

iR Shell 3.9

User Guide



iR Shell is a multi-tasking shell for the PSP which allows you to launch applications (UMD games/movies, legally owned Backups, PS1 games and Sony demos or homebrews) via a menu driven interface. In addition to the standard shell functionalities, it includes a plethora of advanced features.

Most features can be called upon either via the icon based menu system or a shortcut combo key for fast access. Currently, **iR Shell** supports firmware 1.5, all OE revisions except for 3.30 as well as Team M33's custom firmwares up to 3.80 M33-5 and can also run under fw 1.5 & 2.71 emulation under DevHook on PSP Phat. **iR Shell 3.9** is also compatible with **PSP Slim & Lite** !

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1. Feature Highlights

These are just some of the features that iR Shell is capable of. Explore iR Shell fully and come up with many more uses than these for yourself:

- A true multi-tasking shell which allows you to multi-task between a UMD game/homebrew/Backup ISO and any of the iR Shell built-in functions.
- Allow listening to any of your favorite mp3s while playing UMD games, Backups or homebrews. You can optionally mute the game specific audio channels while playing mp3s. For example, you may want to play your own mp3s and mute the in-game music, but leave the game sound effects intact.
- Display anything that iR Shell can launch on your PC Monitor with the help of RemoteJoy.
- Supports the TV-OUT function found exclusively on the PSP Slim
- With the built-in file browser, you can browse files on your Memory Stick, UMD Disc, UMD Backups, your PC hard disks or DVDROM drives via USB or WiFi. You can even open files directly from these devices by a single click, such as viewing PMP Movies, Atrac3s, PMF movies, Backup ISOs, PS1 games, Text files, PDF files, Bitmap Photos, Jpegs, PNG photos, PBP PSP apps, ZIP & RAR archives.
- You can choose to install your PSP homebrew applications & files on your PC harddisk and access them via USB or WiFi on your PSP. This will eventually give your PSP unlimited storage access. With Infrastructure WiFi, you can access these homebrew apps or files on your home PC via WiFi hotspots through Internet.
- Ability to launch and multi-task with PS1 games which were launched from within iR Shell. PS1 game launching is also possible via USB and WiFi by using a Host File System.
- You can now play 2-Player PSOne games also against another PSP wirelessly !
- Backup UMD Video ISO support. You can launch Backup UMD Video ISOs straight from the filebrowser. A complete firmware dump of FW1.5 (including flash1) is required.
- A built-in Universal iR Remote supporting over 2000 devices.
- Allow transfer of files between 2 PSPs via adhoc WiFi.
- Adhoc WLAN connection to PC also possible
- Advanced file management functions which can be performed on a complete directory tree.
- Take snapshots/screenshots of any homebrews, UMD games, Backups, PS1 games, MP4 movies or UMD Movies. For MP4 movies or UMD Movies snapshot, you can use the 'Launch XMB' feature.
- Allow redirection of PSP keypad to PC Keyboard or PC Joystick via USB or WiFi. You can, for example, use a Xbox/Xbox360 gamepad with 2 analog sticks to control movement and aim in a FPS, like Syphon Filter. No more awkward control with PSP buttons for aiming.
- Allow the use of 4th brightness settings with homebrews & UMD games.
- CPU clock settings, ranging from 100MHz to 333MHz.
- Full support for firmwares 1.5, 2.71 with HenD, 2.71 SE-C, all 3.xx OE (except 3.30 OE) and M33 custom firmwares up to 3.80 M33-5 as well as support for 1.5/2.71 Emulation under Devhook with PSP Phat.
- New Context Menu System from which you can choose the action to perform on the selected file for quicker manipulation of files in Directory View
- Auto sleep mode while idle
- Ability to turn on/off the PSP's LED lights for Power, Memory Stick & WiFi. This is good if you are annoyed by the MS LED constantly, for example. The orange charging LED isn't affected.
- Supports Multi-tasking PRX Plugin System. A TXT/HTML reader PRX plugin developed by korDen is already included. It allows you to multi-task with TXT and HTML files such as walkthroughs in the background while simultaneously playing a UMD game

2. Features exclusive to PSP Slim

These features are exclusive to PSP Slim:

- FW3.60 M33, FW3.71 M33 & FW3.80 M33 are supported. POPSloader also supported.
- iR Shell currently uses the PSP Slim's extra RAM for better support such as:
 - MP3 player always available, including nethostfs MAX mode
 - Background image will be available when switching from game to iR Shell when running remotejoy
 - UMD Video can be displayed to PC via remotejoy under fw 1.5 & 3.x modes. The PSP Phat version only supports UMD Video via remotejoy under 1.5 iR Shell.
- Added support for TV out via Sony's component AV cable (only for Pb/Pr). Please note the composite AV cable is not supported. To toggle between TV out & PSP LCD, press "Left Trigger + Right". This setting is independent of the XMB setting. When you put PSP to sleep mode, TV Out will be turned off. When you wakeup the PSP, you can turn on TV out again. You can also turn on/off TV out even if a game/app is running. There is some restrictions when XMB is loaded under iR Shell. iR Shell doesn't allow you to turn-off TV out if XMB is in background. Allowing you to do so will screw up the XMB resolution. You also shouldn't use "Switch Video Output" option under XMB after launching XMB from iR Shell, as iR Shell will lose track of the current TV-Out mode.

3. Installation Instructions

iR Shell supports FW1.5, FW2.71 (SE-C and HenD), all OE custom firmware revisions except 3.30 OE by Dark_AleX as well as most custom firmwares by Team M33 for PSP including 3.80 M33-5. 3.51 M33-3 to 3.51 M33-7, 3.80M33-1 & 3.80M33-3 are not supported.

1. If you have any previous installation of iR Shell: Please disable the iR Shell autoboot PRX in recovery menu and delete all files related to iR Shell from your memory stick. (This includes the autoboot plugin in `/seplugins`, the iR Shell EBOOTS in the `GAME` folders and the `IRHELL` folder itself).
2. Begin installation by unzipping the iR Shell 3.9 installation archive to a folder on your harddrive. Please note that this installation archive contains files relevant to all supported custom firmwares and the complete installation takes 30MB.
3. Next, copy all folders of the extracted archive to the root directory of your memory stick, overwriting any files already present.
4. If you would like to install additional skins, you can download the skin pack, unzip it and also copy it to the root directory of your MS. You can also optionally copy the Pronto Codes infrared device codes pack to the root of your memory stick if you would like to have support for more than 2,000 infrared devices. Please note that the Pronto Codes take up a lot of space if you install them all.
5. To enable the iR Shell autoboot plugin, power off your PSP and then power it on again while holding R-Trigger. Then, enable the `"irsautoboot.prx"` plugin. This plugin is necessary to allow switching between fw 1.5 & fw 2.x/3.x versions of iR Shell.
6. Your PSP will now autostart with iR Shell upon power-on. If you wish you bypass the autostart mechanism at any later point then hold down TRIANGLE when turning on your PSP. You can also hold down CIRCLE to boot straight into 1.5 EBOOT of iR Shell. Booting into 1.5 EBOOT is not supported under PSP Slim & Lite.
7. To install iR Shell firmware patch for **fw 3.80**, **fw 3.71** (Phat or Slim) or **fw 3.60** (Slim only), use iR Shell's **3.xx** EBOOT and goto `ms0:/IRHELL/PATCH/3.80` `ms0:/IRHELL/PATCH/3.71`, or `ms0:/IRHELL/PATCH/3.60` for 3.80M33, 3.71M33 or 3.60M33 respectively. Then, launch `"btcnfpatch.prx"` and it'll install the `irspatch.prx` to 3.80/3.71/3.60 firmware. To install iR Shell firmware patch for **fw 3.5x** (PSP Phat only), use iR Shell file browser in **1.5** EBOOT and goto `ms0:/IRHELL/PATCH/3.5x/btcnfpatch`. Then, launch `"EBOOT.PBP"` and it'll install the `irspatch.prx` to 3.5x firmware. To install the iR Shell firmware patch for **older OE CFWs**, copy `/IRHELL/PATCH/3.02-3.40/irspatch.prx` to `flash0:/kn/irspatch.prx` on your PSPs by using recovery menu or pspfiler. Then, edit the `flash0:/kn/pspbtcnf_game.txt` file and add the `irspatch.prx` to it:
`$/kd/ata.prx`
`/kd/irspatch.prx`
`$/kd/umdmn.prx`
Once done you may delete the `/IRHELL/PATCH` folder from your memory stick to make a little bit more room for other files.
8. **Optional: For 3.71 M33 only:** If you wish to use the infrared feature of iR Shell you'll need a decrypted `sircs.prx` from fw3.52 because Sony has removed infra-red support under firmware 3.71. Place the `sircs.prx` file under `ms0:/IRHELL/SYSTEM`. To make the most of the infrared feature you should download the Pronto Hex Codes or supply your own RDF files. Infrared will only be available under PSP Phat and not PSP Slim & Lite.
9. **Optional:** If you wish you use DevHook with iR Shell then please refer to Chapter 10 of this manual. Please note that DevHook is not compatible under fw 3.71 or fw 3.80 mode. However, you can still launch devhook under fw 1.5 mode via the 1.5 kernel add-on. DevHook is also only compatible with PSP Phat and not PSP Slim & Lite.
10. **Optional:** To use POPSloader together with iR Shell please read Chapter 13.

4. Main Menu View

By default, iR Shell will launch in Menu View. This is the View where you see an array of 6x6 icons to control iR Shell. You can change the default View Mode in iR Configurator at any time.

Below is a description of each function listed by icon group in the main Menu View. You can bring up the Menu View at any time in the iR Shell main program by pressing **SELECT**.

For a detailed PSP button assignment list please refer to the chapter called "iR Shell Button Configuration".

4.1 View Choice Icons

These icons control the different view modes of iR Shell apart from Menu View (**SELECT** button). These views are mostly used for file operations of any kind.

4.1.1 Directory View and Context Menu:

Goes to *ms0:/* directory view to access files under memory stick. Under Directory View, you can open various files directly by pressing **CROSS**. Press **TRIANGLE** to go to the parent directory.

