ProSoft® TECHNOLOGY

Where Automation Connects.


# RLX2-IHx Series

## Industrial Hotspots

802.11a, b, g, n

November 5, 2025

# RELEASE NOTES

## Your Feedback Please

We always want you to feel that you made the right decision to use our products. If you have suggestions, comments, compliments or complaints about our products, documentation, or support, please write or call us.

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RLX2-IHx Release Notes
For Public Use.

November 5, 2025



In an effort to conserve paper, ProSoft Technology no longer includes printed manuals with our product shipments. User Manuals, Datasheets, Sample Ladder Files, and Configuration Files are provided at: www.prosoft-technology.com

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Printed documentation is available for purchase. Contact ProSoft Technology for pricing and availability.

# Contents

# 1 Start Here

This document highlights the new features, fixes, enhancements and known issues for the RLX2-IHx radios.

## 1.1 Special Notes

This section contains information regarding special procedures and potential limitations that may be required for this release.

## 1.2 About the RLX2-IHx Industrial Hotspot™ Products

| Model | Standards | Maximum Output Power |
|---|---|---|
| **RLX2-IHNF** | IEEE 802.11a/b/g/n | 17 dBm (50 mW) |
| **RLX2-IHNF-W** | IEEE 802.11a/b/g/n | 17 dBm (50 mW) |

The RLX2-IHx 802.11 Industrial Hotspots™ are high-speed wireless Ethernet radios, with Power over Ethernet (PoE) and Serial Encapsulation. All radios operate at speeds up to 54 Mbps, and the RLX2-IHNF operates at speeds up to 300 Mbps. Designed for industrial installations, the RLX2-IHx series offer many features including hazardous location certifications, IGMP Snooping, OFDM for noise immunity, repeater mode to extend range, QoS, VLANs, RADIUS Authentication, automatic parent selection for self-healing, OPC server diagnostics, extended temperature, high vibration/shock and DIN-rail mounting.

The following legacy products are no longer for sale:

| Model | Standards | Maximum Output Power |
|---|---|---|
| **RLX2-IHA** | IEEE 802.11a | 24 dBm (250 mW) |
| **RLX2-IHG** | IEEE 802.11b/g | 24 dBm (250 mW) |
| **RLX2-IHNF-WC** | IEEE 802.11a/b/g/n | 17 dBm (50mW) |
| **RLX2-IHW** | IEEE 802.11a/b/g | 20 dBm (100 mW) |

## 1.3 Release Enhancements

**Warning: Do not** upgrade RLX2-IHx radios running firmware *RLX2_v0037A_R* or older directly to the currently released firmware version. Doing so will leave the RLX2-IHx inoperable. Please contact ProSoft Technical Support for more information on the correct update procedure.

| Release Version | Release Date | Description |
|---|---|---|
| RLX2_v0041A_R | 7-Nov-2025 | **New Features/Improvements from RLX2_v0041_R:**<br>• Made the *eAddr* (external IP Address) column of the RLX2 NAT table "persistent" like the RLX2-IHx *Name* or *IP Address*, when updating an RLX2-IHx configuration via the IH Browser. This allows multiple RLX2-IHx's to be updated with a common configuration and not lose *eAddr* settings that are specific to the RLX2-IHx. |
| RLX2_v0041_R | 8-Sep-2025 | **New Features/Improvements from RLX2_v0040B_R:**<br>• Increases the radio's Address Table from 1000 to 4000 entries to support environments that may contain over 2000 wireless devices.<br>• When the *ProSoft Only Clients* feature is enabled, the *MAC Filter* feature also lists the allowed 3rd party wireless clients.<br>• Adds a 2nd Alternate SNTP Server control to be used if the configured Primary SNTP Server does not respond.<br>• Fields with an IP Address can now enter a device Name. The RLX2-IHx performs a DNS lookup on the Name to determine its IP Address. The following fields are supported: *Radius Server*, *SNTP Manager*, *SNTP Server*, *SNTP Alt Server*, *Syslog Server, QoS table Destination* and *Source IP Addresses*.<br>• Issues a Syslog Event when the radio's Ethernet port state changes (up/down, Link Speed, Link Mode).<br>• Adds new control to force a BG Scan of all channels used in RLX2-IHx clients in case the Neighbor Report information from the Wireless Infrastructure is unreliable.<br><br>**Resolved issues from RLX2_v0040B_R:**<br>• Fixed behavior of the Ethernet RJ45 LEDs to behave as described on the overlay of RLX2-IHx.<br>• Added missing *Telnet Disable* control to *Settings Template* used by IH Browser.<br>• Parent Link Event now includes missing channel information. |
| RLX2_v0040B_R | 27-Nov-2024 | **New Features/Improvements from RLX2_v0040A_R:**<br>• Adds support for saving customer User Defaults via the IH Browser and the ability to reset to those defaults via the radio's web page or Reset button.<br>• Adds support for the new IH Browser Device Management and Zero Touch Commissioning functionality by adding the Software Image version string, the hardware platform type and the configuration signatures to the settings conveyed to IH Browser. It allows the IH Browser to determine which radios require updating to the latest firmware and settings specified by the customer.<br>• Now advertises to IH Browser that the RLX2-IHx is un-commissioned if it is running with factory defaults or with User Defaults with the un-commissioned flag set.<br>• Adds support for Zero Touch Commissioning of client radios via the IH Browser.<br>• Adds support for the RLX2-IHx Client to "learn" a trailing number from inspection of DHCP Requests received on its Ethernet interface and append this number to the radio's name during commissioning. |

