INTERNET TELEPHONE

PERSONALISED INFORMATION ONSCREEN

LAN CORDLESS

DU@Lphone™

Your Cordless Gateway to Internet Telephony and Personalised Information

User Manual

P/N 95103107 version 3.1

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WELCOME

Thank you for purchasing the LAN Cordless DUALphone. This user manual describes how to install, configure, and use the LAN Cordless DUALphone, enabling you to make Internet calls, landline calls, and receive on-screen information services. Note that throughout this user manual, we refer to the LAN Cordless DUALphone as DUALphone.

ABOUT THIS USER MANUAL

This user manual consists of a number of sections to guide you through the process of installing, configuring, and setting up your phone for first use. These sections are best read from beginning to end. The remaining sections of this user manual serve as a reference guide for all the features of the DUALphone.
In this manual we have used the following abbreviations:

DHCP – Dynamic Host Configuration Protocol
IP – Internet Protocol
LAN – Local-Area Network
NAT – Network Address Translation
SIP – Session Initiation Protocol
STUN – Simple Traversal of UDP through NAT
URL – Uniform Resource Locator
WAN – Wide-Area Network

For more information, see the glossary on our website. On the website you can also find additional information about the DUALphone such as troubleshooting, frequently asked questions and support contact information.

www.dualphone.net

Have your serial number and MAC address ready when contacting support. You find the numbers on the bottom of the gateway. For inquiries concerning telephony services, contact your Internet Telephony Service Provider. For inquiries concerning your broadband connection, contact your Internet Service Provider (ISP), and for inquiries concerning on-screen information services, contact your information services provider.

For the EU: The telephone's conformity with EU directives is confirmed by the CE symbol. We hereby declare that the LAN Cordless DUALphone and/or LAN Cordless DUALhandset are in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

For the US: This equipment complies with Part 15 of the FCC rules and Part 68 of the FCC rules, and the requirements adopted by the Administrative Council for Terminal Attachments (ACTA).Located on the equipment is a label that contains, among other information, the FCC registration number, and the ringer equivalence number (REN). If requested, this information must be provided to the telephone company.

The REN is used to determine the number of devices which may be connected to the telephone line. Excessive RENs on the telephone line may result in devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed five (5.0). To ascertain the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to determine the maximum REN for the calling area.

This equipment cannot be used on the telephone company-provided coin service. Connection to Party Line Service is subject to State Tariffs.

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If such advance notice is not practicable, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe this is necessary.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice to enable you to make the necessary modifications in order to maintain uninterrupted service. If the trouble is causing harm to the telephone network, the telephone company may request you to disconnect the equipment from the network until the problem is resolved.

This equipment uses the following USOC jacks: RJ11C.

It is recommended that the customer install an AC surge arrester in the AC outlet to which this device is connected. This is to avoid damage to the equipment caused by local strikes of lightening and other electrical surges.

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For further information, see "FCC and other information" on the Safety Information sheet for the US.

AT A GLANCE

HANDSET – FRONT VIEW

MESSAGE INDICATOR
message indicator in antenna – used for voice mail, missed calls, notifications, etc.

EARPIECE

OK KEY
used to enter the main menu and select and confirm options

COLOR DISPLAY

SOFT KEYS
used for various functions

GREEN PHONE KEY
used to make calls on primary line or answer calls

RED PHONE KEY
used to hang up or leave a menu and to turn the handset on or off

NAVIGATIONAL KEYS
used to navigate through menus and services

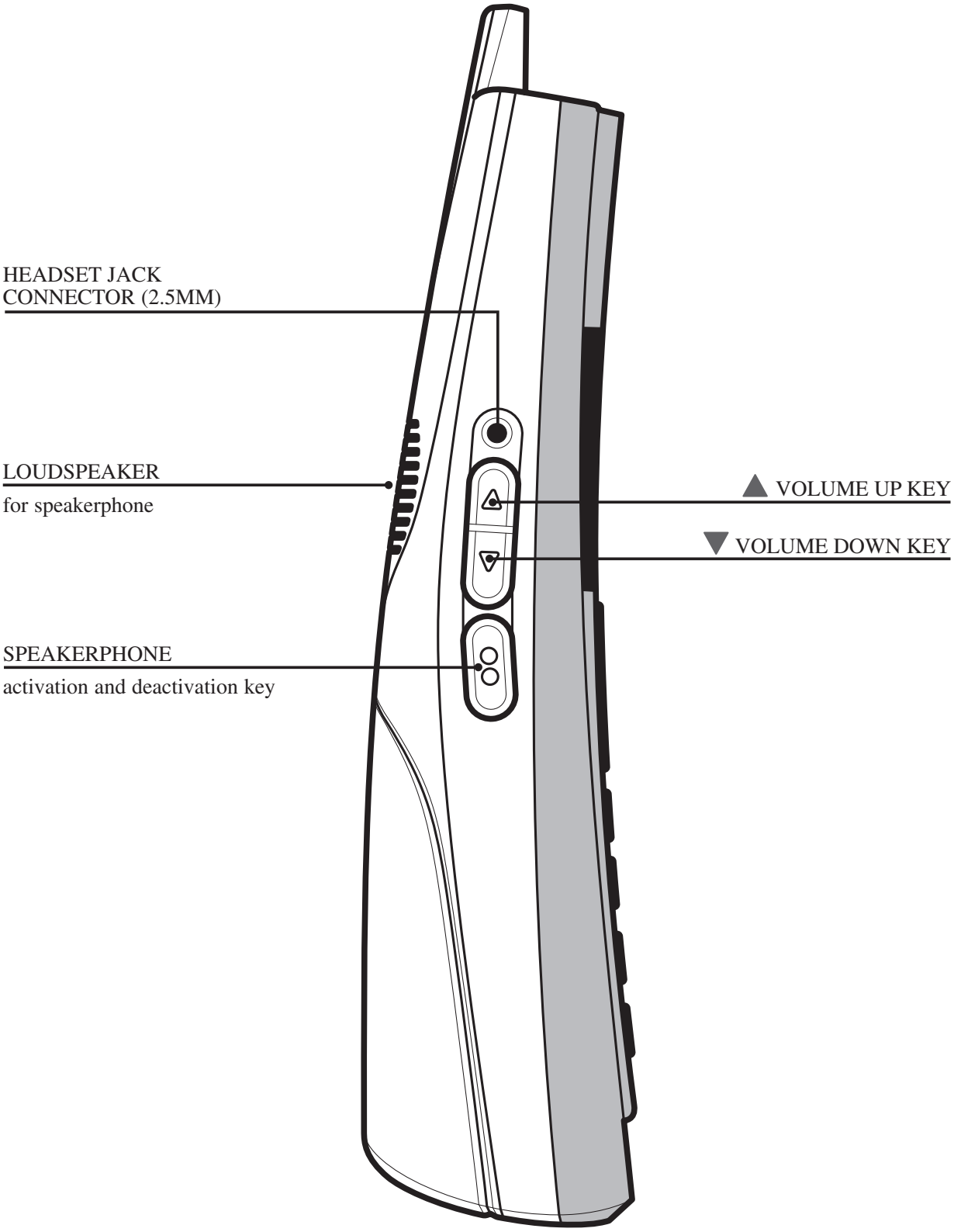
KEYPAD
used to enter numbers and letters

STAR KEY * a/A
used in the name editor to capitalize letters, type numbers and enter a star symbol

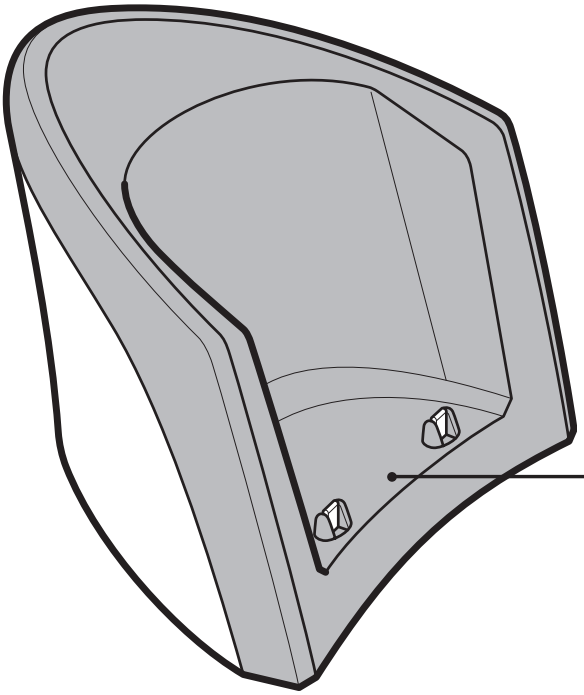
R # R KEY
used to send flash signal for landline calls and enter special characters

MICROPHONE

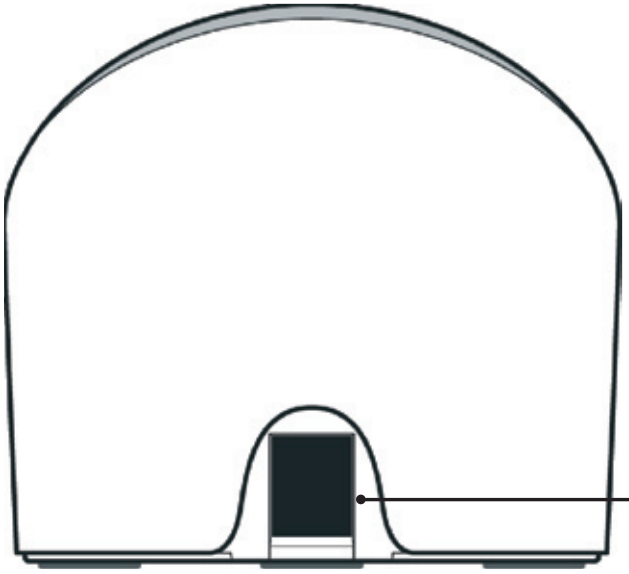
HANDSET – SIDE VIEW



HANDSET CHARGER – FRONT VIEW



HANDSET CHARGER – REAR VIEW



IDLE MODE

HANDSET NAME

CONNECTION STATUS INDICATORS [1)]

BATTERY STATUS
and charging indicator

TIME AND DATE

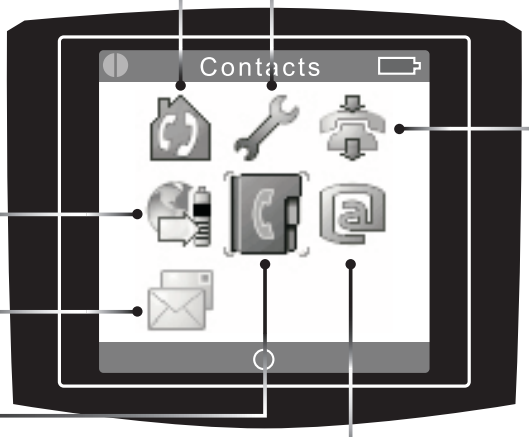
OPTIONS
for redial and active calls
(activated with soft key)

CALL LOG
for incoming, outgoing
and missed calls
(activated with soft key)