You can access other media, such as *disc0:*, *nethost0:* or *usbhost0:* by pressing **TRIANGLE** while at *'ms0:/'*. Below are the supported file types which allow direct launching with the bundled plugins. Please note that your file extension must match the list below:

PMP/AVC:	PMP/PMP AVC Movies via PMPlayer Advance plugin. Use 'TRIANGLE' to write a position file in order to resume the movie at a later point. Use 'HOME+SQUARE' to exit.
AT3:	Atrac3 plugin via Atrac3 Plus Player
PMF:	PMF Movie via PMF plugin (Use CROSS to pause/resume, TRIANGLE to exit)
ZIP:	ZIP Unarchiver via AnonymousTipster's ZIP Plugin
RAR:	RAR Unarchiver via AnonymousTipster's RAR Plugin
TXT:	Text file via bookr plugin
PDF:	PDF file via bookr plugin
LUA:	LUA Player mod 4 plugin. This plugin is currently available in 1.5 EBOOT of iR Shell only and not available for PSP Slim.
HTM/HTML:	HTML Viewer plugin. This plugin is only available in 2.xx/3.xx EBOOT
CBR/CBZ:	PSPComic Reader Plugin
OGG:	OGG media Plugin.

There is also a new **Context Menu System**. You can press the **'START'** button on a normal file (not a directory) under **DIR** view and it will bring up this context menu. Then, you can choose the action to perform on the selected file. For example, the sample context menu has **'View' & 'Edit'**. When you choose the **Edit** action, it will call up the corresponding editor plugin (*psppwrite by zx-81*) to allow you to modify the file.

The Context Menu System is very similar to the existing Plugin system. They both share the same plugins residing in *ms0:/IRHELL/EXTAPP* directories. The main difference is that the content menu doesn't rely on the file extension and will always be available to all types of files.

You can have a maximum of five context menu items and they can be customized under iR Configurator. The **START** key will act as a Context Menu key only when under **DIR** view with the highlighting cursor over a normal file. In all other circumstances, the **START** key will act as the **HELP** key.

4.1.2 DIR Shortcut View:

You can pre-define a directory shortcut via iR Shell Configurator, so that this DIR shortcut view will directly jump to your pre-defined directory for faster access.

4.1.3 MP3 View:

MP3 view allows you to directly jump to the `ms0:/PSP/MUSIC` directory. You can play any mp3 songs by pressing 'CROSS'. You can also highlight multiple mp3 files by clicking 'CIRCLE'. Then, press 'CROSS' after you've finished chosen your mp3 lists. Please note that you can also highlight directories which can contain unlimited number of mp3 files. In this case, all files in the directory will be played back 1 by 1.

4.1.4 Application View:

The Application View will list all your installed homebrew applications under the standard `ms0:/PSP/GAME`. It supports standard firmware 1.5 kxploit naming convention (example: `bookr & bookr%`) and also the traditional hidden directory naming. The new `__SCE__` naming & 1.0 EBOOT format are also supported. You can edit the folder that homebrew is displayed from using iR Configurator. For example, set it to `/PSP/GAME271/` under 2.71 SE-C by Dark_AleX or `/PSP/GAME352/` under 3.52 M33 – or leave it set at the default `/PSP/GAME/`.

4.1.5 iR Remote View:

RDF View allows you to access the built-in Universal Infra-Red remote control function. The RDF View will list all remote controls that you've installed. You can download another archive named "*Pronto Hex Code v1.3*" which included infra codes for over 2000 different devices. If you've an unsupported device, you can visit www.remotecentral.com and download the pronto codes for your particular device and place them in the RDF file format. Please note that you need a decrypted `sircs.prx` in `ms0:/IRHELL/SYSTEM` to use this feature on firmware 3.71 M33.

4.1.6 Game Save View:

Save View allows you to see the details of your game saves. This will be useful to find out which save to send to your friends PSP via the Adhoc WiFi Transfer function.

4.2 Shortcut Launch Icons

These shortcut icons are used to quicklaunch the UMD and some homebrew applications which you can define in the iR Configurator. More on this in the section about the iR Configurator.

4.2.1 Launch UMD:

Launches the inserted UMD Game disc. You can switch between the UMD Game & iR Shell by pressing '**Left Trigger + Select**' and perform various other file operations or other things inside iR Shell at this point. Use the '**Left Trigger + Select**' shortcut again to return to the game.

4.2.2 Predefined Homebrew 1 to 5:

These icons allows you to directly launch 5 pre-defined homebrew applications for fast access without the need to go through the APP View. First, you'll need to install the pre-defined homebrews to any of these directories.

Available Shortcut folders:

`ms0:/IRHELL/HOMEBREWxx/RIGHT/`

`ms0:/IRHELL/HOMEBREWxx/RLEFT/`

`ms0:/IRHELL/HOMEBREWxx/RUP/`

`ms0:/IRHELL/HOMEBREWxx/RRIGHT/`

`ms0:/IRHELL/HOMEBREWxx/RDOWN/`

(xx refers to the kernel version you would like to use: 15, 2X or 3X)

You can also optionally change your homebrew name from "Predefined Homebrew" to anything you like in "iR Shell Configurator" for each EBOOT of iR Shell. Read the FAQ for more info. For 1.5 homebrew you will have two folders, "`Name`" & "`Name%`". You copy your homebrew files from the "`Name`" folder to "`ms0:/IRHELL/HOMEBREW15/RIGHT`", or other shortcut directories. You don't need the "`Name`" folder. Then, you rename your EBOOT.PBP from "`Name%`" folder to `EBOOT%.PBP` and placed it to "`ms0:/IRHELL/HOMEBREW15/RIGHT`".

The shortcut for Analog Right under FW2.xx/FW3.xx has already been set to the Webbrowser plugin so you can quickly launch an internet session from within iR Shell and multi-task with it.

Please note: The *HOME BREW15* folder does not apply to PSP Slim & Lite since it can't run 1.5 kernel.

4.3 USB/WiFi Connection Icons

These icons are used to establish the different kinds of USB and WiFi connections that iR Shell offers. They range from USB Mass Storage to USBhostFS and NetHostFS as well as Adhoc PSP-to-PSP connections for file transfers.

4.3.1 Toggle USB Mass Storage:

Toggles USB Mass Storage On or Off. This is the same mechanism you know from the standard Sony XMB.

4.3.2 Toggle USBHost:

Toggles the USBhostFS connection. With USBhostFS, you can browse your PC hard disks or DVDROM drives via USB on your PSP. You'll need to install the usbhostfs driver on the PC and run the nethostfs.exe server application before you can use this feature. More on this in the section about setting up USBhostFS.

4.3.3 Toggle USBHost Redirection:

Toggle usbhost0 to ms0 mapping. With usbhost0 to ms0 mapping on, all access to ms0: device (the memory stick) will be redirected to usbhost0: (your computer). This will make the contents of your PC's USBhostFS root folder appear as if it is actually your memory stick. This will allow your existing homebrew applications to access files on the PC without modifications. Only use this option if absolutely necessary. There has been much confusion over its usage. In most cases you do NOT need this.

4.3.4 Toggle NetHost:

Toggles the NetHostFS connection. With NetHostFS, you can browse your PC hard disks or DVDROM drives via WiFi on your PSP. See the Host File System section for details on setting up nethostfs access.

4.3.5 Toggle NetHost Redirection:

Toggle nethost0 to ms0 mapping. With nethost0 to ms0 mapping on, all access to ms0: device (the memory stick) will be redirected to the nethost0: (your computer). This will make the contents of your PC's NetHostFS root folder appear as if it is actually your memory stick. This will allow your existing homebrew applications to access files on the PC without modifications. There has been much confusion over its usage. In most cases you do NOT need this.

4.3.6 Initiate Adhoc WiFi Transfer:

With adhoc WiFi file transfer, you can send or receive files/directories to or from another PSP without any access point.

4.4 Music Player Icons

These icons control the playback of mp3 songs. There shouldn't be any further explanation of them necessary since they are the same as on any other media player.

4.4.1 Play/Pause:

Start or pause music playback of a song or playlist in the iR Shell music player.

4.4.2 Stop:

Stops iR Shell music player playback.

4.4.3 Previous Track:

Plays the previous track in the iR Shell music player playlist.

4.4.4 Next Track:

Plays the next track in the iR Shell music player playlist.

4.4.5 MP3 Volume Down:

Use this to lower the volume of MP3 output.

4.4.6 MP3 Volume Up:

Use this to increase the volume of MP3 output.

4.5 Utilities and Tools Icons

4.5.1 File Management:

An advanced File Management function including Copy, Paste, Delete, Rename & Create Dir. These functions can work on a single file or a complete directory tree.

4.5.2 Launch Devhook:

This icon allows launching devhook directly from within iR Shell. You'll have to install devhook 0.4x and/or 0.5x on your PSP before you can use this feature. You can set the devhook firmware version under iR Shell Configurator. The default firmware for DevHook 0.4x to launch is set to fw 2.71 in iR Configurator where you may customize it to your liking. Please note that DevHook does not work under FW 3.71/3.80 M33 for PSP Phat or PSP Slim anymore. It also doesn't work under FW 3.60 M33 for PSP Slim.

4.5.3 Launch XMB:

This allows you to launch FW 3.xx or FW 1.5 XMB from within iR Shell. After launching of XMB, you can switch between XMB & iR Shell via the standard hotkey 'Left Trigger + Select'. In order to launch FW 1.5 XMB you need to have a working dump of FW 1.5 for DevHook 0.4x on your memory stick. Together with the use of nethost0 or usbhost0 redirection, you can then use the XMB Video player to playback mp4 movies on your PC harddisks via FW1.5 in DevHook. Launching 1.5 EBOOT of iR Shell of 1.5's XMB is not supported on PSP Slim & Lite due to the missing 1.5 kernel. On FW 3.71/3.80 you are required to have 1.5 kernel add-on installed to launch fw1.5 XMB.

4.5.4 Set Alarm Clock:

This allows you to setup a one time or recurring alarm. For example, you can setup an alarm to remind you stop playing a game at certain time. The alarm clock has been heavily improved due to adrahil's discoveries. You can now set an alarm in iR Shell and then put your PSP in suspend mode ("sleep"). It will power up at the time you set without wasting much (if any) energy. The alarm is just an MP3 so in order to turn it off earlier please stop MP3 playback (a shortcut would be R-Trigger + Cross). You can also set the alarm to wake you up with a random MP3 from a chosen directory.

4.5.5 Toggle CPU Speed:

Toggle between 100, 222, 266 or 333MHz CPU Clock Speed. If you would like to use 333 MHz together with NetHostFS then please set the CPU speed *before* you enable NetHostFS.

4.5.6 Lock iR Shell:

This will lock iR Shell access until you've given a correct password.

4.6 System Icons

These icons are used to configure, reset and shutdown iR Shell. They are also useful to provide

various information about the PSP such as battery level and muting game audio.

