

## **Grandstream IP Phones with Tpad**



The following instructions detail how to configure the Grandstream Budgetone VoIP IP phones with Tpad. The configuration guide is applicable to other IP Phones in the Grandstream range.

---

## Configuration through the Web Browser

The Grandstream series IP phone has an embedded Web server that can be used to configure the phone. It has embedded HTML pages that allow a user to configure the IP phone through a Web browser such as Microsoft's IE or Mozilla's Firefox.

### Access the Web Configuration Menu

The Grandstream IP Phone Web Configuration Pages can be accessed by inputting the phones IP into the browser's URL address field like:

<http://192.168.002.001>


There are two ways to retrieve this IP address from the phone:

- 1) When the phone is *off-hook* or in *speakerphone* mode, simply press *MENU* button. (*This is most common way to get the IP address of the phone*)
- 2) When the phone is on-hook, press *MENU* button and then the browsing arrow keys to “**[2] IP Addr**”, press *MENU* again.

#### **NOTE:**

- *To type IP address into browser to bring up the configuration pages, please strip out the leading “0”. e.g.: if the IP address is: 192.168.002.001, please type in: 192.168.2.1.*

Once the correct IP address of the phone is input into browser and “Enter” key pressed, the web log in page will come up like following:



**Grandstream Device Configuration**

**Password**

Login

All Rights Reserved Grandstream Networks, Inc. 2005

The password is case sensitive. The factory default password for Administrator is “**admin**”.

## **Configuration Menus**

After inputting the password into the login screen, the embedded Web server of the IP phone will respond with the Configuration Page screens, which are explained in detail below.

## **Status Page:**

**This page is just for information.**

**Basic Settings:** Tpad settings are in **RED TEXT**

**Grandstream Device Configuration**

**STATUS BASIC SETTINGS ADVANCED SETTINGS**

**End User Password:**  (purposely not displayed for security protection)

**IP Address:**  dynamically assigned via DHCP (default) or PPPoE  
(will attempt PPPoE if DHCP fails and following is non-blank)

PPPoE account ID:

PPPoE password:

Preferred DNS server:

statically configured as:

IP Address:

Subnet Mask:

Default Router:

DNS Server 1:

DNS Server 2:

**Time Zone:**

**Daylight Savings Time:**  No  Yes (if set to Yes, display time will be 1 hour ahead of normal time)

**Date Display Format:**  Year-Month-Day  
 Month-Day-Year  
 Day-Month-Year

All Rights Reserved Grandstream Networks, Inc. 2005

<b>End user Password</b>	This contains the password for end user to access the Web Configuration Menu. This field is case sensitive and maximum length is 25 characters. The default end user password is “123”. For Administrator the default password is “admin”
<b>IP Address</b>	<p>There are 2 modes under which the IP phone can operate:</p> <ul style="list-style-type: none"> <li>- If DHCP mode is enabled, then all the field values for the Static IP mode are not used (even though they are still saved in the Flash memory) and the IP phone will acquire its IP address from the first DHCP server it discovers on the LAN it attaches to.</li> <li>- If Static IP mode is selected, the IP address, Subnet Mask, Default Router IP address, DNS Server 1 (mandatory), DNS Server 2 (optional) fields need to be configured. These fields are set to zero by default.</li> </ul> <p>DHCP mode is recommended.</p>
<b>Time zone</b>	Displayed date/time will be adjusted according to the specified time zone.
<b>Daylight savings time</b>	Default <b>NO</b> . If set to Yes, then the displayed time will be 1 hour ahead of normal time.
<b>Date displayformat</b>	This parameter controls the date display format.

## Advanced Settings:

The Tpad settings are in **RED TEXT**

**Grandstream Device Configuration**

**ADVANCED SETTINGS**

<b>Admin Password:</b>	<input type="text"/>	(purposely not displayed for security protection)
<b>SIP Server:</b>	<input style="color: red;" type="text" value="sip.tpad.com"/>	( Tpad SIP Server)
<b>Outbound Proxy:</b>	<input style="color: red;" type="text" value="sip.tpad.com"/>	(Tpad SIP proxy server)
<b>SIP User ID:</b>	<input style="color: red;" type="text" value="1123444"/>	(Your TPAD phone number)
<b>Authenticate ID:</b>	<input style="color: red;" type="text" value="1123444"/>	(Your TPAD phone number)
<b>Authenticate Password:</b>	<input style="color: red;" type="text" value="*****"/>	(Your TPAD password)
<b>Name:</b>	<input style="color: red;" type="text" value="Tom Smith"/>	(optional, e.g., John Doe)