OK KEY INDICATOR
signifies that the OK key is active

1)
- Black/black - out of range of the gateway
- Yellow/black - within range of the gateway, but not ready for Internet calls
- Yellow/yellow – within range of the gateway, and ready for Internet calls on primary line

MAIN MENU



INTERCOM
for communication between
two handsets

SETTINGS

CALL LOG
for incoming, outgoing
and missed calls

ON-SCREEN INFORMATION SERVICES

MESSAGES

CONTACTS

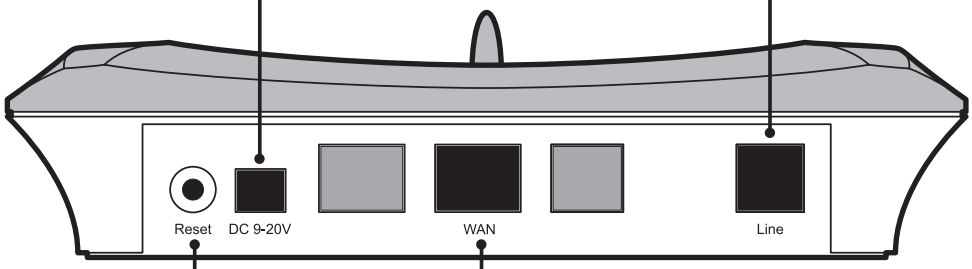
INTERNET TELEPHONY SERVICES
provided by your service provider

GATEWAY – REAR VIEW

POWER CONNECTION

LANDLINE CONNECTION PORT

(POTS/PSTN)



RESET BUTTON

for activating configuration changes and enabling handset registration

WAN CONNECTION PORT

for Ethernet cable

GATEWAY – FRONT VIEW

POWER INDICATOR

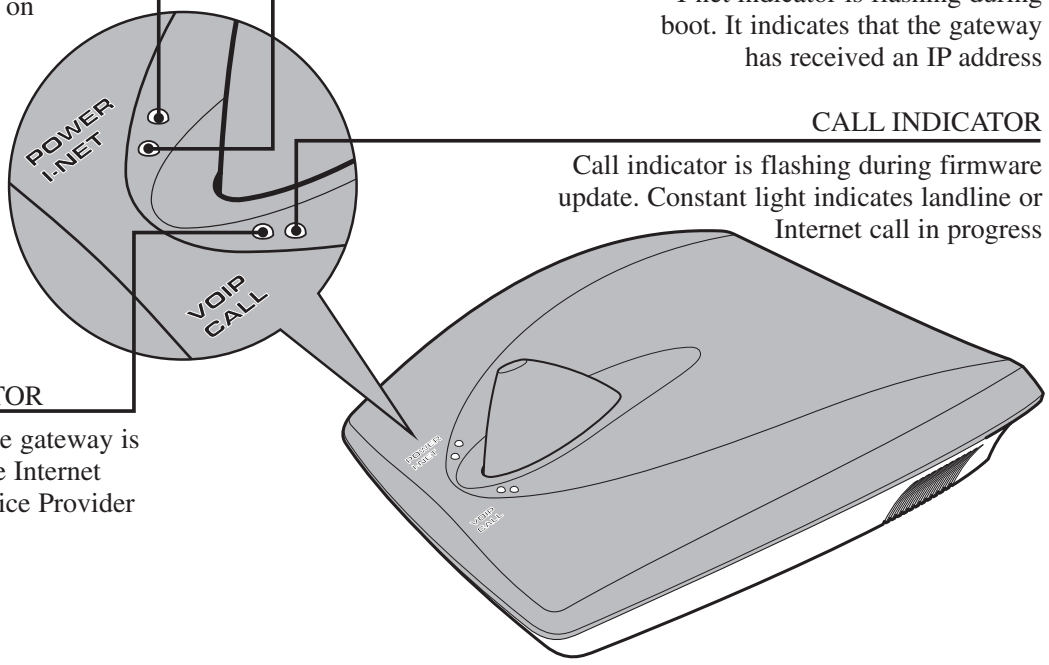
indicates power on

I-NET INDICATOR

I-net indicator is flashing during boot. It indicates that the gateway has received an IP address

CALL INDICATOR

Call indicator is flashing during firmware update. Constant light indicates landline or Internet call in progress



VOIP INDICATOR

indicates that the gateway is connected to the Internet Telephony Service Provider

INSTALLING THE DUALPHONE

This section guides you through the process of installing your DUALphone.

PREREQUISITES

In order to take full advantage of the features of the DUALphone, you need to have the following in place:

- Broadband Internet connection – cable, DSL, or equivalent
- Internet Telephony Service Provider subscription – to make Internet calls
- Landline telephone subscription – to make ordinary phone calls (optional)

Furthermore, before you start the installation process, make sure that you have the following close to the gateway:

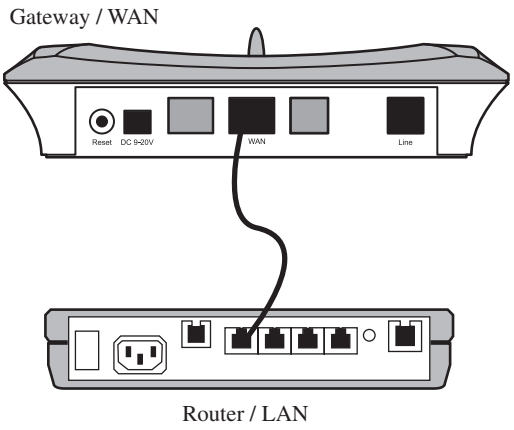
- Wired Ethernet router or broadband modem
- Power outlet for the gateway
- Telephone wall outlet used for landline telephony (optional)

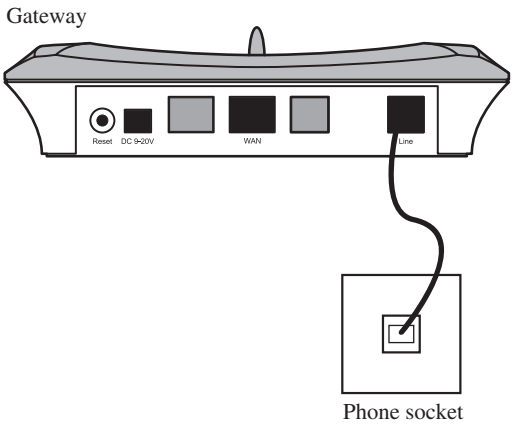
NOTE: The gateway can either be placed on a tabletop or mounted on the wall. If longer cables are required, you can use ordinary cable extensions. The handset has an indoor signal range of up to 50 meters (150 feet) from the gateway, and you must place your handset charger within the signal range. Concrete and metal objects might affect the signal range.

INSTALLING THE GATEWAY AND REGISTERING THE HANDSET

HOW TO INSTALL THE GATEWAY

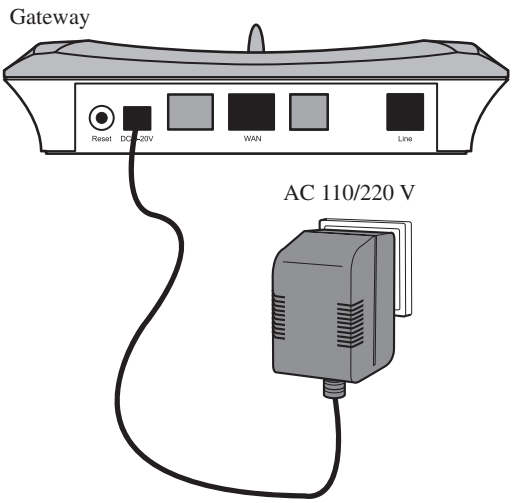
1. To prepare the gateway for Internet telephony, connect the Ethernet cable to the **WAN** port on the gateway and then to a **LAN** port on your broadband modem or router.





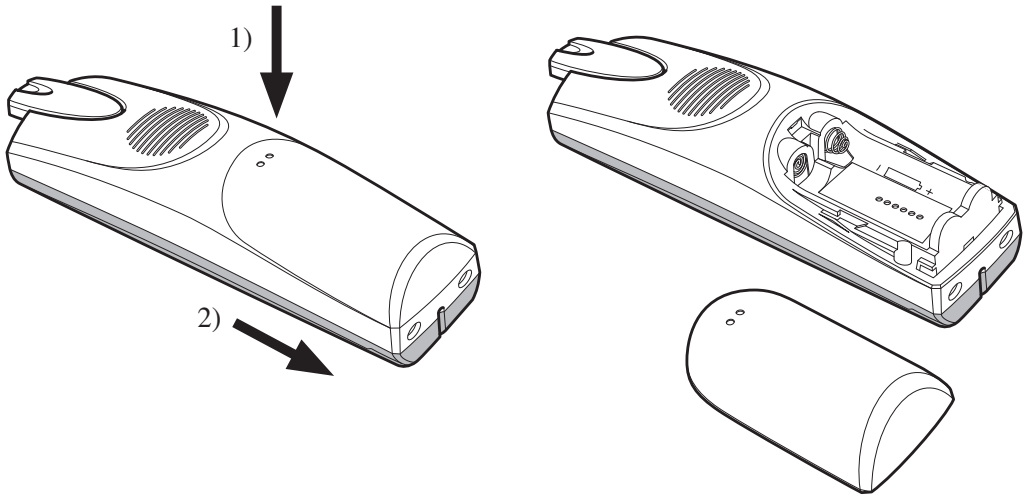
2. To prepare the gateway for landline telephony, connect the telephone cord to the **Line** port on the gateway and then to a telephone wall outlet.

3. Connect the appropriate power adapter to the gateway and to an active power outlet (preferably a continuous power outlet without a switch to interrupt its power).

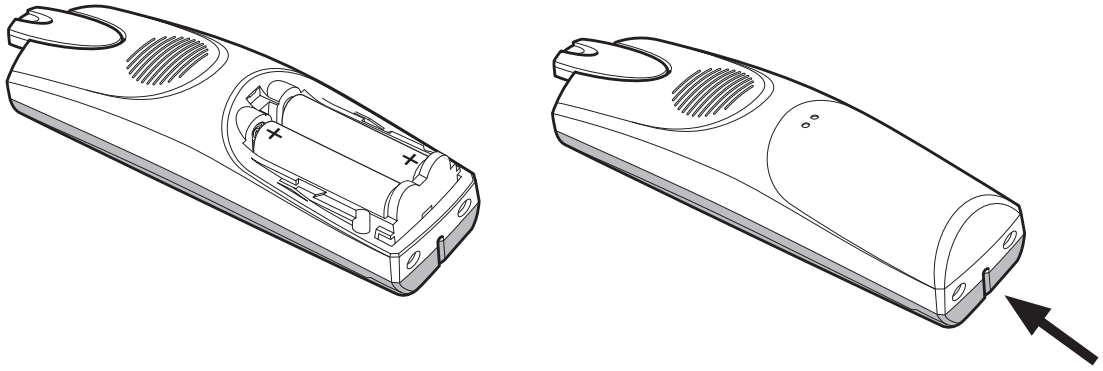


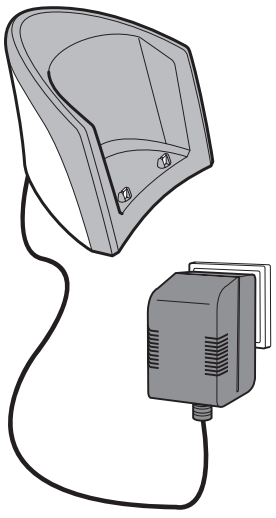
HOW TO INSTALL AND REGISTER THE HANDSET

1 Push in and down on the two holes in the back of the handset to release the battery cover.



2 Insert the two batteries in the handset, making sure that their plus and minus ends are facing as shown in the illustration, and then slide the battery cover shut.





