GP2xTRA

REVIEWS
DODGIN' DIAMONDS
MINIGAME PROJECT
M.A.M.E

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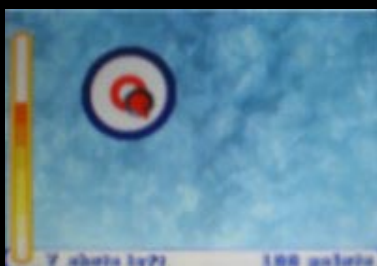
WORLDS FIRST FREE GP2x eMAG!

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REVIEWS

Introduction...

I'd just like to take the time to welcome you to GP2xTRA and thank you for taking the time to download this issue, I hope you enjoy it.

I can't stress enough how important user input is to a magazine like this so **PLEASE** help by writing an article or two, rules are on the last page of this issue.

I know you can get lots of info through sites and forums but this is your chance to put across what you think about game 'x' or to rant about a feature/flaw you like in a game/emulator.

Finally i'd like to thank the GP2x forums who allowed me to post my initial 'help' mesage asking for articles. I will admit; not many people came forward with articles but many thanks go out to those who **did** help

- Ronnie
(Editor)

The Minigame Project 2X

So, there you are, standing in line at the bank and it looks as though you've got a few minutes before your turn at the teller window. Luckly you have your GP2X with you with a copy of The Minigame Project 2X installed on your SD card.

This collection of 22 short and simple ''mini games'' is the perfect distraction for moment just like this; Not to mention other situations when these games come in handy, like waiting at the bus stop, or in the grocery checkout line, or at the doctor's office, or during some boring seminar (just make sure you're sitting in the back row and have the volume turned down).

Every game has it's own special game play and requries different skills to master, yet are easy enough to play that most everyone will find them fun and addicting.

This version of Minigame Project 2X has 22 games to choose from. Their titles are:
- Sonic The Hurdler
- Marios Combo Bounce
- Bloody Bumblebee
- Mini Slug
- Squares32
- MonsterLand
- Target Slide
- Tunnel
- Extender
- Edge Fighter
- Shmupster
- Fruity Guy
- Cannonball Paddler
- Space Ball
- Bubbles32

- Maniac Race
- R-Type Survival
- Falldown
- Space Survival
- Action Tank
- Gravity Ball
- City Defense

I won't describe all of the games to you here, but I will highlight a couple of my favorites.

Maybe because I'm Canadian and curling is such a big sport here, one of my top favorites in this collection is Target Slide. The goal of this game is to get the "slider", which strangely enough resembles curling stone, as close to the center target as possible by angling the direction of the stone (using the joystick) and holding down the action button for the force of the "throw". The stone then slides across the screen and hopefully stops in the center of the three ring target.

The Minigame Project 2X (Cont.)

After each throw, the target moves to a different part of the screen and you throw again. The closer you get your stone to the center of the target, the higher the points. When you're out of stones, the game is over.

If you happen to land your stone on the center of the target, you get another stone to throw. If you don't make the center of the target, your number of stones decreases by one.

Fruity Guy isn't what you may think it's about. This is a little guy who loves to each fruit. Your goal is to eat the strawberries while avoiding the bubbles floating around the game area. For every strawberry you eat, more bubbles appear on the screen. Get hit by a bubble and the game is over.

Every once in a while, a piece of water mellon appears. If you eat this, you become ''Super Fruity Guy'' for a few brief seconds, allowing you to clear up some of the bubbles floating around the game area. But this doesn't last long... so you better be quick.

As I mentioned above, these games easily become addicting. There's also a groovy soundtrack that plays in the background as you play, although (because of there only being one track) it can become tedious after a while... but hey, that's what the volume controls are for.

There's also a slight issue with game crashes every once in a while, but I don't feel that this is a "deal breaker" for me. I'm not really good enough at these games to go too long before the game is over for me anyway.

This first release of this game (or set of games) for the GP2X is a great addition to the device's software library. I'm looking forward to future releases of The Minigame Project.

- David Bouley

Emulator + Version	2.2i
Frames Per Second	n/a
Graphical Compatibility	?/10
Audio Compatibility	?/10

RATING :

?%

REVIEWS

M.A.M.E. 2.4

One of the first emulators I wanted working on my GP2x was MAME. For those of you who've been living on Mars and have no idea what MAME is; MAME stands for Multiple Arcade Machine Emulator and, as you can imagine, it does just that; it emulates various old arcade machines (1,000+) from within one program.

Installation of MAME is quite straightforward, you just unzip the download of MAME to your card and copy your ROM files (the actual games themselves) into the rom folder within the mame folder.

