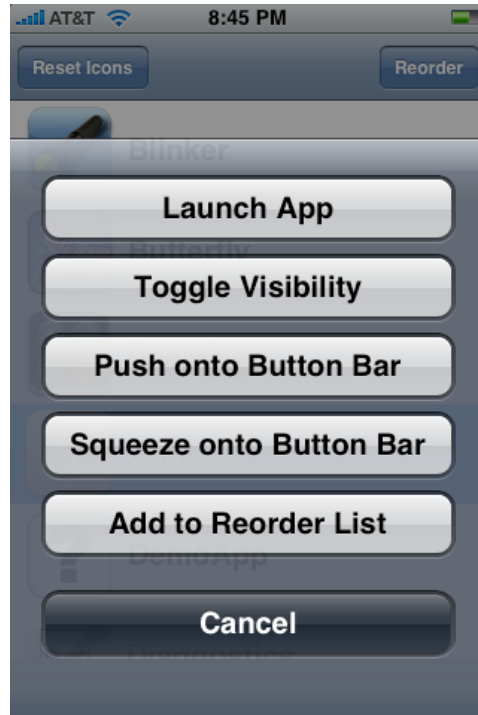
The Main Application

Your applications appear in alphabetical order on the main XLaunch screen. Each program is paired with its application icon if one exists. If one does not, a question mark appears instead, as shown here next to DemoApp. From this screen, you can tap on a program name, choose to reset your icons or enter the reorder screen. The small blue bar at the bottom of the screen offers context-sensitive help.



Launching and Customizing Applications

Tapping any application opens a list of options for you to apply. These options are as follows:



Launch App – Tap this option to launch the selected application. This quits XLaunch and transfers control to whichever application you selected. This option puts the “launch” into XLaunch.

Toggle Visibility – This option toggles an application icon’s visibility from off to on or from on to off. When visible, the icon appears (if there is room) in the SpringBoard home screen. When not, the icon is hidden from view even though it’s installed on your unit. Use this option to save space on your screen and to hide applications that you would rather launch directly from XLaunch rather than from SpringBoard. This option makes XLaunch quit and restarts SpringBoard. Your changes are loaded via the M68AP.plist file when SpringBoard reopens.

Push Onto Button Bar – Choose this option to add your application to the Button Bar. The number of buttons on the bar remain unchanged. If you started with 4 icons, you end up with 4. Your application is pushed onto the right side of the bar. The icon all the way on the left is pushed off to make room. As with Toggle Visibility, this option relaunches SpringBoard and quits from XLaunch. You will see your change immediately after you unlock your iPhone.

Squeeze onto Button Bar – Tap this option to add an application to the Button Bar without popping off the left-most button. In the current version of XLaunch, you can squeeze up to 6 icons onto your bar at once. After that, the leftmost icon is pushed off, just as if you'd chosen the Push Onto Button Bar option.

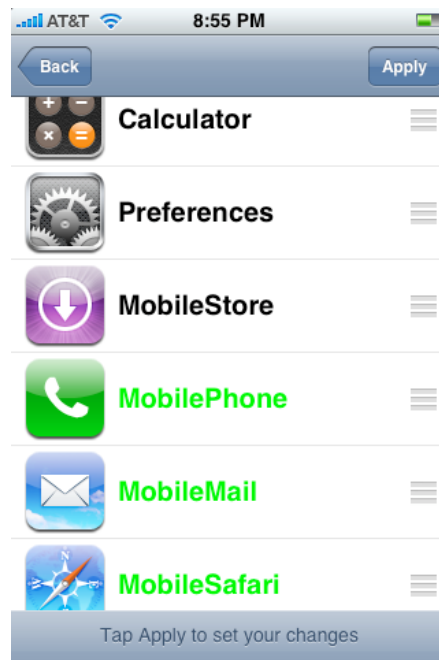
Tip: To remove an icon from the Button Bar, just toggle its visibility.

Add to Reorder List – When you reorder your icons, you're actually editing your M68AP.plist file. In order to have a custom icon appear for reordering you must first choose this option. It adds the selected application to the property list and allows you to place it where you like using the Reorder feature. To remove any application from the Reorder List, you can toggle its visibility. This hides it as well as removes it.

Cancel – Tap cancel to leave this menu without performing any of these actions.

