

HT812/HT814 Firmware Release Notes

IMPORTANT UPGRADING NOTE

- Once HT812/HT814 is upgraded to 1.0.23.5 or above, downgrading to lower firmware version is not supported on below HW:
HT812: 1.6A, 1.6C, 1.6D
HT814: 1.7D, 1.7E, 1.7C
- Once HT812/HT814 is upgraded to 1.0.3.2 or above, downgrading to 1.0.2.x firmware version or lower is not supported.
- Once HT812/HT814 is upgraded to 1.0.2.x, downgrading to 1.0.1.x firmware version or lower is not supported.

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FIRMWARE VERSION 1.0.29.8

PRODUCT NAME

HT812, HT814

DATE

07/27/2021

FIRMWARE FILE INFORMATION

- HT81x firmware file name: ht81xfw.bin
MD5: ac05862659640d669491c67a078a31f8

ENHANCEMENT

- Added support to fill Device.ProvisionCode using DHCP option 43 sub-option 2.
- Added support to allow set dial plan with up to 2048 characters through TR-069.
- Added support for Cisco/Broadsoft R23 Failover/Failback requests.
- Added support for Event=check-sync; reboot=false.
- Added support to remove the ending semicolon from Call-Info header parameters when parsing the header.
- Added support to authenticate based on OpenVPN Username and OpenVPN Password. [OpenVPN USERNAME and PASSWORD]
- Added feature "OnHook DC Feed Current". [OnHook DC FEED CURRENT]
- Increased password rules complexity for admin, user, and viewer level password. The rule is 8-39 characters, at least 1 digit, 1 uppercase and 1 lowercase, and 1 special character.

BUG FIX

- Fixed after completing the attended transfer, HT8xx is still displaying the caller ID of the transferor which is caused by HT8xx did not get caller name or number from Remote Party ID when handling SIP Re-Invite and Update.
- Fixed HT8xx reply with 9002 for Device.Services.VoiceService.1.VoiceProfile.1.SIP.
- Fixed HT8xx does not respect the configured periodic inform interval and send the periodic inform right away.
- Fixed HT8xx will freeze if the remote server replies 200OK with the SDP containing port 0.
- Fixed when OpenVPN is enabled, HT8xx will not get the audio from the remote party.
- Fixed average jitter calculation is not accurate.
- Fixed TR-069 parameter tree missing some options.
- Fixed SLIC settings on TR-06 not matching selections on device Web UI.
- Fixed SUBSCRIBE follows failback register instead of using the subscribe expires timer and the refresh SUBSCRIBE loses the To header tag.
- Removed code to start gs_ata with GDB, removed unused gs_test_suite.sh script.

- Fixed lack of security hardening in Linux.
- Fixed stack-based buffer overflow.
- Fixed improper input validation.

KNOWN ISSUES

- Device will crash when downgrade to firmware 1.0.21.4 or lower version via GDMS platform

NEW FEATURES OVERVIEW

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

OpenVPN USERNAME and PASSWORD

- **Web Configuration**

User can find the configuration section at Web -> Advanced Settings.

OpenVPN Username:

OpenVPN Password:

- **Functionality**

Allows users to configure OpenVPN username and password.

- **New P Values**

Pvalue	Description	Value range	Default
P8394	OpenVPN Username	Max Length - 32	Null
P8395	OpenVPN Password	Max Length - 32	Null

OnHook DC FEED CURRENT

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

OnHook DC Feed Current:

- **Functionality**

This feature is used to adjust DC feed current.

- **New P Values**

Pvalue	Description	Value range	Default
P28192	OnHook DC Feed Current (Profile 1)	0 – 20mA 2 – 30mA default	2 – 30mA default
P28193	OnHook DC Feed Current (Profile 2)	0 – 20mA 2 – 30mA default	2 – 30mA default

FIRMWARE VERSION 1.0.27.2

PRODUCT NAME

HT812, HT814

DATE

04/15/2021

FIRMWARE FILE INFORMATION

- HT81x firmware file name: ht81xfw.bin
MD5: 8d797add00c0f8adc3abe7f41d1b8275

ENHANCEMENT

- Increased Dial Plan maximum supported length.

BUG FIX

- Removed.TR069 parameter "Device.X_GRANDSTREAM_Diagnostics.Capture.DiagnosticsState" as HT8xx does not support packets capture.

KNOWN ISSUES

- Device will crash when downgrade to firmware 1.0.21.4 or lower version via GDMS platform

FIRMWARE VERSION 1.0.25.5

PRODUCT NAME

HT812, HT814

DATE

03/23/2021

FIRMWARE FILE INFORMATION

- HT81x firmware file name: ht81xfw.bin
MD5: 5038566f1b0d97f4b3a38984645ed049

ENHANCEMENT

- Added support for "OpenVPN". [OpenVPN]
- Added support of "Maximum Number of SIP Request Retries". [MAXIMUM NUMBER OF SIP REQUEST RETRIES]
- Added support for "Failback Timer". [FAILBACK TIMER]
- Expanded the supported certificate's length to 8192 for P2386/P2486, P280, P8220

BUG FIX

- Fixed UCM could not detect HT8xx CID.
- Fixed Management VLAN routing used the wrong gateway.
- Fixed the caller ID may not be detected when receiving incoming calls.
- Fixed when RTP attack happens, calls have no audio.
- Fixed devices freeze randomly and is HTTP/SSH inaccessible with no dial tone in the attached analog phone.
- Fixed extreme low audio transmitted randomly.
- Fixed HT8xx may freeze if running FAX for a long time.

KNOWN ISSUES

- Device will crash when downgrade to firmware 1.0.21.4 or lower version via GDMS platform

NEW FEATURES OVERVIEW

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

OpenVPN

- **Web Configuration**

User can find the configuration section at Web -> Advanced Settings.

Enable OpenVPN: ☒ No ☐ Yes
 OpenVPN Server Address:
 OpenVPN Port:
 OpenVPN Interface type: ☐ TAP ☒ TUN
 OpenVPN Transport: ☒ UDP ☐ TCP
 Enable OpenVPN LZO Compression: ☐ No ☒ Yes
 OpenVPN Encryption:
 OpenVPN Digest:
 OpenVPN CA:
 OpenVPN Certificate:
 OpenVPN Client Key:
 OpenVPN Client Key Password:

- Functionality**

This feature allows users to configure OpenVPN.

- New P Values**

Pvalue	Description	Value range	Default
P7050	Enable OpenVPN	0 – No 1 – Yes	0 – No
P7051	OpenVPN Server Address	Maxlength: 64	NULL
P7052	OpenVPN Port	Maxlength: 64	1194

P20714	OpenVPN Interface type	tap – TAP tun – TUN	tap – TAP
P2912	OpenVPN Transport	udp – UDP tcp – TCP	udp – UDP
P20716	Enable OpenVPN LZO Compression	0 – No 1 – Yes	1 - Yes
P20717	OpenVPN Encryption	BF-CBC - BF-CBC 128 bit default key (variable) Default DES-CBC - DES-CBC 64 bit default key (fixed) RC2-CBC - RC2-CBC 128 bit default key (variable) DES-EDE-CBC - DES-EDE-CBC 128 bit default key (fixed) DES-EDE3-CBC - DES-EDE3-CBC 192 bit default key (fixed) DESX-CBC - DESX-CBC 192 bit default key (fixed) RC2-40-CBC - RC2-40-CBC 40 bit default key (variable) CAST5-CBC - CAST5-CBC 128 bit default key (variable) RC2-64-CBC - RC2-64-CBC 64 bit default key (variable) AES-128-CBC - AES-128-CBC 128 bit default key (fixed) AES-192-CBC - AES-192-CBC 192 bit default key (fixed) AES-256-CBC - AES-256-CBC 256 bit default key (fixed)	BF-CBC - BF-CBC 128 bit default key (variable) Default BF-CBC 128 bit default key (variable) Default
P20725	OpenVPN Digest	SHA1 - SHA1 Default MD5 - MD5 RSA-MD5 - RSA-MD5 RSA-SHA1 - RSA-SHA1 DSA-SHA1-old - DSA-SHA1-old DSA-SHA1 - DSA-SHA1 RSA-SHA1-2 - RSA-SHA1-2	SHA1 - SHA1 Default

		DSA – DSA RIPEMD160 - RIPEMD160 RSA-RIPEMD160 - RSA-RIPEMD160 MD4 - MD4 RSA-MD4 - RSA-MD4 ecdsa-with-SHA1 - ecdsa-with-SHA1 RSA-SHA256 - RSA-SHA256 RSA-SHA384 - RSA-SHA384 RSA-SHA512 - RSA-SHA512 RSA-SHA224 - RSA-SHA224 SHA256 - SHA256 SHA384 - SHA384 SHA512 - SHA512 SHA224 - SHA244 Whirlpool - whirlpool	
P9902	OpenVPN CA	8192– Max Character Number	NULL
P9903	OpenVPN Certificate	8192– Max Character Number	NULL
P9904	OpenVPN Client Key	8192– Max Character Number	NULL
P20715	OpenVPN Client Key Password	Maxlength: 64	NULL

MAXIMUM NUMBER OF SIP REQUEST RETRIES

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

Maximum Number of SIP Request Retries: (between 1 and 10, default is 4.)

- Functionality**

This feature allows user to configure the number of SIP retries before failover occurs.

- New P Values**

Pvalue	Description	Value range	Default
P60055	Maximum Number of SIP Request Retries (Profile 1)	Min: 1 Max: 10	4
P60155	Maximum Number of SIP Request Retries (Profile 2)	Min: 1 Max: 10	4

FAILBACK TIMER

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

Failback Timer: (in minutes. default 60 minutes, max 45 days)

- Functionality**

When the primary SBC is up, device will send SIP requests to the primary SBC. If at any point device fails over to the secondary SBC, the SIP requests will stay on the failover SBC for the duration of the failback timer. When the timer expires, device will send SIP requests to the primary SBC.

- New P Values**

Pvalue	Description	Value range	Default
P60056	Failback Timer (Profile 1)	Min: 60 Max: 64800	60
P60156	Failback Timer (Profile 2)	Min: 60 Max: 64800	60

FIRMWARE VERSION 1.0.23.5

PRODUCT NAME

HT812, HT814

DATE

1/13/2021

FIRMWARE FILE INFORMATION

- HT81x firmware file name: ht81xfw.bin
MD5: 450a4328f3dcb82f41aa0bf100dcd30a

ENHANCEMENT

- Added support for more than 2 layers certificate chain loading. Expanded max length of P8472 from 4096 to 8192.
- Added Special Feature IZZI to support N-Way conference hosted on Nokia IMS.
- Added support for "DNS SRV Failover Mode". [DNS SRV FAILOVER MODE]
- Added support of "Register Before DNS SRV Failover". [REGISTER BEFORE DNS SRV FAILOVER]

BUG FIX

- Fixed with option 43, device could not upgrade via FTPS.
- Fixed losing connectivity on LAN connected devices on ATA's using PPPoE.
- Fixed when upgrade via HTTPS, if server returns more data than requested in partial content, the provision will fail.
- Fixed the device obviate the T flag on dial plan.
- Fixed when Internet Protocol set to Both, prefer IPv6, device does not send registration after changing the sip transport from TCP to UDP.
- Fixed "Automatic Upgrade" does not take effect as configured.
- Fixed when STUN is using, the device may fail to resolve the host name of STUN server and resulting in calls failure.

KNOWN ISSUES

- Device will crash when downgrade to firmware 1.0.21.4 or lower version via GDMS platform

NEW FEATURES OVERVIEW

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

DNS SRV FAILOVER MODE

- **Web Configuration**

User can find the configuration section at Web -> Profile Settings.

DNS SRV Failover Mode: Default ▼
Register Before DNS SRV Failover: ☐ No ☒ Yes

- **Functionality**

Configure the preferred IP mode when DNS Mode is SRV or NAPTR/SRV.

- **Default**
SIP request will always be sent to the address with the top priority based on the SRV query result, even if this address is different from the registered IP address.
- **Saved one until DNS TTL**
SIP request will always be sent to the registered IP address until DNS TTL expires or registered IP address is unreachable
- **Saved on until no response**
SIP request will always be sent to the registered IP address only until registered IP address is unreachable.

- **New P Values**

Pvalue	Description	Value range	Default
P26040	DNS SRV Failover Mode (Profile 1)	0 – Default 1 – Saved one until DNS TTL 2 – Saved one until no response	0 – Default
P26140	DNS SRV Failover Mode (Profile 2)	0 – Default 1 – Saved one until DNS TTL 2 – Saved one until no response	0 – Default

REGISTER BEFORE DNS SRV FAILOVER

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

DNS SRV Failover Mode: Default ▼
Register Before DNS SRV Failover: ☐ No ☒ Yes

- **Functionality**

This feature is used to control whether the device need to initiate a new registration request (following existing DNS SRV fail-over mode) first and then direct the non-registration SIP request (INVITE) to the

new successfully registered server or not.

- **New P Values**

Pvalue	Description	Value range	Default
P29095	Register Before DNS SRV Failover (Profile 1)	0 – No 1 – Yes	0 – No
P29195	Register Before DNS SRV Failover (Profile 2)	0 – No 1 – Yes	0 – No

FIRMWARE VERSION 1.0.21.4

PRODUCT NAME

HT812, HT814

DATE

10/16/2020

FIRMWARE FILE INFORMATION

- HT81x firmware file name: ht81xfw.bin
MD5: 3862b56c7613a9c9cd881c6c4efd6fab

ENHANCEMENT

- Added support for IPv6 address without square brackets.
- Added support for DHCP Domain Name configuration. [DHCP DOMAIN]
- Added support of "Use Configured IP" for "DNS Mode". [DNS MODE USE CONFIGURED IP]
- Added support for "Play Busy Tone When Account is unregistered". [PLAY BUSY TONE WHEN ACCOUNT IS UNREGISTERED]

BUG FIX

- Fixed when DNS Mode set to SRV, device does not failover to the second IP got from SRV when receive 503.
- Fixed STUN Server cannot identify square bracket.
- Fixed when Internet Protocol is set to "Both, prefer IPv6", device will not switch to IPv4 to get registered if IPv6 is not available.
- Fixed device will send SIP requests to default port 5060 when a different port was configured.
- Fixed "Automatic Upgrade" does not take effect as configured.

