

PTCarPhone 3

User Manual

Table of Contents

1. Using the phone	5
2. Safety information	6
3. Phone overview	8
4. Getting started	11
4.1 Insert SIM-Card	11
4.2 Switching the phone on/off	12
4.3 Enter the PIN code.....	12
4.4 Main display	12
5. Making calls	13
5.1 Emergency calls (network service)	13
5.2 Dialing with the keypad	13
5.3 Redial	13
5.4 Speed dial	13
5.5 Dialing from the phone book.....	13
5.6 Dialing from the call register	13
5.7 Answering a call	13
5.8 Rejecting a call.....	14
5.9 Ending a call.....	14
5.10 Adjusting the volume	14
5.11 Mute	14
5.12 Call switching/call waiting (network service)	14
5.13 Forward a Call (Second Handset is Required).....	14
6. Phone book	15
6.1 Searching for contacts	15
6.2 Adding contacts.....	15
6.3 Editing contacts.....	15
6.4 Deleting contacts.....	15
6.5 Memory status.....	16
6.6 Memory selection	16
6.7 Creating speed dials.....	16
7. Call Register	17
7.1 Saving to the phone book	17
7.2 Sending an SMS message	17
7.3 Deleting the call register	17
8. Text messaging (SMS)	18
8.1 Reading received messages (SMS)	18
8.2 Writing and sending messages.....	18
8.3 Deleting messages.....	18
8.4 Replying to messages	18
8.5 Forwarding messages	18
8.6 Editing messages.....	19
8.7 Saving messages.....	19
8.8 Calling back the sender of a message.....	19
8.9 Saving a phone number from a message.....	19
8.10 Saving a draft message.....	19

8.11 SMS memory details	19
9. Settings	20
9.1 Call settings.....	20
9.1.1 Sending your own number (network service).....	20
9.1.2 Call waiting (network service).....	20
9.1.3 Automatic answering	20
9.1.4 Incoming call.....	20
9.1.5 Duration of calls	20
9.2 Call divert (network service)	20
9.3 Language	21
9.4 Tones.....	21
9.4.1 Ringtone	21
9.4.2 Message alert tone	21
9.4.3 Keypad tone.....	21
9.5 Security.....	21
9.5.1 PIN code request.....	21
9.5.2 Changing access codes	22
9.5.2.1 Changing the PIN code.....	22
9.5.2.2 Changing the device code.....	22
9.6 Device.....	22
9.6.1 Contrast.....	22
9.6.2 Version	23
9.6.2.1 Firmware update.....	23
9.6.3 Delay timer	23
9.6.4 Answering by lifting the handset.....	23
9.6.5 Backlight.....	24
9.6.6 Configuration	24
9.6.6.1 Downloading from server.....	24
9.6.6.1.1 Downloading configuration file	24
9.6.6.2 Change configuration	24
9.6.6.2.1 Microphone	25
9.6.6.2.2 Second interface.....	25
9.6.6.2.3 Restoring factory settings.....	25
9.6.6.2.4 Operation mode	25
9.6.6.2.5 Digital output	26
9.6.6.2.6 Data logger	26
9.7 Network	27
9.7.1 Selecting network automatically	27
9.7.2 Selecting network from list.....	27
9.7.3 Selecting multi band	27
9.8 SMS message settings	27
9.8.1 Message center number	27
9.8.2 Saving an SMS message after sending	28
9.9 Internet	28
9.10 Clock.....	28
9.11 Alarm clock.....	28
9.12 Date.....	29
10. Installation.....	30
10.1 Precautionary Measures	30
10.2 Sequence of Installation/Starting-Up	30
11. General.....	32

11.1 List of abbreviations.....	32
11.2 Character tables	33
11.2.1 Large Font Mode.....	33
11.2.2 Small Font Mode.....	33
11.3 Editors	33
11.4 Specifications	34
11.5 Accessories.....	35
11.6 Included items	35

1. Using the phone

This user manual describes the functions and settings of the PTCarPhone 3 including the firmware version V.3.00.15 (without GPS) and V.3.00.07 (with GPS) and previous versions. Future firmware versions may contain changes that not be considered in this manual.

NOTE: Notes are marked with a blue box.

TIP: Tips are marked with a green box.

In this manual the steps necessary to use a function are described in an abbreviated form. The main display is always the starting point, e.g. to call up the list of missed calls:

MENU > CALL REGISTER > MISSED CALLS

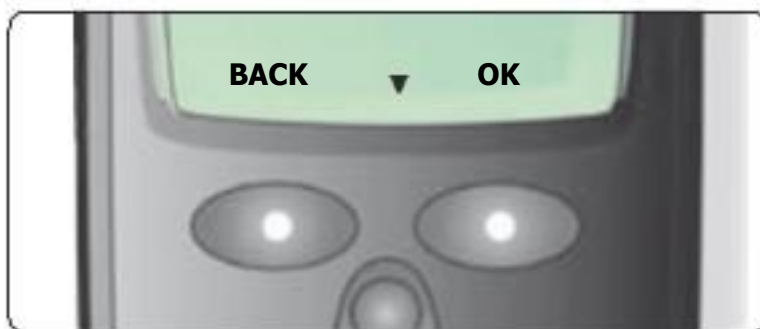
This would mean doing the following on the phone:

- Step 1: Press the right display key (**MENU**).
- Step 2: Use the navigation key to navigate to the particular menu item (here **CALL REGISTER**) and open it by pressing the right display key.
- Step 3: Repeat step 2 as necessary until you reach the last menu item (here **MISSED CALLS**).

The action of pressing the right or left display key is also described in an abbreviated form by the appropriate text symbol.

Example: Confirm your entry with **OK**.

This is how you proceed on the phone: Press the display key that has the text **OK** assigned to it.



Section showing display and display keys

TIP: Unless otherwise shown you get to the previous step by pressing the left display key. To cancel and return to the main display press the end key at any time.

2. Safety information

112 Emergency Calls

Like every other mobile telephone, this device functions with radio signals, mobile radio and landline networks and with user-programmed functions. Establishing a connection can therefore not be guaranteed in all situations. For this reason, you should not rely entirely upon the device in cases of vitally important communication (e.g. medical emergencies).

Remember that you can only make and receive calls with the device when it is switched on and in a service area with sufficient signal strength. Under certain circumstances, emergency calls cannot be made in all mobile radio networks; it is also possible that they cannot be made if certain network services and/or telephone functions are active.

Traffic Safety

While driving only use the hands-free function of the device. The handset must only be used for calls when the vehicle is stationary. Always fasten the handset in its holder; do not place the handset on the seat or a place from which it can come free in a collision or a sudden braking maneuver. The hands-free function is only active if the handset is in its cradle.

Operating Environment

Observe legal regulations and local restrictions when using the device. Switch the device off with the on/off key everywhere where this is requested by corresponding warning signs or where dangers could arise, e.g. close to fuel and/or flammable chemicals.

Health

The functioning of medical devices such as hearing aids and heart pacemakers can be disrupted. Keep a minimum distance of at least 20 cm (8") between the telephone and pacemakers. During a conversation, hold the telephone to the ear farthest away from the pacemaker. For further information consult your doctor.

Electronic Devices

Under certain circumstances high frequency signals can impair the function of incorrectly installed or insufficiently shielded electronic systems in the vehicle.

Accessories

Only use accessories that are approved for use with this device. The use of non-approved accessories leads to loss of the warranty and can result in the user being criminally prosecuted.

Ask your dealer or the manufacturer about approved accessories.

Maintenance, Installation and Repairs

Only qualified specialist personnel can maintain, install and/or repair this device. The device must not be opened. Any change to the device is not permitted and leads to the loss of the warranty.

