



Eos Family – Gen2 Hardware mid-life Updates also called “Windows 10 Updates”

Rollout Guide – January, 2022



EOS What's going on?

Eos Family consoles take a long time to design and get to manufacturing, so when we release a new product, we tend to manufacture the same design for 7-8 years. As technology rapidly moves forward and the needs of our users change, it has become useful for us to do a mid-life update to the internal components of our consoles.

We did mid-life updates for Ion Classic, Element Classic, Gio, and Ti – and now we are embarking on a mid-life update for our 2nd Generation (Gen2) products.

Over the next few weeks, we will begin shipping new consoles with these enhancements, which are also being called “Windows 10 Updates”.

Affected Products



We have made “Windows 10” changes to the following products:



Element 2



Ion Xe



Ion Xe 20



Ion Xe RPU



Gio @5



Eos RPU3



Net3 RVI3

We will also begin shipping new versions of ETC Puck, ETCpad, and Project PC:



ETC Puck



ETCpad



Project PC



eOS W10 Hardware Features

W10 Hardware: Features Overview



Here are the **new** features (details are on the next few pages):

- Support for 4k External Displays *for larger displays and crisper graphics*
- USB v3.1 on motherboard ports *for faster file transfers*
- USB-C ports on rear *for connecting modern drives & devices*
- WiFi network adapter *not enabled now, future connections to wifi networks*
- Bluetooth radio *not enabled now, future connections to user input accessories*
- Improved CPU performance *helps with larger rigs, and graphical tasks like Augment3d*
- Larger solid-state hard drive *additional storage, faster read/write*
- Factory Restore from hard drive *no USB stick needed*
- Windows 10 security patches *support against future threats to W10-embedded systems*



W10 Hardware: What's the same?



First: what is the same on consoles & processors?



All products have unchanged face-panels & user controls. Hooray!

Everything but the motherboard panel!



Power, data, Littlites, USB-A ports are unchanged. Hooray!

