IrLink v1.5 for Palm OS

01/01/2000
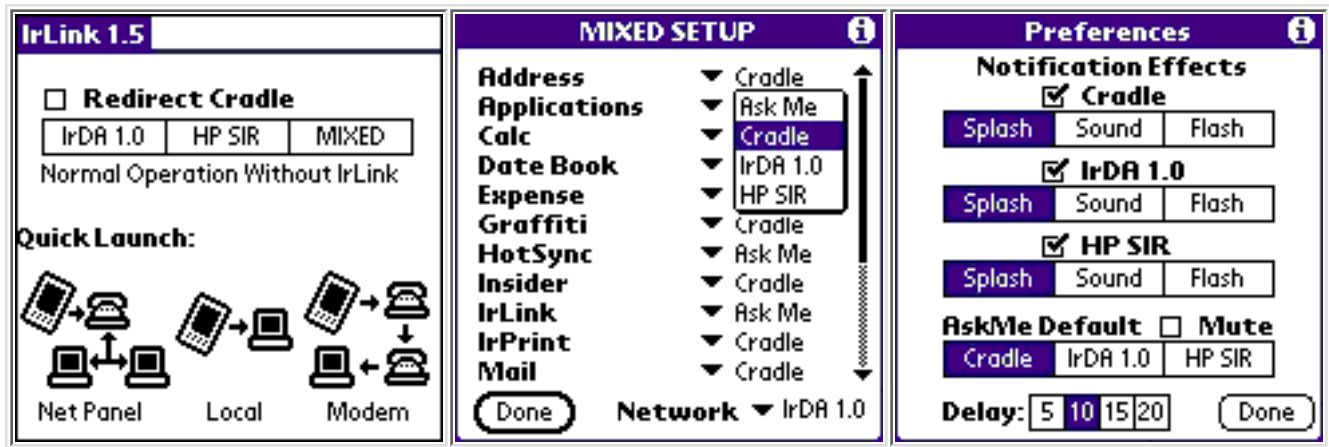

- **I have a Visor ...**

- **I have a Palm III, 2MB Upgrade card with OS 3.0 ...**

- **I have Palm V, Palm IIIx Palm IIIe with OS 3.1..**

- **I have a Palm VII ...**

- **I have ugraded my Palm to OS 3.3 ...**

- **I have a Palm Vx ...**

IS/Complete, Inc.

IrLink v1.5 for Visor

01/01/2000

We make IR on Visor possible !!!

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IrLink v1.5 for Visor User Guide

01/01/2000

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Table of Contents

1. Before You Get Started: [top]

- This version of IrLink does not work with Palm OS 3.3. Please wait for v1.6 if you have Palm OS 3.3 device

- Please do not use IrLink to install IrLink.

- If you are using our full featured evaluation version of IrLink, the evalution peroid is 30 DAYS. After 30 days of trying, this software will no longer works even you roll back the date.

If you like our software, please register it at http://www.iscomplete.com.

- Perform a full backup using cradle before install IrLink.

- If at any time you need to delete IrLink: please make sure to uncheck 'Redirect Cradle', go back to your main Visor screen, click on the menu option, click on delete, choose IrLink from the menu option, and click on the Delete button. Or you can delete IrLink and perform a soft reset immediately to clean up the cradle redirection. You may experience some difficulty with cradle HotSync if you delete the IrLink while the IrLink is set to intercept cradle (USB/Serial). In such cases, please perform a soft reset. The system will be back to normal.
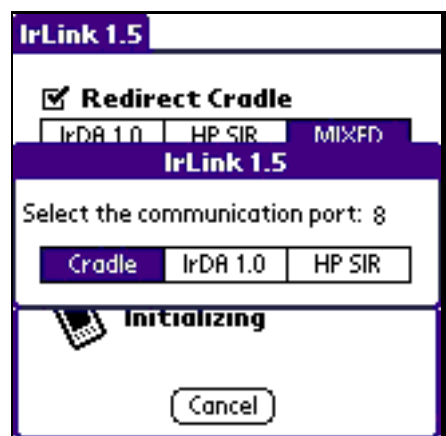
2. About IrLink: [top]

IrLink is software which allows you to use your Palm/Visor and your cellular phone to dial into the Internet simply by using an Infrared signal. It eliminates the need of a physical cradle or serial/USB cable which is usually needed to connect your Palm/Visor and cellular phone. You can also use IrLink with your Visor to HotSync with your notebook or iMac/PowerMac G3 wirelessly via Infrared port.

IrLink is a general utility/tool (a kind of middleware) to re-direct cradle (USB or serial) communication to IrDA communication without the need of code changes from the developer. It supports cradle (USB or serial) re-direct to IrDA communication and cradle re-direct to HP Serial IR.

IrLink is the only software that makes your Visor talk to Nokia 8810 or Ericsson SH888 (or other model that is compatible with DI27) without a cable, dial-up to your ISP, retrieve email, or browse the net without waiting for a new OS or a new patch from the vendor. At this time, IrLink is not compatible with Nokia 61XX models.

The "on-the-fly" port redirection feature will ease IR HotSync between Visor and Notebook/iMac/PowerMac G3 and mixed use with the other devices/applications that use the cradle.

3. What IrLink Can Do [top]

- **AutoSync (Unattended HotSync).** Schedule your Unattended HotSync via IrLink or Datebook. Once this feature is enabled, you can leave your Palm/Visor in your cradle, or aim Palm/Visor's IR port to your PC's IR port, you will able to retrieve/backup your data during the

night ...

- **On-the-fly cradle (USB or Serial) to IR redirection.** You can preset the communication protocol per individual application or simply use 'ASK ME' to make your decision on-the-fly.
- **Smart detection** of the cradle/modem HotSync Button. When the HotSync Button (on cradle or Visor Modem) is pressed, IrLink will switch to cradle regardless of what you have set in IrLink.
- **Tail Device Friendly.** IrLink is compatible with many tail devices, i.e. keyboard for Visor. You can enjoy IR HotSync without missing your appointments.
- **Port Switching Notification**. IrLink will report which communication port/protocol is currently active when an application has enabled the communication port.
- **IrDA Device Discovery**. IrLink has a built in IrDA Device Discovery function for you to check and detect any device that is IrDA compliant. It is the easiest way to figure out whether your infrared (IR) device is functional or not.
- **IR HotSync**. You can carry less while you are traveling. If your notebook doesn't have a USB port but has an IR port, backing up your important data is possible.
- **Easy Link Test.** Provides a simple link test by sending lines of output to the target device. You can test the cradle, IrDA 1.0, or HP SIR.
- **HotSync Button Emulation with AltCtrlHack** (IS/Complete). You can simulate the HotSync Button to do a single button IR HotSync.
- **Beam receiving off.** When you are in the IrLink program, the beam receiving will be turned off temporarily. This can prevent PC IR scanning from interrupting IR HotSync.

Notes:

1. HP SIR -- HP Serial IR or Raw IR, is the lowest layer (Physical Layer) of the IrDA 1.0 standard. For IrDA standard, please visit www.irda.org

4. IrLink Pre-Installation [top]

1. Before you begin the installation of IrLink onto your Visor, you should familiarize yourself with how to install programs onto it (i.e., check out their help area at www.handspring.com)
2. You need to click here to download the latest version of IrLink and LicenseMgr onto your PC/Mac. (these will be links to the actual files)
3. Click here to download 3com's Ir Enhance Update onto your PC/Mac.
4. Make sure you either have a cradle for your Visor plugged into your PC/Mac, or are familiar with beaming applications from another Visor, and have one available with IrLink and LicenseMgr and 3Com's Update on it.
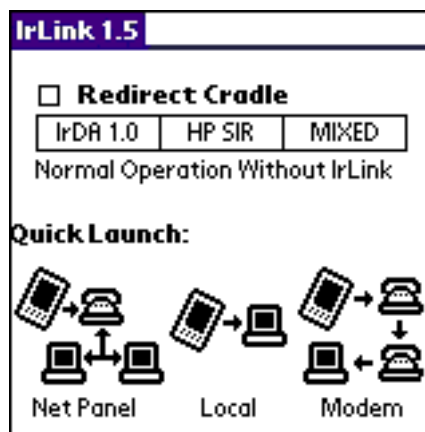
5. IrLink Installation onto your Visor [top]

1. On your computer, click on the Palm Desktop icon. Click on the Install button. Choose the Add button. Open **SerIrCommLib.prc, LicenseMgr.prc** and **IrLink15.prc** files you downloaded earlier. When all three are listed, choose the Done button. You should receive a notice that these files will be HotSynced the next time this action is performed.

2. On your Visor, choose the HotSync icon. Choose either Local or Modem Sync according to your setup (Local means you have a cradle plugged into your PC/Mac).

3. You will get a pop-up message asking you to reset your Visor after HotSync is completed. Click on the Reset button. You should now be able to see an IrLink icon on your Visor.

