

WP820 Firmware Release Notes

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FIRMWARE VERSION 1.0.3.6

PRODUCT NAME

WP820

DATE

12/26/2018

FIRMWARE FILE INFORMATION

- WP820 firmware file name: wp820fw.bin

MD5: d09fbfe80f4381c52795c9c5ec50c405

ENHANCEMENT

- Updated web UI tooltips.
- Changed voicemail notification wording from “Ordinary” to “Normal”.

BUG FIX

- Fixed Current call will be put on hold if receiving call from GDS.
- Fixed Device is vulnerable to remote code execution by exploiting a post auth command injection vulnerability.

FIRMWARE VERSION 1.0.3.5

PRODUCT NAME

WP820

DATE

12/16/2018

FIRMWARE FILE INFORMATION

- WP820 firmware file name: wp820fw.bin

MD5: b82b574434e95b7314155b254722470b

ENHANCEMENT

- Added additional home screen on the right for quick access to WiFi/Bluetooth/DND. [ADDITIONAL HOME SCREENS]
- Added additional home screen on the left for notification messages. [ADDITIONAL HOME SCREENS]
- Added PNP 3CX Auto Provision option. [PNP (3CX) AUTO PROVISION]
- Added config provision options to control config file retrieval behavior [CONFIG PROVISION OPTION]
- Added support for softkey customization. [SOFTKEY CUSTOMIZATION]
- Added support for PTT key customization. [PTT KEY CUSTOMIZATION]
- Added LDAP phonebook support. [LDAP PHONEBOOK]
- Added more options for phonebook automatic download interval. [AUTOMATIC DOWNLOAD INTERVAL FOR PHONEBOOK]
- Added support for captive portal. [WIFI CAPTIVE PORTAL]
- Added support for troubleshooting tools. [NETWORK TROUBLESHOOTING TOOLS]
- Added WiFi band selection. [2.4G/5G BAND FOR WIFI]
- Added WiFi warning when WiFi signal is weak. [WIFI SIGNAL WARNING]
- Added SAFE MONITORING FEATURE [SAFE MONITORING FOR RUNNING/NO MOVEMENT/TILT]
- Added SIP header options to disable/enable Privacy Header, P-Preferred-Identity Header, P-Access-Network-Info Header and P-Emergency-Info Header. [ENABLE/DISABLE CERTAIN SIP HEADERS]
- Added support for quick conference during call. [QUICK CONFERENCE DURING CALL]
- Added support to receive video and show video up to 720p. [RECEIVE AND DISPLAY VIDEO FOR SIP CALL]
- Added support for custom ringtone. [CUSTOM RINGTONE]

- Optimized “Auto Config CPT by Region” feature.
- Added port customization for SSH access. [PORT CUSTOMIZATION FOR SSH ACCESS]
- Added support for custom certificate for provisioning [CUSTOM CERTIFICATECUSTOM CERTIFI]
- Added Slovak language support on LCD display.
- Added door bell ring for GDS open door feature
- Renamed menu item “Tools” to “App”
- Added Calculator application under LCD Menu->App->Calculator
- Increased contacts max limit count to 1000. If device is upgraded from old firmware, please reset device to have this take effect.
- Improved time and date display for different format.
- Improved web UI strings and tooltips
- Improved SMS UI and UX
- Updated strings in English and multiple languages.
- Added stutter tone at dialing interface when the account has unread voicemail message.
- Provided support to enable adb to install third-party app to Menu->App using SDK. (SDK documentation will be provided soon)
- Added warning tone when device is low on battery. Device will generate a warning tone once when battery level becomes 15% and 5%.
- Added auto bootup when placed on charger if the device was powered off abnormally (e.g., battery too low, battery removed without manual power-off, etc.)
- Improved WiFi connection status update and connection performance.
- Improved GuestLogin feature for better stability and performance.
- Improved phone UI for user-friendly purpose.
- Add option “Enable Noise Shield” [NOISE SHIELD]
- Changed incoming call softkey options from “Accept” “Transfer” “Reject” to “Accept” “Transfer” “Mute” for user friendly purpose.
- Added toast message when WiFi signal is poor.
- Changed sound pressure diagnostic code from *77 to ***77* to avoid conflict with commonly used feature code.
- Added prompt for message sending status after user clicks “Send” for SMS.
- Added support for future hardware revisions.
- Added support to play audio notification beep tone during call to notify users that WiFi connection is lost.
- Added IGMP keep-alive interval [IGMP KEEP ALIVE INTERVAL]
- Added gesture control [GESTURE CONTROL]
- Added default ringtone [DEFAULT RINGTONE]
- Added notification tone [NOTIFICATION TONE]

BUG FIX

- Fixed Unable to connect to hidden SSID in WiFi auto config
- Fixed WiFi autoconfig is unable to connect to hidden SSID
- Fixed Master connection sometimes fails after slave device enters ***801* for WiFi autoconfig deployment
- Fixed When account has ringtone set to silent on web UI, the handset LCD displays unknown ringtone
- Fixed There is only one remote party's recording for 3-way conference call
- Fixed Call interface disappears after screen off/on again if the device is in WiFi details interface while answering incoming call
- Fixed Handsfree button shouldn't take effect when user hasn't logged in under guest mode
- Fixed Initiating transfer during two-way call causes device randomly stuck in calling state for both calls
- Fixed Layer 3 QoS for SIP and audio doesn't apply to IPv6 for SIP call
- Fixed Alarm doesn't stop after 1 min if setting up repeating alarm and modifying system date
- Fixed LCD shows transfer failed after blind transfer
- Fixed Transfer logic is incorrect after the transfer target clicks to transfer while DUT is ringing
- Fixed Device displays no response when the remote party rejects IP call
- Fixed Device does not hear the music of MOH when hold in conference
- Fixed Device does not receive Emergency Intercom when device already has 1 SIP call ringing and active PTT intercom
- Fixed No error prompt under lock screen if the device is overcharged with 12V power
- Fixed Device generates a "pu" sound randomly after entering digits and then pressing power button
- Fixed Perform search on web UI cannot jump to account related options
- Fixed Pressing any button shouldn't trigger response during upgrading process
- Fixed LCD softkey label should "return" after restarting WiFi in WiFi roaming mode
- Fixed There should be no dial tone after entering number in handsfree speaker mode after device has mute on
- Fixed Unable to remove multicast paging address in web page
- Fixed Device shows 24hour format when setting the time after disable 24hour format for time display
- Fixed Device should not require password to reset again after reboot from reset which already requests password
- Fixed WP820 should power on automatically when placed on cradle
- Fixed VPN gateway and DNS shows empty information in LCD network status interface
- Fixed Device status shows gateway as 0.0.0.0 in SSH interface
- Fixed The green icon for the Bluetooth device is still displayed when Bluetooth is disconnected
- Fixed "Bypass Proxy For" doesn't take effect after reboot
- Fixed Phone vibrates upon receiving SMS or weak WiFi signal when vibration mode is off

