## Introduction

## Welcome

and thank you for choosing a Maxon Telecom product.
The MX7812 is a result of a development effort stretching over more than a year, involving R\&D engineers in Korea and Denmark.
Your new phone is a child of their combined ingenuity and is packed with features that match the highest standards on today's market. Thus, it will serve you faithfully throughout its entire lifespan.
The MX7812 is a lightweight communications tool, comprising cutting edge technologies within SMS/EMS messaging, WAP Mobile Internet, Personal Organizing and data transmission.
Add to this the option of personalizing your phone with individual ringing tones and self-composed melodies and wallpapers, and we are confident
that MX7812 will soon be your indispensable everyday companion, keeping you focused and in touch.

## The MX7812 Development Team.

## Introduction

## Table of contents

FIRST STEPS Get started ..... 5
■ Battery installation and charging, SIM installation, making and receiving calls.
MESSAGES SMS, EMS \& CB ..... 29
■ Using T9 text editor, Sending and receiving messages, including pictures \& sound.
WAP Surf the Mobile Internet ..... 37
■ Home, bookmarks, surf
PHONEBOOK Create a contact database ..... 43
■ Look up, enter new, import and export, voice mail, voice dial
ORGANIZER Stay focused ..... 51■ Making appointments, reminder, basic calculations2

## Introduction

Table of contents
MAXFUN Take a break ..... 57■ Play Memory, Defenz, BlockBuster \& Bulls Eye.
MYPHONE Personalize your phone ..... 61■ Ring-tones \& melodies, wallpaper \& screensavers, caller group setup.
SETTINGS Basic parameters ..... 67■ Time \& date, data transmission, language, security (PIN), network settings, callsettings, billing.
MISCEILANEOUS About your phone ..... 75
$\square$ How

## Introduction

## About this user guide

This user guide is written for the Maxon MX7810, MX7811, MX7812 and MX7812i cellular handsets and for these models only.

The user guide is structured in the same order as the user interface in the telephones.

Optional functions, that may not be shared by all models, are printed in grey colour. In general:

- indicates a user action
- italic indicates a response from the phone

■ indicates a listing (of events or items)

Bold is used to emphasis text.

Italic may also be used in Notes, Hints and Warnings.

Where the keypad is used as an illustration of an action, active keys are white, inactive are grey.


Most common functions and an abridged menu overview is found in the Mini Guide.

User Guide order no.: 02201055 Mini Guide order no.: 02201059

Queries regarding the guides or phone handling to:

## Maxon Technical Marketing

maxon@maxon.dk

## 4

## What's in the package

When you open your MX78xx sales package you should find the phone itself, the battery, the charger, the MaxSoft CD (Optional), the Mini Guide and this user guide. Depending of your place of purchase, various accessories may also be included.
Contact your retailer if any of the above is missing.
The battery
Your MX78xx comes with a high-performance rechargeable battery. The battery must be fully charged before you use your phone. Failure to do so may impair the service life of the battery. Use only the charger supplied with the phone.

To install the battery, align the pins at the bottom with the guides in the cover and click in place. To remove the battery, press the button on the back of the phone and lift off. The battery must be installed on the phone prior to charging.

Warning: Only use the charger supplied with the phone.

## Get started

Battery charging, SIM installation

## Charging the battery

- Connect the charger to the plug at the base of the phone, release tab facing downwards.
- Connect charger to mains.
- an animated icon indicates charging in progress.
- when the animation stops, charging is completed.


## Installing the SIM card.

To connect to your network operator your phone must have a SIM card installed. The SIM card slot is located under the battery.

- Switch off the phone and remove charger.


## Warning:

Never insert or remove a SIM card with the charger connected.

- Release the battery and remove it to access the SIM cradle.
- Install the SIM card gold-plated side down and with the cut corner of the card matching the slot profile.

6

## Get started

Connecting to network
Never use force. Avoid touching the gold-plated side of the SIM.

- Secure the card lock and reinstall the battery.


## Connecting to the network.

Your SIM card comes with a PIN code to prevent misuse. This code can be four to eight digits long and is printed in the information material that came with your card.

- Turn on the phone by pressing the $(\mathbb{D}$ key for a few seconds.
- a tune is heard and the display becomes active. You are prompted to enter the PIN code.

Note that at this point, you may select from a list of languages by pressing Select on the right softkey.

- Enter the network-supplied PIN code. Press the OK



## First steps



## Get started

Enter PIN, setting language
key to accept.

- your phone will search for the network. When connection is established, the the name of the network is displayed. You are now able to make and receive calls.

Note that entering an incorrect PIN code three times in succession will lock the SIM card and you must enter the PUK code to unlock (see p. 11).

## Setting up the basics.

Go through the following steps to set up language, to set time \& date and to change the default PIN code:

- Enter the menu by pressing ${ }^{\boldsymbol{l}}$. Step to the Settings menu. Press OK.
- Step to highlight the hanmere submenu

If you did not select language before you entered the

## Get started

Setting time \& date
PIN code, and if you want to change the default language:

- Enter the submenu by pressing OK.
- a list of languages appears.
- Scroll with $\boldsymbol{\sim}$. Select language with OK.
- the display will change to the selected language.
- Exit with the Back softkey to proceed from the Settings menu to Time \& Date.


## Setting time \& date.

- Scroll to highlight the Time \& Date submenu. Enter by pressing the OK key.
-the time \& date submenu opens.
- Scroll to Time zone to select your present location

| Language |  |
| :--- | ---: |
| Dutombitit | 0 |
| English | 0 |
| Dansk | 0 |
| Deutsch | Back |
| $7 / 7$ |  | and proceed to Date format to change this if so desired.

First steps


## Get started

Changing PIN

- If you wish to apply daylight saving (adding one hour to present time), tick the Summer time box.
- Scroll to Set time/date. Enter by pressing OK. -the time \& date editor opens.
- Enter the time. Press OK. Enter the date. Press OK.
- Exit with the Back softkey to proceed to Security.


## Changing the PIN code.

If you want to change your SIM-card default PIN code:

- Scroll to the Security menu. Press OK.

The options are:
PIN code 1
Change PIN 1 Change your primary PIN
Change PIN 2 Change your secondary PIN
SIM lock Only designated SIM can be used

- Scroll to Change PIN1 and press OK. Enter your old PIN code followed by the new code. Confirm it when prompted. Press OK.
- Exit with right softkey.

Note: If you enter an incorrect PIN code three times in succession, your SIM card will lock and you must enter the 8 -digit PUK code to unlock. PIN and PUK codes are either supplied with your phone or must be obtained from your network provider or place of purchase.

The IMEI code. Your phone is furnished with an identification code number. You need to retain this number in case you need to block your account if your phone is lost or stolen. We suggest that you write it down here:


You will find the IMEI code label under the battery.


## First steps



| ㅍ.. |  |
| :---: | :---: |
| TDC Mobil |  |
| 20302746 |  |
| Call | Clear |



Eall

## Clear

## Get started

Answering and making calls

## Answering a call.

When called, your phone will play the selected tone or melody and/or vibrate as selected. The display will show the calling pop-up and, if the caller is listed in your phone book, name and number will be displayed.
To answer the call:

- Press the Answer softkey.
- connection is established.

To reject or end a call:

- Press the Reject / End softkey.

If you miss a call, the calling number will be stored in the Dial list. To retrieve a number, use to open the list, scroll to the appropriate number and press OK.

Making a call.
To make a national call, simply enter the desired

## Get started

International calls. Call to an extension line number and press the Call softkey. To end a call, press End.

Some countries (e.g. USA) uses area codes. The area code must be entered before the phone number (no space between).

To make an international call, press the * key until + appears. Then enter the appropriate country code, area code if necessary and finally the telephone number, all in succession (no spaces).

