

## DA1450 DECT Telecare



**DECT cordless phone for blind persons**

**Home Emergency Call**

**Fall Detection Alarm**

**Comfort telephony with hands-free**

**Seniors' phone with easy operation**

**Blind's phone with voice assistant**

**Clock function, time announcement**

**Smoke Alarm detectors**

**Memories, Memos**

**DATA SHEET**

**Technical Specification**

updated data sheet can be found on the product website

Design subject to change

**GENERAL DATA**

|                           |  |
|---------------------------|--|
| Dimensions (L*W*T)        | 70*42*14 [mm]  |
| Weight                    | 45g  |
| Operating temperature     | +5° to 45° Celsius   |
| Storage temperature       | -15° to 55° Celsius  |
| Protection class          | non-condensing splash-proof IP6x   |
| mechanical load enclosure | up to 2m drop height<br>High gloss plastic white<br>Sealing rubber in grey |
| Necklace                  | textile 80cm / length customizable   |
| Call button               | centrally with LED and vibration   |
| Side keys                 | waterproof incorporated  |
| LED Indicators            | shine-through LED<br>brightness adjustable                                 |
| Ring LED                  | operating indicators   |
| Status LED                | status indicator   |
| Loudspeaker               | miniature with high sound level  |
| Microphone                | all-around characteristics   |
| USB (Configuration)       | Micro USB  |
| Battery                   | Li-Ion-Polymer 450mAh  |
| Standby                   | > 2 days   |
| Max call time per day     | ca 45 min  |
| contactless loading       | Qi Standard  |

**Radio**

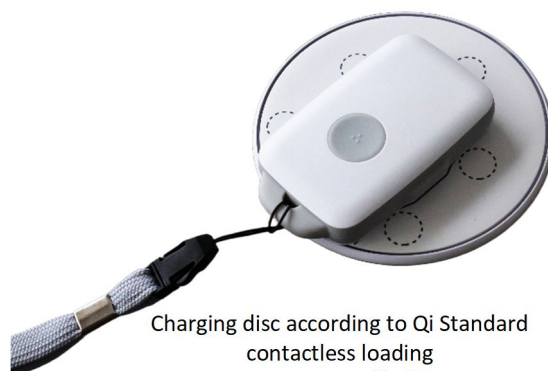
|                          |  |
|--------------------------|--|
| DECT ETSI Standard CI    | ETS 300 175                                    |
| DECT ETSI Standard GAP   | EN 300 444                                     |
| DECT GAP EU, US          | Auto Detect                                    |
| Operation in Europe, USA | Auto Mode                                      |
| Range                    | type 50m inside building<br>type 300m outdoors |
| DECT Chipset             | DCX79 (DSPG)                                   |
| DECT Handset Stack (PP)  | DOSCH&AMAND                                    |
| Hands-free phone         | with high audio quality                        |
| Compatibility            | of all DECT GAP base stations                  |
| Registration             | Plug & Play via "easy subscription"            |
| PIN base individually    | up to 8 digits via PC APP                      |

**FALL DETECTION**

|                                  |  |
|----------------------------------|--|
| Configuration                    | none   |
| Calibration                      | automatically  |
|                                  | <b>Immediately ready for operation</b>                                 |
| Characteristic extraction        | DPDM   |
| DPDM Algorithm                   | "Dosch Probability Density Model"                                      |
| Sturzanalyse                     | within 1.25 seconds  |
| Crash message                    | delayed to 5 seconds   |
|                                  | automatic help and emergency call sequence                             |
| Call for iVA                     | help 3 help numbers + 1 emergency number<br>integrated voice assistant |
| Announcement                     | Message, Person, Address, Access                                       |
| Product on floor                 | adjustable ON/OFF  |
| False alarm rate (all use cases) | type <2%   |
| with negative confirmation       | 0%   |
| False alarm "Product on floor"   | type <0.5%   |
| Fall Detection (all use cases)   | type >85%  |
| slight falls                     | type >75%  |
| heavy falls                      | type >95%  |
| 3D/6D Accelerometer              | LIS3DH   |
| Power Consumption - idle state - | 2µA  |