- Fixed After enabling DND, there is no beep when there is a second call
- Fixed Web UI option "Bypass Proxy For" doesn't support multiple addresses
- Fixed After enabling guestlogin and receiving phone call, the call interface is not displayed
- Fixed Guest login option takes effect without reboot
- Fixed Device does not automatically download contacts after reboot
- Fixed When opening contacts/blacklist during SIP account settings, Delete key becomes Return key after back to SIP account settings
- Fixed The filter character set doesn't filter the number sent by SMS
- Fixed After creating message group with 500 contacts in it, if clicking "Return", the return time takes too long
- Fixed The upgrading processing logic is incorrect when battery is low
- Fixed When device already has 500 SMS and a new SMS draft is created, the new draft will be deleted automatically
- Fixed Some menu items doesn't support pressing UP key to loop to last item
- Fixed Phone has no pop-up prompt upon receiving SMS
- Fixed Phone doesn't automatically restart when provisioning with a value that require reboot
- Fixed Sometimes call history will pop up automatically when there is a missed call
- Fixed LCD doesn't go back to the WiFi main interface directly after pressing return button in WiFi settings menu
- Fixed WiFi list still displays WiFi SSID that does not exist after clicking "Refresh"
- Fixed Device may power off when charged by charging stand
- Fixed WiFi security settings on web UI doesn't take effect after reset
- Fixed Entering wrong password to connect WiFi with WEP encrypt method will not prompt authentication failure
- Fixed Setting 12-hour format doesn't show AM or PM in home screen
- Fixed The firmware upgrade/configuration file detection option name is incorrect
- Fixed Registration failure if device has turned on "Enable SIP OPTIONS Keep Alive"
- Fixed The name of the Bluetooth details interface is incorrect
- Fixed Some strings do not display completely on web UI
- Fixed Transfer interface should be removed when device has one SIP call and one multicast paging call
- Fixed SIP account doesn't automatically register after device switches to "Prefer IPv6"
- Fixed Device enters the wrong voicemail ID interface when there are two SIP accounts
- Fixed During WiFi connection, if pressing "Connect" it will forget the SSID
- Fixed Device can save two channels with the same multicast address and port in multicast paging page
- Fixed SIP registration is unable to use the network preferred protocol properly
- Fixed VPN icon disappears after restarting device

- Fixed WP820 could not do attended transfer before answer for Broadsoft platform
- Fixed Broadsoft IOT: device doesn't respond to configuration file download authentication request
- Fixed When recording file name is too long, it will display in a new line
- Fixed When device is in sleep mode, turn off and turn on AP, the device will not register SIP account after it connects to AP
- Fixed Switching "Preferred Internet Protocol" shouldn't take effect without reboot
- Fixed DTMF doesn't take effect when responding to 183 from SIP server
- Fixed Unable to forget WiFi that is already connected in WiFi settings
- Fixed WiFi list shows two identical SSID
- Fixed Battery icon is wrong when shutdown and charging
- Fixed Device doesn't send BYE when emergency paging is received during attended transfer
- Fixed Device system time does not update after removing battery, putting back battery and going into sleep mode
- Fixed Device sometimes cannot perform attended transfer after receiving emergency paging during transfer interface
- Fixed Device sometimes cannot make call after receiving emergency paging during transfer interface
- Fixed WiFi details display incorrectly when device is set to use static IP and preferred network protocol is "IPv6 only"
- Fixed OpenVPN icon disappears after enabling OpenVPN and rebooting device
- Fixed New call on device is abnormal after transfer
- Fixed Dial interface cannot dial out using OK key after entering numbers
- Fixed Device sometimes switches between charging and not charging when placed on charging stand
- Fixed Multicast paging should add prompt tone upon receiving multicast paging call
- Fixed Unable to hold or unhold after multiple frequent switching between two calls
- Fixed Pressing handset button and then pressing back will have a chance to hear a loud "Du" sound from speaker
- Fixed WP820 SIP registration failed when transport protocol is TLS
- Fixed Intelligent control option is not displayed after pressing DOWN button multiple times
- Fixed Device call interface shows abnormally when second callee answers call while device is in transfer interface
- Fixed Device cannot initiate paging in default mode when channel x is configured (x is not 1)
- Fixed When pressing dial key, the sound should always come from the speaker
- Fixed After pressing handsfree button to enter dialing interface and pressing # to redial, audio comes from handset instead of handsfree speaker

KNOWN ISSUES

- WEP is not supported for WiFi encryption due to security concern. Only WPA/PSK is supported.

- 802.1x EAP encryption is not supported.
- WebUI access using IE8 browser is not supported.
- USB storage device in exfat format is not supported on WP820 anymore.

NEW FEATURES OVERVIEW

This section lists major new features and describes how to use it from the user's point of view.