**Advanced Options:**

*Preferred Vocoder:*  
(in listed order)

choice 1:	<input type="text" value="G.729A /B"/>
choice 2:	<input type="text" value="iLBC"/>
choice 3:	<input type="text" value="G.723.1"/>
choice 4:	<input type="text" value="PCMU"/>
choice 5:	<input type="text" value="PCMA"/>
choice 6:	<input type="text" value="G.726-32"/>
choice 7:	<input type="text" value="G.722 (w ide band)"/>
choice 8:	<input type="text" value="PCMA"/>

*G723 rate:*     6.3kbps encoding rate     5.3kbps encoding rate

*iLBC frame size:*     20ms     30ms

*iLBC payload type:*     (between 96 and 127, default is 97)

*Silence Suppression:*     No     Yes

*Voice Frames per TX:*     (up to 10/20/32/64 for G711/G726/G723/other codecs respectively)

*Layer 3 QoS:*     (Diff-Serv or Precedence value)

*Layer 2 QoS:*    802.1Q/VLAN Tag     802.1p priority value  (0-7)

*Allow incoming SIP messages from SIP proxy only:*     No     Yes

Use DNS SRV:  No  Yes

User ID is phone number:  No  Yes

SIP Registration:  Yes  No

Unregister On Reboot:  Yes  No

Register Expiration:  (in seconds, default 1 hour, max 45 days)

Early Dial:  No  Yes (use "Yes" only if proxy supports 484 response)

Allow outgoing call without Registration:  No  Yes

Dial Plan Prefix:  (this prefix string is added to each dialed number)

No Key Entry Timeout:  (in seconds, default is 4 seconds)

Use # as Dial Key:  No  Yes (if set to Yes, "#" will function as the Dial key)

local SIP port:  (default 5060)

local RTP port:  (1024-65535, default 5004)

Use random port:  No  Yes

NAT Traversal:  No

Yes, STUN server is:  (URI or IP:port)

keep-alive interval:  (in seconds, default 20 seconds)

Use NAT IP  (if specified, this IP address is used in SIP/SDP message)

Proxy-Require:  (if specified, the content will appear in Proxy-Require header)

Voice Mail UserID:  (User ID/extension for 3rd party voice mail system)

SUBSCRIBE for MWI:  No, do not send SUBSCRIBE for Message Waiting Indication

Yes, send periodical SUBSCRIBE for Message Waiting Indication

Auto Answer:  No  Yes

Offhook Auto-Dial:  (User ID/extension to dial automatically when offhook)

Enable Call Features:  No  Yes (if Yes, Call Forwarding & Call-Waiting-Disable are supported locally)

Disable Call-Waiting:  No  Yes

Send DTMF:  in-audio  via RTP (RFC2833)  via SIP INFO

DTMF Payload Type:

Send Flash Event:  No  Yes (Flash will be sent as a DTMF event if set to Yes)

Onhook Threshold:

NTP Server:  (URI or IP address)

system ring tone

custom ring tone 1, used if incoming caller ID is

Default Ring Tone:  custom ring tone 2, used if incoming caller ID is

custom ring tone 3, used if incoming caller ID is

Send Anonymous:  No  Yes (caller ID will be blocked if set to Yes)

Anonymous Method:  Use From Header  Use Privacy Header

Time to ring:

Special Feature:

Syslog Server:

Syslog Level:

Firmware Upgrade and Provisioning: Upgrade Via  TFTP  HTTP

Firmware Server Path:

Config Server Path:

Firmware File Prefix:

Firmware File Postfix:

Config File Prefix:

Config File Postfix:

Automatic Upgrade:

No  Yes, check for upgrade every  minutes (default 7 days)

Always Check for New Firmware

Check New Firmware only when F/W pre/suffix changes

Always Skip the Firmware Check

<i>Firmware Key:</i>	<input type="text"/>	(in Hexadecimal Representation)
<i>Authenticate Conf File:</i>	<input type="checkbox"/> No	<input type="checkbox"/> Yes (cfg file would be authenticated before acceptance if set to Yes)
<i>Lock keypad update:</i>	<input type="checkbox"/> No	<input type="checkbox"/> Yes (configuration update via keypad is disabled if set to Yes)
<i>Allow conf SIP Account in Basic Settings:</i>	<input type="checkbox"/> No	<input type="checkbox"/> Yes
<i>Override MTU Size:</i>	<input type="text" value="0"/>	
<input type="button" value="Update"/> <input type="button" value="Cancel"/> <input type="button" value="Reboot"/>		
All Rights Reserved Grandstream Networks, Inc. 2005		