Reordering Your SpringBoard Icons

Tap the Reorder button at the top-right of your main XLaunch screen to open the reordering screen shown here. This list consists of all the applications mentioned in your M68AP property list. This includes both normal icons (shown in black) and button bar icons (shown in green)



Use the gray grab bars to the right of each application name to reorder your icons. Although the button bar and normal icons are listed together, they are actually ordered separately in the final result. Black-colored applications appear in the order listed in your icons list. Green-colored applications appear in the order listed in your button bar. You can, however, interchange the two kinds of icons in this screen without any surprising side effects.

Note: You cannot use this reordering screen to add or remove icons from the button bar.

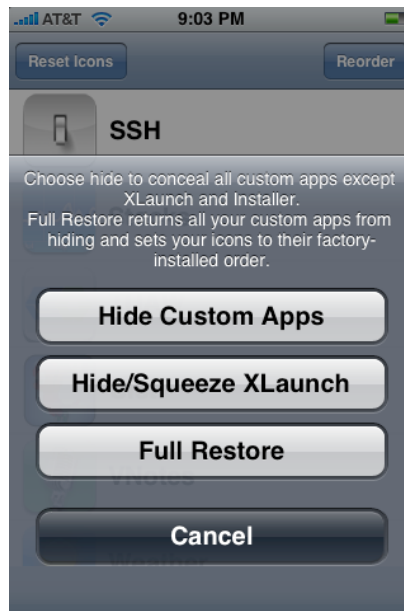
After making your ordering changes, tap **Apply** to confirm your reordering. XLaunch quits, SpringBoard restarts. After unlocking your iPhone, you'll see your updated icon order.

You will **not** be able to use this screen to change the order of either XLaunch or Installer.app. XLaunch pushes itself into slot #13 and Installer.app into slot #14 for safety reasons. This ensures that you will not accidentally push these two apps off screen when you do not have SpringBoard scrolling enabled.

If you'd like to quit without applying your changes, tap the Home button to leave XLaunch. Tap **Back** to return to the main launch screen instead.

Resetting Your Icons

The **Reset Icons** button in the top-left of the main window allows you to restore your icons to certain configurations. These configurations are as follows:



- Choose **Hide Custom Apps** to hide all third party applications excluding XLaunch and Installer.app.
- Choose **Hide/Squeeze XLaunch** to hide all third party applications except Installer.app and then squeeze XLaunch onto your button bar.
- Choose **Full Restore** to reset your SpringBoard M68AP property list. This returns all custom applications from hiding and sets your icons to their factory-installed order. XLaunch and Installer.app remain in slots 13 and 14.
- Choose **Cancel** to close the menu without performing any action.

Leaving the Program

Tap your Home button (the physical button at the bottom of your iPhone or iPod touch that is marked with a white square) to leave XLaunch and return to your Home screen. Launching another application quits XLaunch and transfers control to that new program. This does *not* cause SpringBoard to reboot. XLaunch does not continue to run in the background. Tapping Home quits the program and, like app launching, will *not* cause a SpringBoard relaunch.

You can also leave the program by selecting any option that changes the icon layout on your home screen: resetting icons, messing with visibility, ordering and the button bar all cause XLaunch to quit and restart SpringBoard.

Known Bugs

XLaunch does not at this time work on the iPod touch. Its M68AP property list is not compatible. You can sometimes select more than one cell on the reordering screen. This is harmless and will not interfere with the way the program functions.

More Information about XLaunch

- **Home.** XLaunch is hosted at <http://ericasadun.com/ftp/Applications/XLaunch/>
- **Cost.** XLaunch is currently distributed freely and without charge. If you use the program and would like to donate, you can send paypal contributions to erica@mindspring.com.
- **Author.** This program was written by Erica Sadun

FAQ

HOW DO I DONATE/CONTRIBUTE/SAY THANK YOU

Thanks are **always** appreciated. If you'd like to contribute, you can paypal me using erica@mindspring.com. All contributions go right into my family operations fund and directly help put food on our table.

WHERE CAN I LEARN MORE/LEAVE SUGGESTIONS & APP REQUESTS/FIND SOFTWARE?

Check out my site <http://www.ericasadun.com>

I'M GETTING A SCRIPT EXECUTION ERROR/NOW I CAN'T UNINSTALL

Please send all queries about script execution problems to ste@psmxy.org. For any script/installation issues, check out Ste's debugging page here: <http://blog.psmxy.org/debugging/>

THE PROGRAM LAUNCHES, PAUSES, AND THEN QUILTS

Make sure you have installed the BSD subsystem. Many programs rely on the `libarmfp` file that is installed with that package. The BSD system is available via `Installer.app`.

VISTA CRASHES WHAT DO I DO?