Network Services

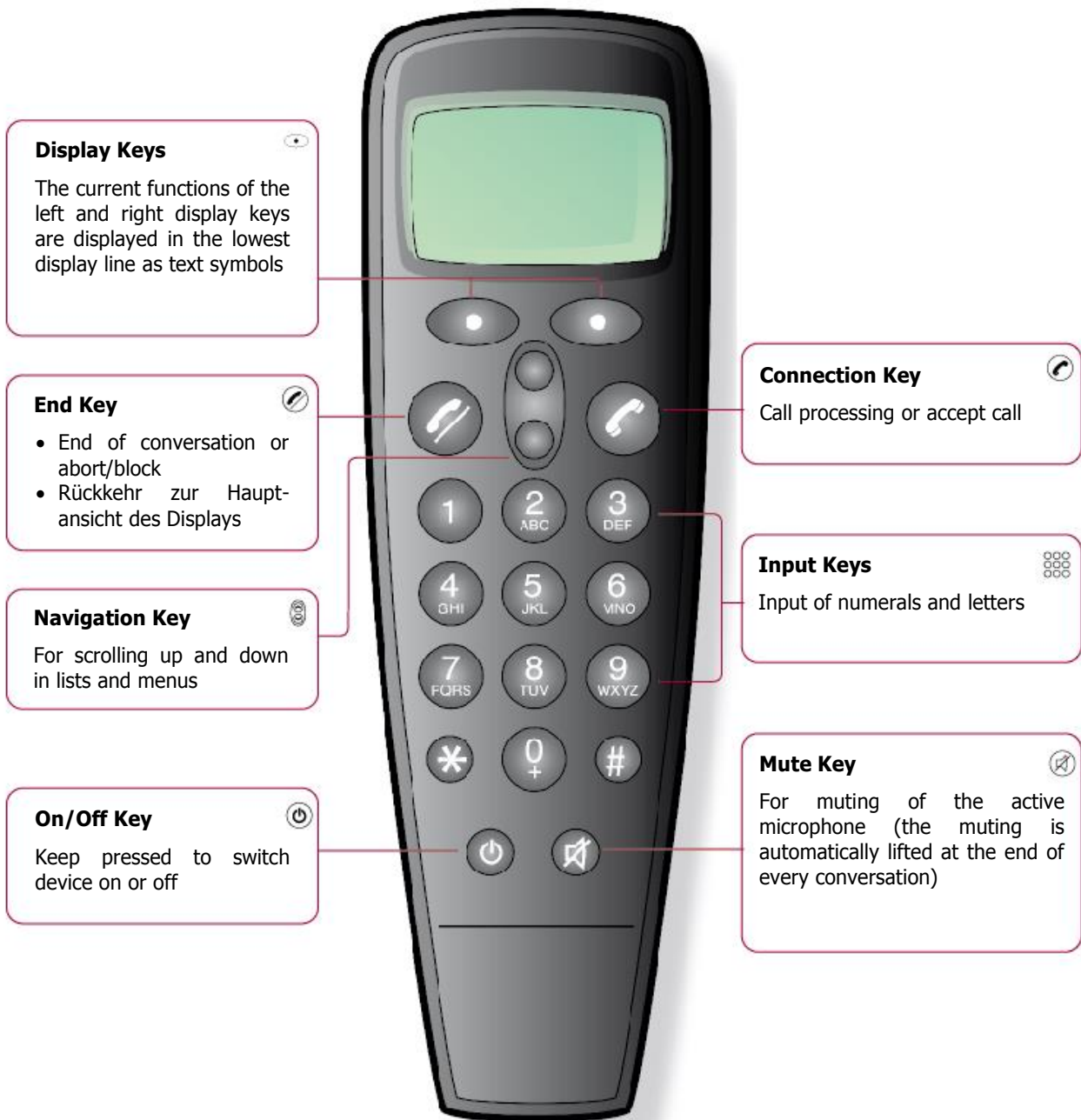
The telephone described in these operating instructions is for use in GSM 850/900 and GSM 1800/1900 mobile radio networks.

Some functions described in the operating instructions are called network services. Network services are special services that are made available at the request of the user by his provider. Before the user can

make use of them, he must have acquired the authorization to use these services from his provider. It is possible that some networks do not support all services.

3. Phone overview

The phone consists of the telephone unit (TPU) with a set of cables, handset, speaker and hands-free microphone.



Text Symbols Display Keys (1)

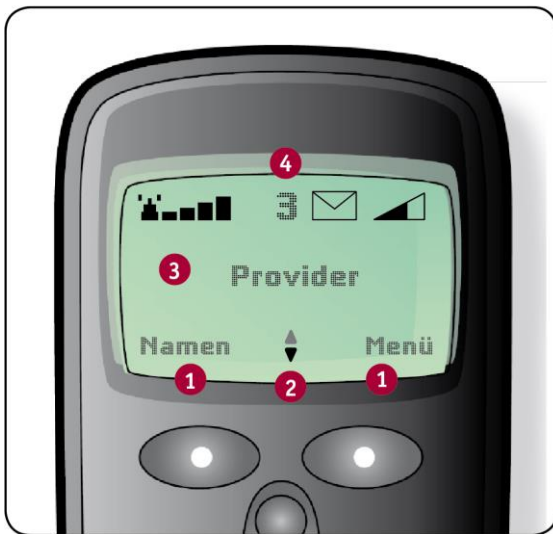
Text symbols for the current functions of the left and right display key

Control Symbols (2)

Show whether upward/downward scrolling is possible

Main Display (3)








Display of information on the present function; time or current provider in the main view of the display



Main view in private mode

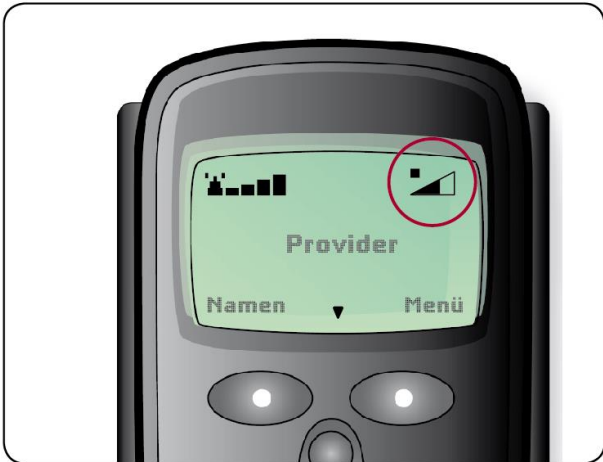
Symbol Bar (4)

Shows display symbols as described in the following:

-  Strength of the reception signal
-  Volume in private mode
-  Volume in hands-free mode
-  The active microphone is muted
-  Switched on: unread SMS in in-box
Flashing: storage left for only one more SMS
-  Roaming/Foreign Service Provider: the current service provider is displayed, and below this the home service provider
-  Activated GPS
 - 1 GPS-Signal - no valid position
 - 2 2D Fix - two-dimensional position
 - 3 3D Fix - three-dimensional position

Hands-free mode

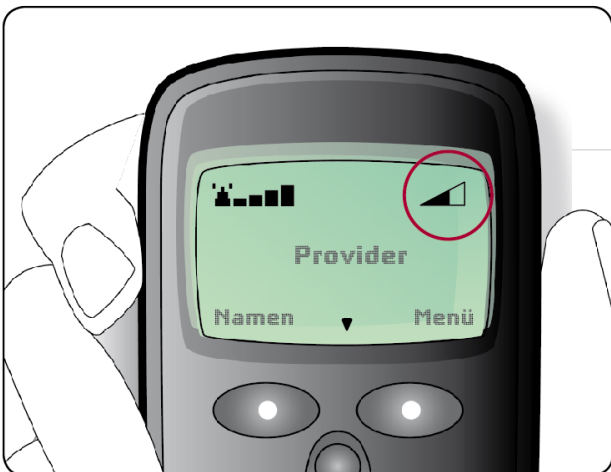
Active when the handset is placed in the supplied A8 holder and the conversation takes place through the external speaker and microphone. During the conversation you can adjust the volume using the navigation key. Lifting the handset, switches the mode to private.



Hands-free mode

Private mode

Active when the handset is lifted and the conversation is conducted through the handset. During the conversation you can adjust the volume using the navigation key. By placing the handset in the holder the mode switches to hands-free.



