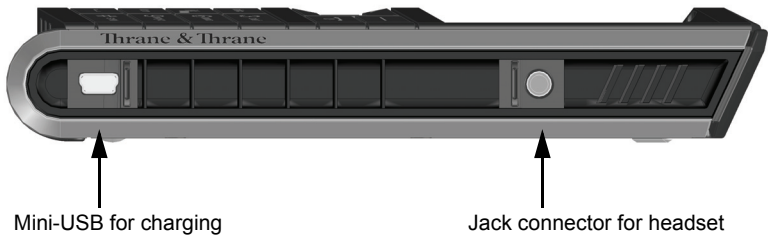


## IP Handset connectors

The handset has two connectors on the side of the handset:

- one connector for connecting a headset.
- one Mini-USB 5-pin connector, for charging the handset from a computer or USB charger.



## Preparing the hardware

### Overview

For the wireless IP Handset you need the following hardware:

- a wireless access point complying to the Wireless Local Area Networking (WLAN) standard 802.11b/g
- for charging the handset:
  - an external power supply with 12 V DC to 24 V DC nominal power, min. 7 W, **or**
  - a computer and a USB cable with a mini-USB 5-pin connector at one end and a USB-A connector at the other end.

### To connect the wireless access point

You may connect the wireless access point to a BGAN terminal or to your standard network connection.

For information on how to install the wireless access point, refer to the documentation that comes with your wireless access point.

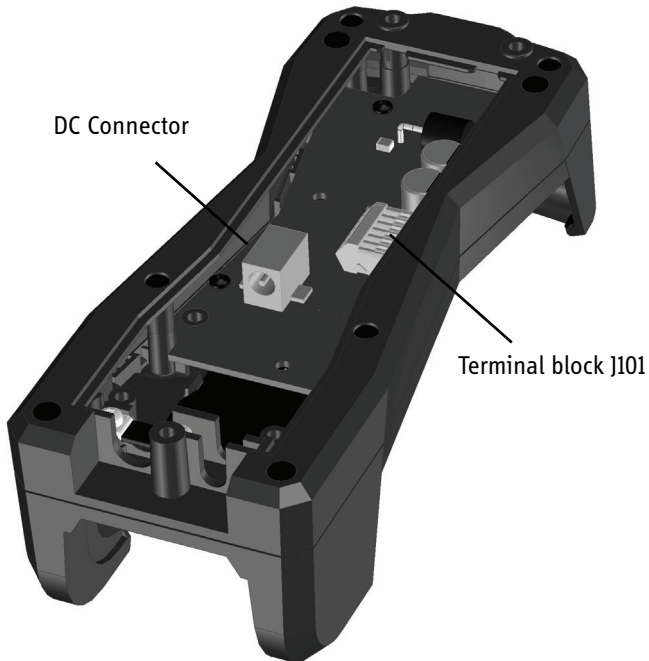
### ***To connect the external power supply to the cradle***

The cradle for the IP Handset serves as a charger when it is connected to an external power supply (12-24 V DC, 7 W).

If you only have access to AC power, a compatible AC-DC power supply, TT-3682L, is available from Thrane & Thrane. This power supply is also used for the EXPLORER 300/500 BGAN terminal.

To connect the power supply, do as follows:

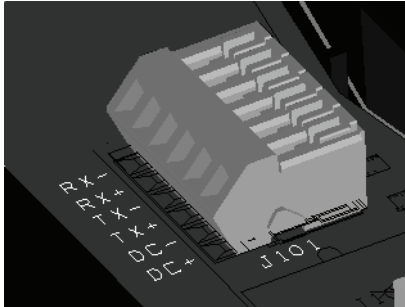
1. On the back of the cradle, unscrew the two screws holding the cover.
2. Remove the cover.



3. Connect your power supply to the cradle.  
There are two options for connecting to the cradle:
  - Using the internal DC connector in the cradle.  
The connector is a proprietary DC Jack, 2.5 mm, positive center.

The connector on the EXPLORER power supply is compatible with this connector.

- Using the internal terminal block (J101).  
Connect the wires from your DC supply to DC+ and DC- in the terminal block J101.



4. Secure the cable with a cable relief at the cable exit on the cradle.

**Note** | Make sure the cable relief matches the size of the cable.

5. Mount the cover and fasten the two screws.

For information on how to mount the cradle on a wall or desktop, see *Installing the cradle* on page 11.

## Charging the handset

### *Introduction*

The battery icon next to the handset icon in the top right corner of the display shows the battery status of the handset.



When the battery level is critically low, the handset makes a sound and shows a message, and the icon starts flashing to indicate that the battery needs recharging. If the battery is not recharged, the handset will eventually switch off.

There are two options for charging the handset:

- using the cradle with a power supply
- using a USB cable and a computer or USB charger

### *To charge the handset using the cradle*

The cradle must be connected to an external 12-24 V DC power supply, as described in the previous section.

Place the IP Handset in the cradle with the display facing up. The handset automatically starts the charging process.

### *To charge the handset from a computer or USB charger*

You need a computer or a USB charger and a USB cable with a mini-USB 5-pin connector at one end and a USB-A connector at the other end.

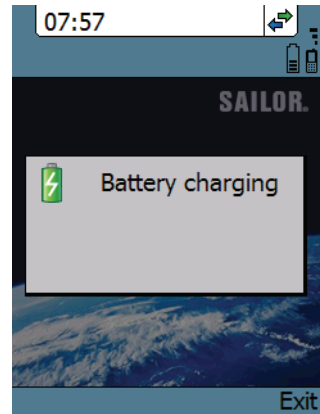
Do as follows:

1. Connect the mini-USB connector to the connector at the side of your handset.
2. Connect the other connector on the cable to a USB port on your computer or your USB charger.

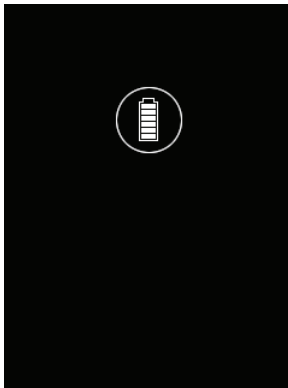
The handset automatically starts the charging process.

## Indications during charging process

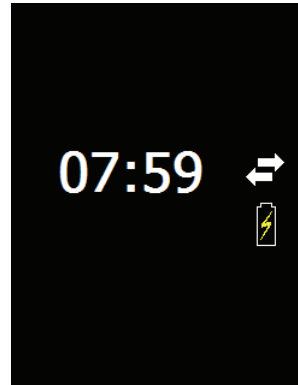
A message appears briefly in the display, the handset makes a sound and the battery icon is animated to show that the battery is charging.



Below are examples of the display when the handset is off and when the handset is in screensaver mode while charging the battery.



Handset off (animated).  
The icon is turned off after a while, but reappears when a key is pressed.



Screensaver mode

### Note


If the handset is out of use for a longer period of time, recharge the battery every two years to avoid deterioration of the battery.

## Connecting the handset to your wireless access point


**Note**

This procedure is only needed at the first connection. Once connected, the handset will automatically attempt to connect to this access point whenever it is switched on.

Do as follows:

1. Start up the wireless access point.
2. Switch on your wireless IP Handset by pressing and holding the on hook key  until the display lights up.
3. Press the center select key to enter the menu system.
4. Select **Network > Wireless network**.
5. When the list of available access points appears in the display, select the access point you want to connect to.

**Note**

Access points with a profile matching your IP Handset are marked with . If this symbol is not present, you cannot connect to an encrypted network until you have set up your wireless profile to match the access point. If you select an encrypted network without a defined profile you are prompted for security settings.

6. If you are prompted for security settings, select **OK** to enter the **Profiles** menu.
7. In the Profiles menu, select the encryption used in your access point. The handset supports WEP and WPA2-PSK (AES only).
8. Select whether your encryption code is hexadecimal or text.
9. Enter your encryption code.
10. Select **Connect**.

The handset will now attempt to connect to your wireless access point. If the access point is connected to a BGAN terminal, see *Establishing a connection using BGAN terminal* on page 21.

When the handset is connected to the access point, the display shows **Connected**.

# Establishing a connection using BGAN terminal

## Using a BGAN terminal

### *Introduction*

By connecting the handset to a BGAN terminal you gain access to the BGAN satellite network with your IP Handset.

When the IP Handset is used with the BGAN terminal, it communicates using Internet protocol between the handset and the terminal. However, on the BGAN network side of the terminal the call is transmitted as a circuit switched Standard Voice or 3.1 kHz Audio call.

When connected with the BGAN terminal the IP Handset provides a dedicated menu for the terminal.

### *Hardware connection*

**The wired handset** is connected to the BGAN terminal by connecting the Ethernet cable from the cradle to one of the LAN ports of the terminal. For further information, see *Connecting the wired handset to a BGAN terminal* on page 12.