## Redirected calls.

To make a call to a fixed extension you may have to go through an automated switchboard. To do so:

- Enter the main phone number.
- Press the * key until - appears.
- Enter the extension number. Press OK.
- the call will be routed to the extension.


13

## First steps



Dial list


Options Exit

## Get started

Emergency calls, missed calls

## Emergency calls.

Provided you are within range of a network, your phone will allow you to make emergency calls at all times, regardless of the state of your account and even without a SIM card installed. To avoid unintentional calling, you will be prompted to confirm your call.

## Missed calls.

The last 20 incoming or outgoing calls are stored in the Dial list. You can open the list to retrieve a missed call:

- Press the key to open the list.
- Scroll with $\boldsymbol{*}$.
- View details with the Options softkey.
- Select contact with OK.
- the number will be called.

14

## Get started

The display

## The display

The MX78xx is equipped with an backlit, 100 by 80 pixel liquid crystal display (LCD) with full graphic capabilities.

In the start screen, the following information may be displayed:

■ Top row: Battery status, SMS-alert or Voice mail received, GPRS selected, Signal strength

■ Line 1: Network name. Home zone notification.
■ Line 2: Analogue clock. Date and month or CB alert

| Display icons: |  |
| :--- | :--- |
| llun... | Battery |
| $\rightarrow$ | Call forward |
| Finll | GPRS signal |
| Inll GSM signal |  |
| E. | SMS |
| $*$ | Speaker OFF |
| $e 0$ | Voice mail | or message.

■ Bottom row: Softkey commands.
The display may also have a Wallpaper (see p. 67).

## First steps



Note: Levels, such as speech volume, are increased or decreased with left and right arrow keys.


16

## Get started

The keypad

## The navigation keys

The arrow keys, the OK key and the softkeys are your means of access to the many features of your phone. A thorough introduction to their function is given on page 20 , and further details under the each feature.

## The keypad

The keypad is a standard 12-key alphanumeric backlit keypad, allowing for number and text entries.

Long keypress. In the start screen, a long keypress on the keys (2) to will initiate a call to the connected shortcut number, provided that this feature is activated (see p. 74).

Caps on/off \& digits. In text editors repeated pressing on the * key will cause the cursor to toggle between upper and lower case. A long keypress on the keys $1-9$ will produce the selected digit.

Symbols. Punctuation and symbols are selected in the options menu during text editing, but can also be found on the \# key (in ABC mode).

Delete. Right softkey deletes (Command: Clear).
Space. Space with the key.
Star-key (*). Switch between upper and lower case letters in text editors. A longpress will open the Symbols pop-up. Toggles between * + - / and $=$ in standby mode.

Hash-key (\#). Toggle between: \# . , ; : " ? ? and ! in

```
Hint. Pressing the \(\mathbf{\Delta}\) key in the start screen is a shortcut to the Phone Book Look up.
```

Hint. Pressing the first letter in a contacts name will let you quickscroll. stand by. Controls . (period) in text editors.

T9 text editor. Text entry is facilitated with the T9 predictive text editor (see p. 29).

Lock/unlock keypad. To prevent unintentional

## First steps <br> Get started

## Note: You must activate DTMF tones in the Call settings menu to be able to remote control answering machines and similar devices.

Keypad, externals
activation, the keypad may be locked on the Options softkey in the standby menu. Keypad locked is stated in the display.

Keypad tone. May be switched on/off in the MyPhone menu (see p. 62).

DTMF tones. The keypad allows for the use of DTMF tones, enabling you to access certain public services and to remote control various devices, e.g. an answering machine.

Volume control. Oblong button on side of phone.

## Externals

Headset (accessory) may be plugged in, opposite to the antenna base. The internal speaker is automatically disconnected. A switch on the microphone enables you to accept and end a call.

## 18

The externals
Data and charger socket (bottom of casing). Use only original Maxon cables and accessories.

The LED. Your phone is equipped with a RED/GREEN dual LED service indicator.

- Slow green blink indicates that network connection is established.
- Slow red blink indicates that network connection is not established.

The LED may be switched off in the MyPhone menu

| State | Description: | LED: |
| :--- | :--- | :--- |
| On network | Connection to network established | Slow green blink |
| Off network | Connection not established | Slow red blink |

## First steps <br> Get started

Finding your way, stand-by and main menu


## Navigating the menu

The arrow keys left 4 down $\boldsymbol{*}$ up $\Delta$ right ${ }^{\circ}$ and ( functions much like the arrow keys and the Enter key on your PC, but the keypad also features two softkeys $\nabla$ and $\nabla$ controlling a variety of shortcut commands. The softkeys are placed left and right to the arrow keys


## In standby mode

A down keypress will open the Dial list. Left key will access Phone Book Look Up and right key will enter the main Menu, whereas an up keypress has no function in standby. A long press on OK will activate Voice dial.

## In main menu mode

Pressing the arrow keys will step through menus and OK will enter the selected menu. Once you have entered a menu, you can scroll up and down with the arrow keys to highlight menu points with the action

## Get started

Stand-by and main menus
bar. All menus are in a continuous loop, meaning that when you reach the end, the menu will start over again. Pressing OK will enter the highlighted submenu or tick a checkbox.

From the start screen, following menus are accessed:

## Left key - Phone Book Look Up

Right key

- SIM Toolkit (if supported)
- Service Numbers (if supported)
- Messages (SMS/EMS/CB)
- Mobile Internet (WAP)

- Phone Book (Voice dial)
- Organizer (Calendar \& To-do list, Calculator and Converter)
- MaxFun (4 Games)
- MyPhone (Audio \& Visual settings, Picture \& sound library)
- Settings (Time, Language, Data, Security, Network and Call settings)


## First steps

## Get started

Submenus, softkeys


## Entering submenus

Some menu points are submenus. Pressing OK when a submenu is highlighted will take you one level deeper into the menu. Pressing the right softkey with the command Back takes you up one level.

Left and right arrow keys will increase/decrease values in settings menus (e.g. volume).

All options in settings as well as in feature menus can be accessed via the Navigator key, but you may also use the softkeys as shortcuts to many features.

The softkeys. Your phone has two softkeys that allow you to access most features via roll-up menus. When one or both softkeys are applicable, the relevant softkey commands will appear in the display. Commands and subsequent function of the softkeys will change as you navigate through the menus. If no commands are displayed, softkeys are not applicable.

In the start screen, the softkeys control the Options and Profiles menus. The Options softkey is a shortcut to the menus WAP Home, Write SMS, Voice mail, Voice dial and Keypad lock. The Profiles softkey lets you select one of five profiles Silent, Discreet, Normal, Outdoor and Freestyle to suit the situation you are in. All profiles can be renamed.

When navigating the menus, the left softkey is generally used to select and the right softkey to clear, backspace or end.

When the left softkey controls Save, the command line will remain blank until all the required information is entered. In text editors, the right softkey command will change when text input is initiated.

The right softkey also controls on/off (long keypress).
Text windows. You will encounter text windows, e.g.


23

## First steps <br> Get started

Scrollbars. Text entering
when receiving an SMS message or a Cell Broadcast message. Text windows may be displayed either with the softkeys visible, in which case you use these to select various options, or with the whole screen filled with text. Any keystroke will close the text window.

Scroll bars. If the text is too large to fit in the window, scroll bars will appear to show there is more text outside the window. Scroll with $\boldsymbol{\sim} \boldsymbol{A}$ arrow keys.


One-line editors. When you wish to enter information, e.g. in the phone book or calendar, a list will appear from which you, line by line, can access the editor. The editor will start in T9 mode. Longpress on \# key will enter ABC mode.

Scroll through the list $\geqslant$ and enter the necessary information. Make selections in checkbox and radio button lists with OK or Select. When all requested information is entered, store with Save.