Choose MAME from your list of GP2x programs under Games and if MAME detected your roms ok, you'll see a list of available roms which MAME will try and run. I say try since this is the one bug bear of MAME; rom compatibility. For reasons known, I assume, only to the original MAME coders, they continually update MAME and 'break' some roms. This means some roms need tinkering with to now run, even though they worked fine previousy! Anyway, it takes a bit of trial and error but once you find a good set of roms, your good to go.

Pressing A on rom name will begin to load the rom and you'll be asked if you want to change that particular games configuration. Pressing the Left or Right shoulder buttons will allow you to overclock the GP2x's CPU, this can increase speed on a game but can also cause problems. Frame skip can be altered to increase playability on slower games and you can adjust audio/video settings too before, finally, you're asked if you want to save this games settings. Personally I never save the settings first time, best to experiment back and forth with the settings and once you have stability and playability then I save the settings.

Compatibilty, for the most part, is extremely high. With my favourite roms in place I began my test. I started with a relatively unsophisticated oldie; Commando (image right). I really spent too much money playing this game as a kid so I was eager to see if it worked, and how well it would work. One word; flawless. Sound was good and graphics perfect. While playing it, it dawned on me that Commando was actually on a vertical screen so it was quite narrow on the GP2x, but more on that later.

Next on my travels was Nemesis, a quality old skool shooter from the good old days. Again, flawless. Sound and graphics were perfect and, like Commando, I didn't need to adjust the games settings at all.

Nemesis (above)

Next, Slap Fight. Another shoot 'em up that I think is much overlooked. Graphics were perfect as was audio. Only while playing the game (after picking up my first gold star) did I realise that the list of available power-ups was off the bottom of the screen! Odd, so after much tinkering I found that pressing both shoulder buttons will infact rotate and/or resize the screen!

An awesome idea!

So now I had Slap Fight in portrait mode (image right)on the GP2x! Still playing perfectly. The joystick adjusts to the fact that you've turned the GP2x ninety degrees anti-clockwise and even better; your volume controls become buttons! As you can tell this feature greatly impressed me. Now Commando's only minus

was gone!

So far so good. Time to up the ante...

Another school boy favourite of mine was Paperboy (right). The arcade game actually had a set of bicycle handlebars as an analogue controller! So I was interested to see

how this one would handle. Initially most of the screen was missing but a couple of presses of both Left and Right buttons resized the screen to GP2x size. Paperboy has a screen size larger than that of the GP2x so a resize is necessity. The sound was quite choppy and the game was really slow. I quit Paperboy, reloaded it, and this time upped the CPU clock speed up from 200 to 250. This made quite a difference to the speed of the actual game, sound was still quite bad, but now it seemed harder to control. Not quite sure why. The game slow down is probably due to not only the sound but also the screen resize I think.

Back in the days of Atari ST's (and no arcade emuators) I had to make do with the (rather splendid) ST conversion of Super Sprint. This was easily one of my favourite games on any home computer (beaten only by Mario Kart on the SNES I may add).

REVIEWS

Super Sprint (above)

Emulator + Version	2.4
Frames Per Second	**various**
Graphical Compatibility	**8/10**
Audio Compatibility	**6/10**

RATING :
80%

Again, like Paperboy, the screen needed resizing and the clock speed ramped up to 250. The sound was a bit choppy in places but Super Sprint isn't exactly known for its amazing audio. I increased the frame skip from 2 to 3 and this made the game much more playable. I must admit, I forgot to test it with the sound off, but i'm sure with the CPU overclocked and the sound off it'd be almost arcade perfect.

The good thing about MAME is the game specific configuration files. You can tinker with the settings (like I did with Paperboy and Super Sprint) and once you've got some good settings for that game, save them. This means all your other games are unaffected, unlike most other emulators out there where you get one game running smoothly to find that you've gone and spoiled another one. All in all, i'm very impressed with MAME and it's still early days. Roll on the next version!

It's difficult to score MAME since it has over 1,000 roms working with various levels of audio/ video compatibility so the above ratings are really just based on the roms available to me, not for all 1,000+!

Dodgin' Diamonds II

Once again, the alien fleet is on the rampage and it's up to you to single-handedly defeat them. You're given only one ship (or life) but have the help of a shield that can protect you from several direct hits of enemy fire. However, if the alien baddies happen to score a hit after your shields are drained, it's game over for you.

You control your ship with the joystick and move in all four directions. The aliens come flying in from the screen and decend upon you. Avoid their fire and use your ship's guns to defend yourself. Watch out for the sides of the screen. Hitting those will drain your shields.

As you battle the different waves of alien craft, ''power up'' globes appear after the destructions of certain ships. Fly over these globes to boost your shields or change the fire power of your guns. You can determine the type of power up you receive by shooting the globes. Each shot changes the type of power up and you can determine which one you'll receive by the colour of the globe.

I found this game to be quite fun to play, although the action is a bit slow. It would make for a much more exciting game if the ships (especially the player's ship) moved a bit faster.

