Documentation

HiPath 500, HiPath 3000/5000, HiPath 4000
OpenStage 10 T, OpenStage 15 T, OpenStage 20 T, OpenStage 30 T, OpenStage 40 T, OpenStage 60 T, OpenStage 80 T

Administration Manual

Communication for the open minded

Siemens Enterprise Communications
www.siemens-enterprise.com

SIEMENS

Content

1 Overview

1.1 Important Notes

For safety reasons, the phone can only be supplied with power by the original power supply unit → page 9.

Never open the telephone or add-on equipment. If you encounter any problems, contact System Support.

Use only original Siemens accessories!
Using other accessories may be dangerous, and will invalidate the warranty, extended manufacturer's liability and the CE mark.

Installation requirement for USA, Canada, Norway, Finland and Sweden: Connection to networks which use outside cables is prohibited. Only in-house networks are permitted.

For USA and Canada only:
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This product is a UL Listed Accessory, I.T.E., in U.S.A. and Canada.
This equipment also complies with the Part 68 of the FCC Rules and the Industrie Canada CS-03.

1.2 About the Manual

The instructions within this manual will help you in administering and maintaining the phones OpenStage 10 T, OpenStage 15 T, OpenStage 20 T, OpenStage 30 T, OpenStage 40 T, OpenStage 60 T and OpenStage 80 T. The instructions contain important information for safe and proper operation of the phones. Follow them carefully to avoid improper operation and get the most out of your multi-function telephone in a network environment.

This guide is intended for service providers and network administrators. The tasks described in this guide are not intended for end users. Many of these tasks affect the ability of a phone to function on the network and require an understanding of telephony concepts.

These instructions are laid out in a user-oriented manner, which means that you are led through the functions of the OpenStage TDM phone step by step, wherever expedient. For the users, a separate manual is provided.

You can find further information on the official Siemens Enterprise Communications website:
http://www.enterprise-communications.siemens.com
and on the Siemens Enterprise Wiki:
http://wiki.siemens-enterprise.com/

1.3 User Interface

1.3.1 OpenStage 60 T/80 T

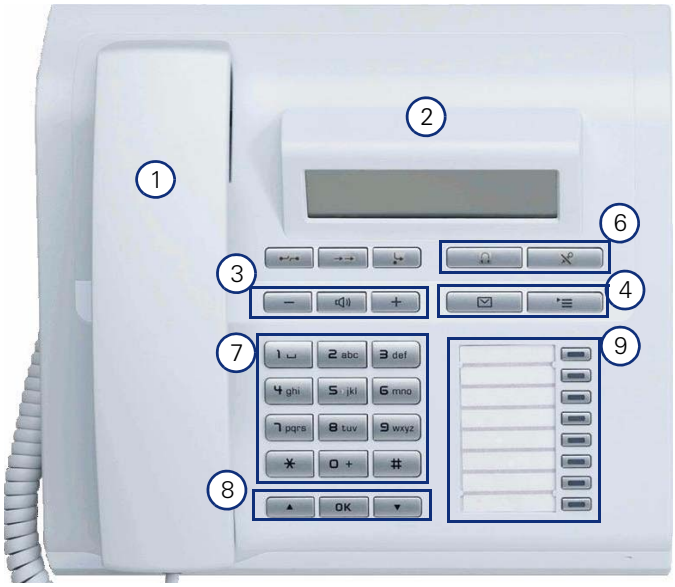
1	The **handset** lets you pick up and dial calls in the usual manner.
2	The **display** provides intuitive support for telephone operation.
3	The user-friendly **mode keys** ⓘ, ⓘ, ⓘ, ⓘ, ⓘ and ? provide easy access to your telephone's applications. To select a tab within a function press the relevant key repeatedly until the required tab is displayed.
4	With the **TouchGuide**, the user/administrator can navigate in the various phone functions, applications, and configuration menus.
5	You can customize your telephone in line with your personal needs by assigning individual phone numbers and functions to the **free programmable sensor keys**.
6	Press the **function keys** [ ], [ ] and [ ] to access frequently used telephony functions.
7	The **audio keys** [−], [ ], [+], [ ] and [ ] let you optimize the audio settings on your telephone.
8	With the **TouchSlider**, the user can adjust the volume, e.g. of ringtones.
9	The **keypad** is used for entering phone numbers and text.
10	Inbound calls are visually signaled on the **call display**.

The only difference between the OpenStage 80 T and OpenStage 60 T is their housings.

1.3.2 OpenStage 40 T

1	The **handset** lets you pick up and dial calls in the usual manner.
2	The **display** provides intuitive support for telephone operation.
3	You can customize your telephone in line with your personal needs by assigning individual phone numbers and functions to the **free programmable sensor keys**.
4	Press the **function keys** ⊷, →→ and ↳ to access frequently used telephony functions.
5	**Mailbox key** ✉ and **menu key** ☰.
6	The **audio keys** −, 🔊, +, 🎧 and 🎤 let you optimize the audio settings on your telephone.
7	With the **5-way navigator**, the user/administrator can navigate in the various phone functions, applications, and configuration menus.
8	The **keypad** is used for entering phone numbers and text.
9	Inbound calls are visually signaled on the **call display**.

1.3.3 OpenStage 30 T

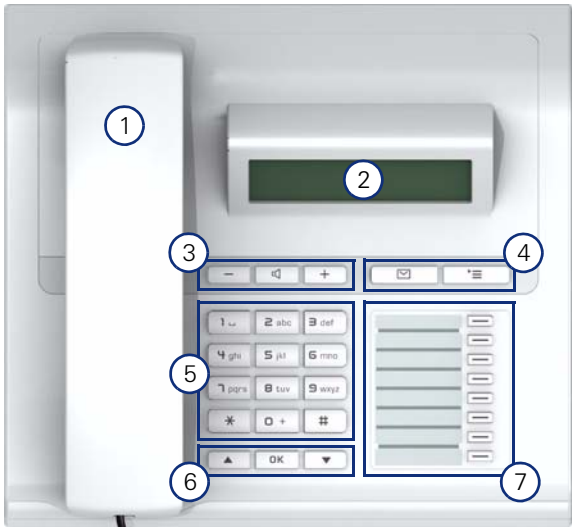


1	The **handset** lets the user pick up and dial calls in the usual manner.
2	The **display** provides intuitive support for telephone operation.
3	The **audio keys** [−], [🔊], and [+], let the user optimize the audio settings on his telephone.
4	With the **mailbox key** [✉] and **menu key** [☰], the user can access the service menu or the mailbox.
5	With the **function keys** [↩], [→→] and [↳], the user can access the frequently used telephony functions release, redial, and call forwarding.
6	With the **headset key**, the user can answer calls, for instance. With the microphone key, he can prevent the other party from hearing internal conversations.
7	The **keypad** is used for entering phone numbers and text.
8	With the **navigation keys**, the user/administrator can navigate in the various phone functions, applications, and configuration menus.
9	The user can customize his telephone in line with his personal needs by assigning individual phone numbers and functions to the **free programmable sensor keys**.

1.3.4 OpenStage 20 T

1	The **handset** lets you pick up and dial calls in the usual manner.
2	The **display** provides intuitive support for telephone operation.
3	Press the **function keys** ⊷, →→, ↳ and ✂ to access frequently used telephony functions.
4	**Mailbox key** ✉ and **menu key** ☰.
5	The **audio keys** −, 🔊 and + let you optimize the audio settings on your telephone.
6	With the **3-way navigator**, the user/administrator can navigate in the various phone functions, applications, and configuration menus.
7	The **keypad** is used for entering phone numbers and text.

