



IPR100 Product Family

Release History

Date: 23 May 2008

Document Number: IPR100RN Revision	Australian		International	
IPR100 Batch	108120	3.04	108123	3.04.02i
IPR110Plus Batch	108121	3.04	108124	3.04.02i
IPR120 Batch	108122	3.04	N/A	

Introduction

This document contains the release notes for IPR100 Product Family version 3.04. The following sections describe the release in detail and provide other information that supplements the main documentation.

The IPR100 product family are all based on a single code base, so all changes are recorded in this document to keep track of changes.

IPR Family Revision History

Version 3.04 / 3.04.02i

IPR120

- Fixed condition that caused loss of control if a single switch was operated quickly
- IPR120 will now change from foreground/background if switch is operated while PTT is depressed

IPR110Plus

- Implemented Radio Channel Change functionality for Codan and Spectra radios
- Fixed bug that would cause web interface to freeze if the SIP functionality was disabled and the SIP connections web page is accessed
- Add to “web status” page a last SELCALL transmitted to the
- Fix bug that doing a reset while in technician mode would display a “password required” error while the IPR was resetting

IPR100

- Fixed incompatibility with hardware revisions < 2.1
- Fixed bug that would cause web interface to freeze if the SIP functionality was disabled and the SIP connections web page is accessed
- Add to “web status” page a last SELCALL transmitted to the
- Fix bug that doing a reset while in technician mode would display a “password required” error while the IPR was resetting

Version 3.03

IPR120

- Added to “web status” page the current state of the 960-ES switches, sip connections and busy/ptt signals
- Fixed bug where holding the PTT button and changing the state of 960-ES switches could confuse the IPR120
- Fixed bug that caused the 960-ES and IPR120 communication to get out of sync, resulting in the LED's on the IPR120 not working correctly.
- When ALL switches are off, disconnect ALL active SIP connections
- Add Console settings page to technician mode
- Fix bug that doing a reset while in technician mode would display a “password required” error while the IPR was resetting
- Add to “web status” page a last SELCALL transmitted to the

Version 3.02

All Products

- Fixed problem where attempting to resolve a invalid IP DNS or mDNS address could cause audio to “stutter” and the web interface to stop responding
- Fixed problem where DTMF detector rejecting an invalid tone could enable audio transmit when no mute present

IPR100Plus / IPR120

- Fixed incorrect model information on UPNP for IPR120 and IPR110PLUS

Version 3.01 / 3.01.02i**All Products**

- Completed testing and functionality of the IPR family
- New and improved web interface, including Advanced / Basic Menus
- support for multiple user levels for the web interface (user, technician and supervisor)
- support for SIP for dynamic connections
- support for Quality of Service differentiated packets
- Improved support for DHCP
- uPnP support - IPR devices will show up in Windows Network neighbourhood.
- MDNS support. IPR devices can use “names” without a DNS server
- SNMP
- support for redundant DNS servers
- support for syslog protocol for debug / status messages

IPR110

- Support for AES256 bit encryption. (not available in the International version).
- Support for SIP servers and SIP phones.
- Support for controlling SIP connections from SELCAL or DTMF tone sequences
- Support for radio channel change control for Spectra and Codan radios.

Version 3.00.Beta

- First release incorporating multiple products
- First release incorporating SIP functionality
- Advanced/Basic menu functions
- uPnP and mDNS support
- Improved CTCSS web page
- Improved SELCAL functionality

Planned Feature

This is a list of functions that are planned for future releases

- SNMP reporting of connection status
- SNMP based control of SIP connections
- Configurable RTCP “keep-alive” support
- TFTP Configuration file upload

Known Issues

- If a unit is configured to use DHCP, but no Ethernet link is present (i.e. Ethernet cable is unplugged). The unit stays in the boot loader mode until the Ethernet link is established
- This software release requires version 3.00.00 of the IPR100 boot loader for all the DHCP enhancements to work. It is compatible with older releases of the IPR100 boot loader, however the boot loader should be upgraded for sites where DHCP is to be used.
- When playing SIP status sounds the IPR100/IPR110Plus does not drive PTT, so if the radio is not already transmitting the sound will not be transmitted to the radio.

IPR100 Revision History (Prior to IPR100Plus and IPR120)

This firmware is compatible with **ALL** revisions of IPR100 Firmware.

For IPR100 firmware revisions 1.0 and 1.1 the BUSY output on the Handset port will not work.

This firmware uses AES encryption: Some versions of the IPR100 firmware only include DES encryption, in this case encryption is not compatible.

BATCH 107160 / Version 2.04

- Added radio channel change functionality: Supporting CODAN and Spectra radios
- Changed web interface for entering Input levels to make it clearer
- Fix bug that could under unusual circumstances lead to a DTMF or SELCAL packet being ignored
- Fixed bug with SELCAL Transmit Level. If the user reset to defaults the transmit level will be set to 0 (i.e. No output tones)
- Allowed entry of IP address 0.0.0.0 (for disabling DNS server)
- Selecting the "Exit" link on the menu causes the user to have to re-enter the password to re-log into the IPR100
- For IE 7 and Firefox web browsers the configuration save button will now always be visible (don't scroll off the page). This does not work with IE6 due to limitations in the browser.

