

# **Hardware Options**

Please note: SJS <u>do not</u> provide hardware - we give our customers the freedom and flexibility to choose the hardware option most suitable for them.

Please note: SJS Recommend 1 device per display/screen

### Large Format Screens (TV, Monitor, Projector)

Requires any PC based device running a modern browser. Optymyse has successfully been tested on:

Chrome 40+ (Preferred) and FireFox 30+

Note\* We have received a few reports that Internet Explorer, in certain configurations, is causing problems when running the Optymyse Director, if you experience such issues we recommend using the latest versions of either Chrome or Firefox. However, initial testing on Internet Explorer 11 has up to now not shown any issues

Any PC which can connect to Optymyse Server Software via LAN / WAN or Cloud can be connected to any TV, Monitor or Projector via HDMI (with sound). VGA (without sound). If you require HDMI please ensure the device you purchase has this capability.

As stated above the Optymyse product is browser based and should work on any device with a browser, unfortunately we can't test every possible device out there. Some devices we have tested are listed further in this document.

If you have a Smart TV it may be possible to use the browser and processor embedded in the TV to display your Optymyse templates, however we recommend mini PCs, because of their power, reliability and speed.

To test a device or smart TV yourself you can use one of these demo links to one of our resource intensive screens which you can put into the browser on the device or smart TV to test how it performs: http://www.optymyse.com/hardware-test-1

http://www.optymyse.com/hardware-test-2

#### What Hardware have SJS used in testing?

#### **ASUS Chromebit**

SJS have recently tested the ASUS Chromebit which retails around £99



https://uk.store.asus.com/asus-chromebit-cs10-stick-pc-rockchip-quad-core-2gb-ram-16gb-emmc-with-wireless-keyboard-mouse.html

The Chromebit worked adequately on basic screens incorporating animations, backdrops and scrolling messages

#### **Intel NUC-**

For all the latest NUC Versions visit the Intel Website:

https://www.intel.co.uk/content/www/uk/en/products/boards-kits/nuc.html

SJS have tested the following 2 versions of Intel NUC:

**Intel NUC i3 (\$250 / £200)** – Tested on complex screen designs incorporating complex backdrops, animation, scrolling messages and multiple grids.



Intel NUC i5 (\$300 / £250) — As above but also including the use of video as seen here: <a href="https://youtu.be/eKKupWyuz3M">https://youtu.be/eKKupWyuz3M</a>. This is the most high powered hardware SJS have tested on, suitable for even the most complex of screen designs.

\*Live TV streaming is also possible however a TV tuner box will be required to take a live satellite, cable or aerial TV signal and make it available as a multi-media feed within the On-premise Optymyse Enterprise system. SJS do not supply TV tuner hardware.

For full hardware specifications of both Intel NUC versions that SJS have tested please follow these links: Intel NUC i3 - <a href="https://www.intel.co.uk/content/www/uk/en/products/boards-kits/nuc/kits/nuc5i3ryk.html">https://www.intel.co.uk/content/www/uk/en/products/boards-kits/nuc/kits/nuc5i3ryk.html</a> Intel NUC i5 - <a href="https://www.intel.co.uk/content/www/uk/en/products/boards-kits/nuc/kits/nuc5i5ryk.html">https://www.intel.co.uk/content/www/uk/en/products/boards-kits/nuc/kits/nuc5i5ryk.html</a>

Please note: The above models may no longer be available. We haven't as yet tested any of the newer models, however the fact that they are newer more powerful models would suggest they should be ok.



The Intel NUC can now be purchased as either a **complete unit** or **bare bones PC**. If a bare bones PC is chosen RAM and a hard drive need to be purchased separately and installed into the unit.

PLEASE NOTE: It is your responsibility to purchase compatible memory and storage for the NUC or any device you choose. SJS are not responsible for the compatibility of components.

The following SSD and RAM are a recommended minimum according to the Crucial website: SSD - Crucial MX200 250GB M.2 Type 2280 (Single Sided) Internal SSD RAM - 8GB Kit (4GBx2) DDR3 PC3-12800 Unbuffered NON-ECC 1.35.

#### **AOPEN Chromebox Commercial**

AOPEN Chromeboxe's are medium powered and have been tested on complex screens Check it out here for tech specs: <a href="http://www.aopen.com/eu/chromebox-commercial">http://www.aopen.com/eu/chromebox-commercial</a> They are generally priced at around £400.





## Raspberry Pi 3

Raspberry Pi's are relatively low powered so are best suited to simple less dynamic screen designs.

### They are generally priced around £30-£50

Check it out here for tech specs: <a href="https://www.raspberrypi.org/products/raspberry-pi-3-model-b">https://www.raspberrypi.org/products/raspberry-pi-3-model-b</a>/ Or here: <a href="http://uk.rs-online.com/web/generalDisplay.html?id=raspberrypi">http://uk.rs-online.com/web/generalDisplay.html?id=raspberrypi</a>



### Will I need to install an operating system?

Yes, whatever device you choose needs to have an OS installed with the capability of running a modern browser. You can use any OS you choose.

SJS have tested running Porteus Kiosk on an Intel NUC. Porteus Kiosk is a free lightweight Linux OS which has been restricted to allow only use of the web browser. Furthermore, the browser has been locked down to prevent users from tampering with settings or downloading and installing software. When the kiosk boots it automatically opens Firefox or Google Chrome browser to your chosen home page. The history is not kept, no passwords are saved, and many menu items have been disabled for total security. When browser is restarted all caches are cleared and application reopens automatically with a clean session to ensure no trace of history is left.

## Advantages of using Porteus Kiosk with Optymyse™

- ✓ Free software
- √ Very Secure
- ✓ Installed easily and has been tested on a NUC by SJS
- ✓ Allows you specify a specific URL which the NUC will load to on boot up
- ✓ No need to constantly load a browser and type a URL each time the NUC is booted.

For more information please visit the Porteus Kiosk website: <a href="http://www.porteus-kiosk.org">http://www.porteus-kiosk.org</a>