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| | | • Adds bandwidth control to packets that match a QoS rule in the QoS table.<br>• Adds Syslog facility and severity variables to the web interface.<br>• Adds a Tx Power Limit control to allow the IH Browser to level Tx power on all channels, since the radio uses higher power on the upper 5 GHz band channels. Leveling Tx Power allows client radios to not favor those APs in the upper band.<br>• Adds an explicit mechanism to inform the old access point (AP) when a client roams to a new AP to ensure the old AP's count of connected devices is accurate. This connection count is advertised by the APs to allow the clients to use this information when selecting a new AP to roam to.<br>• Adds a new Broadcast filter control to filter all broadcast/multicast packets received on the RLX2-IHx Ethernet interface except ARP, DHCP, IGMP and specific RLX2-IHx UDP management packets.<br>• Adds a new web control to disable/enable telnet.<br><br>**Resolved issues from RLX2_v0040A_R:**<br>• Improves operation when many RLX2-IHx Access Points are on the same channel within range of each other, under very high load conditions. Limiting the negotiated MAC Contention window and staling of backlogged management frames now allows roaming to proceed normally under these conditions.<br>• Adds more checking to detect and clean up "bad events" in the Event buffer. This can occur on a reset where the event buffer was not fully preserved.<br>• Corrects an exception that can occur in the function used to count the number of active bridges connected to all APs using the current SSID.<br>• Now defers all recovery mechanisms of the external supplicant, until after the RLX2-IHx has successfully associated with an AP when using Enterprise WPA/WPA2 Security. Incorrect security settings could previously result in the RLX2-IHx resetting within 2 minutes if it could not connect to an AP.<br>• Beacon frames are now transmitted at highest Basic Rate configured instead of at 6 Mb/s.<br>• Improves roams under very high loads where the roam 'start' was being excessively delayed flushing any pending data packets to the current parent. Now limits the backlog of packets at the radio interface without reducing performance. |
| RLX2_v0040A_R | 18-Aug-2023 | **New Features/Improvements from RLX2_v0040_R:**<br>• Adds SNTP support to sync the RLX2-IHx's system time to an external SNTP Time Server.<br>• Adds Syslog support which sends key event messages to an external Syslog Server.<br>• Adds a new *Parent Selection RSSI* threshold control to prevent selecting an AP/Master whose RSSI is weaker than the threshold value.<br>• Improves the initial forced password change that is set to defaults by disabling the **Apply** button until the new password has been entered and the main web landing page is visible.<br>• Adds support to have the RLX2-IHx Identify itself by flashing its LEDs on a command from the IH Browser utility.<br>• Adds support to allow the IH Browser to change the channel used by the RLX2-IHx in Master mode.<br>• Extends the modes of the *ARP Proxy* feature by adding a choice of **Allow** or **Filter** when enabled, with the Allow option propagating the ARP Request if the ARP cannot be resolved.<br>• Now uses the presence of data frames heard from an AP while scanning a channel to add that AP to the Scan table. |