1.3.5 OpenStage 15 T



1	The **handset** lets you pick up and dial calls in the usual manner.
2	The **display** provides intuitive support for telephone operation.
3	The **audio keys** let you optimize the audio settings on your telephone.
4	**mailbox key** and **menu key**.
5	The **keypad** is used for entering phone numbers and text.
6	With the **navigaton keys**, the user/administrator can navigate in the various phone functions, applications, and configuration menus.
7	You can customize your telephone in line with your personal needs by assigning individual phone numbers and functions to the **free programmable keys**.

1.3.6 OpenStage 10 T

1	The **handset** lets you pick up and dial calls in the usual manner.
2	You can customize your telephone in line with your personal needs by assigning individual phone numbers and functions to the **free programmable keys**.
3	The **audio keys** let you optimize the audio settings on your telephone.
4	The **keypad** is used for entering phone numbers and text.

1.4 Administration

The OpenStage TDM telephones mainly will be equipped by the **HiPath Communication System** it is connected to. For further information refer to the corresponding Service Manual.

Beside the main administration via the Communication System, there are view parameters which can be set for the OpenStage 60 T/80 T telephone individually via **Local Menu**. These parameters are described in Section 3, "Administration".

With the functionality of the **OpenStage Manager**, the user can personalize his OpenStage 60 T/80 T telephone with own pictures and ringtone files and also customize the personal phonebook.
You can find a short overview of these functions in Section 4.2.2, "Media Files".

2 Startup

2.1 Prerequisites

The HiPath communications platform HiPath 500, HiPath 3000/5000 or HiPath 4000 is ready to operate.

2.2 Assembling and Installing the Phone

2.2.1 Shipment

- Telephone
- Handset
- Handset cable
- Subpackage:
  - Document "Installation and Quick Reference Guide"
  - Emergency number sticker

Please pay attention to the notes on power supply on Section 1.1, "Important Notes" and Section 2.2.5, "Power supply".

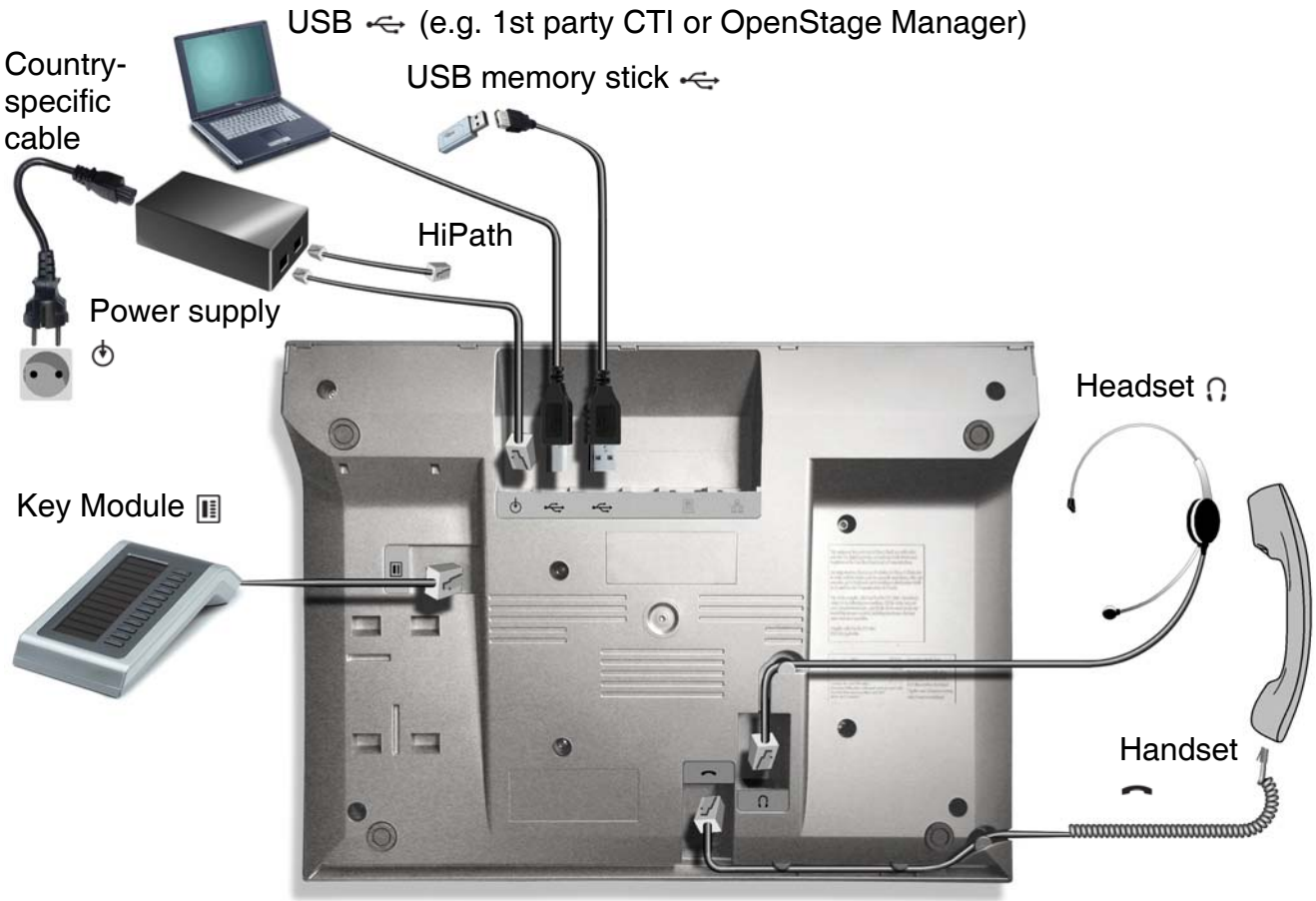
2.2.2 Assembly

1. Handset: Insert the plug on the long end of the handset cable into the jack on the base of the telephone and press the cable into the groove provided for it. Next, insert the plug on the short end of the handset cable into the jack on the handset.
2. Emergency Number Sticker: Write your telephone number and those for the fire and police departments on the included label and attach it to the telephone housing underneath the handset (see arrow).