Pop-ups. Checkboxes. Radiobuttons
T9 editor. Appear when you write SMS messages. You can choose to accept the text entry or exit the editor at any time, using the softkeys.

Pop-up windows \& boxes. Pop-up windows will appear as a question, an information, an event reminder, or an alert to inform you of problems. Warning pop-ups alert you and suggest what should be done - for example that the SIM memory is full and messages need to be deleted.

Checkboxes \& radio buttons $\oint$. When setting up or using your phone, you may enable or disable functions by ticking one or more checkboxes or selecting from an array of options activated by radio buttons. In the latter case, only one option can be
 active at a time.

Icons. Some of these will be animated, e.g. to indicate that the phone is working, or to illustrate a new event such as a received SMS or a recorded voice mail.

## First steps <br> Get started

Voice mail. Voice dial

## Features not accessed from the menu:

Voice mail is your network-based answering machine. A new voice mail will be indicated by a symbol in the start screen, You may play recorded messages by selecting Voice mail in the start screen Options key or you may simply apply a long keypress on the " 1 " key.

## Voice dial.

Voice dialling will enable you to access selected contacts from your phone book simply by speaking the contacts name into the microphone. The phone will dial the contact automatically according to the settings selected. To use voice dialling:

- Apply a long keypress on the OK key or select Voice dial in the Options menu.
- a pop-up box will prompt you to speak the contacts name.
- Holding the phone as you would normally, speak loud
and clearly into the microphone, i.e. "Home"
- the phone will repeat the command and dial the contact

If the command you speak is not recognized by the phone, a beep will prompt you to try again. Contacts for Voice dial are selected in the Phonebook menu, see p. 49

Scratch pad. During a call you may wish to take down a telephone number. Simply enter the number during the call. When the call is terminated, the new number will be stored in the Dial list.

Dial list. To access the dial list, simply press $t$ in the start screen. A list of the last incoming calls (including missed calls) and the last outgoing calls is displayed by phone number (In: > Out: <). Select Details in the softkey menu to view date \& time of the call. If the caller is listed in your phone book, the name is shown instead of the number.

## First steps <br> Get started

Conference call
If OK is pressed while a phone number or name is highlighted, that number will be called.

Conference call. You can conduct multi-party conversation on your MX78xx. During a call, select Hold on left softkey and call another party. You can include the first-called party in the conversation by selecting Join in the options menu. All parties can now converse. To include more parties, start by putting each connected participant on hold while you call the next. Then select Join all from the Options menu to open the conference. As many as five people can be online at the same time.

To release a participant from a conference call, select Release in the Options menu. To dismiss all in a multi-party conversation, select Release all.

## Using SMS, EMS and CB

T9 - The predictive text editor

## T9 helps you write SMS messages

By suggesting, while you type, the most commonly used words, or words you frequently use, T9 will allow you to write quickly.

When using T9, select the key with the first letter in the word you want to type. Only press each key once even though the character you want may be number two or three on the specific key. You will experience that the word you are entering will change as you type and you should not try to make corrections in the word before you have finished
 typing it.

In most cases the text editor will find the desired word. If there are two or more options, an icon $\uparrow$ appears in the top line and a list of possible words is available. Scroll to find the word you want. Press OK.

Should T9 fail to recognize the word, such as personal

| Note: Top line <br> displays: Upper <br> or lower case <br> selected, editor <br> type, language <br> and characters <br> remaining. <br> Left softkey <br> controls <br> selection of <br> language and <br> editor type, <br> save and exit. <br> Right softkey <br> controls clear. |
| :--- |

## Messages

## Using SMS, EMS and CB

T9 continued
names or unusual words or should you wish simply not to apply T9, you can select $A B C$ in the Options menu or by a longpress on the \# key.

Teaching T9 new words. Switch to ABC mode. Type the word. Press to store the word in the memory. Return to T9. Up to 400 personal words can be stored. If this limit is exceeded, rarely used words will be deleted first.

Editor modes, T9, ABC or 123, and symbols such as @ can be selected in the Options menu, or you can longpress * key for symbols, 0-key to switch to 123 mode and \#-key to select ABC mode.

The T9 intelligent text editor may require a little getting used to, but once you master it, you will find it is a powerful and useful tool. In average you will save up to $60 \%$ time using T9.

## Using SMS, EMS and CB

Send SMS

## Send and read SMS

SMS is fun with the MX78xx. Send long messages (up to 456 characters), and personalize them with pictures and sounds. Using the SMS editor is very easy if you follow this guide:


- Press to open the menu. Step to Messages. Press OK. The Write new SMS submenu will be active. Press OK to enter the text editor.
- Write your message using a maximum of 456 Latin characters.
-while you type, the remaining characters will be indicated by a counter in the top right corner.

Note that using all 456 characters will require three separate SMS messages to be sent. Also note that some languages have special characters that will expand the message. Thus, up to seven messages may be sent.

Options: From
the softkey rollup menu you can Forward an SMS, Reply to an SMS, Call the sender or Save the phone number to your Phone Book. You can also Delete the active SMS.

Messages

## Using SMS, EMS and CB

Attaching pictures \& sound


- When you have finished typing, press OK.
- an "Enter phone number" pop-up will appear
- Type the recipients phone number or use left softkey to look up the contact in the Phonebook. Press OK.
- the message will be sent

To include a picture or a sound (Optional)


At any point while writing your SMS, you may select Insert on left softkey. The picture \& sound library opens. Scroll with arrow keys to select the desired item and press OK. The item is inserted in the text. Pictures will be WYSIWYG and sounds will be represented by an icon.

## Incoming SMS

An incoming message alert will be shown in the start screen (and with a tone or vibration if so selected). Press Read to open the message. If a picture or a sound is attached to the message, and you want to

32

## Using SMS，EMS and CB

store this in your own library．Select Store on left softkey．

To postpone reading of a new SMS，press Later．The message will be stored and the icon will appear in the start screen．


To read an SMS received earlier，go to the Messages menu：
－In the SMS menu scroll to SMS Inbox where unread messages are indicated by the icon．
－Select the desired message and press OK to read．
To edit a sent or Save Only message，scroll to SMS

| Inbox |  |
| :---: | :---: |
| 可 a eUp of eoff．．．图 a banana．因 MobilSwar＂＋4．．． |  |
|  |  |
| Options | Back | Outbox，highlight the desired message and press OK．

To create a template，scroll to SMS template and write your message．You can enable the use of the template in the Selections menu in SMS settings．

Messages Using SMS, EMS and CB
SMS settings
Delete old messages regularly to avoid memory congestion. Scroll to:

Delete, and select Inbox, Outbox or Delete all.

## Setting up SMS options

| SM5 settings |  |
| :--- | :---: |
| Format |  |
| S.C. number |  |
| 4alidity |  |
| SMs bearer |  |
| $1 / 7$ |  |

Enter the Messages menu and scroll to SMS settings Press OK to open the settings submenu, comprising the following options:

Format. Lets you select from four alternative data formats, if supported by your network. Text format is default.
S.C. number. Enter your operator Service Center number.

Validity. Specifies the period a sent message will be hosted by the network. Four options.

## Using SMS, EMS and CB

SMS bearer. Select GSM or GPRS connection. Your network subscription must include GPRS services for you to use this.

## Selections

SMS Class 0. If ticked, incoming class 0 messages will not be stored, but shown on display only. New messages will thus overwrite previous.

Save \& Send. Saves message in SIM memory.
Verify send. Initiates confirmation request before sending.

Use template. T9 editor default starts with template.

Reply path. Will let the recipient use senders service center.

| SMS settings |  |
| :---: | :---: |
| s.c. number Walidity SMS bearer |  |
|  |  |
|  |  |
| Felertions |  |
| $1 / 7$ | B |
| Selections |  |
| Wis class 0 ${ }^{\text {a }}$ |  |
| Sawe for send Werify send Use template |  |
|  |  |
|  |  |
| $1 / 7$ | Back |

## Using SMS, EMS and CB

Cell Broadcast

## Reading Cell Broadcast.

Cell Broadcast is a network service. Check details with your operator. CB's will appear automatically in the display. CB messages can either scroll over the display or appear in a pop-up box.