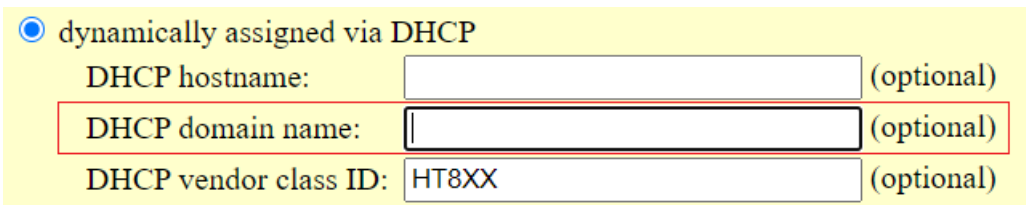
NEW FEATURES OVERVIEW

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

DHCP DOMAIN NAME

- Web Configuration**

User can find the configuration section at Web -> Basic Settings.



The screenshot shows a configuration interface for DHCP settings. It includes a radio button for "dynamically assigned via DHCP" which is selected. Below this are three input fields: "DHCP hostname:" (empty), "DHCP domain name:" (empty), and "DHCP vendor class ID:" (containing "HT8XX"). Each field has a "(optional)" label to its right. A red rectangle highlights the "DHCP domain name:" field.

- **Functionality**

This feature specifies the domain name that client should use when resolving hostname via the Domain Name System.

- **New P Values**

Pvalue	Description	Value range	Default
P147	DHCP domain name	Max Length: 32	Null

- **DNS MODE USE CONFIGURED IP**

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

DNS Mode: ☒ A Record ☐ SRV ☐ NAPTR/SRV ☐ Use Configured IP

DNS SRV use Registered IP: ☒ No ☐ Yes

Primary IP:

Backup IP1:

Backup IP2:

- **Functionality**

When "Use Configured IP" is selected, if SIP server is configured as domain name, device will not send DNS query, but will use "Primary IP" or "Backup IP" to send sip message if at least one of them are not empty. It will try to use "Primary IP" first, after 3 tries without any response, it will switch to "Backup IP 1", then "Backup IP 2", and then it will switch back to "Primary IP" after 3 re-tries.

- **New P Values**

Pvalue	Description	Value range	Default
P2308	Primary IP (Profile 1)	Max Length: 15	Null
P2309	Backup IP1 (Profile 1)	Max Length: 15	Null
P2310	Backup IP2 (Profile 1)	Max Length: 15	Null
P2408	Primary IP (Profile 2)	Max Length: 15	Null
P2409	Backup IP1 (Profile 2)	Max Length: 15	Null
P2410	Backup IP2 (Profile 2)	Max Length: 15	Null

- **PLAY BUSY TONE WHEN ACCOUNT IS UNREGISTERED**

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

Play Busy Tone When Account is ☒ No ☐ Yes (If set to Yes, busy tone will be played when user goes offhook from an *unregistered*: unregistered account.)

- **Functionality**

When this feature is set to Yes, device will play busy tone when the FXS port account is not registered and the attached analog phone is off hook.

- **New P Values**

Pvalue	Description	Value range	Default
P28181	Play Busy Tone When Account is unregistered	0 – No 1 – Yes	0 – No

FIRMWARE VERSION 1.0.19.11

PRODUCT NAME

HT812, HT814

DATE

07/13/2020

FIRMWARE FILE INFORMATION

- HT81x firmware file name: ht81xfw.bin
MD5: 72259df47e4932e584f840605a044f02

ENHANCEMENT

- Added “Disable” option for “Web Access Mode” feature.
- Added configuration for “DNS cache refresh time” (P4208) via config file provisioning.
- Added feature “Web Access Privilege Pattern” (P28152), configurable via config file provision or SSH, not on Web UI.
- Added feature “DNS Cache Duration” (P28160), configurable via config file provision or SSH, not on Web UI.
- Moved “Trusted CA certificates” from Profile1/Profile2 (P2386/P2486) to Advanced Settings and renamed as Trusted CA Certificates A (P2386) and Trusted CA Certificates B (P2486).
- Added feature “Disable User Level Web Access” and “Disable Viewer Level Web Access”. [USER/VIEWER LEVEL WEB ACCESS]
- Added feature “Use P-Asserted-Identity Header”. [USE P-ASSERTED-IDENTITY HEADER]
- Added feature “Load CA Certificates”. [LOAD CA CERTIFICATES]
- Added feature “Connection Request Port”. [CONNECTION REQUEST PORT]
- Added support for Telefonica Spain special flash digit control 3-way conference mode when Special Feature set to “Telefonica Spain”.
- Added support for when Special Feature set to “Telefonica Spain”, # key will act as dial key only if the dialed string is beginning with digits.
- Added Special Feature “Oi_BR”.
- Added support for answer 480 for an inbound call when the phone is off hook longer than 1 minutes.
- Added support to play ringback tone during call transfer when Special Feature is set to ROSTELECOM.
- Updated Special Feature “Telefonica Spain” ETSI-FSK prior to ringing with RP Caller ID scheme FSK signal field 0x01, 0x02, and 0x07.
- Added support to set Ring Timeout to 0 for unlimited ring timeout.
- Added support for Telefonica specific failover mechanism based on DNS SRV for Special Feature “Telefonica”.

- Added New Zealand Standard for Pulse Dialing Standard.
- Increased “SIP TLS Certificate” and “SIP TLS Private Key” supported maximum length from 2048 to 4096.

BUG FIX

- Fixed the CLIP format does not meet the ITE-CA-001 : 6.3.1.5 ETSI ES 300 659-2 (ETSI FSK V.23 signaling with DT-AS) format.
- Fixed remote could not hear HT81x voice when enabling Flash Digit Control.
- Fixed device will crash when SIP TLS Private Key is set but SIP TLS Private Key Password is not configured.
- Fixed device will crash if factory reset via Web UI.
- Fixed after setting NATTraversal of Profile 2 on ACS server, the device could not apply the change.
- Fixed TR-069 Device.LAN.AvailableAddressingType lack of PPPoE mode.
- Fixed could not add or delete object on ACS server
- Fixed device may crash when processing 183 message.
- Fixed SIP TLS related settings will back to default settings after reboot.
- Fixed IVR operation will cause device crash.
- Fixed memory leak issue.
- Fixed “DHCP IP Lease Time” could be set to negative.
- Fixed device login credential could be found in the data package.
- Increase the maximum ptime from 30 to 60 when using codec G729
- Fixed when device act as the callee, after the analog phone offhook to accept the incoming call and sent 200OK, if the ACK could not be received, the port will lockup.
- Fixed distinctive ring tone does not take effect when set to more than 9000ms.
- Fixed the sin wave signal for the ring tone exceeds 5% distortion on shape.
- Fixed device could not make a call when use *19 to disable SRTP per call.
- Fixed device LAN DHCP Base IP will not change automatically when the WAN port receives 192.168.2.1 IP address from the network.
- Fixed device does not take port from SRV results when SIP transport type is TLS.
- Fixed device fails to register when enabling “Validate Incoming SIP Message”.
- Fixed device sends Register to port 5060 when configured as a different port.
- Fixed device will not reach GAPS when LAN IP conflict with WAN IP.
- Fixed a security vulnerability that device will crash if an attacker sends a TCP message that does not contain a ‘\r’.
- Fixed a security vulnerability that device will crash due to a null pointer dereference when an authentication header is present in the HTTP Get request, but the header is not a well-formed digest message.
- Fixed a security vulnerability that the TR-069 interface hardcodes the nonce and opaque values that the HTTP digest authentication values could be reused.

- Fixed when SIP user ID contains domain name and puts @<sip server> to the From/To/Contact header, HT81x could not get registered.
- Fixed incoming call does not work with TLSv1.2.
- Fixed the security vulnerability related to provisioning XML password bypass and command injection.
- Removed gssu command from SSH.
- Fixed when HT81x SRTP mode is set to “Enabled but not forced” and the SIP server does not support SRTP, HT81x will reject the call.
- Fixed when set up an admin password longer than 15 characters, the web access will keep showing “Sorry. Your Login Password is not recognized. Please try again.”

NEW FEATURES OVERVIEW

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

USER/VIEWER LEVEL WEB ACCESS

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

Disable User Level Web Access: ☒ No ☐ Yes
Disable Viewer Level Web Access: ☒ No ☐ Yes

- **Functionality**

These features allow customer to enable or disable user/viewer web access.

- **New P Values**

Pvalue	Description	Value range	Default
P28158	Disable User Level Web Access	0 – No 1 – Yes	0 – No
P28159	Disable Viewer Level Web Access	0 – No 1 – Yes	0 – No

USE P-ASSERTED-IDENTITY HEADER

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

Use P-Asserted-Identity Header: ☒ No ☐ Yes

- **Functionality**

When this feature is set to Yes, device will send P-Asserted-Identity Header on the SIP Invite.

- **New P Values**

Pvalue	Description	Value range	Default
P29098	User P-Asserted-Identity Header (Profile 1)	0 – No 1 – Yes	0 – No
P29198	User P-Asserted-Identity Header (Profile 2)	0 – No 1 – Yes	0 – No

LOAD CA CERTIFICATES

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

Load CA Certificates:

- **Functionality**

This feature allows user to specify which CA certificate to trust when performing server authentication.

- **New P Values**

Pvalue	Description	Value range	Default
P8502	Load CA Certificates	0 – Built-in trusted certificates 1 – Custom trusted certificate 2 – All trusted certificates	0 – Built-in trusted certificates

CONNECTION REQUEST PORT

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

Connection Request Password:

Connection Request Port:

- **Functionality**

This feature allows user to configure the TR-069 connection request port.

- **New P Values**

Pvalue	Description	Value range	Default
P4518	Connection Request Port	0 – 65535	7547

FIRMWARE VERSION 1.0.17.5

PRODUCT NAME

HT812, HT814

DATE

11/13/2019

FIRMWARE FILE INFORMATION

- HT81x firmware file name: ht81xfw.bin
MD5: 12594b474d6be9dba84a1805289e65b0

ENHANCEMENT

- Added support for TLS version configuration. [TLS VERSION]
- Updated "São Paulo" time zone to UTC-3.

BUG FIX

- Fixed device automatically sends a Re-Invite to un-hold the call after the call on-hold for 90 seconds via hook-flash.
- Fixed when device receives Re-Invite with SDP including both T.38 and audio, device will reply 200OK with audio only in SDP.
- Fixed when certification related P values are not configured in a config file, latter P values will not be applied during provision.
- Fixed when DNS SRV is used, device will send sip Register to wrong SIP destination port.
- Fixed when Ring Timeout set to 0, hunting group feature will not work.
- Fixed device will crash when the username of URL of To header is Null.
- Fixed when the SRV contains one more A record, device will use the default destination port.
- Fixed memory leak when working on GDMS platform.
- Fixed device sent SIP requests to outbound proxy 5060 when configured as a different port.

NEW FEATURES OVERVIEW

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

TLS VERSION

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

<i>Minimum TLS Version:</i>	Unlimited ▼
<i>Maximum TLS Version:</i>	Unlimited ▼

- **Functionality**

These features allow customer to choose desired TLS Version.

- **New P Values**

Pvalue	Description	Value range	Default
P22293	Minimum TLS Version	99 - Unlimited 10 – TLS 1.0 11 – TLS 1.1 12 – TLS 1.2	99 - Unlimited
P22294	Maximum TLS Version	99 - Unlimited 10 – TLS 1.0 11 – TLS 1.1 12 – TLS 1.2	99 - Unlimited

FIRMWARE VERSION 1.0.15.4

PRODUCT NAME

HT812, HT814

DATE

09/09/2019

FIRMWARE FILE INFORMATION

- HT81x firmware file name: ht81xfw.bin
MD5: 32b06c782fb5d2acc1f3deb5175c3e

ENHANCEMENT

- Added support for Packet Lost stats using P28157 from config file.
- Updated Pvalue for Automatic Upgrade from P194 to P22296.
- Added more choices to feature "Disable Weak TLS Ciphers".
- Added feature "Syslog Protocol". [SYSLOG PROTOCOL]
- Added support for "Distinctive Call Waiting Tone". [DISTINCTIVE CALL WAITING TONE]
- Added support for "Call Waiting Tones". [CALL WAITING TONES]
- Added support for DHCP option 67.
- Added support to play the second dial tone for unconditional call forwarding in variable mode in Metaswitch platform.
- Added support to allow CID name fields for ports that are part of the active hunting group to take effect.
- Added support for GDMS.

BUG FIX

- Fixed TLS Connection could not establish when there are multiple Via headers.
- Fixed device could not get stateful IPv6 address.

NEW FEATURES OVERVIEW

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

SYSLOG PROTOCOL

- Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

<i>Syslog Protocol:</i>	UDP
<i>Syslog Server:</i>	

- **Functionality**
- Allow users to customize the Syslog Protocol.
- **New P Values**

Pvalue	Description	Value range	Default
P8402	Syslog Protocol	0 – UDP 1 – SSL/TLS	0 – UDP

DISTINCTIVE CALL WAITING TONE

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

Distinctive Call Waiting Tone:

Call Waiting Tone 1 ▾

used if incoming caller ID is

Call Waiting Tone 1 ▾

used if incoming caller ID is

Call Waiting Tone 1 ▾

used if incoming caller ID is

- **Functionality**

This feature allows users to configure call waiting tone depending on the caller ID.