4. Please follow the instructions below in order to use IrLink effectively.

5. Some Quick Links for your setup if you are familiar with IrLink

   1. Infrared PPP Dial Up to ISP, Ericsson SH888I888//DI27 , or Nokia 8810/7110

   2. IR HotSync with your PC or iMac classic, or PowerMac G3 via IrDA

   3. IR HotSync with NT/Unix or other OS via HP SIR

6. Using IrLink v1.5 [top]

1. Click on the new IrLink icon on your Visor.

2. In order for your Visor to start using the Infrared signal instead of the cradle, check the "Redirect Cradle" check box. (see figure 6a)
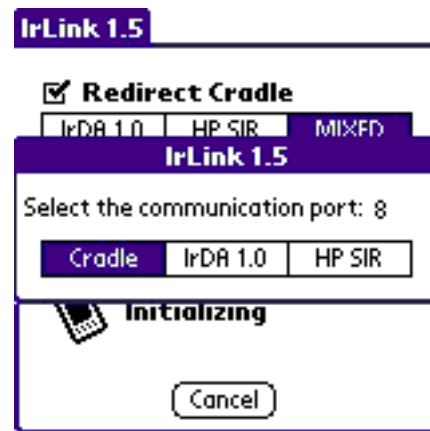

(figure 6.a)

3. You now must choose an appropriate Infrared redirect option for your computer. Your choices are the following:

   1. IrDA 1.0 (literally Infrared Data Association 1.0) means that in order to communicate with your computer you must have an IrDA IrCOMM Driver installed; (If you have chosen IrDA 1.0 and an error message pops up, you have not properly installed 3Com's IR Enhance Update on your Visor. Please click here and follow the instructions again.)
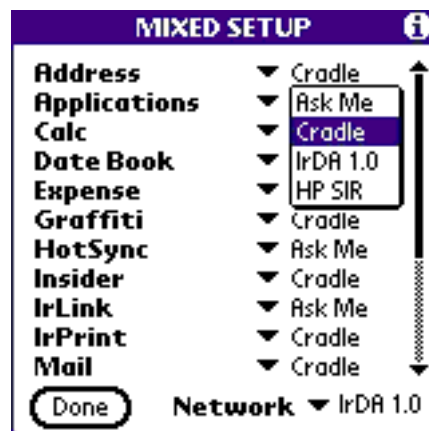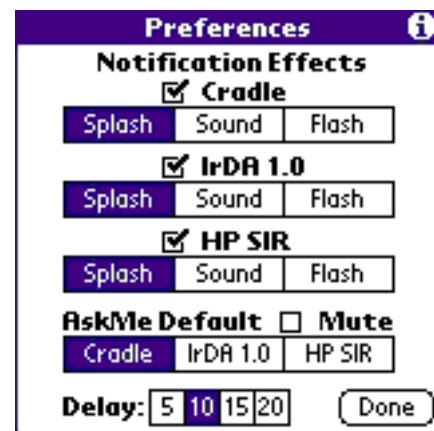
(figure 6b)   (figure 6c)

2. HP SIR (literally Hewlett-Packard Serial infrared) means you will communicate through the lowest physical layer of the IrDA 1.0 standard.

3. MIXED/Menu means you can set your preference as to whether you want each application individually on your computer to be updated by using the Cradle, IrDA 1.0, or HP SIR whenever you perform a HotSync. (see figure 6c)

■ The last option on each individual application is Ask Me. It allows you to choose the method of communication every time you HotSync. This is called on-the-fly cradle to infrared redirection. By default, you will hear a countdown beeping sound when the Ask Me dialog appears. The countdown length can be set to 5/10/15/20 seconds by clicking on your Menu option on the bottom of your Visor and choosing Preferences. On the lower part of your screen, you will see the Ask Me defaults. You can even choose to Mute the countdown sequence. (see figure 6d)

(figure 6c)   (figure 6d)

4. If you go back to your initial IrLink screen, you will see a set of diagrams called "Quick Launch". These options allow you to choose the method for which your Visor will communicate with your PC. When you choose "Quick Launch" you will go directly into HotSync mode. Choices include:

- Net Panel: If you want to connect to a Network;
- Local: If you want your PC and Handheld to directly communicate with each other through the Infrared port, or;
- Modem: If you want your PC and Handheld to communicate through the modems.

Each of these options has it's own setup procedures. Please follow them accordingly.

5. On your initial IrLink screen, choose the Menu option in the lower left-hand corner of the screen. Under Options you will see the following categories:

- Send Test: This option allows you to see if your communication selections are working properly. Follow the instructions as they are displayed.
- Device Discovery: This option allows you to quickly identify the type of device you are attempting to communicate with: i.e., another Visor, Palm, Cellular Modem, IR Printer, and any other IrDA compliant device.
- AutoSync: This option allows you to schedule an automatic daily HotSync via IrLink via the cradle, IR, IR modem or network. In order to set up this option:
    1. Click on the AutoSync option from the Menu.
    2. Check the Enable AutoSync check box.
    3. Choose the type of communication method (Local or Modem)
    4. Choose the time of day you want the computers to perform the HotSync under Daily HotSync Time;
    5. Choose the Apply button. The port protocol and next scheduled HotSync date and time will appear on your screen.
    6. Choose OK or Apply to save your configuration.
    7. Choose Cancel not to apply changes.

    - You will be able to perform a AutoSync by cradle even the Cradle redirection is disabled.
    - **Known issue:** If there is a pending Date Book alarm message, the AutoSync will be blocked until you acknowledge the appointment.
- Mixed Setup: This option is discussed above.
- Preferences: This option allows you to customize how your handheld tells you which type of communication protocol it is using. If you click on the Menu button again in the lower left-hand corner, and choose Preferences, you will see the Notification Effects window. Simply choose a sound or visual effect you would like to have for each type of protocol. (see figure 6d)
- About IrLink: This option tells you the version of IrLink you are using and some other miscellaneous information.

NOTES: When you are in IrLink and the "Ask Me" dialog appears, Beam Receiving will temporarily be disabled to prevent the "Waiting for sender…" message box from coming up. This will cause a

racing condition if you try to communicate with your PC/Mac via Infrared.

Please also note that whenever you want to disable IrLink, uncheck the "Redirect Cradle" check box.

Feature in Experimental Stage

A new feature of IrLink v1.5 is called Scheduled HotSync. This allows you to schedule on the Date Book application of your Visor an exact time for the HotSync to take place, instead of using IrLink AutoSync feature. Please follow the instructions below to perform this new feature.
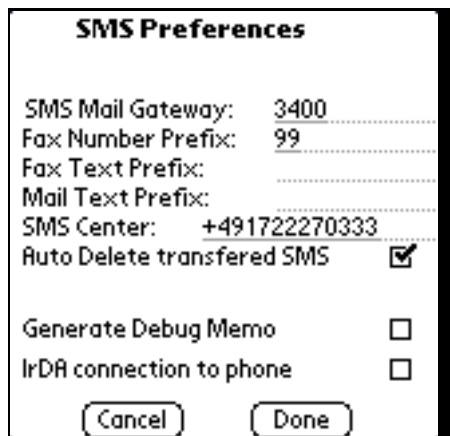
1. Click on the Date Book icon on your Visor.
2. Click on the date and time you would like your computers to HotSync.
3. Type the bolded text to Datebook schedule, to schedule a local HotSync: **!HotSync,Local** and to schedule a remote HotSync: **!HotSync,Remote**

   ❍ *Please be advised that there are no leading or trailing spaces on these lines, and it is case sensitive.*

4. Once you have typed in this line, click on the Details button, and click on the Alarm check box.
5. To perform this scheduled HotSync your "Redirect Cradle" check box must be checked, and you must use the MIXED configuration.

Known issue: If there is a pending Date Book alarm message, the HotSync will be blocked and ignored. You will still see the HotSync schedule as an alarm message regardless of a successful HotSync or not.

7. Q & A: [top]

Q1: How can I use IrLink with GSMTools (v1.21) ?
Ans.: Go to Menu/Options/SMS Preferences, uncheck the IrDA connection to phone.

Q2: How do you make IR HotSync co-exist with OmniRemote without switching back and forth ?

Ans.: Select MIXED option on redirection method, go to MENU/MIXED, search for HotSync, set it

to IrDA 1.0.

Q3: I don't like the Splash Screen. Is there any better way to do this ?

Ans.: Go to MENU/Preferences. You can either disable the notification effect of your choice or you can select sound or flash to avoid any visual effects.

Q4: Why do I need notification ?

Ans.: Many applications will use RS-232 and Infrared in a mixed way. This is the easiest way to know what you are using and what went wrong when you encounter any communication difficulties.

Q5: When I set IrLink to IrDA option, TailLight^{TM}; silent alarm doesn't work. How do I work around it ?

Ans.: Same as Q2.

Q6: The Mixed List doesn't have any Hack program. Will IrLink support Hacks ?

Ans.: Hacks are very special, so we have to handle them differently. When a Hack is activated, the owner of the Hack is the program you are in. For example: For AlarmHack, if you are in Date Book, when the alarm was triggered, the owner of the AlarmHack becomes Date Book. If the alarm was triggered when you are in the MemoPad, the owner of the AlarmHack will become MemoPad. We have no way to tell the owner the code segment during run time. In this version, IrLink will handle hacks that redirect the sound and alarm to the cradle correctly.

8. IrLink Examples: [top]

- Infrared PPP Dial Up to ISP (Visor and Ericsson SH888/DI27 [details], or Nokia 8810 [details])

- IR HotSync with your PC or iMac classic, or PowerMac G3 via IrDA[details]

- IR HotSync with NT/Unix or other OS via HP SIR [details]
- IR Modem HotSync (IrDA)
- IR PPP connection to your Win95/NT^{TM} and become part of a network (IrDA)
- IR PPP connection to your Win95/NT^{TM} and become part of a network (HP SIR)
- Visor/Palm to Palm/Visor PPP connection (IrDA)
- Visor/Palm to Palm/Visor PPP connection (HP SIR)
- Visor to Terminal emulator (HP SIR)
- Visor to Terminal emulator (IrDA)
- Visor Terminal (telnet) Dial-Up (IR Cell Phone Modem)
- Visor to Visor, Palm , Cellular Modem, IR Printer, or IrDA compliant device discovery

- Visor Clipboard Contents Send to Win98/95 (use RemoteClip Hack (R)) via IR

9. How To Report IrLink Bugs: [top]

Please report to VirLink@ISComplete.com with the following information. Please be as detailed as possible if you encounter any bugs when you use IrLink with your Visor:

- Version of IrLink (if not v1.5)
- The make and model of your target device (i.e. Nokia 8810, SH888, Notebook...)
- The firmware number or OS version of your target device if the device is a cellular phone (i.e. Nokia 8810 v4.05)
- The procedures to re-produce the error
- The error message or symptoms on Visor
- The error message or symptoms on your target device (i.e. Call disconnected, no response)
- Lists of your pilot Hacks for Hackmaster
- Modem Preference (if you are using IrLink to dial up to your ISP)
- Palm III Network Preference (if you are using IrLink to dial up to your ISP)

THANK YOU and ENJOY IT !!!