Messages will be stored in the memory, but new messages will overwrite old ones received on the same channel. To read the last messages stored, enter the Messages menu and select Read CB, then select the channel you want to read.

Setting up Cell Broadcast.

- Scroll to CB settings. Press OK. You can select:

CB Enable. Tick to enable Cell Broadcast reception. Channels. View existing channels, add a New channel or use Rename to customize channel names.. Language. Scroll a list of languages. Select with OK. Save with left softkey.

## Surf the Mobile Internet

## Using WAP.

WAP is a technology that enables you to access the Mobile Internet via your phone. Depending on your place of purchase, and provided that your network operator supports WAP, your phone is most likely set up with the necessary information. If so, to access the Mobile Internet for the first time, simply:

- Press to open the main menu. Step to the Mobile Internet menu. Press OK.

The first two choices will be Home and Bookmarks.
 Home will most likely be the homepage of your network operator and as you have not had the chance to bookmark other WAP-sites yet, also your only option.

- Press OK to open Home.
-the display shows "Connecting to server Requesting data"

| HBC |  |
| :--- | :--- |
| httpirl |  |
|  |  |
|  |  |
| Options | Clear |
| Bookmarks |  |
| Ferect |  |
| Edit |  |
| Add |  |
| Delete |  |
| $2 / 7$ | Back |

## Surf the Mobile Internet

Bookmarks
When connection is established, the "Home" URL will be displayed. Follow on-screen instructions to browse the homepage or enter another homepage via the Options softkey menu.

## Entering a homepage.

You can access any WAP homepage by entering the relevant URL in the editor. The input must start with http:// to access the page. Accept with OK.

Bookmarks. You have the option of saving around 50 bookmarks in the memory. Open Bookmarks and:

Select. Opens the list of bookmarked WAP-sites.
Edit. Edits the list of WAP-sites.
Add. Opens an editor allowing you to add a homepage to the memory by typing the WAP address.
Delete. Opens the list of WAP-sites. Delete by highlighting and press OK.

In all cases, confirm your choice with OK.

## Surf the Mobile Internet

Email. Push technology

Password protected sites. You will be prompted to enter user name and password. However, many protected WAP sites will let you enter as a guest, but you may not be eligible to view the entire site.

Email. Some network operators provide a service that enable you to receive and read your email via WAP. Contact your operator for details.

Push. If your network operator supports push technology, you may allow non-requested messages from WAP service providers. The messages will be announced by a pop-up alert and stored in the Push Inbox.

To personalize Push, go to Push settings and select:
Always ask. WAP-site will open only upon your confirmation.

Always open. WAP-site will open automatically.
Open when WAP. WAP-site will open if you are is a

| Push settings |
| :--- |
| Sllow FIJSI settings |
|  |
| Back | WAP session.


| Gateway 1 |  |
| :---: | :---: |
| Itefatt ${ }^{\text {F\|\| }}$ |  |
| Homeprage |  |
| C5D |  |
| GPRS |  |
|  | Back |
| ABC |  |
| httpr/ |  |
| Options | Clear |
| C50 |  |
| Dsername |  |
| Password |  |
| Dial-up number |  |
| IP address |  |
|  | Back |

## Surf the Mobile Internet

Setting up a WAP account

## Setting up your connection.

If your phone is not set up for WAP or if you want to alter the default settings, you must first obtain the necessary information. If this is not included in the sales package, contact your network operator. With the information at hand:

- Go to the WAP menu. Scroll to WAP Profiles. Press OK.
- Select Gateway 1. Tick Default to make this your Home. You can configure five different gateways, but only one at a time can be "Home".
- Select Homepage and enter:

URL address (e.g: http://wap.opasia.dk)
Confirm with OK and proceed to:
CSD. Enter the information requested on the display:

## Surf the Mobile Internet

User name, Password, Dial-up number, IP
address, Data type (Analog /ISDN) and Data speed
$(9600 / 14400)$ is information issued by your operator.

Idle timeout is the time you want the phone to keep an idle connection

Confirm each choice with OK and return to Gateway 1 menu. Proceed to:

GPRS. Enter the information requested on the display:
User name, Password, APN and IP address is information issued by your operator.

Confirm each choice with OK and return to Gateway 1 menu. Proceed to:


41

WAP

## Surf the Mobile Internet

Setting up a WAP account


IP Address. The IP Address is a 12 digit code by default written as 000.000.000.000. When typing it, enter 0 for "blank" spaces.

Connect mode. If no specifications are stated by your network, both Temporary and Continuously are applicable.

Security . Tick to enable encrypted transmission which some URLs may require.

Show graphics. Tick to include graphic elements.
Rename. Select your own name for the gateway.

## Empty cache

To provide quick access to your favorite web sites, information is stored in the cache memory. It is recommended you empty your cache memory regularly to avoid congestion.

42

## Create a contact database

Look up

## Using the Phonebook

You can store up to 250 contacts in the phone book, with up to three phone numbers (work/home/mobile) per entry. You can import and export names and phone numbers from/to a SIM card.

The Phonebook links to a Card Catalogue, allowing you to store a contact's complete address and email address. This information will be saved in the phone's memory, but will not be included in a SIM export.

## Look up

To look up an existing contact, simply use 4 as a shortcut in stand-by mode, or:

- Press to enter the menu. Step to the Phonebook menu. Press OK.
- Scroll to Look up and press OK.
- contacts are listed alphabetically by surname.


43

## Phonebook Create a contact database

Add new contact

- Scroll to find the desired contact and press OK.

- the window will display contact name and telephone numbers available.
- Scroll to the desired number and press Call.


## New

To add a new contact to the phonebook:

- Scroll to New. Press OK.
- a list of several entry fields appears.
- Use $\boldsymbol{*}$ to scroll through the list and $\mathbf{O K}$ to enter the editors. You must enter at least a name and a phone number in order to store the contact.

When you have entered the information you wish, press the Save softkey. The phone returns to Phonebook menu. Another contact may be added or you may exit with the right softkey.

## Create a contact database

Phonebook settings
Contact name and number(s) will be stored in the memory and may be exported to the SIM card. If SIM is full, you will be alerted.

Note: If a different SIM card containing contact information is inserted in the phone, you can import data from this. You may also export data to SIM cards, thus enabling you to share contact information with friends and colleagues. Import and export features are located in the Settings submenu.

## Settings

If you want to alter settings in the Phonebook:

- Enter Phonebook menu. Scroll to Settings and press OK. Choose among the options:

Shortcut dial. Make calls using only one or two keys. In the shortcut list, you can define a key combination (2-21) for your most accessed contacts.
To enable shortcut dial, tick Enable in the Call

## Phonebook Create a contact database

Shortcut dial, fixed \& barred lists
Settings/Optional functions submenu (see p. 74).
Shortcut list. To include or remove a contact in the shortcut list, select a position and:

- Select New or Delete on the Options softkey.
- Choose the appropriate contact from the phone book. Press OK.
- any previous contact on the selected position will be overwritten.

Fixed list. Use this feature to create a list of allowed numbers. When Active is ticked, the user can only access the listed numbers. You will need the PIN 2 code to create a fixed list (see p. 10).

Barred list. Use this feature to create a list of barred numbers. When Active is ticked, the user can not access the listed numbers. You will need the PIN 2 code to create a barred list.

## Create a contact database

Import and export contacts
Own number. Store your own number(s) for future reference. On some SIM's, your phone number will be installed. If yours is not, simply enter it in the editor and press OK.