- **New P Values**

Pvalue	Description	Value range	Default
P29074	Call Waiting Tone Choice 1 (Profile 1)	0 – Call Waiting Tone 1 1 – Call Waiting Tone 2 2 – Call Waiting Tone 3 3 – Call Waiting Tone 4 4 – Call Waiting Tone 5 5 – Call Waiting Tone 6 6 – Call Waiting Tone 7 7 – Call Waiting Tone 8 8 – Call Waiting Tone 9 10 – Call Waiting Tone 10	0 – Call Waiting Tone 1
P29077	Used if incoming caller ID is (Profile 1)	64 – Max String Length	Null
P29075	Call Waiting Tone Choice 2 (Profile 1)	0 – Call Waiting Tone 1 1 – Call Waiting Tone 2 2 – Call Waiting Tone 3 3 – Call Waiting Tone 4 4 – Call Waiting Tone 5 5 – Call Waiting Tone 6 6 – Call Waiting Tone 7 7 – Call Waiting Tone 8 8 – Call Waiting Tone 9	0 – Call Waiting Tone 1

		10 – Call Waiting Tone 10	
P29078	Used if incoming caller ID is (Profile 1)	64 – Max String Length	Null
P29076	Call Waiting Tone Choice 3 (Profile 1)	0 – Call Waiting Tone 1 1 – Call Waiting Tone 2 2 – Call Waiting Tone 3 3 – Call Waiting Tone 4 4 – Call Waiting Tone 5 5 – Call Waiting Tone 6 6 – Call Waiting Tone 7 7 – Call Waiting Tone 8 8 – Call Waiting Tone 9 10 – Call Waiting Tone 10	0 – Call Waiting Tone 1
P29079	Used if incoming caller ID is (Profile 1)	64 – Max String Length	Null
P29174	Call Waiting Tone Choice 1 (Profile 2)	0 – Call Waiting Tone 1 1 – Call Waiting Tone 2 2 – Call Waiting Tone 3 3 – Call Waiting Tone 4 4 – Call Waiting Tone 5 5 – Call Waiting Tone 6 6 – Call Waiting Tone 7 7 – Call Waiting Tone 8 8 – Call Waiting Tone 9 10 – Call Waiting Tone 10	0 – Call Waiting Tone 1
P29177	Used if incoming caller ID is (Profile 2)	64 – Max String Length	Null
P29175	Call Waiting Tone Choice 2 (Profile 2)	0 – Call Waiting Tone 1 1 – Call Waiting Tone 2 2 – Call Waiting Tone 3 3 – Call Waiting Tone 4 4 – Call Waiting Tone 5 5 – Call Waiting Tone 6 6 – Call Waiting Tone 7 7 – Call Waiting Tone 8 8 – Call Waiting Tone 9 10 – Call Waiting Tone 10	0 – Call Waiting Tone 1
P29178	Used if incoming caller ID is (Profile 2)	64 – Max String Length	Null
P29176	Call Waiting Tone Choice 3 (Profile 2)	0 – Call Waiting Tone 1 1 – Call Waiting Tone 2	0 – Call Waiting Tone 1

		2 – Call Waiting Tone 3 3 – Call Waiting Tone 4 4 – Call Waiting Tone 5 5 – Call Waiting Tone 6 6 – Call Waiting Tone 7 7 – Call Waiting Tone 8 8 – Call Waiting Tone 9 10 – Call Waiting Tone 10	
P29179	Used if incoming caller ID is (Profile 2)	64 – Max String Length	Null

CALL WAITING TONES

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

Call Waiting Tones Syntax: `f1=val[, f2=val[, c=on1/off1[-on2/off2[-on3/off3]]]];`
 (Frequencies are in (300, 3400) Hz and cadence on and off are in (0, 64000) ms)

Call Waiting Tone 1:	f1=440@-13,c=300/10000;
Call Waiting Tone 2:	f1=440@-13,c=300/10000;
Call Waiting Tone 3:	f1=440@-13,c=300/10000;
Call Waiting Tone 4:	f1=440@-13,c=300/10000;
Call Waiting Tone 5:	f1=440@-13,c=300/10000;
Call Waiting Tone 6:	f1=440@-13,c=300/10000;
Call Waiting Tone 7:	f1=440@-13,c=300/10000;
Call Waiting Tone 8:	f1=440@-13,c=300/10000;
Call Waiting Tone 9:	f1=440@-13,c=300/10000;
Call Waiting Tone 10:	f1=440@-13,c=300/10000;

- Functionality**

This feature allows user to customize call waiting tone.

- New P Values**

Pvalue	Description	Value range	Default
P29080	Call Waiting Tone 1 (Profile 1)	64 – Max String Length	f1=440@-13,c=300/10000;
P29081	Call Waiting Tone 2 (Profile 1)	64 – Max String Length	f1=440@-13,c=300/10000;
P29082	Call Waiting Tone 3 (Profile 1)	64 – Max String Length	f1=440@-13,c=300/10000;
P29083	Call Waiting Tone 4 (Profile 1)	64 – Max String Length	f1=440@-13,c=300/10000;
P29084	Call Waiting Tone 5 (Profile 1)	64 – Max String Length	f1=440@-13,c=300/10000;
P29085	Call Waiting Tone 6 (Profile 1)	64 – Max String Length	f1=440@-13,c=300/10000;
P29086	Call Waiting Tone 7 (Profile 1)	64 – Max String Length	f1=440@-13,c=300/10000;
P29087	Call Waiting Tone 8 (Profile 1)	64 – Max String Length	f1=440@-13,c=300/10000;

P29088	Call Waiting Tone 9 (Profile 1)	64 – Max String Length	f1=440@-13,c=300/10000;
P29089	Call Waiting Tone 10 (Profile 1)	64 – Max String Length	f1=440@-13,c=300/10000;
P29180	Call Waiting Tone 1 (Profile 2)	64 – Max String Length	f1=440@-13,c=300/10000;
P29181	Call Waiting Tone 2 (Profile 2)	64 – Max String Length	f1=440@-13,c=300/10000;
P29182	Call Waiting Tone 3 (Profile 2)	64 – Max String Length	f1=440@-13,c=300/10000;
P29183	Call Waiting Tone 4 (Profile 2)	64 – Max String Length	f1=440@-13,c=300/10000;
P29184	Call Waiting Tone 5 (Profile 2)	64 – Max String Length	f1=440@-13,c=300/10000;
P29185	Call Waiting Tone 6 (Profile 2)	64 – Max String Length	f1=440@-13,c=300/10000;
P29186	Call Waiting Tone 7 (Profile 2)	64 – Max String Length	f1=440@-13,c=300/10000;
P29187	Call Waiting Tone 8 (Profile 2)	64 – Max String Length	f1=440@-13,c=300/10000;
P29188	Call Waiting Tone 9 (Profile 2)	64 – Max String Length	f1=440@-13,c=300/10000;
P29189	Call Waiting Tone 10 (Profile 2)	64 – Max String Length	f1=440@-13,c=300/10000;

DISABLE WEAK TLS CIPHER SUITES

- Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

Disable Weak TLS Cipher Suites:

- Functionality**

This feature allows users to disable weak ciphers.

- New P Values**

Pvalue	Description	Value range	Default
P8536	Disable Weak TLS Cipher Suites	0 – Enable Weak TLS Ciphers Suites 1 – Disable Symmetric Encryption RC4/DES/3DES 2 - Disable Symmetric Encryption SEED 3 - Disable All Of The Above Weak Symmetric Encryption 4 - Disable Symmetric Authentication MD5 5 - Disable All Of The Above Weak Symmetric Authentication 6 - Disable Protocol Version SSLv2/SSLv3 7 - Disable All Of The Above Weak Protocol Version 8 - Disable All Of The Above Weak TLS Ciphers Suites	0 – Enable Weak TLS Ciphers Suites

FIRMWARE VERSION 1.0.13.7

PRODUCT NAME

HT812, HT814

DATE

07/12/2019

FIRMWARE FILE INFORMATION

- HT81x firmware file name: ht81xfw.bin
MD5: 6f7966d24e7b8b393fb0dc9f1d2ccc47

ENHANCEMENT

- Updated mini_httpd version to 1.30.
- Added ability to support provisioning server path containing the server authentication credentials for the DHCP option 66. Format should be "username:password@Provisioning_Server_IP".
- Added support to validate syntax of ACL entry.
- Added support to view, download, and delete the call history through device Web UI.
- Added support to store SIP file locally.
- Added support to send SNMP trap to 3 different servers. The trap servers should be separated with comma.
- Added support for Packet Lost stats using P28157.
- Added the support to verify if configured Gateway is on the same subnet as the configured IP address.
- Added feature "Call Features Settings" [CALL FEATURES SETTINGS]
- Added feature "Use SIP User-Agent". [SIP User-Agent]
- Updated "Use SIP User-Agent Header" to "SIP User-Agent Postfix".
- Added feature "Disable Reminder Ring for DND". [DISABLE REMINDER RING FOR DND]
- Added feature "CDR File Option". [CDR FILE OPTION]
- Added feature "SIP File Option". [SIP FILE OPTION]
- Added feature "Disable Weak TLS Cipher Suites". [DISABLE WEAK TLS CIPHER SUITES]
- Added feature "Pulse Dialing Standard". [PULSE DIALING STANDARD]
- Added feature "Callee Flash to 3WC". [CALLEE FLASH TO 3WC]
- Added feature "RFC2833 Count" [RFC2833 COUNT]
- Added feature "Replace Beginning '+' with 00 in Caller ID". [REPLACE BEGINNING '+' WITH 00 IN CALLER ID]
- Added feature "Reset Call Features". [RESET CALL FEATURES]

BUG FIX

- Fixed TR-069 manufacture field is empty on the INFORM header.

- Fixed when ACS URL is set to ipv6 and device is in STUN mode, STUN Server address will be wrong.
- Fixed when downloaded a config file, device could not escape "<, >, \", ' , &" symbols properly.
- Fixed device will keep sending the bootstrap message to the ACS server.
- Fixed User Agent customization not working properly.
- Fixed when the SIP call flow includes 183 ringing, there will be audible chirp or beep.
- Fixed authenticate server certificate chain failed.
- Fixed device does not authenticate with ACS server to upload device config.
- Fixed factory reset initiated by ACS server could not reset the device.
- Fixed the TR-069 periodic inform time not right.

NEW FEATURES OVERVIEW

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

CALL FEATURES SETTINGS

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

Call Features Settings

Enable Call Features: ☐ No ☒ Yes ☐ Enable All

(When enabled, Do No Disturb, Call Forward and other call features can be used via the local feature codes on the phone. Otherwise, the ITSP feature codes will be used. Enable All will override all individual features enable setting.)

Reset Call Features: ☒ No ☐ Yes

 SRTP Feature: ☐ No ☒ Yes

Enable SRTP:

Disable SRTP:

 SRTP per call Feature: ☐ No ☒ Yes

Enable SRTP per call:

Disable SRTP per call:

 CID Feature: ☐ No ☒ Yes

Enable CID:

Disable CID:

 CID per call Feature: ☐ No ☒ Yes

Enable CID per call:

Disable CID per call:

 Direct IP Calling Feature: ☐ No ☒ Yes

Direct IP Calling:

 CW Feature: ☐ No ☒ Yes

Enable CW:

Disable CW:

 CW per call Feature: ☐ No ☒ Yes

Enable CW per call:

Disable CW per call:

 Call Return Feature: ☐ No ☒ Yes

Call Return:

Unconditional Forward Feature:	☐ No	☒ Yes
<i>Enable Unconditional Forward:</i>	72	
<i>Disable Unconditional Forward:</i>	73	

Busy Forward Feature:	☐ No	☒ Yes
<i>Enable Busy Forward:</i>	90	
<i>Disable Busy Forward:</i>	91	

Delayed Forward Feature:	☐ No	☒ Yes
<i>Enable Delayed Forward:</i>	92	
<i>Disable Delayed Forward:</i>	93	

Paging Feature:	☐ No	☒ Yes
<i>Paging:</i>	74	

DND Feature:	☐ No	☒ Yes
<i>Enable DND:</i>	78	
<i>Disable DND:</i>	79	

Blind Transfer Feature:	☐ No	☒ Yes
<i>Enable Blind Transfer:</i>	87	

Disable LEC per call Feature:	☐ No	☒ Yes
<i>Disable LEC per call:</i>	03	

Disable Bellcore Style 3-Way Conference:	☒ No	☐ Yes
<i>Star Code 3WC Feature:</i>	☐ No	☒ Yes
<i>Star Code 3WC:</i>	23	

Forced Codec Feature:	☐ No	☒ Yes
<i>Forced Codec:</i>	02	
PCMU Codec Feature:	☐ No	☒ Yes
<i>PCMU Codec:</i>	7110	

PCMA Codec Feature: ☐ No ☒ Yes
PCMA Codec:

G723 Codec Feature: ☐ No ☒ Yes
G723 Codec:

G729 Codec Feature: ☐ No ☒ Yes
G729 Codec:

iLBC Codec Feature: ☐ No ☒ Yes
iLBC Codec:

G722 Codec Feature: ☐ No ☒ Yes
G722 Codec:

- **Functionality**
- Allow users to customize the feature codes.
- **New P Values**

Pvalue	Description	Value range	Default
P191	Enable Call Features (Profile 1)	0 – No 1 – Yes 2 – Enable All	1 – Yes
P24060	SRTP Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24001	Enable SRTP (Profile 1)	Number	16
P24002	Disable SRTP (Profile 1)	Number	17
P24061	SRTP per call Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24003	Enable SRTP per call (Profile 1)	Number	18
P24004	Disable SRTP per call (Profile 1)	Number	19
P24062	CID Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24006	Enable CID (Profile 1)	Number	31
P24005	Disable CID (Profile 1)	Number	30
P24065	CID per call Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24019	Enable CID per call (Profile 1)	Number	82
P24010	Disable CID per call (Profile 1)	Number	67
P24063	Direct IP Calling Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24007	Direct IP Calling (Profile 1)	Number	47
P24064	CW Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24009	Enable CW (Profile 1)	Number	51

P24008	Disable CW (Profile 1)	Number	50
P24067	CW per call Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24013	Enable CW per call (Profile 1)	Number	71
P24012	Disable CW per call (Profile 1)	Number	70
P24066	Call Return Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24011	Call Return (Profile 1)	Number	69
P24068	Unconditional Forward Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24014	Enable Unconditional Forward (Profile 1)	Number	72
P24015	Disable Unconditional Forward (Profile 1)	Number	73
P24072	Busy Forward Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24021	Enable Busy Forward (Profile 1)	Number	90
P24022	Disable Busy Forward (Profile 1)	Number	91
P24073	Delayed Forward Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24023	Enable Delayed Forward (Profile 1)	Number	92
P24024	Disable Delayed Forward (Profile 1)	Number	93
P24069	Paging Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24016	Paging (Profile 1)	Number	74
P24070	DND Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24017	Enable DND (Profile 1)	Number	78
P24018	Disable DND (Profile 1)	Number	79
P24071	Blind Transfer Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24020	Enable Blind Transfer (Profile 1)	Number	87
P24074	Disable LEC per call Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24025	Disable LEC per call (Profile 1)	Number	03
P24075	Star Code 3WC Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24026	Star Code 3WC (Profile 1)	Number	23
P24059	Forced Codec Feature (Profile 1)	0 – No 1 – Yes	1 – Yes