3 Connect the appropriate power adapter to the charger and the other end to an active power outlet (preferably a continuous outlet without a switch to interrupt its power).

4 Place the handset in the charger, and charge the batteries. We recommend that you charge the batteries fully before first use. This takes approximately 10 hours. When you place the handset in the charger, the handset automatically registers with the gateway provided you have just reset the gateway.

NOTE: After registration of the first handset, there is a 5-minute period during which you can register any additional handsets. If you want to register additional handsets after the 5-minute period has expired, press the **Reset** button on the rear of the gateway to start a new 5-minute registration period.

GETTING STARTED

USING THE MENUS AND TYPING TEXT AND NUMBERS

The DUALphone has 7 menus all of which you access from the Main menu.

HOW TO ENTER THE MAIN MENU

1) In **Idle** mode, press the **OK** key. The **Main** menu opens.

TYPING TEXT AND NUMBERS

When you are in a number editor or text editor there are a number of ways in which you can edit text. The **Erase** soft key enables you to erase text that is already in the editor, or to erase text that you have just typed. The **Options** soft key provides you with the following two options: **Insert symbol** and **Input mode**.

HOW TO INSERT A SYMBOL

1) In a text editor, press the **Options** soft key, choose **Insert symbol**, and then press the **OK** key.
2) Use the navigation keys to choose the preferred symbol, and then press the **OK** key. The symbol is inserted in the text.

HOW TO CHANGE THE TEXT FORMAT

When you are in a text editor, the upper right corner of the display shows which text input mode option is currently selected. You can change the input mode of the text editor at any time during editing.

1) In a text editor, press the **Options** soft key, choose **Input mode**, and then press the **OK** key.
2) Choose the preferred input mode, and then press the **OK** key. You can choose among the following options.

OPTION	WHAT IT DOES
ABC	Types all upper case letters.
Abc	Types first letter in a sentence in upper case and remaining letters in lower case.
abc	Types all lower case letters.
123	Types numbers only.

You can also change the case of letters on the fly, or type a number in the middle of a text.

■ Press the **Star** key once to change the case, or press the **Star** key twice to type numbers.

HOW TO LOCK AND UNLOCK THE KEYPAD

If you are carrying the handset around, you can lock the keypad so that you do not use it accidentally.

1) In **Idle** mode, press the **Star** key, and then press the **Lock** soft key.
2) To unlock, press the **Star** key, and then press the **Unlock** soft key.

NOTE: The keypad unlocks automatically when you answer an incoming call or if you make an emergency call. For more information about emergency calls, see page 23 of this manual.

CONFIGURING THE DUALPHONE

The following sections describe how to configure and set up your DUALphone for first use. If your DUALphone has been pre-configured by the Internet Telephony Service Provider you purchased it from, the phone is ready for use once you have plugged in all cables and connected the power, and you can continue with the Specifying Basic Settings section, on page 19 of this manual.

In many ways, the DUALphone functions like an ordinary analog telephone. However, because it is connected to the Internet, you have to configure your phone before it is ready for first use. You will need the account information that you received from your Internet Telephony Service Provider to complete the configuration of your DUALphone. If you have not registered with your Internet Telephony Service Provider yet, you need to do so before you can continue with the configuration.

HOW TO CONFIGURE THE DUALPHONE ONLINE

1) Open a browser on your PC, go to **www.dualphone.net**, and then click the LAN DUALPhone link.
2) In the **Configuration and FAQ menu**, choose **Configuration**.
3) Enter your MAC address found on the back of the gateway or by pressing the volume up key on the handset in Idle mode, and then the default password, which is 1234.
4. Fill in the SIP user name field on the Simple tab. This is usually your phone number. Click Save and update DUALphone. The phone is reset automatically.

NOTE: If your DUALphone does not register automatically, then enter menu, system settings, restore settings, press OK and your system will restart.

After a few seconds, both status indicators in the upper left corner of the display will turn yellow, indicating that you have successfully configured your DUALphone.

NOTE: If your DUALphone account has not been pre-configured by your Internet Telephony Service Provider, you have to fill in the information on Basic tab. For more detailed information on how to configure your account, refer to your Internet Telephony Service Provider's configuration instructions.

If you do not configure your DUALphone on installation, you can only make landline calls. However, you can always complete the configuration at www.dualphone.net or use the configuration menu on the handset at a later time.

HOW TO CONFIGURE THE DUALPHONE USING THE HANDSET

You can configure your DUALphone using the handset. You will need the account information that you received from your Internet Telephony Service Provider to complete the configuration of your DUALphone.

1) In **Idle** mode, press the **OK** key, choose **Settings**, and then press the **OK** key.
2) Choose **VoIP settings**, and then press the **OK** key.
3) When prompted for a PIN code, type the default PIN code 1234, and then press the **OK** key.

You then specify the Domain and the SIP proxy.

1) Choose **Server**, press the **OK** key, and then choose **Domain**.
2) Press the **OK** key, and then enter the domain name. Press the **OK** key.
3) Choose **SIP proxy**, press the **OK** key, and then key in domain name or IP address of the SIP proxy, if it is different from the Domain. If you have more than one VoIP account, you then need to specify account settings for each account.

1. Choose **Accounts**, press the **OK** key, select an account, and then press the **OK** key.
2) Choose the listed parameters one by one, press the **OK** key, and then key in the relevant information based on the account information you received from your Internet Telephony Service Provider.
   - Display name (optional) – Caller ID that the called party sees
   - Nick name – name of the account used in Call Groups and VoIP line settings
   - SIP User name – usually the phone number you received from your service provider
   - Authentication Name – usually the same as SIP User name
   - SIP Password – the password you received from your service provider
3) After each change, press the **OK** key, and then the **Yes** soft key when prompted to save changes.
4) Press the Reset button on the rear of the gateway when you have completed all changes.

HOW TO CONFIGURE THE DUALPHONE USING THE INTERNAL WEBSERVER

You can configure the DUALphone using a PC with a WEB-browser. This can be useful in case the phone cannot access the Internet.

1) Press the Volume Up key on the handset to enter the system status menu where the IP address of the phone is shown.
2) On the WEB-browser type in the IP-address of the phone in the address field: ex. 10.10.106.235.
3) Login with username = admin, password = admin.
4) Follow the instructions shown on the opened WEB-page.

HOW TO CHANGE THE PIN CODE

Make sure to change the PIN code after first login to prevent unauthorized access to your VoIP settings.

1) In Idle mode, press the **OK** key, choose **Settings**, and then press the **OK** key.
2) Choose **VoIP settings**, and then press the **OK** key.
3) When prompted for a PIN code, enter the default PIN code 1234, and then press the **OK** key.
4) Choose **Change PIN code** and then press the **OK** key.
5) Enter a new PIN code, and then press the **OK** key.
6) Press the **Yes** soft key when prompted to save the PIN code.
7) For future reference, write your new PIN code here: | | | | |

NOTE: The handset PIN code and the online configuration password are independent of each other. Changing the handset PIN code will not affect the online configuration password.

HOW TO CHANGE ACCESS CODE

The access code is used for calculating encryption keys during the intitial pairing of handsets to the gateway. To ensure privacy, the access code must be changed. Handset and gateway access codes must be equal. When registering a new handset, ensure that its access code is modified to the same value as the access code of the gateway. For information on how to register handset, see page 34 of this manual.

1) Enter settings, system settings.
2) Choose **Access Code**.
3) Press **OK**.
4) Press **Gateway**.
5) Type in the new access code. (display shows '*' only). Press **OK** and press **Yes** to save.

1) Enter settings, system settings.
2) Choose **Access Code**.
3) Press **OK**.
4) Press **Handset**.
5) Type in the new access code. (display shows '*' only. Press **OK** and press **Yes** to save.
6) Press red hook key.

SPECIFYING BASIC SETTINGS

Before you start using your phone, we strongly recommend that you specify handset language, country selection, time zone, and routing of emergency dials to ensure that your DUALphone functions properly.

HOW TO SPECIFY THE HANDSET LANGUAGE

The individual handset language settings determines in which language the text on the display is presented.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **System settings**, press the **OK** key, and then choose **Language**. Press the **OK** key.
3) Choose the preferred language, and then press the **OK** key.

HOW TO SPECIFY A COUNTRY SELECTION

Setting the country selection properly ensures, among other things, that you can make and receive landline calls and receive Caller ID information on your DUALphone if supported by your telephony provider. It is therefore important that you specify in which country you are using the DUALphone.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **System settings**, press the **OK** key, and then choose **Country selection**. Press the **OK** key.
3) Select the country that you are in, and then press the **OK** key.

NOTE: The handset language and country settings are independent of each other. You can change the handset language whenever you want, but we recommend that you only change the country settings if you bring your DUALphone to another country and want to make landline calls. Also note that you cannot change the country selection in the US version of the DUALphone.

HOW TO CHANGE THE TIME ZONE

Setting the time zone properly ensures that the time displayed in the Idle mode screen corresponds to the time zone that you are in.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **System settings**, press the **OK** key, and then choose **Time and date**. Press the **OK** key.
3) Choose **Time zone**, press the **OK** key, and then select the appropriate time zone. Press the **OK** key.

You should also verify that the time format and the daylight saving settings are correct. For more information see page 42 of this manual. Date and time are automatically synchronized with a time server on the Internet to ensure that the time and date displayed on the DUALphone is always correct. For information on how to disable automatic time setting, see page 42 of this manual.

HOW TO CHANGE EMERGENCY LINE SETTINGS

The default setting of emergency calls is VoIP (Internet call). However, we recommend that you check which way emergency calls are routed on your DUALphone. For more information on emergency calls, see page 23 of this manual.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **Telephony settings**, and then press the **OK** key.
3) Choose **Emergency line**, and then choose **VoIP** or **Landline**.
4) Press **OK** to reset your DUALphone for the changes to take affect.

IMPORTANT: You must check with you Internet Telephony Service Provider whether they have a service that makes it possible for your call to reach the appropriate emergency call center and for the emergency call center to locate from where you are calling. If not, you must use landline settings for emergency calls. This requires a functioning landline connection.

HOW TO SPECIFY THE PRIMARY LINE FOR OUTGOING CALLS

You must specify a primary line for each handset, which is used for outgoing calls when you press the Green phone key. You can choose landline or VoIPline.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **Telephony settings**, press the **OK** key, and then choose **Primary line**. Press the **OK** key.
3) Select **Landline** or **VoIP line**, and then press the **OK** key.

HOW TO SPECIFY CALL GROUPS

If you have more than one handset, you must specify from which account or accounts you want each handset to receive calls. To do this you use Call Groups.