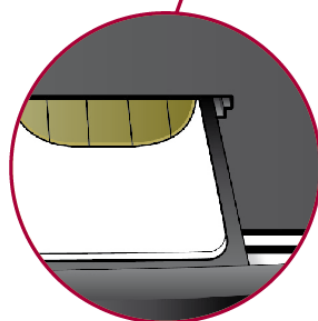
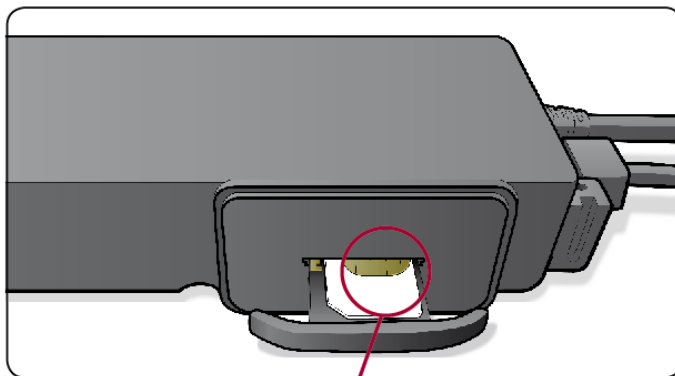
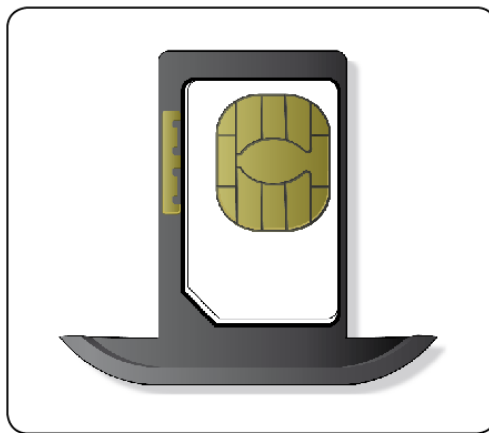
Private mode

4. Getting started

Proceed once the device has been installed by qualified personnel according to the installation instructions and checked it is then ready for use.

4.1 Insert SIM-Card

A valid SIM card is necessary to operate the device. You will receive this from your service provider. It stores all important data relating to your connection. If the SIM card has been supplied in cheque card format, separate the smaller section and remove any projecting waste pieces of plastic.



Make sure that the SIM card slides in in the right position.
No great physical force is necessary!

NOTE: Only insert the SIM card into a switched-off device, i.e. with the ignition switched off and elapsed run-down time!

4.2 Switching the phone on/off

The phone is switched on by the vehicle's ignition signal. It is switched off when the ignition is turned off, and an adjustable time delay has passed.

The phone can also be switched on/off at any time independent of the ignition signal by pressing and holding the power key.

4.3 Enter the PIN code

If it is necessary to enter a PIN, then you will be asked to do this by a corresponding message. Enter the PIN with the input keys and confirm them with **NEXT**. You can carry out a correction if you are use **DELETE**. So that your PIN cannot be seen, input characters are shown with an asterisk. The following registration in the network can take a few seconds.

After entry of the PIN the main view of the display is shown.

NOTE: After three incorrect attempts to enter the PIN the SIM card is frozen. To unfreeze the PIN, you will be asked to enter the PUK (MASTER-PIN).

4.4 Main display

Once the handset has been switched on and the PIN entered (if needed) the main display is shown. From here you can navigate through the various menus and settings. The display shows:

- Reception level
- Active mode (hands-free or private)
- Volume in this mode
- Service provider
- Shortcut to unread text messages (letter and navigation symbols, navigation key)
- Shortcut to phone book (**NAMES**, left display key)
- Menu access (**MENU**, right display key)
- GPS reception (see item 3 "Overview")

5. Making calls

5.1 Emergency calls (network service)

Official emergency numbers are enabled for emergency calls that can still be dialed with no PIN code. Enter the emergency number and dial it by pressing the call key.

NOTE: You must have to insert an activated SIM card from your provider in the device to be able to make an emergency call.

5.2 Dialing with the keypad

Enter the phone number (always including the area code or international code) using the keypad. You can make a correction by selecting **CLEAR**. To dial the number select **DIAL** or press the call key. To cancel the call select **REJECT** or press the end key.

5.3 Redial

From the main display press the call key and select the desired contact number using the navigation key. Press the call key again to dial the number.

5.4 Speed dial

The phone can save nine speed dial numbers. Press and hold one of the keypad numbers (1 to 9) and you will be shown any existing phone book entries assigned to it. Use the navigation key to scroll through the assigned speed dials. At the top right of the display area a number in brackets shows you the assigned speed dial key. To dial the contact number select **DIAL** or press the call key.

To create a new speed dial see section 6.7 „Creating speed dials“.

5.5 Dialing from the phone book

Select the contact number as described in section 6.1 "Searching for contacts" and then call the number by pressing the call key.

5.6 Dialing from the call register

Select the contact via **MENU > CALL REGISTER > MISSED CALLS**, **MENU > CALL REGISTER > RECEIVED CALLS** or **MENU > CALL REGISTER > DIALLED NUMBERS** and then call the number by pressing the call key.

5.7 Answering a call

Depending on the kind of car radio and connection the radio will be muted when there is an incoming call. You will hear the ringtone from the hands-free device at the set ringtone volume. You can answer the call by selecting **ANSWER** or by pressing the call key.

If the caller's number is transmitted you will see this on the display. If the number is in the phone book the caller's name will also be shown.

The radio is unmuted once the call has ended.

5.8 Rejecting a call

To reject a call select **REJECT** or press the end key.

5.9 Ending a call

To end a current call select **REJECT** or press the end key. The radio is unmuted once the call has ended.

5.10 Adjusting the volume

During a call, the volume can only be adjusted by using the navigation key. The volume settings for hands-free and private mode can be adjusted separately in the respective mode. The current volume setting is shown in the display's symbol bar.

For each call the last volume setting for that mode will be used.

5.11 Mute

Press the mute key to mute the active microphone during a call. If the microphone is muted the mute symbol will appear instead of the volume symbol. The microphone is unmuted once the call has ended.

5.12 Call switching/call waiting (network service)

If you receive another call during a conversation answer this call by pressing **SWITCH**. This answers the call and places the active conversation on hold. By pressing **SWITCH** again you can activate the conversation, which is on hold, and place the new conversation on hold. In the display the caller on hold is shown as **(h)** and the active caller as **(a)**.

You can only ever talk to the active caller.

The caller on hold is placed in a queue and also cannot hear the active conversation.

NOTE: The call switching function is only available if "**Call waiting**" is activated in the "**Call settings**". This function is also restricted to a maximum of two callers.

5.13 Forward a Call (Second Handset is Required)

After you accepted an incoming call on one handset (see section 9.1.4 "Incoming Call"), you can forward the active call to the other handset by pressing **SWITCH**. On the other handset appears a beep (not changeable) to signal an incoming forwarded call. Press **ACCEPT**/connection key to accept the call or **CANCEL**/end key to reject the call.

NOTE: If you press **CANCEL** or the end key to reject the forwarded call, the connection to the calling partner will be terminated on both handsets.

6. Phone book

You have a choice of saving phone numbers in the phone memory (internal phone book) or in the SIM card memory (SIM phone book). You can save up to 1,000 phone numbers in the phone memory. The number of contacts, which can be saved on the SIM card, depends on the particular card being used. Both phone books list contacts alphabetically. The SIM phone book is only available in operation mode 0.

TIP: When entering contact names you can change between upper and lower case as often as you like using the # key. The current case is shown in the top right of the display area as **ABC** for upper case and **abc** for lower case. By pressing a keypad number several times you can scroll through the characters assigned to that key. To delete all the characters in one go, press and hold **CLEAR**.