P24000	Forced Codec (Profile 1)	Number	02
P24076	PCMU Codec Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24027	PCMU Codec (Profile 1)	Number	7110
P24077	PCMA Codec Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24028	PCMA Codec (Profile 1)	Number	7111
P24078	G723 Codec Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24029	G723 Codec (Profile 1)	Number	723
P24079	G729 Codec Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24030	G729 Codec (Profile 1)	Number	729
P24084	iLBC Codec Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24035	iLBC Codec (Profile 1)	Number	7201
P24085	G722 Codec Feature (Profile 1)	0 – No 1 – Yes	1 – Yes
P24036	G722 Codec (Profile 1)	Number	722
P751	Enable Call Features (Profile 2)	0 – No 1 – Yes 2 – Enable All	1 – Yes
P24260	SRTP Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24201	Enable SRTP (Profile 2)	Number	16
P24202	Disable SRTP (Profile 2)	Number	17
P24261	SRTP per call Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24203	Enable SRTP per call (Profile 2)	Number	18
P24204	Disable SRTP per call (Profile 2)	Number	19
P24262	CID Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24206	Enable CID (Profile 2)	Number	31
P24205	Disable CID (Profile 2)	Number	30
P24265	CID per call Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24219	Enable CID per call (Profile 2)	Number	82
P24210	Disable CID per call (Profile 2)	Number	67
P24263	Direct IP Calling Feature (Profile 2)	0 – No 1 – Yes	1 – Yes

P24207	Direct IP Calling (Profile 2)	Number	47
P24264	CW Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24209	Enable CW (Profile 2)	Number	51
P24208	Disable CW (Profile 2)	Number	50
P24267	CW per call Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24213	Enable CW per call (Profile 2)	Number	71
P24212	Disable CW per call (Profile 2)	Number	70
P24266	Call Return Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24211	Call Return (Profile 2)	Number	69
P24268	Unconditional Forward Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24214	Enable Unconditional Forward (Profile 2)	Number	72
P24215	Disable Unconditional Forward (Profile 2)	Number	73
P24272	Busy Forward Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24221	Enable Busy Forward (Profile 2)	Number	90
P24222	Disable Busy Forward (Profile 2)	Number	91
P24273	Delayed Forward Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24223	Enable Delayed Forward (Profile 2)	Number	92
P24224	Disable Delayed Forward (Profile 2)	Number	93
P24269	Paging Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24216	Paging (Profile 2)	Number	74
P24270	DND Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24217	Enable DND (Profile 2)	Number	78
P24218	Disable DND (Profile 2)	Number	79
P24271	Blind Transfer Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24220	Enable Blind Transfer (Profile 2)	Number	87
P24274	Disable LEC per call Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24225	Disable LEC per call (Profile 2)	Number	03
P24275	Star Code 3WC Feature (Profile 2)	0 – No	1 – Yes

		1 – Yes	
P24226	Star Code 3WC (Profile 2)	Number	23
P24259	Forced Codec Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24200	Forced Codec (Profile 2)	Number	02
P24276	PCMU Codec Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24227	PCMU Codec (Profile 2)	Number	7110
P24277	PCMA Codec Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24228	PCMA Codec (Profile 2)	Number	7111
P24278	G723 Codec Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24229	G723 Codec (Profile 2)	Number	723
P24279	G729 Codec Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24230	G729 Codec (Profile 2)	Number	729
P24284	iLBC Codec Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24235	iLBC Codec (Profile 2)	Number	7201
P24285	G722 Codec Feature (Profile 2)	0 – No 1 – Yes	1 – Yes
P24236	G722 Codec (Profile 2)	Number	722

SIP User-Agent

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

SIP User-Agent:

SIP User-Agent Postfix:

- Functionality**

This feature allows users to configure SIP User-Agent. If not configured, device will use the default User-Agent header.

- New P Values**

Pvalue	Description	Value range	Default
P29071	SIP User-Agent (Profile 1)	1024 – Max String Length	Null
P29171	SIP User-Agent (Profile 2)	1024 – Max String Length	Null

DISABLE REMINDER RING FOR DND

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

Disable Reminder Ring for DND: ☒ No ☐ Yes

- **Functionality**

This feature allows user to disable reminder ring when FXS port is on DND mode.

- **New P Values**

Pvalue	Description	Value range	Default
P29072	Disable Reminder Ring for DND (Profile 1)	0 – No 1 – Yes	0 – No
P29172	Disable Reminder Ring for DND (Profile 2)	0 – No 1 – Yes	0 – No

CDR FILE OPTION

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

CDR File Option: ☒ Keep ☐ Override
SIP File Option: ☒ Keep ☐ Override
Disable Weak TLS Cipher Suites: ☒ No ☐ Yes
Syslog Server:

- **Functionality**

By default, the device will split the allowed memory for CDR file into 2 parts. Device will create the first CDR file which is half of the allowed size, when it is full, device will create the second file. When “CDR File Option” is set to Keep, device will keep the call records when both files are full, no more new record will be stored. When this feature is set to Override, device will clear the first CDR file and start storing again.

- **New P Values**

Pvalue	Description	Value range	Default
P8534	CDR File Option	0 – Keep 1 – Override	0 – Keep

SIP FILE OPTION

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

SIP File Option: ☒ Keep ☐ Override

- **Functionality**

By default, the device will split the allowed memory for SIP file into 2 parts. Device will create the first SIP file which is half of the allowed size, when it is full, device will create the second file. When “SIP File Option” is set to Keep, device will keep the call records when both files are full, no more new record will be stored. When this feature is set to Override, device will clear the first SIP file and start storing again.

- **New P Values**

Pvalue	Description	Value range	Default
P8535	SIP File Option	0 – Keep 1 – Override	0 – Keep

DISABLE WEAK TLS CIPHER SUITES

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

SIP File Option: ☒ Keep ☐ Override

Disable Weak TLS Cipher Suites: ☒ No ☐ Yes

- **Functionality**

This feature allows users to disable weak ciphers DES/3DES and RC4.

- **New P Values**

Pvalue	Description	Value range	Default
P8536	Disable Weak TLS Cipher Suites	0 – No 1 – Yes	0 – No

PULSE DIALING STANDARD

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

Enable Pulse Dialing: ☒ No ☐ Yes

Pulse Dialing Standard: General Standard ▼

- **Functionality**

This feature allows users to use Swedish pulse dialing standard.

- **New P Values**

Pvalue	Description	Value range	Default
P28165	Pulse Dialing Standard (Profile 1)	0 – General Standard 1 – Swedish Standard	0 – General Standard
P28166	Pulse Dialing Standard (Profile 2)	0 – General Standard 1 – Swedish Standard	0 – General Standard

CALLEE FLASH TO 3WC

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

Callee Flash to 3WC: ☒ No ☐ Yes

Offhook Auto-Dial Delay: (0-60 seconds, default is 0)

- **Functionality**

When this feature is set to Yes, device would be able to set up the 3-way conference call even when device is the callee in the second call.

- **New P Values**

Pvalue	Description	Value range	Default
P28169	Callee Flash to 3WC (Profile 1)	0 – No 1 – Yes	0 – No
P28170	Callee Flash to 3WC (Profile 2)	0 – No 1 – Yes	0 – No

RFC2833 COUNT

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

RFC2833 Events Count: (between 2 and 10, default is 8)
RFC2833 End Events Count: (between 2 and 10, default is 3)

- **Functionality**

This feature allows users to customize the count of RFC2833 events and end events.

- **New P Values**

Pvalue	Description	Value range	Default
P28173	RFC2833 Events Count (Profile 1)	2 – minimum 10 – Maximum	8
P28174	RFC2833 Events Count (Profile 2)	2 – minimum 10 – Maximum	8
P28177	RFC2833 End Events Count (Profile 1)	2 – minimum 10 – Maximum	3
P28178	RFC2833 End Events Count (Profile 2)	2 – minimum 10 – Maximum	3

REPLACE BEGINNING '+' WITH 00 IN CALLER ID

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

Replace Beginning '+' with 00 in Caller ID: ☒ No ☐ Yes

- **Functionality**

When this feature is set to Yes, device will replace the “+” sign at the beginning of a number in the FROM header.

- **New P Values**

Pvalue	Description	Value range	Default
P29073	Replace Beginning '+' with 00 in Caller ID	0 – No	0 – No

	(Profile 1)	1 – Yes	
P29173	Replace Beginning '+' with 00 in Caller ID (Profile 2)	0 – No 1 – Yes	0 – No

RESET CALL FEATURES

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

Reset Call Features: ☒ No ☐ Yes

- Functionality**

When this feature allows users to reset all call features configuration.

- New P Values**

Pvalue	Description	Value range	Default
P24199	Reset Call Features (Profile 1)	0 – No 1 – Yes	0 – No
P24399	Reset Call Features (Profile 2)	0 – No 1 – Yes	0 – No

FIRMWARE VERSION 1.0.11.6

PRODUCT NAME

HT812, HT814

DATE

04/15/2019

FIRMWARE FILE INFORMATION

- HT81x firmware file name: ht81xfw.bin
MD5: 114d2dd0579f0ca2fa77513ca0cf68c4

ENHANCEMENT

- Added "CPU Load" on Web UI status page.
- Added support for SIP keep-alive to use SIP NOTIFY.
- Added feature "Network Cable Status" on Web UI status page.
- Added support for Management Interface. [MANAGEMENT INTERFACE]
- Added feature "Idle Call Setup Action". [IDLE CALL SETUP ACTION]
- Added feature "SSH Idle Timeout". [SSH IDLE TIMEOUT]
- Added feature "Telnet Idle Timeout". [TELNET IDLE TIMEOUT]
- Added feature "Use ARP to detect network connectivity". [USE ARP TO DETECT NETWORK CONNECTIVITY]
- Added feature "Call Record". [CALL RECORD]

BUG FIX

- Fixed PPPoE password is not hidden on Web interface.
- Fixed device will enter a DHCP loop if the DHCP Option 3 contained the IP address of a device that became offline.
- Fixed the security vulnerability that DHCP Options allows user to set any device Pvalue.
- Fixed device used an expired certificate for SIP mutual TLS authentication.
- Fixed device freeze after few hours.
- Fixed device WAN port will drop network when device in bridge mode.
- Fixed when connected device LAN port with PC via an Ethernet HUB, device will lose network connection after reboot.
- Fixed "Cloned WAN MAC Addr" is not working when Device Mode is set to Bridge.
- Fixed device network LED flashes abnormally when unplug network cable from WAN port and plug in later.
- Fixed device will not send PRACK in Allow header when send 180 Ringing.
- Fixed when enable SIP NOTIFY Authentication, device will reboot without sending a 200OK.

NEW FEATURES OVERVIEW

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

MANAGEMENT INTERFACE

- Web Configuration**

User can find the configuration in Web UI -> Basic Settings.

Enable Management Interface: ☒ No ☐ Yes

Management Access: Management Interface Only ▼

Management Interface IPv4 Address: 802.1Q/VLAN Tag 0 (0-4094)
 802.1p priority value 0 (0-7)

☒ dynamically assigned via DHCP

☐ statically configured as:

IP Address: 192.168.100.100

Subnet Mask: 255.255.255.0

Default Router: 192.168.100.1

DNS Server 1: 0.0.0.0

DNS Server 2: 0.0.0.0

- Functionality**

- Allow administrator to setup a Virtual Network Interface on top of the physical interface for device management.

- New P Values**

Pvalue	Description	Value range	Default
P28161	Enable Management Interface	0 – No 1 – Yes	0 – No
P28162	Management Access	0 – Management Interface Only 1 – Both Service and Management Interfaces	0 – Management Interface Only
P22105	Voice VLAN Type	0 – dynamically assigned via DHCP 1 – statically configured as	0 - dynamically assigned via DHCP
P22106	IP Address	IP Format	192.168.100.100
P22107	Subnet Mask	IP Format	255.255.255.0
P22108	Default Router	IP Format	192.168.100.1
P22109	DNS Server 1	IP Format	0.0.0.0

P22110	DNS Server 2	IP Format	0.0.0.0
P22111	Management Interface IPv4 Address: 802.1Q/VLAN Tag	0 – Minimum 4094 – Maximum	0
P22112	Management Interface IPv4 Address: 802.1p priority value	0 – Minimum 7 – Maximum	0

IDLE CALL SETUP ACTION

- Functionality**

This feature allows users to customize dial tone when user does not enter any digit. If the user picks up the handset without entering any digit, device will behave in the following manner:

- For the first 20 seconds, device will play the configured dial tone.
- If the user does not enter any digit during the first 20 seconds, device will play the configured busy tone for 60 seconds, then go to silence after the busy tone.

This feature is configurable through config file or via SSH. No option in Web UI. Need to reboot device after configuration.

- New P Values**

Pvalue	Description	Value range	Default
P28000	Idle Call Setup Action 1 (Profile 1)	0 – Continue 1 – Busy Tone 2 – Howler Tone 3 – CPC (disconnect) 4 – Reorder Tone 5 – Silence 6 – Stop Sequence	0 – Continue
P28001	Idle Call Setup Action 1 (Profile 2)	0 – Continue 1 – Busy Tone 2 – Howler Tone 3 – CPC (disconnect) 4 – Reorder Tone 5 – Silence 6 – Stop Sequence	0 – Continue
P28004	Duration of Idle Call Setup Action 1 (Profile 1)	Min – 1 second Max – 3600 seconds	60
P28005	Duration of Idle Call Setup Action 1 (Profile 2)	Min – 1 second Max – 3600 seconds	60
P28016	Idle Call Setup Action 2 (Profile 1)	0 – Continue 1 – Busy Tone 2 – Howler Tone 3 – CPC (disconnect) 4 – Reorder Tone	2 – Howler Tone

		5 – Silence 6 – Stop Sequence	
P28017	Idle Call Setup Action 2 (Profile 2)	0 – Continue 1 – Busy Tone 2 – Howler Tone 3 – CPC (disconnect) 4 – Reorder Tone 5 – Silence 6 – Stop Sequence	2 – Howler Tone
P28020	Duration of Idle Call Setup Action 2 (Profile 1)	Min – 1 second Max – 3600 seconds	30
P28021	Duration of Idle Call Setup Action 2 (Profile 2)	Min – 1 second Max – 3600 seconds	30
P28032	Idle Call Setup Action 3 (Profile 1)	0 – Continue 1 – Busy Tone 2 – Howler Tone 3 – CPC (disconnect) 4 – Reorder Tone 5 – Silence 6 – Stop Sequence	6 – Stop Sequence
P28033	Idle Call Setup Action 3 (Profile 2)	0 – Continue 1 – Busy Tone 2 – Howler Tone 3 – CPC (disconnect) 4 – Reorder Tone 5 – Silence 6 – Stop Sequence	6 – Stop Sequence
P28036	Duration of Idle Call Setup Action 3 (Profile 1)	Min – 1 second Max – 3600 seconds	1
P28037	Duration of Idle Call Setup Action 3 (Profile 2)	Min – 1 second Max – 3600 seconds	1

SSH IDLE TIMEOUT

- Web Configuration**

User can find the configuration in Web UI -> Basic Settings.