Please visit our web site at www.ISComplete.com!

Infrared connection of Visor to Ericsson SH888/I888 and 7xx/6xx + DI-27 Infrared Modem

By IS/Complete, Inc. (11/30/1999)

Introduction[top]

This document is designed as a step-by-step guide to help you connect your Visor to your Ericsson SH888/I888 mobile phone (or other models attached with DI27 infrared modem) for internet connection (email, faxing, or web browsing.) It is worth noting that other settings may also work and that the settings described in this document are being used as a means to get you up and running with the least amount of hassle. Furthermore, this document assumes you have installed:

- IrLink v1.5 or later
- SerIrCommLib.prc extracted from 3Com's IR Enhanced Update

Note: If you haven't installed IrLink or 3Com's IR Enhanced Update, click here to go to the IrLink installation instructions.

1. SH888/I888 mobile phone/DI27 setup [top]

- Verify that your SIM card is enabled for data/fax – if you are unsure, contact your network provider, who will be able to enable your SIM if necessary.
- If necessary, 'activate' the Infrared port on the mobile phone (see note 1)
- Position both units so that the Infrared ports line up at a distance of between 6 to 10 inches (15 to 26 CM) and at a 20 to 30 degree angle.
- For best results you should avoid bright light sources.
- For best results your mobile needs to be displaying a good signal strength (2 to 4 bars on your mobile display window). Note: This is network dependent on your cellular provider in your coverage area. Failure to have a good signal strength may lead to intermittent dropped calls.

Please Note

1. To 'activate' the Infrared port on the Ericsson SH888, use the two-left/right arrow keys between the yes/no buttons on the phone keyboard to enter the menu system. Scroll to 'Activate IR port' and press YES. (If the IR port is already activated, the display will read 'Deactivate IR port' instead. In this case, just press CLR to return to the standby menu.)
2. For a few seconds the text 'IR port activated' will appear in the display. The phone then returns to standby mode.
3. A wireless connection is liable to open air effects, which means that any call over GSM will not be as reliable or as fast as a land line to cable modem setup.
4. Expect success rates of about 70% for faxing and 90-100% for connecting to the Internet over the GSM network. These figures are network and coverage dependent for your area of use.
5. You will not be able to receive a fax call over your mobile phone without first knowing your mobile's fax number – please check with your network provider regarding this. NOTE: Your mobile's fax number is NOT the same as your mobile's voice number.
6. If you are attempting to receive a fax call, your phone will tell you what type of call you are receiving. If it does not say "Fax Call" then you are not receiving a fax call.
7. If you experience any problems, deactivate any HackMaster extension that will affect the CPU clock.
8. When a program is designed for cradle communication, it may fail on IR connection due to the long CPU withholding. IrDA on Visor is very sensitive to timing. It will drop the connection if the IR signal is not maintained in a timely fashion.

2. Visor Modem Preference setup [top]

- Run Prefs Application (Preference setup) from Application Launcher
- Select Modem from the Preference drop down menu
- Modem setup parameters:

> Modem: Custom

Speed: 9600
Speaker: Low
Flow Ctl: Automatic
String: AT&F

Note: You may not see the Custom modem type. Once you change the String content, the Custom modem type will appear automatically.

3. Visor Network Preference setup [top]

- Run Prefs Application (Preference setup) from Application Launcher
- Select Network from the Preference drop down menu
- Choose the name of your ISP on "Service" or create a new one by selecting New from the Service Menu
- Input your account name
- Input your password or you will be prompted when you try to connect to your ISP
- Input the phone number of your service provider
- Tap the Details to setup network related items. This setup depends on the service that you use to connect to the internet. Most likely you will use PPP, Idle time-out: Power Off, Query DNS: checked, IP Address: Automatic checked, and no script is required.
- If you get PPP time-out or PPP authentication error, you have the wrong setup or script for your service provider. Please check with your ISP for proper setup.

4. Connect Visor to SH888/I888/DI27 [top]

- Launch IrLink
- Make sure IrLink is set to IrDA 1.0
- Tap the Net Panel bitmap (not the label) to go to the Network Panel
- Activate the IR port of your SH888/I888. (IR of DI27 is always on)
- Tap the Connect button to initiate the network dial-up
- Once the network is up, tap the Done button to go back to the IrLink
- You can than launch your email/browser application

Tips:

- The fail ratio of Visor to SH888/I888 Infrared Connection varies depending on your GSM service region and manufacturing batch of SH888/I888. Practice is very important.
- Try to avoid a bright light source.

Please Note

- If the phone drops the call and the software still says you are connected, ensure that you have told the software you have disconnected. Otherwise if you try to change the settings the software may get confused and reset some settings to their default.
- Avoid future login problems by closing down your connection to the email/web post office properly; i.e. Select the Pref/Network 'Disconnect' or disconnect feature your application is providing.

5. Troubleshooting [top]

The following method can be used to check that your Visor can establish a link with the Infrared modem being used.

- If you feel the IR port is not behaving normally on the mobile phone, reset the mobile phone.
- If you feel the IR port is not behaving normally on the Visor, soft reset the Visor.
- Check that the Infrared port is activated on the mobile phone.
- If necessary, use the "IrDA Device Discovery" feature in IrLink to make sure the IR device of your Visor or mobile phone is working normally.
- You can use a Terminal Emulator to check your SH888/DI27 modem by typing 'ati' and press return. You should receive a prompt of either "Ericsson SH 888 Infrared Modem" or "Ericsson DI 27 Infrared Modem" followed by an 'OK' when the interface between Visor and mobile phone is working correctly.
- If you get Error 501-- Modem not found, please make sure the IrLink is set to IrDA 1.0 and IR port on SH888 is activated.
- If you get Error 1102 -- no carrier, most likely you don't have the data service activated. Please check with your GSM carrier for the service options.

Infrared connection of Visor to Nokia 8810/7110 mobile phone.

By IS/Complete, Inc. (11/30/1999)

Introduction

This document is designed as a step-by-step guide to help you connect your Visor to your Nokia 8810 mobile phone for internet connection (email, faxing, or web browsing.) It is worth noting that other settings may also work and that the settings described in this document are being used as a means to get you up and running with the least amount of hassle.

Furthermore, this document assumes you have installed:

- ❍ [IrLink v1.5 or later](#)
- ❍ [SerIrCommLib.prc extracted from 3Com's IR Enhanced Update](#)

Note: If you haven't installed IrLink or 3Com's IR Enhanced Update, click here to go to the [IrLink installation instructions](#).

1. Nokia 8810/7110 mobile phone setup [top]

- Check your SIM card is enabled for data/fax – if you are unsure contact your network provider who should be able to enable your SIM.
- Check your firmware version number. Visor cannot work with 8810 that is equipped with v4.03 (OS v3.01 or v4.05 or higher is fine). (see note 2)
- If necessary, 'activate' the Infrared port on the mobile phone (see note 1)
- Position both units so that Infrared ports line up at a distance of between 6 to 10 inches (15 to

26 CM) and at a 20 to 30 degree angle.

- For best results you should avoid bright light sources.

- For best results your mobile needs to be displaying a good signal strength (2 to 4 bars on your mobile display window).   Note: This is network dependent on the cellular provider in your coverage area. Failure to have a good signal strength may lead to intermittent dropped calls.

<u>Please Note</u>

1. To 'activate' the 8810's Infrared port press "Menu" and then "9". Do not close the key cover until you see a flashing icon in the top left-hand corner. If the icon disappears you will need to 'activate' the infrared port once more. If the icon stops flashing, but does not disappear, it is communicating with another infrared device. If you do not establish infrared communications between the 8810 and another device within 30 seconds you will need to repeat the above.

2. To check your firmware version, punch "*#0000#" and the version number will appear on the display window.

3. A wireless connection is liable to open air effects, which means that any call over GSM will not be as reliable or as fast as a land line to cable modem setup.

4. Expect success rates of about 70% for faxing and 90-100% for connecting to the Internet over the GSM network. These figures are network and coverage dependent for your area of use.

5. You will not be able to receive a fax call over your mobile phone without first knowing your mobile's fax number – please check with your network provider regarding this. NOTE: Your mobile's fax number is NOT the same as your mobile's voice number.

6. If you are attempting to receive a fax call, your phone will tell you what type of call you are receiving. If it does not say "Fax Call" then you are not receiving a fax call.

7. If you experience any problems, deactivate any HackMaster extension that will affect the CPU clock.

8. When a program is designed for RS-232 communication, it may fail on IR connection due to the long CPU withholding. IrDA on Visor is very sensitive to timing. It will drop the connection if the IR signal is not maintained in a timely fashion.

2. Visor Modem Preference setup [top]

- Run Pref Application (Preference setup) from Application Launcher
- Select Modem from the Preference drop down menu
- Modem setup parameters:

Modem: Custom
Speed: 9600
Speaker: Low
Flow Ctl: Automatic
String: AT&FV1E0&D2&S0&C1S0=0S7=60S35=7

Note: You may not see the Custom modem type. Once you change the String content, the Custom modem type will appear automatically.