**The wireless handset** is connected to the BGAN terminal by connecting the Wi-Fi access point to one of the LAN ports of the terminal. For information on how to connect the handset to the access point, see *Connecting the handset to your wireless access point* on page 20.


## Establishing a connection

### *If no SIM PIN is required*

If the handset is connected to a BGAN terminal where the SIM PIN is disabled or has already been entered, the BGAN terminal automatically sets up a SIP profile and assigns the local number 0501 to the first handset that is connected.

If one or more handsets have already been connected to the terminal, and the new handset has not been connected to the terminal before, you need to set up the user name, password and local number in the handset and in the web interface of the BGAN terminal. For further information, see *Connecting subsequent handsets to the BGAN terminal* on page 24.

When the display shows the handset ready symbol  in the upper right corner, the handset is ready for making a call.

If the handset ready symbol is crossed out  you cannot make a call. The display will normally show a message explaining why the handset is not ready.

### *If a SIM PIN is required*

If the handset is connected to a BGAN terminal where the SIM PIN is required and has not yet been entered, you need to enter the SIM PIN for the terminal. To do so, you need to know the Administrator user name and password as well as the SIM PIN for the BGAN terminal. Do as follows:

1. From the main screen of the handset, press the center select key to enter the menu system.
2. Select **BGAN**.
3. Select **Enter PIN code**.

**Note**

This menu item is not available if the PIN has already been accepted. Select **Status > PIN status** to see if the PIN has been accepted.

4. Enter the Administrator user name and select **OK**.




For information on how to type text in the handset, see *Writing text in the handset* on page 47.


5. Enter the Administrator password and select **OK**.
6. Enter the SIM PIN and select **OK**.

If the SIM PIN is rejected, see the next section *Wrong PIN*.

When the PIN is accepted, the BGAN terminal automatically sets up a SIP profile and assigns the local number 0501 to the first handset that is connected.

If one or more handsets have already been connected to the terminal, and the new handset has not been connected to the terminal before, you need to set up the user name, password and local number in the handset and in the web interface of the BGAN terminal. For further information, see *Connecting subsequent handsets to the BGAN terminal* on page 24.

When the display shows the handset ready symbol  in the upper right corner, the handset is ready for making a call.

If the handset ready symbol is crossed out  you cannot make a call. The display will normally show a message explaining why the handset is not ready.

## **Wrong PIN**

After entering the user name and password, you have 3 attempts to enter the PIN, before you are asked to enter the PUK (Pin Unblocking Key). The PUK is supplied with your BGAN SIM card.

Enter the PUK followed by a new PIN of your own choice. The PIN must be from 4 to 8 digits long.



### **Caution!**

If you enter a wrong PUK 10 times, the SIM card will no longer be functional, and you have to contact your Airtime Provider for a new SIM card.

## Connecting subsequent handsets to the BGAN terminal

### *Introduction*

If one or more handsets have already been connected to the terminal, you need to set up the user name, password and local number in the handset and in the web interface of the BGAN terminal.

### *To set up the handset*

To enter the user name and password in the handset, do as follows:

1. Start up your handset as described in the previous sections.
2. Enter the menu system and select **SIP**.
3. Move to the BGAN profile and select **Options** (left select key).
4. Select **Edit/View**.
5. Select **User name** and enter the user name for your handset. Note that the user name must be the same as the local number for your handset when using the BGAN terminal. Available numbers are 0501 to 0516.
6. Select **Password** and enter the password for your handset.
7. Exit the handset menu system.


### *To set up the BGAN terminal*


To enter the local number and password in the web interface of the BGAN terminal, do as follows:

1. Connect a computer to the LAN interface of the BGAN terminal and start up your browser.
2. Enter the IP address for the terminal. The default IP address is 192.168.0.1. The web interface opens.
3. Select **SETTINGS > IP handsets**.


4. Locate the local number that matches the user name of your handset and click **New**.
5. Enter the password you entered in the handset.  
When the terminal and the handset have recognized each other, a “Configure” link appears next to the new handset. When you click the Configure link the internal web interface of the handset opens. For information on the handset web interface, see *Using the web server* on page 77.

### *Handset ready*

When the display shows the handset ready symbol  in the upper right corner, the handset is ready for making a call.

If the handset ready symbol is crossed out  you cannot make a call. The display will normally show a message explaining why the handset is not ready.

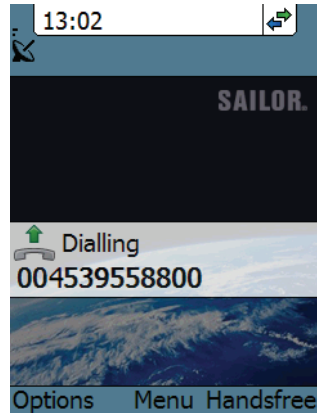
## Making the first call

To make a call, type the phone number on the keypad and press the off hook key in the left side of the keypad  or press #.

The display shows that the number is being dialled.

If the number is in the Contacts list of the handset, you can also select the number from there and dial up with the off hook key.

For further information on how to make calls, see *Making calls* on page 40.

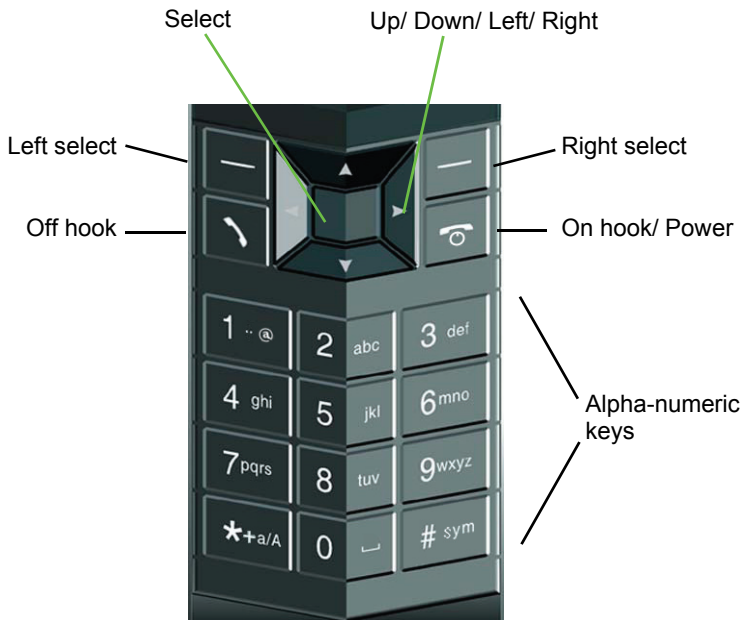


## The handset keypad and display

### The keypad

#### Overview





The following drawing shows the keypad of the handset.


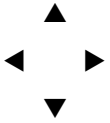


The next sections explain the functions of each key in the keypad.

### Control keys

The below table shows the functions of the control keys in the upper section of the keypad.

Key	Functions
	<p>Left select.</p> <p>Selects the function shown just above the key (left soft key).</p>
	<p>Right select.</p> <p>Selects the function shown just above the key (right soft key).</p> <p>From main screen: Opens the Contacts list.</p>
	<p>Off hook.</p> <p>After entering a phone number: Initiates a call to the number.</p> <p>From main screen: Opens a list of the latest calls, including incoming, outgoing and missed calls.</p>
	<p>On hook/ Power.</p> <p>When the handset is ringing: Rejects the call.</p> <p>During a call: Ends the call.</p> <p>When in the menu system: Abandons the menu system and displays the main screen.</p> <p>Otherwise: Powers the handset on/off, when pressed and held for 3 seconds.</p> <p>If there is an error and the handset does not power off after approximately 3 seconds, hold the key for 10 seconds, and the handset will perform a hardware reset.</p>

Key	Functions
	<p>Select (center).</p> <p>Selects/confirms the function highlighted in the display.</p>
	<p>Navigation.</p> <p>Navigates through the menu system in the display.</p> <p>Right/Left are also used to change settings in the menus.</p> <p>See also <i>Keypad shortcuts</i> on page 32.</p>

## Alpha-numeric keys

This section shows the functions of the alpha-numeric keys in the lower section of the keypad.



The functions available depend on whether you are typing a phone number (number mode) or text (text mode).

**In number mode**, you get the number of the key pressed. Only \* has two functions.

Press \* once: The display shows \* .

Press \* twice, or press and hold: The display shows +.

Press #: The display shows #.

See the available functions in text mode on the next page.



**In text mode**, you have the functions listed below.

The \* key switches between numeric, lowercase and uppercase characters.

To get numbers from lowercase or uppercase mode, press and hold the key.

At numerous presses on the same key, the character changes in the same sequence that the characters are listed in the table below.