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| | | • In *Bridging Client* mode, periodically pings the default gateway to ensure the RLX2-IHx's ARP entry is refreshed on the Infrastructure. Certain systems would stop sending PLC data to the RLX2-IHx until the staled ARP entry was resolved.<br><br>**Resolved issues from RLX2_v0040_R:**<br>• Fixes the configuration of the serial port *Baud Rate* on Series D RLX2-IHx.<br>• Fixes code that was falsely identifying received packets as "replayed" and thus discarding them. This occurred with 3rd party AP Infrastructures under very high packet rate loads.<br>• Adds additional checking and cleanup of *Event Log* entries to ensure they are not corrupted before being delivered.<br>• Limits the max data rate used for Management and EAPoL frames to 24 Mbps.<br>• Adds the RLX2-IHx **Name** to DHCP requests in Series D RLX2-IHx's. |
| RLX2_v0039_R | 7-Oct-2022 | **New Features/Improvements from RLX2_v0038D_R:**<br>• Adds support for PROFINET in NAT mode. It is now possible to have production cells or AGVs all configured the same way to reduce complexity while also supporting PROFINET transmissions.<br>• Extends the collection of Diagnostic data in the Event log.<br>• Improves support for Fast Roaming in environments where the RF Medium may contain discontinuities such as when using RF Waveguides or Radiating cables.<br><br>**Resolved issues from RLX2_v0038D_R:**<br>• Fixes interoperability issues with Hirschmann BAT867 products when RLX2-IHx is in Client mode.<br>• Fixes an issue to allow an RLX2-IHx mode change to Repeater mode via SNMP.<br>• Fixes an issue when in Enterprise security mode on a DFS channel, where a radar hit would cause issues for the RLX2-IHx Master on the new channel.<br>• Fixes an issue that may occur if a 40 MHz 5 GHz band channel was being used. |
| RLX2_v0038D_R | 18-Feb-2022 | **New Features/Improvements from RLX2_v0038C_R:**<br>• Optimizes the "ProSoft-only Client" feature to not respond to Probe Requests from 3rd party wireless devices.<br>• Includes the RLX2-IHx's "Radio Name" in its DHCP Request allowing the DHCP Server to show the name of the RLX2-IHx in its lease table.<br>• Minimizes the loss of high priority frames in hidden node scenarios where very high (>30Mbs) video streams are also present.<br><br>**Resolved issues from RLX2_v0038C_R:**<br>• Fixed the content of the AP Channel Report element in Beacons that continued to include a channel of an RLX2-IHx Master that had powered down.<br>• Corrected the vulnerabilities for the following CVE's:<br>  ○ CVE-2020-26139:<br>  ○ CVE-2020-26146:<br>  ○ CVE-2020-26147:<br>  ○ CVE-2020-26142:<br>• Corrected an issue when MFP and FT are both enabled that was preventing Android-based wireless clients from connecting to the RLX2-IHx.<br>• Prevented a rare long roam case where a management frame was being lost during a roam that occurred under heavy load.<br>• Corrected an issue with the RLX2-IHx ARP processing function that was truncating EtherCAT ARP frames.<br>• Added the Scan Mode setting that was missing from the Settings Template used by the IH Browser. |