3. Visor Network Preference setup [top]

- Run Prefs Application (Preference setup) from Application Launcher
- Select Network from the Preference drop down menu
- Choose the name of your ISP on "Service" or create a new one by selecting New from the Service Menu
- Input your account name
- Input your password or you will be prompted when you try to connect to your ISP
- Input the phone number of your service provider
- Tap the Details to setup network related items. This setup depends on the service you use to connect to the internet. Most likely you will use PPP, Idle time-out: Power Off, Query DNS: checked, IP Address: Automatic checked, and no script is required.
- If you get PPP time-out or PPP authentication error, you have the wrong setup or script for your service provider. Please check with your ISP for proper setup.

4. Connect Visor to 8810 [top]

- Launch IrLink
- Make sure IrLink is set to IrDA 1.0 or Mixed with the Network set to IrDA 1.0
- Tap the Net Panel bitmap (not the label) to go to the Network Panel
- Activate the IR port of your 8810 by pressing "Menu" & "9". You will see that the IR icon is blinking
- Tap the Connect button to initiate the network dial-up
- Once the network is up, tap the Done button to go back to the IrLink
- You can than launch your email/browser application

Tips:

- Always aim your Visor to your 8810 at a 20 to 30 degree angle.
- When the IR icon is steady, the IR connection is good.
- The fail ratio of Visor to 8810 IR Connection varies depending on your GSM service region and manufacturing batch of 8810. Practice is very important.
- Some batches of 8810 require you launch your Palm III network connection 2 seconds after you activate IR port on your 8810. Less or more than 2 seconds and you will never get connected.
- Try to avoid a bright light source.

Please Note

- If the phone drops the call and the software stills says you are connected, ensure that you have told the software you have disconnected. Otherwise if you try to change the settings the software may get confused and reset some settings to their default.
- Avoid future login problems by closing down your connection to the email/web post office properly; i.e. Select the Pref/Network 'Disconnect' or disconnect feature your application is providing.

5. Troubleshooting[top]

The following method can be used to check that the Visor can establish a link with the Nokia Infrared modem being used.

- If you feel the IR port is not behaving normally on the mobile phone, reset the mobile phone.
- If you feel the IR port is not behaving normally on the Visor, soft reset the Visor.
- Check that the Infrared port is activated on the mobile phone
- If necessary, use the "IrDA Device Discovery" feature in IrLink to make sure the IR device of your Visor or mobile phone is working normally.
- You can use a Terminal Emulator to check 8810 modem by typing 'ati' and press return. You should receive a prompt of "Nokia Mobile Phones"
- If you get Error 501-- Modem not found. Please make sure the IrLink is set to IrDA 1.0 and IR port on 8810 is activated.
- If you get Error 1102 -- No carrier (1102). Most likely you don't have the data service activated. Please check with your GSM carrier for the service options.
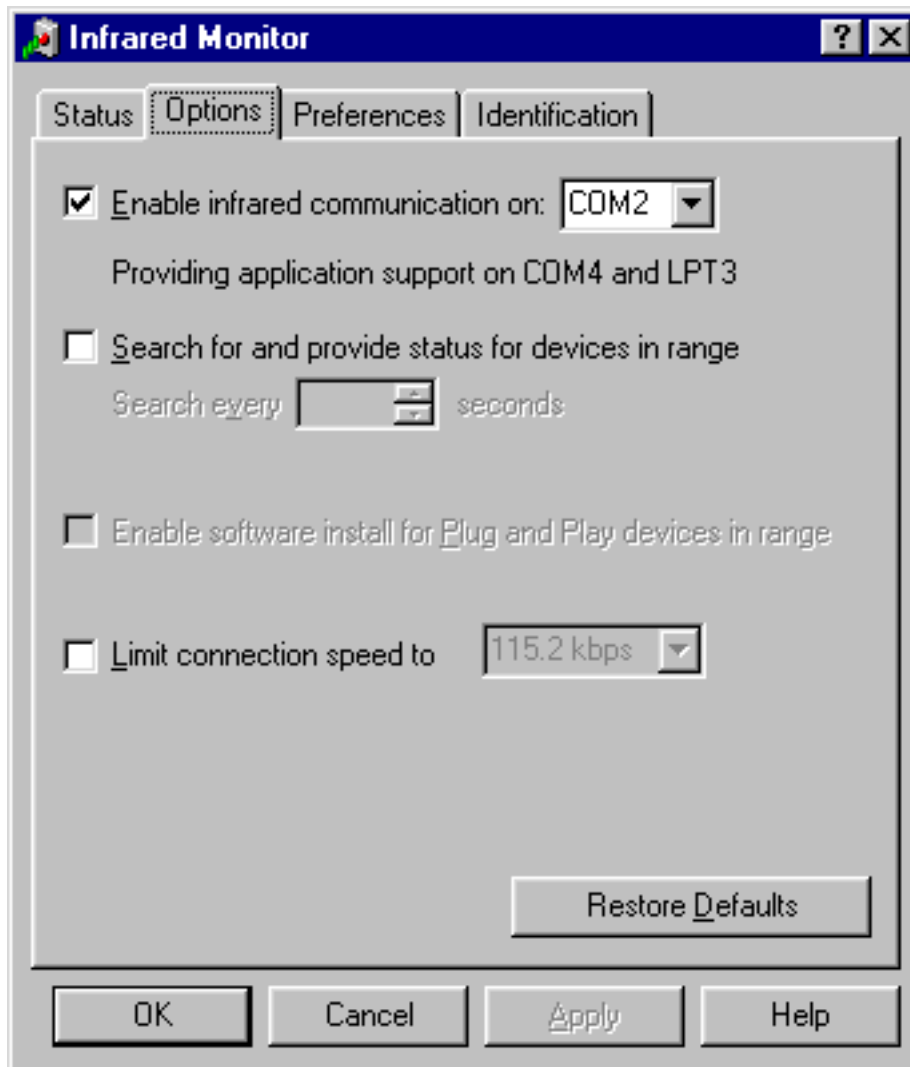
IrLink v1.5 for Visor/Palm IrDA IR HotSync

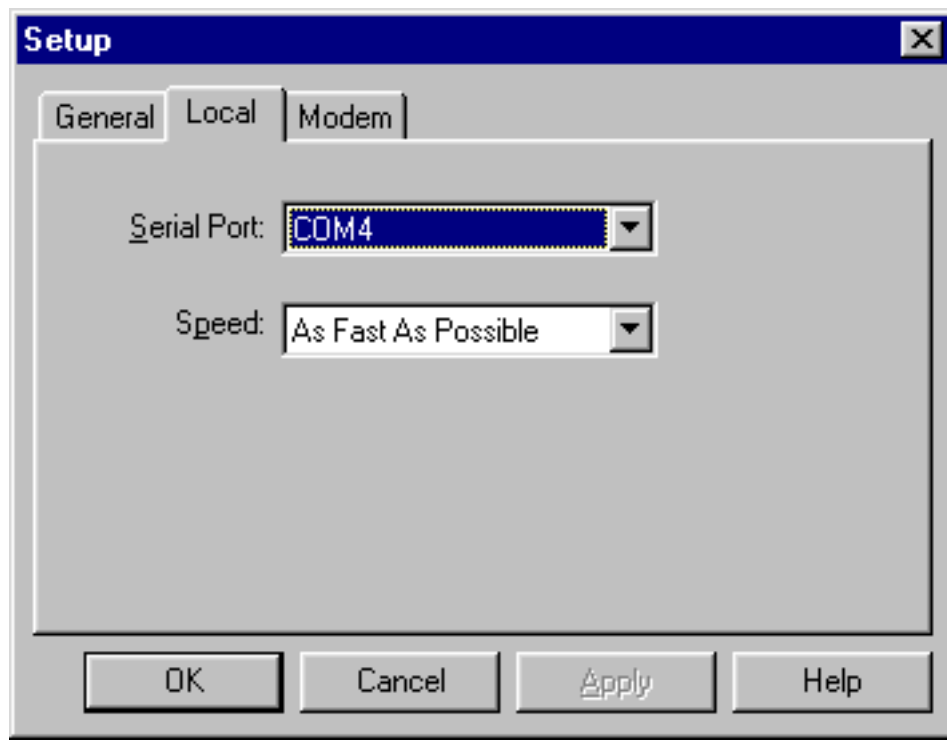## I. On a PC Notebook/Desktop with built-in IrDA 1.0 or later compliant device

You must enable the IrDA protocol and let the IR port become a native IR device.

A. *Windows 95/98*

1. Go to settings/control panel/Infrared. Write down the "Providing application on COMx and LPTx" for HotSync Manager to use. (i.e. COM4)

Go to HotSync Manager/Setup/Local. Assign the port to COMx

Setup ✕

General | Local | Modem

Serial Port: [COM4 ▼]

Speed: [As Fast As Possible ▼]

[OK] [Cancel] [Apply] [Help]

3. Select 'as fast as possible' as the line speed (If this doesn't work with your machine, try to lower the speed and try it again).

4. Click OK.

B. NT 4.0

1. Works only if your vendor of the IR device/notebook supports IrDA for NT

2. If your vendor does not support IrDA for your notebook, you may try QuickBeam Suite for NT from http://www.extendsys.com

3. See set up for Windows 95/98

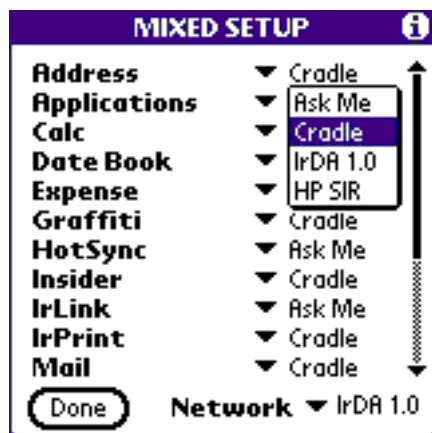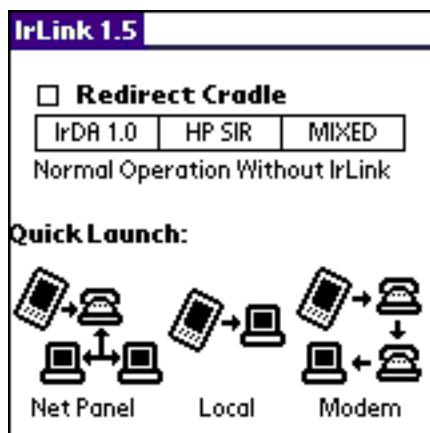## C. iMac Classic/PowerMac G3 with OS 8.5

1. You will need to download Apple's IrDA IrCOMM driver for your PowerMac or iMac for the IR Port to communicate with your Visor.