Key	Numeric output	Lowercase output	Uppercase output
1	1	. , @ : - ?	. , @ : - ?
2	2	a b c	A B C
3	3	d e f	D E F
4	4	g h i	G H I
5	5	j k l	J K L
6	6	m n o	M N O
7	7	p q r s	P Q R S
8	8	t u v	T U V
9	9	w x y z	W X Y Z
0	0	[space]	[space]
*	Switches between lowercase, uppercase and numbers		
#	Symbols. Displays a list with the following additional symbols: . / : @ \$ % ^ & * ( ) ~ \ - _ = + [ ] { } \   ; ' " ! < > , ? # € <CR>		

### *To navigate with the keypad*

**To enter the menu system** from the main screen, press the center select key.

**To move through the menus**, press the navigation keys (arrows).





**To select a highlighted menu item**, press the center select key.

**To select one of the items in the action texts area**, press the key just below the text you want to select.

**To go back one level in the current menu**, press the right select key (only when **Back** is displayed above the key).

### *Keypad shortcuts*

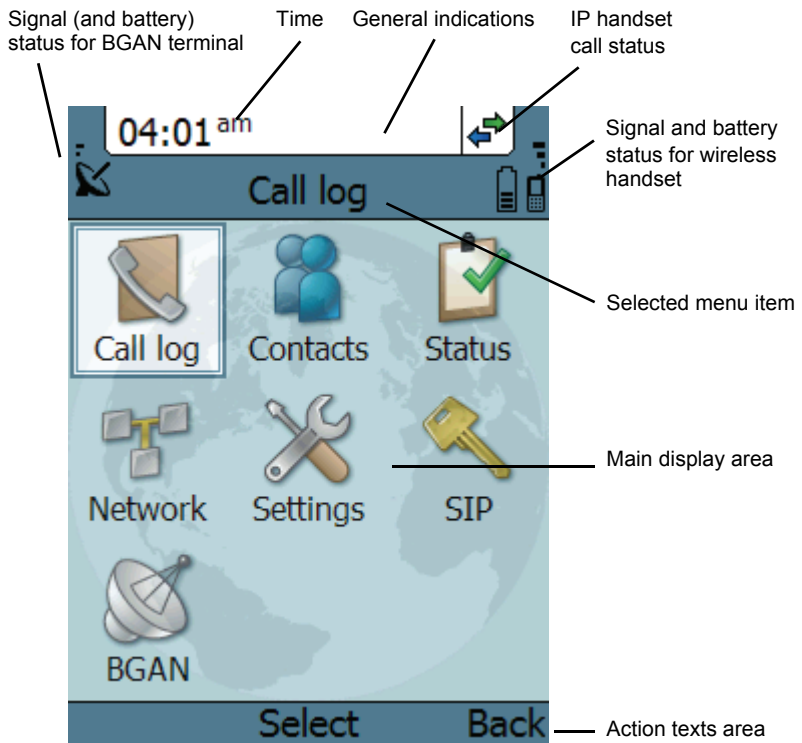
The following shortcuts are available:

	When the display is in the main screen, this key gives direct access to the list of contacts.
	When the display is in the main screen, this key opens a list of the latest incoming, outgoing and missed calls.
	When the display is in the menu system, the on hook key will exit the menu system and show the main screen.
	When the display is in the main screen, the right select key will open the list of contacts. From inside the Contacts list, press the first letter of an entry to access the entry in the Contacts list.
Alpha-numeric keys	When the display is in the menu system, an alpha-numeric key will jump to the menu item with the pressed number or, in the Contacts list, to the first entry beginning with the pressed letter.

## The display

### Overview

The color display of the IP Handset is divided into sections with different information. The sections are outlined below.



### BGAN signal and battery status

When the IP Handset is connected to a BGAN terminal, the display shows the signal strength of the BGAN signal. If the BGAN terminal is battery powered, the battery status is also displayed.

### ***Time***

The display shows the time of day.

The format is selectable in the **Settings > Date and time** menu.

### ***General indications***

General indications are icons that show dynamic information such as missed calls, sounds off, keypad locked and microphone muted.

For explanations of the icons, see *Icons in the display* on page 35.

### ***IP Handset call status***

This field shows handset status such as whether or not the handset is ready for making calls, or whether there is an ongoing call.

For explanations of the icons, see *Icons in the display* on page 35.

### ***Signal and battery status for wireless IP Handset***

This field shows the signal strength for the wireless connection and battery status for the wireless handset.

### ***Main display area***










The main display area primarily displays the menus and messages to the user.










### ***Action texts area***





The action texts are used to indicate an action that takes place when the corresponding key is pressed. The corresponding key is the key directly below the text (left select, center select or right select).

## Icons in the display

The below table explains the icons in your display.

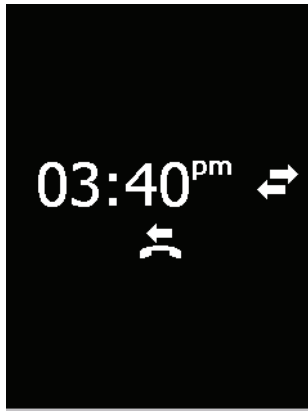
Icon	Meaning
	Wireless handset (used together with signal strength and battery status).
	BGAN terminal connected (used together with signal strength and battery status if relevant).
	Signal strength for wireless handset and/or for BGAN terminal.
	Battery status for wireless handset and/or for BGAN terminal.
	The handset is ready for making calls.
	The handset is not ready for making calls.
	Incoming call - not yet answered (the handset is ringing).
	Incoming call in progress.
	Outgoing call - not yet answered.

Icon	Meaning
	Outgoing call in progress.
	Call ended.
	Missed call. See the Call log for information on the call.
	The microphone is muted. To reactivate the microphone, select <b>Options (left select key) &gt; Microphone.</b>
	The handset is in silent mode. All external sounds from the handset - including ring tones - are muted. Voice is not muted.
	This symbol is shown when you are adjusting the volume.
	The keypad is locked. To unlock the keypad, press the center select key followed by the left select key.
	This symbol is used in the Contacts list to indicate that the number is from the phone book of the BGAN terminal and is read-only.
	When an alpha-numeric key is pressed from inside the Contacts list, this symbol is shown while the handset is searching for entries with the letter pressed.

Icon	Meaning
	Wait - a task is in progress.
	Shown in the list of wireless access points: The wireless connection is encrypted.
	Shown in the list of wireless access points: The wireless connection is not encrypted.
	Shown in the list of wireless access points: The profile for the wireless access point matches the handset.

## Screensaver

You can choose to have a screensaver activated when the handset is not used for 1 minute. This screen shows only the time, handset status and general indications such as missed calls.



When you press a key the display returns to the normal display function.

To enable or disable the screensaver, enter the menu system, select **Settings > Display** and select **Screensaver**. When the box is checked, the screensaver is enabled.

## What's next?

After reading this chapter you should be able to connect the IP Handset, start up and make a call.

The next chapters provide more information on the user interfaces and the setup of the IP Handset. The following chapter, *Operating the IP Handset*, explains how to setup and use the IP Handset.



# Operating the IP Handset

## In this chapter

This chapter describes how to use the IP Handset. It also describes how to configure the handset and use the display menu system, including a short description of how to use the IP Handset with a BGAN terminal.

For information on how to connect and start up the handset, and how to navigate with the keypad, refer to the previous chapter, *Getting started*.

## User interfaces


The main user interface for the handset is the display menu system. However, with a computer and a browser you can also use the built-in **web server** to access the handset. This way you can take advantage of a larger screen and still access a subset of the handset settings.

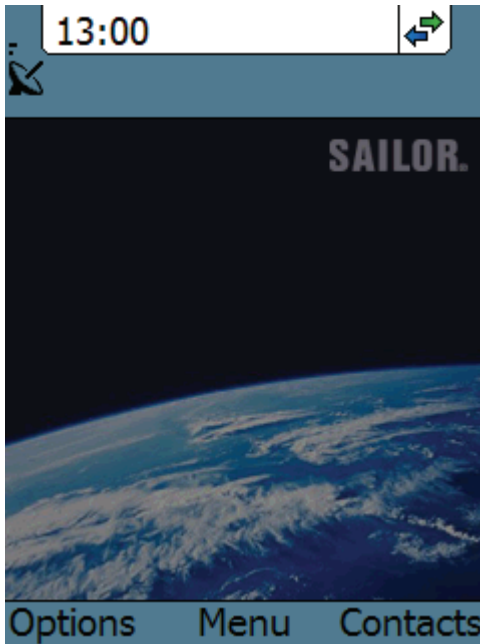
- **The display menu system** is described in *The menu system* on page 49. For an overview of the keys and display, and explanation of keys and display symbols, see *The handset keypad and display* on page 27.
- **The web server** is described in *Using the web server* on page 77.