SSH Port:	22	(default is 22. Cannot be the same as Telnet Port.)
SSH Idle Timeout:	0	(0-86400 seconds. default 0 means never timeout.)

- Functionality**

This feature allows users to configure SSH session timeout. When there is no activity on the session, the

session will close automatically.

- **New P Values**

Pvalue	Description	Value range	Default
P28163	SSH Idle Timeout	0 seconds – Minimum 86400 seconds – Maximum	0

TELNET IDLE TIMEOUT

- **Web Configuration**

User can find the configuration in Web UI -> Basic Settings.

Telnet Port: (default is 23. Cannot be the same as SSH Port.)

Telnet Idle Timeout: (0-86400 seconds. default 0 means never timeout.)

- **Functionality**

This feature allows users to configure Telnet session timeout. When there is no activity on the session, the session will close automatically.

- **New P Values**

Pvalue	Description	Value range	Default
P28164	Telnet Idle Timeout	0 seconds – Minimum 86400 seconds – Maximum	0

USE ARP TO DETECT NETWORK CONNECTIVITY

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

Use DNS to detect network connectivity: ☒ No ☐ Yes

Use ARP to detect network connectivity: ☐ No ☒ Yes

- **Functionality**

This feature allows use to control device network detection mechanism.

- **New P Values**

Pvalue	Description	Value range	Default
P8512	Use ARP to detect network connectivity	0 – No 1 – Yes	1 – Yes

CALL RECORD

- **Web Configuration**

User can find the configuration in Web UI -> Status.

Call Record: [Download](#)

Provision: Not running, Last status : Firmware server is not configured.

Core Dump: Clean

- **Functionality**

Allow user to download call history from the web GUI in CSV format. The file size limitation is 125KB. No more record will be stored if it reaches 125KB.

FIRMWARE VERSION 1.0.10.6

PRODUCT NAME

HT812, HT814

DATE

12/11/2018

FIRMWARE FILE INFORMATION

- HT81x firmware file name: ht81xfw.bin
MD5: 413ccaab858c01caf4780ef2eca3809f

ENHANCEMENT

- Added feature "Inband DTMF Duration". [INBAND DTMF DURATION]
- Added feature "RFC2543 Hold". [RFC2543 HOLD]
- Added feature "Visual MWI Type". [VISUAL MWI TYPE]
- Added feature "Disable Unknown Caller ID". [DISABLE UNKNOWN CALLER ID]
- Added feature "Disable # as Redial Key". [DISABLE # as REDIAL KEY]
- Added feature "Ring Frequency". [RING FREQUENCY]
- Added feature "Allow SIP Factory Reset". [ALLOW SIP FACTORY RESET]
- Added support for G722 Codec.
- Added support for allow user to choose preference codec from PCMU and PCMA for FAX pass-through codec.
- Added Charter OEM ID 75.
- Added Web menu in Spanish.
- Increased device off-hook current to 30mA.

BUG FIX

- Fixed it took long time when device upgrade via TFTP domain name.
- Fixed NAT is not working in PPPoE mode.
- Fixed in 3-way conference call, the remote party could not hear the conference hang-up tone.
- Fixed when enable 'Remove OBP from Route Heade' function, OBP route header was shown when device registered in the Backup Outbound Proxy.
- Fixed device status page did not display core dump file when device crashed.
- Fixed Custom certificate provisioning failed using Pvalue P8472.
- Fixed device failed to register to the second IP of SRV records.
- Fixed device using LAN MAC address to connect ACS server instead of WAN MAC address.
- Fixed factory reset initiated by ACS did not reset the TR-069 config parameters.
- Fixed call failed when Enable 100rel feature set to Yes.
- Fixed device did not respond to ACS with STUN.

- Set the MAC address on syslog message to be lowercase.
- Fixed device failed in getting IP address when the gateway IP is changed.
- Fixed when set device hunting group to circular mode, device will drop the call once the last hunting group member is reached.

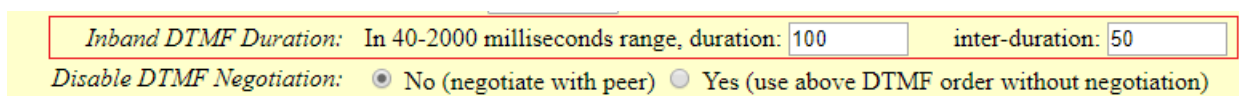
NEW FEATURES OVERVIEW

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

INBAND DTMF DURATION

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.



Inband DTMF Duration: In 40-2000 milliseconds range, duration: inter-duration:

Disable DTMF Negotiation: ☒ No (negotiate with peer) ☐ Yes (use above DTMF order without negotiation)

- **Functionality**

This feature allows users to adjust the DTMF duration.

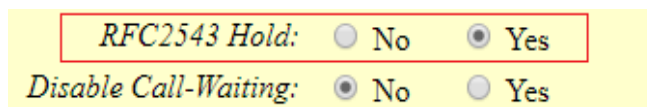
- **New P Values**

Pvalue	Description	Value range	Default
P28134	Inband DTMF Duration: duration (Profile 1)	40 milliseconds – Minimum 2000 milliseconds – Maximum	100
P28135	Inband DTMF Duration: duration (Profile 2)	40 milliseconds – Minimum 2000 milliseconds – Maximum	100
P28138	Inband DTMF Duration: inter-duration (Profile 1)	40 milliseconds – Minimum 2000 milliseconds – Maximum	50
P28139	Inband DTMF Duration: inter-duration (Profile 2)	40 milliseconds – Minimum 2000 milliseconds – Maximum	50

RFC2543 HOLD

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.



RFC2543 Hold: ☐ No ☒ Yes

Disable Call-Waiting: ☒ No ☐ Yes

- **Functionality**

This feature allows users to toggle between RFC2543 hold and RFC3261 hold. RFC2543 hold (0.0.0.0) allows user to disable the hold music sent to the other side. RFC 3261 (a line) will play the hold music to the other side.

- **New P Values**

Pvalue	Description	Value range	Default
--------	-------------	-------------	---------

P26062	RFC2543 Hold (Profile 1)	0 – No 1 – Yes	1 - Yes
P26162	RFC2543 Hold (Profile 2)	0 – No 1 – Yes	1 - Yes

VISUAL MWI TYPE

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

Disable Visual MWI: ☒ No ☐ Yes
Visual MWI Type: ☒ FSK ☐ NEON

- Functionality**

This feature allows use to configure Visual WMI Type.

- New P Values**

Pvalue	Description	Value range	Default
P4371	Visual MWI Type (Profile 1)	1 – FSK 2 - NEON	1 - FSK
P4372	Visual MWI Type (Profile 2)	1 – FSK 2 - NEON	1 - FSK

DISABLE UNKNOWN CALLER ID

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

DTMF Caller ID: *Start Tone* *Stop Tone*
Disable Unknown Caller ID: ☒ No ☐ Yes

- Functionality**

This feature allows users to disable the analog phone's caller ID when the device receive a call with Anonymous, unavailable or unknown as FROM USER and without Display-INFO.

- New P Values**

Pvalue	Description	Value range	Default
P28153	Disable Unknown Caller ID (Profile 1)	0 - No 1 - Yes	0 – No
P28154	Disable Unknown Caller ID (Profile 2)	0 - No 1 - Yes	0 - No

DISABLE # as REDIAL KEY

- Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

Use # as Dial Key: ☐ No ☒ Yes (if set to Yes, "#" will function as the "(Re-)Dial" key)
Disable # as Redial Key: ☒ No ☐ Yes (if set to Yes, "#" will not function as ReDial key)

- **Functionality**

With this feature and feature 'Use # as Dial Key' set to Yes, the # key will act as dial key but not as redial key.

- **New P Values**

Pvalue	Description	Value range	Default
P28147	Disable # as Redial Key (Profile 1)	0 - No 1 - Yes	0 - No
P28148	Disable # as Redial Key (Profile 2)	0 - No 1 - Yes	0 - No

RING FREQUENCY

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

Ring Frequency: 20Hz default ▾
Enable High Ring Power: ☒ No ☐ Yes

- **Functionality**

This feature allows user to customize ring frequency

- **New P Values**

Pvalue	Description	Value range	Default
P4429	Ring Frequency (Profile 1)	20 – 20Hz default 25 – 25Hz	20 – 20Hz default
P4430	Ring Frequency (Profile 2)	20 – 20Hz default 25 – 25Hz	20 – 20Hz default

ALLOW SIP FACTORY RESET

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

Caller ID Fetch Order: ☒ Auto ☐ Disabled ☐ From Header
Allow SIP Factory Reset: ☒ No ☐ Yes

- **Functionality**

This feature allows user to reset the devices directly through SIP Notify.

- **New P Values**

Pvalue	Description	Value range	Default
P26015	Allow SIP Factory Reset (Profile 1)	0 – No	0 - No

		1 – Yes	
P26115	Allow SIP Factory Reset (Profile 2)	0 – No 1 – Yes	0 - No

FIRMWARE VERSION 1.0.9.3

PRODUCT NAME

HT812, HT814

DATE

05/15/2018

FIRMWARE FILE INFORMATION

- HT81x firmware file name: ht81xfw.bin
MD5: 7fd5057127bdc7381ea75e2b0c4cc4e7

ENHANCEMENT

- Added feature "Custom Certificate". [CUSTOM CERTIFICATE]
- Added feature "Conference Party Hangup Tone". [CONFERENCE PARTY HANGUP TONE]
- Added feature "Use P-Access-Network-Info Header". [USE P-ACCESS-NETWORK-INFO HEADER]
- Added feature "Use P-Emergency-Info Header". [USE P-EMERGENCY-INFO HEADER]
- Add support for call waiting tone to be repeated while the caller is still calling.
- Add support for HTTPS based on TLS v1.2

BUG FIX

- Fixed device would not auto-reboot after factory reset via TR-069.
- Fixed when using pulse dialing mode, device plays dial tone after first digit.
- Fixed device stops communicating with TR-069 server when receiving GetOptions RPC Method.
- Change "Validate Server Certificates" default value to No.

NEW FEATURES OVERVIEW

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

CUSTOM CERTIFICATE

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

SIP TLS Private Key Password:

Custom Certificate:
(Private Key + Certificate)

- **Functionality**

This feature allows users to update to the device their own certificate signed by custom CA certificate to manage client authentication.

- **New P Values**

Pvalue	Description	Value range	Default
P8472	Custom Certificate (Private Key + Certificate)	10 - Rows 64 - Columns	Null

CONFERENCE PARTY HANGUP TONE

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

Conference Party Hangup Tone:

Syntax: `f1=val[, f2=val[, c=on1/off1[-on2/off2[-on3/off3]]]];`
 (Frequencies are in (300, 3400) Hz and cadence on and off are in (0, 64000) ms)

- **Functionality**

With this feature, device will play custom tone when a party leave the established 3-way conference. User needs to set "Special Feature" to MTS to use this function.

- **New P Values**

Pvalue	Description	Value range	Default
P28133	Conference Party Hangup Tone	(300, 3400) HZ – Frequency (0, 6400) ms – cadence on and off	f1=425@-15,c=600/600;

USE P-ACCESS-NETWORK-INFO HEADER

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

Use P-Preferred-Identity Header: ☒ Default ☐ No ☐ Yes
Use P-Access-Network-Info Header: ☐ No ☒ Yes
Use P-Emergency-Info Header: ☐ No ☒ Yes

- **Functionality**

With this feature enabled, device will populate the WAN access node with IEE-802.11a, IEE-802.11b in P-Access-Network-Info SIP header.

- **New P Values**

Pvalue	Description	Value range	Default
P26058	Use P-Access-Network-Info Header (Profile 1)	0 - No 1 - Yes	1 - Yes
P26158	Use P-Access-Network-Info Header (Profile 2)	0 - No 1 - Yes	1 - Yes

USE P-EMERGENCY-INFO HEADER

- **Web Configuration**

User can find the configuration in Web UI -> Profile Settings.

Use P-Preferred-Identity Header: ☒ Default ☐ No ☐ Yes
Use P-Access-Network-Info Header: ☐ No ☒ Yes
Use P-Emergency-Info Header: ☐ No ☒ Yes

- **Functionality**

This feature support of IEEE-48-addr and IEEE-EUI-64 in SIP header for emergency calls.

- **New P Values**

Pvalue	Description	Value range	Default
P26059	Use P-Emergency-Info Header (Profile 1)	0 - No 1 - Yes	1 - Yes
P26159	Use P-Emergency-Info Header (Profile 2)	0 - No 1 - Yes	1 - Yes

FIRMWARE VERSION 1.0.8.7

PRODUCT NAME

HT812, HT814

DATE

04/16/2018

IMPORTANT UPGRADING NOTE

- **Once HT812/HT814 is upgraded to 1.0.8.7, downgrading to 1.0.2.x firmware version or lower is not supported.**

ENHANCEMENT

- Added “MTS” to Special Feature.
- Added support for Russian in WebUI and IVR.
- Added support for upgrade device via FTP/FTPS server.
- Added support to have the call waiting tone through SIP INFO.
- Added support for Hunting Group on HT812 WebUI.
- Added feature “Validate Server Certificates”. [Validate Server Certificates]
- Added support for DDNS. [DDNS]
- Added feature Blacklist for Incoming Calls. [Blacklist For Incoming Calls]
- Added support for Telnet. [Telnet]
- Added feature “Play busy/reorder tone before Loop Current Disconnect.” [Play busy/reorder tone before Loop Current Disconnect]

BUG FIX

- Fixed device queried wrong FQDN.
- Fixed device played random DTMF during conversation.
- Fixed device missing parameter to configure the off-hook auto dial feature.
- Fixed device does not receive Connection Request from ACS.
- Fixed unselected syslog levels messages are sent from device.
- Fixed device failed to resolve Backup Outbound Proxy domain name.
- Fixed when device DNS mode set to NAPTR/SRV, device failed to send domain name resolution to preferred DNS server.
- Fixed device would send domain resolution to DHCPv6's DNS server when Internet protocol set to Prefer IPv4.

NEW FEATURES OVERVIEW

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

Validate Server Certificates

- Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

Authenticate Conf File: ☒ No ☐ Yes (cfg file would be authenticated before acceptance if set to Yes)

Validate Server Certificates: ☒ No ☐ Yes (validate server certificates with our trusted list of TLS connections)

- Functionality**

This feature allows users to validate server certificates with our trusted list of TLS connections. Default is enabled. The device needs to reboot after changing the setting.