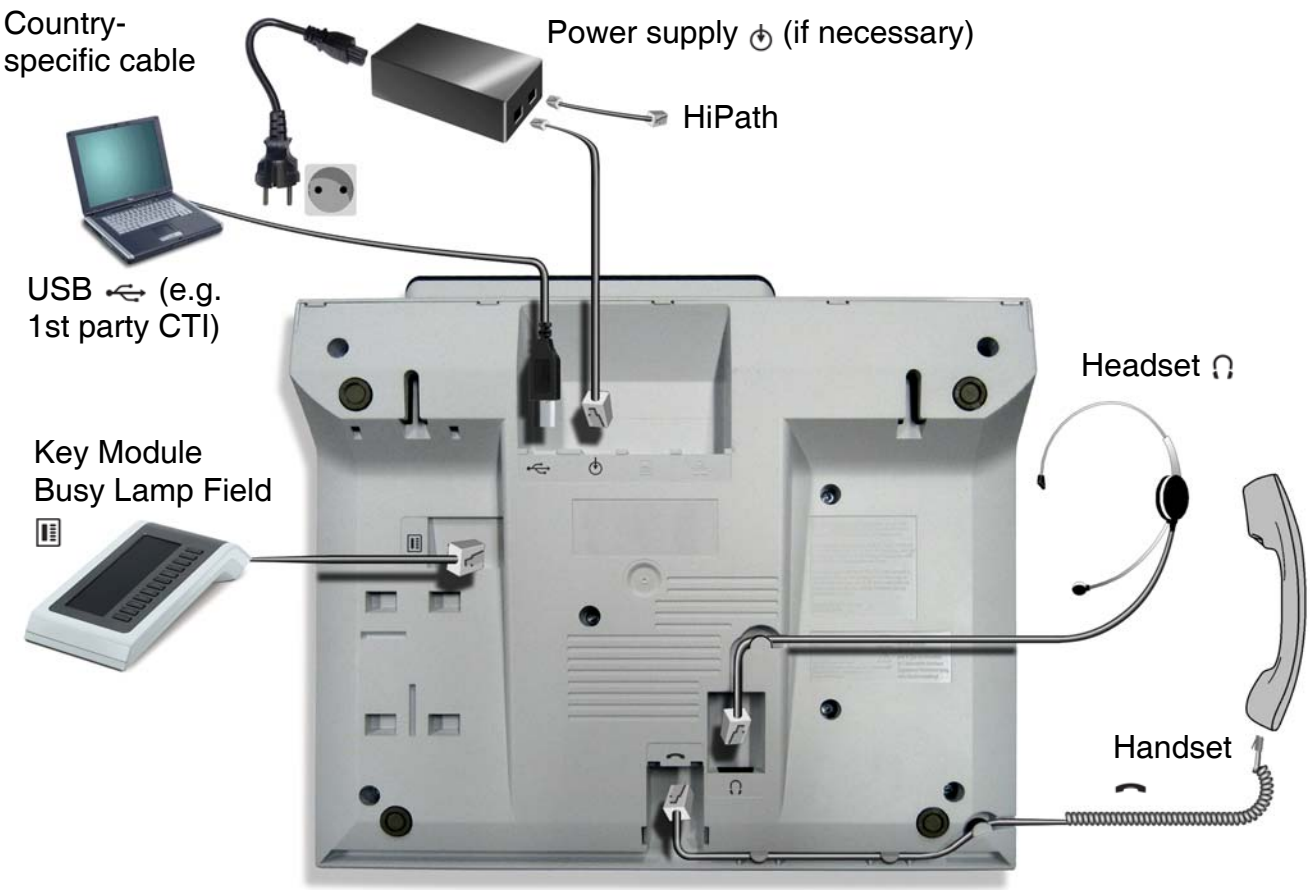
3. OpenStage 60 T/80 T only: Before using the telephone, remove the protective covering from the Navigator/TouchGuide ring surface.