2. Download the file from one of the following URLs and follow all the instructions:

    http://palm.3com.com/custsupp/downloads/extrashqx3leg.html (25 MB) or
    http://palm.3com.com/custsupp/downloads/extrasbin3leg.html (18.3MB)

Note: For OS 9.0 or newer, it has the Infrared driver in the OS. You will not need anything from Apple.

Windows 2000 currently it is not available.

II. On Visor™

1. Run IrLink v1.5

2. Make sure your IrLink is set to IrDA 1.0 or Mixed with IrDA 1.0 for HotSync, or when Ask Me box pops up, select IrDA 1.0

IrLink 1.5

□ **Redirect Cradle**

| IrDA 1.0 | HP SIR | MIXED |

Normal Operation Without IrLink

Quick Launch:

Net Panel   Local   Modem

MIXED SETUP ⓘ

Address	▼ Cradle
Applications	▼ Ask Me
Calc	▼ Cradle
Date Book	▼ IrDA 1.0
Expense	▼ HP SIR
Graffiti	▼ Cradle
HotSync	▼ Ask Me
Insider	▼ Cradle
IrLink	▼ Ask Me
IrPrint	▼ Cradle
Mail	▼ Cradle

(Done)   **Network** ▼ IrDA 1.0

IrLink 1.5

☑ **Redirect Cradle**

| IrDA 1.0 | HP SIR | MIXED |

IrLink 1.5

Select the communication port: 8

| Cradle | IrDA 1.0 | HP SIR |

Initializing

(Cancel)

---

3. If you see the error message as below, please follow our IrLink installation first

IrLink 1.5

ⓘ **IrDA IrComm requires 3Com's IR Enhanced Update, Please download it from 3Com's Web site at http://www.palm.com/ custsupp/downloads/ir enhanc.html**
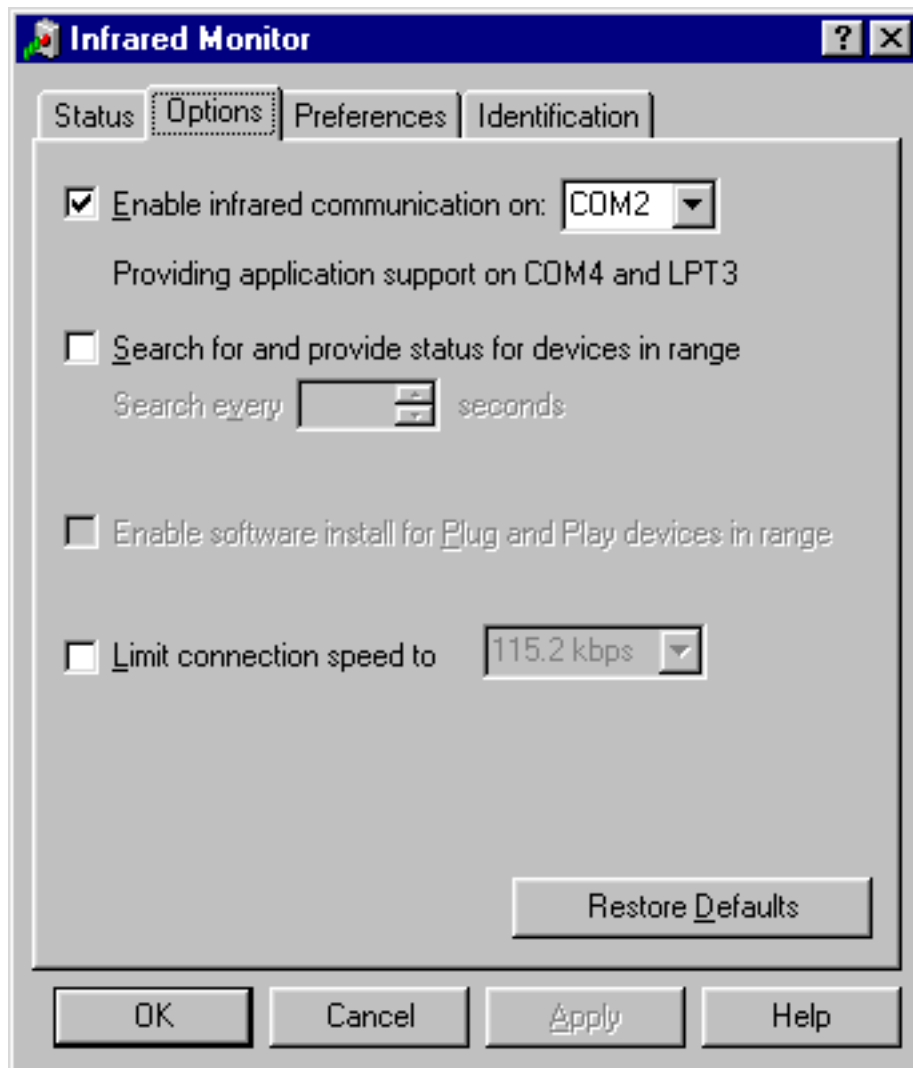
(OK)

4. Aim your Visor^{TM} Infrared port (left side) to your Desktop IR port within 3.25 feet (1 meter) in distance but at least 6 inches (20cm) apart

5. To initiate the Hotsync, either run the IrLink and tap the 'Local Icon', or launch regular HotSync program and tap local sync icon.

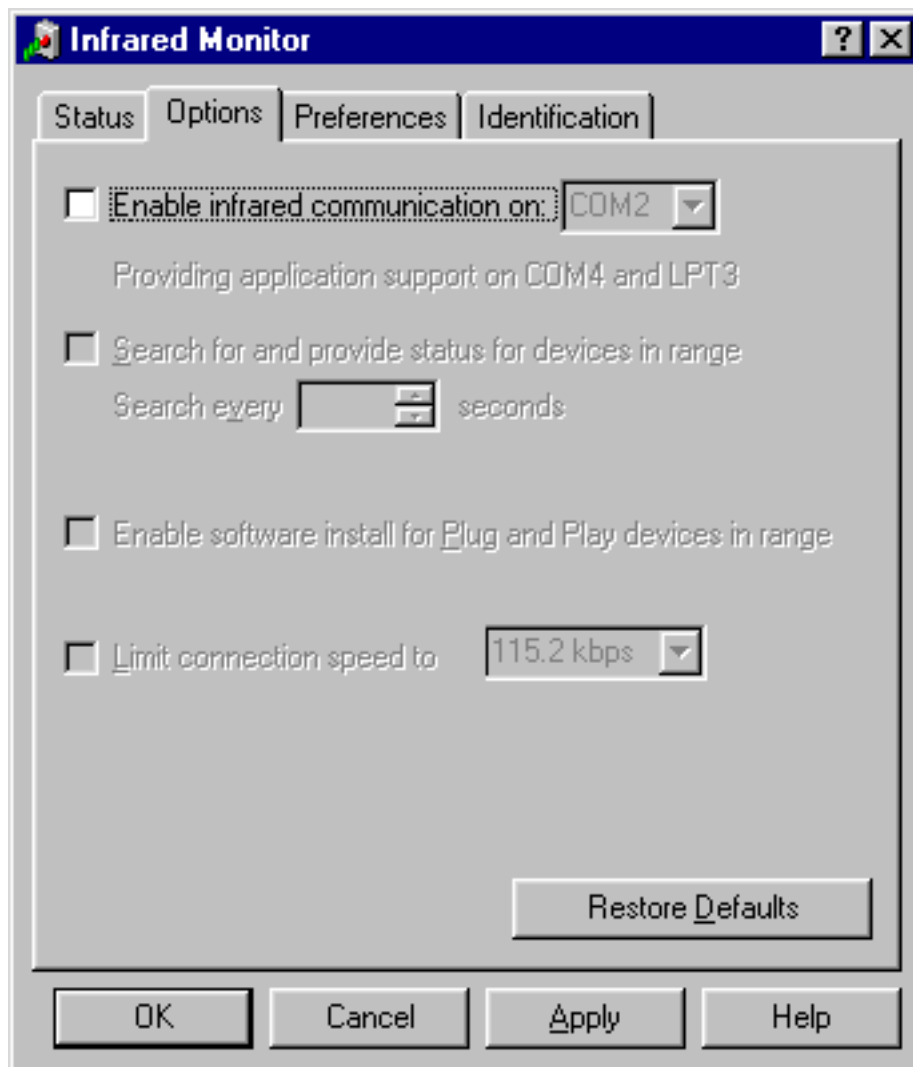6. You can use AltCtrlHack to perform one button/tap IR HotSync.