Export. Export names and phone numbers from the

| Oun number |  |
| :---: | :---: |
| Number 1: |  |
| -40410904 |  |
| Number 2: |  |
|  | Back | memory to the SIM card. You can import single contacts or all the contents.

Note that contacts will be exported one time for each phone number recorded. Thus, if a contact has 3 numbers, he will occupy 3 slots on the SIM card.

Import. Import names and phone numbers from a SIM card to the memory. You can edit and import single contacts or all the contents. When importing, you will not be alerted if the contact is already in the Phone Book and this will not be overwritten. We recommend that you check for double-entries.


47

## Phonebook Create a contact database

Voice dial


Memory status Displays the used and free memory available. On the Options softkey you can Reset the Phone Book memory. Be advised that this will erase all entries in the Phonebook.

## Voice dial

Voice dialling will enable you to access selected contacts from your phone book simply by speaking the contacts name into the microphone. The phone will dial the contact automatically according to the settings selected. To use voice dialling:

- Apply a long keypress on the OK key or select Voice dial in the Options menu.
-a pop-up box will prompt you to speak the contacts name.
- Holding the phone in your normal fashion, speak loud and clearly into the microphone, i.e. "Home"
-the phone will repeat the command and dial the contact


## 48

## Create a contact database

If the command you speak is not recognized by the phone, a beep will prompt you to try again.

## Setting up Voice dialling

Enter Voice dialling in the Phonebook menu and:

- Tick Enable to activate voice dialling.
- Enter Name list to select contacts for voice dial.
- left softkey controls the options New, Edit, Delete, Play and Voice change.
- Select New to open the phone book.

Add or delete names from the phone book. When a new number is selected, you will be prompted to speak the number for the phone to memorize. Be sure to do this in a quiet environment, holding the phone as you would do during conversation. A maximum of 20 numbers can be stored in the voice dial memory.


Phonebook Create a contact database
Service numbers

## Service numbers

This is a network service and the menu will only appear if your network operator supports it. The menu may contain various services, depending on the network.

Look up appointments

## Using the Organizer.

The Organizer is a practical tool comprising the Calendar, the Tasks list and the Calculator. To keep track of appointments, celebrations and meetings etc.:

- Step to Calendar . Press OK.



## Day view.

In day view, you can check your appointments for the day. You can scroll through the entries with $₹$ and use OK to view an appointment. The Option softkey will give you the choice of deleting the appointment or entering a new one. You can also go to Month view via the softkey menu.

## Month view.

Dates that have appointments attached to them will be underlined. You can toggle through the days of a month with the arrow keys and select a date with the OK key to enter day view on that particular date.


Organizer


## Stay focused

Entering a new appointment

## New.

This will let you enter a new appointment into the organizer. You will be prompted to define the new appointment as an Event, a Meeting or a Memo. Select one and enter the relevant information in the text editor. Use the arrow keys $\boldsymbol{\omega}$ 齿 to scroll through the entry fields:

Subject. To state what the event is about.
Start date, End date, Start time, End time. To set up parameters for the event.

Reminder. Your phone can alert you of events, meetings, or memo entries by selecting the appropriate reminder time from a list.

Sound. Select the sound you wish to apply. By choosing a loud sound, you can use the appointment function to set up an alarm call.

## 52

## Stay focused

- Press Save to return to Calendar menu or Cancel to leave the text editor without saving.

Delete.
Enables you to delete all entries or select those who are a week or a month old.

| Delete |  |
| :--- | :---: |
| Meek old |  |
| Month old |  |
|  |  |

## Stay focused

Edit and enter tasks

| Organizer |  |
| :---: | :---: |
| Calendar |  |
| Task list |  |
| Calculator |  |
| $4 / 7$ | Batck |
| To Do list |  |
| Mathers hirthday |  |
| AII |  |
|  |  |
| Iew |  |
| Options | Back |


| To Do list |  |
| :---: | :---: |
| Subject |  |
| - |  |
| Due date | n-17.07.2002 |
| Save | Back |

## Using the Tasks list

The Tasks list is an electronic notepad that will alert you of things to remember. Step to the Organizer menu. Press OK.

- Scroll to Tasks . Press OK. If the list is empty, the menu will display "No entries".
- Select New on left softkey to enter a task.

If one or more task is entered, you will have the following options:

## Delete all

Delete
New
You can enter up to 10 different tasks, each with a maximum 24 characters.

## 54

Using the calculator．
Step to Calculator ．Press OK．

The calculator main window opens．Select Calculator． Press OK．Enter a figure and select $\boldsymbol{\Psi}, \boldsymbol{\square}$ ，畨 or $\boldsymbol{\square}$ ．Press OK．Enter the second figure，select $⿴ 囗 十$ and press OK． The result is displayed on the bottom line．Example：
 Press OK．The display shows： 225

|  | 回目 |
| :---: | :---: |
|  | 200 |
| ＋ | 25 |
| $=$ | 225 |
| Options | Clear |
|  | 回回 |
|  | 225 |
| ／ | 5 |
| $=$ | 45 |
| Options | Clear |

If you want to continue the calculation after the addition in the example，do not select 回，but press OK while in $\boxplus$ mode to reach 225 as an intermediate result．If you want make，say a division，e．g．to divide the above result by 5，then use the arrow keys to sidestep to $\square$ ．Press OK．Enter 5 and select 回．Press OK．The display shows the final result：45．You can perform as many calculations as you wish this way． Only use 回 when you want to finish a calculation．

## Stay focused

Unit converter
Use right softkey to clear single digits. A long keypress will clear all and return the command prompt to Back.

Unit converter (Optional).
From the calculator menu, scroll to Unit converter.


- Enter value to convert. Press OK.
- Scroll to find unit to convert from and select with OK. Return with right softkey. Scroll to find unit to convert to and select with OK. Return.
- Press Convert on left softkey.
- conversion result is presented on the display.

Press New on left softkey to do another conversion.
You can convert: area, distance, energy, fuel consumption, mass, velocity, temperature, volume and time.

Take a break
Play Memory

## Need to relax?

The MX7812 has 4 amusing and challenging pastime games. Step to MaxFun. Press OK. Select among:

## Memory

A classic card game in a new and challenging form. Put your memory to test with six difficult levels, each comprising 18 pairs of cards. The levels will increase in difficulty and randomize to ensure, that you will meet new challenges with every game.

To play Memory, use the arrow keys to highlight a card and OK to select it. Repeat this with another card. If the card faces found are different, the cards will return to face down. If the cards match, they will be removed from the game. Remove all cards to proceed to the next level.



## Take a break

Play Defenz

## Defenz

DefenZ is inspired by early PC classics where the phone is your opponent. The aim is for each party to build a fence and isolate the other before he can do it to you.

To play DefenZ, use the arrow keys to control your fence. If you run head-on into the boundaries of the screen, if you run into your opponent or if you step back into yourself, you will "die" and lose the round.

The trick is to manoeuvre the fence, cutting off your opponent while you retain enough space to prevent yourself from being boxed in.

The game has six levels. After the first level, the difficulty, number of opponents and game speed will increase from level to level.

You must score at least 1000 points to proceed to the next level.

Take a break
Play Bulls Eye

## Bulls Eye

A game of accuracy and timing. Foresee the movements of the target and fire the arrow to hit Bulls Eye.

To play Bulls Eye, press the OK key to draw back the bow. The [power] bar at the bottom indicates bow tension. Press OK again when the desired tension level is reached, and finally press OK to fire the arrow. Keep an eye on the side wind indicator in the top-bar, but also remember that you are playing against time - 5 seconds for each arrow.

If you achieve sufficient points, you will proceed to next level.


## Take a break

Play Block Buster


## Block Buster

Another nostalgic game from the early PC days.
Eradicate the invading blocks before they crush you. Use as few balls as possible to obtain maximum points. Each new level will be tougher than the one before.