## Handset functions

### Making calls

#### *Handset ready*

When the status field for the IP Handset shows ready  , you can make or receive calls.



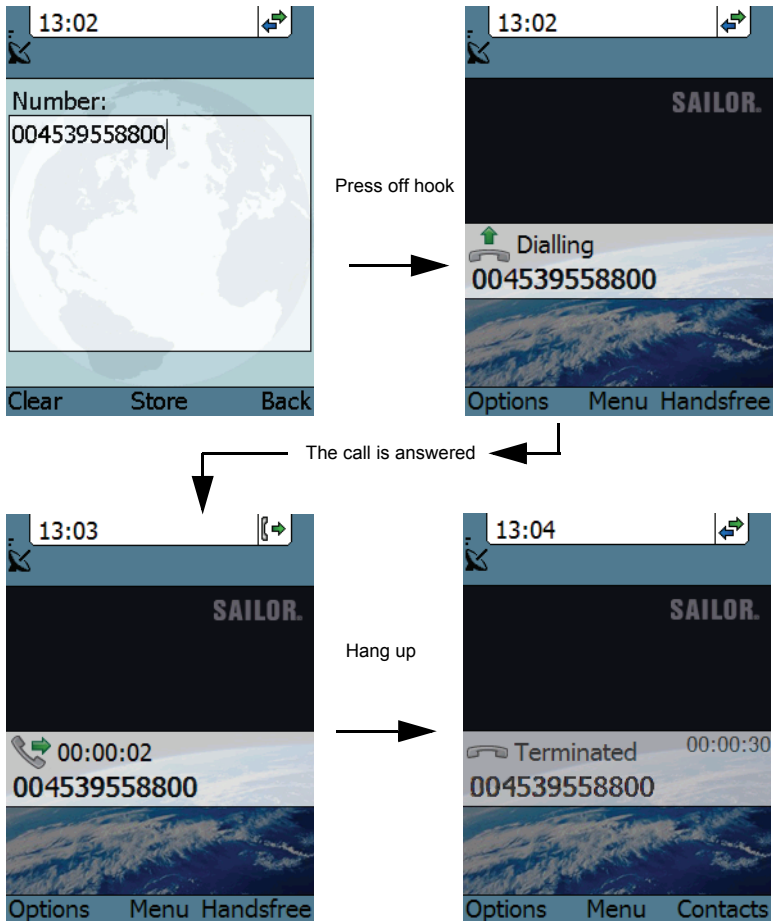
## To make a call

To make a call, simply type the phone number and press **[Call]** or **#**.



### Note

If the handset is in the cradle while you make the call, the mode will automatically be hands-free (default function). For further information, see *To set up the function of the cradle* on page 66.

The display shows the progress as follows:




You can also call a number from your contacts or from a list of recent calls:

- **Contacts:** Press the right select key from the main screen and move to the contact you want to call. Then press the off hook key.
- **Recent calls:** To see the latest calls (incoming, outgoing and missed calls), press  from the main screen. Press  again to call the selected number.

For information on how to make calls using a BGAN terminal, see *Making a call using a BGAN terminal* on page 43.

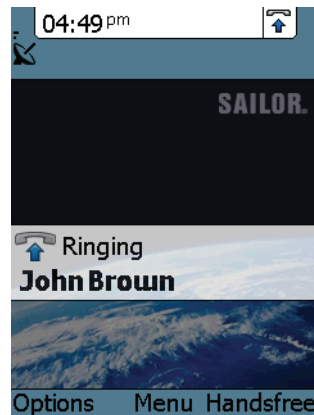
### To receive a call

When the handset is ringing, the display shows the calling name or number, if known.

Answer the call by pressing the off hook key in the left side of the keypad , or by removing the handset from the cradle. For information on cradle detection, see *To set up the function of the cradle* on page 66.

**Note**


If the handset is in the cradle while you answer the call, the mode will automatically be hands-free (by default).



Any open menus are closed down when the handset is ringing.

You can see unanswered calls under **Call log** in the IP handset menus or in the web interface.

### To end or reject a call

Press the on hook key  to end an ongoing call or to reject an incoming call.


When the handset is in hand-held mode, you can also end the call by placing the handset in the cradle.

## Making a call using a BGAN terminal

### *To make a call from a handset connected to a BGAN terminal*

To make a call from a phone or handset connected to a BGAN terminal, dial

**00** <country code> <phone number> followed by  or #.

**Example:** To call Thrane & Thrane in Denmark (+45 39558800), dial **00 45 39558800** followed by  or #.

#### Note

The default call type is set up in the web interface of the BGAN terminal. However, you can select the call type for your call, using a prefix.

Dial **1 \*** before the number to make a Standard Voice call.

Dial **2 \*** before the number to make a 3.1 kHz Audio call.

**Example:** Dial **2 \* 004539558800** to make a 3.1 kHz Audio call to Thrane & Thrane in Denmark.

For further information on call types and the BGAN terminal, refer to the user manual for your BGAN terminal.

### *To make a call to a handset connected to a BGAN terminal*

#### Note

By default all handsets connected to the terminal will ring on incoming calls.

To make a call to a handset connected to the terminal, dial

**+870** <Mobile number>

- **+** is the prefix used in front of the country code for international calls. This is **00** when calling from most countries.
- **Mobile number:** The mobile number of the terminal you are calling.

**Example:** If you are calling from Denmark and the mobile number for 3.1 kHz Audio is 772112345 on your terminal, and you want to make a call to the terminal using 3.1 kHz Audio, dial **00 870 772112345**.

To see the mobile numbers of your terminal, refer to the information included with your airtime subscription.

**Note**

There are two Voice numbers, one for Standard Voice and one for 3.1 kHz Audio.

For more information on call types and the BGAN terminal, refer to the user manual for your BGAN terminal.

## Quick settings

### *To control the volume*

To adjust the voice volume during a call (with the display in the main screen), press ▲ or ▼ on the keypad.

### *To use hands-free operation*

To enable hands-free operation during a call, use the right select key to select **Handsfree**. To go back to hand-held mode, press the right select key again.

In hands-free mode the sound is routed to a speaker, so that you can use the phone without holding it close to the ear. You can adjust the volume with ▲ or ▼ as described in the previous section.

#### **Handset in cradle:**

You can also make a hands-free call by leaving the handset in the cradle while making the call. Similarly you can answer a call using hands-free mode by leaving the handset in the cradle while answering the call.

In both cases, the default function is as follows:

- If you remove the handset from the cradle during the call, the mode will automatically change to hand-held.
- When the handset is out of the cradle in **hand-held** mode, the call will be terminated when you put the handset back in the cradle.
- When the handset is out of the cradle in **hands-free** mode, you can put it back in the cradle without terminating the call.

#### **Note**

You can change this default function under **Settings > Cradle**, if you want the handset to be independent of the cradle. For further information, see *To set up the function of the cradle* on page 66.

### *To mute the microphone*

To mute the microphone during a call, select the left **Options** menu and select **Microphone mute**.

### To lock the keypad

To lock the keypad, select the left **Options** menu and select **Lock keypad**.

When the keypad is locked you can still answer incoming calls.

To unlock the keypad, press the center select key and then the left select key.

### To use night mode

The display has a night mode for operation in low light areas. In night mode, the colors are changed to make the display more suitable for night operation.

To activate night mode, select the left **Options** menu and select **Night mode**.



### To use stealth mode

The display has a stealth mode which turns off all lights and/or sounds for external events. Note, however, that the keypad will still light up when you press a key.

To activate stealth mode, select the left **Options** menu and select **Stealth mode**.

**Note**

Stealth mode is only activated for the items you have selected in the Stealth mode menu. See *To use stealth mode* on page 64.



## Writing text in the handset

### *How to use the keys*

Press \* before the alpha-numeric key to switch between lower case, upper case and numbers.

There are 3 or 4 letters on each key. To obtain the other letters on the key, press the key again.

To move the cursor in the text, use the arrow keys.

To delete the letter just before the cursor, press the left select key **Clear**. Hold the key to delete all the text.

For a list of the key-functions in text-mode, see the table on page 31.

### *Example*

To type “He”, do as follows:

1. Press \* one or two times until the lower left corner of the display shows upper case letters.
2. Press the key **4 ghi** two times to display the letter **H**.
3. Press \* again until the lower left corner of the display shows lower case letters.
4. Press the key **3 def** two times to display the letter **e**.

## Using a headset

You can connect a headset to the wireless IP Handset as follows:

Plug the headset jack into the jack connector on the side of the handset.

The microphone and speaker of the handset are automatically disabled and the headset is used instead.

## The menu system

### Accessing the menu system

To access the menu system from the main screen, press the center select key.