IrLink v1.5 HP SIR IR HotSync

❍ **On a PC Notebook/Desktop with built-in IrDA 1.0 or later compliant device**

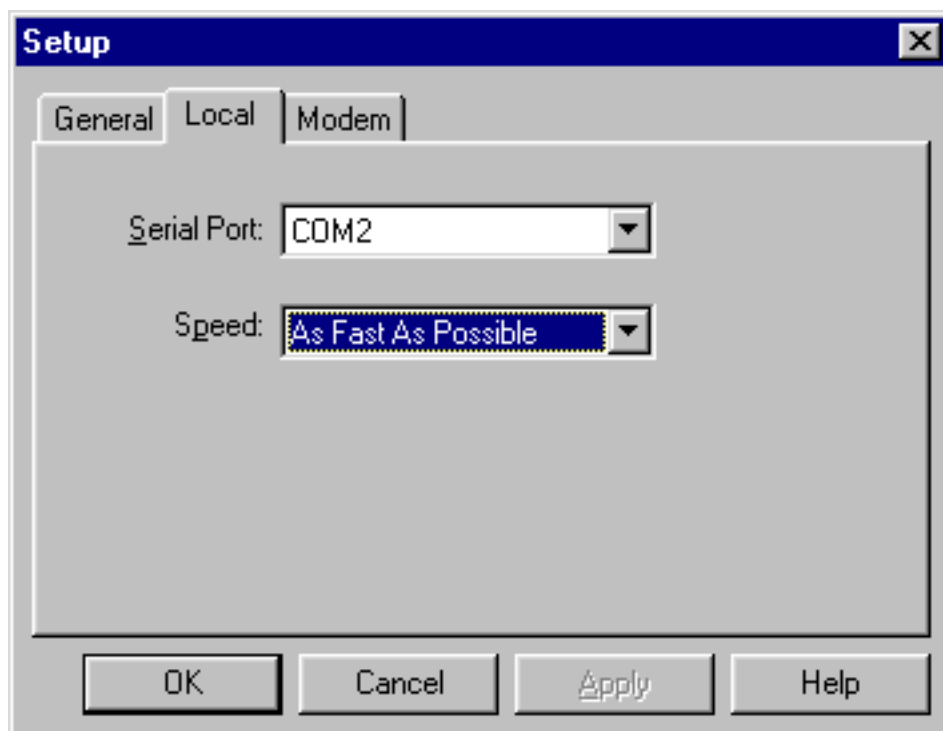■ Must disable the IrDA protocol and let the IR port become native IR device.

■ Windows 95

1. Go to settings/control panel/Infrared, see figure:

1.

2. Un-check the "Enable infrared on COMX", and please remember the COM port shows in the box. We need to use this port for HotSync Manager.

3. Go to HotSync Manager/Setup/Local, assign the port to COMX

4. Select 'as fast as possible' as the line speed (If this doesn't work with

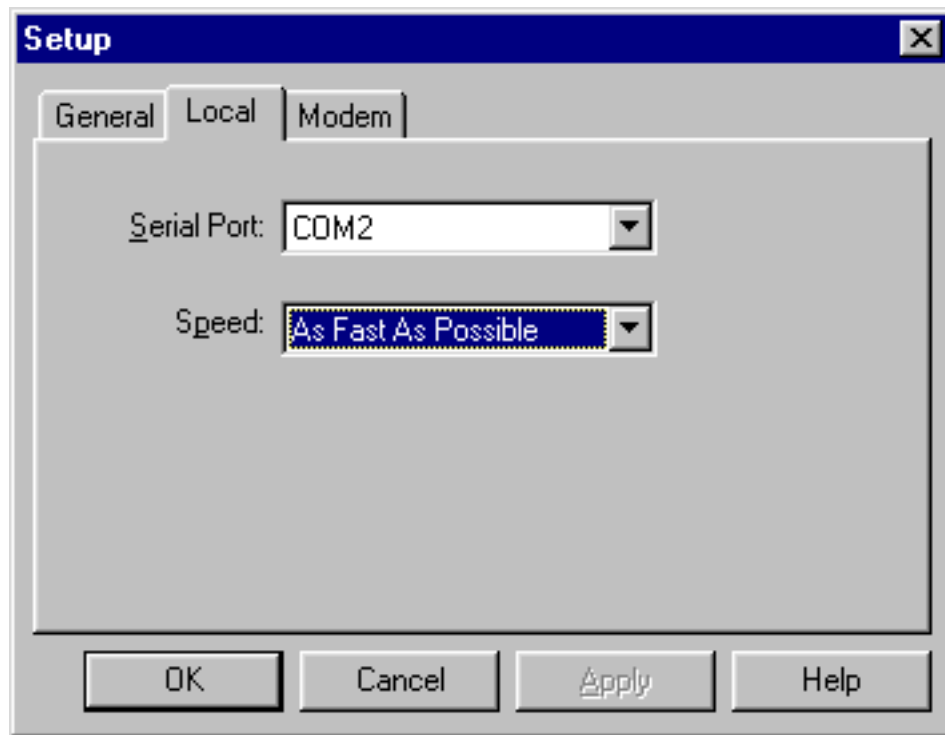your machine, try to lower the speed and try it again)

5. Click OK.

- ■ Windows 98

    Not Supported.

- ■ NT

    1. Check the notebook BIOS, make sure the IR port is enabled on ComX (i.e. COM1, COM2)

    2. Go to your HotSync Manager/Setup/Local to set the port to ComX.

- ■

    3. Select 'as fast as possible' as the line speed (If this doesn't work with your machine, try to lower the speed and try it again)
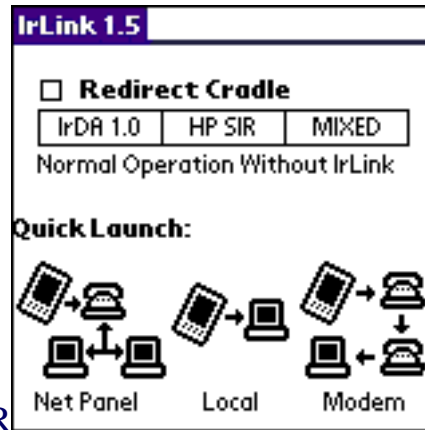
    4. Hit OK

- ■ Unix

    1. Point the HotSync manager for Unix to the Serial IR port or the Serial port that the IR is assigned.

    2. Select 'as fast as possible' as the line speed (If this doesn't work with your machine, try to lower the speed and try it again)
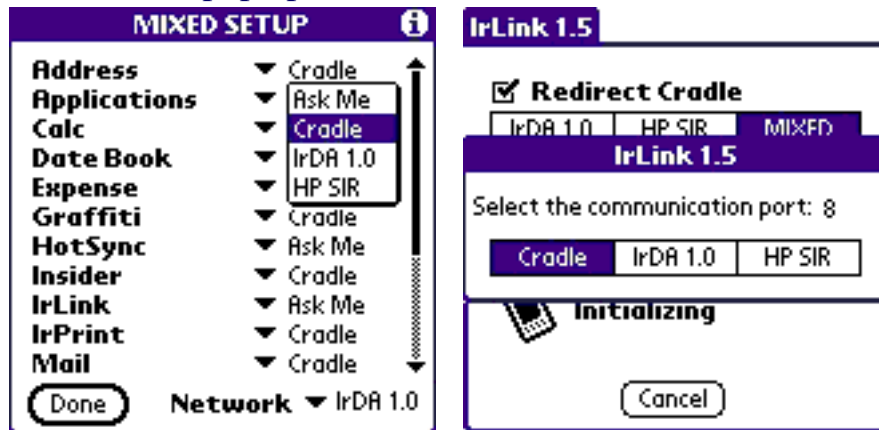
Notes:

- ■ External IR device may not work as well as built-in notebook. You can try it at lower speeds (19200, or 9600 bps)
- ■ Some External IR device may not work as generic IR Port.
- ○ **On PalmIII^{TM} (Note: This program can run on PalmIII^{TM} device, and 2MB Upgrade)**
    - ■ Run IrLink v1.5

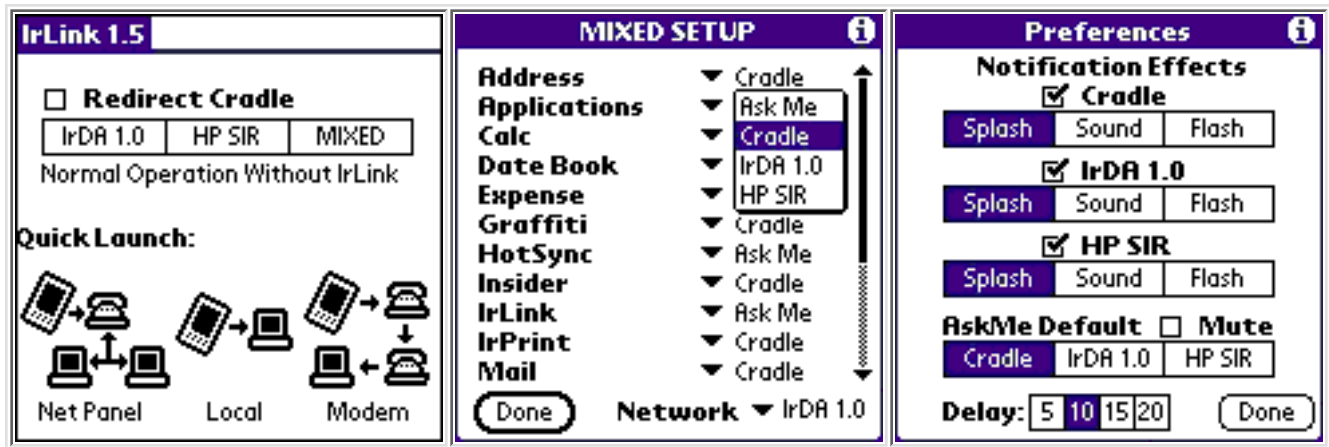- Make sure your IrLink is set to HP SIR, or Mixed with HotSync set to HP SIR, or when

IrLink 1.5

☐ **Redirect Cradle**

| IrDA 1.0 | HP SIR | MIXED |

Normal Operation Without IrLink

Quick Launch:

Net Panel   Local   Modem

Ask Me box pop up, select HP SIR

MIXED SETUP ⓘ

Address	▼ Cradle
Applications	▼ Ask Me
Calc	▼ Cradle
Date Book	▼ IrDA 1.0
Expense	▼ HP SIR
Graffiti	▼ Cradle
HotSync	▼ Ask Me
Insider	▼ Cradle
IrLink	▼ Ask Me
IrPrint	▼ Cradle
Mail	▼ Cradle

(Done) **Network** ▼ IrDA 1.0

IrLink 1.5

☑ **Redirect Cradle**

| IrDA 1.0 | HP SIR | MIXED |

IrLink 1.5

Select the communication port: 8

| Cradle | IrDA 1.0 | HP SIR |

🖫 **Initializing**

(Cancel)

- Aim your PalmIII^{TM} IR port to your Desktop IR port (within 1 meter in distance but 6 inch apart)

- Tap Local Icon within IrLink or use the regulare HotSync program.