To play Block Buster, fire the ball with the OK key and move your bat with left and right arrow keys to smash the ball against the blocks.

## Personalize your phone

Audio profiles. Speech volume

## The My Phone menu

Your MX78xx is set with default factory settings as regards the sounds and display. These settings are easily changed, allowing you to personalize audio and visual signatures to meet your individual preferences. The phone has five profiles that can be set up individually to suit different situations and renamed.

- Press and step to the My Phone menu. Press OK.
- Select Audio
. Press OK to access the default profiles Silent, Discreet, Normal, Outdoor and MyProfile.
- Scroll to the profile you want to edit and press OK. Enable the profile by ticking Activate and alter one or more of the following settings:


Speech volume - adjustable in seven levels.

MyPhone


## Personalize your phone

Ring tones. SMS tones

## Incoming call

Tune - access to 24 different ring signals + up to five composed.
Type - choose between Normal, Once and Rising. Level - sound adjustable in 7 levels.

## Incoming SMS

Tune - access to 10 different SMS alert tunes + up to five composed.
Level - sound adjustable in seven levels.
Keypad
Tune - select Click, Beep, DTMF or Mute.
Level - keystroke sound adjustable in two levels.
Tones - adjustable i three levels for the functions:
Info
Cell Broadcast

## Alarm

Greeting
62

## Personalize your phone

Vibrator - adjustable in three levels and two types for: Incoming call
SMS alert
Alarm
Rename - open editor to rename the active profile.
Reset Profile - returns active profile to defaults.
My melodies
Create tunes of your own with the built-in composer to use as ring tones or for amusement only.

- Enter the My melodies menu and select:


## MelodyMaker

If nothing is composed, a pop-up box will alert you.

- Select New on the left softkey.
- the edit window opens.


63

MyPhone


## Personalize your phone

MelodyMaker

- Enter the Name of the tune, select Ring Tone or SMS Tone and press Notes to open the composer editor.
- Enter notes: Keys 1 to 7 represent the notes $\mathbf{C}, \mathbf{D}, \mathbf{E}$, F, G, A, B.
- use arrow keys to toggle through entered notes.
- Alter the sound, applying one or more of the following effects:

8-key shortens and 9-key lengthens a note by $1 / 4$ (e.g. 4D)
Long keypress: Enhance the duration by an additional 50 \%.
Octave:
Pitch:
Star-key raises a new note one octave (e.g. D1)
Hash-key raises the note one semitone (e.g. \#D)
0-key inserts a pause of same length as the previous note.

64

## Personalize your phone

- Press OK to return to edit window.
- Select Tempo to set the playback speed.
- Use left softkey to listen to the result by selecting Play and subsequently to Save or Cancel the composed tune.
-saved tunes will be listed in the composer and added to ring tone or SMS tone library as selected.

Simplified composing can be performed by finding pre-composed melodies, e.g. on the Internet. These are most often described as a sequence of keypresses
 to be entered. Note that digits in brackets () indicates a long keypress.

Practice the following example and see what you get.
299 *288349\#596886**2*1 \# 48 \# 4 \# 349 \# 34 \# 33879648 \# 4 \# 349 \# 3223 8399488 \# 4 \# 349 \# 34 \# 33879648 \# 4
\# 349 \# 32236399

## Personalize your phone

Visual settings
Tempo should be set to 94
A maximum of five tunes ( 255 notes each) can be stored in the memory. A pop-up box will alert you if the composer is full.

## Melody list

The melody list is your music library


Display
Erecting

## Animation

Selections:
Wallpaper
Back

Visual settings. Your phone has a backlit LCD display with full graphic capability. You can setup greeting, wallpaper and screensaver. To alter default screen settings, scroll ts to:

Display. Press OK. Scroll with to access the following options:

## Greeting

Animation. To select start-up animation
Picture. To select a bitmap picture for start-up.
Text. To write a greeting text of your own.

## 66

## Personalize your phone <br> Visual settings

Selections. To choose between Animation, Picture, Text or None.

## Wallpaper

Image. Scroll through images with arrow keys. Select with left softkey.

Contrast. To adjust display contrast to suit the viewing conditions.

Backlight time. To adjust how long the backlight stays on (Off - 60 sec .).

LED light . Indicates connection to the network (see p. 19 for details).

MyPictures. Select SMS-attachments in a list of pictures. Add new pictures. Scroll to:


Picture list. Press OK.

- the photo library opens.


## Personalize your phone

## Caller groups

## Caller groups

You can establish Caller Groups from the contacts in your phone book to identify a caller by sound alone.

Enter the menu. Scroll to Caller groups. Press OK. Select a group from the five default options: Private, Business, Friends, Family or Others. Select:

Tune - personalize ring tones for the group.
SMS - personalize SMS alert signal for the group.
Rename - give the group a name of your own

## Basic parameters

Time \& Date. Language. Data

## The Settings menu.

Comprises basic parameters for the phone as regards language, time \& date, data transfer, security, network connections and call settings.

- Step to the Settings menu. Press OK and select the relevant submenu. Press OK to enter:

Time \& Date (See p. 9 for details).
Language (See p. 8 for details).


Data Set up necessary parameters for data transmission from your laptop or PC. Specify connection parameters as to:

## Data cable

Bit rate (300 to 115200)
Reset

## Settings



## Basic parameters

Security. Network settings

Back

```
IrDA (Optional)
    Activate 國
    Baud rate (9600, 19200, 38400 or 57600)
    Reset
GPRS
    Attach on:
                            -GPRS coverage. The phone will connect via GPRS
when network is within reach
-App. request. The phone will connect to network only when requested (e.g.: when you send an SMS, WAP the Mobile Internet and transfer Data).
Accept calls . Regular calls will be carried through during GPRS sessions.
```

Security See p. 10 for details

## Network

Select network
Automatic
Manual

Call settings

## Preferred net.

The phone will search this list from the top. Left softkey options roll-up enables you to Add or Insert a new network. If you use Add, the selected network will be added to the end of the list (having the lowest priority). Insert will insert the network in the list where the cursor is placed.

## Add network.

To add a new network, start by selecting an empty network entry from the Add network menu. Press OK. A text editor will appear. Enter the name of the network followed by the Mobile Country Code (MCC) and the Mobile Network Code (MNC). Information supplied by your network operator.

## Call settings

Common calling options are described in "First steps" on p. 12. However, our phone also offers more advanced calling features, accessible from the Call settings menu.

| Network |  |
| :---: | :---: |
| Felect network |  |
| Preferred net Add network |  |
| $7 / 7$ | Back |
| Network |  |
| 1. CII 01 |  |
| Delete Add | BETEL |
| Inzert | . |
| Options | Back |



## Settings

Call settings Call forward Call waiting Optional func. Call barring

Note: Services such as Call wait, Call forward and Call barring depend on your network and type of subscription. Ask your operator for details.

## Basic parameters

Call forward. Call waiting

## Call forward

-Unconditional. To forward all incoming calls to a specified number.
-All unanswered. To forward all calls that you do not answer within a specified period of time.
-No reply. To forward calls that are not replied.
-Not reachable. To forward calls when you are out of network range.
-Busy. To forward calls when your phone is busy.
-Status all. To summarize the status of call forward options.
-Cancel all. To cancel all call forward settings.
A specific number can be designated for each option, and you can activate, view or cancel the present status. Follow the on-screen instructions.

## Call waiting

This function notifies you of another call during a telephone conversation. Enter the menu to Activate or Cancel Call waiting or to see the Status. If Call
72
waiting is active, and you are called during a conversation, you will hear a faint ringing tone in the background. To answer the new caller without losing contact with the original party:

- Enter Options roll-up menu. Select Switch calls.