2.2.3 Connectors at the bottom side

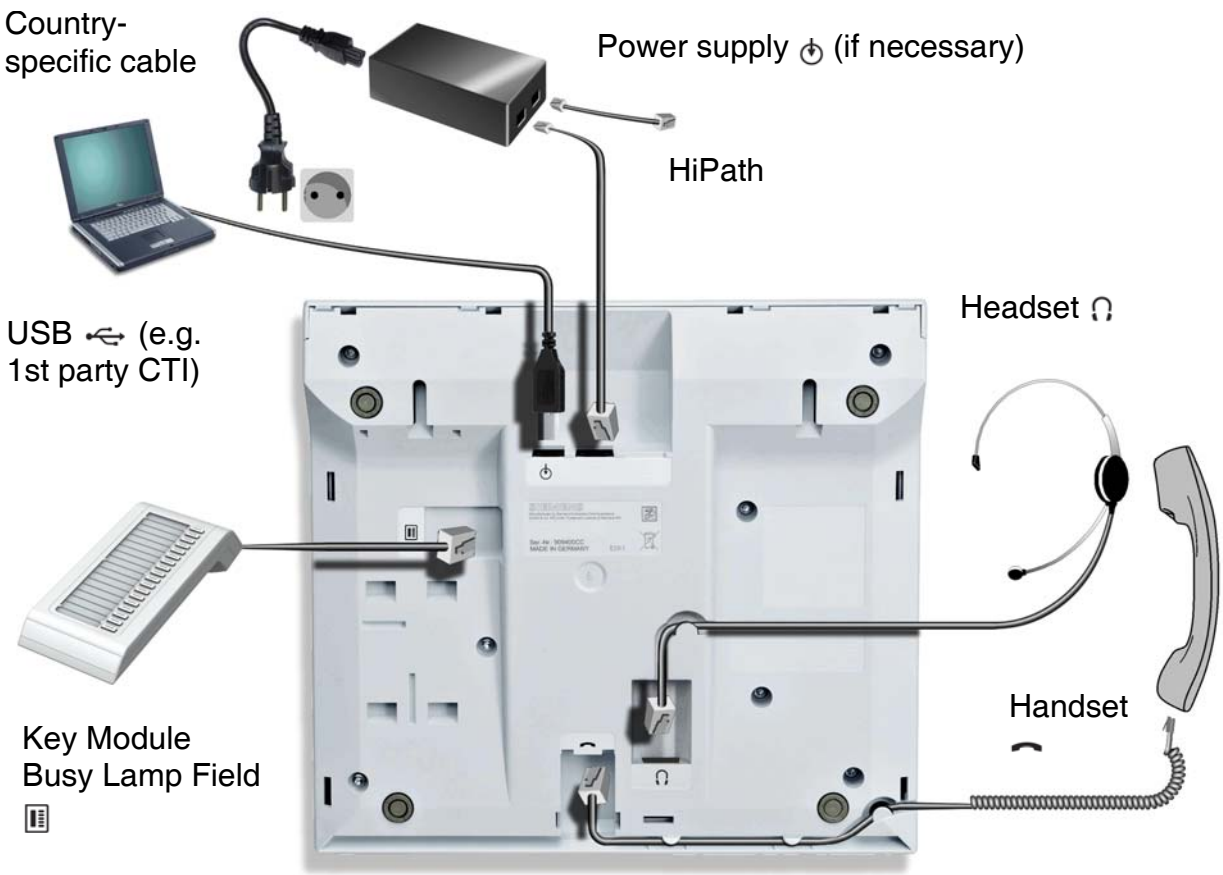
2.2.3.1 OpenStage 60 T/80 T



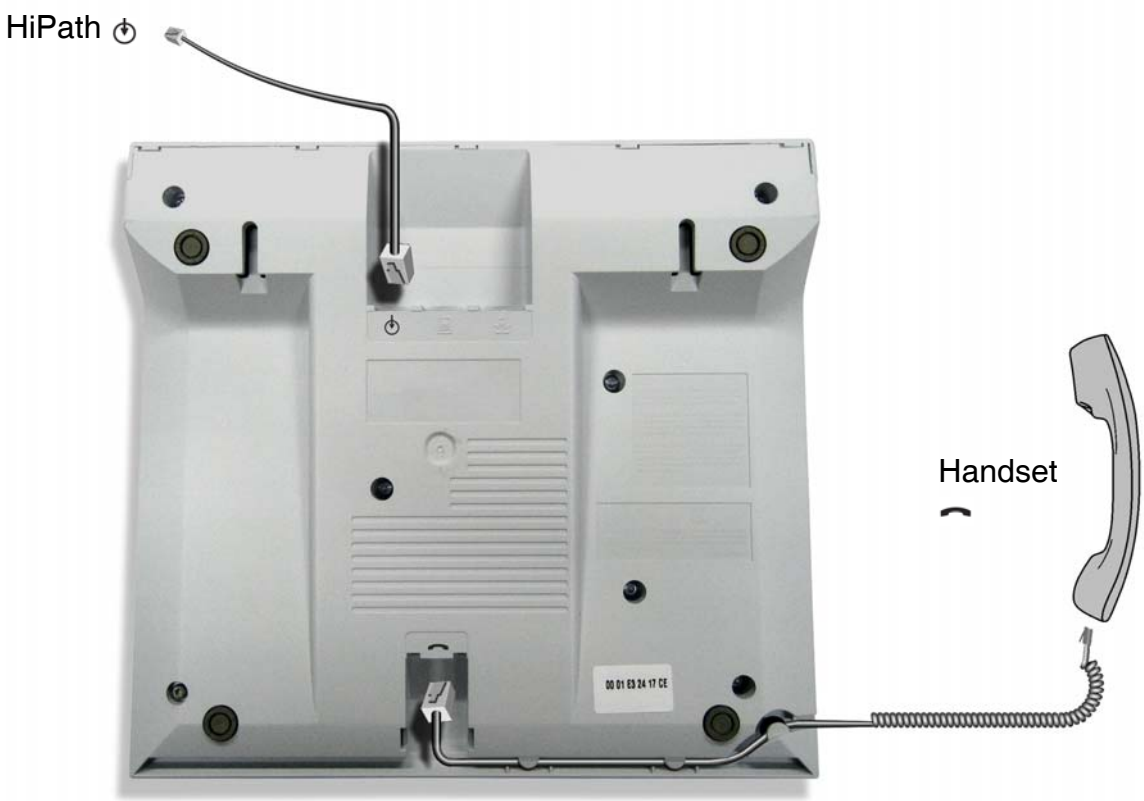
2.2.3.2 OpenStage 40 T



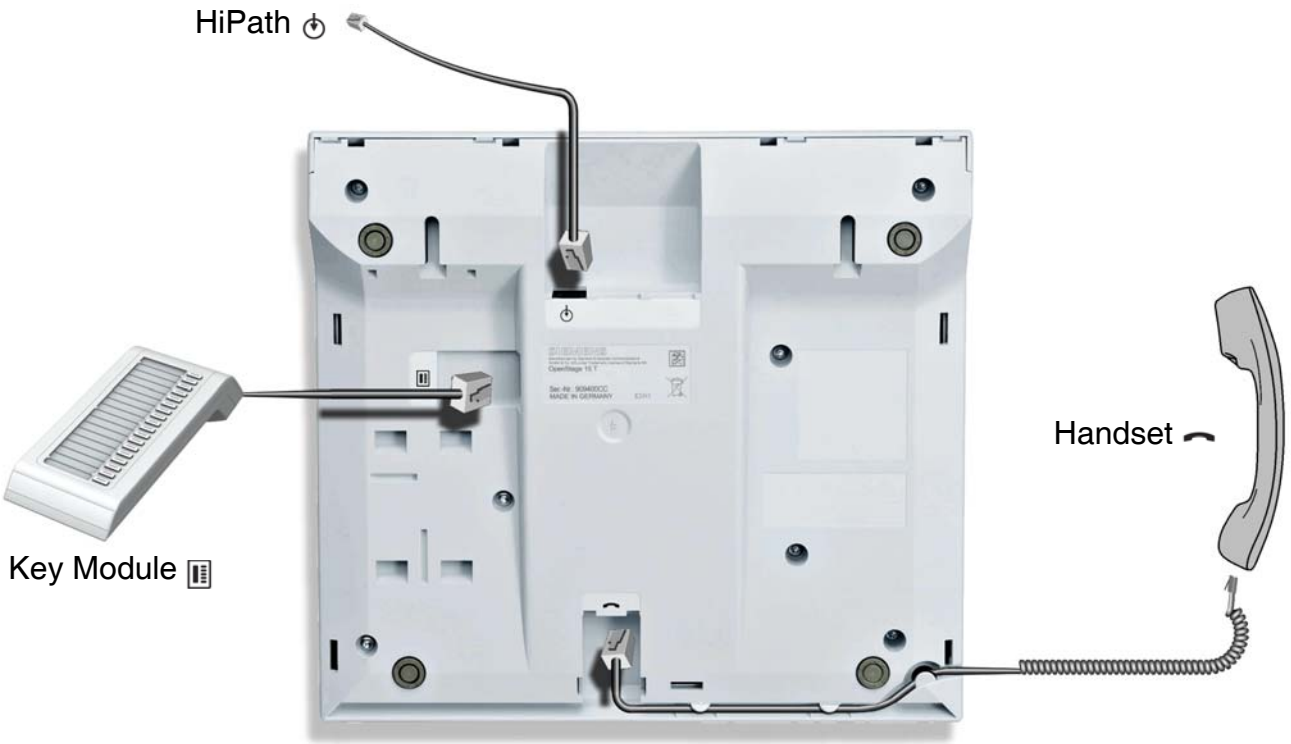
2.2.3.3 OpenStage 30 T



2.2.3.4 OpenStage 20 T



2.2.3.5 OpenStage 15 T



2.2.3.6 OpenStage 10 T

2.2.4 Connecting the Phone

OpenStage 40 T standalone, OpenStage 20 T, OpenStage 15 T, OpenStage 10 T:

- Insert the $U_{P0/E}$ cable into the jack on the base of the telephone.

OpenStage 60 T/80 T, OpenStage 40 T with OpenStage Key Module 40:

1. Insert the $U_{P0/E}$ cable into the jack on the power supply and connect the jack on the power supply with jack on the base of the telephone.
2. If applicable, connect the following optional jacks:
   - Headset (accessory)
   - Add-on device (Key Module, Busy Lamp Field)
   - USB slave for connection to PC
   - USB master for connection to an USB memory stick

To prevent damage on the OpenStage 60 T/80 T phone, connect an USB memory stick using the adapter cable C39195-Z7704-A5.

Do not connect a USB hub to the phone's USB port, as this may lead to stability problems.

2.2.5 Power supply

Depending on the phone type and amount of key modules (with display or key module 15), an external power unit may be required. In the following table, the key module 15 (without display) is explicitly indicated; otherwise, numbers refer to the key module with display. Please ensure to to use the appropriate plug-in power supply.

Name of Phone	Key Modules	External Power Unit
OpenStage 10 T	-	-
OpenStage 15 T	0 or 1 key module 15	-
OpenStage 20 T	-	-
OpenStage 30 T	0 or 1	-
OpenStage 40 T	0 or 1 key module 15	-
	1 or 2	✓
OpenStage 60 T	0, 1 or 2	✓
OpenStage 80 T	0, 1 or 2	✓

The following accessories always need an external power unit:

- OpenStage BLF
- OpenStage Phone Adapter

The order no. for the plug-in power supply is region specific:
EU: L30250-F600-C141
UK: L30250-F600-C142
US: L30250-F600-C143

3 Administration

This chapter describes the configuration of every parameter available on the OpenStage 60 T/ 80 T local admin menu.

The telephones OpenStage 10 T, OpenStage 15 T, OpenStage 20 T and OpenStage 40 T can't be administered via local Menu but only by the communication platform.

To customize the free programmable keys on the telephones OpenStage 10 T, OpenStage 15 T, OpenStage 40 T and OpenStage 60 T/80 T see User Manual.

3.1 Access via Local Phone

The data entered in input fields is parsed and controlled by the phone. Thus, data is accepted only if it complies to the value range.

1. **Access the Administration Menu**

   OpenStage 60 T/80 T:

   Press the ☰ key repeatedly until the "Settings" tab is displayed.

   Select the "Admin" entry and confirm with OK.

   OpenStage 15 T / 20 T / 30 T / 40 T:

   Press the keys >☰, ▼, and OK consecutively to select the administration menu.

2. **Enter Password**

   When the Admin menu is active, you will be prompted to enter the administrator password. The default admin password is "123456". It is highly recommended to change the password (see Section 3.8, "Password") after your first login.

   For entering passwords with non-numeric characters, please consider the following:

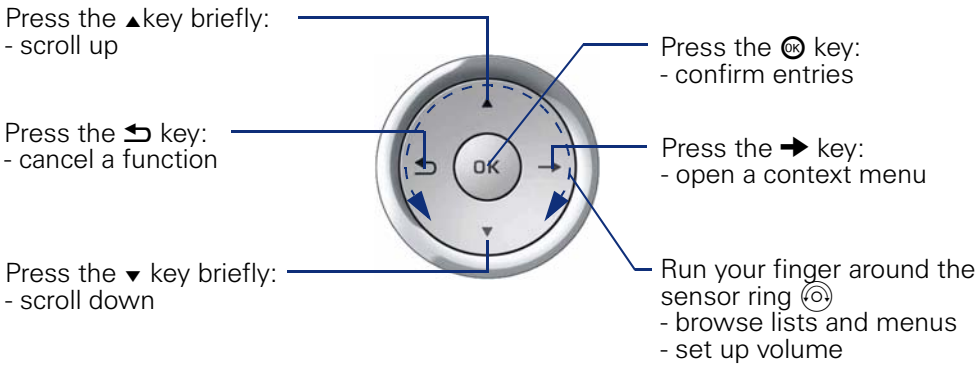
   By default, password entry is in numeric mode. For changing the mode, press the # key once or repeatedly, depending on the desired character. The # key cycles around the input modes as follows:

   (Abc) -> (abc) -> (123) -> (ABC) -> back to start.