- You can use [IrSync+ v1.1 or newer version](#) and/or [AltCtrlHack](#) perform one button/tap IR HotSync.

IrLink v1.5 for Palm III

01/01/2000

We make IR on Palm possible !!!

Click here to continue...

IS/Complete, Inc.

IrLink v1.5 for Palm III User Guide

01/01/2000

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Table of Contents

1. Before You Get Started: [top]

- This version of IrLink does not work with Palm OS 3.3. Please wait for v1.6 if you have Palm OS 3.3 device

- Please do not use IrLink to install IrLink.

- If you are using our full featured evaluation version of IrLink, the evalution peroid is 30 DAYS. After 30 days of trying, this software will no longer works even you roll back the date. If you like our software, please register it at http://www.iscomplete.com

- Perform a full backup using cradle before install IrLink.
- If at any time you need to delete IrLink: please make sure to uncheck 'Redirect Cradle', go back to your main Palm screen, click on the menu option, click on delete, choose IrLink from the menu option, and click on the Delete button. Or you can delete IrLink and perform a soft reset immediately to clean up the cradle redirection. You may experience some difficulty with cradle HotSync if you delete the IrLink while the IrLink is set to intercept cradle (USB/Serial). In such cases, please perform a soft reset. The system will be back to normal.
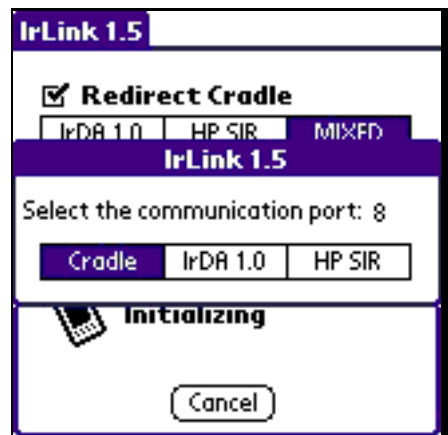
2. About IrLink: [top]

IrLink is software which allows you to use your Palm and your cellular phone to dial into the Internet simply by using an Infrared signal. It eliminates the need of a physical cradle or serial/USB cable which is usually needed to connect your Palm and cellular phone. You can also use IrLink with your Palm to HotSync with your notebook or iMac/PowerMac G3 wirelessly via Infrared port.

IrLink is a general utility/tool (a kind of middleware) to re-direct cradle (USB or serial) communication to IrDA communication without the need of code changes from the developer.   It supports cradle (USB or serial) re-direct to IrDA communication and cradle re-direct to HP Serial IR.

IrLink is the only software that makes your Palm talk to Nokia 8810 or Ericsson SH888 (or other model that is compatible with DI27) without a cable, dial-up to your ISP, retrieve email, or browse the net without waiting for a new OS or a new patch from the vendor. At this time, IrLink is not compatible with Nokia 61XX models.

The "on-the-fly" port redirection feature will ease IR HotSync between Palm and Notebook/iMac/PowerMac G3 and mixed use with the other devices/applications that use the cradle.

3. What IrLink Can Do [top]

- **AutoSync (Unattended HotSync).**   Schedule your Unattended HotSync via IrLink or Datebook. Once this feature is enabled, you can leave your Palm in your cradle, or aim Palm's IR port to your PC's IR port, you will able to retrieve/backup your data during the night ...
- **On-the-fly cradle (USB or Serial) to IR redirection.** You can preset the communication protocol per individual application or simply use 'ASK ME' to make your decision on-the-fly.

- **Smart detection** of the cradle/modem HotSync Button. When the HotSync Button (on cradle or Palm Modem) is pressed, IrLink will switch to cradle regardless of what you have set in IrLink.

- **Tail Device Friendly.** IrLink is compatible with many tail devices, i.e. keyboard for Palm. You can enjoy IR HotSync without missing your appointments.

- **Port Switching Notification**. IrLink will report which communication port/protocol is currently active when an application has enabled the communication port.

- **IrDA Device Discovery**. IrLink has a built in IrDA Device Discovery function for you to check and detect any device that is IrDA compliant. It is the easiest way to figure out whether your infrared (IR) device is functional or not.

- **IR HotSync**. You can carry less while you are traveling. If your notebook doesn't have a USB port but has an IR port, backing up your important data is possible.

- **Easy Link Test.** Provides a simple link test by sending lines of output to the target device. You can test the cradle, IrDA 1.0, or HP SIR.

- **HotSync Button Emulation with AltCtrlHack** (IS/Complete). You can simulate the HotSync Button to do a single button IR HotSync.

- **Beam receiving off.** When you are in the IrLink program, the beam receiving will be turned off temporarily. This can prevent PC IR scanning from interrupting IR HotSync.

Notes:

1. HP SIR -- HP Serial IR or Raw IR, is the lowest layer (Physical Layer) of the IrDA 1.0 standard. For IrDA standard, please visit www.irda.org

4. IrLink Pre-Installation [top]

1. Before you begin the installation of IrLink onto your Palm, you should familiarize yourself with how to install programs onto it (i.e., check out their help area at www.palm.com)

2. You need to have the latest version of IrLink and LicenseMgr onto your PC/Mac. (these will be links to the actual files)

3. Click here to download 3com's Ir Enhance Update onto your PC/Mac. Please extract it for later use.

4. Make sure you either have a cradle for your Palm plugged into your PC/Mac, or are familiar with beaming applications from another Palm, and have one available with IrLink and LicenseMgr and 3Com's Update on it.
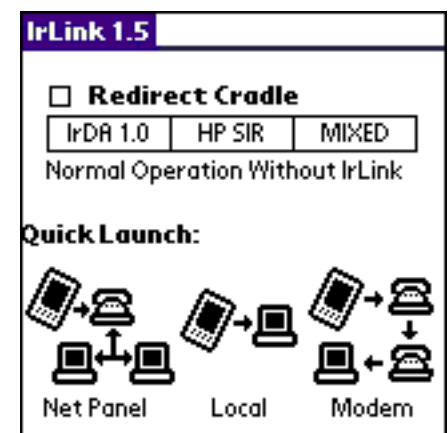
5. IrLink Installation onto your Palm [top]

1. On your computer, click on the Palm Desktop icon. Click on the Install button. Choose the Add button. Open the **AMX.prc, IrLib.Prc, SerIrComm.prc, LicenseMgr.prc and IrLink.prc** files you downloaded earlier. When all three are listed, choose the Done button. You should receive a notice that these files will be HotSynced the next time this action is performed.

2. On your Palm, choose the HotSync icon. Choose either Local or Modem Sync according to your setup (Local means you have a cradle plugged into your PC/Mac).

3. You will get a pop-up message asking you to reset your Palm after HotSync is completed. Click on the Reset button. You should now be able to see an IrLink icon on your Palm.

4. Please follow the instructions below in order to use IrLink effectively.

5. Some Quick Links for your setup if you are familiar with IrLink

   1. Infrared PPP Dial Up to ISP, Ericsson SH888I888//DI27 , or Nokia 8810/7110

   2. IR HotSync with your PC or iMac classic, or PowerMac G3 via IrDA

   3. IR HotSync with NT/Unix or other OS via HP SIR

6. Using IrLink v1.5 [top]

1. Click on the new IrLink icon on your Palm.

2. In order for your Palm to start using the Infrared signal instead of the cradle, check the "Redirect Cradle" check box. (see figure 6a)
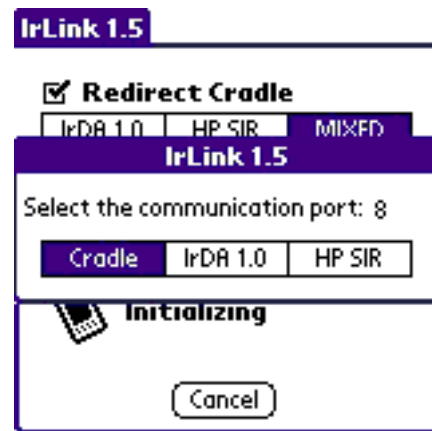
(figure 6.a)

3. You now must choose an appropriate Infrared redirect option for your computer. Your choices are the following:

   1. IrDA 1.0 (literally Infrared Data Association 1.0) means that in order to communicate with your computer you must have an IrDA IrCOMM Driver installed; (If you have chosen IrDA 1.0 and an error message pops up, you have not properly installed 3Com's IR Enhance Update on your Palm. Please click here and follow the instructions again.)
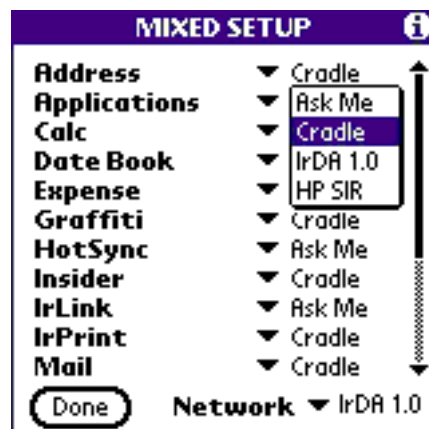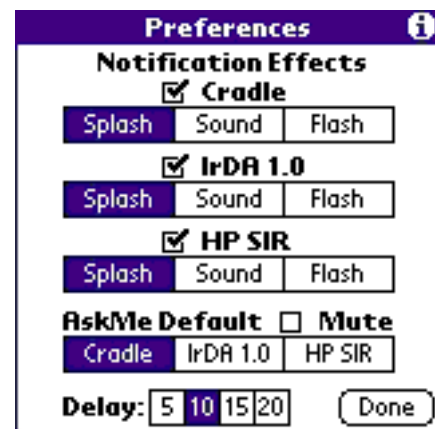
(figure 6b)   (figure 6c)

2. HP SIR (literally Hewlett-Packard Serial infrared) means you will communicate through the lowest physical layer of the IrDA 1.0 standard.