## Optional func.

Any key answer
$7 / 7$ Back

- conduct the conversation with the new party and select Switch calls to return to the first caller.
- select Join calls to conduct a three-party conversation. See Conference call on p. 28 for details.


## Optional func.

This menu contains various settings to facilitate daily use.

Redial. Activates automatically re-dialling of your last unsuccessful call. The number will be redialed after 5 seconds ( 1 time), after 1 minute ( 3 times) and after 3 minutes ( 10 times). If this sequence is completed in full without connection is established, the number must

## Settings

Call barring
Cantel all
Outgoing calls
Incoming calls
Pascword
Back

## Basic parameters

Subtitle
be manually dialled for a new attempt.
To manually abort the redial sequence, press End. To manually redial last number called, press OK two times in succession.

Shortcut dial. If you activate Shortcut dial, you can dial phone numbers from the Shortcut list by pressing just one or two digits.

Any key answer. Set-up your phone to use any key (except (D), e.g. the earpiece volume control on the side, to answer your calls.

## Call barring

You can lock the phone to reject incoming calls or bar outgoing calls, domestic or international. Call barring is a password protected network service, and details should be acquired from your network. Your MX7812 support the following options:

```
Cancel all Outgoing calls
All calls
All international
Except to home
Incoming calls
All calls
When abroad
Password
```


## Billing

You can keep track of your calling expenses by setting up the Billing or "AoC" (Advise of Charge) feature:

- Scroll to Billing. Press OK. Enter the submenus:


Total calls - to view the total amount of time and units used.

Last call - to view the duration of the last call. Set max units - to setup a maximum of units available for a call.

## Settings

## Basic parameters

Subtitle
Units left - to view the number of units left on your account.

Price/unit - to enter a network price for the units.
Currency code - displayed if supported by your network.

## DTMF tones

Enabling DTMF tones allows you to remote control various telephone connected devices, e.g. listen to your home telephone answering machine.

| Settings |  |  |
| :--- | :---: | :---: |
| Metwork |  |  |
| Gall settings |  |  |
| Ruto key lock |  |  |
| Reset settings |  |  |
| Back |  |  |

## Auto key lock

Activates key lock after 30 sec . of idleness.
Reset settings
Reset all settings to factory defaults.

## Mobile phones in brief

Cellular technology

## How do cellular phones work?

Your cellular phone is basically no different from any other two-way radio system. The ingenuity of the cellular system lies in the splitting of the broadcasting environment into a multitude of relatively small cells with low-power transmitters.

This "cellular approach" to radio communication allows for extensive frequency reuse so that millions of people can use their mobile phones simultaneously although the number of frequencies are limited. The broadcasting cells are commonly illustrated as hexagons, typically 10 square miles in area with the base station in the center. This arrangement allows for non-adjacent cells to use the same frequencies without risk of interference.

Out of range. Your cellular phone is in constant contact with the nearest base station. As you move


## Mobile care <br> Mobile phones in brief

Coverage and roaming
from cell to cell, e.g. while driving in your car, the base station you are approaching takes over when you are within reach. This happens within split seconds without your noticing it. All you experience is a stable and clear connection.

However, not all network operators provide the same coverage in all areas. Hence, if you travel near the limit of your network's coverage, you may experience difficulties in maintaining the connection. The same may happen if the radio signal is blocked by obstacles such as high trees, hills or buildings, or if you are inside a heavily reinforced concrete building.

To remedy the situation move closer to the nearest mast if possible or seek higher ground. If you are inside a building, try moving towards a window.

What is roaming? Roaming is the technique that allows subscribers to move from one cell to another or from one network to another without affecting the call.

## Mobile phones in brief

Transmitting systems
What is digital? Early cellular phones relied on analogue systems. Analogue radio systems transmit the voice signal in its original form, whereas digital technology transforms the microphone signal into number sequences (digits) and transmit these. When received, the digital signal is decoded so that you can hear the sender's voice. Digital signals do not degrade in quality as long as the data is received, and they can be compressed to take up less memory.
What is Dual Band? A dual band cellphone has the capability to automatically switch between frequencies and can thus operate on two or more frequency bands, e.g. 900 Mhz and 1800 Mhz . By the same token, tri-band phones master three frequency bands.
What is GSM? Global System for Mobile communications is the most widespread standard for digital communication in Europe, Australia and in large parts of Asia and Africa. GSM uses frequencies in the 900 and 1800 Mhz bands.

## Mobile care <br> Mobile phones in brief

Acronyms \& abbreviations
What is APN? APN stands for Access Point Name and is basically an URL address on the Mobile Internet.

What is GPRS? General Packet Radio System is a service protocol built on GSM technology. GPRS allows several mobile phone users to share the same connection. Charges may thus be based on the amount of transferred data rather than on airtime.

What is CSD? A wireless service protocol used for WAP. CSD stands for Circuit Switched Data and will enable continuous connection and payment by the amount of data transferred.

What is SIM? Subscriber Identity Module or SIM is the little gold-plated plastic card that you get from your network operator and which holds the unique data the network needs to identify your phone.
What is PIN and what is PUK? Access to use a cellphone is most often protected by a code known as "PIN" - Personal Identification Number. Your SIM card

## Mobile phones in brief

comes with a default PIN that you can change to any code you prefer. See p. 9 for details. If you forget your code, or by mistake enter a faulty code three times in a row, the SIM card will lock. To unlock, you must enter the Personal Unblocking Key or "PUK" code that came with your SIM card.
What is IMEI? IMEI stands for International Mobile Equipment Identifier and is an identification system that can recognize every mobile phone by a specific number. If a phone is stolen, the IMEI system is capable of blocking it on all network operators that support the system.
What are MCC and MNC? Mobile Country Code is a code that identifies the country in which the subscriber lives. Mobile Network Code identifies the network operator.
What is DTMF? Dual Tone Multi Frequency or DTMF is a paging and remote control protocol that allows you to control certain functions via your phone, e.g.

## Mobile care <br> Mobile phones in brief

Acronyms \& abbreviations
listening to your answering machine.
What is SMS? Short Messages System is a mobile telephone protocol that makes it possible to send short text messages over the mobile network. SMS Class 0 messages are not stored in memory, but overwritten by the next SMS.
What is Cell Broadcast? Cell Broadcast is a service from your network provider. With CB, you will be alerted when entering a "cheap zone"or you can obtain traffic information, weather reports and other important information sent to you as text messages. Some providers also offer sports results, news bulletins or even commercials. If offering CB services, your network will forward a list of services and the relevant channels to enter.

What is WAP? Wireless Application Protocol or WAP is a standard that allows you to access parts of the Internet, known as "Mobile Internet" via your cellphone.
82

## Questions and answers

Q: My phone does not switch on when I press the (1)
key. What is wrong?
A: The phone has shut down because the power level
is too low to make calls. Recharge the battery.
Q: My phone displays: 'PLEASE INSERT SIM'?
A: You must insert the SIM before you can use the phone. If it is already installed, remove and clean the blank area with a dry cloth, then reinsert.

Q: My phone displays: 'INVALID SIM'?
A: The phone is SIM-locked and will not accept the inserted SIM. Insert the correct SIM or contact your retailer.

Q: My phone displays: "EMERGENCY CALLS ONLY"?
A: Your SIM card is not properly installed or configured, or you are out of network range.

Q: My phone displays: "NO NETWORK" ?
A: You are outside network range or there is no clear

## Miscellaneous <br> Questions and answers

view to the transmitter. If you are inside a building, try moving towards a window.

Q: Some calls are not processed. What is wrong?
A: A call bar has been set to restrict phone usage. Check call barring and cancel as necessary.

Q: Someone else is receiving my calls. What is wrong?
A: The phone has been set to forward your calls to another number. Cancel call forwarding as necessary.