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| | | • Added a work-around for Aruba controllers sending ARP frames with spoofed source addresses. |
| RLX2_v0038C_R | 28-Jul-2021 | **New Features/Improvements from RLX2_v0038B_R:**<br>• Increased Master's packet buffering for clients either in power saving mode or performing background scans.<br>• Improvements to Client mode in 3rd Party infrastructures.<br>  o Add support for 802.11v BSS Transition Management.<br>  o Add specific workarounds for issues found in Cisco or Aruba infrastructures.<br>  o Enhance detection of AP's support for Neighbor Reporting and the creation of a channel scan list upon roaming to a new AP.<br>• Added a web control to select whether active or passive scanning is done during a background scan.<br>• Enabled use of STBC in Series C RLX2-IHNF radios.<br>• Improved reaction time in triggering a roam to a new AP/Master upon TX Failures. Now initiates a penalty-triggered roam within 10-15 msec.<br><br>**Resolved issues from RLX2_v0038B_R:**<br>• Now handles cases where Scan Table in RLX2 Repeater/Client being full:<br>  o New APs detected were not being added.<br>  o Current Parent entry was not present in Scan Table.<br>  o Overwrites weakest foreign SSID entry in Scan Table when a new stronger BSS is detected.<br>• Fixed issue found in Repeater mode when Hide SSID was set and Allow Children was set to 'No', that was causing the Repeater to accept associations from another Repeater.<br>• Fixed web edit field for QoS dest Port to allow 5 digit numbers.<br>• Resolved issue where under some unusual channel conditions RLX2 Repeaters' over-DS FT roam was at times failing, causing a long 120msec roam. |
| RLX2_v0038B_R | 12-Mar-2021 | **New Features/Improvements from RLX2_v0038A_R:**<br>• Added support for 802.1x FT Roaming (using Radius) when in Client mode.<br>• Added support for 802.11k and background scanning to look for AP/Masters that are operating on a different channel. New controls are included on the Parent tab of the RLX2-IHx webpages.<br>• Reduced Authenticate and Associate management frame response timeout to a much smaller value allowing for a faster recovery, which may prevent ENIP connection faults.<br>• Modified encoding of the 16-bit value returned in the EIP RLX2-IHx object variable for Tx and Rx throughput. Values greater than 32,000 now use units of 100 kb/s instead of 1 kb/s. It can represent throughput values much greater than the previous 65 Mb/s limit.<br>• No longer sends directed Probe Requests to APs detected with a hidden SSID if their receive signal strength is less than -72 dBm. This prevents the retransmission of the Probe Request.<br><br>**Resolved issues from RLX2_v0038A_R:**<br>• Now marks a DFS channel as active, allowing the RLX2-IHx to send a Probe Request when scanning, even if the detected Beacon does not have a DS element but has an HT Operation element.<br>• Stopped sending a proprietary multicast frame from the RLX2-IHx Ethernet port when the RLX2-IHx is in Client mode. This packet was potentially corrupting the address tables of any local switch or NAT router. This was not an issue when in Bridging Client or Repeater modes. |

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| | | • Corrected issues associated with Personality Module not retaining a MAC Filter list or configured certificates when being used to clone an RLX2-IHx.<br>Now updates the installed certificates' information on startup so it can be displayed on the RLX2-IHx web interface, instead of generic strings. |
| RLX2_v0038A_R | 16-Nov-2020 | **New Features/Improvements from RLX2_v0038_R:**<br>• Add support for 802.11w (Management Frame Protection).<br>• Decrease watchdog timeout from 30 seconds to 3 seconds.<br><br>**Resolved issues from RLX2_v0038_R:**<br>• None |
| RLX2_v0038_R | 6-May-2020 | **New Features/Improvements from RLX2_v0037G:**<br>• Now require that the password be changed on an RLX2-IHx that is reset to factory defaults, for the unit to become operational.<br>• Add a control to allow setting the login timeout value.<br>• Add new login events to the event log.<br>• The Ethernet I/P module has been enhanced with 2 new Class objects. One, a superset of the existing class but with additional status information and a second object, that contains a signature value of key system files.<br>• Add a control to allow the EIP module to be disabled.<br>• New AOI is available from the ProSoft website for the new Class objects.<br><br>**Resolved issues from RLX2_v0037G:**<br>• Correct internal 'time loss' that was occurring under high loads. Most evident in IH Browser bit and pkt rate displayed values. |
| RLX2_v0037G | 23-Dec-2019 | **New Features/Improvements from RLX2_v0037F:**<br>• Added support for dynamically increasing the 802.11 media access contention window based on both the number of wireless transmitters and how busy the current channel is. Reduces the collision and retry rates on networks close to the capacity of the channel.<br>**Note:** This feature is automatically enabled when all Masters on the network with the same SSID and channel are running v37G or later, otherwise operation proceeds as in firmware v37F.<br>• Added support for assigning local RLX2-IHx applications (FTP, ENIP, Telnet, etc.) to different VLANs.<br>• Added support for assigning a 2nd IP Address from a different subnet to the RLX2-IHx. This allows access to RLX2-IHx applications from different VLANs when those VLANs are using different subnets.<br>• Reduced the number of latency prints in the serial log when busy.<br><br>**Resolved issues from RLX2_v0037F:**<br>• Corrected issue where the RLX2-IHx Client association to a 2.4 GHz access point advertising 802.11b rates was failing.<br>• Corrected issue where the RLX2-IHx in Client mode would reset if it did not receive a packet on its Ethernet within 30 seconds of RLX2-IHx powering up. This also applied when the Ethernet MAC Address to be used was configured on the RLX2-IHx Client and the device with that MAC Address was either not connected or not transmitting. |
| RLX2_v0037F | 19-Sep-2019 | **New Features/Improvements from RLX2_v0037E1:**<br>• Added support for the new "Settings" request from IH Browser. The RLX2-IHx responds to this request with all current (non-security related) setting values. The IH Browser (v3.1.4.19 and later) now provides a viewer for these settings as well as the facility to compare the settings of RLX2s in the same network. |