- New P Values**

Pvalue	Description	Value range	Default
P8463	Validate Server Certificates	0 - No 1 - Yes	0 - No

DDNS

- Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

Enable DDNS: ☒ No ☐ Yes

DDNS Server:

DDNS Username:

DDNS Password:

DDNS Hostname:

DDNS Hash:

- Functionality**

Allow users to use DDNS.

- New P Values**

Pvalue	Description	Value range	Default
P28121	Enable DDNS	0 - No 1 - Yes	0 - No
P28122	DDNS Server	0 - dyndns.org 1 - freedns.afraid.org 2 - zoneedit.com 3 - no-ip.com 4 - oray.net	0 – dyndns.org

P28123	DDNS Username	64 – Max String Length	Null
P28124	DDNS Password	64 – Max String Length	Null
P28125	DDNS Hostname	64 – Max String Length	Null
P28126	DDNS Hash	64 – Max String Length	Null

Blacklist For Incoming Calls

- Web Configuration**

User can find the configuration section at Web -> Advanced Settings

Blacklist For Incoming Calls:

- Functionality**

Allow users to block incoming calls from specific list of numbers. Maximum allow 10 SIP numbers and each number should be separated by a comma (',') in webUI. Other allowed characters are 0-9, 26 letters (A-Z and a-z), comma (','), asterisk (*), pound sign (#) and plus sign (+).

- New P Values**

Pvalue	Description	Value range	Default
P28127	Blacklist For Incoming Calls	10 – Maximum allowed SIP numbers	Null

Telnet

- Web Configuration**

User can find the configuration section at Web -> Basic Settings

Disable SSH: ☒ No ☐ Yes
 SSH Port: (default is 22. Cannot be the same as Telnet Port.)
 Disable Telnet: ☐ No ☒ Yes
 Telnet Port: (default is 23. Cannot be the same as SSH Port.)

- Functionality**

This feature allows users access device CLI by using Telnet. The default Telnet port is 23, this should be different from SSH port.

- New P Values**

Pvalue	Description	Value range	Default
P28120	Disable Telnet	0 - No 1 - Yes	1 - Yes

P28128	Telnet Port	5 – Max String Length	23
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Play busy/reorder tone before Loop Current Disconnect

- Web Configuration**

User can find the configuration section at Web -> Profile Settings

Play busy/reorder tone before Loop Current ☒ No ☐ Yes (play busy/reorder tone before loop current disconnect upon call Disconnect: fail)

- Functionality**

Allow user to configure if it will play busy/reorder tone before loop current disconnect upon call fail. Default is No

- New P Values**

Pvalue	Description	Value range	Default
P21925	Play busy/reorder tone before Loop Current Disconnect. (Profile 1)	0 - No 1 - Yes	0 – No
P21926	Play busy/reorder tone before Loop Current Disconnect (Profile 2)	0 - No 1 - Yes	0 – No

FIRMWARE VERSION 1.0.5.11

PRODUCT NAME

HT812, HT814

DATE

12/13/2017

IMPORTANT UPGRADING NOTE

- **Once HT812/HT814 is upgraded to 1.0.5.11, downgrading to 1.0.2.x firmware version or lower is not supported.**

ENHANCEMENT

- Added support for DHCP option 33.
- Added support for DHCP option 121.
- Added feature "Black List for WAN Side Port". [Black List for WAN Side Port]
- Added feature "Randomized Automatic Upgrade". [Randomized Automatic Upgrade]
- Added feature "Automatic Upgrade End Hour". [Automatic Upgrade End Hour]
- Added feature "Automatic Reboot". [Automatic Reboot]
- Added support for RADIUS. [RADIUS]
- Added support for SNMPv3. [SNMPv3]
- Added feature "Export Backup Configuration". [Export Backup Configuration]
- Added feature "Restore From Backup Configuration". [Restore From Backup Configuration]
- Added option "WAN Only". [WAN Only]
- Added feature "New Viewer Password". [New Viewer Password]
- Added feature "Web Session Timeout". [Web Session Timeout]
- Added feature "Web Access Attempt Limit". [Web Access Attempt Limit]
- Added feature "Web Lockout Duration". [Web Lockout Duration]
- Added support for DHCP option 124, 125 for TR069.
- Added support for DHCPv6 option 16 for TR069.
- Added support for DHCP option 17 in IPv6 implementation.
- Added feature "DHCP Option 17 Enterprise Number". [DHCP Option 17 Enterprise Number]
- Added feature "Caller ID Fetch Order" to specify the priority for caller ID display. [Caller ID Fetch Order]
- Added option "Enable High Ring Power". [Enable High Ring Power]
- Added option "Enable Pulse Dialing". [Enable Pulse Dialing]
- Added option to disable/enable HTTP Web Access.
- Added dial plan rule timer T.
- Added feature "Internet Protocol" to choose from "IPv4 Only", "IPv6 Only", "Both, prefer IPv4", "Both, prefer IPv6". [INTERNET PROTOCOL]

- Added feature “IPv6 Address” to configure IPv6 Address. [IPv6 ADDRESS]

BUG FIX

- Fixed device does not register when enable Allow Incoming SIP Messages from SIP Proxy Only.
- Fixed web vulnerability about CSRF and XSS.
- Fixed device cannot connect to ACS server when using PPPoE IPv4.
- Fixed device would crash after being transferred during in IP call.
- Fixed device does not auto-reboot after factory reset via TR069.
- Fixed set Web Access Mode to HTTPS via TR069, it would take effect as HTTP.
- Fixed device LED light would always be flashing and unable to reboot when switched the web page during uploading the firmware.
- Fixed device does not request a DNS IP from the PPPoE server.
- Fixed sometimes device could not access the web page when Internet Protocol change from preferred IPv6 to IPv6 Only.
- Fixed when IPv4 set to PPPoE, device could not login via SSH after set the Internet Protocol to IPv6 Only.
- Fixed the static IPv6 address does not take effect when device using PPPoE IPv4 address.
- Fixed device failed in adding the Trusted CA.
- Fixed device does not request config file from updated config server path.
- Fixed device would send domain name resolution to DHCPv6's DNS server when Internet protocol set to prefer IPv4.
- Fixed device always displays the IPv6 DNS server in SSH.
- Fixed device always uses the stateful IPv6 address even the DHCPv6 server is used.
- Fixed device FXS port status still display “Ring Back” after far end reject the call.
- Fixed when device uses static IP or PPPoE, it would change to dynamic IP after telnet the device and reset VoIP data.
- Fixed when login the device via SSH, needs to enter password twice.
- Fixed the 3rd and 4th preferred DNS server do not take effect.
- Fixed the URL with underscore “_” is not supported.
- Fixed device drop call after receive T.38 re-invite.
- Fixed device does not open a new TCP window when registration over TLS fails.
- Fixed device would not send register message when enabling PPPoE.
- Fixed device would not auto-reboot after factory reset via TR-069.
- Fixed device would not download configuration or firmware when the Internet protocol is set to IPv6 Only.
- Fixed DHCP option 120 does not take effect when using IPv6.
- Fixed device prompts wrong IP address in IVR when using static IP address.
- Fixed when logging in device via SSH, IPv6 DNS server does not display.
- Fixed when using static IPv4 address, device could not make calls when Internet protocol is set to IPv6 Only.
- Fixed device could not check IPv6 address via IVR.

- Fixed device does not perform IPv6 DNS query for ACS URL.
- Fixed device does not implement HTTPS TR-069 connection when Internet Protocol set to IPv6 Only.

NEW FEATURES OVERVIEW

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

Black List for WAN Side Port

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

Black List for WAN Side Port:

STUN server is: (URI or IP:port)

- **Functionality**

This feature allows users to manually block specific ports or ports range. Users can disable the port with following type of port range (take port1, port2 and port 3 as an example):

1) P1,P2-P3

This type allows users to disable the port P1, P2 to P3

2) -P1,P2-P3

This type allows users to disable the port from 0 to P1 and disable port from P2 to P3

3) P1-

This type allows users to disable the port from P1 to P65535

The following ASCII characters are valid:

1) '0' – '9': Port number

2) ','; Separator for different port or port range

3) '-': Used to indicate the port range

- **New P Values**

Pvalue	Description	Value range	Default
P28115	Black List for WAN Side Port	0 – 65535	None

Randomized Automatic Upgrade

- **Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

Randomized Automatic Upgrade: ☒ No ☐ Yes

- **Functionality**

Allow user to enable Randomized Automatic Upgrade. When this feature enabled, user could customize device random firmware/configuration download start/end time to avoid that all device is upgraded at the same time when it makes a change on firmware/configuration files.

- **New P Values**

Pvalue	Description	Value range	Default
P8458	Randomized Automatic Upgrade	0 – No 1 - Yes	0 - No

Automatic Upgrade End Hour

- **Web Configuration**

User can find the configuration section at Web -> Advanced Settings

Automatic Upgrade:

- ☒ No
- ☐ Yes, every minutes(30-5256000).
- ☐ Yes, daily at start hour (0-23), at end hour (0-23).
- ☐ Yes, weekly on day (0-6).

- **Functionality**

When “Automatic Upgrade” is set to “Yes, daily at”, users can choose a start time and end time of one day when the phone will request the firmware/config file.

- **New P Values**

Pvalue	Description	Value range	Default
P8459	Automatic Upgrade End Hour	0 – 23	22

Automatic Reboot

- **Web Configuration**

User can find the configuration section at Web -> Advanced Settings

- Automatic Reboot:*
- ☒ No
 - ☐ Yes, reboot every day at hour (0-23)
 - ☐ Yes, reboot every week at day (0-6)
 - ☐ Yes, reboot every month at day (0-30)

Download Device Configuration:

- **Functionality**

This feature allows users to configure a specific day on a month to auto restart the device.

- **New P Values**

Pvalue	Description	Value range	Default
P21929	Automatic Reboot	0 – No 1 – Yes, reboot every day at hour 2 – Yes, reboot every week at day 3 – Yes, reboot every month at day	0 - No
P21930	Automatic reboot hour of day	0 - 23	1
P21931	Automatic reboot day of week	0 - 6	1
P28118	Automatic reboot at day of the month	0 - 30	1

RADIUS

• Web Configuration

User can find the configuration section at Web -> Advanced Settings

Enable RADIUS Web Access Control: ☒ No ☐ Yes
Action upon Radius Auth Server Error: ☐ Reject Access ☒ Authenticate Locally
RADIUS Auth Server Address:
RADIUS Auth Server Port:
RADIUS Shared Secret:
RADIUS VSA Vendor ID:
RADIUS VSA Access Level Attribute:

• Functionality

Allow user to “Enable RADIUS Web Access Control” and configure three level access through RADIUS authorization. Grandstream Vendor ID is 42397.

• New P Values

Pvalue	Description	Value range	Default
P28107	Enable RADIUS Web Access Control	0 - No 1 – Yes	0 – No
P28114	Action upon Radius Auth Server Error	0 – Reject Access 1 – Authenticate Locally	1 – Authenticate Locally
P28108	RADIUS Auth Server Address	64 - Max Character Number	None

P28109	RADIUS Auth Server Port	64 - Max Character Number	None
P28110	RADIUS Shared Secret	64 - Max Character Number	None
P28111	RADIUS VSA Vendor ID	64 - Max Character Number	42397
P28112	RADIUS VSA Access Level Attribute	64 - Max Character Number	None

SNMPv3

- Web Configuration**

User can find the configuration section at Web -> Advanced Settings

Enable SNMP: ☒ No ☐ Yes

SNMP Version: Version 3 ▼

SNMP Port: 161 (161 or 1025-65535. Default 161)

SNMP Trap IP Address:

SNMP Trap Port: 162 (162 or 1025-65535. Default 162)

SNMP Trap Version: Version 2c ▼

SNMP Trap Interval: 5 (1-1440. Default 5 minutes)

SNMPv1/v2c Community:

SNMPv1/v2c Trap Community:

SNMPv3 User Name:

SNMPv3 Security Level: noAuthUser ▼

SNMPv3 Authentication Protocol: None ▼

SNMPv3 Privacy Protocol: None ▼

SNMPv3 Authentication Key:

SNMPv3 Privacy Key:

SNMPv3 Trap User Name:

SNMPv3 Trap Security Level: noAuthUser ▼

SNMPv3 Trap Authentication Protocol: None ▼

SNMPv3 Trap Privacy Protocol: None ▼

SNMPv3 Trap Authentication Key:

SNMPv3 Trap Privacy Key:

- Functionality**

This function allows users to configure SNMPv3 feature.

- **New P Values**

Pvalue	Description	Value range	Default
P21904	SNMP Version	1 – Version 1 2 – Version 2c 3 – Version 3	3 – Version 3
P21903	SNMP Port	162 or 1025-65535	162
P21902	SNMPv1/v2c Community	64 - Max Character Number	None
P21905	SNMPv3 User Name	64 - Max Character Number	None
P21910	SNMPv3 Security Level	0 – noAuthUser 1 – authUser 2 - privUser	0 - noAuthUser
P21906	SNMPv3 Authentication Protocol	0 – None 1 – MD5 2 - SHA	0 - None
P21907	SNMP Privacy Protocol	0 – None 1 – DES 2 – AES AES128	0 – None
P21908	SNMPv3 Authentication Key	5 – Rows 64 – Columns	None
P21909	SNMPv3 Privacy Key	5 – Rows 64 – Columns	None
P21911	SNMPv3 Trap User Name	64 - Max Character Number	None
P21916	SNMPv3 Trap Security Level	0 – noAuthUser 1 – authUser	0 - noAuthUser

		2 - privUser	
P21912	SNMPv3 Trap Authentication Protocol	0 – None 1 – MD5 2 - SHA	0 - None
P21913	SNMP Trap Privacy Protocol	0 – None 1 – DES 2 – AES AES-128	0 – None
P21914	SNMPv3 Trap Authentication Key	5 – Rows 64 – Columns	None
P21915	SNMPv3 Trap Privacy Key	5 – Rows 64 – Columns	None

Export Backup Configuration

- Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

Export Backup Configuration:

Restore From Backup Configuration:

- Functionality**

Export backup package which contains device configuration along with personal data.

Restore From Backup Configuration

- Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

Export Backup Configuration:

Restore From Backup Configuration:

- **Functionality**

This feature allows users to upload backup package and restore.

WAN Only

- **Web Configuration**

User can find the configuration in Web UI -> Basic Settings.