Move around in the menus with the arrow keys and select with the select keys.

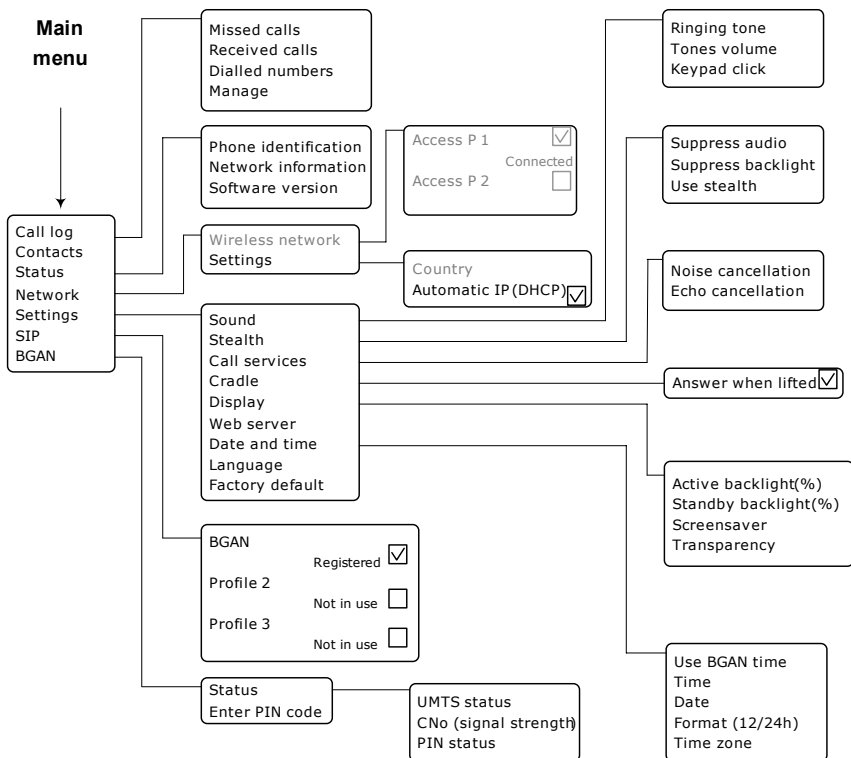
Leave the menu system by pressing the on hook key.

## Menu overview

The following drawing shows an overview of the menu system.

**Note**

The **Wireless network** menu under Network and the **Country** menu under Network > Settings are not present in the wired handset!



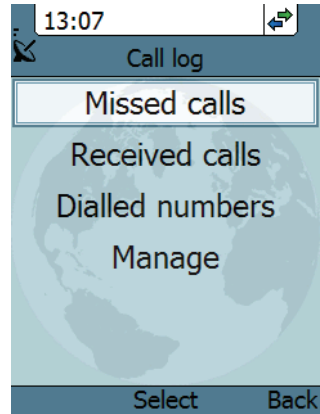
## Call log

### To see the call log

Note that the call log can hold maximum 100 calls. You can delete calls from the call log. For further information, see the next pages in this section.

Do as follows:

1. From the main menu, select **Call log**.
2. Select the list you want to see.
3. If you want to see details for a call, move to the call and select **View**.  
The display shows the name (if known), the number, time of the call and duration.



### To add a number from the call log to the Contacts

Do as follows:

1. In the call log, go to the call and select **Options**.
2. Select **Add to contacts**.  
Note that the Contacts list can hold maximum 100 entries.
3. Type in the name of your new contact and select **OK**.

### *To delete a number from the call log*

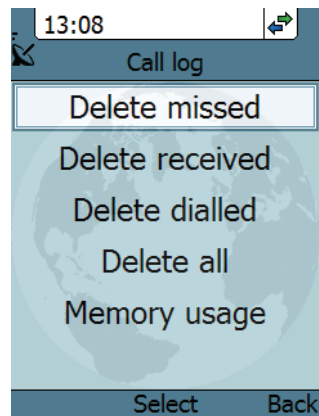
Do as follows:

1. In the call log, go to the call and select **Options**.
2. Select **Delete**.
3. Select **Yes**.

### *To delete all numbers in a call log folder*

Do as follows to delete all numbers in the call log, or all numbers in a subfolder of the call log.

1. In the call log menu (not in one of the subfolders) select **Manage**.
2. Select the folder you want to empty.
3. Select **Yes**.



### *To see memory usage in the call log*

To see the number of stored entries and the maximum allowed number of entries, do as follows:


1. In the call log menu (not in one of the subfolders) select **Manage**.
2. Select **Memory usage**.

## Contacts

### To see your contacts

Do one of the following:

- From the main screen, press the right select key,
- from the main screen, press ▼, or
- from the main menu, select **Contacts**.

If a contact is from the BGAN phone book it is marked with . This means you cannot edit or delete the entry.

### To call a contact

Do as follows:

1. In your Contacts list, scroll to the contact you want to call.
2. Press the off hook key.

### To add a contact

Do as follows:

1. In your Contacts list, press the left select key, **Options**.
2. Select **Add**.  
Note that the Contacts list can hold maximum 100 entries.
3. Type in the name of your contact and select **OK**.  
The name can be maximum 32 characters.  
For information on how to enter text, see *Writing text in the handset* on page 47.
4. Scroll to **Number** and select **Edit**.
5. Type in the number of your contact and select **OK**.  
The number can be maximum 32 characters.

### *To edit a contact*

Do as follows:

1. In your Contacts list, scroll to the contact you want to edit.
2. Press the left select key, **Options**.
3. Select **View/Edit**.
4. Select **Edit**.
5. Change the name of your contact and select **OK**.  
For information on how to enter text, see *Writing text in the handset* on page 47.
6. Scroll to **Number** and select **Edit**.
7. Change the number of your contact and select **OK**.

### *To delete a contact*

Do as follows:

1. In your Contacts list, scroll to the contact you want to delete.
2. Press the left select key, **Options**.
3. Select **Delete**.
4. Press the left select key, **Yes**.

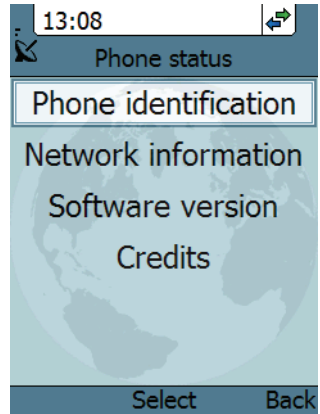
The contact is now deleted from your Contacts list.



## Status

To view status for the handset, do as follows:

1. From the main menu, select **Status**.
2. Select **Phone identification** to see the serial number of the IP Handset.
3. Select **Network information** to see:
  - DHCP Enabled/Disabled
  - IP address
  - Subnet mask address
  - Default gateway
  - Physical address (MAC)
4. Select **Software version** to see the version of the IP Handset software.



## Network

**Note**

The Wireless network menu described in the following sections is only available in the wireless handset. For the wired handset, go to *To select the IP mode* on page 61.

### To connect to the wireless network




If your handset has been connected to the wireless access point before, it will automatically attempt to establish a connection as soon as the access point is within reach.

If it is the first time you connect your handset to the wireless access point, you need to manually connect to the access point.

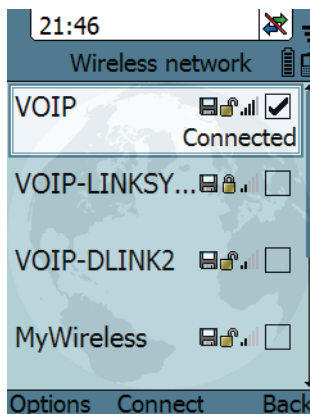
To connect to the access point, do as follows:

1. Start up your wireless access point.
2. Start up the handset.
3. Enter the menu system and select **Network > Wireless network**.

A list appears with all wireless access points within reach, together with previously connected access points.

-  means the handset already has a profile for this access point.
-  means the access point uses encryption.
-  means the access point does not use encryption.

The connected access point (if any) is always placed at the top.



4. Select **Connect** at the network you want to connect to.


If your access point does not use encryption, the handset will automatically connect and create a new profile for the access point.

If your access point uses encryption and it is the first time you connect, you will be prompted for security settings.

Select **OK** to enter the Profiles menu. Then enter the encryption key as described in the next section (from step 5).



When the profile matches the access point, and you have selected **Connect**, the handset will attempt to establish a connection. If the access point is connected to a BGAN terminal, see *Using a BGAN terminal* on page 21 for information on how to connect to the BGAN network.

When the handset is ready for use, you will see the handset ready symbol  in the top right corner of the display.

### To edit a Wireless network profile

To edit a Wireless network profile, do as follows:

1. From the main menu, select **Network > Wireless network**.
2. Select the access point you want to change profile for.
3. Press the left select key, **Options**.