6.1 Searching for contacts

To search for a contact select **MENU > PHONE BOOK > SEARCH**. The first alphabetical contact will then be displayed. You now have the option of searching for an entry in the active phone book by using the navigation key or by entering a letter using the keypad. If there is no contact with that particular letter the next available contact will be shown. When you have found or selected a contact you can then choose to call the person by pressing the call key. By choosing **SELECT** you can edit, delete or copy the contact.

TIP: You can go straight to this function from the main display by pressing the left display key to select **NAMES**.

6.2 Adding contacts

To add a new contact select **MENU > PHONE BOOK > ADD**. You will then be asked to enter the contact's phone number using the keypad. Confirm with **NEXT** and then add the contact's name using the keypad. (Corrections can be made by selecting **CLEAR** and/or by using the navigation key.) To save the contact entry, select **OK**.

6.3 Editing contacts

Select the contact that you want to edit via **MENU > PHONE BOOK > EDIT**. You are now able to change the contact's phone number by selecting **CLEAR** and/or using the navigation key. Select **NEXT** and edit the contact's name with **CLEAR** and/or by using the navigation key. To confirm and save your changes select **OK**.

6.4 Deleting contacts

Select the contact that you want to delete via **MENU > PHONE BOOK > DELETE** and by using the navigation key. To delete the contact select **DELETE** and confirm that you are sure by selecting **YES**. To cancel select **BACK** or press the end key.

6.5 Memory status

To view the maximum amount of space left in the memory of either phone books and/or directory location select **MENU > PHONE BOOK > MEMORY STATUS**. Use the right display key to switch between the phone books.

6.6 Memory selection

Regardless of the operation mode you can select the active phone book and/or directory location via **MENU > PHONE BOOK > MEMORY SELECTION**. **SIM** selects the SIM card as the directory location, **PHONE** selects the phone memory.

6.7 Creating speed dials

The phone can save nine speed dial numbers. To select a speed dial entry, press and hold the assigned keypad number. Then press the call key to call the number (see section 5.4 „Speed dial”).

The phone can save speed dial tables, each with nine speed dials for up to ten SIM cards plus one speed dial table for the internal phone book in the phone memory. If the SIM card is swapped, the speed dial list that was previously created is loaded automatically. If more than ten different SIM cards are used, the oldest table will be deleted. If any SIM contacts are no longer available, these will be deleted from the speed dials.

All nine speed dials can be called by selecting **MENU > SPEED DIAL** and using the navigation key. The current allocation for each speed dial will be shown. Select **CHANGE** to access the contact in the active phone book. Choose the desired entry or contact using the navigation key and confirm your selection with **OK**.

7. Call Register

There are four call registers: **MISSED CALLS**, **RECEIVED CALLS** and **DIALLED NUMBERS** and **TOP 10**. Select **MENU > CALL REGISTER** and use the navigation key to highlight the call register you want and then choose **SELECT** to open it. Where entries are listed you can call the number by pressing the call key. Alternatively you can choose **SAVE TO PHONE BOOK** or **SEND MESSAGE** by choosing **SELECT**.

The phone can list ten numbers in each of first three call registers. If a list is full, the oldest entry is deleted. Each list is sorted chronologically. The latest entry is always the first in the list. If the same number appears twice in the list the latest entry is saved and the older one is deleted.

The **TOP 10** call register is different to the other lists. It is made up from the last 20 phone numbers used. The most frequently used phone numbers are at the top of the list.

TIP: By scrolling the navigation key upwards the **TOP 10** call register can also be viewed from the main display.

7.1 Saving to the phone book

To save a phone number from one of the call registers into the active phone book, first choose the register by selecting **MENU > CALL REGISTER** and by using the navigation key. Use the navigation key to navigate to the entry that you want to save to the phone book. Choose **SELECT** and then **SAVE TO PHONE BOOK**. The phone number is now displayed; if necessary it can be corrected by selecting **DELETE** and/or using the navigation key. Select **NEXT** to go to the name entry. Enter a name for the phone number via the keypad and select **OK** to confirm your entry and save it to the phone book.

7.2 Sending an SMS message

You have the option of sending a message straight to a number from one of the call registers. First choose the call register by selecting **MENU > CALL REGISTER** and by using the navigation key. Use the navigation key to navigate to the number to which you want to send a message. Choose **SELECT** and then **SEND AN SMS**. After you have entered your message using the keypad, press **NEXT** and then **SELECT** to correct the recipient's number if necessary. Now select **SEND** to send the message to the recipient.

7.3 Deleting the call register

Choose the list you want to delete by selecting **MENU > CALL REGISTER > DELETE LIST** and by using the navigation key. Select **DELETE** and confirm your choice with **YES**. To cancel, select **BACK** or press the end key.

8. Text messaging (SMS)

Please also read the tips on text entry under section 6. "Phone book".

8.1 Reading received messages (SMS)

When you receive a text message you will hear a message alert tone in the active speaker and the letter symbol will appear in the display. To read the message from the main display press the navigation key down to open the shortcut to the SMS inbox. If you have more than one unread message, select one using the navigation key and open it by choosing **SELECT**. If the message does not fit on the display, scroll up and down within the message using the navigation key. By choosing **SELECT** you now have the option to **DELETE, ANSWER, FORWARD, EDIT, SAVE, CALL-BACK** or to **SAVE NUMBER**. Follow the instructions in each case. Press **BACK** to open any other unread messages or use the end key.

NOTE: The shortcut to the SMS inbox is only available if there are unread SMS messages.

Alternatively you can also open a message via **MENU > SMS > SMS INBOX**. Select the message using the navigation key and open it by choosing **SELECT**. If you press **SELECT** again, you will have all the options described above.

8.2 Writing and sending messages

Select **MENU > SMS > WRITE SMS** to open the editing screen where you can write your message using the keypad. After you have entered the text, select **NEXT** and **SEND SMS**. Now choose whether you want to enter the recipient's phone number directly by selecting **ADD NUMBER** or whether you want to select a recipient from the active phone book by selecting **FROM PHONE BOOK**. To send the message to the recipient press **SEND**.

8.3 Deleting messages

Select the message you want to delete via **MENU > SMS > SMS INBOX** or **MENU > SMS > SMS ARCHIVE**. Press **SELECT** and choose the option **DELETE SMS**. Confirm that you are sure with **YES** in order to delete the message or cancel by selecting **BACK** or by pressing the end key.

8.4 Replying to messages

Select the message that you want to reply to via **MENU > SMS > SMS INBOX**. Press **SELECT** and choose the option **REPLY**. The text of the original message is already inserted in the editing screen. You can now edit the text and then select **NEXT** and **SELECT**, or you can change the recipient's phone number. Now select **SEND** to send the message.

8.5 Forwarding messages

Select the message you want to forward via **MENU > SMS > SMS INBOX** or **MENU > SMS > SMS ARCHIVE**. Press **SELECT** and choose the option **FORWARD**. The text of the original message is already inserted in the editing screen. You can now edit the text and then select **NEXT** and **SELECT**, or you can change the recipient's phone number. Select **ADD NUMBER** to enter the recipient's number

directly using the keypad or select **FROM PHONE BOOK** to choose a recipient from the active phone book. Now select **SEND** to send the message.

8.6 Editing messages

Select the message you want to edit via **MENU > SMS > SMS INBOX** or **MENU > SMS > SMS ARCHIVE**. Press **SELECT** and choose the option **CHANGE**. The text of the original message is already inserted in the editing screen for you to edit. Once you have finished, select **NEXT** to go to the options **SEND SMS**, **SAVE SMS** and **DELETE TEXT**. Choose one of the options and follow the instructions.

8.7 Saving messages

Select the message that you want to save to the SMS archive via **MENU > SMS > SMS INBOX**. Press **SELECT** and choose the option **SAVE SMS**. Choose **SELECT** to move the SMS to the SMS archive.

8.8 Calling back the sender of a message

Select the message whose sender you want to call back via **MENU > SMS > SMS INBOX**. Press **SELECT** and choose the option **CALL-BACK**. Choose **SELECT** to start calling the sender.