3. MIXED/Menu means you can set your preference as to whether you want each application individually on your computer to be updated by using the Cradle, IrDA 1.0, or HP SIR whenever you perform a HotSync. (see figure 6c)

   ■ The last option on each individual application is Ask Me. It allows you to choose the method of communication every time you HotSync. This is called on-the-fly cradle to infrared redirection. By default, you will hear a countdown beeping sound when the Ask Me dialog appears. The countdown length can be set to 5/10/15/20 seconds by clicking on your Menu option on the bottom of your Palm and choosing Preferences. On the lower part of your screen, you will see the Ask Me defaults. You can even choose to Mute the countdown sequence. (see figure 6d)

(figure 6c)   (figure 6d)

4. If you go back to your initial IrLink screen, you will see a set of diagrams called "Quick Launch". These options allow you to choose the method for which your Palm will communicate with your PC. When you choose "Quick Launch" you will go directly into HotSync mode. Choices include (see fugure 6a):

- Net Panel: If you want to connect to a Network;
- Local: If you want your PC and Handheld to directly communicate with each other through the Infrared port, or;
- Modem: If you want your PC and Handheld to communicate through the modems.

Each of these options has it's own setup procedures. Please follow them accordingly.

5. On your initial IrLink screen, choose the Menu option in the lower left-hand corner of the screen. Under Options you will see the following categories:

- Send Test: This option allows you to see if your communication selections are working properly. Follow the instructions as they are displayed.
- Device Discovery: This option allows you to quickly identify the type of device you are attempting to communicate with: i.e., another Palm, Palm, Cellular Modem, IR Printer, and any other IrDA compliant device.
- AutoSync: This option allows you to schedule an automatic daily HotSync via IrLink via the cradle, IR, IR modem or network. In order to set up this option:
  1. Click on the AutoSync option from the Menu.
  2. Check the Enable AutoSync check box.
  3. Choose the type of communication method (Local or Modem)
  4. Choose the time of day you want the computers to perform the HotSync under Daily HotSync Time;
  5. Choose the Apply button. The port protocol and next scheduled HotSync date and time will appear on your screen.
  6. Choose OK or Apply to save your configuration.
  7. Choose Cancel not to apply changes.

    - You will be able to perform a AutoSync by cradle even the Cradle redirection is disabled.
    - Known issue: If there is a pending Date Book alarm message, the AutoSync will be blocked until you acknowledge the appointment.
- Mixed Setup: This option is discussed above.
- Preferences: This option allows you to customize how your handheld tells you which type of communication protocol it is using. If you click on the Menu button again in the lower left-hand corner, and choose Preferences, you will see the Notification Effects window. Simply choose a sound or visual effect you would like to have for each type of protocol. (see figure 6d)
- About IrLink: This option tells you the version of IrLink you are using and some other miscellaneous information.

NOTES: When you are in IrLink and the "Ask Me" dialog appears, Beam Receiving will temporarily be disabled to prevent the "Waiting for sender…" message box from coming up. This will prevent a

racing condition if you try to communicate with your PC/Mac via Infrared.

Please also note that whenever you want to disable IrLink, uncheck the "Redirect Cradle" check box.

Feature in Experimental Stage

A new feature of IrLink v1.5 is called Scheduled HotSync. This allows you to schedule on the Date Book application of your Palm at exact time and many times per day for the HotSync to take place, instead of using IrLink AutoSync feature which can have only daily schedule. Please follow the instructions below to perform this new feature.
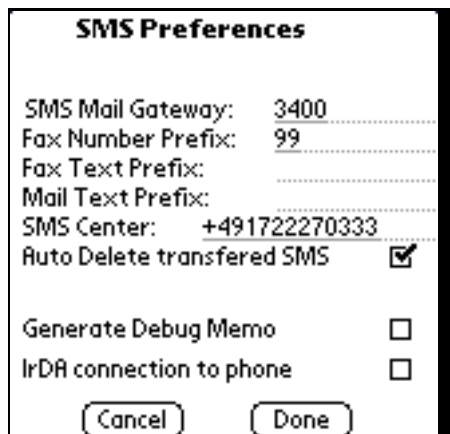
1. Click on the Date Book icon on your Palm.
2. Click on the date and time you would like your computers to HotSync.
3. Type in the following line to schedule a local HotSync: **!HotSync,Local** and to schedule a remote HotSync: **!HotSync,Remote**

   ❍ *Please be advised that there are no leading or trailing spaces on these lines, and it is case sensitive.*

4. Once you have typed in this line, click on the Details button, and click on the Alarm check box.
5. To perform this scheduled HotSync your "Redirect Cradle" check box must be checked, and you must use the MIXED configuration.

Known issue: If there is a pending Date Book alarm message, the HotSync will be blocked and ignored. You will still see the HotSync schedule as an alarm message regardless of a successful HotSync or not.

7. Q & A: [top]

Q1: How can I use IrLink with GSMTools (v1.21) ?
Ans.: Go to Menu/Options/SMS Preferences, uncheck the IrDA connection to phone.

Q2: How do you make IR HotSync co-exist with OmniRemote without switching back and forth ?

Ans.: Select MIXED option on redirection method, go to MENU/MIXED, search for HotSync, set it

to IrDA 1.0.

Q3: I don't like the Splash Screen. Is there any better way to do this ?

Ans.: Go to MENU/Preferences. You can either disable the notification effect of your choice or you can select sound or flash to avoid any visual effects.

Q4: Why do I need notification ?

Ans.: Many applications will use RS-232 and Infrared in a mixed way. This is the easiest way to know what you are using and what went wrong when you encounter any communication difficulties.

Q5: When I set IrLink to IrDA option, TailLight^{TM}; silent alarm doesn't work. How do I work around it ?

Ans.: Same as Q2.

Q6: The Mixed List doesn't have any Hack program. Will IrLink support Hacks ?

Ans.: Hacks are very special, so we have to handle them differently. When a Hack is activated, the owner of the Hack is the program you are in. For example: For AlarmHack, if you are in Date Book, when the alarm was triggered, the owner of the AlarmHack becomes Date Book. If the alarm was triggered when you are in the MemoPad, the owner of the AlarmHack will become MemoPad. We have no way to tell the owner the code segment during run time. In this version, IrLink will handle hacks that redirect the sound and alarm to the cradle correctly.

8. IrLink Examples: [top]

- Infrared PPP Dial Up to ISP (Palm and Ericsson SH888/DI27 [details], or Nokia 8810 [details])

- IR HotSync with your PC or iMac classic, or PowerMac G3 via IrDA[details]

- IR HotSync with NT/Unix or other OS via HP SIR [details]
- IR Modem HotSync (IrDA)
- IR PPP connection to your Win95/NT^{TM} and become part of a network (IrDA)
- IR PPP connection to your Win95/NT^{TM} and become part of a network (HP SIR)
- Palm to Palm PPP connection (IrDA)
- Palm to Palm PPP connection (HP SIR)
- Palm to Terminal emulator (HP SIR)
- Palm to Terminal emulator (IrDA)
- Palm Terminal (telnet) Dial-Up (IR Cell Phone Modem)
- Palm to Visor, Palm , Cellular Modem, IR Printer, or IrDA compliant device discovery

- Palm Clipboard Contents Send to Win98/95 (use RemoteClip Hack (R)) via IR

9. How To Report IrLink Bugs: [top]

Please report to IrLink@ISComplete.com with the following information. Please be as detailed as possible if you encounter any bugs when you use IrLink with your Visor:

- Version of IrLink (if not v1.5)
- The make and model of your target device (i.e. Nokia 8810, SH888, Notebook...)
- The firmware number or OS version of your target device if the device is a cellular phone (i.e. Nokia 8810 v4.05)
- The procedures to re-produce the error
- The error message or symptoms on Palm
- The error message or symptoms on your target device (i.e. Call disconnected, no response)
- Lists of your pilot Hacks for Hackmaster
- Modem Preference (if you are using IrLink to dial up to your ISP)
- Palm III Network Preference (if you are using IrLink to dial up to your ISP)

THANK YOU and ENJOY IT !!!

Please visit our web site at www.ISComplete.com!

IrLink v1.5 for Palm IIIx, IIIe, V with OS 3.1

01/01/2000

Please follow the instruction for Visor, Click here to continue...

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IrLink v1.5 for Palm VII

01/01/2000

Please follow the instruction for Visor, Click here to continue...

IS/Complete, Inc.

IrLink v1.5 for Palm Vx and device with OS 3.3

01/01/2000

<u>STOP HERE !!!</u>

IrLink V1.5 does not support Palm OS 3.3
Please wait for soon to be released IrLink v1.6

[IS/Complete, Inc.](#)