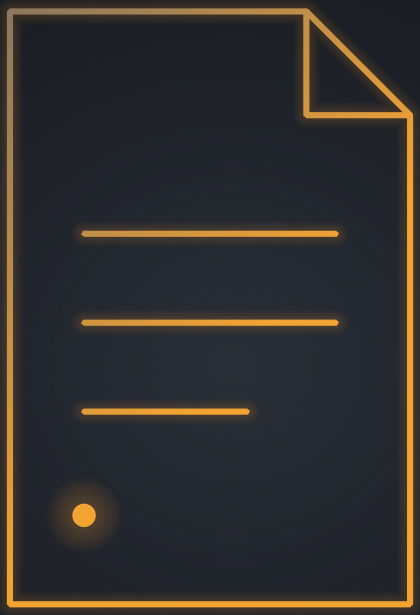
aerl

Release Notes

AERL Firmware and Software



CoolMax · EarthGuard · Nexus · AERL Link

Customer Release Notes

REV 1.0.0, 8 NOV 2026

© 2026 AERL PTY LTD

Contents

	Foreword	3
01	**CoolMax SRX and SRX-R** Current release, version 2.17.9 (August 2026)	3
02	**EarthGuard EG-600** Current release, version 2.2.1 (November 2025)	5
03	**Nexus Gateway Software** How it is released	6
04	**AERL Link** Current release, version 1.0.4.20 (October 2026)	6
	Thank You for Choosing AERL	8

Document

Revision **1.0.0**	Effective **11 / 2026**	Audience **Installers, service technicians and system owners**	Covers **CoolMax · EarthGuard · Nexus · AERL Link**
Updating **AERL Firmware Update Guide**	Format **A4 · 9 pages**		

Foreword

These notes list the changes that matter to installers and owners in each released version of AERL's firmware and software, newest first. They cover the CoolMax SRX and SRX-R charge controllers, the EarthGuard EG-600, the Nexus gateway software and AERL Link.

To update a unit, see the AERL Firmware Update Guide. AERL Link and AERL Cloud offer each unit the newest release for it; the release notes for an update are also shown when it is offered.

Dates are the month a release was first published. AERL withdraws a release from AERL Link and AERL Cloud when a newer one replaces it; a unit on a withdrawn release keeps working, and is offered the current release.

CoolMax SRX and SRX-R

01

Current release, version 2.17.9 (August 2026)

1.1 Current Release

Item	Details
Current release	**2.17.9** (Stable), for the CoolMax SRX and SRX-R
How to check	AERL Link: the unit's card and its STATUS tab. AERL Cloud: the FW Version column on the Service page.
How to update	AERL Link over USB, or AERL Cloud through a Nexus gateway

1.2 Version 2.17.9 (August 2026)

The current Stable release for the SRX and SRX-R, offered to units of hardware revision 108 and later. It has the same functions as 2.9.4 (below), and brings them to the SRX-R. It is numbered 2.17.9 so that every unit on an earlier release can take it as an update. SRX units of hardware revision 107 stay on 2.9.4.

1.3 Version 2.9.4 (November 2025)

Released for the CoolMax SRX.

- Charging rides through a sudden short drop in solar input, such as a passing cloud, instead of shutting down.
- Improved maximum power point tracking.
- Improved reliability.

1.4 Version 2.8.4, SRX-R (October 2025)

Released for the CoolMax SRX-R. Also includes the changes first released in 2.6.6 (SRX, November 2024), 2.6.7 (SRX and SRX-R, December 2024) and 2.6.9 (SRX-R, March 2025).

- **Earth-fault detection** measures the insulation resistance directly, for more reliable detection. Fixes a unit that could stay stopped after an earth-fault check.
- **Alarm buzzer** turns off after 30 minutes.
- **Charge stages:** charge-stage changes are timed, so a unit no longer switches back and forth between stages. Fixes re-bulk.
- **Start-up:** fixes start-up and power ramps that could stall; handles a failed pre-charge safely.
- Detects whether the unit is supplied from a solar array or a DC power supply.
- Settings can be changed over CAN bus, so a unit's charge profile can be set from AERL Cloud through a Nexus gateway.
- Improved fan control, and better handling of a failed fan or temperature sensor.
- Lower electrical noise.
- Improved reliability.

1.5 Version 2.5.3 (September 2024)

- Improved maximum power point tracking between charge states.
- Improved reliability.

1.6 Version 2.5.1 (September 2024)

- Faster over-current protection.
- Improved reliability.

1.7 Version 2.4.2 (June 2024)

Includes the changes made since 2.0.3:

- Earth-fault checks are synchronised between units on the same CAN bus, so parallel units do not disturb each other's measurement.
- Support for Pylontech batteries over CAN; the unit stops charging on a battery alarm.
- The LED flashes green while the unit is controlled over CAN.
- The CAN ID is kept through a restart, and units on a shared bus resolve duplicate IDs.
- Slow start-up ramp for lead-acid batteries.
- Units on a shared DC bus synchronise their converters.
- Higher input current, and a wider range of charge voltages.

1.8 Version 2.0.3 (February 2024)

- Earth-fault testing of the battery negative is back.
- Faster earth-leakage measurement.