The blue screen of death is supposed to be a little joke. That's why it's in the "toys" category of installer.

SERIOUSLY, WHAT DO I DO TO FIX VISTA?

Try opening and closing all the windows on your iPhone or iPod and reinstalling your drivers. (No, seriously, it's a joke. That's all. I did on request for a friend. Version 0.2 even adds a blinking cursor)

HOW DO I RUN THE ERICA COMMAND LINE UTILITIES?

They are not "applications" in the traditional sense. They are meant to be run via `ssh` at the UNIX command line. Please check out an introductory UNIX reference to learn about doing this and to find out what a UNIX path refers to.

I GET COMMAND NOT FOUND OR PERMISSION ERRORS WHEN I RUN THE UTILITIES

Make sure that your /etc/fstab does not contain a noexec for your media partition. If so, edit that bit out. Then make sure your files are correctly installed in /var/root/bin and that they are enabled to be executable (chmod +x, or chmod 755.) Finally, ensure the path is accurate. Try running /var/root/bin/snap2album, for example rather than snap2album and see if that fixes things.

LIGHT DOESN'T AFFECT MY AUTOBRIGHTNESS SETTINGS

I know people would like light to automatically brighten, to override autodimming and locking when in use and that is already on my to-do list.

WHY CAN'T PIRATES or HALLOWEEN FIND A HOST?

You need to configure your email on your iPhone or iPod touch.

CAN VOICE NOTES RECORD PHONE CALLS?

Sorry, no. The software cuts out when the phone kicks in. System stuff, not my fault!

WHAT'S THE DEAL WITH TEXT EDITING IN TAPP AND VNOTES?

Broken in 1.1.1. Working on it.

WHY DON'T MY RINGTONES PLAY?

Under 1.1.1 you must be using SendSong version 0.19 or newer. SendSong 0.21 produces more reliable ringtone playback. It's an ongoing process of development. If you're losing your ringtones on Sync, you may want to turn off the sync Ringtones option in iTunes although some users report that this doesn't work.

WHY DOES SENDSONG CRASH WHEN I SCROLL DOWN MY LIST

I don't have SendSong check for how big your music library is. So if your library is modest, SendSong doesn't crash. If it is big, it does. This is a known issue and I am working on fixing it.

HOW CAN I DOWNLOAD WIDGETS/RUN WIDGETS/etc

Yes, you can run Widgets on your iPod touch. See:
<http://www.tuaw.com/2007/09/17/run-widgets-kind-of-on-your-iphone/>

- Download your Widgets from your Mac (/Library/Widgets) or from Apple's website: <http://www.apple.com/downloads/dashboard/>.
- Install /System/Library/WidgetResources from your Mac onto your iPhone or iPod touch.
- Install widgets in /var/root/Library/Widgets.

HOW DO I GET STARTED WITH IPHONE PROGRAMMING

The easiest way is to install Elliot Kroo's binary toolchains. Use 0.5 for Tiger and the older 0.4 for Leopard. I've written posts on TUAW about both. Here are a few tutorials to get started with:

- **Hello World:** <http://www.oreilynet.com/mac/blog/2007/08/a_simpler_hello_world_for_the.html>
- **NavBar:** <<http://www.tuaw.com/2007/08/16/iphone-coding-working-with-the-navigation-bar/>>
- **TextView:** <<http://www.tuaw.com/2007/08/03/journeys-inside-the-iphones-sdk/>>
- **Recording Audio:** <<http://www.tuaw.com/2007/08/06/iphone-coding-recording-audio/>>
- **NSLog:** <<http://www.tuaw.com/2007/08/17/iphone-coding-nslog-on-the-iphone/>>
- **openURL:** <<http://www.tuaw.com/2007/08/28/iphone-coding-url-launcher/>>
- **Slider:** <<http://www.tuaw.com/2007/09/04/iphone-coding-using-the-slider/>>
- **Accelerometer:** <<http://www.tuaw.com/2007/09/10/iphone-coding-using-the-accelerometer/>>
- **NSBundle:** <<http://www.tuaw.com/2007/11/13/iphone-coding-use-NSBundle-and-avoid-hard-coded-paths/>>

The binaries are:

0.05: <http://iphone.natetrue.com/iPhoneToolchainv05.dmg>

0.04: <http://conceitedsoftware.com/iphone/iPhoneToolchainv04.dmg>

WHAT ABOUT WINDOWS OR LINUX PROGRAMMING?

Sorry, out of my area of expertise!