3. Navigate within the Administration Menu

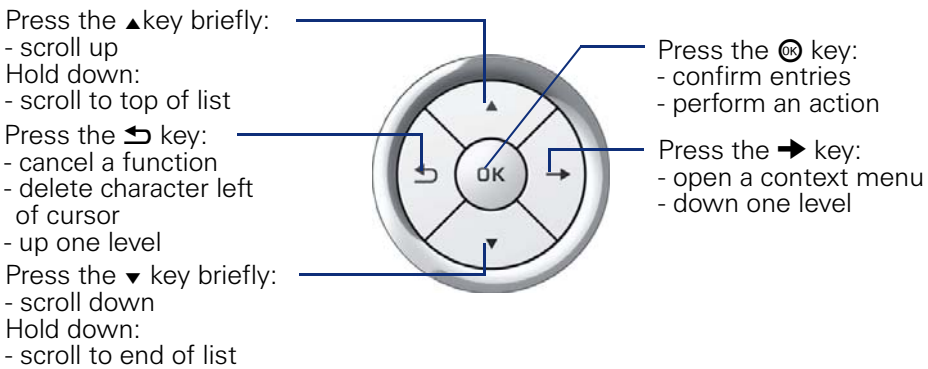
OpenStage 60/80

Use the TouchGuide to navigate and execute administrative actions in the administration menu.



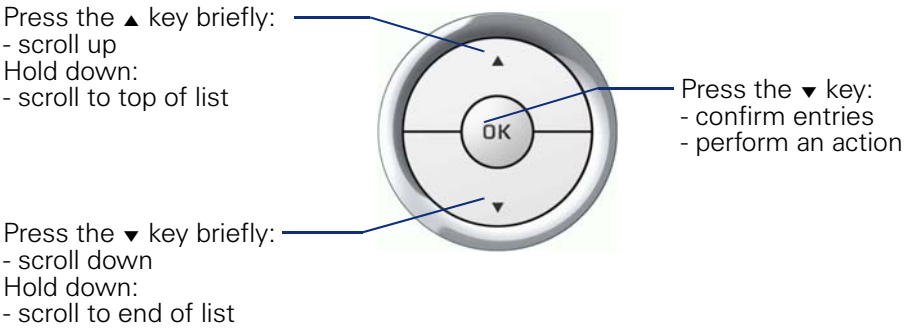
OpenStage 40

Use the 5-way Navigator to navigate and execute administrative actions in the administration menu.

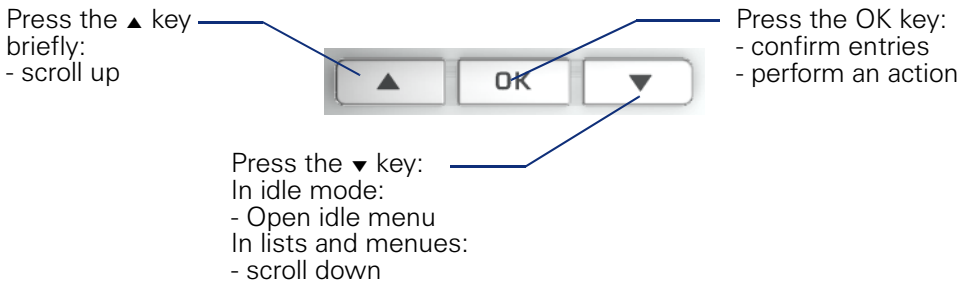


OpenStage 20

Use the 3-way Navigator to navigate and execute administrative actions in the administration menu.



OpenStage 15 / 30



4. Select a parameter

If a parameter is set by choosing a value from a selective list, an arrow symbol appears in the parameter field that has the focus. Press the key to enter the selective list. Use the Sensor Wheel resp. the ▲ and ▼ key to scroll up and down in the selective list. To select a list entry, press the OK key.

5. Enter the parameter value

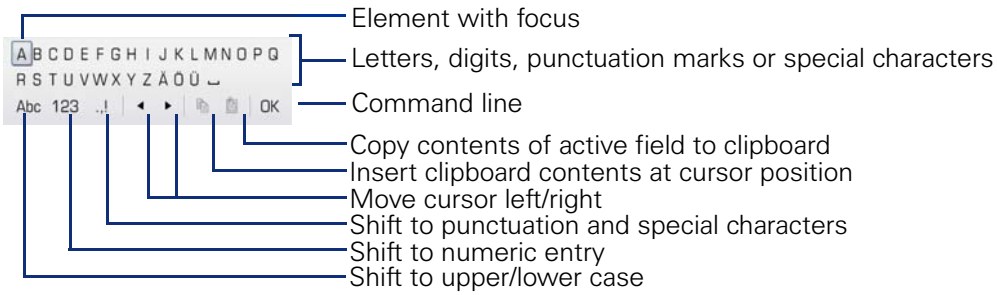
For selecting numbers and characters, you can use special keys. See the following table:

Key	Function
*	Switch to punctuation and special characters.
#	Toggle between lowercase characters, uppercase characters, and digits in the following order: (Abc) -> (abc) -> (123) -> (ABC) -> back to start.

OpenStage 60/80

If a parameter is set by entering a number or character data, the onscreen keypad is used. Press the OK key to enter the editor. Within the editor, solely use the key numbers or the Sensor Wheel for selecting numbers, characters, or groups of characters. The ⮌ key deletes one character in the input field, and the ➔ key moves the cursor to the OK field.

The following figure describes the elements of the onscreen keypad and their functions:



Additionally, you can use the following keys on the keypad as shortcuts for the selection of character groups

Element	Function
*⌂	Switch to punctuation and special characters.
#⊸	Toggle between lowercase characters, uppercase characters, and digits.

OpenStage 15/20/30/40

With the OpenStage 15/20/30/40, use the keypad for entering parameters. With the 3 way/5 way navigator, you can enter, delete, copy and paste characters and numbers as well as navigate within an entry and toggle the input mode.

6. Save and exit

When you are done, select **Save & exit** and press OK.

3.2 IP Address

To establish a connection between the user's PC and the phone via USB cable, an IP address is necessary. It is preconfigured with 192.168.200.1, but can be edited.

Local Phone Menu

- Admin
  - Network
    - IP configuration
      - **IP address**

3.3 Password timeout

With this entry you decide after which time of inactivity (in minutes) a password has to be re-entered. The setting is valid for the admin password and for the user password.

Local Phone Menu

- Admin
  - System
    - Features
      - Configuration
        - General
          - **Not used timeout**

3.4 Bluetooth adapter

You can read only the MAC adress of the phone's bluetooth adapter.

Local Phone Menu

Bluetooth is available only on OpenStage 60/80 phones.

- Admin
  - System
    - Features
      - Configuration
        - Bluetooth
          - **Local device address**

3.5 Dialing

For correct synchronisation of Microsoft Outlook contacts via the OpenStage Manager, the canonical dialing settings must be configured appropriately.

3.5.1 Canonical Dialing Settings

Call numbers taken from a directory application are mostly expressed in canonical format. Moreover, call numbers entered into the local phone book are automatically converted and stored in canonical format, thereby adding "+", **Local country code**, **Local national code**, and **Local enterprise node** as prefixes. If, for instance, the user enters the extension "1234", the local country code is "49", the local national code is "89", and the local enterprise node is "722", the resulting number in canonical format is "+49897221234".

