

GP2X User Guide

Version 1.2

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Homepage: <http://www.emuholic.com/>

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GP2X Information

Product Name:

- * GP2X-F100

General

- * Main Processor: MagicEyes MP2520F
- * CPU: ARM920T - 200 MHz
- * CoProcessor: ARM940T - 200 MHz
- * Dimension 143.6mm* 82.9mm*34mm
- * Mass (w/o batteries): 161g/5.68oz (GP32 NLU: 163g/5.74oz)
- * RAM: 64Mb
- * Internal Storage: 64Mb NAND Flash Memory
- * External Storage: SD Card
- * Connections: EXTension port, USB 2.0, DC in (3v), Headphone jack.
- * O/S: Linux
- * Batteries: 2 x AA
- * Display: 3.5" TFT LCD
- * Resolution: 320*240 (QVGA)
- * TV Output: up to 720*480 with separate S-Video cable.

Video

- * Video Codec support: MPEG 1, 2, 3, 4, DivX 3.11, 4.x, 5.x and higher, XviD, WMV (7, 8, 9 Series by 'After Support')
- * Extension support: AVI, MPG, MPEG
- * Audio Formats: MP3, OGG, WMA (by 'After Support')
- * Resolution: MAX 720*480
- * Frame Rate: Max 30 fps
- * Bit Rate: Video Max: 2500Kbps, Audio Max: 384Kbps
- * Caption: SMI

Audio

- * 2 Channel Stereo (L+R)
- * Frequency Response 20Hz~20KHz
- * Sampling Rate 16bit/8~48KHz
- * Supported Formats WMA, OGG, MP3
- * 11 Equalizer settings

Included Software

- * E-Book Reader
- * Image Viewer
- * Movie Viewer
- * Music Player

Controls

- * 8 way digital thumb stick
- * 4+1 main action buttons (Thumb stick clicks in for use as an action button)
- * 2 shoulder buttons
- * Start and Select
- * Volume +/-

I/O Ports

- * Headphones
- * USB 2.0 (not powered)
- * EXT Port
- * DC Power - 3 Volts, center negative
- * Future SDIO Hardware Support

GP2X Layout:

- 1 – Left Shoulder button
- 2 – Right Shoulder button
- 3 – Joystick
- 4 – Y, A, X and B buttons
- 5 – Volume buttons
- 6 – Select button
- 7 – Start button
- 8 – Left speaker
- 9 – Right speaker
- 10 – Power LED (green)
- 11 – Battery LED (red)



- 12 – Secure Digital Card slot
- 13 – Headphone Jack
- 14 – Battery Cover
- 15 – DC Power (3 Volts, center negative)
- 16 – Mini USB socket



Setting Up Your GP2X

You should have the following inside your GP2X box:

- 1x GP2X unit
- 1x USB cable
- 1x Screen Protector
- 1x Pack of 2 AA batteries
- 1x Korean/English Manual

Fitting the Screen Protector

After unpacking the GP2X you should install the screen protector immediately. Carefully remove the shipping film from the GP2X screen by pulling the Red tag on the top right. Now remove the film from the Screen Protector and ensuring there is no dust on the underside of the Screen Protector and on the GP2X screen carefully place it on the GP2X. The Screen Protector also has a film to protect the screen, using a fingernail or knife, gently unpeel it from a corner of the screen.



Fitting the batteries

The GP2X uses two AA batteries to power the device. To fit these, gently push and slide the marked area on the battery cover found on the back of the GP2X towards you. Insert the batteries the correct way as shown in the battery compartment and then replace the battery cover.

Fitting the Secure Digital Card

The GP2X uses a Secure Digital Card (not supplied as standard) as its storage. To install this insert the Secure Digital Card with the back facing you into the Secure Digital Slot found on the top of the GP2X. The notch should be on the bottom right hand side and when inserted you should hear a click to confirm it is correctly inserted. Do not try to force the Secure Digital Card into the slot or you may damage the Card or the GP2X!



Wrong



Correct

Installing the USB Cable

The GP2X can connect to your PC via a USB cable to transfer your games, utilities, movies, music and E-Books. To do this you will require a free USB port on your PC, it is recommended you have a USB 2 port for faster transferring of files but a USB 1 port will work. Locate an unused USB port on your PC and carefully insert the USB connector into it. To connect the USB cable to your GP2X, remove the rubber protection cover and insert the USB cable into the GP2X.