4.6.1 Reset iR Shell:

This will restart iR Shell. You will be given a few options like a normal restart, a complete system reset as well as switching to EBOOT of the other firmware (1.5 or OE/M33). Please note that in order to be able to switch to a different kernel EBOOT of iR Shell you will need to enable the supplied autoboot plugin in OE/M33 recovery menu and will also need to have 1.5 kernel addon installed if you are running FW 3.71/3.80 M33. Switching to 1.5 EBOOT of iR Shell is also not available for PSP Slim & Lite due to the missing 1.5 kernel.

4.6.2 Exit iR Shell:

Exit iR Shell and return back to XMB.

4.6.3 iR Shell Configurator:

This will launch the iR Shell Configurator which allows you to customize iR Shell the way you want it to be. There are over 70 options to customize. Within the Configurator, you can also choose to install various skins.

4.6.4 System Info:

Displays various system information such as battery and memory status.

4.6.5 Help:

Call up the Help screen describing shortcut key combos for all iR Shell functions for fast & direct access. Most functions can be access via icons or combo keys, except Snapshot (Note/Music button) and the Application Switch hotkey (Left Trigger + Select) which can only be access via key combos.

4.6.6 Mute Game Audio:

Allows muting of specific audio channels of UMD/Homebrew games. Depending on the "Mute Game Audio Type" option under iR Shell Configurator the game audio will only be muted while mp3 playback from within iR Shell is active, or always muted even when no mp3 is playing.

5. Photo Viewer

Photo viewer is activated when selecting a BMP, PNG or JPG file under Directory View. There can be a maximum of 350 photos in a directory. This is the button assignment:

Square:	Toggle Slide Show (Slide show interval is changeable in iR Configurator)
Right:	Next Picture
Left:	Previous Picture
Cross or Triangle:	Exit Photo Viewer
Circle:	Change JPEG photo scaling option (Note: Scaling option only works on JPEG files and has no effect on others)
Left Trigger + Select:	Switch to the background app

6. iR Shell Button Configuration

This section will explain the button configuration in the different view modes of iR Shell. Learning the basics of these will help you get the most out of iR Shell and in some cases you will be completely lost without them.

The most important button combination to remember right now is: **L Trigger + SELECT**. This combo enables "multi-tasking" between a homebrew, PSP/PS1 game or whatever else that you launched from iR Shell and iR Shell itself.

6.1 General iR Shell button configuration:

Analog pad left:	Launch UMD
Analog pad right, R+Analog Pad (any direction):	Launch predefined homebrew from the shortcut folder located at: /IRSHELL/HOMEBREW/<Direction>/EBOOT.PBP, (5 Homebrew shortcuts in all)
Analog pad up:	USB mass storage On/Off toggle
Analog pad down:	Quit iR Shell
Left Trigger + Up Arrow:	Launch XMB
Left Trigger + Down Arrow:	Alarm Clock / Stop alarm
Left Trigger + Left Arrow:	Launch Devhook
Left Trigger + AUP:	Toggle USB HostFS (usbhost0:)
Left Trigger + ALEFT:	Toggle USB HostFS to ms0 redirection (usbhost0: -> ms0:, ms0: -> ms1:)
Left Trigger + ADOWN:	Toggle NetHostFS (nethost0:)
Left Trigger + ARIGHT:	Toggle NetHostFS to ms0 redirection (nethost0: -> ms0:, ms0: -> ms1:)
Left Trigger + Right Trigger:	Restart/Reset iR Shell
Left Trigger + Right:	Toggle TV-Out (PSP Slim only)
Left Trigger + Select:	Switch Task between the launched app and iR Shell
Left Trigger + Start:	CPU speed toggle between 100, 222, 266 & 333
Note button:	Take a screen snapshot (the snapshots are placed under <i>ms0:/PSP/PHOTO/SHOT</i>). The folder <i>ms0:/PSP/PHOTO</i> must exist on your memory stick for this function to work.
Left Trigger + Cross:	Adhoc WiFi File Transfer
Left Trigger + Square:	File Manipulation on selected file(s) in Directory View
Left Trigger + Circle:	Lock iR Shell. You'll need to enter a correct password to regain access. Default password is null (nothing).
Left Trigger + Triangle:	Directory Shortcut View (directory selectable in iR Configurator)
Left Trigger + Brightness:	Enable maximum brightness, 4th level (Press Brightness button alone to return to normal setting). Not needed anymore on M33 custom firmwares.

Right Trigger + Triangle:	Shortcut to browse /PSP/MUSIC directory
Right Trigger + Start:	Run iR Configurator
Right Trigger + Select:	System Information
Right Trigger + Vol-:	Turn off PSP's LED lights. Orange charging light not affected
Right Trigger + Vol+:	Turn on PSP's LED lights again (back to normal)
Start button:	<i>In Directory View:</i> Brings up the Context Menu when pressed while highlighting a single file. The contents of the context menu can be customized. See chapter 4.1.1 for more details. <i>In all other view modes:</i> Brings up the Help messages. Press Start again to see the next help screen. Press any other button to close the help messages.

6.2 Menu View:

Arrow Keys (Digital Pad):	Menu navigation
Cross:	Execute the iR Shell function we selected with arrow keys
Select:	Toggle Menu View and last used other view
Triangle:	Switch to last used other view (to go back to Menu View again press SELECT)
Analog pad left:	Launch UMD
Analog pad right, R+Analog Pad (any direction):	Launch predefined homebrew from the shortcut folder located at: /IRSHLL/HOMEBREW/<Direction>/EBOOT.PBP
Analog pad up:	USB mass storage On/Off toggle
Analog pad down:	Quit iR Shell
Left Trigger + Up Arrow:	Launch XMB
Left Trigger + Down Arrow:	Alarm Clock / Stop alarm
Left Trigger + Left Arrow:	Launch Devhook
Left Trigger + AUP:	Toggle USB HostFS (usbhost0:)
Left Trigger + ALEFT:	Toggle USB HostFS to ms0 redirection (usbhost0: -> ms0:, ms0: -> ms1:)
Left Trigger + ADOWN:	Toggle NetHostFS (nethost0:)
Left Trigger + ARIGHT:	Toggle NetHostFS to ms0 redirection (nethost0: -> ms0:, ms0: -> ms1:)
Left Trigger + Right Trigger:	Restart/Reset iR Shell
Left Trigger + Right:	Toggle TV-Out (<i>PSP Slim only</i>)
Left Trigger + Select:	Switch Task between the launched app and iR Shell
Left Trigger + Start:	CPU speed toggle between 100, 222, 266 & 333
Note button:	Take snapshot (photos are placed under ms0:/PSP/PHOTO/SHOT)
Left Trigger + Cross:	Adhoc WiFi File Transfer
Left Trigger + Square:	File Manipulation on selected file(s) in Directory View
Left Trigger + Circle:	Lock iR Shell. You'll need to enter a correct password to regain access. Default password is null (nothing).
Left Trigger + Triangle:	Directory Shortcut View (directory selectable in iR Configurator)
Left Trigger + Brightness:	Enable maximum brightness, 4th level (Press Brightness button alone to return to normal setting).
Right Trigger + Triangle:	Shortcut to browse /PSP/MUSIC directory
Right Trigger + Start:	Run Configurator.
Right Trigger + Select:	System Information
Right Trigger + Vol-:	Turn off PSP's LED lights. Orange charging LED not affected
Right Trigger + Vol+:	Turn on PSP's LED lights again (back to normal)
Start button:	Help messages. Press Start again to see the next help screen. Press any other button to close the help messages.

6.3 Directory View:

This is the button assignment additionally to the shortcut combos when in Menu View:

Arrow Keys (Digital Pad):	File browser navigation
Triangle:	Go to parent directory under Directory View / Return to Directory View under Menu
Square:	View toggle. Allows you to toggle between application view, RDF view, directory view or Game save view. Does not work in menu view (switch to any other view first). Use SELECT to open Menu View.
Cross:	Item selection
Circle:	Highlight items or Display / Hide Icon (for APP/SAV Views). Also used to add items to the mp3 player playlist.
Start button:	<i>In Directory View:</i> Brings up the Context Menu when pressed while highlighting a single file. The contents of the context menu can be customized. See chapter 4.1.1 for more details.

6.4 DIR Shortcut View:

This is essentially just a "favorite" shortcut folder you can set up in iR Configurator. It gets displayed in Directory View.

The same button assignment applies as well. You can use this shortcut to have quick access to */PSP/PHOTO/* or */ISO/* for example.

6.5 MP3 View:

This is just another shortcut to */PSP/MUSIC* directory on your memory stick. Essentially the same as pressing "R Trigger + Triangle". Again, the same full button configuration as for Directory View applies here. These are the most important ones for MP3 playback:

Arrow Keys (Digital Pad):	File browser navigation
Circle:	Mark item for Playback List (max playback list size: 30)
Square:	View toggle. Allows you to toggle between application view, RDF view, directory view or Game save view. Does not work in menu view (switch to any other view first). Use SELECT to open Menu View.
Triangle:	Move up one folder
Cross:	Instant Playback (for single tracks only)
Right Trigger + Square:	Stop playback
Right Trigger + Cross:	Start Playlist / Playback Pause / Playback Resume
Right Trigger + Circle:	Mute Game Audio Channels
Right Trigger + Right Arrow:	Next MP3 Track
Right Trigger + Left Arrow:	Previous MP3 Track
Right Trigger + Up Arrow:	Volume Up (volume control for MP3 player only)
Right Trigger + Down Arrow:	Volume Down

6.6 Application View:

This view lists the homebrew applications, PS1 games, and Sony demo's stored in the path you defined in iR Configurator (*/PSP/GAME/* by default). From here you can easily launch your homebrew, rename it and so on. Most other system-wide shortcuts also still work.

Arrow Keys (Digital Pad):	File browser navigation
Cross:	Launch selected application
Square:	View toggle. Allows you to toggle between application view, RDF view, directory view or Game save view. Does not work in menu view (switch to any other view first). Use SELECT to open Menu View
Circle:	Toggle application icon

6.7 iR Remote View:

If you haven't installed the Pronto Hex Codes before you'll need to download the archive, unzip *prontocodes13.zip*, and place the files on your PSP under '/IRHELL/IRCODES/'. Once installed you can select any RDF remote control file in iR Remote View and launch it with Cross.

Please note: infrared control is not available on the PSP Slim & Lite.

Arrow Keys (Digital Pad):	Select remote control file
Cross:	Launch selected remote control file
Square:	Toggle between application view, RDF view, directory view or Game save view. Does not work in menu view (switch to any other view first). Use SELECT to open Menu View.
Start:	Switch to another remote control file directly (if shortcut list is defined)
Select:	Exit iR Remote View

Once the remote control is launched all buttons have new mappings which will be displayed on-screen.