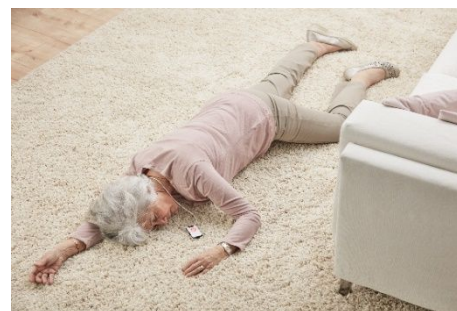
Control Elements



Charging disc according to Qi Standard contactless loading



"easy subscription" at the push of a button  
Registration at the in-house base station:  
e.g. Fritzbox, Speedport, Gigaset, ...



Fall detection via DPDM method  
False alarm rate type <2%  
Fall detection type >85%

**HOUSE EMERGENCY CALL**

**manual help call** key press > 2sec  
 2 times press leads to help call immediately  
 Cancellation press button again

Help numbers (with iCM) 3  
 Name and phone number Friends, Family, Neighbors  
 Repetitions adjustable 0-99  
 Announcement of the selected contact named iVA  
 Dialling process secured by iCM  
 Detecting invalid call attempts iCM  
 iCM intelligent Call Manager

Emergency number (without iCM) 1  
 Used for professional help, service call center 24/7

**automatic call for help** fall and smoke alarm

Help numbers 3  
 Name and phone number  
 Contacts with emergency aid (neighbour, caretaker)  
 Repetitions at the factory 0  
 Announcement of the selected contact named iVA  
 Dialling process secured by iCM  
 Detecting invalid call attempts iCM

Emergency number (without iCM) 1  
 professional help or call center

**Telephony**

Phone book, number of entries 100

Phone number with name PC APP  
 Conversion name to audio signal T2A encoder  
 T2A Text-to-Audio

Announcement Name with iVA

incoming call with announcement \*1) "Susan calls"  
 Auto acceptance \*1) adjustable per number

\*1) only for base station with CLIP function

Activate phone book via side key  
 Turn off your phone book automatically

**TELEPHONE BOOK (Register)**

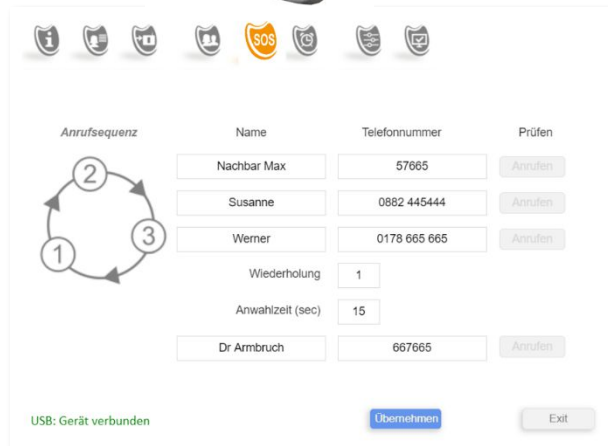
Number of telephone registers 10  
 Number of contacts per register 10  
 Title of telephone registers freely definable  
 Enter personal titles PC APP  
 Title Telephone Register Announcement via iVA

**Example-free definable titles**

Telephone register 1 "Favorites"  
 Phone Register 2 "Friends"  
 Telephone register 3 "Family"  
 Telephone register 4 "Medicals"  
 Telephone register 5 "Transport"

.....  
 Telephone register Selection via title (read out)

