

# **HT841/HT881 Firmware Release Notes**

## **IMPORTANT UPGRADING NOTE**

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# FIRMWARE VERSION 1.0.9.9

## PRODUCT NAME

HT841, HT881

## DATE

01/28/2025

## FIRMWARE FILE INFORMATION

- Firmware file name: ht8x1fw.bin  
MD5: a94e33ee5e04f447aec067114e1f722

## ENHANCEMENT

- Added IVR support to check Device Individual Certificate information.
- Added support for Subscribe Retry Wait Time upon 403 Forbidden. [Subscribe Retry Wait Time upon 403 Forbidden]
- Added support for Secondary NTP server. [Secondary NTP server]
- Added the option to validate SIP User ID in Request-Line.
- Added the TR-069 Command for Triggering False Ring Signal.
- Changed the "anonymous" to "private" and "unknown" to "unavailable" in the X-ATA-CallerID header.
- Added ability to set local date and time. [Local Time]
- Added support for the Syslog header format. [Syslog header format]
- Added support for WebUI hides "Conference URI" when "Special Feature" is set to "BroadSoft"
- Added support to upload config template in txt format.
- Added the ability to pull the SIP User ID per port via SNMP.
- Added the ability to set OpenVPN options. [OpenVPN® Additional Options]
- Added support to configure the static DNS SRV records. [Static DNS Cache]
- Added support CIDR when configuring static IP from WebUI.
- Updated the "Enable High Ring Power" (P4234) to "Ring Power".  
(P4234 Ring Power. 0 - 45Vrms default, 3 - 50Vrms, 4 - 55Vrms. Default is 0.)
- Added support for HELD Use LLDP Information. [HELD Use LLDP Information]
- Added support for Enable LLDP. [Enable LLDP]
- Added support for LLDP TX Interval. [LLDP TX Interval]
- Added support for Enable CDP. [Enable CDP]
- Added ability to set off-hook Auto-Dial number via feature code. [Off-hook Auto Dial]
- Added support for Firmware Upgrade via Resync SIP Notify.
- Added support for RFC5627 GRUU. [Support GRUU]
- Added support for RFC5626 outbound. [Support outbound]
- Added support RTP port range. [Random RTP Port Range]
- Added support sending multiple DTMF modes simultaneously. [Force DTMF to be sent via SIP]

INFO simultaneously]

- Added support to initiate a Re-Invite for fax transmission when the fax machine is the sender. [Re-INVITE Upon CNG Count]
- Added support for SIP PUBLISH method (RFC 6035).
- Added support OpenVPN® failover option. [OpenVPN® Server Secondary]
- Enhanced the security of HT devices.

## BUG FIX

- Fixed the unit can't establish SRTP Session after re-invite.
- Fixed the DTMF transmission failure issue.
- Fixed the device FXO profile's lack of "stats" data model.
- Fixed the device MIB files do not show the exact model's name.
- Fixed device unable to import MIB file to PRTG.
- Fixed device has an issue sending RTP/AVP in the 200 OK over SRTP outbound calls.
- Fixed the User level WebUI access could show all tabs other than the Status tab.
- Fixed device could hear the voicemail reminder with the Offhook Auto-Dial enabled.
- Fixed device fails to apply configuration using XML template.
- Fixed device OpenVPN settings do not remain after turning off the HT.
- Fixed device keeps sending EAPOL Start when a Linux PC is connected to the LAN port on bridge mode.
- Fixed the Swedish Pulse dialing.
- Fixed HT device to reboot and generate a Core Dump when receiving a call.
- Fixed the SIGSEGV in reinit\_Socket during SIP operation.

## NEW FEATURES OVERVIEW

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

### Subscribe Retry Wait Time upon 403 Forbidden

User can find the configuration section in Web-> FXS -> SIP Settings-> SIP Basic Settings

SUBSCRIBE for MWI ?	No, do not send SUBSCRIBE for Message We
Subscribe Retry Wait Time upon 403 Forbidden ?	0
Local SIP Port ?	5060

### Functionality


This feature allows users to configure the Subscribe Retry Wait Time upon 403 Forbidden. This specifies the wait time to retry subscribe after receiving 403 Forbidden. The valid range is 0 to 10080 in minutes, default is 0. If the value is not 0, the device will retry 10 times first, then wait for the specified time before trying again. If the value is 0, the device will follow the "Retry-After" header if present. Otherwise, the device will wait 20 minutes before sending subscribe again.