1. In the **Main** menu, choose **Settings**, and then press the **OK** key.
2. Choose **Telephony settings**, press the **OK** key, and then enter your PIN Code (the default PIN code is 1234) and then choose **Call Groups**. Press the **OK** key. All nicknames for the VoIP accounts you subscribe to are listed, and so is the landline account.

Clear any accounts for which you do not want the current handset to receive calls, and then press the OK key.

UPDATING THE FIRMWARE

To ensure that your DUALphone has the latest features installed, we recommend that you update the firmware once you have configured and set up the phone.

HOW TO UPDATE THE FIRMWARE

When new software is available the display reads, **"New firmware available"**.

1) Press the **OK** key. The Firmware update menu appears.
2) To update to the latest version, choose the update listed on the **Simple** tab, press the **OK** key, and then press the **Yes** soft key when prompted if you want to update the system. If you press the **View** soft key before you start installation, you can find out about the software version number and the date and time it was released.
3) Select language and press **OK**.

The update time varies depending on the size of the update and the speed of your Internet connection. During the update process the following steps are listed in the display:

- Getting gateway
- Updating gateway
- Getting handset
- Updating handset

Once a step is complete, a green checkmark appears next to the step. When the entire update has been successfully completed, the display reads **"Upgraded to <version number>"**.

NOTE: While the update is in progress you cannot receive incoming calls or make calls, including emergency calls, on the DUALphone. Also note that we recommend that you do not reset the gateway during the installation process.

MAKING AND ANSWERING CALLS

With the DUALphone you can make both Internet and landline calls. All outgoing calls are by default Internet calls unless you specify otherwise. The following sections describe how to make and answer Internet and landline calls with the DUALphone.

INTERNET CALLS

When you make and receive Internet calls, the following icons are displayed:

- Calling
- Ongoing call

HOW TO MAKE AN INTERNET CALL

If your primary line is Internet, you do the following to make an Internet call.

- In **Idle** mode, type the number you want to dial, and then press the **Green phone** key.

If your primary line is Landline, you do the following to make an Internet call.

- In **Idle** mode, type the number you want to dial, press the **Options** soft key, and then choose **Internet**. Press the **OK** key.

HOW TO END A CALL

- Press the **Red phone** key, or place the handset in the charger.

HOW TO MAKE AN INTERNET CALL USING CONTACTS

1) In the **Main** menu, choose **Contacts**, and then press the **OK** key.
2) Choose the contact you want to call, and then press the **Green phone** key. The default number is dialed.

If you want to call a contact, and use another number than the default number, do the following:

1) In the **Main** menu, choose **Contacts**, and then press the **OK** key.
2) Choose the contact you want to call, and then press the **OK** key.
3) Choose a number from the list, and then press the **Green phone** key.

For more information about default numbers, see page 29 of this manual.

HOW TO MAKE AN INTERNET CALL USING THE CALL LOG

1) In **Idle** mode, press the **Call log** soft key, or choose **Call log** from the **Main** menu, and then press the **OK** key.
2) Choose the number you want to call, and then press the **Green phone** key.

For more information about the call log, see page 29 of this manual.

HOW TO MAKE AN INTERNET CALL USING REDIAL

1) Press the **Options** soft key, choose **Redial**, and then press the **OK** key. The most recently dialed number is displayed.
2) Press the **Green phone** key to call the number.

HOW TO MAKE AN INTERNET CALL USING SPEED DIALS

- In **Idle** mode, type the speed dial number assigned to the contact you want to call, and then press the **Green phone** key.

For information on how to set up speed dials, see page 29 of this manual.

HOW TO MAKE AN EMERGENCY CALL

- Enter the emergency number for your country, and then press the **Green phone** key.

When you make emergency calls, always press the Green phone key regardless of whether your emergency calls are routed through the Internet or via landline.

You cannot make emergency calls in the following situations:

- Firmware update is in progress
- Handset batteries are drained
- Power failure
- Handset is out of range of the gateway

For more information about emergency calls, see page 40 of this manual.

LANDLINE CALLS

When you make and receive landline calls, the following icons are displayed:

- Calling
- Ongoing call

HOW TO MAKE A LANDLINE CALL

If your primary line is Internet, you do the following to make a landline call.

- In **Idle** mode, type the number you want to dial, press the **Options** soft key, and then choose **Call on landline**. Press the **OK** key.

If your primary line is Landline, you do the following to make a landline call.

- In **Idle** mode, type the number you want to dial, and then press the **Green phone** key.

HOW TO MAKE A LANDLINE CALL USING CONTACTS

1) In the **Main** menu, choose **Contacts**, and then press the **OK** key.
2) Choose the contact you want to call, press the **Options** soft key, and then choose **Call on landline**. Press the **OK** key. The default number is dialed.

If you want to call a contact, and use another number than the default number, do the following.

1) In the **Main** menu, choose **Contacts**, and then press the **OK** key.
2) Choose the contact you want to call, press the **OK** key, and then choose a number from the list.
3) Press the **Options** soft key, and then choose **Call on landline**.

For more information about default numbers, see page 29 of this manual.

HOW TO MAKE A LANDLINE CALL USING THE CALL LOG

1) In **Idle** mode, press the **Call log** soft key, or choose **Call log** from the **Main** menu, and then press the **OK** key.
2) Choose the number you want to call, press the **Options** soft key, and then choose **Edit for call**. Press the **OK** key
3) Press the **Options** soft key, choose **Call on landline**, and then press the **OK** key.

For more information about the call log, see page 25 of this manual.

HOW TO MAKE A LANDLINE CALL USING REDIAL

1) Press the **Options** soft key, choose **Redial**, and then press the **OK** key. The most recently dialed number is displayed.
2) Press the **Options** soft key, choose **Call on landline**, and then press the **OK** key.

HOW TO MAKE A LANDLINE CALL USING SPEED DIALS

1) In **Idle** mode, type the speed dial number assigned to the contact you want to call.
2) Press the **Options** soft key, choose **Call on landline**, and then press the **OK** key.

For information on how to set up speed dials, see page 29 of this manual.

ANSWERING CALLS

HOW TO ANSWER A CALL

■ Pick up the handset, and then press the **Green phone** key.

You can also set the DUALphone to auto answer so that when you pick up the handset from the charger, you have automatically answered the call. For more information, see page 40 of this manual.

CALLER ID

When you receive an incoming Internet call, the Caller ID is always displayed. Usually Caller ID is also displayed on incoming landline calls, but some telephony providers may require that you subscribe to a Caller ID service. If the caller is stored as a contact, the contact name is displayed instead of the Caller ID. If the caller has blocked display of the number, no Caller ID is displayed.

CALL LOG

The call log keeps track of all your incoming and outgoing calls. It consists of 4 tabs that you can scroll through using the navigation keys on the handset. The tabs display the following information:

- All calls
- Missed calls
- Incoming calls
- Outgoing calls

The call log stores up to 30 numbers. For each call, the call log keeps track of the number, the date and time of the call, and the type of call: incoming, outgoing, or missed. If the caller's name and number is stored in Contacts, the caller's name is displayed. A number or name is only listed once, but all missed calls are counted so you can always see how many times the same caller has tried to reach you.

The phone can be configured for either shared or private call-log. In shared mode (default) all calls made on the system will be shown on all handsets. In private mode only calls made on the particular handset are shown.

HOW TO VIEW NUMBERS IN THE CALL LOG

- In **Idle** mode, press the **Call log** soft key, or choose **Call log** from the **Main** menu, and then press the **OK** key. Use the navigation keys to page through the tabs and scroll through the names and numbers.

When you select a number in the call log and press the **Options** soft key, you have the following options:

OPTION	WHAT IT DOES
Add as contact	Opens a text editor so that you can add the selected number as a contact. For more information see, page 28 of this manual.
Append as contact	Opens Contacts so that you can add the selected number to an already existing contact. For more information see, page 29 of this manual.
Edit for call	Opens the number editor so that you can edit the number before calling.
Delete	Deletes the selected number from the call log.
Delete list	Deletes all numbers in the call log list.

For information on how to make a call from the call log, see page 23 of this manual.

HOW TO CHANGE SHARED/PRIVATE CALL LOG MODE

1) Go to **www.dualphone.net.**
2) Choose **configuration**.
3) Click advanced.
4) Find the **call handling** tab and from here phonebook confguration.

DURING CALLS

HOW TO PLACE A CALL ON HOLD

■ During a call press the **Hold** key.

HOW TO RETRIEVE A CALL FROM HOLD

■ Press the **Options** soft key, and then choose **Retrieve call**.

HOW TO ADJUST THE HANDSET VOLUME

■ During a call press the **volume up** or **volume down** buttons on the side of the phone to adjust the volume up or down. The volume setting is automatically saved when you end the call.

HOW TO USE THE SPEAKERPHONE

The speakerphone allows you to make and answer calls without picking up the handset.

■ During a call, press the **speakerphone** button on the side of the phone. To deactivate the speakerphone, press the **speakerphone** button again.

NOTE: To enjoy the best sound quality, place the handset in a horizontal position rather than a vertical position.

HOW TO TRANSFER A CALL

Call transfer is for Internet calls only. To be able to use call transfer you need to contact your Internet Telephony Service Provider to find out if they support this service.

1) During a call press the **Hold** key, then press the **Options** soft key, and then choose **Transfer call**.
2) Press the **Options** soft key, choose **Contacts**, and then press the **OK** key.
3) Choose the contact to which you want to transfer the call, and then press the **OK** key.

Alternatively, you can type the number to which you want to transfer the call.
1) During a call press the **Hold** key, then press the **Options** soft key, and then choose **Transfer call**.
2) Enter the number to which you want to transfer the call, and then press the **OK** key

NOTE: Not all Telephone Providers supports call transfer.

HOW TO MUTE A CALL

During a call, you can switch off the microphone so that the person on the line cannot hear what you are saying.

■ Press the **Mute** soft key. To turn the microphone on again, press the **Mute off** soft key.

CALL WAITING

Call waiting notifies you about an incoming call during an ongoing call. You can put the current call on hold, and then answer the incoming call. If you do not answer a waiting call, the call is added to the call log as a missed call. Call waiting works for both Internet and landline calls, but it works in different ways as described in the following. When you receive an incoming call during an ongoing call, you can also choose to start a conference between all three parties. For more information, see page 36 of this manual.

HOW TO ANSWER AN INTERNET CALL DURING AN ONGOING LANDLINE CALL

1) Press the **Green phone** key. The current call is automatically put on hold.
2) Press the **Options** soft key, and then choose **Swap calls** to switch between the two calls.
3) Press the **Red phone** key to end the ongoing call.

NOTE: The DUALphone does not currently support call waiting if you have an ongoing Internet call and receive an incoming Internet call.

HOW TO ANSWER A LANDLINE CALL DURING AN ONGOING INTERNET CALL

1) Press the **Green phone** key. The current call is automatically put on hold.
2) Press the **Options** soft key, and then choose **Swap calls** to switch between the two calls.
3) Press the **Red phone** key to end the ongoing call.

HOW TO ANSWER A LANDLINE CALL DURING AN ONGOING LANDLINE CALL

1) Press the **Green phone** key or long-press the **R** key until an R is displayed. The current call is automatically put on hold.
2) Long-press the **R** key until an R is displayed to switch between the two calls.
3) Press the **Red phone** key to end both calls.