You are now ready to switch on and enjoy the GP2X!

Using the GP2X for the first time

Switch on the GP2X by pressing the On/Off switch located on the left hand side of the GP2X. The screen should light up and after a second or two the first of two boot screens should display. This should last for several seconds then a second boot screen will display. After around 25 seconds in total, the boot process will be complete and you will be presented with the Main Menu screen as shown in *Figure 1*.



Figure 1

To navigate the menu system you can use the joystick to move left and right between the options. Press **B** to select the highlighted option and **X** to cancel.

Connecting the GP2X to your PC

Remove the rubber flap found on the right hand side of your GP2X then carefully insert the USB cable into the USB connector on the GP2X. Please also ensure that a Secure Digital card has been inserted into the GP2X otherwise your PC may not recognise the GP2X. Now navigate to the Settings menu and press **B** to enter the Settings menu as shown in *Figure 2*.



Figure 2

Now navigate to the USB option and press **E** to select it. The USB Connection screen will appear as in *Figure 3*.



Figure 3

After a few seconds Windows should report that it has found a new USB device and will start to automatically configure the GP2X as a drive device. Once you are notified that the device is ready to use, open **My Computer** and locate the new Drive that has been created as shown in *Figure 4*.

Hard Disk Drives



Figure 4

In this example the Secure Digital Card is already formatted but if you have a new card you may need to format it for it to be used on the GP2X. To do this right click on the Secure Digital drive (in this example Drive G) and choose **Format** from the options.

A new window will appear and prompt you for some information. The **Capacity** will vary between different sizes of Cards; in this example a 256 MB Card is shown. The **File System** should be set to **FAT32** and the **Allocation unit size** set to **Default allocation size**. The **Volume label** is the name of your drive; you may rename this to an easily identifiable name such as **GP2X Card**. Once you are happy with the settings click on the Start button and the Secure Digital Card will proceed to be formatted.

A screenshot of the Windows 'Format' dialog box for the SD CARD 2 (G:) drive. The dialog box has a light beige background and contains several settings:

- Capacity:** A dropdown menu showing '243 MB'.
- File system:** A dropdown menu showing 'FAT32'.
- Allocation unit size:** A dropdown menu showing 'Default allocation size'.
- Volume label:** A text input field containing 'GP2X Card'.

Once the process is completed you can now begin to transfer files to your GP2X.

Managing files on the GP2X

Copying files to your GP2X

Copying files to the GP2X is much like everyday file copying on your hard drive. In the following example we will copy a MP3 to the GP2X.

Connect your GP2X to your PC as shown [here](#). Now select which file you wish to copy to the GP2X by clicking on it once, if you wish to select more files then hold the CTRL button while clicking on a new file to select/deselect it. Once you have chosen your file(s) right click on one of them and choose **Copy** from the options, next click on the GP2X drive (in our case drive G) and choose **Paste** from the options. Your files will now be copied to the GP2X, the time it takes depends on the size and number of files you copied.

Deleting files on your GP2X

Again this is the same as performing a deletion of files on your PC. Connect your GP2X to your PC as shown [here](#). Now select which file you wish to delete from the GP2X by clicking on it once, if you wish to select more files then hold the CTRL button while clicking on a new file to select/deselect it. Now press the **Delete** key on your PC or right click and choose **Delete** from the options. Your file(s) will now be deleted from the GP2X. You can also perform this task from within the GP2X Explorer, more information [here](#).

Useful Tips

1 - You can create new folders on your Secure Digital Card for the various file types supported on the GP2X. For example: a Games folder to store your games, a Music folder to store your MP3's or a Video folder to store your videos. This way it is easier to keep track of what is installed on your GP2X and you can manage your files more efficiently.



2 – Never remove your Secure Digital Card or switch off your GP2X while files are being accessed. This can result in the loss or damage of files on your Secure Digital Card.

Installing and loading software

Installing the SDL files

The GP2X supports SDL which is a development library for multiple devices and operating systems. Games using SDL may require library files to be installed to the GP2X in order for them to run, you will only need to install these once. You can download the SDL files from the GP2X Archive at <http://archive.gp2x.de/>

The SDL files are in a Zip archive format so you can simply extract the two files (install_libs.gpu and install_libs.tar.gz) straight to the GP2X drive as you normally would on your PC. Open the file in your preferred .zip extraction program and point it to extract the files to the GP2X drive (in this case the G drive).