Pvalue	Description	Value Range	Default
60068	Subscribe Retry Wait Time upon 403 Forbidden	Number: 0 - 10080	0

### Secondary NTP server

User can find the configuration section in Web -> System Settings -> Time and Language-> Time Zone.

NTP Server 

**Secondary NTP Server** 

Allow DHCP Option 42 to Override NTP Server   



- Functionality**



This feature allows users to configure the Secondary NTP Server. Configure the URL or IP address of the NTP server. The device may obtain the date and time from the server.

Pvalue	Description	Value Range	Default
8333	Secondary NTP Server	String: Server address	(Null)

### Local Time

User can find the configuration section in Web -> System Settings -> Time and Language-> Time Zone.

Self-Defined Time Zone   

Allow DHCP Option 2 to Override Time Zone Setting   

**Local Time**

- Functionality**


This feature allows users to set device time from the host PC time via the browser. After clicking the bottom “Sync PC”, the device will display the notice of the synchronized local time.


Local Time  The synchronized local time is: 2025-1-27 21:42:38


Pvalue	Description	Value Range	Default
	Local Time	Button	(Null)

## Syslog header format

User can find the configuration section in Web-> Maintenance -> System Diagnosis

Syslog Protocol 

Syslog Header Format 

Send SIP Log 

- **Functionality**

This feature allows users to configure the Syslog Header Format. When "RFC3164 Compliant" is enabled, the syslog header will contain the PRI and timestamp information to be compatible with RFC3164.

Pvalue	Description	Value Range	Default
8723	Syslog Header Format	Number: 0 – Default 1 – RFC3164 Compliant	0 – Default

## OpenVPN® Additional Options

User can find the configuration section in Web-> Network Settings -> OpenVPN® Settings

OpenVPN® Client Key Password 

OpenVPN® Additional Options 

- **Functionality**

This feature allows users to configure the Syslog Header Format. When "RFC3164 Compliant" is enabled, the syslog header will contain the PRI and timestamp information to be compatible with RFC3164.

Pvalue	Description	Value Range	Default
8460	OpenVPN® Additional Options	String: Maxlength 2048 characters	(Null)

## Static DNS Cache

Users can find the configuration section in Web -> Advanced Settings -> Static DNS Cache.

# NAPTR

NAPTR SRV A

Order	NAPTR DNS Cache Name	NAPTR DNS Cache Time Interval (s)	NAPTR DNS Cache Order	NAPTR DNS Cache Preference	NAPTR DNS Cache Replacement	NAPTR DNS Cache Service	Operation
1		300	0	0		SIP+D2U	
2		300	0	0		SIP+D2U	
3		300	0	0		SIP+D2U	
4		300	0	0		SIP+D2U	
5		300	0	0		SIP+D2U	
6		300	0	0		SIP+D2U	
7		300	0	0		SIP+D2U	
8		300	0	0		SIP+D2U	
9		300	0	0		SIP+D2U	
10		300	0	0		SIP+D2U	
11		300	0	0		SIP+D2U	
12		300	0	0		SIP+D2U	
13		300	0	0		SIP+D2U	
14		300	0	0		SIP+D2U	
15		300	0	0		SIP+D2U	
16		300	0	0		SIP+D2U	

Add



NAPTR DNS Cache Name



NAPTR DNS Cache Time Interval (s)



NAPTR DNS Cache Order



NAPTR DNS Cache Preference



NAPTR DNS Cache Replacement



NAPTR DNS Cache Service



Cancel

Save



# SRV:

NAPTR SRV A

Order	SRV DNS Cache Name	SRV DNS Cache Time Interval (s)	SRV DNS Cache Priority	SRV DNS Cahce Weight	SRV DNS Cache Target	SRV DNS Cache Port	Operation
1		300	0	0		0	
2		300	0	0		0	
3		300	0	0		0	
4		300	0	0		0	
5		300	0	0		0	
6		300	0	0		0	
7		300	0	0		0	
8		300	0	0		0	
9		300	0	0		0	
10		300	0	0		0	
11		300	0	0		0	

Add



SRV DNS Cache Name



SRV DNS Cache Time Interval (s)



SRV DNS Cache Priority



SRV DNS Cahce Weight



SRV DNS Cache Target



SRV DNS Cache Port



Cancel

Save

A:

Order	A DNS Cache Name	A DNS Cache Time Interval(s)	A DNS Cache IP Address	Operation
1		300		
2		300		
3		300		
4		300		
5		300		
6		300		
7		300		
8		300		
9		300		
10		300		

Add
×

---

A DNS Cache Name

A DNS Cache Time Interval(s)

A DNS Cache IP Address

• **Functionality**

This feature could let the user configure the DNS Cache Name, DNS Cache Time Interval(s), DNS Cache Order, DNS Cache Preference, DNS Cache Replacement, DNS Cache Service, DNS Cache Priority, DNS Cache Weight, DNS Cache Target, DNS Cache Port, and DNS Cache IP Address for different DNS modes in NAPTR, SRV, and A Record.

**NAPTR Settings**

Pvalue	Description	Value range	Default
93000 93020 93040 93060 93080 93100 93120 93140 93160 93180	NAPTR DNS Cache Name	String:  Max length 512 characters	(Null)

93200 93220 93240 93260 93280 93300 93320 93340			
93001 93021 93041 93061 93081 93101 93121 93141 93161 93181 93201 93221 93241 93261 93281 93301 93321 93341	NAPTR DNS Cache Time Interval(s)	Number:  300 to 65535	300
93002 93022 93042 93062 93082 93102 93122 93142 93162 93182 93202 93222 93242 93262 93282 93302 93322 93342	NAPTR DNS Cache Order	Number:  0 to 65535	0
93003 93023 93043 93063 93083 93103 93123 93143 93163 93183 93203 93223 93243	NAPTR DNS Cache Preference	Number:  0 to 65535	0

93263 93283 93303 93323 93343			
93007 93027 93047 93067 93087 93107 93127 93147 93167 93187 93207 93227 93247 93267 93287 93307 93327 93347	NAPTR DNS Cache Replacement	String:	(Null)
93005 93025 93045 93065 93085 93105 93125 93145 93165 93185 93205 93225 93245 93265 93285 93305 93325 93345	Service	String:  Max length 512 characters	SIP+D2U

### SRV Settings

Pvalue	Description	Value range	Default
93008 93028 93048 93068 93088 93108 93128 93148 93168 93188 93208	SRV DNS Cache Order Name	String:  Max length 512 characters	(Null)

93228 93248 93268 93288 93308 93328 93348			
93009 93029 93049 93069 93089 93109 93129 93149 93169 93189 93209 93229 93249 93269 93289 93309 93329 93349	SRV DNS Cache Time Interval(s)	Number:  300 to 65535	300
93010 93030 93050 93070 93090 93110 93130 93150 93170 93190 93210 93230 93250 93270 93290 93310 93330 93350	SRV DNS Cache Priority	Number:  0 to 65535	0
93011 93031 93051 93071 93091 93111 93131 93151 93171 93191 93211 93231 93251 93271	SRV DNS Cache Weight	Number:  0 to 65535	0

93291 93311 93331 93351			
93013 93033 93053 93073 93093 93113 93133 93153 93173 93193 93213 93233 93253 93273 93293 93313 93333 93353	SRV DNS Cache Target	String:	(Null)
93012 93032 93052 93072 93092 93112 93132 93152 93172 93192 93212 93232 93252 93272 93292 93312 93332 93352	SRV DNS Cache Port	Number:  0 to 65535	0

### A Settings

Pvalue	Description	Value range	Default
93014 93034 93054 93074 93094 93114 93134 93154 93174 93194 93214 93234	A DNS Cache Name	String: max length 512 Characters	(Null)

93254 93274 93294 93314 93334 93354			
93015 93035 93055 93075 93095 93115 93135 93155 93175 93195 93215 93235 93255 93275 93295 93315 93335 93355	A DNS Cache Time Interval(s)	Number:  300 to 65535	300
93016 93036 93056 93076 93096 93116 93136 93156 93176 93196 93216 93236 93256 93276 93296 93316 93336 93356	A DNS Cache IP Address	String:	(Null)

### HELD Use LLDP Information

User can find the configuration section in Web -> System Settings -> E911/HELD.

HELD Location Types ⓘ

**HELD Use LLDP Information ⓘ**

HELD NAI ⓘ

- **Functionality**

This feature allows users to configure HELD Use LLDP Information. If "Yes", the information from the LLDP-support switch is used to generate ChassisID and PortID; otherwise, the MAC address of the gateway and phone is used as default.