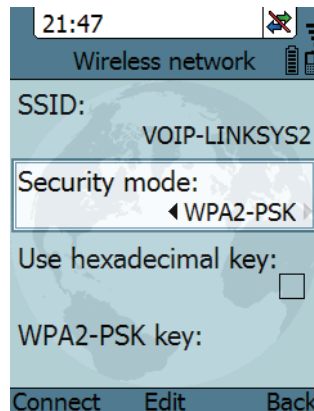
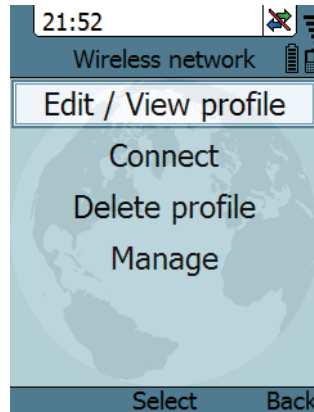
Note that if no profile is defined for the selected access point, this menu will only show Connect and Manage.

4. Select **Edit/View profile**.  
There are three types of profile, depending on the type of encryption used. There are three types of encryption mode:
  - WEP
  - WPA2-PSK (AES only)
  - No security

In this example, the security mode is WPA2-PSK.

The SSID and security mode of the selected access point are automatically detected by the handset.

5. Select whether you will enter the encryption key in hexadecimal numbers or text.
6. Enter your encryption key.
7. Select one of the following:
  - Connect (left key) if you want to connect immediately to the access point, or
  - Back (right key) if you want to save the profile for later.

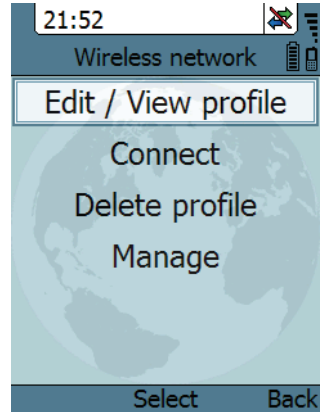


### To delete a Wireless network profile

To delete a Wireless network profile, do as follows:

1. In the Wireless network list, go to the access point for which you want to delete the profile.
2. Select **Options** (left select).
3. Select **Delete profile**.
4. Select **Yes** (left select).

The profile for the selected access point is now deleted. If the access point uses encryption, your handset will not be able to connect to the access point unless the security settings are entered again.



### To delete all Wireless network profiles

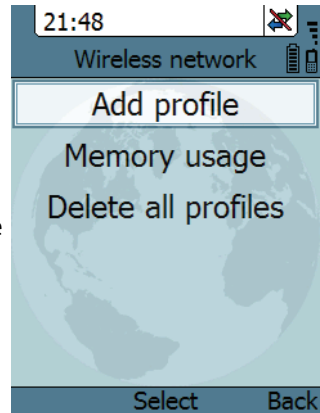
To delete all Wireless network profiles, do as follows:

1. From the Wireless network list, select **Options** (left select).
2. Select **Manage**.
3. Select **Delete all profiles**.

**Important**

When you delete all profiles you will not be able to connect to any access point using encryption, unless you enter the security settings again!

4. Select **Yes** (left select) to confirm.



### To create a new Wireless network profile

Normally a new profile is automatically created when you connect to an access point.

If you need to define a profile for an access point that is not currently within reach, do as follows:

1. From the Wireless network list, select **Options** (left select).
2. Select **Manage**.
3. Select **Add profile**.
4. Type in the SSID of the access point.
5. Select **OK**.

A new profile is now created

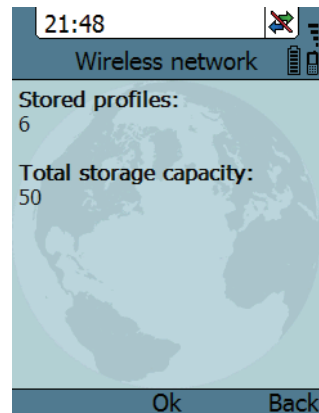
6. Enter the security information for the access point. For further information, see *To edit a Wireless network profile* on page 58.



### To see memory usage in the list of Wireless network profiles

To see the number of stored profiles and the maximum allowed number of profiles, do as follows:

1. From the Wireless network list, select **Options** (left select).
2. Select **Manage**.
3. Select **Memory usage**.



## To set the country for wireless network use

To make sure you have the right settings for the country your handset is currently located in, you have to enter the country in the handset.

### Important

In some countries, the use of WLAN is not allowed. Before continuing, make sure WLAN is allowed and licensed in the country where you intend to use it.

To enter the country, do as follows:

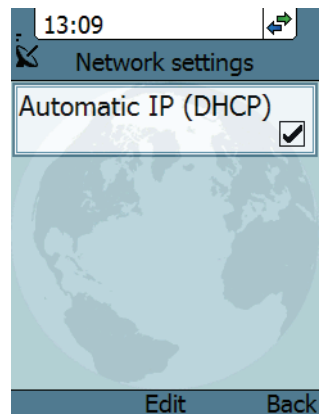
1. Select **Network > Settings > Country**.
2. Scroll to the country your handset is located in and select it.  
If the country is not in the list, select **Other**.

## To select the IP mode

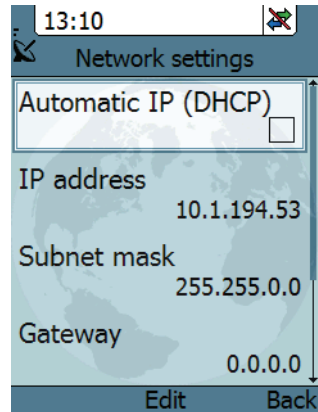
You can select whether or not the IP Handset should use DHCP to obtain a dynamic IP address. We recommend using DHCP.

Do as follows:

1. From the main menu, select **Network**.
2. Select **Settings**.
3. Do one of the following:
  - If the IP Handset should use DHCP to automatically obtain an IP address, check the box next to **Automatic IP (DHCP)** and select **Back** or press on hook to exit completely.
  - If the IP address is to be a static IP address, uncheck the box next to **Automatic IP (DHCP)**. Then select **Yes** to confirm and continue to the next step.



4. If you selected not to use DHCP, scroll down to **IP address**.
5. Click **Edit**, type in the IP address and select **OK**.
6. Continue to **Subnet mask**, **Gateway**, **Primary DNS** and **Secondary DNS** and enter them in the same way.
7. Select **Back** or press on hook to exit.  
The handset will now use the static information you entered, in stead of using DHCP.

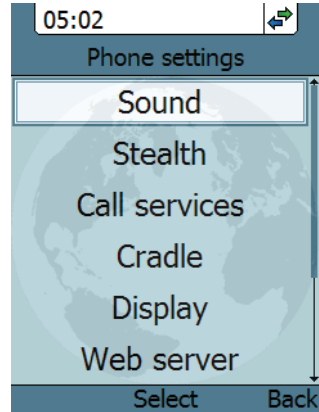




## Settings

### Overview

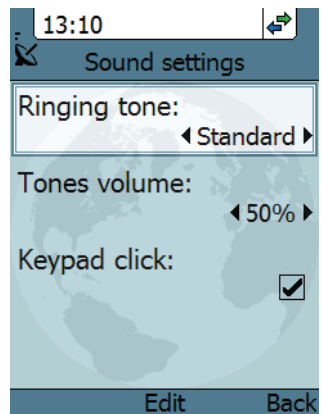
To access the Settings menu, select **Settings** from the main menu.



### To adjust the sound

To adjust the sounds of the handset, do as follows:

1. From the **Settings** menu, select **Sound**.
2. Move to the sound you want to adjust.
3. For **Keypad click**, select **Edit** to change the setting.
4. For the other settings, use the keys ◀ and ▶ to change the setting, or select **Edit**, select the setting you want and select **OK**.



### To use stealth mode

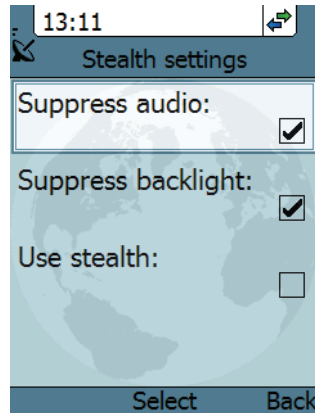
Stealth mode is used when the IP Handset should not be noticed. You can select stealth for sound, for light, or for both.

Do as follows:

1. From the **Settings** menu, select **Stealth**.
2. Move to **Suppress audio** and/or **Suppress backlight** and select **Edit** to change the setting.