Now quit the USB connection screen and return to the main menu. Navigate to the **Utility** option and press **B**. You will be presented with the **Utility Launcher** screen as shown in *Figure 5*.

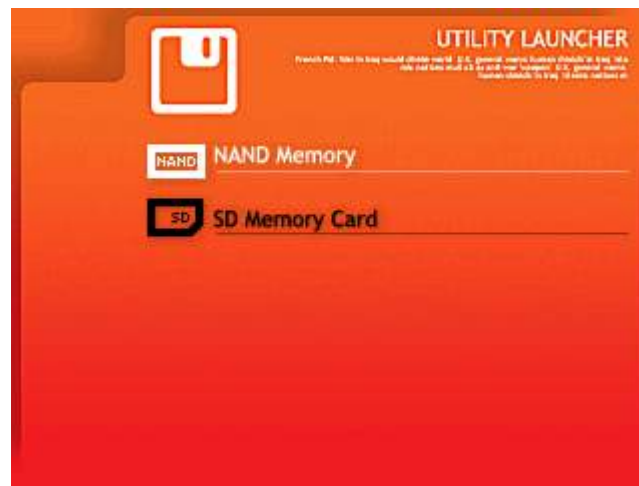


Figure 5

The two options are described:

NAND Memory – This is the internal memory of the GP2X and only important files such as drivers like the SDL files should be installed to here. The reason is that only 20MB is available for storage so space is more limited than you would get with a Secure Digital Card.

SD Memory Card – This is your Secure Digital Card where all data such as games, music and videos are stored.

Please note that you cannot copy files to the NAND Memory via the USB cable. In order to run any software initially you will need a Secure Digital card.



Figure 7

As you will notice this screen is similar to the Utility Launcher screen. Choose the **SD Memory Card** option and press **B** to select it. A program list screen similar to the image in *Figure 8* will be displayed.



Figure 8

Highlight **ShanghaiX** and press **B** to select it. The game should now load. Enjoy your first game on the GP2X!

Useful tip

Game and Utility files have different filename extensions even though they are the same format. This is because the Game Launcher screen only displays filenames with the extension **.GPE** and the Utility Launcher screen only displays filenames with the extension **.GPU**.

Viewing Images

The GP2X can view images that are stored on your Secure Digital Card. The following image formats are supported

- JPEG - .jpg extension
- Bitmap - .bmp extension
- Graphics Interchange - .gif extension
- Portable Network Graphics - .png extension

From the Main Menu, choose the **Photo** option and press **B** to select. You will be presented with the **Photo Viewer** screen as shown in *Figure 9*.



Figure 9

Choose the **SD Memory Card** option and press **B** to select it. An image list screen similar to the image in *Figure 10* will be displayed.



Figure 10

Highlight the image you wish to view and press **B** to select. After a second or two, depending on the size of the file, your image will be displayed. Pressing the **L** or **R** shoulder buttons on your GP2X will automatically load and display the previous or following image on your Secure Digital Card.

To return to the list of images press the **X** button, and to return to the Main Menu press the **▶** button.

Useful tip

The GP2X cannot currently display images larger than 2048x1024 pixels; if the image is larger it may not be displayed. Use a photo editing application to reduce the resolution to 2048x1024 pixels or lower.

Playing Music

The GP2X can support the following audio formats:

MP3 - .mp3 filename extension

OGG - .ogg filename extension

From the Main Menu, choose the **Music** option and press **B** to select. You will be presented with the **Music Player** screen as shown in *Figure 11*.



Figure 11

Choose the **SD Memory Card** option and press **B** to select it. An audio list screen similar to the image in *Figure 12* will be displayed.