Pvalue	Description	Value Range	Default
8575	HELD Use LLDP Information	Number: 0 – No 1 – Yes	0 – No

### Enable LLDP

Users can find the configuration section in Web -> Network Settings -> Advanced Settings.

Enable LLDP

LLDP TX Interval

Enable CDP

- **Functionality**

This feature allows users to enable or disable LLDP. It controls the LLDP (Link Layer Discovery Protocol) service.

Pvalue	Description	Value Range	Default
1684	Enable LLDP	Number: 0 – No 1 – Yes	1 – Yes

### LLDP TX Interval

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

Enable LLDP

LLDP TX Interval

Enable CDP

- **Functionality**

This feature allows users to configure LLDP TX Interval (in seconds). The valid range is 1 to 3600.

Pvalue	Description	Value Range	Default
22122	LLDP TX Interval	Number: 1 - 3600	60



## Enable CDP

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

LLDP TX Interval ⓘ

**Enable CDP ⓘ**

Layer 2 QoS 802.1Q/VLAN Tag ⓘ  ⓘ

- **Functionality**

This feature allows users to configure the enable or disable LLDP. It controls the LLDP (Link Layer Discovery Protocol) service.

Pvalue	Description	Value Range	Default
22119	Enable CDP	Number: 0 – No 1 – Yes	1 – Yes

## Off-hook Auto Dial

User can find the configuration section in Web-> FXS -> Call Features Settings-> Off-hook Auto Dial

### | Off-hook Auto Dial

Set Offhook Auto-Dial Feature ⓘ

Enable set Offhook Auto-Dial ⓘ

- **Functionality**

This feature allows users to configure the enable or disable the Off-hook Auto Dial and set up the number of Enable set Offhook Auto-Dial.

Pvalue	Description	Value Range	Default
24089	Set Offhook Auto-Dial Feature	Number: 0 – No 1 – Yes	1 – Yes
24040	Enable set Offhook Auto-Dial	String: Number Max length 2 characters	77

## Support GRUU

User can find the configuration section in Web-> FXS -> SIP Settings-> SIP Basic Settings

Support outbound [?](#)

Support GRUU [?](#)

SIP URI Scheme When Using TLS [?](#)  sip  sips

- **Functionality**

This feature allows users to configure the Support GRUU for RFC 5627.

Pvalue	Description	Value Range	Default
60080	Support GRUU	Number: 0 – No 1 – Yes	0 – No

### Support outbound

User can find the configuration section in Web-> FXS -> SIP Settings-> SIP Basic Settings

Support SIP Instance ID [?](#)

Support outbound [?](#)

Support GRUU [?](#)

- **Functionality**

This feature allows users to configure the Support outbound for RFC 5626.

Pvalue	Description	Value Range	Default
60081	Support outbound	Number: 0 – No 1 – Yes	0 – No

### Random RTP Port Range

User can find the configuration section in Web-> FXS -> Codec Settings-> RTP Setting.

Use Random RTP Port [?](#)

Random RTP Port Range [?](#)

 - 

Symmetric RTP [?](#)

- **Functionality**

This feature allows users to set the Random RTP Port Range, range is 1024-65535.

Pvalue	Description	Value Range	Default
60084	Random RTP Port Range: Min	Number: 1024 - 65535	(Null)
60085	Random RTP Port Range: Max	Number: 1024 - 65535	(Null)

### Force DTMF to be sent via SIP INFO simultaneously

User can find the configuration section in Web-> FXS -> Codec Settings-> DTMF Settings.

Preferred DTMF ⓘ choice 1    
 choice 2    
 choice 3

**Force DTMF to be sent via SIP INFO simultaneously** ⓘ

Inband DTMF Duration ⓘ Duration:  ms, Inter Duration:  ms

- **Functionality**

This feature allows users to configure the Force DTMF to be sent via SIP INFO simultaneously.

Pvalue	Description	Value Range	Default
28794	Re-INVITE Upon CNG Count	Number: 0 – No 1 – Yes	0 – Default

### Re-INVITE Upon CNG Count

User can find the configuration section in WebUI-> FXS/FXO -> Codec Settings-> Vocoder Settings

Re-INVITE After Fax Tone Detected ⓘ

**Re-INVITE Upon CNG Count** ⓘ

Jitter Buffer Type ⓘ  Fixed  Adaptive

- **Functionality**

This feature allows users to initiate a Re-Invite for fax transmission when the fax machine is the sender. If it is set to 0, this feature is disabled. Equal to or greater than 1: ATA will initialize the re-invite request when the CNG count is reached. The valid range is [0, 6].