NOTE: The procedure for answering an incoming landline call during an ongoing landline call may vary depending on your telephone company. Contact your telephony provider for more information.

HOW TO ANSWER AN INTERNAL CALL DURING AN ONGOING INTERNET OR LANDLINE CALL

If you have more than one handset registered with the gateway, you can receive an incoming internal call during an ongoing call.

1) Press the **Green phone** key. The current call is automatically put on hold.
2) Press the **Options** soft key, and then choose **Swap calls** to switch between the two calls.
3) Press the **Red phone** key to end the ongoing call.

HANDLING CONTACTS

Contacts are used for storing names and numbers so that you can easily find the person or company you want to call. The Contacts menu consists of one or more tabs that you can scroll through using the navigation keys on the handset. The number of tabs depends on how many groups you have created. The names and numbers are listed in alphabetical order on the tabs. You can store up to 200 contacts, and you can add 4 numbers to each contact. Contact entries are shared between all handsets registered with the gateway.

COMMON/PRIVATE CONTACTS

The phone can be configured for either shared or private contacts. In shared mode (default) all contacts of the system will be shown on all handsets.In private mode only contacts created on the particular handset are shown.

HOW TO ADD A CONTACT

1) In the **Main** menu, choose **Contacts**, and then press the **OK** key.
2) Press the **Options** soft key, choose **Add contact**, and then press the **OK** key.
3) Press the **Edit** soft key to enter the name editor, type the name of the contact, and then press the **OK** key.
4) Scroll down and choose a number field, press the **OK** key, and then type a number,
5) Press the **Options** soft key, choose **Number type**, and then press the **OK** key.
6) Choose the preferred number type, press the **OK** key to confirm, and then press the **Red phone** key to return to the number editor. Do the same for all the numbers you want to add to the contact.
7) Press the **Save** soft key, and then the **Yes** soft key, when prompted to save. You need to type both a name and a number for a contact before you can save the information

HOW TO DELETE A CONTACT

1) In the **Main** menu, choose **Contacts**, press the **OK** key, and then choose the contact you want to delete.
2) Press the **Options** soft key, choose **Delete contact**, and then press the **Yes** soft key when prompted to delete the contact.
3) To delete all contacts, choose **Delete all contacts**, and then press the **Yes** soft key, when prompted to delete the list.

When you delete a contact, it is automatically deleted from any related groups.

HOW TO FIND A CONTACT

- In the **Main** menu, choose **Contacts** and then press the **OK** key. Use the navigation keys to navigate through the tabs and to scroll up and down.

You can also search for a contact by entering the first letter of the name.

- In the **Main** menu, choose **Contacts** and then press the **OK** key. Enter the first letter of the name of the contact you are looking for. The first name starting with that letter is highlighted.

HOW TO EDIT A CONTACT

1) In the **Main** menu, choose **Contacts**, press the **OK** key, and then choose the contact you want to edit.
2) Press the **Options** soft key, choose **Edit contact**, and then choose the field that you want to edit.
3) Press the **Edit** soft key, and make your edits.
4) Press the **OK** key, press the **Save** soft key, and then press the **Yes** soft key when prompted to save.

HOW TO CHANGE THE RINGER TONE FOR A CONTACT

1) In the **Main** menu, choose **Contacts**, and then press the **OK** key.
2) Choose the contact for which you want to specify a ringer melody, and then press the **Options** soft key.
3) Choose **Edit contact**, scroll down and choose **Ringer melody**, and then press the **OK** key.

4) Select a melody, press the **OK** key, and then press the **Red phone** key to return to the contact.
5) Press the **Save** soft key, and then press the **Yes** soft key, when prompted to save.

You can listen to the various melodies, before you decide which one to use.

- Press the **Play** soft key, and use the arrow keys to scroll through all the tones. To stop, press the **Stop** soft key.

HOW TO CHANGE THE DEFAULT NUMBER FOR A CONTACT

The first number you save for a contact is automatically the default number. If you use speed dial, for example, it is always the default number that is dialed. You can always change the default number for a contact.

1) In the **Main** menu, choose **Contacts**, press the **OK** key, and then choose a contact.
2) Press the **Options** soft key, choose **Edit contact**, and then press the **OK** key.
3) Choose the number you want as default number, and then press the **Edit** soft key.
4) Press the **Options** soft key, choose **Default**, and then press the **OK** key.
5) Press the **Yes** soft key when prompted to save the number as default number.
6) Press the **Red phone** key to return to the contact, press the **Save** soft key, and then press the **Yes** soft key when prompted to save changes.

HOW TO SPECIFY A SPEED DIAL NUMBER FOR A CONTACT

1) In the **Main** menu, choose **Contacts**, and then press the **OK** key.
2) Choose the contact to which you want to add a speed dial number, and then press the **Options** soft key.
3) Scroll down, choose **Speed dial**, and then press the **OK** key.
4) Select an empty speed dial number, and then press the **Add** soft key.
5) To replace an existing entry select the speed dial entry you want to replace, and then press the **Replace** soft key.
6) Press the **Red phone** key to return to contacts.

HOW TO ADD A CALL LOG NUMBER TO CONTACTS

1) In **Idle** mode, press the **Call log** soft key, and then choose the number you want to add to contacts.
2) Press the **Options** soft key, choose **Add as contact**, and then press the **OK** key. The number is automatically added to the new contact.
3) Press the **Edit** soft key to enter the name editor, write the name of the contact, and then press the **OK** key. If Caller ID is used, the name is entered automatically.
4) Press the **Save** soft key, and then the **Yes** soft key, when prompted to save.

HOW TO ADD A CALL LOG NUMBER TO AN EXISTING CONTACT

1) In **Idle** mode, press the **Call log** soft key, and then choose the number you want to append to an existing contact.
2) Press the **Options** soft key, choose **Append to contact**, and then press the **OK** key.
3) Choose the contact to which you want to add the number, and then press the **Append** soft key. The contact opens, and the number is added automatically.
4) Press the **Save** soft key, and then the **Yes** soft key, when prompted to save.

HOW TO CREATE A GROUP

You can organize your contacts into appropriate groups to gain an easier overview of all your contacts, and you can specify a different ringer melody for each group. When you create a group, a new tab named after the group is automatically added to the Contacts menu. The tab contains all the members of the group.

1) In the **Main** menu, choose **Contacts**, and then press the **OK** key.
2) Press the **Options** soft key, scroll down and choose **Groups**, and then press the **OK** key.

3) Press the **Options** soft key, choose **Add group**, and then press the **OK** key
4) Write a name for the group, press the **OK** key, and then press the **Yes** soft key when prompted to save.

HOW TO EDIT A GROUP

1) In the **Main** menu, choose **Contacts**, and then press the **OK** key.
2) Press the **Options** soft key, choose **Groups**, and then press the **OK** key.
3) Choose the group you want to edit, press the **Options** soft key, and then choose **Edit group**. Press the **OK** key.
4) Make your edits, press the **OK** key, and then press the **Yes** soft key when prompted to save.

HOW TO ADD A CONTACT TO A GROUP

1) In the **Main** menu, choose **Contacts**, and then press the **OK** key.
2) Choose the contact you want to add to a group, press the **Options** soft key, scroll down, and then choose **Edit contact**. Press the **OK** key.
3) Scroll down and choose **Groups**, and then press the **OK** key.
4) Choose the group or groups to which you want to add the contact.
5) Press the **Red phone** key to return to the contact, press the **Save** soft key, and then press the **Yes** soft key when prompted to save changes.

HOW TO DELETE A GROUP

When you delete a group, the individual entries remain in the common Contacts list.

1) In the **Main** menu, choose **Contacts**, and then press the **OK** key.
2) Press the **Options** soft key, scroll down and choose **Groups**, and then press the **OK** key.
3) Choose the group you want to delete, press the **Options** soft key, and then choose **Delete group**. Press the **OK** key.
4) Press the **Yes** soft key when prompted to delete the group.

HOW TO REMOVE A CONTACT FROM A GROUP

1) In the **Main** menu, choose **Contacts**, press the **OK** key, and then choose the contact that you want to remove from a group.
2) Press the **Options** soft key, choose **Edit contact**, and then scroll down and select **Groups**.
3) Choose the group from which you want to remove the contact, and then press the **OK** key.
4) Press the **Red phone** key, press the **Save** soft key, and then press the **Yes** soft key when prompted to save.

HOW TO CHANGE A RINGER TONE FOR A GROUP

You can specify a different ringer tone for each group you create.

1) In the **Main** menu, choose **Contacts**, and then press the **OK** key.
2) Press the **Options** soft key, choose **Groups**, and then press the **OK** key.
3) Choose the preferred group, press the **Options** soft key, and then choose **Ringer tone**. Press the **OK** key.
4) Select a tone, and then press the **Red phone** key to return to the group.

You can listen to the various melodies, before you decide which one to use.

■ Press the **Play** soft key, and use the arrow keys to scroll through all the tones. To stop, press the **Stop** soft key.

HOW TO CHANGE SHARED/PRIVATE CONTACT LIST MODE

1) Go to **www.dualphone.net**.
2) Choose **configuration**.
3) Click advanced.
4) Find the '**call handling**' tab and from here phonebook confguration.

RECEIVING MESSAGES

USING VOICE MAIL

To use voice mail you need to subscribe to a voice mail service. Contact your Internet Telephony Service Provider for more information. When you have set up a voice mail account, you can access your voice mail through the DUALphone. For information on how to set up your voice mail URL, see page 44 of this manual.

HOW TO VIEW MESSAGE STATUS

- In the **Main** menu, choose **Messages**, press the **OK** key, choose **message**, **Voice Mail**, select your account and then press **OK**.
  You can now see how many new messages you have, and the total number of messages in your voice mailbox.

HOW TO LISTEN TO MESSAGES

1) In the main menu, choose **Messages**, **Voice Mail**, select **Landline** or **VoIP**, and then press the **Play** key.
2) Choose **Message status**, and then choose **New** or **Total**.
3) Press the **Play** soft key to listen to messages.

NOTE: Your Internet Telephony Service Provider can send notifications such as e-mail notifications and billing information to your phone. The notification may contain both text and graphics. When you receive a message, the message indicator is lit up, and if enabled you'll hear a message tone.

USING ON-SCREEN INFORMATION SERVICES

On-screen information services enable you to view information such as the latest news and the local weather report on your DUALphone.

On **www.dualphone.net**, you can find a number of on-screen information services that you can subscribe to on your DUALphone. However, if you want information that fits your specific needs, you need to subscribe to an on-screen information services provider to have the information sent to your DUALphone. For information on how to configure on-screen information services, see page 19 of this manual.

HOW TO VIEW ON-SCREEN INFORMATION SERVICES

1) In the **Main** menu, choose **Info services**, and then press the **OK** key.
2) Choose the service you want to view, and then press the **OK** key.

