Handheld PC

This page provides information to run Batocera on your favorite handheld PC. We are talking about x86_64 PC hardware designed for handheld gaming. These are typically on the larger side (similar to a Nintendo Switch) and require active cooling (a fan) to function.

If you were after the weaker and more portable handhelds, click here.

Steam Deck

As of writing this product currently isn't out. This section will be updated when it does.

Aya Neo

The Aya Neo, Founder Edition or Kickstarter edition (AMD Ryzen 5 4500U based, with a 7" screen) should be working out of box with Batocera **v31** and later versions.

> Sometimes there are some issues (**v31**, **v32**) using the native resolution of the screen, Batocera will default to using a lower resolution in these situations. This can be worked around by manually switching the output back and forth in the video output settings.

OneNetbook OneXPlayer

The OneXPlayer (Intel Tiger Lake i5 or i7 11xxG7 CPU, with a 8.4" screen) is supported out-of-the-box with Batocera **v32** and later versions. The OneXPlayer S1 should also be supported, but has yet to be tested.

However, if running v31 or you find your screen is rotated incorrectly (from a hardware perspective, the screen is a vertical tablet screen in portrait mode), you can do the following:

1. Set the screen in landscape mode. Edit the `batocera.conf` file and add:

```
display.rotate=3
splash.video.rotation=3
# splash.screen.sound=0
```

This will both rotate the EmulationStation and emulators screen, but also the splash boot video if you're using one.

2. By default, the only resolution supported is 1600×2560 (native resolution of the screen panel). Even with a beefy CPU, it's not really necessary to have such a high resolution on the OneXPlayer. You can force a 1080×1920 resolution by editing the `/boot/batocera-boot.conf` file and add:

```
# disable the splash screen
# splash.screen.enabled=0
es.forcedresolution=1080x1920:60
```

WARNING Yes, it's 1080×1920, as the hardware screen is in portrait mode.

WARNING 2 By default the `/boot` mount point is read-only, you might need to do a `mount /boot -o remount,rw` before editing it from your SSH session.

After a reboot, this will force a new resolution called "1080x1920_60.00" in the **Video Mode** options from the **Games Settings** menu (`[START]` button). I'd recommend you to use this resolution, as it will require less CPU/GPU power, which means a better battery life on your device.

If you use the Thunderbold output to play your games on a 4K monitor and want to keep the full 1600×2560 resolution, you still select AUTO or 1600×2560 and have the full experience. In that case, if you want to use bezels, I'd recommend to also set the `Stretch bezels (4K and ultrawide)` option from the GAME SETTINGS menu.

Additional notes:

- The "home", "keyboard" and "turbo" buttons won't be usable, they're not attached to the rest of the controller
- Touchscreen is not supported at the moment. The USB "Surface-like" OneXPlayer keyboard is fully supported though.

GPD MAX

Video output settings are currently bugged in Batocera. If you toggle between modes then you can temporarily fix it for that session. If you'd like to permanently fix the issue, SSH in and run the following commands:

```
mount -o remount,rw /boot
echo "es.resolution=1280x800" >> /boot/batocera-boot.conf
```

GPD Win 2

> ⛔ The 8100Y model has a locked BIOS and cannot support booting into other operating systems, like Batocera. The M3 7Y30 is confirmed working.

🔧 **Fix Me!** (The values may be 1 instead of 3, depending on original rotation.)

Set the screen in landscape mode. Edit the `batocera.conf` file and add:

```
display.rotate=3
splash.video.rotation=3
```

This will both rotate the EmulationStation and emulators screen, but also the splash boot video if you're using one.

Suspending by closing the lid currently does not function, but otherwise is fully operational.

Booting off the SD card port is possible, but will result in a black screen. Booting via the USB port is recommended. More information for booting generic Linux-based OS's from the SD card port on this [Reddit post](#). There are very slim Micro-SD card adapters that sit nearly flush with the device you can buy:
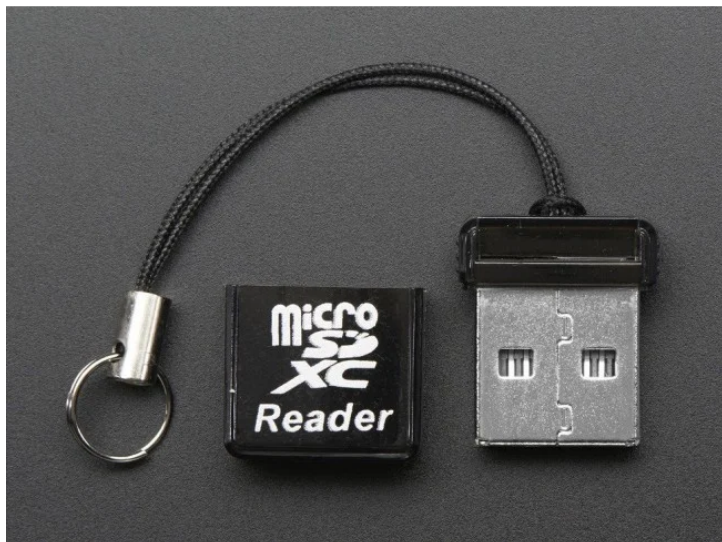
Performance

5th gen and below run flawlessly. Can run Wii games decently. Struggles with most PS2 games, but can run easy-to-run games at full speed. You can check out Batocera Nation's demonstration video here (the installation instructions earlier in the video are outdated).

OneNetbook One GX/One GX Pro

🔧 Fix Me!

A small handheld ultrabook equipped with a Intel 11th gen Tiger Lake i7-1160G7 (non-pro has a weaker Intel 10th gen). It has detachable controllers connected via Bluetooth. Should work out of box with Batocera but testing is required. Can use an external GPU, which also needs testing (not likely working).

GPD Win 1/Win 3/XD/XD Plus

These devices are currently not supported.

- The Win 1 is not supported currently. It can boot up, and if connected to an external screen it can work, but the main portable screen shows only black.
- The Win 3 technically boots perfectly fine, but the screen rotation settings are not properly interpreted, resulting in major screen distortion. This can be worked around by manually setting the screen rotation every boot. Shares the same issues the Win 2 has in regards to buttons/suspending features. There is also a chance of the device having a locked BIOS, meaning installation of any other OS aside Windows is impossible.
- The XD and XD Plus are Android-powered ARM devices, and currently not supported by Batocera.

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