LDAP PHONEBOOK

- **Web Configuration**

This option can be found on web UI under Applications->LDAP Phonebook.

LDAP Phonebook

| | |
|---|---|
| Connection Mode ? | <input type="text" value="LDAP"/> |
| Server Address ? | <input type="text"/> |
| Port ? | <input type="text" value="389"/> |
| Base DN ? | <input type="text"/> |
| User Name ? | <input type="text"/> |
| Password ? | <input type="password"/> |
| LDAP Name Attributes ? | <input type="text"/> |
| LDAP Number Attributes ? | <input type="text"/> |
| LDAP Name Filter ? | <input type="text"/> |
| LDAP Number Filter ? | <input type="text"/> |
| Search Field Filter ? | <input type="text" value="All Filter"/> |
| LDAP Display Name Attributes ? | <input type="text"/> |
| Max Hits ? | <input type="text" value="50"/> |
| Search Timeout (s) ? | <input type="text" value="4"/> |
| LDAP Lookup For Dial ? | <input type="checkbox"/> |
| LDAP Lookup For Incoming Call ? | <input type="checkbox"/> |
| LDAP Dialing Default Account ? | <input type="text" value="Default"/> |

- **Functionality**

WP820 supports obtaining contacts information from a LDAP server. LDAP contacts can be viewed on handset LCD via the contacts menu or phonebook softkey.

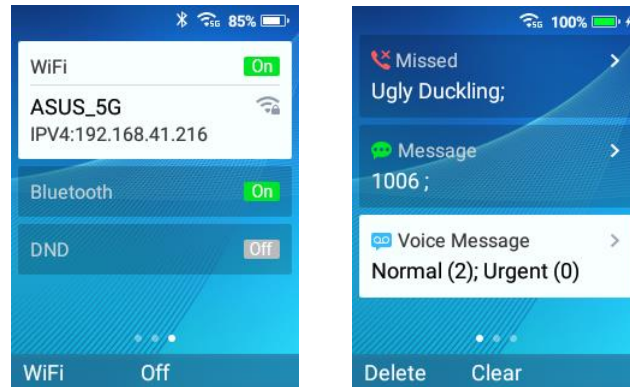
- **New P-value**

| P-value | Description | Value range | Default |
|-------------------|---------------------------------|--|---------|
| P8037 | Connection Mode | 0 – LDAP 1 - LDAPS | 0 |
| P8020 | Server Address | String | N/A |
| P8021 | Port | 1 – 65535 | 389 |
| P8022 | Base DN | String | N/A |
| P8023 | User Name | String | N/A |
| P8024 | Password | String | N/A |
| P8028 | LDAP Name Attributes | String | N/A |
| P8029 | LDAP Number Attributes | String | N/A |
| P8026 | LDAP Name Filter | String | N/A |
| P8025 | LDAP Number Filter | String | N/A |
| ldap_search_field | Search Field Filter | 0 - All filter 1 - Name Filter 2 - Number Filter | 0 |
| P8030 | LDAP Displaying Name Attributes | String | N/A |
| P8031 | Max Hits | 0 – 32000 | 50 |
| P8032 | Search Timeout | 0 – 180 | 4 |
| P8034 | LDAP Lookup For Dial | 0 – No 1 – Yes | 0 |
| P8035 | LDAP Lookup For Incoming Calls | 0 – No 1 – Yes | 0 |
| P22039 | LDAP Dialing Default Account | 0 – Default 1 – Account 1 2 – Account 2 | 0 |

ADDITIONAL HOME SCREENS

- **LCD Configuration**

This option can be found on handset UI home screen.



- **Functionality**

On handset home screen:

- Press right arrow to quickly check the WiFi/Bluetooth/DND status. Here you can quickly turn on and off WiFi, Bluetooth or DND using the middle softkey. The left softkey is a shortcut to jump to selected menu.
- Press left arrow to view notifications. The notification screen shows missed calls, voice messages, SMS and other notifications. Delete - Removes the selected notification. Clear - Removes all the notifications on the screen.
- Press end call button to return to the default home screen.

PNP (3CX) AUTO PROVISION

- **Web Configuration**

This option can be found on web UI under Maintenance->Upgrade->Provision

PNP Feature

PNP (3CX) Auto Provision

- **Functionality**

When enabled, it allows 3CX plug and play provisioning and UCM zero config provisioning.

- **New P-value**

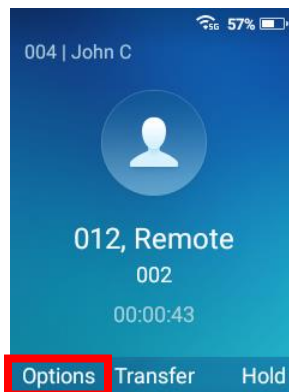
| P value | Description | Value Range | Default |
|---------|--------------------------|-------------------|---------|
| P1414 | PNP (3CX) Auto Provision | 0 – No 1 – Yes | 1 |

QUICK CONFERENCE DURING CALL

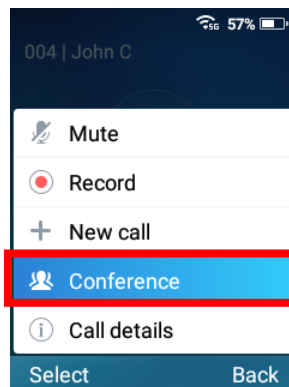
- **Functionality**

Steps to perform quick conference during a call:

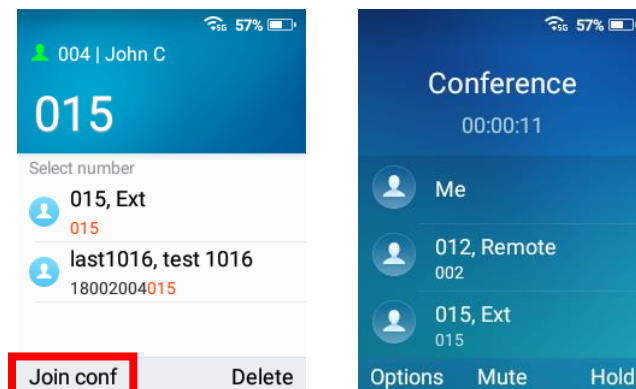
1. During a call, press the left softkey “Options” key to bring up the available options.