**Note** | These settings are only activated when **Use stealth** is checked.

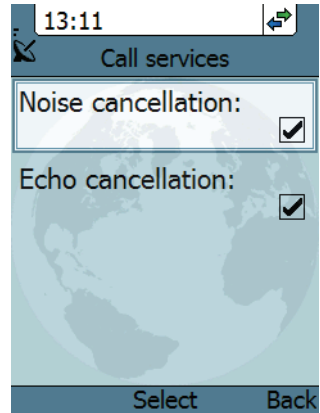
3. Move to **Use stealth** and press **Edit** to check/uncheck the box.
4. When stealth is set up in this menu you can activate and deactivate it from the main screen by selecting **Options > Stealth**.



### *To enable or disable Noise cancellation and Echo cancellation*

Do as follows:

1. From the **Settings** menu, select **Call services**.
2. Move to **Noise cancellation** and/or **Echo cancellation** and use **Select** to change the setting.
  - Echo cancellation should normally be checked (on).
  - Noise cancellation should only be checked when the handset is used in a noisy environment.





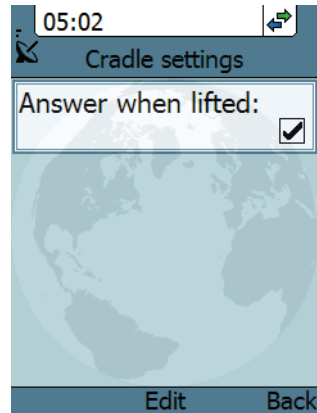
### *To set up the function of the cradle*

You can select whether the handset should detect the cradle or not. Do as follows:

1. From the **Settings** menu, select **Cradle**.
2. To have the handset detect whether or not it is in the cradle, check the box. This is the default mode. The function is as follows:

- You can answer calls by removing the handset from the cradle, and terminate a call by putting the handset back in the cradle.
- The handset automatically changes to hands-free when you make or answer a call with the handset in the cradle.
- If you take the handset from the cradle during the call, it automatically changes back to hand-held.
- In hand-held mode, when you put the handset in the cradle, the call is terminated.
- In hands-free mode, when you put the handset in the cradle the call is not affected.

3. To make the handset independent of the cradle, uncheck the box. This means you must always use  or **#** and  to start and end calls, and you can only enable or disable hands-free operation by using the keypad.



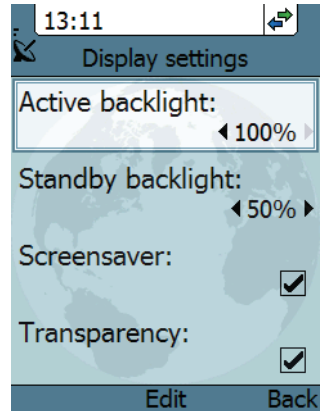
### To set up the display

To change the display settings, do as follows:

1. From the **Settings** menu, select **Display**.
2. Move to the setting you want to change.
3. For the backlight settings, use the keys ◀ and ▶ to change the percentage.  
Standby backlight can be set to maximum 50%, and the Standby backlight cannot be set higher than the Active backlight.
4. For the remaining settings, select **Edit** to check/uncheck the box.

The backlight is on for 15 seconds after the last key press.

The screensaver is activated 1 minute after the last key press.

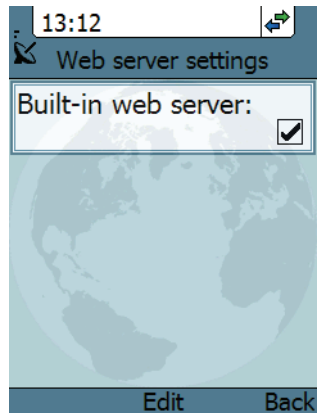


### To enable or disable the web server

To enable or disable the built-in web server of the handset, do as follows:

1. From the **Settings** menu, select **Web server**.
2. Select **Edit** to enable or disable the web server. The default settings is enabled (checked).

For information on the web server, see *Using the web server* on page 77.

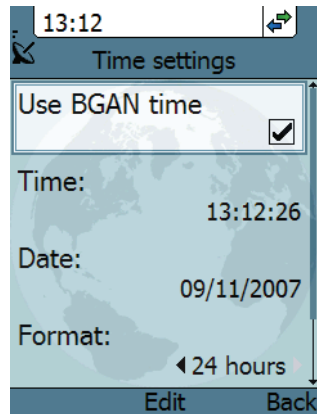


### To set the date and time

**Note** | The date and time is only maintained as long as the handset is powered!

To set the date and time, do as follows:

1. From the **Settings** menu, select **Date and time**.
2. If your handset is connected to a BGAN terminal and you want to use the UTC time received from the BGAN satellite, select **Use BGAN time**. Then leave the menu.
3. If you want to set the date and time manually, uncheck the **Use BGAN time** box. Then continue to the following steps.
4. To change the time, move to **Time:** and press **Edit**. Then type in the new time and select **OK**. The new time is activated immediately.
5. To change the date, move to **Date:** and press **Edit**. Then type in the new date and select **OK**.
6. To switch the time format between 24h and 12h, use the keys ◀ and ▶, or select **Edit** and select the wanted format.
7. To change the time zone, use the keys ◀ and ▶, or select **Edit** and select the wanted time zone.



### To select the language

This setting is for future use. Only English language is available at this time.

### To apply factory default settings

To return to factory default for all settings, do as follows:

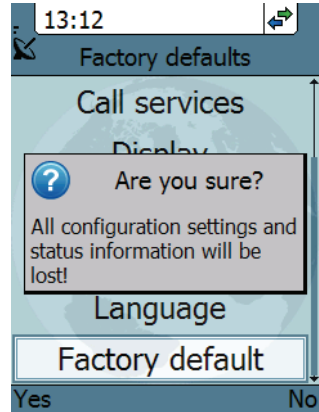
1. From the **Settings** menu, select **Factory default**.

**Important**

All settings and status information are lost when you accept this setting!

2. Select **Yes**.

All settings and status information are now changed to factory default settings. Note that in some cases this operation may take up to 30 seconds.



## SIP

### Overview

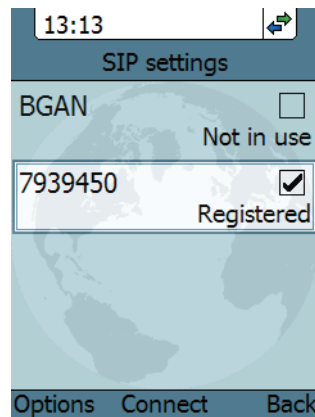
The handset communicates using Session Initiation Protocol (SIP). The profile used for communication depends on your subscription.

### To activate a profile

The default profile is the BGAN profile, which is used when the IP Handset is connected to a BGAN terminal.

To activate a profile, do as follows:

1. From the main menu, select **SIP**.
2. Move to the profile you want to use for communication, and select **Connect**.



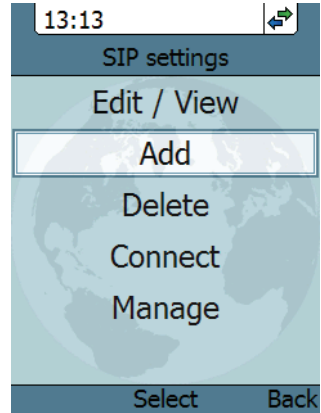


### To add a new SIP profile

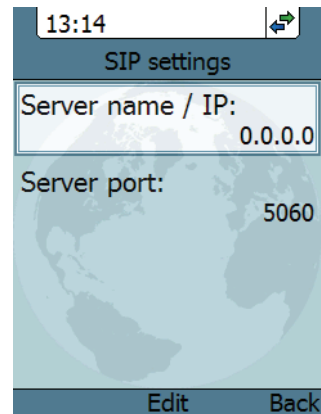
The handset can hold up to 10 profiles.

Do as follows:

1. In the SIP menu, select **Options** (left select key).
2. Select **Add**.
3. Type in the name to use for the new profile and select **OK**.



4. Move to **SIP server** and select **Edit**.
5. At **Server name / IP:**, select **Edit** again.
6. Type in the server name (URL) or IP address and select **OK**.
7. Type in the port number for the SIP server and select **OK**.
8. Select **Back**.



9. Continue through the items in the list, selecting **Edit**, typing in the information and entering with **OK**.

The items are:

- **User name**  
When connecting to a BGAN terminal, the user name should be the same as the local number for the handset.
- **Password**  
When connecting to a BGAN terminal, the password must match the handset password entered in the terminal.
- **Codec priority**  
Select the codec type that should have the highest priority. You may select G.711 or G.729 A/B.



10. When you have made your changes, select **Back**.
11. If you want to connect immediately with the new profile, select **Connect**. If not, select **Back** to leave the menu.

### To edit a profile

1. In the list of profiles, go to the profile you want to change and select **Options > Edit/View**.
2. Edit the settings as described in the previous section.