A few other improvements to the game would be the ability to change the volume of the music soundtrack. It is pretty good and wasn't annoying to me at all, but it is a little loud. In order to play the game as I sat next to my wife, who's watching T.V., I had to plug the headphones in to help control the volume of the music.

Another improvement would be better colour selection for the game's main menu. I found it difficult to determine which option I had selected as the font colour and the selection colour where similar.

Other than these minor issues, I'd say the game is top notch. I'd say the developers knew what they were doing when they put Dodgin' Diamonds II together... although I'm not quite sure what significance the title has with the game

- David Bouley

Emulator + Version	beta
Frames Per Second	n/a
Graphical Compatibility	?/10
Audio Compatibility	?/10

RATING :

?%

GP2xTRA
ARTICLES

WHATS IN THE BOX
1 x GP2x, comes in handy.
1 x USB cable, for connecting your GP2x to your PC
1 x CD, with User Guide etc.
1 x little bag of crystal things that i've not to eat (it says)

EXTRA ACCESSORY
1 x TV-out cable, to show your GP2x display on a TV screen

My first impression was how small the actual box is! After opening the box i took out the GP2x itself and was impressed by how nice it looks, it looks somewhat like a PSP/GBA hybrid. They joystick to the left of the screen took a little while to get used to and the four buttons to the right of the screen are nice and soft, no harsh click. Took me a little while to notice it but the joystick is also a button! Very like some Sony Ericsson mobile phones have.

Having had a preformatted 512mb SD card at the ready I popped it into the SD slot, connected the GP2x to my PC and waited for the result. I say result since I didn't install or read anything and also don't run Windows. I use Kubuntu Linux. So I was almost expecting a problem to occur. No problem here! Thankfully the GP2x itself runs Linux and as far as my Linux was concerned i'd plugged in some sort of removeable storage media so that was a pleasant surprise!

Time for a drag and drop fest! Added a few emulators and some rom files, following the readme files closely since i remembered when i had a GP32 that some emulators need to be in a particular location to work properly. Same with their respective rom files. Ok so; SD card, check. Emulators, check. Roms, check. Let's fire this thing up!

First Impressions Last (Cont.)

Firstly you're greeted with the GP2x firmware screen then a short 'Loading...' screen, i assume while Linux boots up, and then to the main menu screen where you can choose what you want to do;

has two audio (phono) jacks but the tv cable itself is s-video, so I had to get a converter to go from s-video to phono jack. Luckily I had one with my tv card on my PC.

video, music, games and so on. I chose games, then SD card then gave a few emulators a try. Most of the emulators are running at a very playable speed on the GP2x which wasn't surprising since the coders had done such an excellent job on the GP32 versions, i mean; a full speed Atari ST on the GP32. I shudder to think what'll be possible with the dual processor in the GP2x!

Ok, so the emulators and roms work. What about this TV-out thing? Well first of all the TV-out cable, by itself is useless. Far too short for any decent use which seems a bit pointless to sell a cable that forces you to buy another cable to extend it! Also, the tv-out cable

You have to tell the GP2x to go into tv-out mode which is in the Settings menu. In here you can do several things and, of course, choose TV-out. I grabbed my TV remote control and flicked through the AV channels. Cool! There it is!

One GP2x menu on my TV screen.

First Impressions Last (Cont.)

I immediately went to Games and chose Quake.

Fighting back tears of joy I played through the first few levels of Quake,

easily playable with the joystick and buttons replacing the mouse and keyboard, then forced myself to quit and try a few other things, this is where things got a bit hairy! SNES emulator. No problems at all, just loaded it up and played a few levels of Super Mario World and a few sets of Super Tennis (loved Super Tennis on the SNES), fine. Lets try... the Megadrive emulator, uh oh! What's going on here?! The screen's gone all full of wavy lines! I remembered the movements and button presses to get a rom running so chose Sonic. Oh, its ok now. It was fine too, just as good

as I remembered it. Joy! Outcast, the Atari ST emulator. Let's see how you do. Uh oh! The screen is half the width it should be! Everything is cramped into the left half of the screen! Are my batteries dud? No. Turns out some of the GP2x software isn't compatible with the tv-out. I've since upgraded the megadrive emulator and its now fine but as of writing the Atari ST emulator still needs more work on its tv-out. I've no doubt the programmer will fix this in due course, I have every faith in his abilities.

So all in all i'm delighted with the GP2x. While its obviously not as powerful as, say, a PSP it's open source operating system, easily upgradeable firmware and open devkit are what the PSP owners would probably love to have for their system, but can't. Tough, you lot should have bought a GP2x then!

By Ronnie

ARTICLES

ARTICLES

GP2X USBnet on Linux

This guide should lead you through getting your GP2X connected to your PC via USBnet.