This area will change on all affected consoles & processors

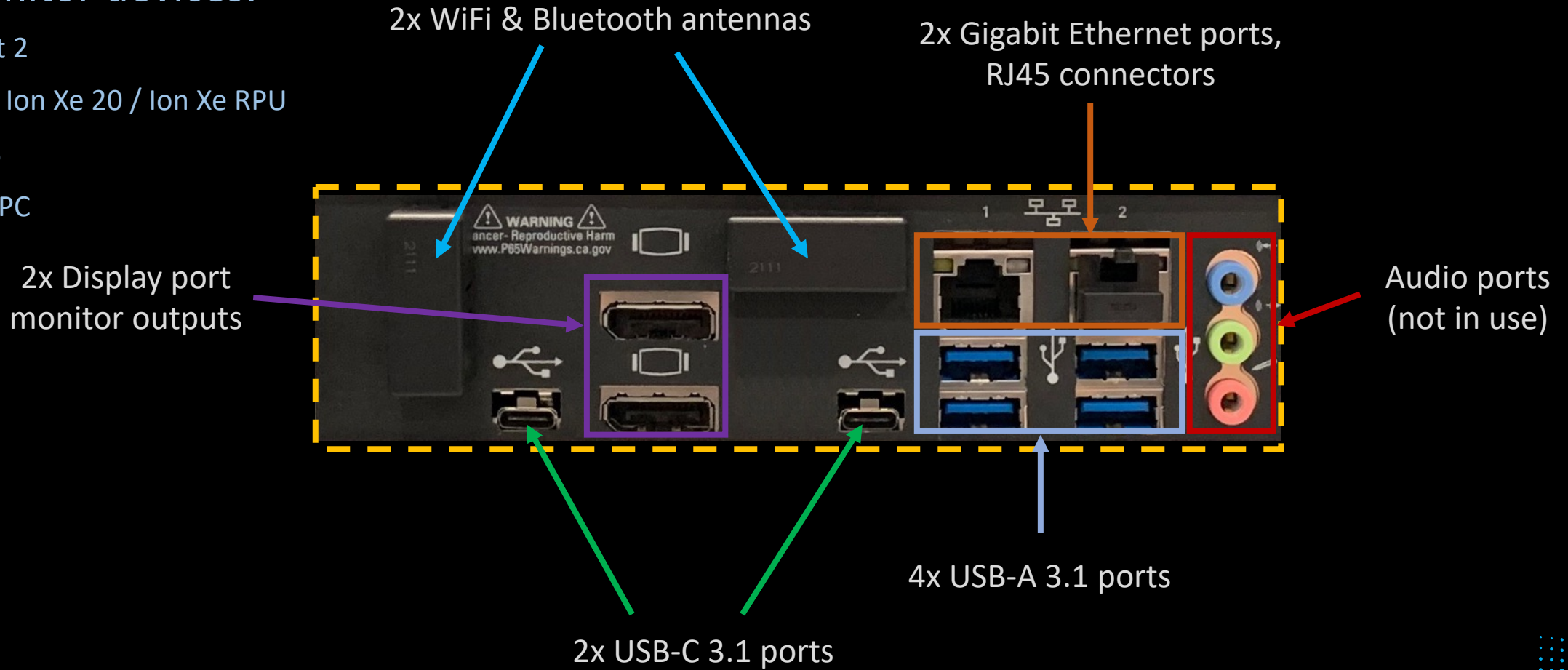


W10 Hardware: Motherboard Area



Two-monitor devices:

- Element 2
- Ion Xe / Ion Xe 20 / Ion Xe RPU
- Gio @ 5
- Project PC



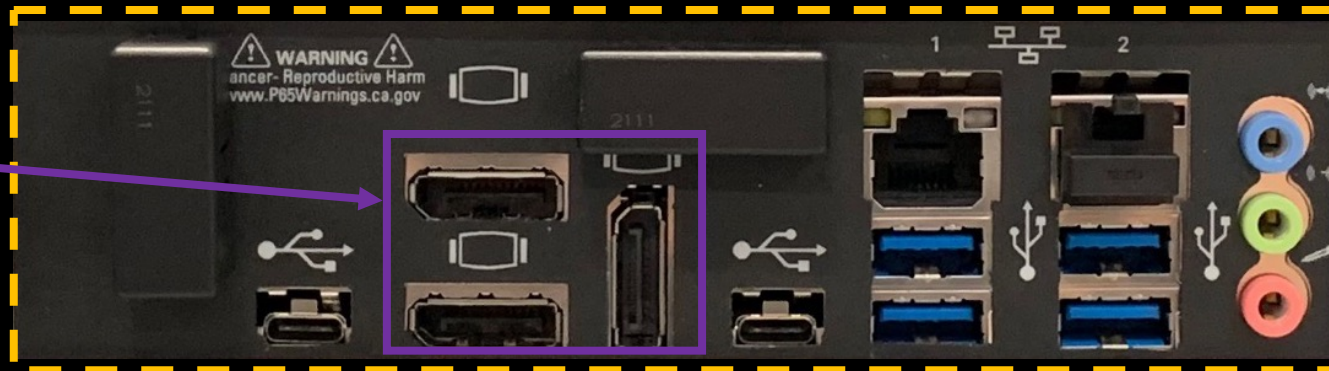
W10 Hardware: Motherboard Area



Three-monitor devices:

- Eos RPU3
- Net3 RVI3

3x Display port
monitor outputs



W10 Feature Details: External Monitors



All W10 consoles natively support displays up to 4k resolution

- Displays supported: 1920x1080 minimum, 3840x2160 maximum
- Eos v3.1 software includes High-DPI support
- High-DPI monitors can give more real-estate, but also are less strenuous on the eyes during long programming sessions
- Eos v3.1.1 will bring additional monitor-splitting capabilities
- Eos v3.1.0 supports DDC/CI monitors, to control their dimming from within the software

4k Displays
3840 x 2160

1k Displays
1920 x 1080

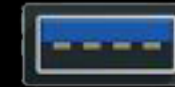


W10 Feature Details: USB



W10 consoles come with USB 3.1 on all motherboard ports, and two of the ports are now USB-C.