8.9 Saving a phone number from a message

Select the message with the phone number you want to save to the active phone book via **MENU > SMS > SMS INBOX**. Press **SELECT** and choose the option **SAVE NUMBER**. Choose **SELECT** to display the sender's number and edit it if necessary. Select **NEXT** to go to the contact name. Enter the sender's name via the keypad and select **OK** to confirm your entry and to save it to the active phone book.

8.10 Saving a draft message

If you do not want to send a message right away you can save a draft in the SMS archive ready to send later on. Select **MENU > SMS > WRITE SMS** to open the editing screen where you can write your message using the keypad. After you have entered your text, select **NEXT** and **SAVE SMS**. Select **OK** to save the message to the SMS archive.

Select your message draft by going to **MENU > SMS > SMS ARCHIVE** and choosing **SELECT**. Press **SELECT** again and you have the option to edit your draft further with **CHANGE**, to remove it from the SMS archive with **FORWARD**, **SEND** or **DELETE SMS**. In each case follow the instructions on the display.

8.11 SMS memory details

A total of 30 SMS messages can be held in the SMS inbox and the SMS archive. Select **MENU > SMS > MEMORY STATUS** to get details of the current memory status. Here you will find out details of the maximum memory capacity and the number of unread and saved SMS messages. A flashing letter symbol on the display means that there is only room for one more message.

9. Settings

You are able to personalize your PTCarPhone using the following setting options. The current settings will be shown when you access each setting menu.

9.1 Call settings

Settings for incoming and outgoing calls.

9.1.1 Sending your own number (network service)

When you make a call your phone number may be displayed on the recipient's phone. You can turn this function on or off via **MENU > SETTINGS > CALL SETTINGS > SEND MY NUMBER**. In some cases you will need to register this function separately with your service provider.

9.1.2 Call waiting (network service)

If you are registered for this service you can check whether call waiting is turned on or off by going to **MENU > SETTINGS > CALL SETTINGS > CALL WAITING**.

9.1.3 Automatic answering

This device supports automatic answering. Select **MENU > SETTINGS > AUTOMATIC ANSWER** and select one of the options: **ANSWER OFF, ANSWER AFTER 2 RINGS, ANSWER AFTER 5 RINGS**.

9.1.4 Incoming call

If an additional handset is connected to the device you can determine with this setting which of the handsets alerts you incoming calls. You can choose between the options **HANDSET 1, HANDSET 2** or **BOTH** via **MENU > SETTINGS > CALL SETTINGS**.

By selecting **HANDSET 1** you only receive an alert to an incoming call on the handset that is directly connected to the device (not to the second interface). By selecting **HANDSET 2** you only receive an alert to an incoming call on the handset that is connected to the second interface. By selecting **BOTH** you receive alerts to incoming calls on both handsets at the same time.

9.1.5 Duration of calls

To display the total duration of all outgoing calls select **MENU > CALL SETTINGS > DURATION OF CALL**. After a call has ended the duration of the call will be displayed for 5 seconds. To reset the counter select **DELETE** and follow the instructions. To delete the counter you will need the device code.

9.2 Call divert (network service)

Ensure that you can be reached by using the call divert options. Select **MENU > SETTINGS > CALL DIVERT** to turn the following call diverts on or off: **DIVERT IF UNATTAINABLE, DIVERT IF NO ANSWER, DIVERT IF ENGAGED** and **DIVERT ALL VOICE CALLS**. Select **CANCEL ALL DIVERTS** to turn off all active diverts. When you switch **ON** divert you will be asked to **ENTER NUMBER** by using

the keypad or to select a contact from the active phone book. Select **OK** to confirm your entry and to activate the call divert.

9.3 Language

Select **MENU > SETTINGS > LANGUAGE** to choose a language from German, English (UK), English (US), French, Italian, Spanish, Dutch or Swedish. Select **AUTOMATIC** to use the language setting from your SIM card. If the language from your SIM card is not available then English (UK) will be used.

9.4 Tones

This menu gives settings for tone functions.

9.4.1 Ringtone

To adjust the volume and melody of your ringtone go to **MENU > SETTINGS > RINGTONE**. Use the navigation key to adjust the volume. With the keypad (1-9) you can select from nine ringtones. The ringtone will then be played back at the set volume for you to check.

NOTE: When adjusting these settings the handset must be in the cradle otherwise the ringtones cannot be heard over the speaker.

9.4.2 Message alert tone

Select **MENU > SETTINGS > TONES > MESSAGE ALERT TONE** to turn on or off the acoustic tone that announces a new message.

9.4.3 Keypad tone

Select **MENU > SETTINGS > TONES > KEYPAD TONE** to turn on or off the acoustic keypad tone.

9.5 Security

The phone and SIM card are protected from unauthorized use by a number of security codes.

- PIN:** Protects your SIM card (Personal Identification Number).
PUK: Unblocks your SIM card if the wrong PIN code has been entered several times.
Device code: Protects your phone from misuse.

NOTE: You get the PIN and PUK codes from your service provider. Keep these secret codes safe but make sure that you have ready access to them!

9.5.1 PIN code request

The PIN code is normally requested every time you switch on the phone. However you can adjust this setting if you wish via **MENU > SETTINGS > SECURITY > PIN CODE REQUEST**. You have the following options: **ON**, **OFF** and **AUTOMATIC**.

You must have your PIN ready when changing these settings.

The **ON** and **OFF** options are features of the SIM card. Selecting one of these will turn the PIN code request on or off and this will then be saved on the SIM card.

NOTE: By switching off your PIN code your SIM card is at risk from unauthorized use by a third party which is why some service providers do not allow this option.

If you select the **AUTOMATIC** option the PIN code is saved in the device and is entered internally when the phone is switched on. If the automatic PIN code entry fails as it was changed on another phone or another SIM card was inserted you will be requested to enter your PIN code manually. If successful the PIN code request setting will be restored again to the factory settings (**ON**).

NOTE: The automatic PIN entry will fail if another SIM card is inserted into the phone. After successfully entering the PIN code the counter for incorrect attempts is reset.

9.5.2 Changing access codes

9.5.2.1 Changing the PIN code

You can change the PIN code to any 4 to 8 digit number. Select **MENU > SETTINGS > SECURITY > CHANGE ACCESS CODES > CHANGE PIN** and you will be asked to enter your current PIN code. After you have entered your PIN code select **NEXT**. You will be asked to enter a new PIN code and then in the next step to enter it a second time. By pressing **OK** this confirms and saves the new PIN code.

NOTE: The PIN code cannot be changed if the PIN code request is switched off.

9.5.2.2 Changing the device code

The device code protects certain device settings and must be entered when making any changes. The default setting of this code is **0000**. It is highly recommended that you change this code to a new code that can be any 4 to 8 digit number.

Select **MENU > SETTINGS > SECURITY > CHANGE ACCESS CODES > CHANGE HANDSET CODE** and you will be asked to enter your current handset code. After you have entered it select **NEXT**. You will be asked to enter a new handset code and then in the next step to enter it a second time. By pressing **NEXT** this confirms and saves the new handset code.

9.6 Device

Device and/or handset settings.

9.6.1 Contrast

To adjust the display contrast select **MENU > SETTINGS > DEVICE > CONTRAST** and choose a setting to suit your surroundings.

9.6.2 Version

To find out the current software version for the telephone unit (TPU) and the handset select **MENU > SETTINGS > DEVICE > VERSION**. Then choose either **PTC** (for the telephone unit) or **HA** (for the handset). The software version always begins with PTC for the telephone unit and HA for the handset.

9.6.2.1 Firmware update

To update your device's firmware and profit from constant development go to **MENU > SETTINGS > DEVICE > VERSION > PTC > UPDATE**. After you have selected **UPDATE** you will be asked to enter the device code. After entering the code the device establishes a GPRS connection and checks whether a more up-to-date firmware version is available. "**Checking version**" will appear on the display. If a more up-to-date firmware version is available this is automatically downloaded and installed onto your device. "**Update running**" and a progress bar will appear on the display. The device then restarts. The whole update process can take several minutes. If there is not a more up-to-date version available than the one currently installed then the device displays "**Software is up-to-date**".