Pvalue	Description	Value Range	Default
28923	Re-INVITE Upon CNG Count	Number:	0
28924		0 - 6	
28925			

### OpenVPN® Server Secondary

Users can find the configuration section in Web -> Maintenance-> VPN.

OpenVPN® Server Secondary Address [?](#)

OpenVPN® Secondary Port [?](#)

Randomly Select Server [?](#)

- **Functionality**

This feature allows users to configure the OpenVPN® Server Secondary Address for the failover. The user could set the OpenVPN® Server Secondary Address and Port and decide if to enable the Randomly Select Server. If it is enabled, a server will be randomly selected in the configuration to start OpenVPN® requests. If closed, requests will be made in the order of server configuration.

Pvalue	Description	Value Range	Default
22597	OpenVPN® Server Secondary Address	String: maximum length: 253 characters	(Null)
22598	OpenVPN® Secondary Port	Number: 1 - 65535	1194
22599	Randomly Select Server	Number: 0 – No 1 – Yes	0 - No

# FIRMWARE VERSION 1.0.7.3

## PRODUCT NAME

HT841, HT881

## DATE

07/01/2024

## FIRMWARE FILE INFORMATION

- Firmware file name: ht8x1fw.bin  
MD5: 0f838418ec2fff575a830b7aabd65992

## ENHANCEMENT

- Added IVR support to check Device Individual Certificate information.
- Added support to sort downloaded XML config file p-values in ascending order.
- Added support for p-value not on WebUI:  
P82307 Syslog Setting and Internal Logs Protection. (0- No, 1- Yes. The default is 0.  
If set to '1 - Yes', Syslog settings and internal logs will be saved across a factory reset)

## BUG FIX

- Fixed the Inbound SRTP call fails with "488 Not Acceptable Here" due to the index value of 88 used by Netsapiens.
- Fixed the issue which caused Registration spamming.
- Fixed unit can't establish SRTP Session after re-invite.
- Fixed a bug that caused the device not to request the config file until a reboot.
- Fixed device UAC will re-attempt requests with the same Credentials after 403 Forbidden.
- Fixed a bug that caused CID not to be detected using Bellcore Scheme.
- Fixed an issue of WebUI wording change request for DNS SRV failover.
- Fixed the bug of Prompt Tone Access Code was removed from the DTMF buffer.

# FIRMWARE VERSION 1.0.5.10

## PRODUCT NAME

HT841, HT881

## DATE

04/28/2024

## FIRMWARE FILE INFORMATION

- Firmware file name: ht8x1fw.bin  
MD5: 6ea8117d84f686c96785d246a5f90e62

## ENHANCEMENT

- Set the “Disable User Level Web Access” (P28158) to “Yes” by default.
- Set the “Disable Viewer Level Web Access” (P28159) to “Yes” by default.
- Force user to change the password upon first login using the default password to the Admin/User/Viewer Account.

# FIRMWARE VERSION 1.0.5.9

## PRODUCT NAME

HT841, HT881

## DATE

04/23/2024

## FIRMWARE FILE INFORMATION

- Firmware file name: ht8x1fw.bin  
MD5: 099b15ce88c7a34406c08eeaa4a0c72c

## ENHANCEMENT

- Added support for New WebUI.
- Added support for "Enable Early Media for VoIP-to-PSTN Calls".[Enable Early Media for VoIP-to-PSTN Calls]
- Added support tone configuration by port. (Check the changelog for the details)
- Added support for "Request URI Routing ID" on FXO port. [Request URI Routing ID]
- Added support "SIP Destination Port" on the "Port Status" page. (WebUI->Status->Port Status)
- Added the status check whether local sip ports are the same between different profiles.
- Update the FXO's Hook Flash Timing from "300 – 1500" to "100 – 1500".
- Added support for "Auto Send DTMF Upon Call Start".[Auto Send DTMF Upon Call Start]
- Update the "DSP DTMF Detector SNR" value range from "0 – 2" to "0 – 12".
- Added RTP/RTCP Keep Alive on Hold. [RTP/RTCP Keep Alive on Hold]
- Added support for p-value not on WebUI:  
Initial Line Polarity (P28834/28835/28836) (0 - Forward, 1 – Reverse. Default is 1)

## BUG FIX

- Fixed the DDNS does not work issue.
- Fixed unit stops responding after a couple of hours.
- Fixed an issue that causes the caller not to hear the echo when leaving a message on the answering machine.
- Fixed a bug that caused the device to freeze after a few hours.
- Fixed an issue with the registration.
- Fixed a bug that caused the call to fail when the DDI line was connected to the FXS port of the device on the Macau DDI environment.
- Fixed the remote party perceiving echo.
- Fixed the Inaccurate encoding and decoding of DTMF durations with SIP Info.
- Fixed the Peer trunk with the FXO profile fails issue.
- Fixed the SRTP decrypt RTP fail causing one-way audio after a 20+ minute call.