To start with, you'll need a GP2X and the cable that comes with it (USB to GP2X). Your setup will need to look something like this:

The cable that came with your GP2X goes into the rectangular port on the side of your GP2X under the rubber flap, the other end goes into a USB port (depicted is a USB extension lead (white cable), but it's the same thing). Ideally, you would also connect your GP2X up to the mains, but you can use batteries too.

Now to set everything up. First you need to determine your Linux kernel version (lower than 2.4 will not work). Since the GP2X uses a 2.4 kernel, it has no compatability problems with a complimentary 2.4 Linux, however, with 2.6, you will need to change the g_ether module.

If you are using a 2.6 kernel on your PC, you must download g_ether.o and create a file with a .gpu/.gpe extension with this:

```
#/bin/sh

rmmod g_ether
cp  -f  g_ether.o  /lib/modules/2.4.25/
kernel/drivers/usb/gadget/g_ether.o
sync

modprobe g_ether
cd /usr/gp2x
./gp2xmenu
```

Upload both files to your SD card in the same directory. From the menu, execute the .gpu/.gpe file and wait a second or two while it completes the task. You can then delete both files. This lets the GP2X communicate with 2.6 kernels. It doesn't make the GP2X kernel 2.6, but simply fixes problems that a lot of people have.

The next step is to make sure you have the right modules on your PC. Go to your kernel sources directory and make menuconfig.

For 2.4 kernels:

* Code Maturity Level Options --->

o [*] Prompt for development and/or incomplete code/drivers

o USB support --->

+ USB-to-USB Networking cables, Linux PDAs, ... (EXPERIMENTAL)

ARTICLES

GP2X USBnet on Linux (Cont.)

For 2.6 kernels:

* Device Drivers ---> USB support ---> USB Network Adapters --->

o Multi-purpose USB Networking Framework

o Simple USB Network Links (CDC Ethernet subset)

o [*] Embedded ARM Linux links (iPaq, ...)

Recompile and install your kernel. Restart your computer. Everything should be configured now. Once everything has started up, plug your GP2X in and switch it on. Wait for the menu to come up, and then run ifconfig usb0 80.0.0.1. 80.0.0.1 is the IP which your computer will use. You're setting up a seperate network with your computer and the GP2X essentially. The GP2X's IP is configured from the menu. We'll use 80.0.0.2 for that. You don't have to use 80.0.0.x, it can be anything, but to avoid problems, try and keep it out of your LAN IP range.

After this, your GP2X should be properly connected. Open a terminal on your computer and run ping -c 3 80.0.0.2. If you get feedback like "3 packets transmitted, 3 received, 0% packet loss, time 2007ms", your computer notices your GP2X, that's good! Now, let's test Telnet: again in your terminal, this time run telnet 80.0.0.1. If you connect properly, it will ask you for

a "gp2x login", type in root; no password is needed. If you get connecton errors, ask around. If you didn't install the g_ ether module already, try. Make sure you installed your kernel correctly and give it another go. Once you're in, you can control your GP2X from your computer, and view verbose output from things that you run. That's beyond the scope of this document, but it's like a terminal on your GP2X in a window on your computer.

You can try web services, FTP and Samba too; again, beyond the scope of this document, however, if you still have problems, try asking on irc.efnet.org/ #gp2xdev or http://www.gp32x.com/ board/. Note that this doesn't cover how to connect your GP2X to the Internet, so don't complain about that to other people.

By Alvin Sipraga

GP2xTRA

GP2xTRA is effectively open source.

Anyone can write for GP2x, you don't need to be a writer or a journalist.

So how can you get your article/review in GP2xTRA? I'm glad you asked!

All you have to do is write your article on computer and save it as either a Word file (.doc) or as a plain text file (.txt) and we'll do the rest. **PLEASE, where possible, include screen shots or photo's.**

Some article ideas :

REVIEWS :
> *Homebrew Games*
> *Emulated Games*
>> *SNES*
>> *Megadrive*
>> *Commodore 64*
>> *Atari ST*
>> *etc...*
> *Ported Games*
>> *Quake*
>> *Duke Nuke 'Em*
>> *etc...*
> *Emulators*
>> *SNES*
>> *Megadrive*
>> *NeoGeo*
>> *etc...*
> *Utilities*
> *etc...*

ARTICLES :
> *Installing Emulators*
> *Programming*
> *Hacking*
> *etc...*

PLEASE NOTE:

When reviewing homebrew (or ported) games, you should include scores out of ten for graphics and sound, give the game version number and a final rating percentage.

When reviewing emulated games (or an emulator itself), you should include scores out of ten for graphics and sound compatibility. Please give the emulator name and version you used, average frames per second (fps) and a final percentage rating.

When reviewing utilities please include scores out of ten for its looks and/or sound and also for its ease of use (including installation) and a final percentage rating.

EMAIL YOUR ARTICLES TO : **gp2xtra@googlemail.com**