TIP: You can cancel the update process at any time with **CANCEL**.

NOTE: If you receive the error message "Internet Connection Error" when trying to update then the update server is not available or the GPRS settings are incorrect. Try the update again at a later time. If necessary correct the internet settings (see section 9.9 Internet).

GPRS connections can generate extra charges. Please contact your service provider for more information.

9.6.3 Delay timer

The delay timer determines the length of time before the phone automatically switches off if the phone has been inactive and if the ignition has been turned off. This function can be useful to prevent the device from switching off if the ignition is only temporarily turned off (e.g. when fuelling). The delay timer is restarted whenever the phone is used again (when any key is pressed). If the phone is switched on using the power key when the ignition is turned off and the delay timer is set to 0 minutes, the phone will turn itself off again after 15 minutes (not editable). Again the delay time will be restarted when any key is pressed.

Select **MENU > SETTINGS > DEVICE > DELAY TIMER** to set the delay timer and choose one of the options: **0 MINS** (phone switches off when the ignition is turned off), **5 MINS**, **15 MINS**, **1 HR**, **2 HRS**, **4 HRS**, **8 HRS**, **12 HRS**, **1 d**, **7 d**, **10 d** or **30 d** (MINS = Minutes; HR = Hours; d = Days).

NOTE: This setting will not work if, contrary to the installation instructions, the ignition is connected to the permanent positive!

9.6.4 Answering by lifting the handset

Select **MENU > SETTINGS > DEVICE > ANSWER BY LIFTING HANDSET** to choose whether you want to answer a call simply by removing the handset from the holder. You have the option of selecting **ON** or **OFF**.

9.6.5 Backlight

The handset allows you to control the backlighting of the keypad and display separately. Select **MENU > SETTINGS > DEVICE > BACKLIGHT > KEYPAD** or **MENU > SETTINGS > DEVICE > BACKLIGHT > DISPLAY** and choose between **AUTOMATIC** and **PERMANENT**. The automatic option means that the backlighting is activated whenever a key is pressed and is turned off after a preset period of 30 seconds. The permanent option means that the backlighting is on continuously.

NOTE: Permanent display backlighting is only possible if permanent keypad backlighting has been selected.

9.6.6 Configuration

Select **MENU > SETTINGS > DEVICE > CONFIGURATION** to get to the settings for the hardware and optional modules on the PTCarPhone 3. You must enter the device code to gain access to the submenus.

9.6.6.1 Downloading from server

By selecting **MENU > SETTINGS > DEVICE > CONFIGURATION > DOWNLOAD FROM SERVER** you can download your own pre-programmed configuration file from a FTP server. This setting allows you to configure all of your devices in a group with the same settings by just pressing a few keys.

9.6.6.1.1 Downloading configuration file

Select **MENU > SETTINGS > DEVICE > CONFIGURATION > DOWNLOAD FROM SERVER > SELECT**. The FTP server's address will appear. Once you have already activated all the FTP settings you can start downloading the configuration file by pressing the call key. "**Automatic configuration**" appears on the display. A progress bar shows the progression of the operation. After successful configuration the main menu reappears.

If changes are needed in the FTP settings then select **MENU > SETTINGS > DEVICE > CONFIGURATION > DOWNLOAD FROM SERVER > SELECT > CHANGE**. The following settings are needed for successful configuration using a configuration file:

- FTP-Server (host name)
- File name (name of the configuration file)
- Username (username of the FTP user)
- Password (password of the FTP user)

NOTE: You can find information on creating configuration files on the website (www.ptcarphone.eu).

9.6.6.2 Change configuration

To carry out all configuration settings manually select **MENU > SETTINGS > DEVICE > CONFIGURATION > CHANGE**.

9.6.6.2.1 Microphone

To set the microphone gain to **0dB**, **+1dB** or **+2dB** select **MENU > SETTINGS > DEVICE > CONFIGURATION > CHANGE > MICROPHONE**. Choose the option you want and confirm by selecting **OK**.

9.6.6.2.2 Second interface

To detect an optional module, for example a second handset select **MENU > SETTINGS > DEVICE > CONFIGURATION > CHANGE > SERIAL INTERFACE**. With constant use of the same module it is recommended that the module is set up directly and not left to **AUTOMATIC**. This bypasses the test procedure for automatic detection when turning the device on.

The following setting options are available:

- **MODEM** A computer can be connected. The PTCarPhone in this case acts as a modem. GPS can not be accessed in this mode.
- **2. HANDSET** An additional handset can be connected.
- **GPS** An external GPS device can be connected. The baud rate in the submenu must be set to the baud rate of the GPS device.
- **AUTOMATIC** A supply voltage of 10.8 V with a maximum of 200 mA is available. The connected accessories are automatically detected when the PTCarPhone is turned on.

9.6.6.2.3 Restoring factory settings

To restore factory settings select **MENU > SETTINGS > DEVICE > CONFIGURATION > CHANGE > RESTORE FACTORY SETTINGS** and confirm that you are sure by selecting **YES**. Alternatively cancel by selecting **NO** or using the end key.

9.6.6.2.4 Operation mode

The device has several different operation modes. Each operation mode enables different usage of the phone book and the handset's menu tree. The operation mode can be changed via **MENU > SETTINGS > DEVICE > CONFIGURATION > CHANGE > OPERATION MODE**.

Operation mode 0:

In this mode the device works like a normal phone. The phone book available is the same as the selected directory. There are no restrictions on the handset's menu tree. This is the active mode when the device is issued.

Operation mode 1:

This mode restricts the use of the phone in terms of its phone book. Only the internal phone book is available. The menus for editing the phone book no longer appear in the handset. There are however no restrictions on dialing and sending messages via the keypad.

Operation mode 2:

All the phone book functions are the same as in operation mode 1. Only limited dialing is possible via the keypad. Only enabled numbers of the phone book can still be dialed and emergency numbers. These restrictions also apply to the sending of messages.

Operation mode 3: (as of firmware version 3.05.03 and 3.06.03 GPS)

The restrictions of operation mode 2 apply here as well. Additionally, receiving calls is restricted to phone numbers which are listed in the phone book. These restrictions do not apply to receiving messages.

NOTE: In operation mode 1, 2 and 3 the phone can only be used restrictively. This is a security feature, which is especially suitable for fleet vehicles as a cost-saving measure.

SECURITY SETTINGS				
Operation mode	Available phone memory		Dialing restrictions exist	Restrictions on receiving calls
	SIM card	PTCarPhone		
0	X ⁽¹⁾	X ⁽¹⁾		
1		X		
2		X	X	
3		X	X	X

⁽¹⁾ Only one of these is active

TIP: Configure the phone book in operation mode 0 and then switch to operation mode 1, 2 or 3.

The Windows® software Phonemanager 3 offers a convenient way of configuring the phone book. It is available as an option.

9.6.6.2.5 Digital output

This output's function can be set via **MENU > SETTINGS > DEVICE > CONFIGURATION > CHANGE > DIGITAL OUTPUT** and used as an event data logger.

Choose one of the following settings:

- **TELEFON ON** The output supplies power when the PTCarPhone 3 is switched on
- **RING** The output supplies power with every ringtone for one second
- **SWITCH** The output is switched by a command via SMS
It can be switched ON, OFF or for a five second pulse.

NOTE: Refer to the installation instructions to connect the digital output cable.

9.6.6.2.6 Data logger

To look at the data logger's memory status select **MENU > SETTINGS > DEVICE > CONFIGURATION > CHANGE > DATALOGGER**. Settings can be carried out here and data can be sent.

MEMORY STATUS:

The whole capacity and the number of received and unread data records is displayed, both taking into account the configured data record structure.

PARAMETER:

The data logger can be stopped and started here. Events, data record structures, cycle times, thresholds, optimizations and data formats are established in these settings. The settings for **EVENTS** and **DATA RECORD STRUCTURES** can be defined by pressing the #-key.