Q: Can I send and receive emails and surf the Mobile Internet on my phone?
A: Yes. Your MX78xx has WAP capability, which means that you can access the Mobile Internet from your phone. For sending and receiving emails, please contact your network operator.

Q: Can I use my phone for transferring data from a laptop computer?
A: Yes. Your MX78xx has a fax and data modem.

## Questions and answers

Q: Can I download new ring tones and graphics to my phone?
A: We are working on that. In the meantime, you can compose your own ring tones using the "MelodyMaker".

Q: What is T9?
A: T9 text input is a predictive text editor that allows you to type using just one click per letter, thus saving time when writing SMS, text entries, etc.

Q: What type of networks support Maxon MX78xx?
A: Check the technical specifications on p. 88.
Q: What does dual-band, GSM, CDMA and all the other telecom argot mean?
A: See "How do cellular phones work" on p. 77
Q: Can I use my phone inside a car?
A: Road safety comes first. Always keep your eyes on the road if you are driving. You can install a "Hands free" set (see. p. 87) if you need to drive and talk at

## Miscellaneous <br> Questions and answers

the same time and if local legislation permits it. If your car is equipped with airbags, check safety precautions with your car dealer. See also "Warnings" (Cover).

Q: My battery stand-by time seems too short. What am I doing wrong?
A: You may have made excessive use of the display backlight or the MelodyMaker. Both are power consuming. Try switching off the backlight when you do not need it.

Q: Are cellular phones dangerous to my health?
A: No unambiguous scientific evidence exists today. We recommend that you keep abreast with the advice given by your domestic health authorities. See also "Warnings" (Cover).

Q: My phone has been lost or stolen. What do I do? A: Contact your network operator immediately to close your account and prevent misuse. Report your phone stolen to local police.

## Chargers:

■ Car charger

## Batteries:

■ Extended battery Li-Ion 900 mv.

## Portables:

- Leather carry case
- Carry strap
- Belt clip
- Headset

Car accessories:
■ Car mount cradle
Data / Fax accessories:
■ Data/Fax cable RS232
Data/Fax cable USB


Car mount


87

## Technical data

Physical:
Size: $108 \times 47 \times 19 \mathrm{~mm}$
Weight: 90 g.
Graph. display.
Performance:
GSM 900/1800, EGSM
Standby: up to 250 hours
(650 mA standard battery)
Talk time: 4 hours
Average charging: 90 min.
Radiation: 0.865 (EU)
I/O connectors:
Charger \& Data/Fax
Antenna
Headset

- Antenna
- Headset


## Power requirements:

■ Consump: max. 555 mA

- Internal voltage: 3.6 V


## Basics:

Long SMS (459 char.)

- Call wait and hold
- Call forward and barring
- Conference call
- Billing (AoC)
- 24 ring tones and tunes
- Vibrator


## Features:

Data and fax modem

- GPRS Class B10
- 250 (750) contacts
- Personal Organizer
- Melody composer

Games
A Page Battery, performance .....  6
Accept call 12 Battery, power level ..... 15
Accessories 91 Bearer type, SMS ..... 35
Advice of Charge 75 Bearer type, WAP ..... 41
Aircraft, caution in . . .Cover Belt clip ..... 87
Alarm (Reminder) ..... 54
Billing ..... 75
Alarm, set 52 Bookmarks, WAP ..... 38
Alert, SMS ..... 32
Alert tunes ..... 62 ..... Page
67 Cache, WAP Animation ..... 42
74 Calculator, using the Any key answer ..... 55
.75 Calendar AoC ..... 51
51 Calendar, look up Appointment, look up ..... 51
Appointment, new . 52 Calendar, new entry ..... 52
Arrow keys . 20 Call, make a ..... 12
Audio (Sound) settings 61 Call barring ..... 74
Call forward ..... 72
B Page Call, optional func ..... 73
Backlight, display ..... 12
Battery, charge ..... 28
. 6 Call, conference
Battery, optional ..... 75

## Index

Call, emergency ..... 14 D
Page
Call, incoming 12 Data settings ..... 41
Call, missed 14 Data/fax cable ..... 87
Call, redirected 13 Default, reset to ..... 63, 76
Caller group, setup 68 Dial, by voice ..... 48
Car charger .87 Dial-up number, WAP ..... 41
Car cradle ..... 87
Disclaimer ..... Cover
Car safety
Carry case ..... 87Display15
Driving, caution
Driving, caution ..... Cover ..... CoverCarry strap
Cell Broadcast ..... 36 E ..... Page87
Cell Broadcast, channels .36
Cell Broadcast, read 36 Entertainment Cell Broadcast, read ..... 57
. 36 Environment Cell Broadcast, set ..... Cover
Charger Externals ..... 16
Cigar lighter charger ..... 87
Clock, set ..... 9 F
Page
Conference call ..... 28
Contact, look up ..... 43
Contact, new ..... 44 ..... Page
Country Codes 13 Games
90

Index
Gateway, WAP ..... 40
IP-address, WAP ..... 41
GPRS ..... 35, 41
Greeting
Greeting ..... 66 ..... 66
GSM Keypad ..... Page
16
Kypad Keypad, lock ..... 17
H PageHands-free set . . .Cover, 87LPage
Hazards, avoid . . . . . .CoverHeadset87
Hearing aids, caution .Cover Lost your phone CoverLED19
High-risk activities . . .Cover
Home, WAP . . . . . . . . . . 37 ..... 37 M
M ..... Page
Menu navigation ..... 20
I Page Melody composer ..... 63
IMEI number . 11 Message, SMS ..... 31
Inbox, PUSH (WAP) ..... 39
Mobile phones, about ..... 77
Inbox, SMS ..... 33
Incoming call ..... 12 N ..... Page
Information boxes .25 Navigator key
Int. calling prefixes 13 Network ..... 7, 70
Internet, Mobile .....  57

## Index

| 0 | Page | R | Page |
| :---: | :---: | :---: | :---: |
| One key dialling | . 74 | Radio button | . 25 |
| Options softkey | . 23 | Read SMS | 32 |
| Organizer | . 51 | Redial call | . 73 |
| Outbox, SMS | . 33 | Reject call | . 12 |
| Outdoor | . 61 | Reset to default | 63, 76 |
| Own number | . 47 | Ring tones | . 62 |
|  |  | Roaming | 78 |
| P | Page |  |  |
| Pacemaker, caution | .Cover | S | Page |
| Password (PIN) | . 10 | Safety | .Cover |
| Password, WAP | . 39 | Scratch pad | . 27 |
| Phonebook | . 43 | Scrollbar | . 24 |
| PIN1, PIN2 | . 10 | Security . . . . | ver, 10 |
| PUK | . 10 | Service numbers | . . 50 |
| Pop-up boxes | . 25 | Settings menu | . 69 |
| Profiles, config. | . 61 | Silent | . 61 |
| Profiles, set . | . 61 | SIM 6 |  |
|  |  | SMS31 |  |
| Q | Page | Softkeys | . 23 |
| Questions \& Answers | . . 75 | Softkeys roll-up |  |

92

Index
Speech volume 18 Video (Display) ..... 66
Speed dialling .74 Voice dialling ..... 46
Stand-by time 88 Voice mail ..... 63
Volume, earpiece ..... 18
T Page
T9 text editor ..... 25 ..... Page
Talk time 88 Wallpaper ..... 67Technical data88 WAP, home
Text messages 31 WAP, sites ..... 3837
Time, set 10 WAP, profiles ..... 39
Tones 61 WAP, set connection ..... CoverTroubleshooting83 Warnings
Warranty ..... Cover
U Page Welcome .....  3
Unlock SIM .....  6
User Guide, about ..... 4
Username, WAP ..... 41
V ..... Page
Validity, SMS ..... 34
Vibrator ..... 63


94

Certificate of Approval, MX7810


Miscellaneous Notes

## 96