**Note**

For the BGAN profile, only the user name and password can be changed. The default user name and password are 0501 and 0501.

### To delete a profile

Do as follows:

1. In the SIP menu, move to the profile you want to delete and select **Options**.
2. Select **Delete**.
3. Select **Yes**.

### To delete all profiles

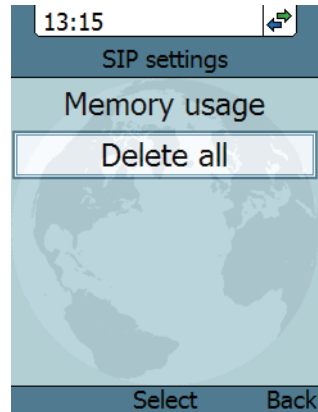
Do as follows:

1. From the SIP settings menu, select **Options** (left select key).
2. Select **Manage**.
3. Select **Delete all**.

#### Important

All profiles except BGAN are deleted - this means that you will only be able to connect your handset using the BGAN profile.

4. Select **Yes**.



### To see memory usage in the list of SIP profiles

To see the number of profiles in the list and the maximum allowed number of profiles, do as follows:

1. From the SIP settings menu, select **Options** (left select key).
2. Select **Manage**.
3. Select **Memory usage**.

## BGAN

### Overview

When the IP Handset is connected to a BGAN terminal, the handset provides a dedicated BGAN menu for the terminal. The following sections describe this menu.

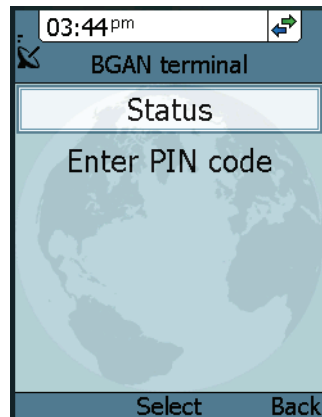
### To see the BGAN status

Do as follows:

1. From the menu system select **BGAN**.
2. Select **Status**.

The status menu shows the following information:

- **UMTS status** shows the status of the BGAN connection, for example Ready or Registering.
- **CNo** shows the signal strength of the BGAN connection.
- **PIN status** shows status of the PIN, for example whether the terminal is waiting for a PIN.

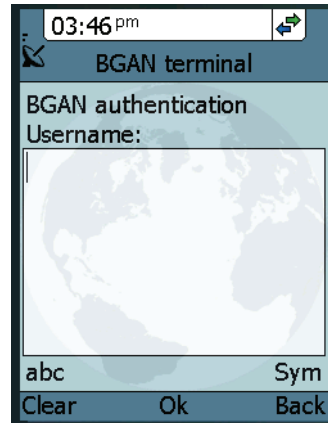


### To enter the PIN for the BGAN terminal

Note that this menu item is only available if the BGAN terminal is waiting for a PIN.

Do as follows:

1. From the **BGAN** menu select **Enter PIN code**.
2. Type in the Administrator user name for the terminal and select **OK**.  
For information on how to type text in the handset, see *Writing text in the handset* on page 47.
3. Type in the Administrator password for the terminal and select **OK**.
4. Type in the PIN for the terminal and select **OK**.



## What's next?

This chapter has described the basics of how to use the IP Handset.

The following chapter, *Using the web server*, describes how to use the built-in web server of the IP Handset.



# Using the web server

## In this chapter

This chapter describes how to use the web server in your IP Handset system.

## Introduction

### The web server

The web server is built into the IP Handset and is primarily used for uploading software and for editing contacts.

You can access the web server from a computer connected to the BGAN terminal you are using for your handset. Use a standard Internet browser.

Internet Explorer 6.0 and 7.0 on Windows, Firefox 2.0 on Windows, Firefox on Linux and Safari on MAC have been tested successfully with the web server. You may be able to use other browser versions as well.

### Browser settings

The **Proxy server** settings in your browser must be disabled before accessing the web server.

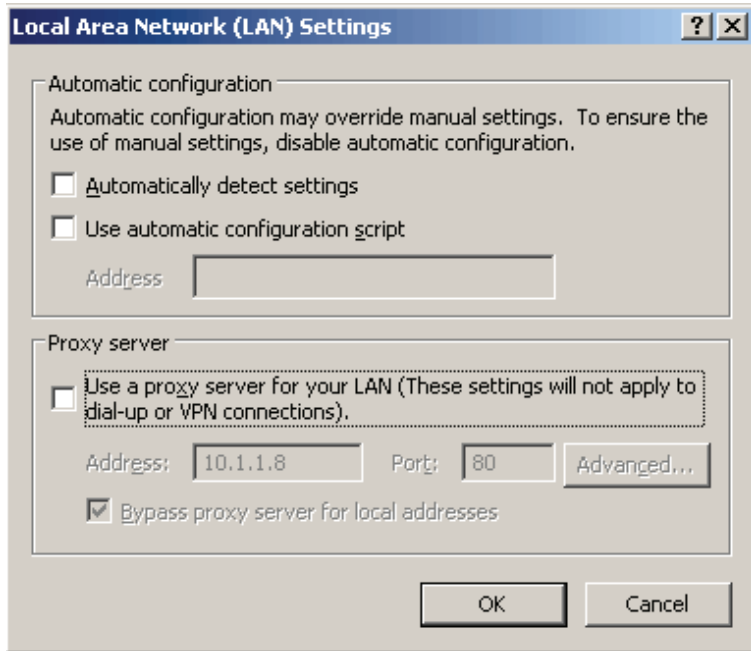
Most browsers support disabling of the Proxy server settings for one specific IP address, so you can disable Proxy server settings for the web server only, if you wish. Consult your browser help for information.

To disable the use of a Proxy server completely, do as follows:

**Note**

The following description is for Microsoft Internet Explorer. If you are using a different browser, the procedure may be different.

1. In Microsoft Internet Explorer, select **Tools > Internet Options > Connections > LAN Settings**.



2. Uncheck the box labeled **Use a proxy server for your LAN**.
3. Click **OK**.

When the proxy server settings are disabled, close your browser.

You may need to change this setting back on return to your Internet connection.



## Accessing and navigating the web server

### *To access the web server*

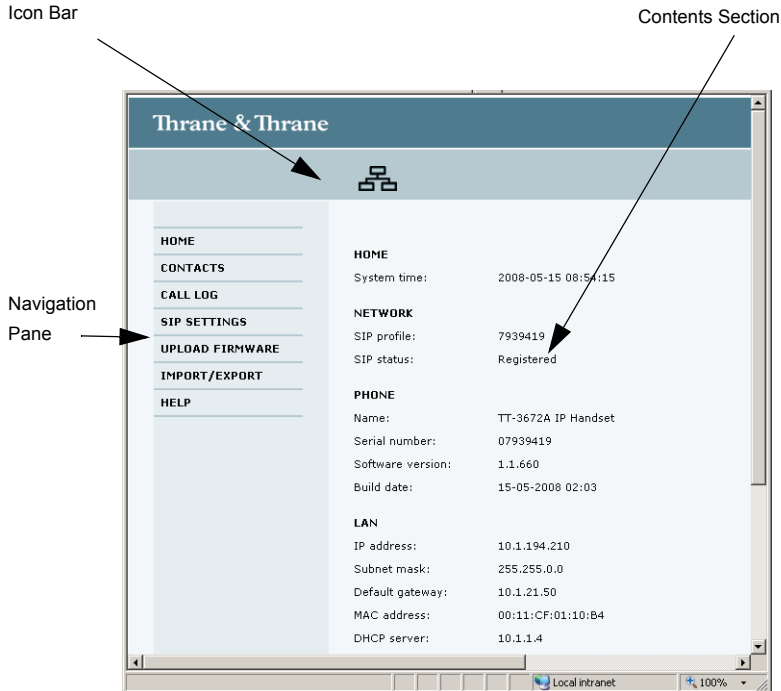
To access the web server from a computer, do as follows:

1. Start up your computer, the BGAN terminal and the IP Handset.
2. Connect your computer to the BGAN terminal using a standard LAN cable.
3. Connect your IP Handset to the BGAN terminal as described in *Getting started* on page 7.
4. Open your browser on the computer and enter the IP address of the IP Handset.

You can find the IP address in the handset menus under **Status > Network information**.

## Overview of the web server

The web server consists of the following sections.



- The **navigation pane** holds the main menu. Clicking an item in the menu opens a submenu in the navigation pane or a new page in the contents section.
- The **icon bar** shows a LAN icon when the handset is connected using the LAN interface, or a Wireless LAN icon if the handset is connected using the Wireless LAN interface.
- The **contents section** shows the page selected in the navigation pane. This section is used for viewing or changing settings, or for performing actions.