2. Use the navigation key to select “Conference” to create a conference.



3. Use the dial pad to enter the extension for the party to invite to the conference and then press “Join conf.” The conference will automatically be bridged before the third party answers the call.



SOFTKEY CUSTOMIZATION

- **Web Configuration**

This option can be found on web UI under System Settings->Preferences->Button Customization

Soft Key

| | |
|----------------------------|--------------|
| Main Screen Left Softkey | Call History |
| Main Screen Center Softkey | Menu |
| Main Screen Right Softkey | Settings |
| Call Screen Left Softkey | Option |
| Call Screen Center Softkey | Transfer |
| Call Screen Right Softkey | Hold |

- LCD Configuration**

This option can be found on the handset UI under Settings->Basic Settings->Button customization->Soft key

| Soft key | |
|---------------|--------------|
| Home screen | |
| Left button | Call History |
| Center button | Menu |
| Right button | Settings |
| In call | |
| Left button | Options |
| Center button | Save |
| Right button | Back |

- Functionality**

Users can customize the functions assigned to the softkey that will be used on the home screen or call screen. On the home screen, the softkey can be customized to one of the following options: Call History, Menu, Settings, Contacts, Voicemail or DND. On the call screen, the softkey can be customized to one of the following options: Options, Transfer, Hold. Mute, New call, Conference or Record. **Note:** One of the call screen softkey must be “Options.”

- New P-value**

| P value | Description | Value Range | Default |
|---------|-------------|-------------|---------|
| | | | |

| | | | |
|--------|----------------------------|---|---|
| P22252 | Main Screen Left Softkey | 0 - Call history 1 – Menu 2 – Settings 3 – Contacts 4 – Voicemail 5 - DND | 0 |
| P22253 | Main Screen Center Softkey | 0 - Call history 1 – Menu 2 – Settings 3 – Contacts 4 – Voicemail 5 - DND | 1 |
| P22254 | Main Screen Right Softkey | 0 - Call history 1 – Menu 2 – Settings 3 – Contacts 4 – Voicemail 5 - DND | 2 |
| P22255 | Call Screen Left Softkey | 0 – Option 1 – Transfer 2 – Hold 3 – Mute 4 - New Call, 5 – Conference 6 – Record | 0 |
| P22256 | Call Screen Center Softkey | 0 – Option 1 – Transfer 2 – Hold 3 – Mute 4 - New Call, 5 – Conference 6 – Record | 1 |
| P22257 | Call Screen Right Softkey | 0 – Option 1 – Transfer 2 – Hold 3 – Mute 4 - New Call, | 2 |

| | | | |
|--|--|------------------------------|--|
| | | 5 – Conference 6 – Record | |
|--|--|------------------------------|--|

PTT KEY CUSTOMIZATION

- Web Configuration**

This option can be found on the web UI under System Settings->Preferences->Button customization

Multi-function Button

PTT/Paging

Short press to access PTT/Paging settings, hold the key to initiate PTT/Paging call

SAFE/Panic Call

Short press to open status page, long press to trigger Panic Call

Mute

Mute incoming call, mute/unmute during a call

- LCD Configuration**

This option can be found on the handset UI under Settings->Basic Settings->Button customization->Multi-function button

Multi-function button

PTT/Paging ✓

SAFE/Panic Call
Short press to view statu..

Mute
Mute incoming call, mute..

Select
Back

- Functionality**

Users can customize the multi-function key on the left side of WP820 to the preferred function. The multi-function key can be programmed for PTT/Paging, SAFE/Panic Call or Mute. **Note:** The mute key is only valid during a call. If not set to “PTT/Paging,” the WP820 can only receive PTT and page.


- New P-value**

| P value | Description | Value Range | Default |
|---------|-----------------------|---|---------|
| P22258 | Multi-function button | 0 – PTT/Paging 1 – Mute 2 – SAFE/Panic Call | 0 |

AUTOMATIC DOWNLOAD INTERVAL FOR PHONEBOOK

- **Web Configuration**

This option can be found on the web UI under Application->Contacts

Automatic Download Interval 

- **Functionality**

Users can now select 5 mins, 30mins and 1 hour for automatic download interval.


- **New P-value**


| P value | Description | Value Range | Default |
|---------|-----------------------------|---|---------|
| P332 | Automatic Download Interval | 0 – None 5 – 5 min 30 – 30 min 60 – 1 Hour 120 – 2 Hours 240 – 4 Hours 360 – 6 Hours 480 – 8 Hours 720 – 12 Hours | 0 |


SAFE MONITORING FOR RUNNING/NO MOVEMENT/TILT


- **Web Configuration**


This option can be found on the web UI under Value-added Service->SAFE/Panic Call.

SAFE Monitoring Settings 

Panic Call Silent Alarm 

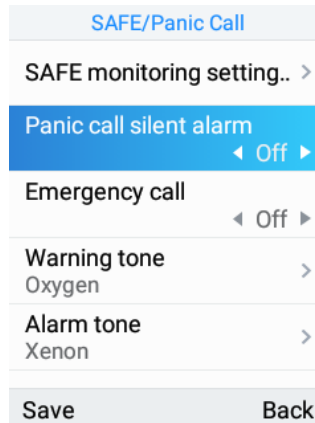
Emergency Call 

Warning Tone 

Alarm Tone 

- **LCD Configuration**

This option can be found on the handset UI under Settings->Advanced Settings->SAFE/Panic Call.