NOTE: By changing the "data record structure" or "data format" the whole content of the data logger is deleted. Before making any changes to settings it is recommended you read the data logger and save the data.

SEND:

You can send by **FTP** as well as by **EMAIL**. After selecting the process the destination address is always displayed. Start the sending process by pressing the call key.

With **CHANGE** you can edit the email address of the receiver and the data of the email transfer account.

TIPS: Refer to section 11.3 Editors for assistance on using editors.

9.7 Network

Settings that determine the network connection.

9.7.1 Selecting network automatically

Select **MENU > SETTINGS > NETWORK > SELECT AUTOMATICALLY** to restart the network search. An attempt will then be made to connect to the home network. If this is not possible the next network in the list will be used.

9.7.2 Selecting network from list

Select **MENU > SETTINGS > NETWORK > SELECT FROM LIST** to restart the network search. This is a good idea if you are not located within your home network area or you wish to connect to another network. You will then see a list of the available networks. Choose a network from the list and confirm with **OK**.

9.7.3 Selecting multi band

To adjust your phone to the frequency band used go to **MENU > SETTINGS > NETWORK > SELECT MULTI BAND**.

9.8 SMS message settings

This allows you to set basic SMS message settings.

9.8.1 Message center number

Select **MENU > SETTINGS > SMS SETTINGS > SMS CENTER** if you need to change the phone number of the service center, as given by your service provider. Enter the number using the keypad and confirm with **OK**.

9.8.2 Saving an SMS message after sending

If you want to automatically save an SMS message to the SMS archive after it has been sent select **MENU > SETTINGS > SMS SETTINGS > SAVE SMS AFTER SENDING** and choose **ON** or **OFF**.

9.9 Internet

To configure GPRS access to your service provider's website select **MENU > SETTINGS > INTERNET**. Enter individual parameters in the following menus. Then confirm them with **OK**.

MCC/MNC	Enter mobile country code / mobile network code
APN	Access point name
LOGIN	Username
PASSWORD	User password

TIP: If needed, contact your service provider for these details.

The access data of the following service providers are already saved on the device:

Provider	MCC/MNC
T-Mobile D	26201
Vodafone D2	26202
E-Plus	26203
o2 Germany	26207
SFR	20810
Bouygues Télécom	20820
Orange	20801
P+T Luxembourg	27001

9.10 Clock

To activate the internal clock select **MENU > SETTINGS > CLOCK**. Choose the display mode (**12 HOURS** or **24 HOURS**) and set the clock using the keypad.

The clock display starts 10 seconds after opening the main display. The time is merged in where the service provider is displayed. When changing cells or switching to another network (roaming), the current service provider is displayed for 10 seconds.

The clock is automatically synchronized when receiving a message or when a GPS signal is available.

NOTE: If you have a PTCarPhone 3 with an integrated GPS module (PTCarPhone 3/GPS Art.-No.: 2609-049-117-51), you only need to set the time once with a valid GPS signal so that the time difference to Universal Time is correctly set.

9.11 Alarm clock

To activate the alarm function, select **MENU > SETTINGS > ALARM CLOCK**. The alarm clock can be set to **OFF**, **ONCE** or **DAILY**. Once you have set an alarm time a spot appears behind the last figure in the clock display. Ringtone melody 3 plays as the alarm tone at the currently set ringtone volume and "alarm" flashes on the display. When the alarm "rings" you can snooze the alarm for two minutes by pressing **SNOOZE**. This option is available until you press **DELETE**.

NOTE: The clock must be on before you can use the alarm function. If the clock is not on when you try to set the alarm then you will be automatically directed to the clock settings menu. You will only be able to use the alarm function once you have switched the clock on.

9.12 Date

You can set the date by selecting **MENU > SETTINGS > DATE**. Press **SELECT** to choose one of the three date formats available: **DD.MM.YY**, **MM/DD/YY** or **YY-MM-DD**. Once you have selected this you can set the date.

NOTE: The date set is used in the call register.

10. Installation

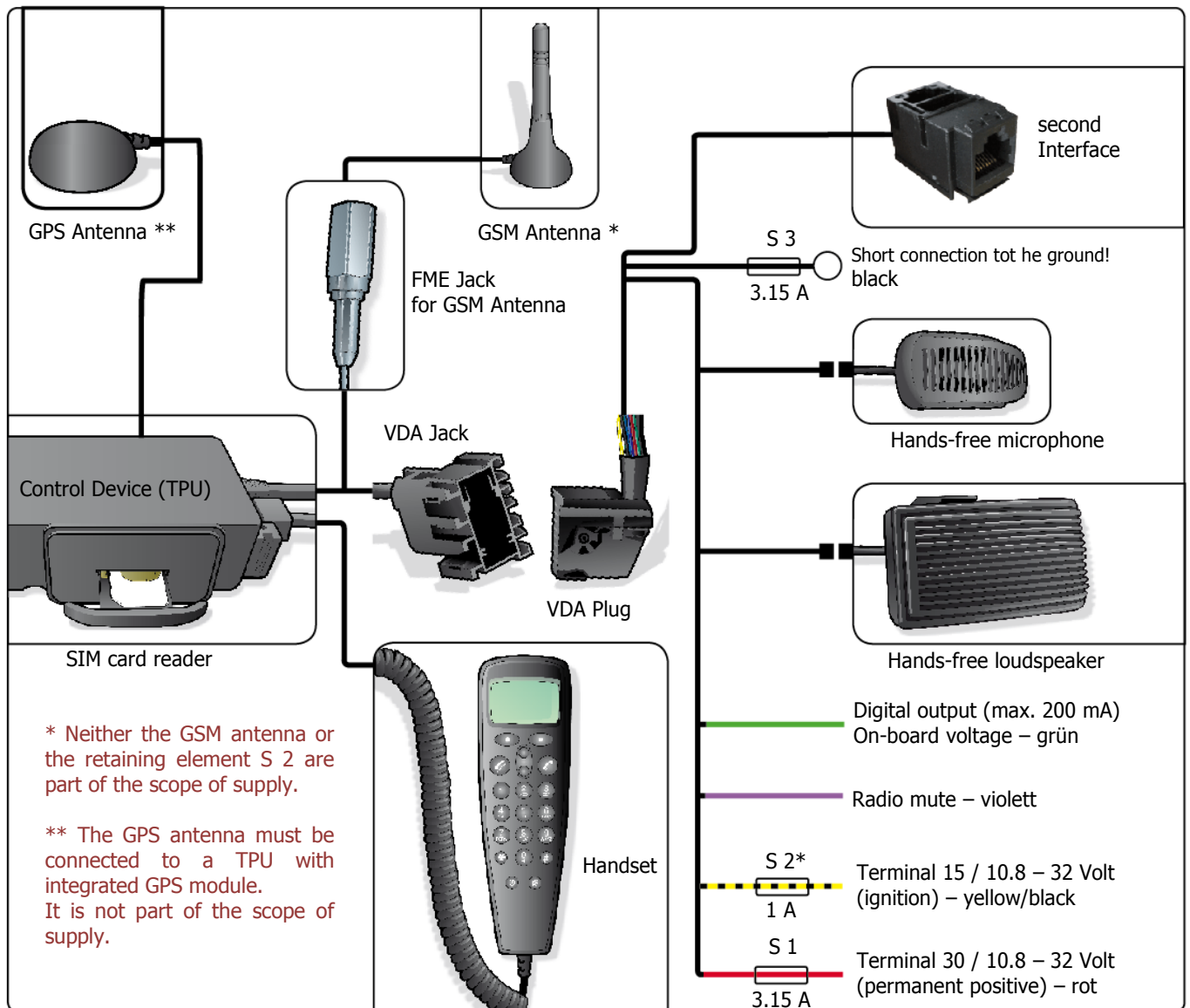
10.1 Precautionary Measures

1. The device must only be installed in the vehicle and serviced by qualified skilled personnel. Incorrect installation can cause electronic vehicle systems to malfunction. Incorrect installation or servicing can have dangerous results and lead to the voiding of the warranty and possibly of the operating license of your vehicle.
2. In vehicles that are equipped with an airbag, please be aware that the airbag is inflated with great force. Do not place any rigidly installed or movable equipment in the area that would be occupied by the inflated airbag.
3. Before the device is used for the first time, the GSM and, in the case of a TPU with integrated GPS module, the GPS antenna must be connected. The device must not be operated without antenna/e because this can lead to destruction.
4. In modern vehicles, under certain circumstances, adjustments may have to be carried out after clipping onto the vehicle battery. For this, be sure to consult the operating manual of your vehicle for assistance.