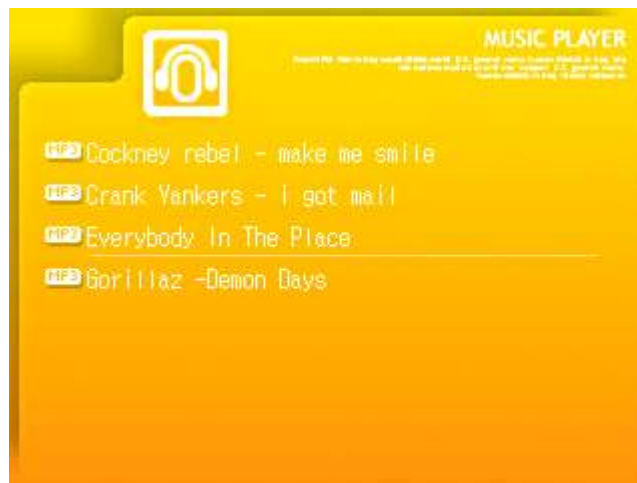


Figure 12

Choose the song you wish to listen to and press **B** to select. The audio player will then appear and start to play your chosen song as shown in *Figure 13*.

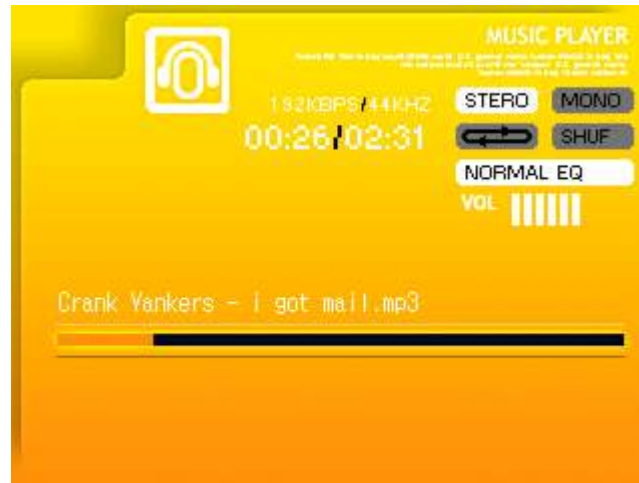


Figure 13

Pressing **Y** will show or hide a series of options for the player. These are:

-  Previous Track
-  Next Track
-  Skip Backwards
-  Skip Forwards
-  Play
-  Pause
-  Stop
-  Open a new file
-  Equalizer

Use the joystick to change between the options and press **B** to select.

The Equalizer has eleven presets to suit the style of music. These are Normal, Rock, Pop, Jazz, Classic, Dance, Heavy Metal, Disco, Soft, Live 3D and Hall. To change between these highlight the Equalizer option and press **B** to cycle through the presets.

The Volume buttons found on the GP2X can be pressed to increase or decrease the volume in 10 settings. You can also lock the buttons and turn the screen off and on by pressing **□** to save battery life and also avoid unnecessary button pressing.

To exit the Music Player press **X** twice to return to the file list screen or press **▶** to return to the Main Menu.

Viewing Movies

The GP2X can support the following file formats:

AVI – XVID

From the Main Menu highlight the **Video** option and press **B** to select. The **Movie Player** screen will be displayed as in *Figure 14*.

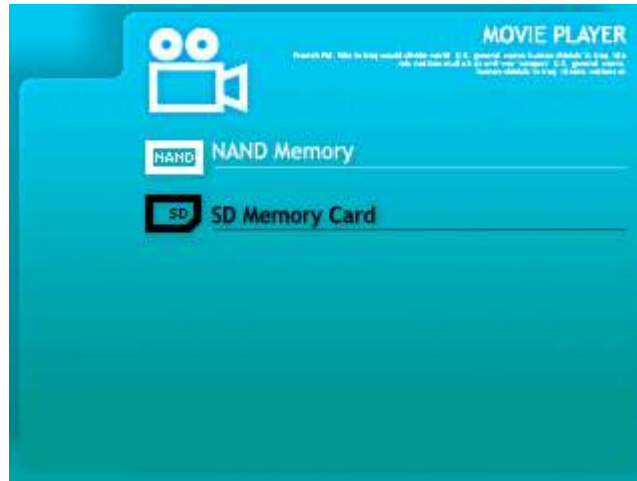


Figure 14

Choose the **SD Memory Card** option and press **B** to select it. The **Movie Player** file list screen similar to the image in *Figure 15* will be displayed.



Figure 14

Highlight the video you wish to view and press **B** to select. A message will display that your video is being loaded and then after a second or two your chosen video will start to play.




Pressing **Y** will show or hide a series of options for the player.