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| | | • Added an ARP Proxy function to the RLX2. When the feature is enabled via a checkbox on the RLX2-IHx web interface, the RLX2-IHx will filter all ARP frames received on its Ethernet, if the IP Address being queried has not been learned on the wireless interface. This feature intends to prevent ARP broadcast bursts that may occur on the wired network from causing interference on the wireless network.<br>• Added web control to force the minimum Tx Rate used by the RLX2-IHx to a higher value. This is useful when retries are mainly caused by collisions and the retries are triggering the MAC rate fallback algorithm. In this scenario using a lower Tx Rate would increase the number of collisions that occur.<br>• Now use directed data frames from the parent in addition to Beacon frames to maintain our "in-sync" status. Since Beacons are broadcast and thus unreliable, the RLX2-IHx Repeater was at times declaring loss of sync which resulted in a Scan, even though it was still receiving data frames from the parent.<br>• Added a Tx Stale time control to the web interface (default value: 60 sec). Now check against this time to discard frames that have not been transmitted for an extended time. This usually occurred if the channel was very busy.<br><br>**Resolved issues from RLX2_v0037E1:**<br>• Now only applies configured IP-related priority map table values to actual IP frames.<br>• Corrected issue when MAC Filtering is enabled and a client device in the list is reset. Initial attempt to re-associate always failed.<br>• Correct issue that stopped using aggregation to a 3rd party client device if that device sent a Delete Block Ack management frame. |
| RLX2_v0037E1 | 7-May-2019 | **New Features/Improvements from RLX2_v0037E:**<br>• Added a check and print if a received frame is detected as missing.<br><br>**Resolved issues from RLX2_v0037E:**<br>• Corrected the *Receive re-ordering timeout* used when a received frame is missing on Series C RLX2-IHNF. This was incorrectly set to 1 second. Now this timeout is the same as in Series B.<br>• Ensured that an ACK frame is truly from our Parent before using its RSSI. Processing the incorrect ACK RSSI was triggering a roam under certain conditions. |
| RLX2_v0037E | 1-Apr-2019 | **New Features/Improvements from RLX2_v0037D:**<br>• Improved recovery sequence that includes a reset of the radio MAC chip, by ensuring any pending frames are always re-queued for transmission.<br><br>**Resolved issues from RLX2_v0037D:**<br>• Corrected *Max Tx Rate MCS0* setting in Series C radios to use the lowest N rate (6.5 Mb/s) instead of lowest 0.11a/g rate of (6 Mb/s).<br>• Prevented the adoption of Virtual Carrier Sense (NAV) durations > what's legitimately valid.<br>• Corrected % retries displayed for Series C radios which often indicated a lower number, as only certain retry sequences were included in the calculation.<br>• Ensured VLAN Local PVID used on a Repeater is obtained from the Parent instead of a locally configured value.<br>• Incorrect usage of the Ethernet PVID for ingress frames from local stack instead of the Local PVID. |
| RLX2_v0037D | 7-Jan-2019 | **New Features/Improvements from RLX2_v0037B:**<br>• The *Parent Selection* algorithm improvements to allow the Repeater to detect a better parent or act quickly on Tx failures and roam earlier to an alternate parent.<br>• Logging improvements to reduce the size of hourly log files, and increase the |