- Fixed no audio on 200ok/ack with UAS on outbound calls.
- Fixed device cannot connect to OpenVPN server issue.

## NEW FEATURES OVERVIEW

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

### Enable Early Media for VoIP-to-PSTN Calls

Users can find the configuration section in Web -> FXO Profile 1 or 2-> FXO Termination.

PIN for PSTN-to-VoIP Calls ?

Enable Early Media for VoIP-to-PSTN Calls ?  No  Yes

- **Functionality**

This feature allows users to set the in-band ringtone option to hear ringtones and other alert tones in reverse polarity signals and supports responding with 183 progress on the FXO port.

Pvalue	Description	Value Range	Default
28830 28831	Enable Early Media for VoIP-to-PSTN Calls	Number: 0 – No 1 – Yes	0 – No

### Request URI Routing ID

Users can find the configuration section in Web -> Port Settings-> FXO PORTS.

Hunting Group	Request URI Routing ID	Enable Port
Disabled <span style="font-size: small;">v</span>	<input style="width: 100%; height: 20px;" type="text"/>	<input type="radio"/> No <input checked="" type="radio"/> Yes
Disabled <span style="font-size: small;">v</span>	<input style="width: 100%; height: 20px;" type="text"/>	<input type="radio"/> No <input checked="" type="radio"/> Yes
Disabled <span style="font-size: small;">v</span>	<input style="width: 100%; height: 20px;" type="text"/>	<input type="radio"/> No <input checked="" type="radio"/> Yes
Disabled <span style="font-size: small;">v</span>	<input style="width: 100%; height: 20px;" type="text"/>	<input type="radio"/> No <input checked="" type="radio"/> Yes
Disabled <span style="font-size: small;">v</span>	<input style="width: 100%; height: 20px;" type="text"/>	<input type="radio"/> No <input checked="" type="radio"/> Yes
Disabled <span style="font-size: small;">v</span>	<input style="width: 100%; height: 20px;" type="text"/>	<input type="radio"/> No <input checked="" type="radio"/> Yes
Disabled <span style="font-size: small;">v</span>	<input style="width: 100%; height: 20px;" type="text"/>	<input type="radio"/> No <input checked="" type="radio"/> Yes
Disabled <span style="font-size: small;">v</span>	<input style="width: 100%; height: 20px;" type="text"/>	<input type="radio"/> No <input checked="" type="radio"/> Yes



- **Functionality**

This feature allows users to set up a specific FXO port on the outbound call when using FXO Hunting Group.

Pvalue	Description	Value Range	Default
4670	Request URI Routing ID	Number: Max Length 64	(Null)
4671			
4672			
4673			
4674			
4675			
4676			
4677			

### Auto Send DTMF Upon Call Start

Users can find the configuration section in Web -> FXO Profile 1 or 2-> Call Settings.

Auto Send DTMF Upon Call Start ?

Early Dial ?
 No
  Yes

- **Functionality**

This feature allows users to set DTMF digits to send to the TDM side after the call from the VoIP side gets started.

Pvalue	Description	Value Range	Default
28845	Auto Send DTMF Upon Call Start	Number: Max Length 16	(Null)
28846			

### RTP/RTCP Keep Alive on Hold

Users can find the configuration section in Web -> FXS or FXO Profile-> SIP Settings.

Use Random RTP Port ?
 No
  Yes

RTP/RTCP Keep Alive On Hold ?
 No
  Yes

Hold Target Before Refer ?
 No
  Yes

This feature allows users to set the RTP/RTCP keep Alive on Hold feature. If the RTCP is enabled, the device stops sending RTCP packets once the call is put on hold.