To navigate through the content of an on-screen information service, you typically have the following options, but they may vary depending on the on-screen information services provider:

OPTION	WHAT IT DOES
Menu	Takes you back to the list of available on-screen information services.
Skip	Takes you to the first page in a series of related pages.
Next	Takes you to the next page in a series of related pages.
Previous	Takes you to the previous page in a series of related pages.
Options	Provides you with a number of choices that are dependent on the on-screen information service you are viewing.
Red-hook key	A short keypress always takes you one step back and a long press takes you to the Idle screen.

HOW TO VIEW THE MOST RECENTLY UPDATED ON-SCREEN INFORMATION SERVICES

1) In the **Main** menu, choose **Info Services**.

HOW TO USE INPUT FIELDS

Some information services may provide input fields. Input fields are similar to text boxes on the Internet, and are used, for example, for Internet search, chat or the yellow pages. One screen may contain several input fields, and you use the arrow keys to navigate the fields.

1) In the **Main** menu, choose **Info services**, and then press the **OK** key.
2) If there is more than one field, use the arrow keys to navigate to the preferred field.
3) Press **OK** to activate the field. A text editor opens.
4) Enter in the text, and then press the **OK** key.
5) Press the relevant soft key to send the information.

DUALPHONE.NET

■ In the Main menu, choose **DUALphone.net**, and then press the **OK** key.

The information available in the DUALphone.net menu depends on your provider. It often activates a link to an on-screen information service.

USING INTERCOM

You can register up to 8 handsets with the same gateway, and you can have up to 8 different VoIP accounts provided they belong to the same Internet Telephony Service Provider. However, you can only have 4 active calls at a time: 3 Internet calls and 1 landline call. If you use Call Groups, you should only include up to 6 handsets in a Call Group, because only 6 handsets at a time can receive incoming calls.

If you have more than one handset, you can make intercom calls, and you can transfer calls to other handsets. You can answer incoming calls on any of the registered handsets, and if you reject a call on one handset, you can still answer the call on the other registered handsets. Contact entries are automatically shared between all handsets.

HOW TO REGISTER AN ADDITIONAL HANDSET WITH THE GATEWAY

1) Press the **Reset** button on the rear of the gateway to enable registration mode.
2) If the handset is not already turned off, press the **Red phone** key to turn it off.
3) Place the handset in the charger. The left status indicator in the upper left corner of the display will turn yellow, indicating that you have successfully registered the handset.

You can also register a handset by means of the handset.
1) Press the **Reset** button on the rear of the gateway to enable registration mode.
2) In the **Main** menu, choose **Settings**, and then press the **OK** key.
3) Choose **System settings**, press the **OK** key, and then choose **Handset settings**. Press the **OK** key.
4) Choose **Register handset**, press the **OK** key, and then press the **Yes** soft key when prompted to register handset.

If the handset you want to register is already registered with another gateway, you need to deregister the handset from that gateway before you can register it with a new gateway.

HOW TO DEREGISTER A HANDSET WITH THE GATEWAY

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **System settings**, press the **OK** key, and then choose **Handset settings**. Press the **OK** key.
3) Choose **Deregister handset**, press the **OK** key, and then press the **Yes** soft key when prompted to deregister the handset.

HOW TO VIEW ALL HANDSETS REGISTERED WITH THE GATEWAY

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **System settings**, press the **OK** key, and then choose **Handset settings**. Press the **OK** key.
3) Choose **Handsets**, and a list of all handsets is displayed.

HOW TO GIVE YOUR HANDSET A NAME

Naming your handsets can be useful when you register extra handsets with the gateway. This way you can easily identify the various handsets when you make internal calls. When the phone is in Idle mode, the name of the handset is displayed. If you do not name your handsets, they are numbered consecutively starting with Handset 1, which is the handset first registered with the gateway.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **System settings**, press the **OK** key, and then choose **Handset settings**. Press the **OK** key.
3) Choose **Handset name**, write a name for the handset, and then press the **OK** key.
4) Press the **Yes** soft key when prompted to save.

HOW TO CALL ANOTHER HANDSET

You can make calls between all handsets registered to the same gateway.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **Intercom**, press the **OK** key, and then choose the handset you want to call. Press the **OK** key.

HOW TO CALL ALL HANDSETS

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **Intercom**, press the **OK** key, and then choose **All handsets**. Press the **OK** key. The first handset to answer the call, receives the call.

HOW TO TRANSFER A CALL TO ANOTHER HANDSET

1) During a call, press the **Hold** key.
2) Press the **Options** soft key, choose **Intercom**, and then press the **OK** key.
3) Choose the handset to which you want to transfer the call, and then press the **OK** key.
4) When the other handset has answered the call, press the **Options** soft key and **transfer call**.

USING LEAST COST ROUTING (LCR)

LCR allows automatic selection of the preferred interface (landline/VoIP) based on recognition of the dialed phone number.

HOW TO CONFIGURE LEAST COST ROUTING (LCR)

1) Go to **dualphone.net** and and login under **configuration**.
2) Choose **Advanced + LCR** and follow instruction there.

NOTE: Emergency line has first priority

BRIDGING

Bridging converts the phone into a bridge between landline and VoIP, enabling wordwide low-cost calls at local rates.

As an example, you could setup your DUALphone to automatically accept landline calls from your cellphone and redirect these calls to the VoIP interface. Then you can dial the destination VoIP number and the DUALphone will connect your cellphone call to worldwide destinations at local rates.

An incoming call on the landline interface can be bridged onto the VoIP interface and vice-versa.

Optional caller authorization secured by caller-id validation or pin-code protection prevents abuse.

Optional destination number can be preconfigured, e.g. for redirecting all landline calls to you when you are travelling.

HOW TO CONFIGURE BRIDGING

1) Go to **dualphone.net** and login under **configuration**.
2) Choose **Advanced + Bridging** and follow instruction there.

MAKING CONFERENCE CALLS

You can make 3-way conference calls that allow you and two other parties to participate in the same conversation.

HOW TO MAKE A CONFERENCE CALL WITH ONE EXTERNAL PARTY AND TWO INTERNAL PARTIES.

You can make a 3-way conference call that includes two handsets registered with the same gateway and either an Internet call or a landline call.

1) Type the phone number you want to call, and then press the **Green phone** or press the **Options** soft key and choose **Call on landline** if you want to make a landline call.
2) When the called party has answered, press the **Hold** key.
3) Press the **Options** soft key, choose **Intercom**, and then press the **OK** key
4) Choose the preferred handset, and then press the **OK** key.
5) When the other handset has answered the call, press the **Options** soft key, choose **Conference**, and then press the **OK** key. All three parties are now in conference.
6) Press the **Red phone** key to end the conference and to end both calls.

HOW TO MAKE A CONFERENCE CALL WITH TWO EXTERNAL PARTIES

You can make a 3-way conference call where one external call is an Internet call and the other external call a landline call.

1) Type the phone number you want to call, press the **Options** soft key, and then choose **Call on landline**. Press the **OK** key.
2) When the called party has answered the call, and then press the **Hold** soft key.
3) Press the **Options** soft key, choose **Contacts**, and then press the **OK** key
4) Choose the preferred contact, and then press the **OK** key.
5) When the other handset has answered the call, press the **Options** soft key, choose **Conference**, and then press the **OK** key. All three parties are now in conference.
6) Press the **Red phone** key to end the conference and to end both calls.

You can also choose to make the first number you dial the Internet call, and the second number you dial the landline call.

1) Type the phone number you want to call, and then press the **Green phone** key.
2) When the called party has answered the call, press the **Hold** key.
3) Press the **Options** soft key, choose **Contacts**, and then press the **OK** key
4) Press the **Select** soft key, Press the **Options** soft key, and then choose **Call on landline**. Press the **OK** key.
5) When the other handset has answered the call, press the **Options** soft key, choose Conference, and then press the **OK** key. All three parties are now in conference.

Press the **Red phone** key to end the conference and to end both calls.

NOTE: If you want to make a 3-way conference where the two external calls are landline calls, you need to contact your telephony provider to find out if they support this feature.

HOW TO JOIN A CALL

You can join an ongoing call from another handset.

1) In **Idle** mode, press the **Options** soft key, and then choose **Active calls**. Press the **OK** key. The phone number of the party in call is displayed. If the party in call is in **Contacts**, the name is also displayed.

2) Choose the call you want to join and press the **Join** soft key. An advisory tone is emitted informing the caller on the other handset that you are joining the call.

3) Press the **Red phone** key to leave the call. An advisory tone is emitted informing the caller on the other handset that you are leaving the call.

SPECIFYING SETTINGS

AUDIO SETTINGS

HOW TO CHANGE THE RINGER MELODY

You can specify a ringer melody for each type of call that you receive, so that you can easily distinguish between Internet, landline, and internal calls.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **Audio settings**, press the **OK** key, and then choose **Ringer Melody**. Press the **OK** key.
3) Choose the type of call for which you want to specify a ringer melody, and then press the **OK** key.
4) Select a ringer melody from the list, press the **OK** key, and then press the **Red phone** key.

You can listen to the various melodies, before you decide which one to use.

- Press the **Play** soft key, and use the arrow keys to scroll through all the melodies. To stop, press the **Stop** soft key.

HOW TO CHANGE THE RINGER VOLUME

You can increase or decrease the ringer volume of a handset.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **Audio settings**, press the **OK** key, and then choose **Ringer volume**. Press the **OK** key.
3) Use the navigation keys to adjust the volume, and then press the **OK** key.

HOW TO CHANGE THE MESSAGE TONE

You can specify a tone that lets you know that you have a message waiting for you.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **Audio settings**, press the **OK** key, and then choose **Message tone**. Press the **OK** key.
3) Choose a tone from the list, and then press the **OK** key. Select **Silent** if you do not want a message tone.

You can listen to the various tones before you decide which one to use.

- Press the **Play** soft key, and use the arrow keys to scroll through all the tones. To stop, press the **Stop** soft key.

HOW TO CHANGE THE KEYPAD SOUND

You can specify a sound that you will hear when you press a key on the handset.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **Audio settings**, and then choose **Keypad sound**.
3) Choose a sound from the list and then press the **OK** key. Choose **disabled** if you do not want a keypad sound.

HOW TO USE ADVISORY TONES

Advisory tones let you know that something is about to happen or is happening. The DUALphone has the following advisory tones:

ADVISORY TONE	WHAT IT MEANS
Battery alert	The batteries must be charged.
Range tone	The handset is out of reach of the gateway.
Confirmation	You have saved or deleted an entry, or made a selection.

By default all advisory tones are activated, however, you can activate or deactivate them individually.

1) In the **Main** menu, choose **Settings** and then press the **OK** key.
2) Choose **Audio Settings**, and then press the **OK** key.
3) Choose **Advisory tones**, press the **OK** key, and then select the type of tone you want to disable or enable by pressing the **OK** key. Press the **Red phone** key.

HOW TO ACTIVATE SILENT MODE

You can activate silent mode to disable all ringer melodies and confirmation sounds.

1) In the Main menu, choose Settings, and then press the OK key.
2) Choose Silence, press the OK key, and then choose Silent on. Press the OK key.

Alternatively, you can activate silent mode from the idle menu by pressing the # key and then the Silence off soft key.