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| | | buffered log duration.<br>• *Tx kbits/s* column in IH Browser now includes broadcasts sent to the BSS.<br>• Reduced recovery time due to external interference.<br>• Improvements while roaming in 3rd Party wireless Infrastructures.<br><br>**Resolved issues from RLX2_v0037B:**<br>• Closed a small window that made 0.1x frames received during a roam falsely look like duplicates, causing a long roam.<br>• Corrected the retransmission counts for Series C radios, which were excessively retrying frames.<br>• Improved robustness of Fast Transition roams while under a high traffic load.<br>• Allows the web interface to operate correctly with Web Browsers using Bit Defender and Port Scanning security software.<br>• Updated handling of Beacon content changes. |
| RLX2_v0037B | 10-Aug-2018 | **Note:** This version can be loaded into both the RLX2-IHNF Series B and Series C models.<br><br>**New Features/Improvements from RLX2_v0036J:**<br>• Added a UAPSD Disable control to turn off uAPSD support for client devices that does not implement it properly.<br>• Extended the squelching of very weak Parent candidates in initial scans to also be done when any Parent Overrides are set.<br><br>**New Features/Improvements from RLX2_v0036J/RLX2_v0037A:**<br>• Added NAT support to the RLX2. Available when the RLX2-IHx is in either Repeater or Bridging Client modes.<br>• Added a control to set a Cost Penalty Factor that adjusts the sensitivity of the parent cost algorithm to Tx Failures.<br>• Added a Tab on the web interface showing the version of various RLX2-IHx firmware components.<br>• When 'Secure Bridging' option is enabled, RLX2-IHx will now not respond to Probe Requests from 3rd party client devices.<br>• Reduced recovery time of any stuck condition on the transmitter by 40%.<br><br>**Resolved issues from RLX2_v0036J:**<br>• Corrects issue where an Apply from the web interface would fail because the posted string was too long. This would occur if both the VLAN and QoS tables were enabled and configured with multiple entries.<br><br>**Resolved issues from RLX2_v0036J/RLX2_v0037A:**<br>• Now allows the RLX2-IHx in a Client mode to roam in 3rd party infrastructure that is using Enterprise level encryption.<br>• Corrects two cases that resulted in a watchdog reset of the RLX2-IHx.<br>• Web interface now prevents invalid characters from being entered into edit fields. |
| RLX2_v0037A | 8-Feb-2018 | **Note:** This version can only be loaded into the RLX2-IHNF Series C model. A load on any Series B model will be rejected.<br><br>**New Features/Improvements:**<br>• Added a UAPSD Disable control to turn off uAPSD support for client devices that does not implement it properly.<br>• Extended the squelching of very weak Parent candidates in initial scans to also be done when any Parent Overrides are set.<br><br>**Resolved issues:**<br>• Corrected issue where an Apply from the web interface would fail because the posted string was too long. This would occur if both the VLAN and QoS tables were enabled and configured with multiple entries. |

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| RLX2_v0036J | 8-Nov-2017 | **New Features/Improvements:**<br>• Added a PTP filter control to web interface. When enabled filters all PTP packets received on the unit's Ethernet interface.<br>• Adjusted signal strength LED thresholds when in Repeater mode for 2 and 3 LEDs from -68dBm and -60dBm to -67dBm and -57dBm respectively.<br>• Increased the reliability of roams occurring at low signal levels.<br>• Added a Blackout disable checkbox to the web interface. When checkbox is checked any blackout values assigned to a parent candidate are ignored. This addresses case where there was only one parent candidate in range so a blackout assigned due to any connection issue would cause the Repeater to not attempt a re-connect with the parent until blackout expired.<br>• Improved error recovery mechanisms.<br><br>**Resolved issues:**<br>• Implements a fix for the KRACK Attack on WPA/WPA2.<br>• Fixes the *Scan* feature to ignore very weak parent candidates. |
| RLX2_v0036H1 | 30-Jun-2017 | **Official release firmware for the –JP model for Japan:**<br>• Tx Power corrected in lower DFS channels to comply with Japanese regulations.<br><br>**Note:** The –JP model includes 3 additional DFS channels in the DFS Mid band |
| RLX2_v0036H | 28-Apr-2017 | **New Features/Improvements:**<br>• Adds the ability to extract the RLX2-IHx configuration via the web interface.<br>• Adds support for the *–JP* model for Japan.<br>• Now accepts the upload of a new "config" image type as part of a firmware combo image.<br>• Now supports "Fast" roaming while SSID is hidden on Masters. |
| RLX2_v0036G_R | 31-Jan-2017 | **New Features/Improvements:**<br>• Addition of new *Cable Break Detection* feature which allows Masters to detect a break in the Radiating cable between them and report this event via an SNMP Trap.<br>• ROMAP.mib file has been updated with new parameters for the *Cable Break Detection* feature.<br>• New Cable Break Events are now output to the RLX2-IHx Event Log.<br>**Note:** This requires IH Browser version 3.1.3.12.<br>• Input checking security improvements to web interface.<br>• Adds dynamic RTS/CTS and tweaks to Tx Rate Backoff mechanism to ensure high throughput levels can be maintained in a multi-Master radiating cable Fast Roam environment.<br>• Improve recovery time when connection to current Parent RLX2-IHx is lost<br>• Improvements to ensure a fast roam when a Repeater roams from one Repeater to another.<br><br>**Resolved issues:**<br>• Channel and Band values submitted via an SNMP write are now qualified before being adopted.<br>• Changes made to SNMP controls on web interface are now saved.<br>• Changes made to 2 Serial App controls on web interface were not being saved.<br>• Removed WEP option when in 802.11n mode as WEP is disallowed in the 802.11 standard for 802.11n.<br>• Corrected operation of the MAC Filter Addresses feature.<br>o Addresses in filter table are now cleared on a reset to Defaults.<br>o If Filter was disabled but client device had been previously added to table, would not let device Associate. |