6.8 Game Save View:

Arrow Keys (Digital Pad):	Select game save
Cross:	Show details of selected game save
Square:	View toggle. Allows you to toggle between application view, RDF view, directory view or Game save view. Does not work in menu view (switch to any other view first). Use SELECT to open Menu View
Circle:	Toggle Game Save icon

Other general iR Shell button combinations also continue to work here. For example, "*Left Trigger + Square*" which will let you copy or delete a game save.

7. USB and WiFi Host File Systems

The Host File Systems (NetHostFS and USBhostFS) are two of the most powerful features of iR Shell that truly unleash the full power of the PSP.

7.1 Introduction

Using USB or WiFi connections, you can remotely browse your PC harddisk, CDROM, DVDROM, etc. just like local files on your Memory Stick. You can open PC files on your PSP via the familiar iR Shell file browser (DIR View). This allows you to play host mp3s, movies, photos, etc. on your PSP without physically copy them to the MS. The files you selected are streamed realtime to the PSP for playback. You can even launch PSP homebrews that are installed on your PC harddisk. This will eventually turn your PC storage as your PSP local storage and open up all kinds of possibilities.

Some homebrews are hardcoded to open files located on `ms0:` device (Memory Stick). To achieve maximum homebrew compatibility, iR Shell supports device redirection. Once enabled, your `usbhost0:` or `nethost0:` will appear as `ms0:` on your PSP. When your homebrew tries to open files under `ms0:`, it will be redirected to the host file system. You can also choose to install PSP homebrew applications on your host under `usbhost0:/PSP/GAME` or `nethost0:/PSP/GAME`, similar to the way you install homebrews on `ms0:`. Afterwards, you can enable the redirection and also enable the "Redirect APP View to Host" in iR Configuration. The homebrews installed on your host harddisk will be presented to you under the regular iR Shell APP View. You'll also notice the title of the APP View will be changed to "Homebrew Applications [HOST]". The HOST keyword signals you that the homebrew listed are residing in your PC host.

After you've enabled redirection, files on memory stick can still be chosen via `ms1:` device. Depending on the particular homebrew application, files on `ms1` may or may not be seen by the homebrew.

7.2 Installation & Configuration

This section of the manuals details how to set up USBhostFS and NetHostFS in order to allow access to files stored on your PC via your PSP.

7.2.1 USBhostFS:

For USBhostFS support, you'll need to first download the USB drivers on your PC (both Windows & Linux are supported). Properly installed USBhostFS drivers are also required for RemoteJoy video output. Start `usbhostfs.exe` (or `RemoteJoy4iRS`) on your PC and select "Toggle USBHost" in iR Shell to enable USBhostFS support. The first time you do this on Windows you will be asked to specify the location of the drivers. Point the driver installation to the folder where you previously placed the USB drivers. Alternatively, `RemoteJoy4iRS` also comes bundled with USBhostFS drivers which can be found in the `\FILES\DRIVER` subfolder which will be created the first time you launch `RemoteJoy4iRS`.

Important: You will need to update your USBhostFS drivers to the new drivers even if you previously had USBhostFS working with older iR Shell releases than iR Shell 3.7. Other `usbhostfs.exe` releases are also incompatible with iR Shell and you must use AhMan's modified files or `RemoteJoy4iRS`. If you already had a working setup for iR Shell 3.7 then you are fine.

USBhostFS can also be used for PSP keypad redirection to PC keyboard & Joystick. You'll need to enable the option "Redirect Keypad to Host" under iR Shell Configurator for this to work.

Usage: `usbhostfs.exe [options] rootdir`

rootdir: The defined dir will be used as root dir for PSP. Use `/cygdrive` if you want the PSP to see all drives in your PC.

Options:

- k** Disable PC keyboard redirection. PC Joystick redirection will still be active. Also, the original usbhostfs command will be active.
- j** Enable the 2nd joystick (for PS1 games) – see below
- 1 file** Joystick Mapping file for the first joystick – see below
- 2 file** Joystick Mapping file for the second joystick – see below

Examples:

`usbhostfs /cygdrive`

This will allow you to access all drives on your PC.

`usbhostfs -j -1 joy_1.map -2 joy_2.map`

This will tell usbhostfs to use *joy_1.map* for the first joystick and *joy_2.map* for the 2nd joystick. "-j" is to indicate you've 2 joysticks in the system and will only be used for PS1 games.

Joymap.exe

A new feature allows you attach two joysticks to your PC for PS1 games. Additional options to specify map files for these joysticks have also been added.

In order to create such joystick map files for usage with iR Shell you should run the *joymap.exe* utility (requires *cygwin1.dll*) from the command-line:

Usage: `joymap <0/1> mapfile`

where <0/1> indicates the joystick numbder 0 or 1. mapfile is the result joystick mapping file to be created.

Example:

`joymap 0 xbox.map`

This will create a xbox.map joystick mapping file for the first joystick in the system (Xbox Controller).

7.2.2 NetHostFS:

For NetHostFS support, it's a bit more complicated as it involves a working internet connection already present on your PSP. In order to proceed you should first set up a working internet connection in the PSP's XMB and then go on.

Once you unzip the nethostfs archive to your PC (both Windows & Linux are supported), you can launch it as follows. Unlike usbhostfs, however, you'll need to explicitly enable PSP keypad redirection with -s option. You'll also need to enable the option "Redirect Keypad to Host" under iR Shell Configurator when using keypad redirection.

Please note: If your PC firewall asks if you want to allow nethostfs.exe access to the internet then you will need to allow this at least for your local network (LAN). If you want to be able to browse your PC files from a remote location via the internet then you will need to allow nethostfs.exe to have access to the whole internet, of course.

Also note: *Nethostfs.exe* has also been updated with support for a second joystick (for PS1 games) which means that older versions are now incompatible with it. Please use only the latest version with iR Shell 3.9.

Usage: `nethostfs.exe [options] rootdir`

rootdir: The defined dir will be used as root dir for PSP. Use /cygdrive if you want the PSP to see all drives in your PC.

Options:

- p** *port* TCP port number
- l** *login_password* Password for client PSP to login
- c** *max_clients* Maximum number of client PSPs, valid range 4-1000, default 20
- r** Restrict to Read-Only access
- s** Tells the nethostfs to enable keypad redirection. Please note if you connect more

- than 1 PSP to the same nethostfs server with the '-s' option enabled, the keypad redirection will be forwarded to all PSPs. You can have more than 1 nethostfs server running with each one listening to a different port & serving different PSP.
- k disables keyboard redirection and only joystick will be redirected. This is similar to the "-k" option for usbhostfs.
 - h Print this help messages
 - j Enable the 2nd joystick
 - 1 *file* Joystick Mapping file for the first joystick
 - 2 *file* Joystick Mapping file for the second joystick

Note on -r option:

This option is useful when you open your PC for public access via the Internet without worrying about files being modified or deleted. You can also install various homebrews on the server to allow others to run them from your PC without having the need to install them on their PSPs (use the nethost redirection & enable Redirect APP View to Host). Some homebrews may need to create files while they're running, such as updating high score files for games. In order to achieve maximum compatibility all file update commands, issued by the PSP, will be simulated without applying the updates on the file system. This means all update commands will return successfully, so as not to cause any errors in homebrews.

Examples

```
nethostfs -p 7513 -l mypass -r /cygdrive
```

This will allow your PSP to access all drives in your PC in read-only mode (-r), which means you can't modify or delete any files. You'll also need to configure the following under iR Configurator.

```
nethostfs -p 7513 -l mypass -s -j -1 joy_1.map -2 joy_2.map
```

This will set up NetHostFS to use port 7513 (default) with the password mypass. The "-s" option will enable Keypad Redirection. The "-j" option will enable second joystick support for PS1 games and the -1 and -2 options define the names of the joystick map files.

7.2.3 Adhoc WiFi PC Configuration:

The PSP firmware 1.5 and 3.xx do not allow your PSP to connect directly to a PC without a router via Adhoc WiFi. The Adhoc WiFi connection only supports PSP to PSP communication. To connect your PSP to your PC, you'll normally need an Infrastructure Access Point. However, iR Shell utilizes a little trick by using the network drivers from firmware 1.0 and 1.5 to allow you to connect your PSP to your PC via Adhoc WiFi.

To use adhoc PC connection, follow the procedures below:

1. Place the following PRX modules from a 1.0 firmware dump. These files are not included with iR Shell distribution for legal reasons. These files will need to be decrypted.

```
ms0:/IRHELL/SYSTEM/ifhandlde.prx
ms0:/IRHELL/SYSTEM/pspnet.prx
ms0:/IRHELL/SYSTEM/pspnet_apctl.prx
ms0:/IRHELL/SYSTEM/pspnet_inet.prx
ms0:/IRHELL/SYSTEM/pspnet_resolver.prx
```

2. Place the following PRX module from a 1.5 firmware dump: *wlan.prx*. This file is also not included with iR Shell for legal reasons. This file will also need to be decrypted:

```
ms0:/IRHELL/SYSTEM/wlan15.prx
```

3. From your XMB, go to Network Settings->Infrastructure Mode.

- Enter a connection name with "adhoc" as prefix (case insensitive). Example, "Adhoc PC1". The adhoc prefix tells iR Shell this is an adhoc entry. Without adhoc prefix, iR Shell will treat it as a regular Infrastructure settings for Access Point only.
- Enter the SSID name for your adhoc network. Don't use Scan as it won't allow you to scan adhoc networks.

- Use WEP encryption to your preference. Any other encryption does not work !
- Choose Custom under "Address Settings", then choose "Manual IP Address Settings". Enter IP address manually, example "192.168.100.2". For "Default Router" entry, type your PC's IP Address, example "192.168.100.1". Enter an arbitrary DNS address.
- For Proxy Server, choose "Do Not Use". Then save settings and skip test connection.

4. Goto iR Configurator, select the appropriate XMB Network Config entry. Then, enter your PC IP Address under "NetHost IP (Adhoc)" entry. This PC IP Address is used for adhoc connections. For infrastructure connections, iR Shell uses the IP Address/Name defined under "Nethost IP/Name (AP)". The reason for having 2 different entries is to avoid making changes to your configurator when switching from AP to Adhoc.

5. Done. You can now use nethost0 via Adhoc mode under iR Shell. If you enable to option "Allow Adhoc PC Connection for Homebrew" under iR Configurator, this will even allow your existing Infrastructure WiFi homebrew applications to use Adhoc WiFi to a PC.