- USB 3.1 protocol brings communication speeds up to 10Gb/second (For persnickety folks, we are *technically* using USB 3.1 Gen2x1)
- USB-C connectors are found on many modern devices, and will allow future compatibility with ETC and third-party products.
- USB-C plugs are reversable (there is no “up or down” – they can plug it in either way)



USB-A



USB-C

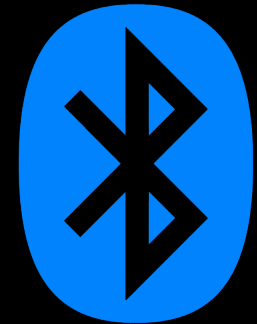


W10 Feature Details: WiFi & Bluetooth



W10 consoles include WiFi and Bluetooth radios

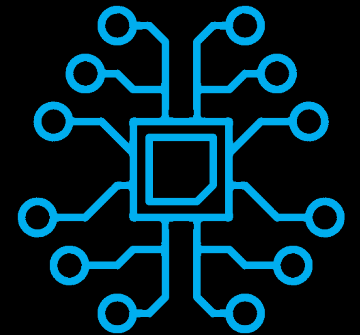
- Both radios will be non-functional when we begin shipping. We will enable them in Eos v3.2 software (expected late summer)
- The WiFi Ethernet adapter is 802.11ac, and should be equated to a laptop WiFi adapter.
 - When enabled, we will use it to connect to a lighting network's wireless access point (not an internet-connected WAP), for connections to apps, OSC triggers, remote file access, etc.
 - We will not allow multiconsole connections via WiFi, nor allow output (sACN or Art-Net) via the WiFi connection.
 - We expect to offer more features via a WiFi connection in future software.
- The Bluetooth 5.1 radio, when enabled, will allow the user to connect human input accessories, like a mouse, a keyboard, SpaceMouse, or other devices.
- All W10 products can be ordered with "No Radios," for regions/sites that do not want wireless radios in their devices. Talk with Customer Service or Quotations if you need to order a No-Radio device.



W10 Feature Details: Performance Updates



- **Improved CPU performance** — consoles now have 40% more processing power, enabling Eos software to chug through bigger magic sheets, larger Augment3d models, and much more.
- **Larger solid-state hard drive** — we now include a 256GB NVMe hard drive, for more storage and faster read/write capabilities.
- **Factory Restore from hard drive** — if a console needs reimaging, the user will be able to do it directly from the hard drive, instead of needing to wait for technical services to mail them an image stick.
- **Windows 10 security patches** — W10-embedded systems have enhanced protection against future threats. And though we still don't recommend internet connections to the desk, we will be capable of patching new vulnerabilities via software update.



EOS Software & Support

W10 Software & Compatibility

W10 consoles will require Eos v3.1.0 (or above)

- W10 consoles will not ship with nor be able to run v2.9.x software, and therefore will not be able to join multiconsole sessions with devices running v2.9.x
- We will move repairs over to using W10 components, and save some W7 components for desks that absolutely need it

“If I’m talking to a user, how do they tell the difference between a W7- and a W10-based console?”

- Only W10-based consoles will have USB-C ports

W10 Output Protocol Support

We are unable to continue support of some output protocols on W10 platforms.

- The following protocols will no longer be supported on W10-based devices (including the new Puck) and ETCnomad:
 - Draft sACN
 - Net2 – EDMX
 - AVAB UDP

Windows 10-based consoles will continue to output sACN and Art-Net

If you run into issues with sites that are still using these protocols, please reach out to Nick Gonsman (nick.gonsman@etcconnect.com)

FAQs for W7 Consoles



With W10 consoles showing up in the field, some users may have questions about our plans for their W7 consoles:

- **Development:** our software development plans for the foreseeable future include releasing new features that will install on W7- and W10-based consoles.
- This is not like Windows XP, where we were forced to cease development for those consoles because of difficulties in developing and supporting that platform.
- The W10 hardware features may be desirable to some users, but are not necessary to continue installing new software. If users ask about upgrade options for their W7 consoles, check out the next few pages.