In the event that these instructions are not adhered to, legal measures may be initiated against the offender.

10.2 Sequence of Installation/Starting-Up

1. Unclip negative pole of the vehicle battery. Here note the safety instructions of the vehicle manufacturer.
2. Familiarize yourself with the wiring diagram (picture Connection Diagram).

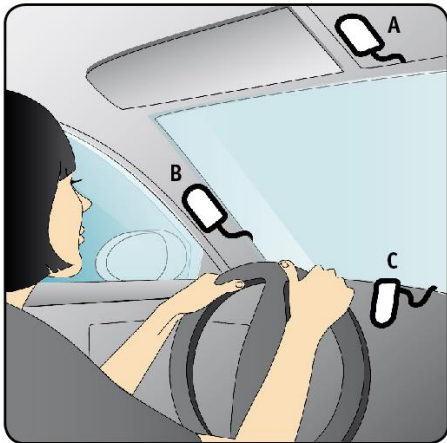


3. Select places for installation and install the control device (TPU), handset, loudspeakers, microphone and antenna taking into account the cable lengths and installation instructions. When drilling holes make sure that no vehicle parts become damaged. Use cable bushings where holes have sharp edges.

4. Install the microphone ME15, supplied for the hands-free kit, in accordance with the installation sketch (Picture *Installation of Microphone*); the best distance from the mouth is approx. 30 cm; airflows from the ventilation should not go towards the microphone (see also Picture *Places to Install Microphone*). The loudspeaker is then installed (the best position is in the lower front passenger foot well).

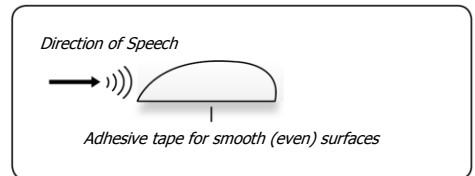
When installing the microphone and loudspeaker, make sure that they are sufficiently far apart to prevent an acoustic short-circuit. In an especially loud environment the directional gooseneck microphone ME251 (accessories) can also be used.

Places to Install Microphone



A = optimal position
B = suitable alternative
C = suitable to a limited extent

Installation of Microphone



5. Connect the electrical supply cable (red cable) to terminal 30 (permanent positive). It is absolutely necessary for the ignition input (yellow/black cable) to be connected to the ignition (terminal 15) in order for the device to be switched on automatically with the ignition. It is advised that you do not place the ignition input of the device on permanent positive, because that restricts the device's functional range. After the ignition has been switched off, the device continues to run for the programmed time and then switches itself off. The earth cable is connected directly to the vehicle battery via a 3.15 A fuse, the central earth point or a part of the vehicle body that ensures a safe earth connection.
6. If available connect the violet cable to the mute output of your car radio.
7. Insulate unused cables so that no short circuits can occur.
8. Connect handset/s, loudspeaker, microphone and antenna/e firmly to the control device using the plug-in and/or screw joints.
9. Check again to make sure the installation was performed correctly.
10. Insert a activated SIM card.
11. Connect vehicle battery and switch on ignition.
12. Device switches itself on and requests a PIN, if this preset response has not already been switched off on the SIM card.
13. Enter PIN – telephone registers itself in the network.
14. Set up voice calls and test the hands-free kit.
15. Carry out other activities and/or personal settings as necessary.

11. General

11.1 List of abbreviations

FTP File Transfer Protocol

PIN Personal Identification Number
 PUK Personal Unblocking Key
 SIM Subscriber Identity Module
 SMS Short Message Service
 TPU Telephone Unit
 UTC Universal Time

11.2 Character tables

If you press a keypad several times while in letter mode you can scroll through the characters assigned to that key.

11.2.1 Large Font Mode

Key	1x	2x	3x	4x	5x	6x	7x	8x	9x	10x	11x	12x	13x	14x
1	.	,	'	?	!	"	1	-	()	/	:	_	
2	A	B	C	2	Ä	Å	Æ	Ç						
3	D	E	F	3	È									
4	G	H	I	4	Ì									
5	J	K	L	5	\$									
6	M	N	O	6	Ö	Ñ	Ø							
7	P	Q	R	7	ß									
8	T	U	V	8	Ü	U								
9	W	X	Y	9										
0	_	+	=	0	Δ	Φ	Γ	Λ	Ω	Π	Ψ	Σ	Θ	≡
*	*	#	;	<	>	&	Ì	@	£	¿				

11.2.2 Small Font Mode

Key	1x	2x	3x	4x	5x	6x	7x	8x	9x	10x	11x	12x	13x	14x
1	.	,	'	?	!	"	1	-	()	/	:	_	
2	a	b	c	2	ä	å	ã	æ	ç					
3	d	e	f	3	è	é								
4	g	h	i	4	ì									
5	j	k	l	5	\$									
6	m	n	o	6	ö	ñ	õ	ø						
7	p	q	r	7	ß									
8	t	u	v	8	ü	u								
9	w	x	y	9										
0	_	+	=	0	Δ	Φ	Γ	Λ	Ω	Π	Ψ	Σ	Θ	≡
*	*	#	;	<	>	&	Ì	@	£	¿				

11.3 Editors

Using editors in text mode

Key	#	switch between upper and lower case
Keys	0...9, press	output according to character table left of the cursor
Keys	0...9, hold	direct output of digits left of the cursor
Key	DELETE , press	deletes characters left of the cursor
Key	DELETE , hold	deletes the whole content in text box
Key	BACK (text box is empty)	leave editor without saving data
Key	OK	leave editor with saving data
Key	Up navigation key	cursor one position backwards
Key	Down navigation key	cursor one position forward

11.4 Specifications

GSM module

- Quad band 850/900/1800/1900 MHz
- Power for 850/900 MHz 2 watt
- Power for 1800/1900 MHz 1 watt
- Emergency call function (911/112)
- SMS capability (160 characters per SMS)

Interface

- RS232 with V24 level
- Baud rate: 115200
- Parity: none
- Data bits: 8
- Stop bits: 1
- Handshake: adjustable (default = OFF)

Operating voltage 10.8 to 32 Volt

Current requirement

- OFF: < 1 mA
- OFF: < 50 mA with active alarm function at 12 V
- OFF: < 25 mA with active alarm function at 24 V
- ON: approx. 100 mA when the handset is not backlit
- ON: approx. 200 mA when the handset is backlit
- ON: < 800 mA when in hands-free mode

Temperature

Operating: -4 °F to 158 °F (-20 °C to 70 °C)
 Storage: -40 °F to 185 °F (-40 °C to 85 °C)

Fuses

3.15 A fuse for permanent positive
 3.15 A fuse for earth ground connection
 1 A fuse for ignition (not included)

GSM antenna GSM quad band antenna with FME connection (not included)

GPS antenna GPS antenna with SMA plug (not included)

NOTE: Be aware of the antennas' installation conditions in the vehicle. Please contact your qualified mobile personnel with any questions.

Type approval number e1*72/245*2006/28*5674*00

License number e1 03 5674

11.5 Accessories

PTCarPhone 3 accessories include the following:

HA88 handset including extension cable (5m)

Item number: 2508-242-012-51

PTPhoneManager II

Item number: 6900-000-000-00

Gooseneck microphone ME251

Item number: 2908-029-000-51

11.6 Included items

The following items are included:

- Telephone unit (TPU)
- Handset
- Loudspeaker
- Hands-free microphone
- 2.5m extension cable for handset
- Cable set with second interface
- Brief guide