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| | | ○ Client that was in Filter table but associated to a peer RLX2-IHx of this unit (Ethernet or Radio) would not become active when client roamed to this unit.<br>• **CANCEL** button on web interface was not working on FireFox web browsers.<br>• Repeater would not roam between Masters that had a different setting for the *FT Disable* control.<br>• Clean up of Event IDs 66 and 94 and their usage.<br>• A 3rd Party wireless Client that manually disconnected from the RLX2-IHx was sometimes not able to reconnect to same unit. |
| RLX2_v0036E1_R | 31-Oct-2016 | **Resolved issues:**<br>• Corrected an issue introduced in v0036 that could cause a Master to reset when simultaneously handling high data loads from multiple child Repeaters, while other child Repeaters are roaming to or away from it. |
| RLX2_v0036E_R | 23-Sep-2016 | **Resolved issues:**<br>• Improved performance of RLX2-IHx access point with 3rd party clients. |
| RLX2_v0036D_R | 12-Sep-2016 | **New Features/Improvements:**<br>• Improved roaming performance in non-FT Alt Channel roam applications.<br><br>**Resolved issues:**<br>• Fixed issue related to Alt Roaming.<br>• Fixed issue with antenna diversity function to improve receive rates. |
| RLX2_v0036C_R | 19-Jul-2016 | **New Features/Improvements:**<br>• **Tabbed Web Interface**<br>○ Replaces all pop-up configuration windows with tabs on main page.<br>○ Allows all settings to be made prior to saving changes by clicking **APPLY CHANGES**.<br>• **Bridging Client Mode**<br>○ New client mode allows the RLX2-IHx to associate to 3rd party Access Points and allow the bridging of multiple Ethernet devices on its Ethernet. **Note:** Previous Client Mode only allowed one Ethernet device.<br>• **Roam Time Improvements**<br>○ Reduces roam time to < 10 msec under normal conditions when roaming on same channel.<br>○ Roams are now-near hitless without data loss. Data is buffered during a roam and delivered after roam is complete.<br>○ Adds new Roam events to the Event Log.<br><br>• **EtherNet/IP and Modbus Agent**<br>○ Adds EtherNet/IP and Modbus agent to allow read-only access to common parameters and status of the RLX2-IHx.<br>• **Hardware Key Cache**<br>○ Hardware Key cache extended to 124 non-TKIP entries. TKIP entries are still limited to 28.<br><br>• **VLAN Web Tab**<br>○ Increases number of VLAN IDs supported on webpage from 10 to 15.<br><br>**Resolved issues:**<br>• Closes several data loss leaks that could occur during a fast roam.<br>• Improves the updating of IGMP consumers after a roam to ensure implicit data continues without interruption.<br>• Corrects the 802.11e AC parameters used for QoS to match the recommended defaults in the 802.11 standard. |