- **Functionality**

SAFE monitoring feature on WP820 will monitor the user's safety situation and trigger an alarm once it detects any unsafe situation. When it detects that the user may be in a dangerous situation such as unable to move, fall, or being chased, the WP820 can quickly alert or initiate an emergency call for timely assistance.

In particular, the phone will automatically prompt a warning alert and message once it detects any unsafe situation. If the user does not cancel the prompt warning message to confirm its safety within the set time, an alarm will be triggered and an emergency call will be initiated (if configured) for assistance.

There are three types of safety detection methods can be set on SAFE monitoring settings:

- **No movement detection**
It detects that the user may be unable to move because of an injury or a coma, etc. Users can configure the duration of the no movement. If it stays no movement longer than the duration, the device will be triggered for detection.
- **Tilt detection**
It detects that the user may be in a state of slipping or falling, etc. Users can configure the sensitivity and timeout for this detection. With higher sensitivity level on tilt status, a relative slight falling action will trigger tilt detection and alert.
- **Running detection**
It detects that user may be in a status of being chased or escaping from a dangerous environment. Users can configure the sensitivity and timeout for this detection. With higher sensitivity level on running status, a slower running speed will trigger the running detection.

To trigger alarm in a silent way during urgent or dangerous situation, configure the Panic Call silent alarm option to be on. The default setting is off. This setting will enable the phone to initiate an emergency call silently. It is mainly used when it is not convenient to play an alarm in a dangerous environment. Users can also press and hold the multi-function keys on the side of the phone to initial an emergency call in silence.

To initiate Emergency Call, users need to set the emergency call number after turning on this feature. The default setting is off.

- **New P-value**

| P value | Description | Value Range | Default |
|---------|-------------------------|---|---------|
| P22259 | Safety Monitoring | 0 – off 1 – on | 0 |
| P22260 | No Movement Sensitivity | 0 – Disable 1 – Level 1 (lowest) 2 – Level 2 3 – Level 3 4 – Level 4 5 – Level 5 6 – Level 6 7 – Level 7 (highest) | 0 |
| P22261 | No Movement Timeout | 5 – 300 | 5 |
| P22262 | Tilt Sensitivity | 0 – Disable 1 – Level 1 (lowest) 2 – Level 2 3 – Level 3 4 – Level 4 5 – Level 5 6 – Level 6 7 – Level 7 (highest) | 0 |
| P22263 | Tilt Timeout | 5 – 300 | 5 |
| P22264 | Running Sensitivity | 0 – Disable 1 – Level 1 (lowest) 2 – Level 2 3 – Level 3 4 – Level 4 5 – Level 5 | 0 |

| | | | |
|--------|-------------------------|--------------------------------------|-----|
| | | 6 – Level 6 7 – Level 7 (highest) | |
| P22265 | Running Timeout | 5 – 300 | 5 |
| P22266 | Snooze Timeout | 0 – 300 | 0 |
| P22267 | Warning Timeout | 5 – 60 | 5 |
| P22268 | Panic Call Silent Alarm | 0 – Off 1 - On | 1 |
| P22269 | Emergency Call | 0 – Off 1 - On | 1 |
| P22270 | Emergency Call Number | String | N/A |

ENABLE/DISABLE CERTAIN SIP HEADERS

- **Web Configuration**

This option can be found on the web UI under Account->Account 1/2-> SIP Settings

Use Privacy Header [?](#) ▼

Use P-Preferred-Identity Header [?](#) ▼

Use P-Access-Network-Info Header [?](#)

Use P-Emergency-Info Header [?](#)

- **Functionality**

Allows users to enable or disable the following SIP header from showing in the SIP messages:

- Use Privacy Header.
- Use P-Preferred-Identity Header.
- Use P-Access-Network Header
- Use P-Emergency-Info Header

- **New P-value**

| P value | Description | Value Range | Default |
|---------|-------------|-------------|---------|
|---------|-------------|-------------|---------|

| | | | |
|--------|--|------------------------------|---|
| P2338 | Use Privacy Header (Account 1) | 0 - Default, 1 - No, 2 - Yes | 0 |
| P2438 | Use Privacy Header (Account 2) | 0 - Default, 1 - No, 2 - Yes | 0 |
| P2339 | Use P-Preferred-Identity Header (Account 1) | 0 - Default, 1 - No, 2 - Yes | 0 |
| P2439 | Use P-Preferred-Identity Header (Account 2) | 0 - Default, 1 - No, 2 - Yes | 0 |
| P26058 | Use P-Access-Network-Info Header (Account 1) | 0 – No 1 – Yes | 0 |
| P26158 | Use P-Access-Network-Info Header (Account 2) | 0 – No 1 – Yes | 0 |
| P26059 | Use P-Emergency-Info header (Account 1) | 0 – No 1 – Yes | 0 |
| P26159 | Use P-Emergency-Info header (Account 2) | 0 – No 1 – Yes | 0 |

RECEIVE AND DISPLAY VIDEO FOR SIP CALL

- Web Configuration**

The video codec option can be found on the web UI under Account->Account 1/2->Codec Settings

Preferred Video Codec

Preferred Video Codec ⓘ

| | | |
|---|--|--|
| <input type="checkbox"/> 0 item Available | <input type="button" value="←"/> <input type="button" value="→"/> <input type="button" value="↑"/> <input type="button" value="^"/> <input type="button" value="v"/> <input type="button" value="↓"/> | <input type="checkbox"/> 1 item Selected |
| | | <input type="checkbox"/> H264 |

Enable Video FEC [?](#)

Enable RFC5168 Support [?](#)

FEC Payload Type [?](#)

H.264 Image Size [?](#)

Use H.264 Constrained Profiles [?](#)

Video Bit Rate [?](#)

SDP Bandwidth Attribute [?](#)

The disable video option can be found on the web UI under Phone Settings->Call Settings

Disable Video Call [?](#)

Other video display features can be found on the web UI under Phone Settings->Video Settings

Video Frame Rate [?](#)

Video Display Mode [?](#)

Enable Frame Skipping in Video Decoder [?](#)

- **Functionality**

WP820 supports one-way video and can receive video up to 720p for SIP call. Currently, the only supported video codec is H264. The video feature can be disabled by enabling “Disable Video Call.”