There is more info about Adhoc NetHostFS setup available at the unofficial iR Shell forums located at <http://www.irshell.org>.

Important:

Adhoc NetHostFS via decrypted FW1.0 PRXs as described above is currently not possible under FW3.71/3.80 M33 due to NID changes implemented by Sony in the newer firmwares.

7.2.4 Display Redirect via USBhostFS and RemoteJoy

iR Shell enables you to display all PSP screen contents on your PC monitor. It uses USBhostFS and RemoteJoy (both originally by Tyranid) to achieve this.

The RemoteJoy implementation in iR Shell is about 99 per cent compatible and does not suffer from the problems many of the other RemoteJoy modifications have. This means you will not have any issues with Savegames not loading/saving, having to pull and replug the USB cable at certain times and so on. Instead, it just works perfectly in either iR Shell EBOOT (1.5 or 2.x/3.x). Here's how to do it:

Preparations:

For all further steps, we will require a working USBhostFS connection. This means you will also need to have the updated USBhostFS drivers for iR Shell installed. The current *usbhostfs.exe* that comes with iR Shell is incompatible with other releases out there so be sure to use the recommended files for iR Shell.

Please follow **chapter 6.2.1** first and make sure that you can connect fine using USBhostFS. Next you must launch iR Configurator and make sure that both "*Non-MS Media Access*" and "*Display Redirect to usbhost0*" are set to "*Enable*" and save your changes.

Manual method:

First launch *usbhostfs.exe* on your PC. Then start *remotejoy.exe* with your preferred commandline options such as "*remotejoy.exe -c -d -r 0 -v*". Finally choose "*Toggle USBhostFS*" in iR Shell to connect to the display. Now you can do whatever is possible with iR Shell and display it on your screen including but not limited to displaying homebrew, UMD/ISO games, PS1 games, the "launched" XMB, iR Shell itself and Sony demos on your PC Monitor.

Using RemoteJoy4iRS:

Copy RemoteJoy4iRS.exe to any folder and then launch it. At the first launch it will extract some subfolders with the necessary files and also a folder structure to use with Host Redirection. You're ready to go - just choose "*Toggle USBhostFS*" in iR Shell and you should start to see your screen contents on your PC.

You can use the upper 4 buttons in the GUI to switch between windowed and fullscreen mode with and without fps (frames per second) counter. The lower four buttons allow you to switch between different modes for usbhostfs.exe. Get more info about RemoteJoy4iRS usage from the readme.txt or the unofficial iR Shell forums.

Please note:

Please use *"F12"* to close the RemoteJoy window or return from Full Screen View (and not *"ESC"* which will send iR Shell the Quick Exit command - similar to *HOME+SQUARE*).

Restrictions:

Please note the iR Shell background image (except for menu view) will be removed when an application is loaded and you switch back to iR Shell under PSP Phat. PSP Slim & Lite will still display the image.

7.2.5 2-Player PS1 Games via USBhostFS/NetHostFS

It is now possible to play 2-Player PS1 games with iR Shell using a PC with USBHostFS (and optionally some joysticks). Enjoy all those great classics with your buddies again. If you wish you can also show the PSP screen content on your PC monitor by using Remote Joy (see next chapter).

To enable 2-Player support for PS1games open iR Configurator & set *"POP 2 Player Support"* to either *"1P: PSP, 2P: Host"* or *"1P: PSP/Host, 2P: Host"* or *"Adhoc Wi-Fi"* (see next chapter).

"1P: PSP, 2P: Host" Player 1 uses PSP keypad & Player 2 uses host keypad redirection.

"1P: PSP/Host, 2P: Host" Player 1 can use PSP Keypad & Host keypad redirection and Player 2 uses Host keypad redirection.

"Adhoc Wi-Fi" Player 1 uses PSP #1 and Player 2 uses PSP #2 to connect wirelessly with each other (see next chapter).

Please also make sure *"Redirect Keypad to Host:"* is set to *"Via usbhost0"* or *"Via nethost0"* (or even *"Via usbhost0 or nethost0"*), depending on which Host File System you would like to use. Next, start *nethostfs.exe* or *usbhostfs.exe* on your Windows PC with any other command-line parameters you require. If *"1P: PSP/Host, 2P: Host"* is set under Configurator, Player 1 will use the PSP or PC Joypad 1 and Player 2 will use PC keyboard by default.

If you've two joypads on your PC, you can start nethostfs/usbhostfs with option *"-j"*, this will allow player 2 to also use a joypad. For nethostfs.exe you will also need to enable *"-s"* option. You can assign joystick map files to use with *"-1"* and *"-2"* options. Please see **chapters 6.2.1** and **6.2.2** for more details.

7.2.6 2-Player PS1 Games via Adhoc WiFi (2 PSPs required)

Currently, this feature isn't very stable. Games may lose synchronization during 2-Player battle. Some games seem to work better than others, however. You may also try the same game using different POP version and see if it helps. POP from firmware ver 3.52, 3.71, 3.72 3.73 & 3.80 are not supported.

Supported POPS Versions for 2-Player Adhoc:

- **3.10 - 3.51 & 3.60** (You can choose these POPS versions under CFWs 3.52 M33-4, 3.60 M33, 3.71 M33-3 and 3.80 M33 when using Popsloader.

Usage Instructions:

- Make sure both PSPs are using the same POP version.
- To enable 2 Player Adhoc, goto iR Configurator and set *"POP 2 Player Support"* to *"Adhoc WiFi"*.
- Choose the same PS1 game on both PSPs. Please note that this must be the exact same game generated by the same popstation and must have the same Game ID.
- You'll see the other player on the PSP screen. The one who initiates the connection request will be the Client and the other will be the Server.

- Once the Server confirms the connection request, the Server will send the PS1 game save to the other PSP. This game save is important as different saves will not be able to sync. In order to avoid overwriting with the original save on the Client PSP, iR Shell will rename your original game save directory and prepend it with a "~". For example, your original save directory is "SLPS12345" and it will be renamed as "~SLPS12345".
- When you no longer wants to play Adhoc WiFi for the specific game, you can then delete the new save and rename your original save back. If you don't care about your original game save, you don't have to take any actions.

Limitations:

- Make sure you don't press the HOME button while Adhoc is running. Doing so will result in lose sync.
- If you need to convert a game save to another POP version, do it before activating adhoc mode. If you convert the game save under adhoc mode, it won't sync.

8. iR Configurator

The iR Configurator is the main configuration program for iR Shell's default settings. You can launch the configurator from inside iR Shell with the button combination "R Trigger + START" or by selecting its icon from Menu View.

8.1 Button Configuration:

Inside the iR Configurator, this button configuration is being used:

- Up & Down (Digital Pad):** Choose setting to edit
- Left & Right (Digital Pad):** For settings with multiple defaults you can use Left and Right on the digital pad to choose other defaults or change values
- Cross:** Edit a setting if it requires entering text or choosing a directory
- Circle:** Save changes and exit iR Configurator
- Triangle:** Exit iR Configurator without applying changes

When using DIR view to set paths for iR configurator options, please note the slightly different button assignments: **Circle** enters a path, **Cross** selects the path in iR Configurator.

8.2 iR Configurator Options:

The following is a list of all iR Configurator settings and options with a short explanation of what each does where necessary:

- Devhook Launcher Ver:** 0.4x, 0.5x - sets the version of DevHook to be used for the "Launch DevHook" shortcut in Menu View and via shortcut. DevHook does not work on FW 3.60 M33, fw 3.71 mode of 3.71M33 or 3.80M33. You can use fw 1.5 mode of 3.71/3.80 M33, though.
- DevHook FW Dir for 0.4x:** ms0:/dh/271/ - sets the firmware folder to be used when running DevHook 0.4x
- UMD Mode:** UMD Required, OE No UMD Mode, M33 NoUMD Mode, Sony NP9660 NoUMD Mode - set to whether to use No-UMD mode or not for ISO launching. iR Shell overrides your recovery menu setting and uses its own configuration.
- POP Ver:** Flash, Use Popsloader Plugin - You can set if you would like to use POPSloader when launching PS1 games from within iR Shell or use the one from flash. It doesn't matter whether you have POPSloader enabled or disabled in recovery menu. iR Shell doesn't care about that setting in recovery menu. You can still launch POPs via XMB with the posloader plugin.
- POP CPU Speed Override:** Default (333Mhz), Same as iR Shell - sets the default CPU speed when running PS1 games from within iR Shell
- Default CPU Speed:** 222, 266, 333, 100 - sets the default bootup CPU speed in general
- Date Format:** Month/Day, Day/Month, Month.Day, Day.Month - sets the way you would like the date to be displayed in iR Shell
- Startup Splash:** Bitmap Image, PMF Movie, No Splash - sets the type of startup splash, be it none, an image or a PMF Movie
- Initial View:** Menu View, DIR MP3 View, DIR Shortcut View, SAV View, DIR View, RDF View, APP View - sets the initial View Mode to be used when iR Shell launches
- Hide Save View:** Yes, No - allows you to hide Save View if you don't use it
- Hide RDF View:** Yes, No - allows you to hide RDF View (infrared remote control view) if you don't use it
- Hide RDF Sub-directory:** Yes, No - allows you to hide any subfolders in RDF view (infrared remote control view) if you have no use for them.
- Slide Show Interval in Seconds (1-60):** 5 - sets the interval between loading a new image when running a slide show. Enter any number