NAT/DHCP Server Information & Configuration:

Device Mode: ☒ NAT Router ☐ Bridge ☐ WAN Only

- **Functionality**

This feature allows users to shutdown the LAN port completely.

New Viewer Password

- **Web Configuration**

User can find the configuration section at Web -> Basic Settings

New Viewer Password: (purposely not displayed for security protection)

Confirm Viewer Password:

- **Functionality**

Allow users to configure Viewer Password. The default viewer password is viewer.

- **New P Values**

Pvalue	Description	Value range	Default
P28113	New Viewer Password	30 – Max Character Number	viewer (purposely not displayed for security protection)

Web Session Timeout

- **Web Configuration**

User can find the configuration section at Web -> Basic Settings

Web/SSH Access:

Web Session Timeout: 10 (1-60, default 10 minutes.)

Web Access Attempt Limit: 5 (1-10, default 5.)

Web Lockout Duration: 15 (0-60, default 15 minutes.)

- **Functionality**

This feature allows users to set the idle time to logout the user from the Web.

- **New P Values**

Pvalue	Description	Value range	Default
P28116	Web Session Timeout	1 - 60 minutes	10 minutes

Web Access Attempt Limit

- Web Configuration**

User can find the configuration section at Web -> Basic Settings

Web/SSH Access:

Web Session Timeout: (1-60, default 10 minutes.)

Web Access Attempt Limit: (1-10, default 5.)

Web Lockout Duration: (0-60, default 15 minutes.)

- Functionality**

This feature allows users to customize the number of failed attempt that the device will allow to block the web access.

- New P Values**

Pvalue	Description	Value range	Default
P28117	Web Access Attempt Limit	1 - 10	5

Web Lockout Duration

- Web Configuration**

User can find the configuration section at Web -> Basic Settings

Web/SSH Access:

Web Session Timeout: (1-60, default 10 minutes.)

Web Access Attempt Limit: (1-10, default 5.)

Web Lockout Duration: (0-60, default 15 minutes.)

- Functionality**

This feature allows users to customize the duration that the web UI access will be blocked due to failed login attempt.

- New P Values**

Pvalue	Description	Value range	Default
P1683	Web Lockout Duration	0 – 60 minutes	15 minutes

DHCP Option 17 Enterprise Number

- Web Configuration**

User can find the configuration in Web UI -> Advanced Settings.

<i>DHCP Option 17 Enterprise Number:</i>	3561
<i>Syslog Server:</i>	192.168.253.111
<i>Syslog Level:</i>	DEBUG
<i>Send SIP Log:</i>	☐ No ☒ Yes

- Functionality**

Set DHCP Option 17 Enterprise Number. The default value is “3561”

- New P Values**

Pvalue	Description	Value range	Default
P8457	DHCP Option 17 Enterprise Number	5 – Max Character Number	3561

Caller ID Fetch Order

- Web Configuration**

User can find the configuration section at Web -> Profile Settings.

<i>Caller ID Fetch Order:</i>	☒ Auto ☐ Disabled ☐ From Header
<i>SIP T1 Timeout:</i>	0.5 sec
<i>SIP T2 Interval:</i>	4 sec

- Functionality**

Allow users to configure Caller ID display from SIP INVITE based on option “Auto”, “Disabled” or “From Header”. In “Auto” mode, device will look for the caller ID in the order of P-Asserted Identity Header, Remote-Party-ID Header and From Header in the coming SIP INVITE. In “Disabled” mode, all incoming calls caller ID will be disabled. In “From Header” mode, device will search caller ID from ‘FROM’ header of incoming calls.

- New P Values**

Pvalue	Description	Value range	Default
P2324	Caller ID Fetch Order. (Profile 1)	0 – Auto 1 – Disabled 2 – From Header	0 – Auto
P2424	Caller ID Fetch Order. (Profile 2)	0 - Auto 1 - Disabled 2- From Header	0 – Auto

Enable High Ring Power

- **Web Configuration**

User can find the configuration section at Web -> Profile Settings.

Ring Frequency: (15-60 Hz, default is 20 Hz)

Enable High Ring Power: ☒ No ☐ Yes

- **Functionality**

Allow users to enable High Ring Power option under Profile.

- **New P Values**

Pvalue	Description	Value range	Default
P4234	Enable High Ring Power. (Profile 1)	0 - No 1 - Yes	0 - No
P4235	Enable High Ring Power. (Profile 2)	0 - No 1 - Yes	0 - No

Enable Pulse Dialing

- **Web Configuration**

User can find the configuration section at Web -> Profile Settings.

Enable Pulse Dialing: ☒ No ☐ Yes

Enable Hook Flash: ☐ No ☒ Yes

- **Functionality**

Allow users to enable Pulse Dialing option.

- **New P Values**

Pvalue	Description	Value range	Default
P20521	Enable Pulse Dialing. (Profile 1)	0 - No 1 - Yes	0 - No
P20522	Enable Pulse Dialing. (Profile 2)	0 - No 1 - Yes	0 - No

INTERNET PROTOCOL

- **Web Configuration**

User can find the configuration in Web UI -> Basic Settings.

Internet Protocol: ☐ IPv4 Only ☒ IPv6 Only ☐ Both, prefer IPv4 ☐ Both, prefer IPv6

IPv4 ☒ dynamically assigned via DHCP

Address: DHCP hostname: (optional)

- **Functionality**

Selects Internet protocol. The default setting is "IPv4 Only".

- **New P Values**

Pvalue	Description	Value range	Default
P1415	Internet Protocol	0 – Both, prefer IPv4 1 – Both, prefer IPv6 2 – IPv4 Only 3 – IPv6 Only	2 – IPv4 Only

IPv6 ADDRESS

- **Web Configuration**

User can find the configuration in Web UI -> Basic Settings.

IPv6 ☒ dynamically assigned via DHCP

Address: ☐ statically configured as:

☒ Full Static

Static IPv6 Address:

IPv6 Prefix Length:

☐ Prefix Static

IPv6 Prefix(64 bits):

DNS Server 1:

DNS Server 2:

Preferred DNS Server:

- **Functionality**

Allow users to configure the appropriate network settings to obtain IPv6 address.

- **New P Values**

Pvalue	Description	Value range	Default
P1419	IPv6 Address dynamically assigned via DHCP or statically configured	0 – dynamically assigned via DHCP 1 – statically configured as	0 – dynamically assigned via DHCP
P1426	Full Static or Prefix Static	0 – Full Static 1 – Prefix Static	0 – Full Static

P1420	Static IPv6 Address for Full Static mode	40 – Max Character Number	Null
P1421	IPv6 Prefix Length for Full Static mode	3 – Max Character Number	Null
P1422	IPv6 Prefix (64 bits) for Prefix Static mode	40 – Max Character Number	Null
P1424	DNS Server 1	40 – Max Character Number	Null
P1425	DNS Server 2	40 – Max Character Number	Null
P1423	Preferred DNS Server	40 – Max Character Number	Null

FIRMWARE VERSION 1.0.3.7

PRODUCT NAME

HT812 and HT814

DATE

7/03/2017

IMPORTANT UPGRADING NOTE

- **Once HT812/HT814 is upgraded to 1.0.3.7, downgrading to 1.0.2.x firmware version or lower is not supported.**

ENHANCEMENT

- Added option “Use Actual Ephemeral Port in Contact with TCP/TLS” to force device use actual ephemeral port. [Use Actual Ephemeral Port in Contact with TCP/TLS]
- Added option “SIP URI Scheme When Using TLS” to choose between ‘SIP’ and ‘SIPS’. [SIP URI Scheme When Using TLS]
- Added Option “Backup Outbound Proxy” to use backup Outbound Proxy if Outbound Proxy registration expire. [Backup Outbound Proxy]
- Added option “Prefer Primary Outbound Proxy” to enable register through primary outbound proxy if registration expire. [Prefer Primary Outbound Proxy]
- Added option “Enable RTCP” to enable RTCP function through Web UI. [Enable RTCP]
- Added option “Hold Target Before Refer” to enable device hold before being referred. [Hold Target Before Refer]
- Added Option “Enable Session Timer” to disable session timer. [Enable Session Timer]
- Added feature “Conference URI” to enter Conference URI. [Conference URI]
- Added feature “White List for WAN Side” for remote management. [White List for WAN Side]
- Added feature “Black List for WAN Side” for remote management. [Black List for WAN Side]
- Added option “Web Access Mode” to choose between “HTTPS” and “HTTP” to access device Web UI. [Web Access Mode]
- Added feature “HTTPS Web Port” to set https web port instead of using default https port. [HTTPS Web Port]
- Added feature “SSH Port” to self-configure ssh port. [SSH Port]
- Added SNMP related features. [SNMP]

BUG FIX

- Fixed device could not off hook keep sending register after call canceled.
- Fixed device would not send register message to failover SIP server when register to primary sip server failed.
- Fixed device does not contact ACS after being provisioned from GAPS.

- Fixed device missing parameter on TR-069.
- Fixed device does not send keep-alive signal on initial provision.
- Fixed device “Backup Outbound Proxy” Option does not support configuration via TR-069.
- Fixed device session re-transmission mechanism does not work.
- Fixed device crashes randomly without generating core dump.

NEW FEATURES OVERVIEW

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

Use Actual Ephemeral Port in Contact with TCP/TLS

- **Web Configuration**

User can find the re-enter confirm box at Web -> Profile Settings

SIP URI Scheme When Using TLS: ☐ sip ☒ sips

Use Actual Ephemeral Port in Contact with TCP/TLS: ☒ No ☐ Yes

NAT Traversal: ☒ No ☐ Keep-Alive ☐ STUN ☐ UPnP

- **Functionality**

This option is used to control the port information in the Via header and Contact header. If set to No, these port numbers will use the permanent listening port on the phone. Otherwise, they will use the ephemeral port for the connection. The default setting is “No”.

- **New P Values**

Pvalue	Description	Value range	Default
P2331	Use Actual Ephemeral Port in Contact with TCP/TLS. (Profile 1)	0 – No 1 – Yes	0 – No
P2431	Use Actual Ephemeral Port in Contact with TCP/TLS. (Profile 2)	0 – No 1 – Yes	0 – No

SIP URI Scheme When Using TLS

- **Web Configuration**

User can find the re-enter confirm box at Web -> Profile Settings

SIP URI Scheme When Using TLS: ☐ sip ☒ sips

Use Actual Ephemeral Port in Contact with TCP/TLS: ☒ No ☐ Yes

NAT Traversal: ☒ No ☐ Keep-Alive ☐ STUN ☐ UPnP

- **Functionality**

Specifies if “sip” or “sips” will be used when TLS/TCP is selected for SIP Transport. The default setting is “sips”.

- **New P Values**

Pvalue	Description	Value range	Default
P2329	SIP URI Scheme When Using TLS. (Profile 1)	0 – No 1 – Yes	1 – Yes
P2429	SIP URI Scheme When Using TLS (Profile 2)	0 – No 1 – Yes	1 – Yes

Backup Outbound Proxy

- **Web Configuration**

User can find the re-enter confirm box at Web -> Profile Settings

Outbound Proxy:		(e.g., proxy.myprovider.com, or IP address, if any)
Backup Outbound Proxy:		(e.g., proxy.myprovider.com, or IP address, if any)

- **Functionality**

Set backup outbound proxy, when the “Outbound Proxy” registration failed, device will use the backup outbound proxy. By default, this section leaves empty.

New P Values

Pvalue	Description	Value range	Default
P2333	Backup Outbound Proxy. (Profile 1)	96 - Max String Length	Null
P2433	Backup Outbound Proxy. (Profile 2)	96 – Max String Length	Null

Prefer Primary Outbound Proxy

- **Web Configuration**

User can find the re-enter confirm box at Web -> Profile Settings

Prefer Primary Outbound Proxy:	☒ No ☐ Yes (yes - will reregister via Primary Outbound Proxy if registration expires)
SIP Transport:	☒ UDP ☐ TCP ☐ TLS (default is UDP)

- **Functionality**

If set this option to “Yes”, when registration expires, device will re-register via primary outbound proxy. By default, this option is disabled.

- **New P Values**

Pvalue	Description	Value range	Default
P28096	Prefer Primary Outbound Proxy. (Profile 1)	0 – No 1 – Yes	0 – No
P28097	Prefer Primary Outbound Proxy. (Profile 2)	0 – No 1 – Yes	0 – No

Enable RTCP

- Web Configuration**

User can find the re-enter confirm box at Web -> Profile Settings

Use Random RTP Port: ☒ No ☐ Yes
Enable RTCP: ☐ No ☒ Yes

- Functionality**

This option allow user enable RTCP. The default setting is “Yes”.

- New P Values**

Pvalue	Description	Value range	Default
P2392	Enable RTCP. (Profile 1)	0 – No 1 – Yes	1 – Yes
P2492	Enable RTCP. (Profile 2)	0 – No 1 – Yes	1 – Yes

Hold Target Before Refer

- Web Configuration**

User can find the re-enter confirm box at Web -> Profile Settings

Enable RTCP: ☐ No ☒ Yes
Hold Target Before Refer: ☐ No ☒ Yes
Refer-To Use Target Contact: ☒ No ☐ Yes

- Functionality**

This function allows user to hold or not hold the phone call before referring. The default setting is “Yes”.

- New P Values**

Pvalue	Description	Value range	Default
P26003	Hold Target Before Refer. (Profile 1)	0 – No 1 – Yes	1 – Yes
P26103	Hold Target Before Refer. (Profile 2)	0 – No 1 – Yes	1 – Yes

Enable Session Timer

- Web Configuration**

User can find the re-enter confirm box at Web -> Profile Settings

Special Feature:

Enable Session Timer: ☐ No ☒ Yes

- Functionality**

If set this option to “No”, session timer will be disabled. By default, this option is enabled.

- New P Values**

Pvalue	Description	Value range	Default
P2395	Enable Session Timer. (Profile 1)	0 – No 1 – Yes	1 – Yes
P2495	Enable Session Timer. (Profile 2)	0 – No 1 – Yes	1 – Yes

Conference URI

- Web Configuration**

User can find the re-enter confirm box at Web -> Profile Settings

Add Auth Header On Initial REGISTER: ☒ No ☐ Yes

Conference URI:

- Functionality**

This option allows to manually configure conference URL. The default is null.

