



Overview of Alltrack R-net and Amylior ISM

Understanding the integration of R-net electronics and the Amylior Seating Controller (e-bx).

Core System Architecture

- The **Alltrack** chair uses **R-net electronics**, which are inherently modular.
- The **Amylior Seating Controller (e-bx)** and its associated iQ Actuators manage all power seating functions.
- The e-bx system is a proprietary, "**plug-n-play**" architecture designed to seamlessly interface with the R-net electronics.



Key Seating Components

iQ Actuators

The e-bx can control and program up to 6 iQ actuators. It constantly exchanges data on position, runtime, speed, and errors via a unique handshake protocol.

Multiple Function Control (MAC)

For managing multiple functions (Tilt, Recline, Elevate, Legrests), the necessary option is the MAC E-BX, which specifically powers the iQ Actuators.



Programming the Amylior System

All programming is done using existing R-net programming tools.

Access Path: **Seating** > Amylior ISM

1. General Submenu (Actuator Limits)

This is used to adjust the minimum and maximum position limits for each actuator (Actuator #1, #2, etc.). These limits define the safe operating range for the seating functions.

Setting	Applicable Actuator Example	Description	Range Example
Min limit #X (% or °)	Actuator #1 (Tilt)	Minimum setting for the position.	0° to 46° for Tilt.
Max limit #X (% or °)	Actuator #3 (Elevate)	Maximum setting for the position.	0% to 100% for Elevate.

2. Actuator & 3. Axis Setup Submenus

Actuator Setup (Kinetics)

This submenu controls the kinetic behavior of individual actuators:

- **Up Speed / Down Speed:** Sets speed in either direction.
- **Acceleration / Deceleration:** Sets rate of speed change.
- **Set point 1:** Soft stop angle adjustment for standing.

Axis Setup (Movement)

This controls how multiple actuators function together for a single "axis":

- **Axis Channels:** Defines which motors operate for an axis.
- **Axis Display:** Sets the axis appearance on the user interface.
- **Actuator Mode Entry Axis:** Sets the default axis in Seating Mode.

4. Drive Inhibits and Restrictions

The R-net system uses **Inhibits** to apply safety limits to either drive speed or actuator movement based on the position of other modules.





Example: If the seat is elevated, drive speed may be limited, or certain tilt functions may be restricted to maintain stability.



Retrofitting and Removal

CRITICAL WARNING: Only a qualified technician from an authorized supplier should modify the seating system. Improper installation or wiring risks altering the chair's center of gravity, which can cause **falls/tip-overs**, or damage the electrical system.

Safety and Hardware Considerations

-  **Wiring Integrity:** Cable routing and the installation of cable guides and tie-wraps must be precisely followed to prevent wire pinching.
-  **Actuator Replacement/Position Reset:** If an actuator is replaced, you must perform a position reset for the new actuator.
-  **Special Boot-up Modes: WARNING:** Never use these with a user in the chair as actuator movement limits are temporarily disabled, risking serious injury.
-  **Configuration Errors:** Error code **965A** may be reported if the R-net settings in the e-bx section are incompatible with the chair's actuator configuration.

Programming and Documentation Needs



Required Tools

Programming generally requires the R-net PC Programmer software and the R-net Programmer's Kit (Dongle).



Critical Documentation

It is considered critical to have the chair's Serial Number and a copy of the original factory programming for troubleshooting.

Technical Support and Training



Phone Support

Amylior Technical Support:
1-888-453-0311 ext. 2



Email Support

Reach the tech team directly at:
techsupport@amylior.com



Online Documentation

Extensive installation guides and
troubleshooting blueprints are
available online.

Questions?

Thank you for your attention.

Image Sources



<https://amylior.com/wp-content/uploads/2023/05/Alltrack-M3-ATM3.jpg>

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https://amylior.com/wp-content/uploads/2025/06/Alltrack_Signature_M3_2025.png

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