



# NEPI ENGINE

## SOFTWARE RELEASE NOTES

**Version Number: 2.1.3**  
**Version Date: Jan 12th, 2024**

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## **Version #: 2.0.3**

**Issued:** Sept 7<sup>th</sup>, 2023

### **NEPI SDK Updates**

#### *SYSTEM:*

- WiFi: Allow setting access point SSID/Passphrase via ROS interface
- WiFi: Added WiFi client support

#### *NAVPOSE:*

- NavPoseMgr: Major rewrite to correct longstanding bugs and inconsistencies
- GPSD\_ROS\_Client: Update for new NavPoseMgr API

#### *CONNECT:*

- NEPI\_Link\_ROS\_Bridge: Make public SSH key available over ROS API
- NEPI\_LINK\_ROS\_Bridge: Update for new NavPoseMgr API

### **NEPI Hardware Drivers**

- New Pan/Tilt NEPI abstracted driver class (PTX)
- IQR Pan/Tilt PTX ROS node and new IQR PTX NEPI driver
- Add Mavlink ROS node

### **NEPI RUI Updates**

- Reorganized top menu: Connect-->Apps subitem, new Controls menu with PTX sub-items
- ADMIN Page: Added WiFi client and Access Point setup
- NAVPOSE Page: Completely restructured to support new backend
- CONNECT Page: Added option to show public SSH key
- PAN/TILT Page: New pan/tilt control and status page

## **Version #: 2.0.4**

**Issued:** Oct 11<sup>th</sup>, 2023

### **NEPI SDK Updates**

#### *SYSTEM:*

- Improved ownership and permissions settings for user partition
- ROS node user-modified config files now reside in user partition
- ROS node user and select system config files can be restored from user partition

### **NEPI Hardware Drivers**

- General fixes for V4L2 camera drivers
- Auto-start IQR Pan/Tilt ROS node when hardware is detected (plug-and-play)
- IDX Node: Allow configurable ignored L4V2 devices (default list includes Zed2, Zed-M, and some RB5 built-ins)

## NEPI RUI Updates

- Avoid showing developer license warning on page refresh and dropped connection
- CONNECT Page: Updated text labels and text field behaviors
- ADMIN Page: Added a User Restore (Advanced Setting) button to support post-sw-update settings restoration
- PAN/TILT Page: Look and feel updates

## Version #: 2.1.0

**Issued:** Nov 25<sup>th</sup>, 2023

## NEPI SDK Updates

### SYSTEM:

- General: Port all to Python 3 (ROS Noetic) for Ubuntu 20.04 switch
- Time Sync Mgr: Properly report when NTP is synchronized
- Network Mgr: Check for internet connectivity and report
- Autolauncher: Allow absolute paths for configured auto-launched node config files
- AUTOMATION:
- Automation Mgr: Sort scripts alphabetically in query responses
- Automation Mgr: Improve ability to stop/kill running scripts
- Automation Mgr: Log all script console output to files
- CONNECT:
- NEPI Connect Bridge: Available LB data sources no longer static

## NEPI Hardware Drivers

- Autolauncher: Ardupilot default config for mavros node

## NEPI RUI Updates

- General: Larger panel for menu subitems
- General: Port to Python 3 and Ubuntu 20.04
- Automation Tab: Automation scripts now listed alphabetically
- Automation Tab: Display script log size as part of status
- AU Tab: Always show the image corresponding to classifier state
- Dashboard Tab: Use NTP sync status directly to determine NTP status color
- (New) Imagery Tab: New dedicated multi-image viewer page
- Imagery Tab: Single snapshot button on Imagery page instead of per-image
- Sequencer Tab: Move page to Applications submenu
- Admin Tab: Obscure WiFi client passwords
- Admin Tab: Indicate when system has internet connection
- Connect Tab: Improved page responsiveness
- IDX Sensor Tab: Renamed Imaging and allows selecting any image under IDX sensor namespace

## **Version #: 2.1.1**

**Issued:** Nov 29<sup>th</sup>, 2023

### **NEPI SDK Updates**

#### *SYSTEM:*

- Fixed a runaway log message (suppress socat output)
- Make change\_identity.py script non-interactive for scriptability
- Updates to move to Ubuntu 20.04 for NEPI rootfs
- nepi\_edge\_sdk\_link ported to Python 3
- Updates to move to Ubuntu 20.04 for NEPI rootfs

### **NEPI Hardware Drivers**

### **NEPI RUI Updates**