BATCH 107113 / Version 2.01

This is a bug fix for version 2.00, all 2.00 sites should be updated to version 2.01

- Fixed race condition in start-up that could stop SELCAL reception from working.

BATCH 107065 / Version 2.00

This is a major firmware upgrade with new features added

- **Added support for DNS** (Domain Name System) for name resolution. I.e. Host names like ipr100.omnitronics.com.au can be used
- **Added “Conference” mode**, which enables multiple IPR100's to be connected together in various configurations.
- **Added Trunk radio audio delay** feature.
- Improved PTT logic for conference and multicast mode to ensure local PTT or BUSY output is in the correct state.
- Changed default device name to be IPR100-#####, where ##### is the device serial number.

BATCH 107045 / Version 1.25

- Fixed DTMF bug that caused digit 0 to be decoded as B (introduced in version 1.22)
- Fix problems with the lead in and lead out timing for both SELCAL and DTMF tones.
- Made IPR100 restart if the configuration is reset to defaults due to a corrupt configuration or if reset using the serial port monitor.
- **The version is compatible with all hardware revisions**

BATCH 107033 / Version 1.24

Release 1.24 is a bug fix for version 1.22 and 1.23.

- Fix bug in 1.23/1.22 which meant it radio mute was ignored in RADIO mode.
- If “Ignore mute” option and VAD is disabled, IPR100 will transmit continuously
- **The version is compatible with all hardware revisions**

BATCH 107007 / Version 1.23

This version is obsolete and should not be used.

Release 1.23 is a bug fix for version 1.22.

- Fix bug in 1.22 which meant it only worked correctly in radio mode
- Added configuration update function. If version 1.22 was loaded into a IPR100 the configuration would reset to defaults. Version 1.23 will not reset to defaults.
- Reset to defaults now sets the IP address to 192.168.0.99 for units with an odd serial number and to 192.168.0.98 for units with an even serial number (to match the documentation).
- **The version is compatible with all hardware revisions**

BATCH 106227 / Version 1.22

This version is obsolete and should not be used.

Release 1.22 is a **low priority** release.

- Add support for DTMF digits A B C and D
- Add support for serial pass through mode to use multicast as well as unicast addresses.
- Fix bug with saving configuration. The bug occurred if the configuration being saved was exactly the same as the configuration on start up.
- Internal optimisation.
- **The version is compatible with all hardware revisions**

BATCH 106156 / Version 1.21

Release 1.21 is a **low priority** release.

- Fix bug that caused hardware to always be identified as revision 2.1
- **This upgrade is required for hardware revision 2.1**
- **The version is compatible with all hardware revisions**

BATCH 106150 / Version 1.20

This version is obsolete and should not be used.

THIS Version contains a bug that will incorrectly identify the hardware revision as version 2.1, it should be updated to version 1.21.

Release 1.20 is a **low priority** release. For most installations this will fix a minor bug that effects audio after saving the configuration.

- Fix bug that caused audio to be disabled whenever the configuration is saved
- **This version is INCOMPATIBLE with hardware revisions other than 1.20**

<i>Note: All revisions older than 1.17 are obsolete and should be upgraded</i>

BATCH 106104 / Version 1.19

Release 1.19 is a **low priority** release. For most installations upgrading will have no effect.

- Improved error handling during DSP startup to retry if a memory error occurs during initial download.
- Added restart if communication with internal DSP fails
- **This upgrade is required for hardware revision 2.0**

BATCH 106092 / Version 1.18

Release 1.18 is a **low priority** release. For most installations upgrading will have no effect.

- Added functionality for in-house testing. No user visible change

BATCH 106081 / Version 1.17

Release 1.17 is a **high priority** release. This version **MUST** be used for ALL installations.

- Fixed serious bug that would cause IPR100 to stop transmitting audio after an indefinite time period. This was due to a memory leak in the VoIP code.

BATCH 106070 / Version 1.16

This version is obsolete and should not be used.

- Fixed serious bug that would cause IPR100 to stop transmitting and/or receive audio after four days.
- Fixed serious bug that would cause IPR100 to restart if receiving audio during startup.
- Minor updates to the web configuration interface.

BATCH 106062 / Version 1.15

This version is obsolete and should not be used.

- Adjust audio levels

BATCH 106058 / Version 1.14

This version is obsolete and should not be used.

- Fixed gains revision 1.13 hardware audio levels
- Added warning to web interface for audio compressor

BATCH 106046 / Version 1.13

This version is obsolete and should not be used.

- Added support for revision 1.13 hardware audio levels
- Fixed audio “pops”
- Added “better” audio samples for diagnostic functions

BATCH 106027 / Version 1.12

This version is obsolete and should not be used.

- Upgraded CTCSS functionality for multiple CTCSS frequencies
- Fixed audio “pops”
- Added “better” audio samples for diagnostic functions

BATCH 106005 / Version 1.11

This version is obsolete and should not be used.

- Added support for Handset Busy output

BATCH 105211 / Version 1.10

This version is obsolete and should not be used.

- First release of production IPR100 Firmware

BATCH 105144 / Version 1.00

This version is obsolete and should not be used.

- Demonstration release of IPR100 Firmware