1.9 Version 2.0.2 (February 2024)

- Earth-fault testing coordinated between parallel units over CAN.
- The converter shuts down if its temperature sensor stops responding.

1.10 Version 2.0.1 (February 2024)

- **Earth-fault trip fixed at 50 kΩ.** The unit reports an earth fault when the insulation resistance of a monitored pole falls below 50 kΩ. There is no sensitivity to set.
- Fixes a fault that could make the unit stop responding.
- Improved handling of an input over-voltage alarm.
- The LED shows when a firmware update is in progress.
- Improved reliability.

EarthGuard EG-600

Current release, version 2.2.1 (November 2025)

02

2.1 Current Release

Item	Details
Current release	**2.2.1**, for the EarthGuard EG-600
How to check	AERL Link: the unit's card and its STATUS tab
How to update	AERL Link over USB-C

2.2 Version 2.2.1 (November 2025)

- Fixes unexpected restarts during earth-fault measurement.
- Includes 2.2.0: improved insulation measurement on systems with capacitance between the DC wiring and earth.
- Includes 2.1.2: corrected voltage measurement range.
- Includes 2.1.1: steadier insulation readings (filtering and averaging of the measurements).

Nexus Gateway Software

How it is released

03

3.1 How It Is Released

Nexus gateways update their own software automatically (AERL Firmware Update Guide, Nexus Gateway and HMI-10). The version is shown on the gateway's page in AERL Cloud. For the changes in a particular version, contact AERL support.

AERL Link

Current release, version 1.0.4.20 (October 2026)

04

4.1 Current Release

AERL Link updates itself: each time it starts, it checks for a newer release and offers to install it. The version is shown on AERL Link's SETTINGS page. Download it from **aerl.com.au/professionals**.

4.2 Version 1.0.4.20 (October 2026)

- **Help:** the SRX and SRX-R user manual is inside AERL Link, searchable; the **?** beside a setting opens it at the right section. Two help tours, on a demo SRX.
- **Settings:** every Apply lists the changes, *before → after*, before anything is sent. **Undo** and **Redo** step through a unit's earlier settings.
- **Support bundle:** saves a zip of AERL Link's logs and each unit's settings, settings history and event log, to email to AERL support.
- **Firmware:** the firmware list comes from AERL Cloud; update offers show the release notes. Stable and Beta firmware, and a firmware lock that holds a site at a tested version.
- **Status:** an explanation behind a **?** for status codes an installer can act on.
- Demo units can import and export settings files.
- More reliable calibration, firmware updates and USB communication.

4.3 Versions 1.0.4.17 to 1.0.4.19 (September 2026)

- **CAN role** on the COMMS tab, locked by a password from AERL support.
- The DEVICES page shows connected units straight away.
- Every status code has a description; explanations for codes −380, −1103, −1160 and −1162.
- EarthGuard: the faulted pole is named, and the insulation at fault level is shown in kΩ. Settings changes are saved reliably.
- Calibration is refused while the battery voltage is still moving.
- Settings files are checked before they are used; AERL Link asks before a file turns Blackstart Guard on.
- A unit that was never set up gets a complete charge profile.
- The low-temperature cutoff shown matches what the firmware enforces.
- More reliable firmware updates, and units moved or swapped between USB ports are found again.

4.4 Version 1.0.4.16 (August 2026)

- Calibration switches the unit's output off while it measures, and switches it back on afterwards. It is refused when no battery is connected.
- The firmware update offer waits until a calibration has finished; damaged downloaded firmware is never offered.
- The COMMS tab is hidden on firmware that cannot store the comms settings.
- AERL Link stays on the unit's page while it restarts after an update.
- More reliable USB communication.

4.5 Version 1.0.4.15 (June 2026)

- Fixes the SRX calibration accuracy check.

4.6 Version 1.0.4.14 (June 2026)

- **Output Enabled** setting back on the OUTPUT tab.
- Firmware updates recover better from a disconnection.
- More reliable communication on noisy USB connections.

4.7 Version 1.0.4.13 (June 2026)

- EG-600: a note that the circuit voltage reading on some earlier hardware can be in error.

4.8 Version 1.0.4.12 (June 2026)

- Fixes the Battery Voltage setting showing the wrong value after it was read back from the unit.

4.9 Version 1.0.4.11 (May 2026)

- First release published from aerl.com.au. Earlier installations do not update to it by themselves: install it from the download page.
- Demo units for each product.
- Ground fault settings for older SRX firmware.

4.10 Change Log

Revision	Date	Change
1.0.0	11 / 2026	First issue.

Thank You for Choosing AERL

If you have any questions or need support, contact AERL.

Sincerely,

The AERL Team

AERL Pty Ltd · 1/75 Bluestone Circuit, Seventeen Mile Rocks QLD 4073 · 1800 950 865 · support@aerl.com.au · aerl.com.au



Australian Energy Research Laboratories

ADDRESS

1/75 Bluestone Circuit
Seventeen Mile Rocks QLD 4073
Australia

CONTACT

sales@aerl.com.au
support@aerl.com.au

aerl.com.au

Phone
1800 950 865

© 2026 AERL Pty Ltd