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| | | • Improves handling of lost 802.11 Mgmt frames during and immediately after a roam in harsh environments. It was causing faults to occur ranging from radio Tx queues getting stuck, to excessive delays in re-establishing an Association to a parent Bridge.<br>• Corrects several webpage interface anomalies; **CANCEL CHANGES** button, **CHANGE PASSWORD** input sanity checks, links in the Parent Tab for Roam Threshold and Parent Margin brought up incorrect on-line help page, operation on –W and –WC watertight models, S/N value on main Info page was incorrect.<br>• Now issues the correct Event ID to the event log for Re-Assoc type frames.<br>• Now handles an extended duration, loss of telnet communication to serial data log. If buffer is filled before telnet data could resume, the interface becomes inoperative.<br>• Reconfigures internal Ethernet switch to not process VLAN IDs 1, 2, 3 and 5. With the VLAN feature disabled, VLAN-tagged packets with these VLAN IDs were being filtered from the data stream.<br>• Sets debug prints in the EtherNetIP/Modbus module to OFF by default. |
| RLX2_v0035J_R | 25-May-2016 | **Resolved Issues:**<br>• Radar detected after initial CAC would cause the unit to reset, deferring the switching to an alternate channel by 30 to 90 seconds during next CAC period.<br>• Correct algorithm that picked an alternate channel on detecting radar, which was only picking channels that didn't support 40 MHz. |
| RLX2_v0035H_R | 15-Apr-2016 | **New Features/Improvements:**<br>• **'Parent Selection'** - Now includes transmit failures as a factor in calculating the 'Best Parent' for roaming purposes.<br>• **Repeater Link Failures** - Improvements to resolve link failures to the current Parent faster, and ensures a new Parent is selected, if available.<br>• **VLAN** - Increase the number of VLANs that can be configured via the RLX2-IHx web interface from 10 to 15.<br><br>**Resolved Issues:**<br>• Now recovers properly from certain frame losses that could occur when roaming under poor RF conditions.<br>• Fixed an issue with a Telnet connection to the RLX2-IHx's serial log that could prevent a subsequent connection once the initial Telnet session was closed.<br>• Certain received Ethernet packet's priority values were incorrectly interpreted.<br>• Corrects the infrequent occurrence of an issue that was adding 1 second to the RLX2-IHx's roam's time. |
| RLX2_v0035G_R | 7-Oct-2015 | • Changed beacon period to optimize 3rd party client support<br>• Fixes for the hardware key cache usage in the radio card and Authenticator for networks with more than 26 nodes<br>• Fixes issue where the Ethernet interface didn't start or was detected<br>• Fixes a Web server bug where QoS default priority variable was not written to flash |
| RLX2_v0035F_R | 4-Jun-2015 | • Ensures any permanent node is re-added to the Address Table if the entry is "Pre" deleted. This fixes an issue that was introduced in v0035A. |
| RLX2_v0035E_R | 26-May-2015 | • Ignores very weak parent candidates after a full scan. Uses a threshold value that starts at -70 dBm. If no parent is selected, the threshold is decreased by 4 dB and a new scan is done. The threshold is reset to -70 on a transition from connected to scanning.<br>• Fixes an issue found in "alt channel" roaming where the RSSI of the new parent |

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| | | scan entry created had a very low value, just prior to the roam. Due to RSSI averaging, the RSSI was still below the roam threshold when the first 'roam check' occurred after the roam, and another roam would be triggered. |
| RLX2_v0035D_R | 12-Mar-2015 | • Fixes an issue so it does not use the age of a scan list entry when not connected to a parent.<br>• Fixes an issue that was causing packets to go out at 11Mb/s when the Max Supported Data rate control was set to MCS2, 1 or 0. |
| Previous Revisions | - | • Please contact ProSoft Technical Support for information on previous RLX2-IHx revisions |

# 2 Support, Service & Warranty

## 2.1 Contacting Technical Support

ProSoft Technology, Inc. is committed to providing the most efficient and effective support possible. Before calling, please gather the following information to assist in expediting this process:

1. Product Version Number
2. System architecture
3. Network details

If the issue is hardware related, we will also need information regarding:

1. Module configuration and associated ladder files, if any
2. Module operation and any unusual behavior
3. Configuration/Debug status information
4. LED patterns
5. Details about the interfaced serial, Ethernet or Fieldbus devices

| **North America (Corporate Location)** | **Europe / Middle East / Africa Regional Office** |
|---|---|
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| **Latin America Regional Office** | **Asia Pacific Regional Office** |
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For additional ProSoft Technology contacts in your area, please see:
www.prosoft-technology.com/About-Us/Contact-Us

## 2.2 Warranty Information

For details regarding ProSoft Technology's legal terms and conditions, please see:
www.prosoft-technology.com/ProSoft-Technology-Legal-Terms-and-Conditions

For Return Material Authorization information, please see:
www.prosoft-technology.com/Services-Support/Return-Material-Instructions