For generating an appropiate dial string, a conversion from canonical format may be required. The following parameters determine the local settings of the phone, like **Local country code** or **Local national code**, and define rules for converting from canonical format to the format required by the PBX.

To enable the number conversion, all parameters not marked as optional must be provided, and the canonical dial lookup settings must be configured (see Section 3.5.2, "Canonical Dial Lookup").

Data required

- **Local country code**:
  E.164 Country code, e.g. "49" for Germany, "44" for United Kingdom.
  Maximum length: 5.
- **National prefix digit**:
  Prefix for national connections, e.g. "0" in Germany and United Kingdom.
  Maximum length: 5.
- **Local national code**:
  Local area code or city code, e.g. "89" for Munich, "20" for London.
  Maximum length: 6.
- **Min local num length**:
  Minimum number of digits in a local PSTN number, e.g. 3335333 = 7 digits.
- **Local enterprise node**:
  Number of the company/PBX wherein the phone is residing.
  Maximum length: 10 (Optional)
- **PSTN access code**:
  Access code used for dialing out from a PBX to a PSTN.
  Maximum length: 10. (Optional)

- **International access code**:
  International prefix used to dial to another country, e.g. "00" in Germany and United Kingdom.
  Maximum length: 5.
- **Operator code**:
  List of extension numbers for a connection to the operator. The numbers entered here are not converted to canonical format.
  Maximum length: 50. (Optional)
- **Emergency number**:
  List of emergency numbers to be used for the phone. If there are more than one numbers, they must be separated by commas. The numbers entered here are not converted to canonical format.
  Maximum length: 50. (Optional)
- **Initial extn. digits**:
  List of initial digits of all possible extensions in the local enterprise network. When a call number could not be matched as a public network number, the phone checks if it is part of the local enterprise network. This is done by comparing the first digit of the call number to the value(s) given here. If it matches, the call number is recognized as a local enterprise number and processed accordingly.
  If, for instance, the extensions 3000-5999 are configured in the HiPath, each number will start with 3, 4, or 5. Therefore, the digits to be entered are 3, 4, 5.
- **Internal numbers**

To enable the phone to discern internal numbers from external numbers, it is crucial that a canonical lookup table is provided (Section 3.5.2, "Canonical Dial Lookup").

> Local enterprise form:

Default value. Any extension number is dialled in its simplest form. For an extension on the local enterprise node, the node ID is omitted. If the extension is on a different enterprise node, then the appropriate node ID is prefixed to the extension number. Numbers that do not correspond to an enterprise node extension are treated as external numbers.

> Always add node:

Numbers that correspond to an enterprise node extension are always prefixed with the node ID, even those on the local node. Numbers that do not correspond to an enterprise node extension are treated as external numbers.

> Use external numbers:

All numbers are dialled using the external number form.

- **External numbers**

  > Local public form:

  Default value. All external numbers are dialled in their simplest form. Thus a number in the local public network region does not have the region code prefix. Numbers in the same country but not in the local region are dialled as national numbers. Numbers for a different country are dialled using the international format.

  > National public form:

  All numbers within the current country are dialled as national numbers, thus even local numbers will have a region code prefix (as dialling from a mobile). Numbers for a different country are dialled using the international format.

  > International form:

  All numbers are dialled using their full international number format.

- **External access code**

  > Not required:

  The access code to allow a public network number to be dialled is not required.

  > For external numbers:

  Default value. All public network numbers will be prefixed with the access code that allows a number a call to be routed outside the enterprise network. However, international numbers that use the + prefix will not be given access code.

- **International gateway**:

  > Use national code:

  Default value. All international formatted numbers will be dialled explicitly by using the access code for the international gateway to replace the "+" prefix.

  > Leave as +:

  All international formatted numbers will be prefixed with "+".

Local Phone Menu

```
└── Admin
    └── Local functions
        └── Locality
            └── Canonical settings
                    Local country code
                    National prefix digit
                    Local national code
                    Min local num length
                    Local enterprise node
                    PSTN access code
                    International access code
                    Operator code
                    Emergency number
                    Initial extn. digits

└── Admin
    └── Local functions
        └── Locality
            └── Canonical dial
                    Internal numbers
                    External numbers
                    External access code
                    International gateway
```

3.5.2 Canonical Dial Lookup

The parameters given here are important for establishing outgoing calls and for recognizing incoming calls.

In the local phonebook numbers are stored in canonical format. In order to generate an appropriate dial string according to the settings in **Internal numbers** and **External numbers** (-> Section 3.5.1), internal numbers must be discerned from external numbers. The canonical lookup table provides patterns which allow for operation.

Furthermore, these patterns enable the phone to identify callers from different local or international telephone networks by looking up the caller's number in the phone book. As incoming numbers are not always in canonical format, their composition must be analyzed first. For this purpose, an incoming number is matched against one or more patterns consisting of country codes, national codes, and enterprise nodes. Then, the result of this operation is matched against the entries in the local phone book.

To make sure that canonical dial lookup works properly, at least the following parameters of the phone must be provided:

- Local country code -> Section 3.5.1
- Local national code -> Section 3.5.1
- Local enterprise node -> Section 3.5.1

Up to 5 patterns can be defined. The **Local code 1 ... 5** parameters define up to 5 different local enterprise nodes, whilst **International code 1... 5** define up to 5 international codes, that is, fully qualified E.164 call numbers for use in a PSTN.

Data required

- **Local code 1 ... 5**:
  Local enterprise code for the node/PBX the phone is connected to.
  Example: "722" for Siemens Munich.
- **International code 1 ... 5**:
  Sequence of "+", local country code, local area code, and local enterprise node corresponding to to one or more phone entries.
  Example: "+4989722" for Siemens Munich.

Local Phone Menu

```
└--- Admin
     └--- Local functions
          └--- Locality
               └--- Canonical lookup
                         Local code 1
                         International code 1
                         Local code 2
                         International code 2
                         Local code 3
                         International code 3
                         Local code 4
                         International code 4
                         Local code 5
                         International code 5
```

3.6 Pixel saver

By the time the screen of your phone is black, the pixel saver is activ to help save energy conservation. With this entry you decide after which time of inactivity (in hours 2- 8) the pixel saver is to be activated.

Local Phone Menu

- Admin
  - Local functions
    - Locality
      - Pixel saver
        - **Timeout (Hrs)**

3.7 Display General Phone Information

General information about the status of the phone can be displayed, if desired.

3.7.1 Software ver.

Displays the version of the phone's firmware.

3.7.2 Last restart

Shows date and time of the last reboot.

Local Phone Menu

- Admin
  - General information
    - **Software ver.**
    - **Last restart**

3.8 Password

The passwords for user and administrator can be set here. They have to be confirmed after entering. The factory setting is "123456"; it is highly recommended to change the password after the first login.

Local Phone Menu

- Admin
  - Password
    - **Admin**
    - **Confirm admin**
    - **User**
    - **Confirm user**

3.9 Factory Reset

This function resets all parameters to their factory settings. You have to enter the reset password "124816". All personal settings will be erased.

Local Phone Menu

- Admin
  - Maintenance
    - Factory reset
      - **Reset phone**

3.10 Restart Phone

This function initiates a restart of the phone. All personal settings will remain.

Local Phone Menu

- Admin
  - Maintenance
    - Restart
      - **Restart phone**

4 Examples and HowTos

4.1 Canonical Dialing

4.1.1 Canonical Dialing Settings

The following example shows settings suitable for the conversion of given dial strings to canonical format.