Initial JPG Viewer Scaling:	representing seconds. Original, Scale to fit, Fit to Width, Fill Screen – sets how to scale JPG images if they don't fully fit the screen
PMF Movie Scaling:	Enable, Disable – sets, whether PMF movies should be scaled when played
PSP Headphone Remote:	Disable, Always Enable, Enable Only Under iR Shell – allows you to set if and when you would like the PSP's remote control to work
MP3 Randon Start for Single Dir Playback:	Enable, Disable – when enabled, you can use CIRCLE to highlight a single MP3 directory and then press "R-Trigger+ CROSS" to start playback. The system will randomly pick an mp3 file from that directory and start playback. Only the first song will be picked at random, however, playback will continue from the next song after the randomly picked one.
Default Mute Game Audio:	Enable, Disable – sets if Mute Game Audio should be enabled by default
Mute Game Audio Type:	Mute while MP3 Active, Mute Always – sets when Mute Game Audio actually mutes game audio, for example only if an MP3 is played in iR Shell's mp3 player.
Eboot 1.0 Format Support for fw1.5:	Disable, Enable – enables support for 1.0 style EBOOTS in iR Shell so kxploit is not needed (applies to FW 1.5 EBOOT of iR Shell)
Enable Music Button for Screen Capture:	Enable, Disable – allows you disable the "Music" button for taking screenshots with iR Shell. This can be useful if a game needs the "Music" button, for example. A folder /PSP/PHOTO must exist on your memory stick for the screen capture to work
__SCE__ Naming Support:	Disable, Enable – enables support for FW1.5 homebrew named with the SCE naming convention to hide corrupted icons
Skip Help Files Installation:	Yes, No – when installing a skin, this option will allow you to skip installing the skin's help files i(maybe because you use translated help images, for example).
Disable Analog Pad:	Analog Pad Disabled, Analog Pad Working - This will allow you to disable the analog stick completely if you have problems with it or it is broken.
Non-MS Media Access:	Disable, Enable – this setting basically enables or disables the Host File Systems (USBhostFS and NetHostFS). Set this to enabled if you would like to use either.
Redirect APP View to Host:	Enable, Disable – enable this setting if you would like to have homebrew which is stored on your PC directly appear in iR Shell's Application View when using host redirection. Please note that you will need to have a cloned memory stick folder layout in your host file system's shared root folder for this to work.
Redirect Keypad to Host:	Via usbhost0, Via nethost0, Via usbhost0 or nethost0 – enables or disables keypad redirection to the host PC via the specified Host File System(s). You cannot use your PC gamepad to control any PSP games via host file system if you disable this setting in iR Configurator.
POP 2 Player Support:	Disable, 1P: PSP - 2P: Host, 1P: PSP/Host – 2P: Host, Adhoc Wifi. Enable this if you would like to enable support for a second joystick (or PSP) when playing PS1games using USB/NethostFS or via Adhoc WiFi. The option " 1P: PSP - 2P: Host" will have Player1 controlling the game via the PSP while Player2 uses the keyboard (or joystick1). The option " 1P: PSP/Host – 2P: Host" will allow player1 either use the PSP or joystick1 while Player2 uses joystick2 or the keyboard. The option "Adhoc WiFi" will allow you to play

the game against somebody with another PSP wirelessly.

- Display Redirect to PC via usbhost0:** Disable, Enable – By enabling this option you will be able to redirect the PSP display output to a PC monitor using *usbhostfs.exe* and *RemoteJoy* (or the *RemoteJoy4iRS* Gui package). See chapter 6.2.4 for more details.
- XMB Network for NetHost:** <your XMB WiFi connections> - use Left and Right on the digital pad to choose which XMB WiFi connection you would like to use for NetHostFS.
- NetHost IP/Name (AP):** <your PC address IP or host name> - enter here the IP address or host name of your PC when using infrastructure NetHostFS.
- NetHost IP (Adhoc):** <PC IP address when using Adhoc> - enter here the IP address of your PC when using adhoc NetHostFS with your PC. Most people will NOT need this ! Sorry, Adhoc NetHostFS is not available under FW3.71/3.80 M33 due to technical reasons.
- NetHost Port:** 7513 – you can set a different port to be used for NetHostFS here. Do not change this if you don't know what you are doing.
- NetHost Password:** <type in password here> - you can set a password to be used for NetHostFS communication between your PC and your PSP here to make it a little more safe.
- NetHost/UMD Compatibility:** Normal, Maximum – allows you choose a compatibility mode for launching ISOs via NetHostFS. Maximum mode provides best compatibility but does not allow you to play MP3 in background, use Mute Game Audio functions and also does not support WPA encryption. Switch to WEP instead, if you would like to use Maximum Compatibility mode with NetHostFS. This restriction does not apply to PSP Slim & Lite.
- Allow Adhoc PC Connection for Homebrew:** Enable, Disable – allows homebrew apps to access iR Shell's own adhoc PC connection as if the PSP were connected to an access point.
- Homebrew Path:** ms0:/PSP/GAME – folder you store your homebrew in. APP view will show the application stored in this path. Please make sure that you run 1.5 homebrew only from within the 1.5 EBOOT of iR Shell and vice versa.
- DIR Shortcut (L Trigger + Triangle):** ms0:/PSP/PHOTO/ - defines the folder to be directly opened in Directory View when someone uses the "L Trigger + Triangle" shortcut.
- Homebrew#1 (Analog Right):** here you can browse to an EBOOT which will be launched when you move your analog stick to the right.
- Homebrew#2 (R Trigger + Analog Left):** here you can browse to an EBOOT which will be launched when you use the mentioned button combo.
- Homebrew#3 (R Trigger + Analog Up):** here you can browse to an EBOOT which will be launched when you use the mentioned button combo.
- Homebrew#4 (R Trigger + Analog Right):** here you can browse to an EBOOT which will be launched when you use the mentioned button combo.
- Homebrew#5 (R Trigger + Analog Down):** here you can browse to an EBOOT which will be launched when you use the mentioned button combo.
- Default Alarm State:** Off, On – sets if the alarm state will be on or off by default when you launch iR Shell
- Default Alarm Clock (HHMM):** 0000 – sets the default alarm time when arming the alarm clock.
- Alarm Repeat:** Enable, Disable – enables or disables repeating of the alarm.
- Alarm MP3 File:** ms0:/IRSHELL/SYSTEM/ALARM.MP3 – sets the MP3 file to be used for the alarm. Turning off the alarm is the same as

Low Battery Warning Alarm:	stopping any other MP3. Off, 3%, 5%, 10%, 15%, 20%, 25%, 30%, 35%, 40% - sets the battery level threshold at which point you will get a battery warning
Low Battery Warning Repeat:	Enable, Disable – you can set if the battery warning should be continuously repeated here. Turning off the alarm MP3 is the same as stopping any other MP3.
Auto Sleep:	Disable, Auto, When No Background App Running – When set to "Auto", iR Shell will automatically go to Sleep/Suspend mode when it's idle after the time you specify in the next option. When set to "When No Background App is Running" this will only happen if you have no other homebrew, PSOne game or ISO/CSO backup running in the background. Sleep Mode will not be activated in the following scenarios: <ul style="list-style-type: none"> • AC Adapter is connected • NetHostFS or USBHostFS are active • Adhoc WiFi Transfer is active • USB mass storage is active • Slide Show is active • MP3 is playing
Auto Sleep (1-60 minutes):	You can set the idle time after which the PSP should be put to sleep (or "suspend mode") here. Press CROSS to change the time.
Launching App Confirmation:	Yes, No – sets if you will need to confirm launching any homebrew applications from within iR Shell
Launching UMD Confirmation:	Yes, No – sets if you will need to confirm launching any UMDs from within iR Shell
Launching ISO Confirmation:	Yes, No - sets if you will need to confirm launching any ISOs from within iR Shell
Launching Shortcut Homebrew Confirmations:	Yes, No – sets if you will need to confirm launching any homebrew that you started via a shortcut.
APP/Save Icon Position:	Defined by Skin, Override by Configurator – sets if the Application and Save icon positions will be defined by the skin settings or the following settings in iR Configurator.
APP Icon State:	On Top/Initial On, On Top/Initial Hidden, Overlay with Text/Initial On, Overlay with Text/Initial Hidden – sets if and how to display the application's icon in iR Shell's Application view.
APP Icon X Position (0-336):	sets the X Position of the application icon if "APP/Save Icon Position" is set to "Override by Configurator"
APP Icon Y Position (0-192):	sets the Y Position of the application icon if "APP/Save Icon Position" is set to "Override by Configurator"
Save Icon State:	On Top/Initial On, On Top/Initial Hidden, Overlay with Text/Initial On, Overlay with Text/Initial Hidden - sets if and how to display game save icon in iR Shell's Game Save view.
Save Icon X Position (0-336):	sets the X Position of the game save icon if "APP/Save Icon Position" is set to "Override by Configurator"
Save Icon Y Position (0-192):	sets the Y Position of the game save icon if "APP/Save Icon Position" is set to "Override by Configurator"
External Plugin Suffix: PMF	APP#: 1
External Plugin Suffix: AVC	APP#: 2
(...)	

This is the plugin setup for **external** ("EBOOT") and **internal** ("special PRX") **plugins**. The supported file extensions are listed under "External Plugin Suffix" for each iR Shell EBOOT version respectively. Each supported firmware mode (1.5, 2.71 or 3.xx) has it's own plugins,

too.

External plugins are located at **/IRHELL/EXTAPP/**.

Internal (*special PRX*) plugins are located at **/IRHELL/PRXPLUGIN/**.

Under **/IRHELL/PRXPLUGIN**, there are subfolders such as **APP1**, **APP2** etc. which contain the actual plugins. The "**APP#**" setting in iR Configurator from above controls which of these APP folders will be used for the plugin integration. So, the external PMF plugin of iR Shell can be found at **/IRHELL/EXTAPP/APP3/**. The EBOOT.PBP in the APP# directory is for fw 3.x; while EBOOT15.PBP is for fw 1.5.

If you would like to assign an **internal plugin** to a file extension instead then choose "**PRX Plugin x**" (where "**x**" is a number between 1 and 5 that corresponds with the subfolders **APP1** to **APP5** in **/IRHELL/PRXPLUGIN/**).

Context Menu 1:	MT-Viewer	APP#: PRX Plugin 1
Context Menu 2:	View	APP#: 5
Context Menu 3:	Edit	APP#: 20
(...)		

This is the **Context Menu** setup. The Context Menu System is very similar to the exiting Plugin system. They both share the same external plugins in **ms0:/IRHELL/EXTAPPxxx** directories (xxx = corresponds to the iR Shell firmware EBOOT for which the extension is designed) and the Context Menu also supports **internal** ("*special PRX*") **plugins** located in **/IRHELL/PRXPLUGIN/**.

The main difference is that the content menu doesn't rely on the file extension and will always be available to all types of files. You can have a maximum of 5 context menu items and they can be customized here under iR Configurator. Please note that the **START** key will act as a **Context Menu** key only when under **DIR view** with the highlighting cursor over a normal file. In all other circumstances, the **START** key will act as the **HELP** key.

Password Mode:	Off, iR Shell Startup – <i>sets if iR Shell startup should be protected by a password.</i>
File Manipulation:	No Password, Password protected – <i>allows you to also protect any file manipulation with a password</i>
Configurator:	No Password, Password protected – <i>allows you to protect iR Configurator with a password to protect iR Shell from any unwanted changes made by others.</i>
Change Password	<enter new password> - <i>use this to enter a new password.</i>
Skin Browser	<i>choose this option to run the iR Configurator. It has it's own on-screen help.</i>
Save Changes & Return to iR Shell	<i>use this to save your changes and exit iR Configurator</i>
Cancel Changes & Return to iR Shell	<i>use this to cancel your changes and exit iR Configurator.</i>

9. Running Demos, Backups and Homebrew

Launching Sony demos, homebrew applications and backups of any kind (PSP ISOs, UMD Video ISOs, PS1 games) is very easy with iR Shell. You can either select them in APP view (for homebrew and Sony demos) or you can run them from Directory View.