- **New P-value**

| P value | Description | Value Range | Default |
|---------|------------------------------|-------------------|---------|
| P2393 | Enable Video FEC (Account 1) | 0 – No 1 – Yes | 1 |
| P2493 | Enable Video FEC (Account 2) | 0 – No 1 – Yes | 1 |

| | | | |
|--------|--|--|------|
| P1331 | Enable RFC5168 Support (Account 1) | 0 – No 1 – Yes | 1 |
| P478 | Enable RFC5168 Support (Account 2) | 0 – No 1 – Yes | 1 |
| P26022 | Video FEC Mode (Account 1) | 0 – 0 1 – 1 | 0 |
| P26122 | Video FEC Mode (Account 2) | 0 – 0 1 – 1 | 0 |
| P2394 | FEC Payload Type (Account 1) | 96 - 126 | 120 |
| P2494 | FEC Payload Type (Account 2) | 96 - 126 | 120 |
| P2307 | H.264 Image Size (Account 1) | 9 - 720P 1 – VGA 5 – CIF 4 – 4CIF 0 – QVGA 6 – QCIF | 9 |
| P2407 | H.264 Image Size (Account 2) | 9 - 720P 1 – VGA 5 – CIF 4 – 4CIF 0 – QVGA 6 – QCIF | 9 |
| P26045 | Use H.264 Constrained Profiles (Account 1) | 0 – No 1 – Yes | 0 |
| P26145 | Use H.264 Constrained Profiles (Account 2) | 0 – No 1 – Yes | 0 |
| P2315 | Video Bit Rate (Account 1) | 32 - 32 kbps 64 - 64 kbps 96 - 96 kbps 128 - 128 kbps 160 - 160 kbps 192 - 192 kbps 210 - 210 kbps | 2048 |

| | | | |
|--------|-------------------------------------|--|------|
| | | 256 - 256 kbps 384 - 384 kbps 512 - 512 kbps 640 - 640 kbps 768 - 768 kbps 1024 - 1024 kbps 1280 - 1280 kbps 1536 - 1536 kbps 2048 - 2048 kbps | |
| P2415 | Video Bit Rate (Account 2) | 32 - 32 kbps 64 - 64 kbps 96 - 96 kbps 128 - 128 kbps 160 - 160 kbps 192 - 192 kbps 210 - 210 kbps 256 - 256 kbps 384 - 384 kbps 512 - 512 kbps 640 - 640 kbps 768 - 768 kbps 1024 - 1024 kbps 1280 - 1280 kbps 1536 - 1536 kbps 2048 - 2048 kbps | 2048 |
| P2360 | SDP Bandwidth Attribute (Account 1) | 0 – Standard 1 - Media Level 2 - Session Level 3 - None | 1 |
| P2460 | SDP Bandwidth Attribute (Account 1) | 0 – Standard 1 - Media Level 2 - Session Level 3 - None | 1 |
| P22091 | Disable Video Call | Value = 0; No Value = 1; Yes | 0 |
| P904 | Video Frame Rate | 5 - 5 frames/second 15 - 15 frames/second | 15 |

| | | | |
|--------|--|--|---|
| | | 25 - 25 frames/second 30 - 30 frames/second 29 - Variable frames rate | |
| P921 | Video Display Mode | 0 - Original proportion 1 - Equal proportional cutting 2 - Proportional add black edge | 1 |
| P22008 | Enable Frame Skipping in Video Decoder | 0 – No 1 – Yes | 1 |

PORT CUSTOMIZATION FOR SSH ACCESS

- **Web Configuration**

The video codec option can be found on the web UI under System Settings->Security Settings->Web/SSH Access

SSH Port 

- **Functionality**

Configures the SSH port for SSH access.

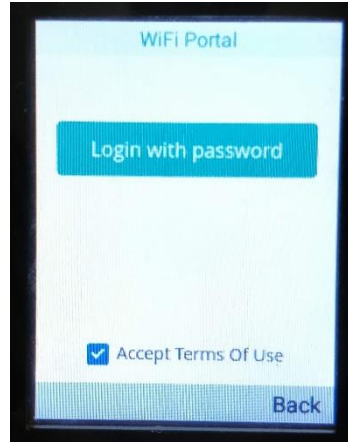
- **New P-value**

| P value | Description | Value Range | Default |
|---------|-------------|-------------|---------|
| P27006 | SSH Port | Number | 22 |

WIFI CAPTIVE PORTAL

- **Functionality**

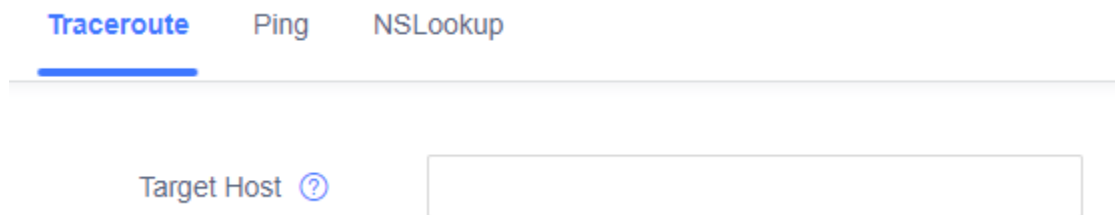
WP820 can connect to WiFi network that requires additional credentials to sign up or login before the connection is established. Upon connecting to an SSID that requires additional actions, WP820 LCD will automatically display the WiFi portal for users to login.