These are:

-  Previous Video
-  Next Video
-  Skip Backwards
-  Skip Forwards
-  Play
-  Pause
-  Stop
-  Open a new file

Use the joystick to change between the options and press **B** to select. The Volume buttons found on the GP2X can be pressed to increase or decrease the volume in 10 settings. To exit the Video Player press **X** to return to the file list screen or press  to return to the Main Menu.

Reading E-Books

The GP2X can read E-Books in the .TXT format. Word wrapping should be disabled to ensure the best format to view the E-Book as currently the GP2X E-Book viewer can only display 54 characters per line instead of the usual 80 characters per line.

From the Main Menu highlight the E-Book options and press **B** to select. The **E-Book Viewer** screen will be displayed as in *Figure 16*.

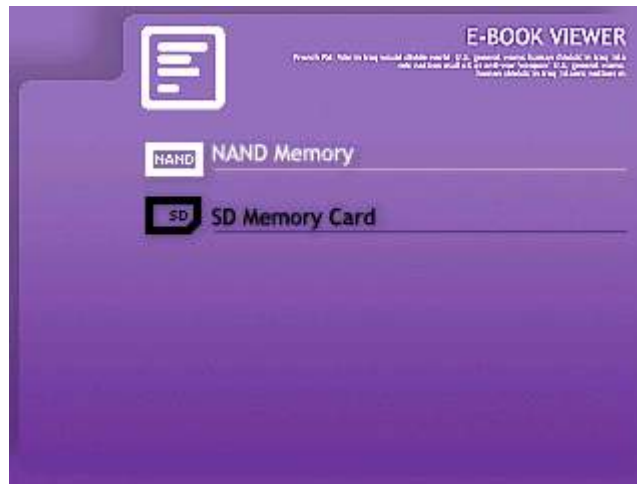


Figure 16

Choose the **SD Memory Card** option and press **B** to select it. An E-Book file list screen similar to the image in *Figure 17* will be displayed.



Figure 17

Highlight the E-Book you wish to view and press **B** to select. Your chosen E-Book will be loaded and displayed similar to what is shown in *Figure 18*.

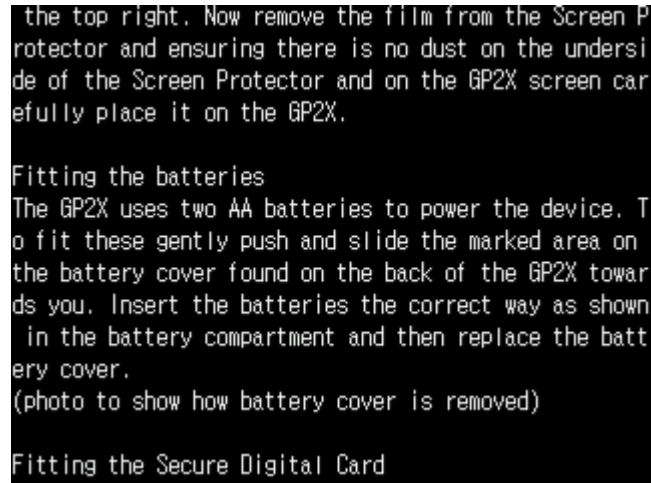








Figure 18

The following controls are available to use when reading an E-Book:

-  – Scroll the page one line up
-  – Scroll the page one line down
-  – Scroll the page one page up
-  – Scroll the page one page down
-  – Return to the E-Book file list screen
-  – Return to Main Menu

The E-Book viewer has an automatic bookmark feature that will save the current page number if you exit the E-Book viewer or switch off your GP2X.

Using Explorer

The GP2X has a built in File Explorer that allows you to view folders and files on your Secure Digital Card.

From the Main Menu highlight the E-Book options and press **B** to select. The **Explorer** screen will be displayed as in *Figure 19*.



Figure 19

Choose the **SD Memory Card** option and press **B** to select it. An **Explorer** file list screen similar to the image in *Figure 20* will be displayed.



Figure 20

Use the joystick to navigate through the folders and files. To view a folder press **B** and to exit the folder press **X**. You can also delete files one at a time by choosing a file and

pressing **B** to bring up a **Confirm Delete** message. Press **B** to confirm the deletion of the file or **X** to cancel the deletion of the file as shown in *Figure 21*.



