

# Release notes

## Xsens 2025.0

This document describes the new features, improvements, and bug fixes in the new release 2025.0 for Xsens software: Xsens Record, Xsens Analyze and Xsens Animate Versions

<b>New versions</b>	<b>Xsens: 2025.0 Stable (May 2025)</b> Awinda firmware: AW-A2 v4.14.0, AW-DNG2(-ANT) v4.14.0, MTw2 v4.14.0 Link firmware: BPACKv1 v1.6.3, BPACKv2 v1.6.3, MTx2 v1.6.3 FWU: 4.4.1
<b>Previous versions</b>	<b>MVN: 2024.2 Stable (Apr 2024)</b> Awinda firmware: AW-A2 v4.6.0, AW-DNG2(-ANT) v4.6.0, MTw2 v4.6.0 Link firmware: BPACKv1 v1.6.3, BPACKv2 v1.6.3, MTx2 v1.6.3 FWU: 4.4.1
<b>Release date</b>	May 2025
<b>Operating system</b>	Windows 11, 64-bit
<b>Meaning of icons</b>	+added, ^changed, !note, #fixed, -removed

### Major improvements and new features

- + A new, fully updated biomechanical model is now available, offering selectable Male and Female profiles, with the original model as Legacy profile.
  - o It includes updated gender-specific anthropometries and a refined spine modeling, offering:
    - Increased spine range of motion, especially in spine flexion and extension movements
    - A physiological lumbopelvic rhythm that portrays the S-to-C-curve dynamics for more realistic posture and motion tracking
    - Improved the overall scaling and anatomical representation directly impacting upper and lower body kinematic
- + Refreshed user interface for an improved user experience
  - o Updated icons and visual styling, with support for Dark Mode and Light Mode
  - o Streamlined guided calibration flow with spoken instructions and intuitive visual guidance
  - o New welcome screen and loading screens
- + Experimental: Auto Sensor Mapping
  - o Setup without predefined sensor placement for faster workflows
  - o **!Note:** This feature is experimental and currently supports **Full Body Awinda** setups only. Performance may vary across use cases, and results are not guaranteed. Use with caution in critical recording scenarios.
- + Integration of HTC Vive Mars camera tracking
  - o Enabling precise camera-based positional tracking of performers and props.
- + Support of Xsens Academic License

## Bug fixes

- # MVN crashing when starting a motion capture session
- # Body pack client BP: 172.16.0.1 doesn't work
- # Packet loss while streaming locally from MVN network streamer
- # Calibration lost after motion capture configuration window is opened
- # GNSS scenario shows Soft Floor and Vehicle incorrectly
- # Accept System = Any → GNSS option not shown
- # GNSS/Ext Positions graphs shown as black boxes (also seen in 2022.0 and later)
- # XME\_REDIST license not supported by XME
- # XME examples now handle missing license with appropriate message
- # MVN Export All Open Files creates empty FBX files
- # Mismatch between default std for Vive data and updateExtPosAiding
- # MVN | Help > About buttons had inconsistent behavior
- # GNSS data not recognized in import OBR
- # On certain device types (Computers using USB hubs or with lower end specifications)
  - MVN Vive Mars Objects | Changing objects name can cause MVN to crash
  - MVN Vive | Assigning trackers to body segments can cause MVN to crash
- # HTC Vive | When a Vive object moves out of range it can cause MVN to stop recording
- # HTC Vive | If a single Vive tracker loses connection during recording the recording data file (mvno) may get lost.
- # HTC Vive | Tracker on body is far away from where it should be
- # HTC Vive | Graphs can freeze while using it in combination with Awinda

## Minor Updates

- + Improved tracking performance for all HTC Vive configurations
- + General stability and performance enhancements

## Known Issues

- ! License Manger does not display network license when used the 1<sup>st</sup> time
- ! Application can crash when props are enabled and biomechanical model is switched
- ! Network streamer icon is not showing properly only the network monitor icon I shown in the toolbar
  - Still accessible through options