Parameter	Example value	Explanation
Local country code	44	International country code for the UK.
National prefix digit	0	Used in front of national codes when dialled without international prefix.
Local national code	115	Area code within the UK (here: Nottingham).
Min local num length	7	Number of digits in a local PSTN number (e.g. 3335333 = 7 digits).
Local enterprise node	780	Prefix to access Nottingham numbers from within the Siemens network.
PSTN access code	9	Prefix to make an international call in the UK.
Operator code	0, 7800	Set of numbers to access the local operators.
Emergency number	999, 555	Set of numbers to access emergency services.
Initial extn. digits	2, 3, 4, 5, 6, 8	1st digits of numbers that are used for extension numbers on the local node.

4.1.2 Canonical Dial Lookup

The following example shows settings suitable for recognizing incoming numbers and assigning them to entries in the local phone book, and for generating correct dial strings from phone book entries, depending on whether the number is internal or external

Parameter	Example value	Explanation
Local code 1	780	Enterprise node prefix (here: Nottingham).
International code 1	+44115943	Equivalent prefix to access numbers on this node from the PSTN. Here, the prefix used by the PSTN (DID/DDI: direct inward dialing) is 943, which differs from the enterprise node prefix used within the enterprise network.
Local code 2	722	Enterprise node prefix (here: Munich).
International code 2	+4989722	Equivalent prefix to access numbers on this node from the PSTN. Here, the prefix used by the PSTN for direct inward dialing is identical to the the enterprise node prefix.

4.2 Transferring Phone Software and Media Files

4.2.1 Phone Software

The firmware for OpenStage 15 / 20 T / 30 T / 40 T / 60 T / 80 T can be installed via HiPath-Manager SW-transfer at HiPath 3000 and via TSDM at HiPath 4000. For OpenStage 60 T/80 T, it is also possible to install the software via USB stick. The required procedure is described in this section.

4.2.1.1 Installation Using a USB Memory Stick (OpenStage 60 T/80 T)

Please note that some USB memory sticks will not be indentified as an USB memory stick by the phone. In such a case, please try another stick type or manufacturer.
Advisable and tested USB memory sticks are:

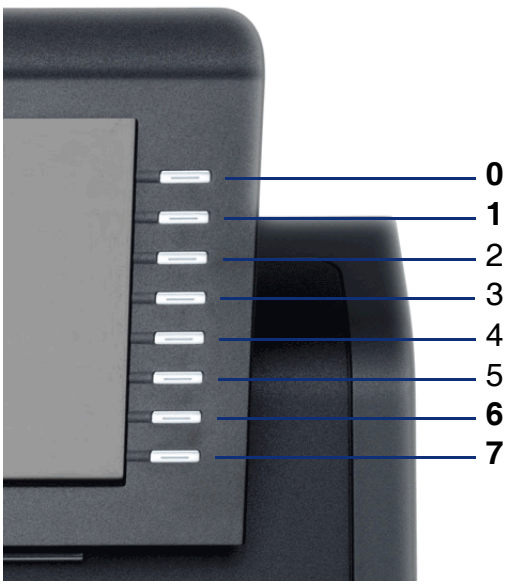
Description	Vendor	Vendor product number	EAN	Vendor ID	Product ID
Kingston DataTraveler USB2.0 1GB	Kingston	DTI/1GB	0740617086102	0951	1603
Kingston DataTraveler USB2.0 2GB	Kingston	DTI/2GB	0740617090185	13FE	1D00
Corsair Flash Voyager USB2.0 4GB	Corsair	CMFSUB2.0-4GB	0870584006527	090C	1000
PNY Outdoor Attaché USB2.0 1GB	PNY	P-FD1GBOUT-BX	3536401506737	13FE	1A00

To install the software, take the following steps:

1. Ensure that the memory stick should contains no other files.
1. Copy the official SW bind (`OS_HI_TDM_<version number>.bin`) and the file `prepare.img` to the root of the USB stick.
2. Remove the USB stick from the PC.
3. Power off the phone.
4. Connect the USB stick with the USB master port of the phone. Depending on the geometry of you USB stick, you might need a standard USB extension cable to connect the stick with the phone.
5. Power on the phone. If the phone detects the USB stick correctly, you will see the following output on the LCD:
   SLBL: 1.1.0_0013_hs
   BOOT:1.3.1_0013_hs_nand128

AUX power detected
USB mass storage device detected
Enter update code: _

6. Enter the update code "0167" using the FPKs. The FPKs are counted from top to bottom: the topmost FPK represents "0", the lowermost FPK represents "7".



If you do not press any FPK or enter a wrong code, the phone will continue booting the phone application.

7. If the correct FPK sequence is entered, the USB update starts. The update progress can be observed on the display.

8. The update progress is finished when you see the following text:
Update script succedded.
Copy logs to USB stick … done.
Unmounting USB device and exit
Please remove USB device to reboot!
The update process has copied some log files to the USB stick. You will find them in the `log`-directory on the stick.

9. Disconnect the USB stick from the phone. If the update has been successful, the phone will do an automatic restart. It will start up with the new software bind.

4.2.2 Media Files

The following Media files can be transferred to the OpenStage 60 T/80 T via the OpenStage Manager. For detailed description refer to the corresponding manual.

4.2.2.1 Picture Clips

Picture clips are available only on OpenStage 60/80 phones.

Picture Clips are small images used for displaying a picture of a person that is calling on a line. The supported file formats for picture clips are JPG and PNG.

4.2.2.2 Screensaver

The screensaver is displayed when the phone is in idle mode. It performs a slide show consisting of images which can be uploaded using the web interface.

Screensavers are available only on OpenStage 60/80 phones.

For screensaver images, the following specifications are valid:

- Data format: JPG or PNG. JPG is recommended.
- Screen format: 4:3. The images are resized to fit in the screen, so that images with a width/height ratio differing from 4:3 will appear with deviant proportions.
- Resolution: The phone's screen resolution is the best choice for image resolution: 320x240

4.2.2.3 Ringer File

The download of ringer files is possible only for OpenStage 60/80. This can be handled by the OpenStage Manager.

Custom Ringtones can be uploaded to the phone. The following file formats are supported:

- WAV format. The recommended specifications are:
  - Audio format: PCM
  - Bitrate: 16 kB/sec
  - Sampling rate: 8 kHz
  - Quantization level: 16 bit
- MIDI format.

- MP3 format. OpenStage 60 T/80 T phones are able to play MP3 files from 32 kbit/s up to 320 kbit/s. As the memory for user data is limited to 8 MB, a constant bitrate of 48 kbit/sec to 112 kbit/s and a length of max. 1 minute is recommended. Although the phone software can play stereo files, mono files are recommended, as the phone has only 1 loudspeaker. See the following table for estimated file size (mono files):

Length	**64 kbit/s**	**80 kbit/s**	**96 kbit/s**	**112 kbit/s**
0:15 min	0,12 MB	0,15 MB	0,18 MB	0,21 MB
0:30 min	0,23 MB	0,29 MB	0,35 MB	0,41 MB
0:45 min	0,35 MB	0,44 MB	0,53 MB	0,62 MB
1:00 min	0,47 MB	0,59 MB	0,70 MB	0,82 MB

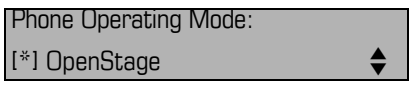
4.3 optiPoint Compatible Mode (V2R0)

Some older versions of HiPath 3000 will not identify OpenStage TDM phones correctly. To overcome this restriction, OpenStage 10 T / 15 T / 30 T phones with firmware from V2R1 onwards can be switched to an optiPoint500 compatible mode. In optiPoint mode, the phone changes its Phone-ID to that of a corresponding optiPoint model, e. g. an OpenStage 10 T will adopt the Phone-ID of an optiPoint500 Entry. For a complete reference, see the following table:

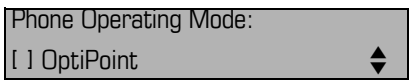
OpenStage 10 T	<->	optiPoint500 Entry
OpenStage 15	<->	optiPoint 500 Standard
OpenStage 30	<->	optiPoint500 Advance

4.3.1 Switching Procedure for OpenStage 15 / 30

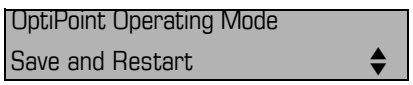
1. Press the menu button ☰ for at least 5 seconds.
2. The menu LED starts flashing and the phone mode selection menu is shown on the display. The currently active phone mode is marked.