Pvalue	Description	Value Range	Default
28839	RTP/RTCP Keep Alive On Hold	Number:	0
28840		0 – No	
28841		1 – Yes	

# FIRMWARE VERSION 1.0.3.4

## PRODUCT NAME

HT841, HT881

## DATE

10/23/2023

## FIRMWARE FILE INFORMATION

- Firmware file name: ht8x1fw.bin  
MD5: c07b9582ff0e837e3491edab1fe8f62f

## ENHANCEMENT

- Added support “Polarity On Answer Delay”. [Polarity On Answer Delay]
- Updated config file download request starts from cfgMAC.xml.
- Added new value “4 - Auto” in NAT Traversal(P52/730/630).
- Added support “AVS DTMF Detector Parameter” [AVS DTMF Detector Parameters]
- Added support “Radius auth protocol”. [Radius Auth Protocol]
- Removed “Ring Timeout” (P816/516) from FXO page.

## BUG FIX

- Fixed DNS SRV Failover fails when "Check Domain Certificates" is enabled.
- Fixed device config file download request does not start from cfgMAC.xml.
- Fixed NAT Traversal does not have the "Auto" option.
- Fixed Call Waiting CID cannot be displayed.
- Fixed an issue caused device echo during calls.

## NEW FEATURES OVERVIEW

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

### Polarity On Answer Delay

Users can find the configuration section in Web -> FXO Profile -> FXO Termination

Enable Polarity Reversal:  No  Yes (Default No. Check with your PSTN carrier before setting to Yes)

Polarity On Answer Delay:  (200-30000 milliseconds. Default 1000 milliseconds)

- **Functionality**

This feature allows users to configure the Polarity On Answer Delay.

Pvalue	Description	Value Range	Default
28825 28826	Polarity On Answer Delay	Number: 200 - 30000	1000

### AVS DTMF Detector Parameters

User can find the configuration section in Web -> FXO Profile/FXO Profile.

*DSP DTMF Detector Min Level:*  (-45-0 dBm, default is -25)  
*DSP DTMF Detector Snr:*  (0-2, default is 1)  
*DSP DTMF Detector Deviation:*  (0-25, default is 25)  
*DSP DTMF Detector Twist:*  (0-12 dB, default is 5)  
*Disable DTMF Negotiation:*  No (negotiate with peer)  Yes (use above)

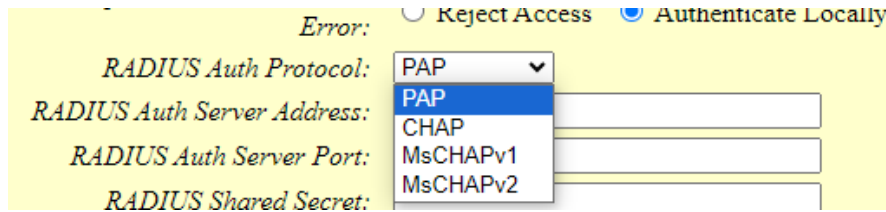
- **Functionality**

This feature allows users to configure the AVS DTMF detector related parameters. DSP DTMF Detector Min Level sets the minimum level required for DTMF tone to be considered valid, DSP DTMF Detector SNR sets the Maximum signal-to-noise ratio required for DTMF tone to be considered valid, DSP DTMF Detector Deviation sets the deviation, above and below the central frequency, DSP DTMF Detector Twist sets the maximum value by which one frequency energy level can surpass another frequency energy level.

Pvalue	Description	Value Range	Default
28804 28805 28806	DSP DTMF Detector Min Level	Number: -45 – 0	-25
28808 28809 28810	DSP DTMF Detector SNR	Number: 0 – 2	1
28812 28813 28814	DSP DTMF Detector Deviation	Number: 0 – 25	25
28816 28817 28818	DSP DTMF Detector Twist	Number: 0 – 12	5

### Radius Auth Protocol

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



- **Functionality**

This feature allows users to configure RADIUS authentication protocol.

Pvalue	Description	Value Range	Default
28803	RADIUS Auth Protocol	Number: 0 – PAP 1 – CHAP 2 – MsCHAPv1 3 – MsCHAPv2	0 – PAP

# FIRMWARE VERSION 1.0.1.2

## PRODUCT NAME

HT841, HT881

## DATE

09/04/2023

## FIRMWARE FILE INFORMATION

- firmware file name: ht8x1fw.bin

MD5: a22de4261464c204dd4b6029c8fbb92d

## ENHANCEMENT

- This is the initial release version of HT8X1 firmware.