Figure 21

To exit Explorer press **X** to return to the file list or **▶** to return to the Main Menu.

Using the Settings menu

From the Main Menu highlight the Setting option and press **B** to select. The **Settings** screen will be displayed as in *Figure 22*.



Figure 22

Five options are available to choose from, these are:

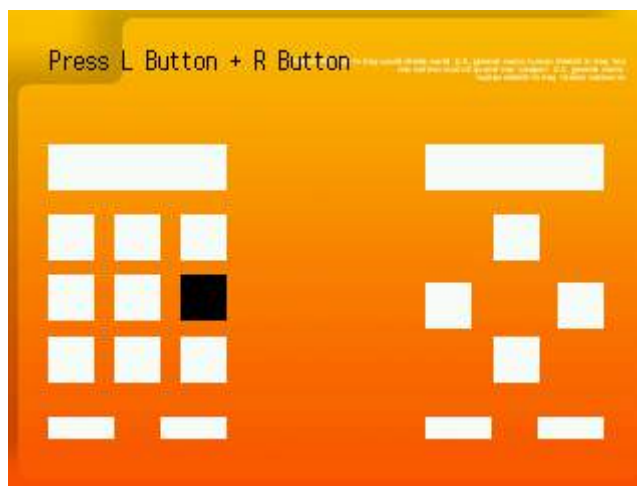
- T-Mode – A diagnostic tool for your GP2X
- Battery – Shows the battery level
- USB – Connects the GP2X to your PC
- TV-Out – Activate the TV-Out feature
- Info – Provides some information on your GP2X.

T-Mode

This allows you to make some basic tests on your GP2X. There are seven screens in total, to change screen press **L** and **R** at the same time.

Screen 1 – Shows the manufacturer date, firmware revision and your GP2X serial number.

Screen 2 – Shows a joystick and button test. You can press any of the joystick directions and buttons to check they are working.



Screens 3 to 7 – Displays black, white, red, green and blue backgrounds to check the colour display on the screen and any possible dead pixels.

Battery

This screen shows the battery life left on your GP2X. Three levels are displayed; Empty, Medium and Full so even if the screen is reporting your battery as empty you may still have a fair amount of battery life left.



USB

Choosing this menu option will connect your GP2X to your PC. Please refer to Page 8 for more information.

TV-Mode

TBA

Info

This screen shows your GP2X version number, model number, serial number and some copyright information.

The serial number shows the date of manufacturer (2005.11.09), firmware version (GP2XV001) number and your unique GP2X serial number (partially censored in the screenshot).

INFORMATION

VERSION 1.0
MODEL GP2X - F100
S/N 2005.11.09 - GP2XV001 - 000004-0000

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Troubleshooting

GP2X does not switch on

Check that you have correctly inserted the batteries and that they have not run out of power.

GP2X displays random coloured lines when switched on or during use

Check that your batteries have not run out of power. Use a fresh pair of batteries and try again.

USB is not found or does not connect

- Ensure that the cable is fully inserted into both your PC USB port and your GP2X
- Check that the Secure Digital card is correctly inserted into the GP2X as described [here](#). A Secure Digital card is required for the PC to recognise the GP2X.
- If your PC does not find your GP2X when connected to the USB, try removing all other USB devices and then rebooting your PC. Now connect your GP2X to your PC as shown [here](#). If your GP2X is found by your PC you can now reconnect your other USB devices.

Secure Digital card cannot be accessed on the GP2X

- Check that the Secure Digital card is correctly inserted into the GP2X as described [here](#).
- Ensure that you have the correct files on your Secure Digital card, for example if trying to watch a Video that there is at least one .avi file present on your card. Use the [Explorer](#) menu to check properly.
- Check that your Secure Digital card is properly formatted as described [here](#).

Firmware update does not show the message box

- This is a known problem and will be fixed in a future update. This happening means that your GP2X firmware cannot currently be updated. You can download a Firmware Updater (currently v1.1.0) at <http://archive.gp2x.de/> which will update your GP2X a second way.

Useful Information

GP2X News Sites (English)

Emuholic - <http://emuholic.emuboard.com/> – Official homepage for the GP2X User Guide and we also post the latest handheld news for GP2X, GP32, GBA, DS, PSP and the Zodiac.

GP32X - <http://www.gp32x.com/> – Latest news for the GP32 and GP2X.

