VOI SPEED

Hitachi SIP WI-FI Telephone

Quick Installation Guide

1. Preliminary notes.

In order to configure a WI-FI phone you must have at least one WI-FI access poit in your LAN.

All settings must be entered using the phone's keypad as the phone's web interface can only be accessed after the first configuration.

Connect the power supply to the base and place the telephone on the base. When recharging the telephone lamp is blue.

Switch on the telephone only when the battery is fully charged. Press the button placed at the bottom left hand corner of the display in order to access the main menu'. Use the telephone pointing device in order to browse the menus and press it (or select 'right') to confirm each selection. Press 'CLR' to go back (or select 'left'). Press 'END' to start again.

2. TCP/IP settings

Go to Menu→ setup → Phone Lock → User Pwd
Default password: 000000
Press the phone's pointing device to confirm the password.

Go to Network → Network Config → Config 1 → Basic Info and press Edit
Set Join Method to Auto and apply.
In this example we have named the configuration 'Config 1' (you will see Config 1 on the top left corner of the display).

Go to TCP/IP → press Edit

Select DHCP enabled (defaul setting) if you have a network server that dynamically allocates IP addresses. Select DHCP disabled otherwise. In the latter case you will need to enter all IP addresses manually making sure not to allocate the same IP address more than once and that all IP addresses belong to the same sub-net. Go to section 2 if you have selected DHCP enabled.

IP ADDRESS - NETMASK : enter a static IP address belonging to the same network of VOIspeed server. The access point must have an IP address belonging to the same network too. Specify also the subnet mask.
Note: press the star key (*) twice in order enter a dot (.).

GATEWAY - DNS1/2 : enter the IP address of the gateway used by the telephone and the DNS to access the internet (this is generally used to syncronise the clock using the NTP server, port 123).

3. WI-FI setting

IMPORTANT: all WI-FI settings must be the same for both telephone and access point.

In order to scan the networks present in the area:

Go to Menu → Setup → Phone Lock → User Pwd → enter 000000 → Network → select 'Site Scan'

A list of wireless networks will be displayed. The telephone must be configured to access all networks present in the list (entering the relevant access point data) in order to enable roaming from one network to the other.

To enter the access point data:

Go to Menu → Setup → Phone Lock → User Pwd → enter the password
Go to Network → Network Config → Config 1 → WLAN

SSID = enter the network name for that Access Point (e.g. 'TEST')

Note: the same name must be entered at the access point. If this is the case the name will be displayed at the telephone in the list generated after a network scan.

We recommend using WEP authentication to register with the Access Point.
In this case Go to Menu → Setup → Phone Lock → User Pwd → enter the password

Network → Network Config → Config 1 → WEP → set WEP to 'enabled'

Enter the number of bit used for the access key (64,128,256).

Enter the 4 network keys to access the network and select the default one (DefaultKeyID 1-4). Access keys can be composed of Exadecimal values (Hex) or Ascii (Asc). Enter in WEPKey 1-4 the 4 access keys (which need to coincide with those entered in the Access Point).

Go to Menu → Setup → Phone Lock → User Pwd → enter the password → Network → Network Config → Config 1 → Authenticate.

Here you can select the authentication mode:

None (default value): in case the Access Point does not support the 8021x authentication mode
8021X-MD5: authentication by 8021X protocol using MD5
8021X-TLS: authentication by TLS protocol
WEB: password authentication (see below).

Press 'END'.

If all settings have been entered correctly the telephone will signal a network reboot. The telephone will then connect to the Access Point. You will see the network signal bars and 'ON' on the display.

4. SIP Setting

Go to Menu → Setup → Phone Lock → User Pwd → Network → SIP → User Account → Press Edit and enter:

'Displayname' = the string you want to be displayed when the phone is logged on.

'Phone Number' = 'User ID' = extension number, as defined at the VOIspeed server
'User Password' = Enter the password, as defined at the VOIspeed server
'URL Scheme' = SIP

Go to 'Server Setup'.
1st Proxy = 1st Registrar = IP address of VOIspeed server's SIP interface (usually private IP, e.g. 192. 169.x.x)

Go To 'Expires' → Set 'Regist Expire' = 60

This setting measures how long the user stays logged in on the network (better signal quality = shorter time; worst signal quality = longer time). We recommend using a time between 60 and 120 (60 = best WI-FI networks, 120 = worst networks).

5. Other settings

In order to syncronise the internal clock you need to enter either the IP address or the name of an NTP server.

Go to Menu → Setup → Advanced → Time.

Time Server: enables NTP (Network Time Protocol) to syncronise the clock. When Auto time is enabled you need to specify the IP address of two NTP servers. When the NTP server is outside the LAN the phone will have to access this server using a gateway (see section 1.5) through port 123 (that needs to be open at the firewall).

Time Zone: enter the time-zone setting.

Daylight save: enter daylight mode.

Time format: select format for date and time.

Current Type: edit the time and set its format.

Note: if at any time you want the reset the settings to their default values, the language will be set to Chinese. In order to set the language to English: go to Menu (bottom left hand corner of the display) → Setup (list item 5) → Advanced (list item 7) → Language (list item 4) and select 'English'.

6. Telephone's Web interface

In order to use the web interface (where you can configure the settings described above) you need to enabled it at the telephone (Menu → Setup → Phone Lock → User Pwd → Web Server = ON). Then go to a browser window and type:
http:\\"IP_Hitachi_Phone":"8080"
Default values:

      Username = Admin
      Password = 000000

IMPORTANT. You must enter a valid RTP port range for the telephone:

Access the telephone web interface.
Go to Configuration → RTP RTCP →

Enter:

RTP Port Min = 5004
RTP Port Max = 5006 (or more).

Select 'CHANGE VALUE'.

7. How to...

Make a call: dial the number and press the button with the green handset

Answer an incoming a call: press the button with the green handset when the phone indicates an incoming call.

End/reject a call: press the button with the red handset.

Put a call on hold: during an active call, press the button with the green handset. Press the button again to retrieve the call.

Transfer a call: put the active call on hold. Dial another number and the press 'transfer' either before the recipient picks up the call (unattended transfer) or after the recipient has answered the call (attended transfer).

8. TFTP firmware update.

You can use a TFTP server (connected to the LAN) to update the telehone firmware:

Download the TFTP server and install it on a PC on the same sub-net of the SIP telephone.

Download the new Hitachi firmware, extract the files (if compressed) and save them in the Root folder of the TFTP server.

At the telephone:

Go to Menu → Setup → Phone lock → User Pwd → Enter 000000 (defult password) → go to 'Upgrade'.

Go to 'Setup' and set TFTP server = IP address of the TFTP server

Go to 'Program' → press the phone's pointing device to confirm
(by downloading the new firmware you may lose some settings)

The TFTP server provided is free (Solar Winds) and must be setups as follows:

Go to File → Configure → Security = enter Receive and Transmit files.

In the TFTP Root Directory you must place the un-compressed files.
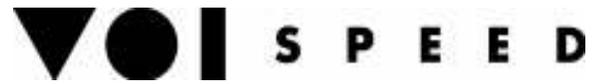
Note: in case you experienced problems with the phone we recommend using version 2.1.11.

For more information please download the Hitachi telephone manual from the download area of www.voispeedltd.com.