<b>Admin Password</b>	Administrator password. <b>Leave default</b>
<b>SIP Server</b>	Enter <b>sip.tpad.com</b>
<b>Outbound Proxy</b>	Enter <b>sip.tpad.com</b>
<b>SIP User ID</b>	Enter your TPAD phone number e.g. <b>1123444</b>
<b>Authentication ID</b>	Enter your TPAD phone number e.g. <b>1123444</b>
<b>Authenticate Password</b>	Enter your <b>TPAD password</b>
<b>Preferred Vocoder</b>	The BudgeTone IP phone supports up to 8 different codec types including G711-ulaw (PCMU), G711-alaw (PCMA), G723, G729A, G726-32 (ADPCM), G722, G728 and iLBC.  <b>Leave as Default.</b>
<b>G723 Rate:</b>	Encoding rate for G723 codec. <b>Leave default</b> , 6.3kbps rate is set.

<b>iLBC frame size</b>	iLBC packet frame size. <b>Leave Default</b> is 20ms.
<b>iLBC payload type</b>	Payload type for iLBC. <b>Leave Default</b> value is 97.
<b>Silence Suppression</b>	This controls the silence suppression/VAD feature of G723 and G729. If set to “Yes”, when a silence is detected, small quantity of VAD packets (instead of audio packets) will be sent during the period of no talking. Set to “No”, this feature is disabled.
<b>Voice Frames per</b>	<b>Leave as Default</b>
<b>Layer 3 QoS</b>	<b>Default value is 48.</b>
<b>Layer 2 QoS</b>	<b>Default setting is blank or “0”</b>
<b>Allow incoming SIP messages from SIP proxy only</b>	<b>Default is No.</b>

<b>Use DNS SRV</b>	<b>Default is No.</b> If set to Yes, the phone will use DNS SRV configured to lookup for the server
<b>Use ID is phone number</b>	If “Yes” is set, a “user=phone” parameter will be attached to the “From” header in SIP request, which will be processed by supported SIP proxy. <b>Default is No.</b>
<b>SIP registration</b>	This parameter controls whether the BudgeTone phone needs to send REGISTER messages to the proxy server. <b>The default setting is “Yes”.</b>
<b>Unregister On Reboot</b>	<b>Default is No.</b>
<b>Register Expiration</b>	<b>The default interval is 3600 seconds</b> (or 1 hour).
<b>Early Dial</b>	<b>Default setting is No.</b>
<b>Allow outgoing call without Registration</b>	<b>Default is No.</b>
<b>Dial Plan Prefix</b>	Sets the prefix added to each dialed number. If configured, the prefix will be added to EVERY number input. <b>Default is none.</b>
<b>No key Entry Timeout</b>	<b>Default is 4 seconds.</b> User can short or extend that depends on digits dialed habit
<b>Use # as Dial Key</b>	<b>Default is NO.</b>
<b>Local SIP port</b>	<b>The default value is 5060.</b>

<b>Local RTP port</b>	The default value is 5004.
<b>Use Random port</b>	Default is No. If set to Yes, the device will pick randomly generated SIP and RTP ports. This is usually necessary and useful when multiple IP Phones are behind the same full cone NAT router.
<b>NAT Traversal</b>	Default is NO. It should be set to YES if the device is behind NAT router.
<b>Keep alive interval</b>	Default is 20 seconds.
<b>Use NAT IP</b>	Default is blank.
<b>Proxy-Require</b>	Default is blank.
<b>Voice Mail User ID</b>	Default is blank.
<b>Subscribe for MWI</b>	Default is No.
<b>Auto Answer</b>	Default is No.
<b>Offhook Auto-Dial</b>	Default is blank.
<b>Enable call features</b>	Default is Yes.
<b>Disable Call Waiting</b>	Default is No.

<b>Send DTMF</b>	Set as RTP (RFC2833)
<b>DTMF Payload Type</b>	Default is 101
<b>Send Flash Event</b>	Default is NO.
<b>Onhook Threshold</b>	Default is 800ms.
<b>NTP server</b>	Leave as Default.
<b>Default Ring Tone</b>	Default set as “system ring tone”
<b>Send Anonymous</b>	Default is NO.
<b>Anonymous Method</b>	Set to “Use From Header”.
<b>Time to ring</b>	Default is 60 seconds
<b>Special Feature</b>	Default is Standard.
<b>Syslog Server</b>	Default is None.

Click **UPDATE** at the bottom of the configuration page then click to view your changes and then click the **REBOOT** on the phone menu screen. Make sure you click **UPDATE** before clicking **REBOOT** to make sure your changes are implemented correctly.