NETWORK TROUBLESHOOTING TOOLS

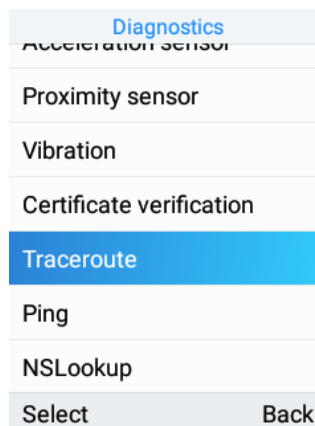
- **Web Configuration**

The options can be found on the web UI under Maintenance->System Diagnosis



- **LCD Configuration**

The options can be found on the handset UI under Menu->Diagnostics




- **Functionality**

Support network troubleshooting tools: Trace route, Ping and NSLookup on handset UI and web UI.

2.4G/5G BAND FOR WIFI

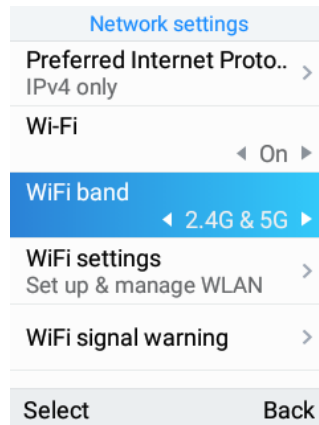
- Web Configuration**

The options can be found on the web UI under Maintenance->System Diagnosis

WiFi Band  2.4G & 5G 2.4G 5G

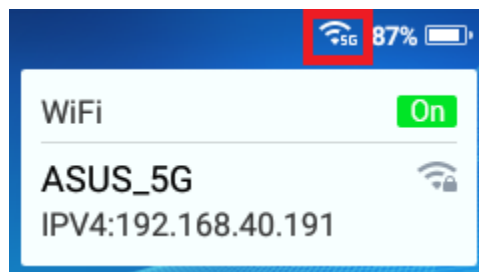
- LCD Configuration**

The options can be found on the handset UI under Menu->Diagnostics



- Functionality**

Select whether to enable 2.4G, 5G or both for WiFi connections. Once connected to WiFi, there will be an icon on the upper status bar to indicate whether 2.4G or 5G is being used.



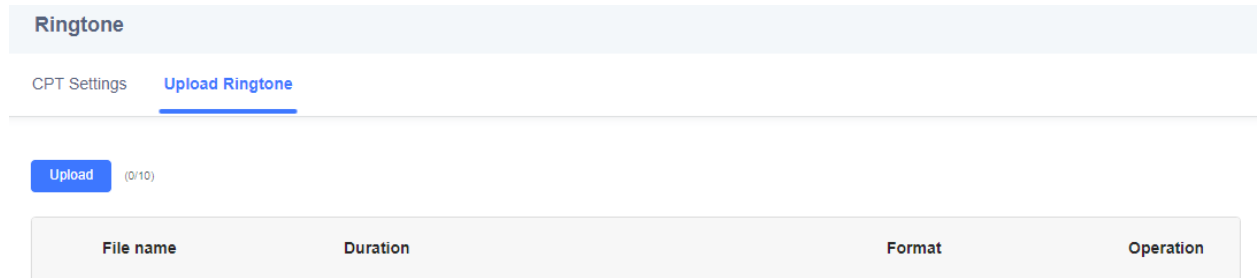
- New P-value**

| P value | Description | Value Range | Default |
|------------------|-------------|---|----------------------|
| P25420 P25421 | WiFi Band | 2.4G & 5G - P25420=1 P25421=1 2.4G - P25420=1 P25421=0 5G - P25420=0 P25421=1 | P25420=1 P25421=1 |

CUSTOM RINGTONE

- **Web Configuration**

The options can be found on the web UI under Phone Settings->Ringtone



Click "Upload" Button to upload files in .mp3/.wav/.ogg format and size less than 2M.

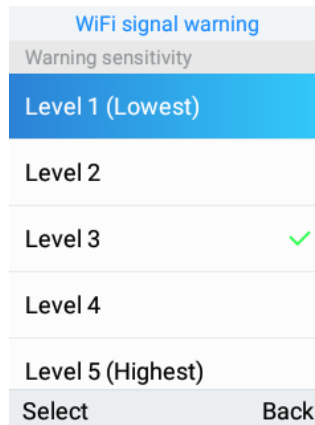
- **Functionality**

Allow users to upload a ringtone file and select the uploaded ringtone to be used for incoming calls.

WIFI SIGNAL WARNING

- **LCD Configuration**

The options can be found on the handset UI under Settings->Network Settings->WiFi signal warning.



- **Functionality**

Enables low WiFi signal warning notification. When the WiFi signal becomes weak, WP820 will prompt a toast to notify the user. The user can adjust the sensitivity level for WiFi signal warning. The higher the sensitivity level, the more frequent the notifications when the WiFi signal is getting weak.

There are 5 sensitivity levels for users to select:

- Level 1: WiFi signal strength -80 dBm.
- Level 2: WiFi signal strength -75 dBm.
- Level 3: WiFi signal strength -70 dBm.
- Level 4: WiFi signal strength -65 dBm.
- Level 5: WiFi signal strength -60 dBm. This is the highest sensitivity level.

For example, if select Level 1 and the WiFi signal strength is lower than -80 dBm, the low WiFi signal prompt will be shown on the handset.

CUSTOM CERTIFICATE

- **Web Configuration**

The options can be found on the web UI under System Settings->Security Settings->Certificate Management.

CA Certificate

Import trusted CA certificates



Trusted CA Certificates

| Index ID | Issued to | Issued by | Expiration | Operation |
|----------|-----------|-----------|------------|-----------|
|----------|-----------|-----------|------------|-----------|

No data

User Certificate

Add Certificate



| Index ID | Certificate Name | Certificate Application | Operation |
|----------|------------------|-------------------------|-----------|
|----------|------------------|-------------------------|-----------|

No data

Custom Certificate

Import custom certificate



Custom Certificate

| Index ID | Issued to | Issued by | Expiration | Operation |
|----------|-----------|-----------|------------|-----------|
|----------|-----------|-----------|------------|-----------|

No data

- **Functionality**

Allows users to upload custom certificates to be used for HTTPS provisioning.