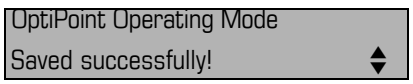
3. When pressing the up ▲ or down ▼ key, the second, currently inactive, mode is shown.



4. Press the OK key to select the optiPoint mode.



5. Press the OK key again to confirm the selection and activate optiPoint mode.



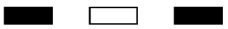
6. After 5 seconds the phone performs a restart and comes up in the new operating mode.

4.3.2 Switching Procedure for OpenStage 10

The operating mode of an OpenStage 10 phone is changed via the 3 function keys.

1. Initially, all 3 LEDs of the function keys are off. Press the rightmost function key for at least 5 seconds.

2. The current active phone operating mode will be indicated by the LED on one of the other two function keys. When OpenStage mode is active, the middle LED glows, whereas in optiPoint mode, the leftmost LED glows.
   OpenStage Mode:



   optiPoint Mode:

3. To toggle between modes, press either the leftmost or the middle function key, depending on which mode is active.
   From OpenStage mode to optiPoint mode:

   From optiPoint mode to OpenStage mode:

4. After a timeout of 2 seconds, the phone restarts and comes up in the new operating mode.

4.3.3 Key Mapping in optiPoint Mode (HiPath 3000)

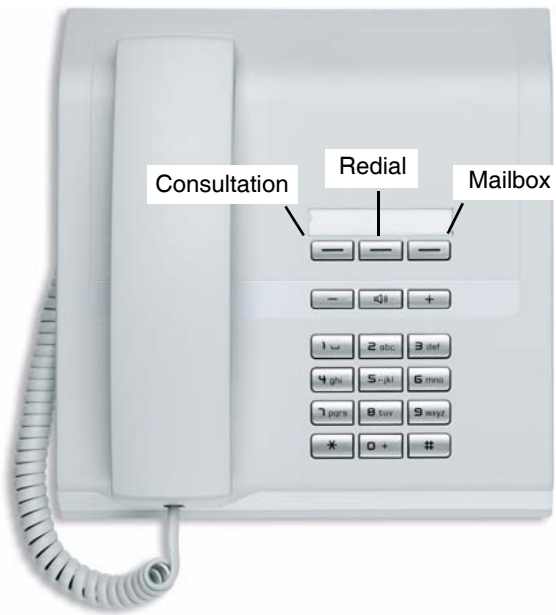
In optiPoint mode, the function keys of OpenStage T phones are defined by the HiPath 3000 system in a specific manner. For Hipath 4000, the assigment of key numbers and functions must be solved by corresponding AMO TAPRO settings.

When migrating from optiPoint to OpenStage, please inform the user about the new key layout. If desired, the key layout can be changed via the HiPath 3000 system to adapt to the user's needs. Depending on the model type, the number of available free programmable keys may have decreased.

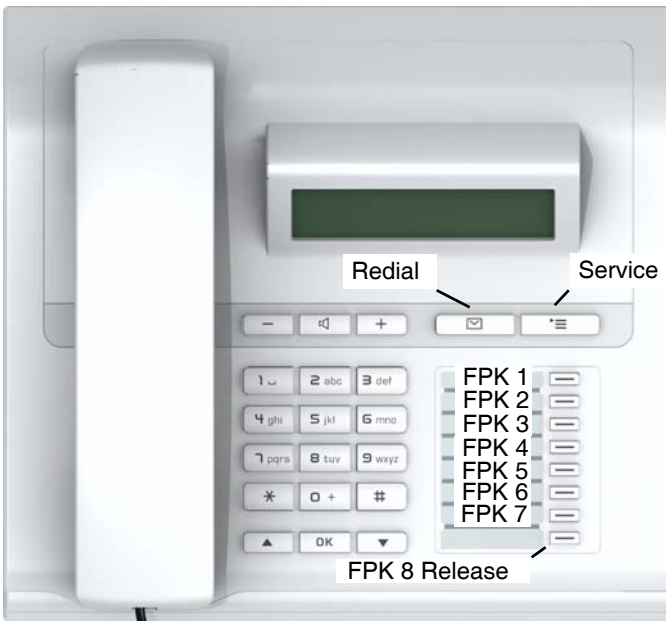
The following figures contrast the key layouts of optiPoint phones to the corresponding OpenStage phones in optiPoint mode, provided that the HiPath 3000 system is in default configuration.

Those keys whose functions are not indicated by symbols like, e. g., 🔊, are labelled. Those optiPoint keys which will not be available on the corresponding OpenStage phone are shaded.

4.3.3.1 optiPoint 500 Entry / OpenStage 10



4.3.3.2 optiPoint 500 Standard / OpenStage 15



4.3.3.3 optiPoint 500 Advance / OpenStage 30

On the optiPoint 500 Advance, 2 keys correspond to the 2 upper keys on the OpenStage 30 key module. These are labeled "KM 1" and "KM 2".

The 3 keys labeled "FPK u" on the optiPoint 500 Advance correspond to the keys with the forward, headset, and message symbol on the OpenStage 30. The keys are not programmed in the default configuration, but can be programmed by the user.

5 Local Phone Menu

- Admin
  - Network
    - IP configuration
      - **Network - IP configuration**
      - IP address -> Section 3.2
  - System
    - Features
      - Configuration
        - General
          - **Features - configuration**
          - Not used timeout -> Section 3.3
        - Bluetooth
          - **Bluetooth admin settings** -> Section 3.4
          - Local device address
  - Local functions
    - Locality
      - Canonical settings
        - **Canonical settings** -> Section 3.5.1
        - Local country code
        - National prefix digit
        - Local national code
        - Min local num length
        - Local enterprise node
        - PSTN access code
        - International access code
        - Operator code
        - Emergency number
        - Initial extn. digits
      - Canonical lookup
        - **Canonical lookup** -> Section 3.5.2
        - Local code 1
        - International code 1
        - Local code 2
        - International code 2
        - Local code 3
        - International code 3
        - Local code 4
        - International code 4
        - Local code 5
        - International code 5
      - Canonical dial
        - **Canonical dial** -> Section 3.5.1
        - Internal numbers
        - External numbers
        - External access code
        - International gateway
    - Pixel saver
      - **Pixel saver**
      - Timeout (Hrs) -> Section 3.6

--- General information	**General information**	-> Section 3.7
	Software ver.	
	Last restart	
--- Password	**Admin password**	-> Section 3.8
	Admin	
	Confirm admin	
	User	
	Confirm user	
--- Maintenance		
--- Factory reset	**Please enter admin password**	-> Section 3.9
	Reset phone	
--- Restart	**Enter admin password**	-> Section 3.10
	Restart phone	

Index

Communication for the open minded

Siemens Enterprise Communications
www.siemens-enterprise.com

Copyright © Siemens Enterprise Communications GmbH & Co. KG 2009
Hofmannstr. 51, 80200 München

Siemens Enterprise Communications GmbH & Co. KG is a Trademark Licensee of Siemens AG

Reference No.: A31003-S2000-M101-4-76A9

The information provided in this document contains merely general descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract. Availability and technical specifications are subject to change without notice.
OpenScape, OpenStage and HiPath are registered trademarks of Siemens Enterprise Communications GmbH & Co. KG.
All other company, brand, product and service names are trademarks or registered trademarks of their respective holders.