TELEPHONY SETTINGS

HOW TO ACTIVATE CALL FORWARDING

You use call forwarding to specify a number to which your calls are forwarded, when you are not able to answer your calls. To be able to use call forwarding, you will have to configure your call forwarding settings. Contact you Internet Telephony Service Provider for more information.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **Telephone settings**, choose **Call forward**, **Landline** or **account 1-8** and then press the **OK** key. The following call forward options are displayed (if your Internet Telephony Service Provider does not support call forwarding, the options are disabled):

OPTION	WHAT IT DOES
On busy	Forwards the call to a dedicated number when you are talking on the phone.
On no answer	Forwards the call to a dedicated number when you do not answer the phone.
Unconditionally	Forwards all incoming calls to a dedicated number.

3) Choose the preferred option, and then choose **Activate**.
4) Type the number to which you want to forward your calls, or press the **Options** soft key, choose **Contacts**, and then choose the preferred contact. Press the **OK** key. The call forwarding option is now enabled.

HOW TO DEACTIVATE CALL FORWARDING

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **Telephony settings**, choose **Call forward**, **Landline** or **account 1-8**, and then press the **OK** key.
3) Choose the call forward option you want to deactivate, and then press the **OK** key.
4) Choose **Deactivate**, and then press the **OK** key.

HOW TO SPECIFY A LANDLINE VOICEMAIL NUMBER

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **Telephony settings**, choose **Voicemail**, and then press the **OK** key.
3) Choose **Landline**, enter the preferred number, and then press the **OK** key.
4) Press the **Yes** soft key to save.
5) Press **OK** to reset.

HOW TO SPECIFY A VOIP VOICEMAIL NUMBER

You can specify a VoIP voicemail number for each VoIP account selected in Call Groups.
For more information on Call Groups, see page **20**

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **Telephony settings**, choose **Voicemail**, and then press the **OK** key.
3) Choose the preferred account, and then choose **Voicemail**.
4) Enter the voicemail number, press the **OK** key, and then the **Yes** soft key to save.
5) Choose Subscription, and then enter the SIP address of the subscription service. (Contact your Internet Telephony Service Provider for more information on this feature.)
6) Press the **OK** key, and then the **Yes** soft key to save.
7) Press **OK** to reset.

HOW TO SET AUTO ANSWER

Auto answer allows you to answer incoming calls automatically when you pick up the handset from the charger.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **Telephony settings**, press the **OK** key, and then choose **Answer mode**. Press the **OK** key.
3) Choose **Auto answer**, press the **OK** key, and then select **Enabled**. Press the **Red phone** key.

HOW TO SET ANY KEY ANSWER

Any key answer allows you to answer incoming calls by pressing any key on the keypad.

1) In the **Main** menu, choose **Settings** and then press the **OK** key.
2) Choose **Telephony settings**, press the **OK** key, and then choose **Answer mode**. Press the **OK** key.
3) Choose **Any key answer**, press the **OK** key, and then select **Enabled**. Press the **Red phone** key.

HOW TO SET LANDLINE DIAL MODE

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **Telephony settings**, press the **OK** key, and then choose **Landline dial mode**. Press the **OK** key.
3) Select **Pulse** or **Tone**, press the **OK** key, and then press the **Yes** soft key when prompted to save.

HOW TO CONFIGURE LEAST COST ROUTING (LCR)

1) Go to **www.dualphone.net** and login under **configuration**.
2) Choose **Advanced + LCR** and follow instruction there.

HOW TO SPECIFY AN EMERGENCY LINE

The default setting for emergency dialing is VoIP. However, you can always change which way you want your emergency calls routed.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **Telephony settings**, press the **OK** key, and then choose **Emergency line**. Press the **OK** key.
3) Select **Landline** or **VoIP line account 1-8**.
4) Press **OK** to reset.

IMPORTANT: If your emergency line is set to VoIP, we strongly recommend that you check with your Internet Telephony Service Provider whether they have a service that makes it possible for your call to reach the appropriate emergency call center and for the emergency call center to locate where you are calling from. If you set emergency line to landline, check that you have a working landline connection.

HOW TO SPECIFY THE PRIMARY LINE FOR OUTGOING CALLS

For each handset, the primary line setting determines which line is used for outgoing calls when you press the Green phone key. You can choose landline or VoIPline.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **Telephony settings**, press the **OK** key, and then choose **Primary line**. Press the **OK** key.
3) Select **Landline** or **VoIP line**, and then press the **OK** key.

HOW TO SPECIFY A VOIP LINE FOR OUTGOING CALLS

For each handset the VoIP line settings determines which VoIP account is used for outgoing VoIP calls.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **Telephony settings**, press the **OK** key, and then choose **VoIP line**. Press the **OK** key, and then enter the PIN code. The PIN code is 1234.
3) Select the VoIP account you want to use for outgoing VoIP calls. All nicknames for the VoIP accounts you subscribe to are listed. If you only have one account, only one nickname is listed.

INFORMATION PUSH SETTINGS

HOW TO SET AUTO SHOW ON-SCREEN INFORMATION SERVICES

With this feature you specify when you want the DUALphone to display on-screen information services.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **Information push**, and then press the **OK** key.
3) Select the relevant option, and then press the **OK** key. You can choose one of the following options:

OPTION	WHAT IT DOES
Never	Displays on-screen information services only when you are using the Info services menu.
When cradled	Displays on-screen information services when the handset is in the charging cradle.
Always	Displays on-screen information services at all times when you are not making phone calls. (This option decreases the standby time.)

SYSTEM SETTINGS

HOW TO DISABLE AUTOMATIC TIME SETTING

By default, date and time are automatically synchronized with a time server on the Internet to ensure that the time and date displayed on the DUALphone is always correct. However, you can always disable automatic time setting.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **System settings**, press the **OK** key, and then choose **Time and date.** Press the **OK** key.
3) Choose **Auto set time**, press the **OK** key, and then select **Auto set time off**. Press the **OK** key.
4) Press the **Reset** button on the rear of the gateway for the changes to take effect.

HOW TO CHANGE THE TIME FORMAT

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **System settings**, press the **OK** key, and then choose **Time and date**. Press the **OK** key.
3) Choose **Time format**, press the **OK** key, and then select **AM/PM** or **24 hour**. Press the **OK** key.

HOW TO SET TIME MANUALLY

If you disable automatic time setting, you can set the time manually.

1) In the **Main** menu, choose **Settings** and then press the **OK** key.
2) Choose **System settings**, press the **OK** key, and then choose **Time and date**. Press the **OK** key.
3) Choose **Set time**, press the **OK** key, and then use the key pad to type the correct time. Press the **OK** key.

HOW TO SET THE DATE MANUALLY

If you disable automatic time and date setting, you can set the date manually.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **System settings**, press the **OK** key, and then choose **Time and date**. Press the **OK** key.
3) Choose **Set date**, press the **OK** key, and then use the key pad to type the correct date. Press the **OK** key.

HOW TO CHANGE THE DATE FORMAT

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **System settings**, press the **OK** key, and then choose **Time and date**. Press the **OK** key.
3) Choose **Date format**, press the **OK** key, and then select **US format** or **European format**. Press the **OK** key.

HOW TO CHANGE THE TIME ZONE

Setting the time zone properly ensures that the time displayed on the Idle mode screen corresponds to the time zone that you are in. For automatic time setting to function properly, it is important that you have specified the correct time zone.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **System settings**, press the **OK** key, and then choose **Time and date**. Press the **OK** key.
3) Choose **Time zone**, press the **OK** key, and then select the appropriate time zone. Press the **OK** key.

Date and time are automatically synchronized with a time server on the Internet to ensure that the time and date displayed on the DUALphone is always correct.

HOW TO ENABLE OR DISABLE DAYLIGHT SAVING TIME

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **System settings**, press the **OK** key, and then choose **Time and date**. Press the **OK** key.
3) Choose **Daylight saving**, press the **OK** key, and then select **1 hour DST** or **No DST**. Press the **OK** key.

HOW TO SET HANDSET LANGUAGE

You can choose which language to be used in the handset display.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **System settings**, press the **OK** key, and then choose **Language**. Press the **OK** key.
3) Select the preferred language, and then press the **OK** key.

Downloadable language packets are found by selecting **'all'**.

NOTE: We recommend that you do not reset the gateway during the update process.

If you have selected a language you do not understand, and you cannot find the language menu again, do the following:

■ In **Idle** mode, press the **OK** key to enter the main menu, and then type 888. The language list is displayed.

HOW TO CHANGE THE DISPLAY CONTRAST

1) In the **Main** menu, choose **Settings** and then press the **OK** key.
2) Choose **System settings**, press the **OK** key, and then choose **Handset settings**. Press the **OK** key.
3) Choose **Display Contrast**, press the **OK** key, and then use the navigation keys to select the preferred contrast.

You can always restore the default contrast settings.
1) In the **Main** menu, choose **Settings** and then press the **OK** key.
2) Choose **System settings**, press the **OK** key, and then choose **Handset settings**. Press the **OK** key.
3) Choose **Display Contrast**, press the **OK** key, and then press the **Restore** soft key.
-or-
A) In the **Main** menu, press **555**, and then press the **Yes** soft key, when prompted to restore the contrast.

HOW TO UPDATE THE FIRMWARE

When new firmware is available the displays reads, **"New firmware available"**.

1) Press the **OK** key. The **Firmware update** menu appears.
2) To update to the latest version, choose the update listed on the **Simple** tab, press the **OK** key, and then press the **Yes** soft key when prompted if you want to update the system. If you press the **View** soft key before you start installation, you can find out about the software version number and the date and time it was released.
3) Select language and press **OK**.

The update time varies depending on the size of the update and the speed of your Internet connection. During the update process the following steps are listed in the display:

- Getting gateway
- Updating gateway
- Getting handset
- Updating handset

When a step has been completed successfully, a green checkmark appears after the message. While the update is in progress you cannot make calls on the DUALphone. If you have more than one handset registered with the gateway, all handsets will be updated when you press the OK key, but not necessarily at the same time.

NOTE: We recommend that you do not reset the gateway during the update process.

HOW TO REVERT TO AN OLDER FIRMWARE VERSION

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **System settings**, press the **OK** key, and then choose **Firmware update**.
3) Use the arrow keys to navigate to the **Advanced** tab, choose the preferred update, press the **OK** key, and then press the **Yes** soft key when prompted to update the system.
4) If promted, select language and press **OK**.

HOW TO FIND OUT WHICH FIRMWARE VERSION IS CURRENTLY INSTALLED

If you are uncertain whether you have updated to the latest firmware version, you can check which version number is currently installed, and compare with the version number listed on the Simple tab.

- In **Idle** mode, press the **volume up** key, on the side of the DUALphone and scroll down.

HOW TO RESTORE CONFIGURATION SETTINGS

When you restore the DUALphone's configuration settings, the settings revert to the online settings. That is, if you have made changes to the VoIP settings on the handset, they are overwritten by the online settings.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **System settings**, press the **OK** key, and then choose **Restore settings**. Press the **OK** key.
3) Press the **Yes** soft key when prompted to save, and then press the **Reset** button on the rear of the gateway for the changes to take effect.

NOTE: If you have not configured your DUALphone online, you cannot restore the settings.