- **New P-value**

| P value | Description | Value Range | Default |
|---------|-------------|-------------|---------|
|---------|-------------|-------------|---------|

| | | | |
|-------|--------------------|--------|-----|
| P8472 | Custom Certificate | String | N/A |
|-------|--------------------|--------|-----|

CONFIG PROVISION OPTION

- Web Configuration**

| **Config Provision**

Config Provision [?](#)

| | | |
|---|---|--|
| <input type="checkbox"/> 0 item Available | < | <input type="checkbox"/> 4 items Selected |
| Not Found | > | <input type="checkbox"/> cfg000b82d64c80 |
| | ↑ | <input type="checkbox"/> cfg000b82d64c80.xml |
| | ^ | <input type="checkbox"/> cfgwp820.xml |
| | ↓ | <input type="checkbox"/> cfg.xml |
| | ↓ | |

- Functionality**

Sets the config provision files and the requesting sequence.

In the above example, WP820 will request config files in the order of:

- cfg000b82d64c80
- cfg000b82d64c80.xml
- cfgwp820.xml
- cfg.xml

IGMP KEEP ALIVE INTERVAL

- Web Configuration**

This option can be found on web UI under Phone Settings->PTT/Multicast Setting.

| **General Settings**

IGMP Keep-alive Interval (s) [?](#)

30

- Functionality**

Specifies how often the phone report IGMP when PTT/ Paging function is turned on. IGMP reporter help to keep PTT/ Paging receivable in dormant state. The interval may take some effect to standby time.

- New P-value**

| P-value | Description | Value range | Default |
|---------|-------------|-------------|---------|
|---------|-------------|-------------|---------|

| | | | |
|--------|------------------------------|---------|---|
| P22251 | IGMP Keep-alive interval (s) | 0 – 120 | 0 |
|--------|------------------------------|---------|---|

GESTURE CONTROL

- Web Configuration**

This option can be found on web UI under System Settings->Preferences->Gesture Control

Flip phone

Reject incoming call [?](#)

Off

Pick up the phone

Ringtone [?](#)

Off

Alarm Ringtone [?](#)

Off

- Functionality**

WP820 supports movement gestures to control certain phone behavior. Flip phone – Flip the phone 180 degrees to reject the call or reject with SMS message. Pick up the phone – When the phone is picked up you can choose to mute or turn down the ringtone or alarm tone.



- New P-value**

| P-value | Description | Value range | Default |
|---------------------------------|----------------------|--|----------------|
| P22225 | Reject incoming call | 1 – Reject 2 – Reject with SMS 3 – Off | 3 |
| P22228 | Reply content | not_convenient, call_later, in_meeting, in_a_call, customize | not_convenient |
| gsensor_flip_reply_sms_customer | Customize (message) | String | N/A |
| P22226 | Ringtone | 1 – Mute 2 – Ringing Down 3 – Off | 3 |
| P22227 | Alarm ringtone | 1 – Mute 2 – Ringing Down 3 – Off | 3 |

DEFAULT RINGTONE

- Web Configuration**

This option can be found on web UI under Phone Settings->Call Settings.

Default Ringtone  Flutey Phone 

- LCD Configuration**

This option can be found on handset UI under Settings->Basic Settings->Sound->Default Ringtone

| Ringtones | |
|------------------|-------------------------------------|
| Flutey Phone | <input checked="" type="checkbox"/> |
| Free Flight | <input type="checkbox"/> |
| Friendly Ghost | <input type="checkbox"/> |
| Funk Y'all | <input type="checkbox"/> |
| Game Over Guitar | <input type="checkbox"/> |
| Gimme Mo' Town | <input type="checkbox"/> |
| Save | Back |

- Functionality**

Configures the default ringtone for incoming calls. If an account's ringtone is set to "Default Ringtone," it will use the ringtone specified here.



- New P-value**

| P-value | Description | Value range | Default |
|---------|------------------|--|---|
| TBA | Default Ringtone | (See config template for full tone list) | /system/media/audio/ringtones/Ring_Synth_04.ogg |

NOTIFICATION TONE

- Web Configuration**

This option can be found on web UI under Phone Settings->Call Settings.

Notification Tone  Pixie Dust 

- LCD Configuration**

This option can be found on handset UI under Settings->Basic Settings->Sound->Notification tone

| Ringtones | |
|-----------|--------------------------|
| Adara | <input type="checkbox"/> |
| Aldebaran | <input type="checkbox"/> |
| Altair | <input type="checkbox"/> |
| Alya | <input type="checkbox"/> |
| Antares | <input type="checkbox"/> |
| Antimony | <input type="checkbox"/> |
| Arcturus | <input type="checkbox"/> |
| Save | Back |

- **Functionality**

Configures notification tone for new notifications such as new SMS, Voicemail and etc.

- **New P-value**

| P-value | Description | Value range | Default |
|---------|-------------------|--|---|
| TBA | Notification Tone | (See config template for full tone list) | /system/media/audio/notifications/pixiedust.ogg |

NOISE SHIELD

- **Web Configuration**

This option can be found on web UI under Phone Settings->Call Settings.

Enable Noise Shield 

- **Functionality**

Configures whether to enable noise shield feature. If enabled, all the background noise will be suppressed except the sound from speaker.

- **New P-value**

| P-value | Description | Value range | Default |
|----------|---------------------|-------------------|---------|
| avs_edrc | Enable Noise Shield | 0 – No 1 – Yes | 0 |

FIRMWARE VERSION 1.0.1.15

PRODUCT NAME

WP820

DATE

09/27/2018

This is the initial firmware.