

Release Notes Firmware Release 1.6.0

1. Introduction

This document contains all information you need for updating your Newton system to firmware version 1.6.0. The software and USB to CAN dongle is compatible with Windows (7, 8, 8.1 and 10) or macOS (tested with v10.14 Mojave, others might work).

IMPORTANT!: Update all of the devices (controller, head, camera/lens dongles) to the latest firmware version to ensure compatibility.

2. Changelog

The 1.6.0 release is a major feature release. It adds a significant number of features, both production ready and experimental ones, and fixes a number of issues and bugs.

Compared to the previous major release (1.5.x) the following has been changed:

- Issues and bug fixes.
- A way to scale the focus wheel input. This is especially useful on the C2 version with dual joystick where you now can set the joystick focus knob to have a full range of up to four full rotations.
- Zoom max speed to be mapped to an encoder knob on C1/C2 controller.
- About page that shows firmware version and runtime for the S1/S2 unit.

The 1.6.0 release also include licensed features to be loaded with license keys that are individual for each feature and Newton product:

- Support for control using the Nodo Inertia Wheels. Require a Newton Nodo dongle.
- AR data output. Allows for output of tracking data required for AR camera tracking.
- Motion control. Allows for control of the Newton head and the lens control over an ethernet protocol for either real-time or pre-recorded movement of the head.

Both AR data output and motion control are added as experimental features and these are ready to be tried for 40h without license.

The 1.6.0 is a new major release and for compatibility both C1/C2 controller and S1/S2 head must be updated. In addition the FIZC dongles *must* be updated to the 1.3.x series.

3. Update Instruction

3.1. Install USB to CAN interface driver

This step is required on Windows computers the first time you want to utilize the IA USB to CAN interface.

1. Run the file **dpinst_32.exe** (for 32-bit Windows) or **dpinst_64.exe** (for 64-bit Windows) from the **windows-drivers** folder
2. Follow the on-screen instructions to install the driver
3. Connect the USB-CAN interface to the computer
4. The USB to CAN interface should now be visible in the device manager under the "Ports" section

3.2. Upgrade firmware

1. Connect CAN dongle via USB to the computer
2. Connect CAN connector of CAN dongle to one of the CAN ports on the Newton device
3. Run **firmware_gui.exe** from the Windows folder or **firmware_gui.app** from OSX folder
4. Follow the instructions in the installation wizard. From the **firmware** folder, select the correct file for the product you are updating
5. Press update