HOW TO SPECIFY A COUNTRY

Specifying the correct country ensures that your landline connection functions properly and that you can, for example, receive Caller ID information on your DUALphone. It is therefore important that you specify in which country you are using the DUALphone.

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **System settings**, press the **OK** key, and then choose **Country selection**. Press the **OK** key.
3) Select the country that you are in, and then press the **OK** key.
4) Press **OK** to reset.

NOTE: The handset language and country settings are independent of each other. You can change the handset language whenever you want, but we recommend that you only change the country settings if you bring your DUALphone to another country and want to make landline calls. Also note that you cannot change the country selection in the US version of the DUALphone.

VOIP SETTINGS

You use VoIP settings to configure your DUALphone. Typically, you configure your VoIP settings on the Internet; however, in some situations you may want to do it using the handset.

HOW TO ACCESS THE VOIP SETTINGS

1) In the **Main** menu, choose **Settings**, and then press the **OK** key.
2) Choose **VoIP settings**, press the **OK** key, and then enter your PIN code (the default PIN code is 1234). Press the **OK** key. You can now change your Server and Account settings.

The VoIP settings menu contains the following settings:

SERVER SETTING	WHAT IT MEANS
Domain	Domain name
SIP proxy	Usually the same as Domain

ACCOUNTS SETTING	WHAT IT MEANS
Display name	Caller ID that the called party sees (optional)
Nickname	Name of the account
SIP User name	Usually the phone number you received from your service provider
Authentication Name	Usually the same as SIP User name
SIP Password	SIP Password – the password you received from your service provider

For more information on configuring your VoIP settings either using the handset or online, see page 17 of this manual.

NOTE: If you change any of the settings, you will be asked to reset your DUALphone for the changes to take affect.

INTERNET SETTINGS

OPTION	WHAT IT MEANS
NAT configuration	Allows configuration of features for resolving of the NAT - Network Address Translation (firewall settings on your router). These features enable interoperability with most types of routers; see section “NAT settings” for further description.
IP Mode	Specifies whether to use dynamic or static IP.
IP address	Displays the Internet address of your DUALphone. Only enabled when you use static IP.
Subnet mask	Displays the subnet mask used by your DUALphone. Only enabled when you use static IP.
DNS server	Displays the name of the DNS server used by your DUALphone. Only enabled when you use static IP.
Default gateway	Displays the name gateway used by your DUALphone. Only enabled when you use static IP.

Most Internet connection-points make use of a router. The functionality of the router is to let multiple devices share a common global IP-address.

If the phone is located behind a router, some features must be used in order to let the ITSP know how to reach the phone (to know the private IP address and port number of the phone). This phone includes the following three features: STUN, RPORT and SIP-ALG circumvention. Which combination of these features to select depends on the router used and the network strategy chosen by the ITSP.

This phone provides a set of predefined configuration templates, namely:

		STUN	Rport	SIP-ALG PREVENTION
1	Used when the SIP phone is located behind a router.	●	●	
2	Used when the SIP phone is located behind a symmetric router		●	
3	Used when the SIP phone has a public IP address or it is located behind a SIP aware router and you wish to utilize the routers SIP aware capabilities.			
4	Used when the SIP phone is located behind a SIP aware router and you wish to circumvent the routers SIP aware capabilities.	●	●	●
Manual	Used in case profile 1-4 are not sufficient			

HOW TO CHANGE NAT CONFIGURATION

NAT configuration can be changed to one of the predefined configurations (recommended)

1) In settings menu select **Internet setting**.
2) Select **NAT configuration**.
3) Select profile **1, 2, 3** or **4**.
4) Press **OK** to reset.

Alternatively, the NAT configuration can be carried out manually by selecting Manual in the NAT configuration menu.

NOTE: If manual settings are equal to any of the 4 profiles, then the profile will be highlighted.

OPTION	WHAT IT MEANS
STUN mode	Enables/disables STUN feature.
STUN keep alive	Sets STUN refresh timing in seconds.
RPORT mode	Enables/disables RPORT
SIP Port	Selects the source port on SIP traffic sent to the ITSP. By selecting a non-standard SIP port (different from 5060), SIP ALG in some routers can be circumvented.

HOW TO CHANGE THE IP MODE

Because most networks use dynamic IP (or Dynamic Host Configuration Protocol - DHCP), the default IP setting is dynamic IP. This means that your broadband modem or router assigns a new IP address to the DUALphone each time you turn on the phone. However if you use static IP on your network, the DUALphone must also use static IP.

1) In the **Settings menu**, choose **Internet settings**, and then press the **OK** key.
2) Choose **IP mode**, and then press the **OK** key.
3) Select **Static**, and then press the **Yes** soft key when prompted to save changes.
4) Press the **Reset** button on the rear of the gateway for the changes to take effect.

When you have changed the IP mode to static, you must enter information about IP address, Subnet mask, DNS server and Default gateway fields. This information is part of the account information you received from your Internet Telephony Service Provider.

NOTE: On some routers port forwarding must be enabled for the DUALphone to work properly. If you use port forwarding, all incoming traffic is forwarded to an internal IP address that you specify, and you must ensure that the router always assigns the same IP address to the DUALphone. For more information, refer to your router's user manual.

HOW TO DISABLE STUN

STUN is enabled by default. However, some routers have a built-in method (SIP-aware) that prevents the router from using STUN. Therefore, if you experience router problems, disabling STUN might help you solve your problem. For more information, see your router's user manual.

1) In the **Settings** menu, choose **Internet settings**, and then press the **OK** key.
2) Choose **STUN mode**, and then press the **OK** key.
3) Select **Disabled**, and then press the **Yes** soft key when prompted to save changes.
4) Press the **Reset** button on the rear of the gateway for the changes to take effect.

HOW TO CHANGE THE STUN KEEP ALIVE INTERVAL

The default STUN keep alive count is 90. However, if you experience router problems, decreasing the interval might help you solve your problem.

1) In the **Settings** menu, choose **Internet settings**, and then press the **OK** key.
2) Choose **STUN keep alive**, and then press the **OK** key.
3) Press the **Erase** soft key to delete the current settings, write a new interval, and then press the **Yes** soft key when prompted to save changes.
4) Press the **Reset** button on the rear of the gateway for the changes to take effect.

HOW TO ENABLE DNS-SRV

If your telephone provider requires DNS-SRV, then:

1) Go to **www.Dualphone.net** and login under **configuration**.
2) Choose **advanced** and Voice server page.
3) Set 'Proxy Port' to 0.

TROUBLESHOOTING

The following is a list of solutions to the most common issues that you may experience when you use the DUALphone. Most of the problems you can easily solve yourself, whereas others require that you contact your service provider. To view the most recently updated troubleshooting information, go to **www.dualphone.net.**

PROBLEM	POSSIBLE CAUSES	POSSIBLE SOLUTIONS
The handset display is black.	**1)** Handset is in power saving mode. **2)** Batteries are drained. **3)** Power is not turned on.	**1)** Press any key. **2)** Charge the batteries. **3)** Check that the batteries are inserted with the plus and minus ends facing the correct way. Long-press the **Red phone** key.
The handset does not charge.	**1)** The charger is not powered. **2)** Batteries are not inserted correctly.	**1)** Check that the power cord is connected properly to the charger, and that power is turned on. **2)** Check that the batteries are inserted with the plus and minus ends facing the correct way.
The handset registration failed, and the status indicator on the display is black.	**1)** Handset is out of range of the gateway.	**1)** Move the handset closer to the gateway, place it in the charger, and reset the gateway.
The display reads, **"Searching for Gateway"**.	**1)** Handset is out of range of the gateway. **2)** Gateway is not powered.	**1)** Move the handset closer to the gateway. **2)** Plug gateway into a power outlet. (If possible, a continuous power outlet.)
The POWER indicator on the gateway is not lit.	**1)** Gateway is not powered.	**1)** Check that the gateway power cord is connected properly, and that the adapter is plugged into a power outlet. (If possible, a continuous power outlet.)
The I-NET indicator on the gateway is not lit.	**1)** The Ethernet cable is not connected. **2)** The router or modem is not powered. **3)** The gateway cannot retrieve an IP address.	**1)** Check that the Ethernet cable between the **WAN** port on the gateway and the **LAN** port on your modem or router is connected properly. **2)** Turn on the power to the modem or router. **3)** In **Internet settings**, check that the IP mode corresponds to the IP mode of your Internet connection.
There is no audio when I make Internet calls.	**1)** The router blocks audio.	**1)** Use port forwarding. Check your router's user manual to see how to configure port forwarding.

PROBLEM	POSSIBLE CAUSES	POSSIBLE SOLUTIONS
I cannot make landline calls.	**1)** The landline cable is not connected. **2)** The landline is out of order.	**1)** Check that the landline cable between the **Line** port on the gateway and the telephone wall outlet is connected properly. **2)** Contact your landline provider.
I cannot receive landline calls.	**1)** The country setting is wrong.	**1)** Check that you have chosen the country that you are in. Open the **System settings** menu, choose **Country selection**, and then choose the country that you are in.
I cannot make Internet calls, the VoIP indicator on the gateway is not lit, and the right status indicator in the upper left corner of the display is black.	**1)** The configuration of the DUALphone is not complete. **2)** The gateway has not been reset after you saved the configuration. **3)** The router uses port forwarding. **4)** The router blocks Internet telephony. **5)** The router firmware needs updating.	**1)** Check that you have configured your DUALphone properly. Go to **www.dualphone.net** and then click **Configuration**. For more information, contact your Internet Telephony Service Provider. **2)** Reset the gateway and allow the gateway 2 minutes to log in at your Internet Telephony Service Provider. **3)** Check that you have configured your router so that it always assigns the same IP address to your DUALphone's MAC address when using port forwarding. Otherwise incoming traffic is probably not forwarded to your DUALphone. For more information, check your router's manual. **4)** **a)** Try disabling STUN. Open the **Internet** settings menu, choose **STUN mode**, and select **Disabled**. Reset the gateway. For more information, contact your Internet Telephony Service Provider. **b)** Use port forwarding. The default SIP port is 5060, and the default RTP port is 5004. Ensure that your router always assigns the same IP address to your DUAL phone when using port forwarding. For more information, check your router's manual. **5)** Check your router's user manual to see how to update the firmware.

PROBLEM	POSSIBLE CAUSES	POSSIBLE SOLUTIONS
When I make Internet calls, the sound quality is poor.	**1)** There is too much simultaneous data traffic on your broadband connection. **2)** Your Internet Telephony Service Provider's Quality of Service is based on a "best efforts" rather than a guaranteed voice priority method.	**1) a)** Reduce the amount of traffic on your broadband connection. **b)** Sign up for a Quality of Service agreement with your broadband provider. **c)** Order a connection with higher speed from your broadband provider. **2)** Contact your Internet Telephony Service Provider regarding ensured voice prioritization across the network.
I cannot make Internet calls, but it worked yesterday.	**1)** The gateway is not logged in at the Internet Telephony Service Provider. **2)** The router is turned off. **3)** The SIP server is down. **4)** The Internet connection is down.	**1)** Check that all cables are connected properly, and check that power is turned on, and then reset the gateway. **2)** Turn on the router. **3)** Contact your Internet Telephony Service Provider. **4)** Contact your broadband provider.