GP2X Emulation - <http://gp2x-emulation.dcemu.co.uk/> – News for the GP2X.

My GP2X - <http://www.mygp2x.com/> - Blog style news for the GP2X.

GP2X User - <http://www.gp2xuser.com/> - News for the GP2X

GP2X News Sites (Non English)

GP32Spain - <http://www.gp32spain.com/> - Spanish GP2X and GP32 news.

GP2X.de - <http://www.gp2x.de/> - German GP2X news.

GP2Xfr - <http://www.gp2xfr.info/> - French GP2X news.

GPain - <http://www.gpain.com/> - Korean GP2X news.

GP2Mania - <http://gp2mania.com/> - Korean GP2X news.

GP2X Resources

GP2X Archive - <http://archive.gp2x.de/> - The one stop site for all GP2X releases.

PD Roms - <http://pdroms.de/> - Archive for GP2X releases.

GP2X Wiki - <http://wiki.gp2x.org/> - Wiki for the GP2X

GP2X.Letter - <http://news.gp2x.info/> - Newsletter for the GP2X.

GP2X Stores

GBAX – <http://www.gbax.com/>

GP32Z – <http://www.gp32z.com/>

GP2X.de - <http://shop.gp2x.de/>

GP2X Developer Homepages

TBA

IRC Channels

#GP2X on EFNet - <irc://irc.efnet.org/gp2x> – General chat for GP2X

#GP2XDEV on EFNet - <irc://irc.efnet.org/gp2xdev> – Development chat for GP2X

Installing software updates and firmware flashing

Important Note: Before proceeding you should be aware that flashing your GP2X firmware can go wrong so please be careful when doing so. You will need either a fresh pair of batteries or a trusted power adaptor, this is vital as batteries running out during the flashing process can leave you with an incomplete flashed firmware which may leave your GP2X unusable. We take no responsibility for any damage caused when performing a firmware update and you do so at your own risk.

Firmware flashing

Download the latest firmware update from <http://archive.gp2x.de/> in the Firmware section. In this example we are using the Firmware v1.1.0 released on 23rd December 2005. Using your preferred archive extraction tool, open the file gp2x-4th_update-051222.zip and extract all the files to your Secure Digital card.

There should be eight files on your Secure Digital card:

- charset.tar.gz
- EBookViewer
- gp2xkernel.img
- mplayer
- MusicPlayer
- patch20051216.gpu
- profile
- version

If these files are not present on your Secure Digital card check that the gp2x-4th_update-051222.zip file has the above files and extract them again to the Secure Digital card.

Double check that your batteries are fully charged or your power adaptor is connected and that all files are present on the Secure Digital card. When you have done so, switch on the GP2X and wait for a message to appear that your firmware has been updated. Do NOT switch off your GP2X or remove the Secure Digital card at this time as it may result in an incomplete firmware flash and break your GP2X.

After the firmware updated message has appeared you can now continue and the GP2X should now be using the new firmware. You can check by viewing the Info screen and reading the version number.

Installing the software patches

The GP2X uses applications much like a PC would. These applications occasionally need to be updated to fix any bugs or to provide new features.

If you already performed the above firmware flash, the necessary files to perform the software update will already be installed on your GP2X. From the Main Menu, highlight the **Utility** menu and press **B** to select. Choose **SD Memory Card** from the options and press **B** to select it, a program list screen will be shown. In the case of the v1.1.0 update the file you need to run is **patch200511216.gpu**, locate this on your card and press **B** to load it.

The screen will display a black colour for a few seconds while the software update is being performed. Do NOT switch off your GP2X or remove the Secure Digital card at this time as it may result in an incomplete software update.

When the update has completed you will be returned to the Main Menu, it is now safe to delete the firmware and software update files from your Secure Digital card.

Useful tip

- Never download or install a firmware update from an untrusted source. The update may be fake and damage your GP2X. If you are unsure, ask on one of the forums before installing. The GP2X Archive at <http://archive.gp2x.de/> is a trusted site but you should always check beforehand.
- If you are unable to upgrade your firmware due to the SD Card bug which prevents the firmware being updated. You can download a Firmware Updater (currently v1.1.0) from <http://archive.gp2x.de/> in the Firmware section which will update your GP2X a second way.