EOS Upgrade Program Plans



W7 > W10 Upgrade Program



Later in the year, we will begin offering W10 upgrades for users who find the hardware features desirable, similar to our previous XP>W7 program

- The following consoles will be eligible to be upgraded:
 - Element 2
 - Ion Xe, Ion Xe 20, Ion Xe RPU
 - Gio @5
 - Eos RPU3
 - Net3 RVI3
- The consoles will need to be returned to our repairs department, where we will replace the necessary internal components
- Pricing and availability have not been set yet – we will make announcements when we are ready to roll out this program



EOS ETC Puck

ETC Puck



“ETCnomad Puck” is now “ETC Puck”! This next-generation mini-processor has many of the same features as our W10 consoles:

- W10-embedded environment
- Double the processing power of the previous generation Puck
- 2 external monitors, up to 4k resolution
 - One Display Port connector, one HDMI connector
- 2 gigabit network adapters
- 802.11ax WiFi adapter (enabled in future software)
- Bluetooth 5.0 radio (enabled in future software)
- USB 3.1 ports (3 USB-A, 2 USB-C)
- Kensington lock port

ETC Puck has new part numbers:

1k: 4380A1143

6k: 4380A1144

There is not a “no-radio” option for ETC Puck.



EOS ETCpad

ETCpad is getting an update! The newer model looks nearly identical to the original, but now includes:

- USB-C charging and data port
- ARCore sensors for Augment3d Focus Wand in the RFR app
- Updated Android embedded OS

ETCpad has a new part number: 4250A1222

- All accessories still work with the new model, and use the same part numbers
- “ETCpad USB Hub Replacement” (P/N: M7599) – we are adding a USB-C adapter to the kit, so it can be ordered for users of both generations of ETCpad



eOS Project PC

Project PC

Project PCs remain a useful tool for dedicated lighting configuration and software hosting.

Project PCs are being upgraded with the same internal hardware as consoles, and will continue to carry a full Windows 10 license.



EOS Ordering Information



Ordering Info: Overview

Most Part Numbers for ordering remain the same:

Product	Part Number
Element 2 1k	4331A1011
Element 2 6k	4331A1012
Ion Xe 2k	4311A1011
Ion Xe 12k	4311A1012
Ion Xe 20 2k	4311A1021
Ion Xe 20 12k	4311A1022
Ion Xe RPU 2k	4311A1031
Ion Xe RPU 12k	4311A1032

For local accessory kits, add the following to the part number: -US: Edison connector, -EU: Schuko/UK13A connector, -AZ: Australian Type 1

Product	Part Number
Gio @5 4k	4390A1014
Gio @5 24k	4390A1016
Eos RPU3 4k	4350A1015
Eos RPU3 24k	4350A1025
Net3 RVI3	4250A1130
Net3 Project PC	4250A1040-C
ETC Puck 1k *	4380A1143
ETC Puck 6k *	4380A1144
ETCpad ±	4250A1222

* ETC Pucks ships with IEC-320-15 to NEMA 5-15P power cable

± ETCpad ships with USB-C charger with detachable plug cable (IEC-320-15 to NEMA 5-15P)



New Part Numbers!



Existing Orders

We will begin filling existing orders with new W10 hardware

- If you have a need for a W7-based console, please contact your Customer Service representative or Project Manager to discuss options

Ordering Info: No-Radio Units

Some regions or facilities may not want wireless radios in our products

- All consoles and processors may be ordered without WiFi & Bluetooth radios installed
- No-radio units are POA, and carry the same list price as standard units
- ETC Puck and ETCpad are not available without wireless radios
- If you have questions about ordering no-radio consoles, please reach out to your Customer Service representative, or your Quotations specialist

EOS Documentation

Documentation

The following documentation will go live as each W10 product begins shipping:

- Updated datasheets
- Longform specifications
- Submittal drawings
- Drafting blocks will remain unchanged

EOS Timeline

- Manufacturing has started production for the following consoles:
 - Element 2
 - Ion Xe, Ion Xe 20, and Ion Xe RPU
 - Eos RPU3
 - Net3 RVI3
- We anticipate the following products to begin shipping in February:
 - Gio @5
 - ETC Puck
 - ETCpad
 - Project PC

EOS Questions?

Never hesitate to reach out – we are here to help:

Nick Gonsman, Marketing Product Manager: nick.gonsman@etconnect.com

Lowell Olcott, Marketing Product Manager: lowell.olcott@etconnect.com

Matt Halberstadt, Technical Product Manager: matt.halberstadt@etconnect.com