- New P Values**

Pvalue	Description	Value range	Default
P2318	Conference URI. (Profile 1)	1024 - Max String Length	Null
P2418	Conference URI. (Profile 2)	1024 – Max String Length	Null

White List for WAN Side

- Web Configuration**

User can find the re-enter confirm box at Web -> Basic Settings

WAN Side Web/SSH Access: ☐ No ☐ Yes ☒ Auto (WAN side access allowed for private IP; rejected for public IP)

White List for WAN Side:

Black List for WAN Side:

- Functionality**

This function allow users list White List for WAN Side used for remote management.

- New P Values**

Pvalue	Description	Value range	Default
P20701	White List for WAN Side	3 –Rows 51 – Columns	Null

Black List for WAN Side

- Web Configuration**

User can find the re-enter confirm box at Web -> Basic Settings

WAN Side Web/SSH Access: ☐ No ☐ Yes ☒ Auto (WAN side access allowed for private IP; rejected for public IP)

White List for WAN Side:

Black List for WAN Side:

- Functionality**

This function allows users list Black List for WAN Side to ban WAN side web access.

- New P Values**

Pvalue	Description	Value range	Default
P20702	Black List for WAN Side	3 –Rows 51 – Columns	Null

Web Access Mode

- Web Configuration**

User can find the re-enter confirm box at Web -> Basic Settings

Web/SSH Access:

Web Access Mode: ☐ HTTPS ☒ HTTP

HTTP Web Port: (default is 80)

- Functionality**

This function enable user choose Web Access Mode between “HTTPS” and “HTTP”, if “HTTPS” is selected, Web UI will be accessed through <https://ip>. By default, “HTTP” is checked.

- New P Values**

Pvalue	Description	Value range	Default
P1650	Web Access Mode	0 – HTTPS 1 – HTTP	1 – HTTP

HTTPS Web Port

- Web Configuration**

User can find the re-enter confirm box at Web -> Basic Settings

HTTP Web Port: (default is 80)

HTTPS Web Port: (default is 443)

- Functionality**

This feature enable user to self-configure HTTPS Web Port. By default, the port number is 443.

New P Values

Pvalue	Description	Value range	Default
P27010	HTTPS Web Port	5 - Max String Length	443

SSH Port

- Web Configuration**

User can find the re-enter confirm box at Web -> Basic Settings

Disable SSH: ☒ No ☐ Yes

SSH Port:

- Functionality**

This feature enable user to self-configure SSH Port number. By default, the port number is 22.

- New P Values**

Pvalue	Description	Value range	Default
P27006	SSH Port	5 - Max String Length	22

SNMP

- Web Configuration**

User can find the re-enter confirm box at Web -> Advanced Setting

Enable SNMP: ☒ No ☐ Yes

SNMP Trap Community:

SNMP Trap IP Address:

SNMP Trap Port: (162 or 1025-65535. Default 162)

SNMP Trap Version: ▾

SNMP Trap Interval: (1-1440. Default 5 minutes)

- Functionality**

This feature allow user configure SNMP function, included “Enable SNMP”, “SNMP Trap Community”, “SNMP Trap IP Address”, “SNMP Trap Port”, “SNMP Trap Version”, and “SNMP Trap Interval”.

- New P Values**

Pvalue	Description	Value range	Default
P21896	Enable SNMP	0 – No 1 – Yes	0 – No
P21897	SNMP Trap IP Address	64 – Max String Length	Null
P21898	SNMP Trap Port	5 – Max String Length	162
P21901	SNMP Trap Interval	4 – Max String Length	5
P21900	SNMP Trap Community	64 – Max Length	Null
P21899	SNMP Trap Version	1 – Version 1 2 – Version 2c	2 – Version2c

FIRMWARE VERSION 1.0.3.2

PRODUCT NAME

HT812 and HT814

DATE

1/27/2017

IMPORTANT UPGRADING NOTE

- **Once HT812/HT814 is upgraded to 1.0.3.2, downgrading to 1.0.2.x firmware version or lower is not supported.**

ENHANCEMENT

- Added option "DNS SRV use Registered IP" to force DNS SRV to use registered IP instead of use the first SRV.
- Changed default NTP server from us.pool.ntp.org to pool.ntp.org.

BUG FIX

- Fixed If NOTIFY arrives within 32 seconds of last NOTIFY that the device will generate a 500 Error.
- Fixed after device booted up, NTP synchronize will reach MWI SUBSCRIBE expiration and renew SUBSCRIBE immediately.
- Fixed device cannot be provision "SIP Authentication ID" via TR-069
- Fixed problem that sip response status code sometimes displayed in hex number in syslog
- Fixed device cannot get IP if SIP/RTP Layer 2 QoS priority is not set to 0.
- Fixed when device received HTTP 302 redirect to a HTTPS server, device cannot switch to the new IP address.
- Fixed device does not download the firmware and configuration file from option66 server via http and https
- Fixed that in DHCP option 66/160, IP address does not support HTTP and HTTPS prefix but only support default TFTP prefix.
- Fixed device does not carry Proxy-Require field when the proxy is a domain.
- Fixed in PPPoE IP mode, disconnect/connect the uplink network cable will cause the network LED keep blinking.

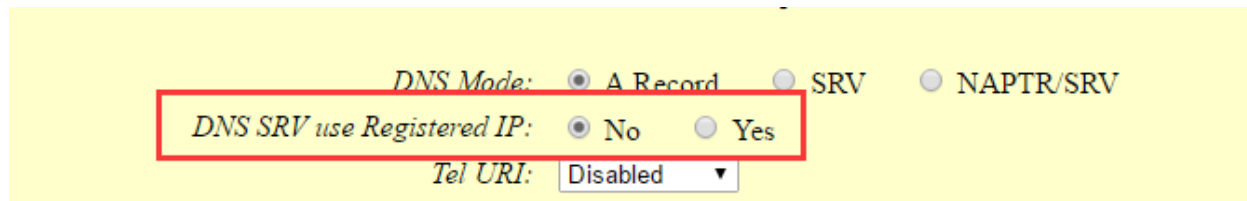
NEW FEATURES OVERVIEW

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

DNS SRV use Registered IP

- Web Configuration**

User can find the re-enter confirm box at Web -> Profile Settings



DNS Mode: ☒ A Record ☐ SRV ☐ NAPTR/SRV

DNS SRV use Registered IP: ☒ No ☐ Yes

Tel URI:

- Functionality**

If set this option to “Yes”, when registered on second SRV and making an outbound call, it will try the second SRV (registered IP) first. By default, this option is disabled and the DNS SRV will use first SRV instead of the registered IP.

- New P Values**

Pvalue	Description	Value range	Default
P28092	DNS SRV use Registered IP. (Profile 1)	0 – No 1 – Yes	0 – No
P28093	DNS SRV use Registered IP. (Profile 2)	0 – No 1 – Yes	0 – No

FIRMWARE VERSION 1.0.2.7

PRODUCT NAME

HT812 and HT814

DATE

11/10/2016

IMPORTANT UPGRADING NOTE

- For HT812, once upgraded to 1.0.2.7 or above, downgrading to 1.0.1.x firmware version or lower is not supported.
- HT814 is officially released on November 10, 2016, with firmware 1.0.2.5 as the first official firmware and 1.0.2.7 as the first Beta firmware.

ENHANCEMENT

- None.

BUG FIX

- Fixed HT81x failed to send 10-page fax.
- Fixed HT81x failed to establish intercom call when callee off hook immediately after ringing.

FIRMWARE VERSION 1.0.2.5

PRODUCT NAME

HT812

DATE

11/01/2016

IMPORTANT UPGRADING NOTE

- **For HT812, once upgraded to 1.0.2.3 or above, downgrading to 1.0.1.x firmware version or lower is not supported.**

ENHANCEMENT

- Changed OPUS Payload Type default value to 123 to match other GS products. [OPUS Payload Type Default Value]

BUG FIX

- Fixed The value of DTMF payload can be set to empty.
- Fixed HT812 would crash after failed attended transfer as transferee.
- Fixed HT812 does not play ring back tone in Broadsoft mode if Call-Waiting Caller ID is Disabled.
- Fixed No CID with callback from call on hold.
- Fixed DUT will play ring back tone after playing call waiting tone.
- Fixed Call audio would become very poor If change RTP mode to SRTP after call transferred.
- Fixed Device did not prompt "Device not registered" when use Spanish IVR.
- Fixed DUT cannot open configure file that download through TR-069.

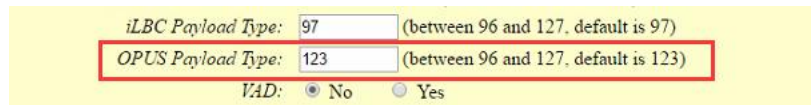
NEW FEATURES OVERVIEW

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

OPUS Payload Type Default Value

- **Web Configuration**

User can find the re-enter confirm box at Web -> Profile Settings



The screenshot shows a web configuration interface for profile settings. It contains two input fields for payload types: 'iLBC Payload Type' with a value of 97 and 'OPUS Payload Type' with a value of 123. Both fields have a range constraint '(between 96 and 127, default is 97)' and '(between 96 and 127, default is 123)' respectively. The 'OPUS Payload Type' field is highlighted with a red rectangular box. Below these fields is a radio button selection for 'VAD' with options 'No' (selected) and 'Yes'.

- **Functionality**

Change OPUS Payload Type default value to 123.

FIRMWARE VERSION 1.0.2.3

PRODUCT NAME

HT812

DATE

10/05/2016

IMPORTANT UPGRADING NOTE

- **For HT812, once upgraded to 1.0.2.3 or above, downgrading to 1.0.1.x firmware version or lower is not supported.**

ENHANCEMENT

- Added network check mechanism to enable or disable WAN port web access. [WAN PORT WEB ACCESS]
- Added a re-enter box to confirm change user and admin password on web GUI to avoid typo or mistakes. [PASSWORD CHANGE CONFIRMATION]

BUG FIX

- Fixed HT812 cannot off-hook normally when register server is domain and sip transport is TLS
- Fixed call waiting tone only play once.
- Fixed HT812 used an incorrect User-Agent when sending configure file request to UCM.
- Fixed HT812 will play ring back tone after playing call waiting tone.
- Fixed If the value of On Hook Timing set to less than 80ms, the FXS port cannot detect on hook event.
- Fixed After changed sip port, only account 1 will take effect and all other accounts will use random port instead.
- Fixed When setting the language to "Spanish IVR", some options on web page will display Spanish.
- Changed default Call Waiting Tone to f1=440@-13,c=300/10000;

NEW FEATURES OVERVIEW

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

WAN PORT WEB ACCESS

- Web Configuration**

These settings can be found at Web -> Basic Settings -> WAN side HTTP/Telnet access:

NAT/DHCP Server Information & Configuration:

Device Mode: ☒ NAT Router ☐ Bridge

NAT maximum ports: (range: 0 - 4096, default is 1024)

NAT TCP timeout: (range: 0 - 3600, default is 3600)

NAT UDP timeout: (range: 0 - 3600, default is 300)

Uplink bandwidth: ▼

Downlink bandwidth: ▼

Enable UPnP support: ☒ No ☐ Yes

Reply to ICMP on WAN port: ☒ No ☐ Yes (Unit will not respond to PING from WAN side if set to No)

WAN side HTTP/Telnet access: ☐ No ☒ Yes ☐ Auto (WAN side access allowed for private IP; rejected for public IP)

Cloned WAN MAC Addr: (in hex format)

Enable LAN DHCP: ☐ No ☒ Yes

LAN DHCP Base IP: (base IP for the LAN port, default is 192.168.2.1)

LAN DHCP Start IP: (default is 192.168.2.100)

LAN DHCP End IP: (default is 192.168.2.199)

LAN Subnet Mask: (default is 255.255.255.0)

DHCP IP Lease Time: (in units of hours, default is 120 hours or 5 days)

DMZ IP:

- Functionality**

Added an option of "Auto" for WAN side HTTP/Telnet access, and set this option as default value.

If the device is using public IP, the WAN Port web access will be disabled by default.

If the device is using private IP, the WAN Port web access will be enabled by default.

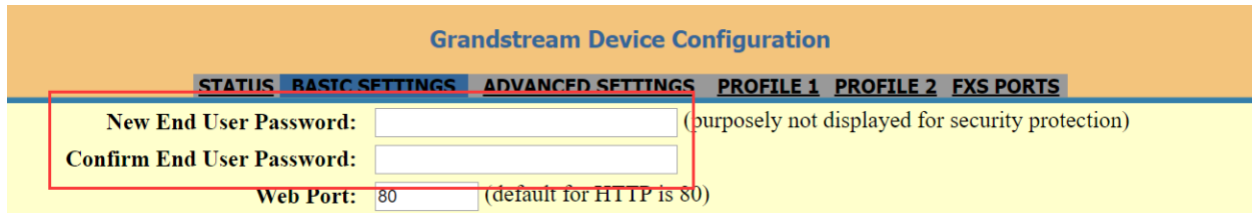
- New P Values**

Pvalue	Description	Value range	Default
P190	WAN side HTTP/Telnet access	0 – No 1 – Yes 2 – Auto (New added)	2 - Auto

PASSWORD CHANGE CONFIRMATION

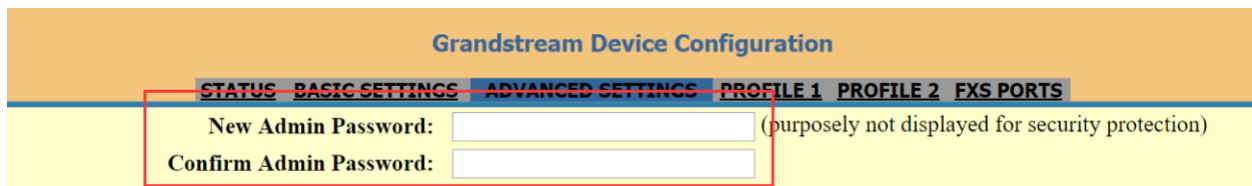
- **Web Configuration**

User can find the re-enter confirm box at Web ->Basic Settings/Advanced Settings



Grandstream Device Configuration

STATUS	BASIC SETTINGS	ADVANCED SETTINGS	PROFILE 1	PROFILE 2	FXS PORTS
New End User Password: (purposely not displayed for security protection)					
Confirm End User Password:					
Web Port: 80 (default for HTTP is 80)					



Grandstream Device Configuration

STATUS	BASIC SETTINGS	ADVANCED SETTINGS	PROFILE 1	PROFILE 2	FXS PORTS
New Admin Password: (purposely not displayed for security protection)					
Confirm Admin Password:					

- **Functionality**

Allow user to re-enter the password to confirm the password is input correctly.