Launching any application should work regardless of where it is stored – be it the PSP's memory stick or your PC's harddrive via USBhostFS or NetHostFS. You can multi-task between iR Shell and the launched Demo/Backup/homebrew by using the system-wide hotkey "L Trigger + Select". That way you can use other iR Shell functions like the file browser or Mute Game Audio after you have already launched the application.

9.1 Running homebrew:

Running homebrew is very simple. Either select it in APP view or launch the EBOOT.PBP from Directory View. Homebrew may either be on your memory stick or available via Host File System such as USBhostFS or NetHostFS. Homebrew may also be launched from the XMB after using "Launch XMB".

Please also note that you can only launch homebrew coded for FW1.5 in the FW1.5 EBOOT of iR Shell. For the same reason you can only launch official Sony demos from within the FW3.xx EBOOT of iR Shell. Please set your homebrew path accordingly for each iR Shell EBOOT version in it's respective iR Configurator. A recommendation would be to set the Homebrew path to /PSP/GAME150/ for the FW1.5 EBOOT of iR Shell in iR Configurator. On FW 3.71/3.80 you will need to have the 1.5 kernel addon installed to use the 1.5 EBOOT of iR Shell and 1.5 homebrw. PSP Slim & Lite does not support 1.5 kernel at all, so 1.5 EBOOT of iR Shell also won't work.

If you have problems with some homebrew then try enabling host redirection for those problem cases. However, try to avoid host redirection where possible.

9.2 Running official Sony demos:

Running official Sony demos is very similar to launching homebrew. You must make sure, however, that the Sony demo resides in /PSP/GAME/ and that you have GAME set to use 3.xx kernel. Furthermore, you can only launch Sony demos from the 3.xx EBOOT of iR Shell.

9.3 Running PSP ISO Backups:

To launch a PSP ISO simply select the desired ISO or CSO file in Directory View and launch it. The ISO/CSO files may either be on your memory stick or available via Host File System such as USBhostFS or NetHostFS. If you're launching an ISO/CSO via USBhostFS or NetHostFS, make sure you do NOT enable host redirection. Host redirection is only designed for homebrews, not ISOs ! Also do NOT "Launch XMB" and then run the ISO. Launch it from Directory View as intended. The ISO Backup capability is based on OE/M33 firmwares.

Please note that when launching an ISO from inside the 1.5 EBOOT of iR Shell, you will only be able to launch ISOs that do not require a higher firmware. Switch to the 3.xx EBOOT of iR Shell for newer ISO. Also, do not use redirection when running ISO/CSO files via Host File System.

9.4 Running PS1 games:

PS1 games may be run from Application View and Directory view in the 3.xx EBOOT of iR Shell. PS1 games won't work when launched from 1.5. PS1 games may either be on your memory stick or available via Host File System such as USBhostFS or NetHostFS. PS1 games may also be launched from the XMB after using "Launch XMB". Ability to launch PS1 games are based on OE/M33 firmwares.

9.5 Running UMD Video ISO Backups:

iR Shell's 2.xx/3.xx EBOOT can now use M33's Video UMD ISO support (since 3.52 M33-3) to play Video UMD ISOs, additionally to the still possible "old" method via 1.5 EBOOT and a 1.5 firmware dump.

To allow UMD Video autostart from 2.xx/3.xx iR Shell file browser, make sure *"UMD Auto-Start"* under XMB System Settings is set to *"On"*. To disable auto UMD start upon PSP power-on, set *"Skip Sony logo"* to *"Enabled"* under M33 Recovery Menu. Same as when using the "old" method with 1.5 EBOOT, you'll need to name your video iso with extension *".umv"*, not *".iso"*.

Be careful: There is a chance of bricking your PSP when changing XMB UMD Auto-Start setting or other system settings under M33 3.71/3.80.

In order to run UMD Video ISOs under 1.5 EBOOT ("old method"), you will need a full FW1.50 dump for DevHook (including flash1) on your memory stick in /DH/150/ folder. Next, rename your UMD Video .ISO to .UMV and put it on your memory stick, too. You can then launch the UMD Video ISO Backup by selecting the .UMV in Directory View. Exit the emulated XMB by pressing HOME+SQUARE. Playing UMD Video ISO backups in fw 1.50 mode is based on Dark_AleX's version of UMD Emulator.

10. iR Shell Directory Structure

This section of the manual will explain the iR Shell folders on your memory stick to you, so you always know what you are working on.

10.1 IRSHELL Folder:

/IRSHHELL/BIN	contains all iR Shell binary program modules.
/IRSHHELL/CFG15	contains iR Shell configuration files for fw 1.5.
/IRSHHELL/CFG2X	contains iR Shell configuration files for fw 2.71.
/IRSHHELL/CFG3X	contains iR Shell configuration files for fw 3.xx.

Since iR Shell can now run under fw 1.5, 2.71 and 3.xx PSPs, you can choose to have a common configuration for all firmware versions or use different configuration for fw 1.5 and 2.71 and 3.xx respectively.

To use a common configuration for both fw 1.5 & 2.71, define a directory *"/IRSHHELL/CFG"*: **/IRSHHELL/CFG** contains your iR Shell configuration files.

If *"/IRSHHELL/CFG"* is not present, iR Shell will assume you would want to have 2 different configurations for fw 1.5 and 2.71.

NOTE:

Make sure you only use one of the configuration options. If you've *CFG*, *CFG15*, *CFG2X* & *CFG3X* together, iR Shell will only use *CFG*. The included archive provides default configuration for *CFG15*, *CFG2X* & *CFG3X*. If you want to have a common configuration, delete *CFG2X* and *CFG3X* and rename *CFG15* to *CFG*.

/IRSHHELL/CLEANUP	contains a Windows script which helps you find and delete iR Shell files you don't need prior to installation.
/IRSHHELL/EXTAPP	external plugin modules
The EXTAPP folder contains APP folders numbered from 1-20. These refer to the plugin number you can set under "APP#" in iR Configurator for the respective file extension.	

/IRSHHELL/HOMEBREW15	shortcut apps for firmware 1.5
/IRSHHELL/HOMEBREW2X	shortcut apps for firmware 2.71
/IRSHHELL/HOMEBREW3X	shortcut apps for firmware 3.xx

Each **HOMEBREW** folder contains the folders **RDOWN**, **RIGHT**, **RLEFT**, **RRIGHT** and **RUP**. These refer to the shortcut apps available in iR Shell. Any file you place in the **RIGHT** folder will be launched as soon as you move the analog stick to the **RIGHT**. The remaining shortcut folders with an additional "R" in the front of the folder name refer to the shortcut apps available via **RIGHT TRIGGER + ANALOG PAD** (in all four directions). Refer to chapter 5 for a list of the button configuration in iR Shell including the shortcut apps.

/IRSHHELL/IRCODES	Infra-Red Universal Remote Code database. Needs to be installed from a separate archive <i>protocodes13.zip</i> , or you can move your code database over from your old installation.
/IRSHHELL/PATCH	Contains the UMD/ISO compatibility patches you should apply during installation. Please refer to the installation instructions for more information.
/IRSHHELL/PRXPLUGIN	Contains subfolders for internal (multi-tasking) PRX plugin integration. You can choose these instead of the external or context menu plugins in iR Configurator instead.
/IRSHHELL/SKINS	Skins directory. iR Shell 3.9 doesn't come with any additional skins by default anymore. Please download the separately available skin pack to install them instead.
/IRSHHELL/SYSTEM	system files and some special tools from 3rd party. Decrypted WLAN PRXs for Adhoc NetHostFS and infrared

usage under FW3.71 M33 also go here.

10.2 SEPLUGINS Folder:

Copy this folder to the root of your memory stick and enable the plugin in recovery mode:

/seplugins/irsautoboot.prx	Autoboot PRX for iR Shell. Also necessary in order to quickly switch between 3.xx EBOOT and 1.5 EBOOT of iR Shell.
/seplugins/vsh.txt	Necessary VSH.TXT file in order to be able to enable the Autoboot PRX plugin to be enabled in recovery menu.

10.3 PSP Folder:

Please note that your iR Shell installation archive came with a *PSP* folder that contains two folders: **GAME150** & **GAME**. The **GAME150** folder contains the iR Shell EBOOT for FW1.5, and the **GAME** folder contains the iR Shell EBOOT for FW2.71/3.xx kernel:

/PSP/GAME150/irshell150	contains the FW 1.5 EBOOT of iR Shell
/PSP/GAME150/irshell150%	also contains the FW1.5 EBOOT of iR Shell
/PSP/GAME/irshell2x3x	contains the FW2.x/FW3.x EBOOT of iR Shell for custom firmwares SE, OE and M33 (except 3.30 OE)

10.4 DEVHOOK folder (optional – PHAT ONLY):

This folder contains the necessary modification to make DevHook work with iR Shell. Please refer to chapter 10 for more info about this. No further file details are given.

/dh/05/kd/usbhostfs.prx
/dh/05/kd/vshex.prx
/dh/271/flash0/kd/pspbtcnf.txt
/dh/271/flash0/kd/pspbtcnf_game.txt
/dh/303/CFG/pspbtcnf_dh.txt
/dh/303/CFG/pspbtcnf_game_dh.txt
/dh/kd/devhook.prx
/dh/kd/msreboot.bin
/dh/kd/systemctrl_dh.prx
/dh/kd/umdciso.prx
/dh/kd/usbhostfs.prx
/dh/kd/vshex.prx

Please note: DevHook does not work under FW 3.x mode of FW3.71/3.80 M33. This is due to changes implemented by Sony and not an iR Shell bug.

10.5 3rd Party Files:

These are files that are not included with the iR Shell distribution archive by default. You will need to obtain these files from other places and put them in the correct folders for yourself.

All of these files are optional and most iR Shell functionality will work. Some functions, however, require you to have these files. Refer to the various feature descriptions to see if you need these files.

/IRHELL/SYSTEM/IFHANDLE.prx
/IRHELL/SYSTEM/pspnet.prx
/IRHELL/SYSTEM/pspnet_apctl.prx
/IRHELL/SYSTEM/pspnet_inet.prx
/IRHELL/SYSTEM/pspnet_resolver.prx

These are the fw 1.0 Network Modules required for adhoc PC connection. These files are Sony copyright materials and are not included in this distribution, they need to be decrypted in order to be used with iR Shell. You don't need these files if you only use Infrastructure NetHostFS PC connection like most people do. Adhoc NetHostFs will NOT work under 3.71/3.80 M33 and 3.60 M33.