Customising the menu graphics

You can customise the menu graphics on the GP2X to suit your taste. There are already a number of custom skins available for you to use such as the one shown on the left called Tux'N'Tosh by Sonic-NKT.

You can find many GP2X menu graphic replacements at <http://archive.gp2x.de/> in the Skins – GPH Linux section. In this example we will install the Tux'N'Tosh skin but the process is the same for any other.



Download and extract the Tux'N'Tosh_GP2x-theme.zip to the root of your Secure Digital card. There should be around 170 files (this varies between skins) in the root and the following folders:

- imgbattery
- imgcommon
- imgbook
- imgexplorer
- imggame
- imgimage
- imgmain
- imgmovie
- imgmusic
- imgsetting
- imgtestmode
- imgutil

Now highlight **Utility** from the main menu and press **B** to select. Choose the **SD Memory Card** option and press **B** to select it. In this example the file to run is named *imgall* but the name may vary between other skins, there should only be one .gpu file in the package so run that.

Once run, the screen will display a black background while the files are being copied to the NAND memory. Once it is complete you should be returned to the main menu and your new menu graphics will be shown. You can now delete the files from your Secure Digital card.

Developing for the GP2X introduction

Note: Things are always changing in the development scene so this guide may not be fully accurate or even useful.

First download DevkitGP2X from <http://archive.gp2x.de/> in the Development Utilities section. Run the file that was downloaded and install it to c:\devkitgp2x\. You will also need MinSys installed which you can download from <http://www.devkitpro.org/>. Don't forget to include the PATHs for your devkitgp2x/bin/, devkitgp2x/include and MinSys folders.

Next download theoddbot's GP2X SDL libraries from <http://www.emuholic.com/theoddbot-libs-open2x-soft-float-beta2.tar.gz>. Extract this file to a temporary location on your PC. Now locate the extracted folder and follow the folders until you get to the \theoddbot-libs-open2x-soft-float\usr\ folder. Now select and copy all the folders as follows:

- bin
- etc
- include
- info
- lib
- main
- share

Now go to your c:\devkitgp2x\ folder and paste the above folders. You will be asked if it is OK to overwrite some folders, choose Yes for all of these prompts.

Now download <http://www.emuholic.com/arm-linux-sdl-config.rar> and extract this file to the c:\devkitgp2x\bin\ folder.

I have provided a SDL Test Program project for you to test your development setup; you can download it at <http://archive.gp2x.de/cgi-bin/cfiles.cgi?0,0,0,0,46,1047>. Extract this file to a folder on your PC and from the command prompt type 'make' and press return.

The demo project should now start to compile and after a few seconds will finish. You should now have a new file named *sdltest.gpe*, copy this file and the /sdltest/ folder the root folder of your GP2X and from the Game menu select 'sdltest'. After a few seconds while the program loads a menu containing the tests should appear.

If you have problems relating to executables not being found you may need to update your PATHS list. You will need paths to c:\devkitGP2x\bin\ and c:\msys\bin\. You can find information on how to do this at <http://www.devkitpro.org/setup.shtml>.

Credits, Thanks and other stuff

Credits

Guyfawkes – GP2X User Guide. All content not credited below.
GP2X Wiki – GP2X Specifications

Thanks to

Efegea – for his very useful screen grab tool.
Soyburg and Overjupiter – Corrections to the user guide.
Igboo, David Flores, Tony Cardine – Additions to the user guide.
rhk – his makefile for the demo project.
Sonic-NKT – Screenshot from his Tux'N'Tosh_GP2x-theme

Other Stuff

If you notice any mistakes in the guide or have a suggestion on a new section to add please contact me by email at guyfawkes@NOSPAMgbaemu.com (remove NOSPAM) or on IRC - EFNet #gp2xdev.

This guide may be freely distributed provided it is not edited in any way and it is not sold for a profit. Stores selling the GP2X may include this PDF on their own demo CD/DVD or include a printed version.

If you are going to mirror this guide on your own website please ensure that the latest version is always used as the latest guide may contain important changes not found in an earlier version. The latest version can always be found [here](#).

Translated versions of this guide will be available shortly. We currently have German, Spanish, French and Dutch versions planned. If you would like to translate to another language please contact me at guyfawkes@NOSPAMgbaemu.com (remove NOSPAM).