/IRHELL/SYSTEM/wlan15.prx

Firmware 1.5 Network Module (*renamed from wlan.prx* !) required for adhoc PC connection under FW3.xx. This file is also by Sony and not included in this distribution. You will need to decrypt this file in order to be used with iR Shell. You don't need this file if you only use Infrastructure NetHostFS PC connection like most people do. AdHoc NetHostFS will not work under 3.80 M33, 3.71 M33 and 3.60 M33.

/IRHELL/SYSTEM/sircs.prx

Firmware 3.52 infrared module required in order to use the infrared remote control feature under FW3.71 M33. You will need to get this module from a 3.52 firmware dump and decrypt it. Use M33's Psardumper with the decrypt option (SQUARE) to dump it. Infrared will still not work on the PSP Slim & Lite, however.

/dh/150/

To be able to launch FW1.5 XMB and use the Video UMD ISO playback function, you'll need to have a complete firmware 1.5 dump for DevHook 0.4x under ms0:/dh/150 directory. This is because SE/OE/M33 only has a subset of 1.5 firmware files. the firmware files for launching XMB are not present. Launching DevHook is not possible under FW 3.X modes of FW 3.71/3.80. Under PSP Slim & Lite it is additionally not possible to launch 1.5 XMB.

DevHook 0.46 and DevHook 0.52 including firmware dumps

DevHook is purely optional. If you wish to use it then you must first install it with some firmware dumps. Refer to the next section on how to set up DevHook for use with iR Shell. DevHook does not work under FW 3.60 M33 (Slim & Lite only) or FW 3.X modes of FW 3.71/3.80 M33 (Slim & Lite or Phat).

11. DevHook Setup (optional – PHAT ONLY)

If you would still like to use DevHook firmware emulation for whatever reason, then please follow the following procedure. Afterwards, when using "Launch DevHook" from iR Shell, you can choose to start a UMD with iR Shell in the background. You may also launch any ISO from Application view and you will be given a chance to load it with DevHook, too. You can specify the DevHook version to use (0.46 or 0.52) in iR Configurator.

The included archive contains modded versions of devhook 0.46 and 0.52 which have the game exit key changed from Right-Trigger+Left-Trigger to Left-Trigger only.

Please note that you do NOT need to completely set up DevHook in order to use the Video UMD ISO playback or "Launch XMB" in 1.5 EBOOT functions. You simply need a full FW1.5 dump (including flash1) present but not the actual DevHook installation.

Important: DevHook does not work under FW 3.X modes of FW3.71/3.80 M33 due to changes implemented by Sony. This is not an iR Shell bug.

11.1 Install DevHook 0.46 and 0.52:

It is out of the scope of this manual to explain how to install DevHook and the necessary firmware files in order to use this function in iR Shell. Simply follow some installation instructions which can be found in all the various PSP forums. In order to use 1.5 firmware files you will need DevHook 0.46 and for the last supported firmware (3.03) you will need DevHook 0.52.0100. It is recommended that you install both and also create the necessary firmware dumps for FW1.5 and FW3.03. If you have problems emulating FW1.5 then try replacing the vshex.prx with the one from Dark_Alex's 1.5 POC custom firmware.

11.2 Install modified DevHook files for iR Shell:

Copy the contents of /devhook/ to the root of your memory stick, effectively replacing some files in the ms0:/dh/ folder. The archive contains the modded files for both DevHook 0.46 and DevHook 0.52. You should now be able to use DevHook from within iR Shell provided you did everything correctly.

12. Using HTML plugin as Webbrowser (optional)

iR Shell's FW2.x/3.x EBOOTS come with a HTM/HTML plugin by Dark_AleX which uses Sony's XMB browser. You can also use this plugin as a shortcut app and have instant access to a webbrowser that way. The webbrowser will establish the network connection for you. Please note that you cannot run NetHostFS and the Webbrowser at the same time. To exit the web browser press HOME+SQUARE. You can also multi-task with the webbrowser while listening to music in iR Shell in the background this way.

12.1 Copy Webbrowser EBOOT to Shortcut folder

In order to use Dark_AleX's HTML plugin as a webbrowser you will need to copy it to a shortcut folder for iR Shell.

In order to do this copy the **EBOOT.PBP** from **/IRSHELL/EXTAPP/APP6/** to **/IRSHELL/HOMEBREW3X/RIGHT/**. This will set up the browser to be launched as soon as you move the analog stick to the right when running FW3.xx iR Shell.

If you would like to use a different shortcut combo such as "Right Trigger + Analog Up" then please refer to chapter 9 for more information.

Please note: This special iR Shell release already comes with preconfigured Webbrowser mapped to Analog Right on your PSP. It will load the unofficial support forums located at www.irshell.org for your convenience.

13. Using POPSloader with iR Shell (optional)

iR Shell now supports M33 POPSloader for launching PS1 games with older versions of the Sony PS1 emulator. This is especially useful when wanting to use the new 2-Player PSOne Games via Adhoc WiFi feature. To use POPSloader please open the iR Configurator of iR Shell's 3.xx EBOOT and change "Pop Ver" from "Flash" to "Use Popsloader Plugin". Then install POPSloader and the required PRXs as you usually would. Upon next launch of a PS1 game from within iR Shell you will be asked which POPS version you would like to use.

Please note: POPSloader for FW3.71 currently only works in FW3.71 M33-3. PSP Slim users may either use FW3.60 M33, FW3.71 M33-3 or FW3.80 M33 if they would like to use POPSloader. Older CFWs such as 3.52, 3.40 and so on are also still supported, of course. Follow the instructions to install POPSloader for your custom firmware and acquire the necessary POPS files. You do NOT need to enable the plugin in your PSP's recovery menu. iR Shell's uses POPSloader independently of your recovery menu settings.

14. Turning the LED lights on/off (optional)

If you have ever been annoyed by the memory stick or any of other LED light constantly flashing while watching videos, then this new option is especially for you:

- Press **R-Trigger + Vol-** to switch **off** LEDs.
- Press **R-Trigger + Vol+** to return back to **normal**.

The orange power charging LED isn't affected by this setting at all.

15. Technical Info about TV-Out (PSP Slim only)

TV out is only possible via Sony's component AV cable (only for Pb/Pr). Please note that the composite AV cable is not supported. To toggle between TV-Out & PSP LCD, press "**Left Trigger + Right**".

When you put PSP to sleep mode or use Auto Sleep, TV Out will be turned off automatically. When you wakeup the PSP, you can turn on TV out again. You can also turn on/off TV out even if a game/app is running. There are some restrictions when XMB is loaded under iR Shell. iR Shell wouldn't allow you to turn-off TV out if XMB is in background. Allowing you to do so will screw up the XMB resolution. You also shouldn't use "*Switch Video Output*" option under XMB after launching XMB from iR Shell, as iR Shell will lose track of the current TV-Out mode.

16. Technical Info for PRX Plugin Programmers

iR Shell PRX Plugin Requirements:

- You'll only have 50KB memory space to work on the plugin. This includes code & data segment. Stack is not included and will share the one from iR Shell. However, care should be taken not to over use the stack.
- Needs to be a kernel mode PRX only. User mode not supported.
- Standard memory allocation functions, like malloc, sceKernelAllocPartitionMemory can't be used. Remember we've working on a very tight memory footprint. Of course, you can have your own memory management functions to tingle within those 50KB of memory space.
- GU shouldn't be used. You can use the Primitive Graphics lib (or mods) by Nem which can be found in Hello World.

The PRX Plugin will need to provide these 3 APIs as exported functions:

```
int pluginMain(const char *filename, int *param1) // main entry point which iR Shell will
                                                    // call to start the plugin
```

input param: filename

This is the file selected by user via iR Shell file browser.

input/output param: param1

This parameter allows the plugin to save an integer value for the specific filename. If user chooses to launch the plugin on the same file, iR Shell will pass the saved value from last exit. If it's a new file, the integer value will always be zero.

return 0 for normal exit and
< 0 for error, if any.

```
void pluginSuspend() // iR Shell will call this function when
                      // the system is being put into
                      // suspend mode.
```

```
void pluginResume() // iR Shell will call this one when the
                     // system is waking up.
```

Sample exports.exp file for a PRX plugin:

```
# Define the exports for the prx
PSP_BEGIN_EXPORTS
```

```
# These four lines are mandatory (although you can add other functions like module_stop)
# syslib is a psynonym for the single mandatory export.
```

```
PSP_EXPORT_START(syslib, 0, 0x8000)
PSP_EXPORT_FUNC(module_start)
PSP_EXPORT_VAR(module_info)
PSP_EXPORT_END
```

```
PSP_EXPORT_START(irsplugin, 0, 0x0001)
PSP_EXPORT_FUNC(pluginMain)
PSP_EXPORT_FUNC(pluginSuspend)
PSP_EXPORT_FUNC(pluginResume)
PSP_EXPORT_END
```

```
PSP_END_EXPORTS
```

All program logic should be provided in **pluginMain**. It's suggested the **module_start** just simply return **0**.

Within the main loop, use ***irsGetPad()*** to read keypads instead of the standard ***sceCtrlReadBufferPositive***.

Handle these two keys in the plugin:

TRIANGLE: cleanup resources and then return back to iR Shell. iR Shell will then unload your module from memory.

LTRIGGER + SELECT: call ***irsSwitchApp()*** to switch to background app.

These APIs are provided by iR Shell:

int irsGetPad(void) // returns the keypad button pressed

void irsSwitchApp(void) // switches to background app if present

iR Shell exported function stub (irshell.S):

```
.set noreorder
#include "pspstub.s"
    STUB_START "irshell",0x00090000,0x00020005
    STUB_FUNC 0x9C575BB0,irsGetPad
    STUB_FUNC 0x9E272C4D,irsSwitchApp
    STUB_END
```

Once the PRX Plugin is completed, you can place it under ***/IRSHELL/PRXPLUGIN/APP#***. There can be a maximum of 5 PRX Plugins and they can be configured under iR Configurator. Just use the External Plugin or Context Menu section to define the PRX Plugin. The "APP #" field allows you to choose normal External Plugin or PRX Plugin.

This manual was last updated on 28th January, 2007. It may contain errors but I hope that it proves useful to you. Please also refer to the FAQ document for any further questions you may have.

This document is written by StoneCut.