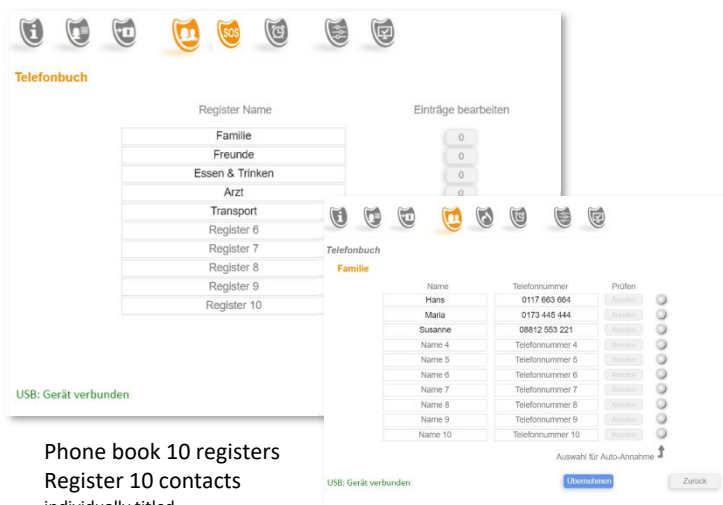
Missed calls 10, self-organizing  
 Caller list 10, self-organizing



Emergency call list  
 manual and automatic (fall, smoke alarm)  
 3 Cries for help (friends, family, neighbors)  
 1 emergency call (professional help, call center)



Activate phone book with a side key  
 automatic deactivation in case of missing follow-up action



Phone book 10 registers  
 Register 10 contacts individually titled

**TELEPHONE CONTACTS**

|  |                       |
|--|-----------------------|
| Number of entries per telephone register | 10                    |
| Enter number with name                   | PC APP                |
| Name Phone Contact                       | Announcement via iVA  |
| Telephone contact selection              | by name (read out)    |
| scroll/select                            | via other side button |
| Number of phone contacts                 | 100                   |
|  | read aloud by name    |
| Selection Contact: Time spent blind      | type < 15sec          |

**CALLING with voice assistant**

**incoming** call with announcement "Susan is calling"  
 Auto acceptance adjustable per number



**outgoing** call with the name "Call Lars?"  
 "Press call button"



"Susanne calls"  
 "Werner is called"

**CALLING with 100 contacts**

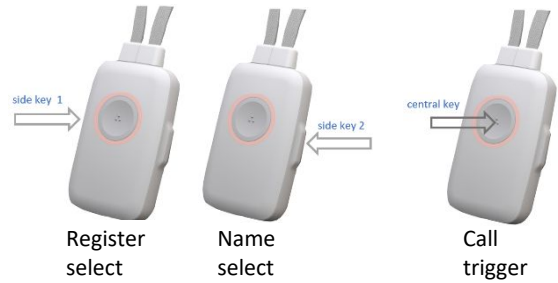
|                         |                            |
|-------------------------|----------------------------|
| Phone Contact Selection | 2 Methods                  |
| Method 1                | Quick dial via side button |
| Method 2                | Reading phone contacts     |

**CALLING Method 1**

suitable for life-blind speed dialing  
 suitable for in-house telephone comfort-free



Press a side key select Register  
 Press other side key select name  
 Press call button trigger call

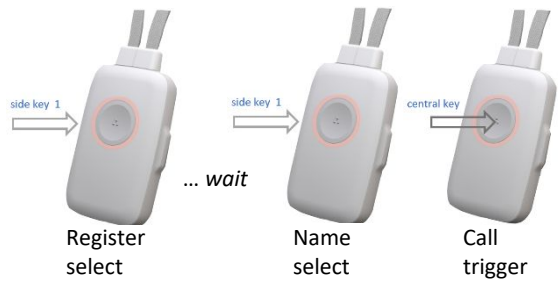


**CALLING Method 2**

suitable for age-blind standard dialing



Press side key select Register  
 wait till announcement "select name"  
 Press side key select name  
 Press call button trigger call



**CALLING Method 3**

suitable for age-blind phone contacts read aloud  
 suitable for persons with severe disabilities



Press the call button Start reading aloud  
 wait till desired name is read aloud  
 Press call button trigger call  
 Stop the process press call button 2 sec



**Memories**

|                                 |                          |
|---------------------------------|--------------------------|
| Number of entries per day       | 5                        |
| Field of application            | Daily Recurring Memos    |
| Entering time and instruction   | PC APP                   |
| System time                     | 24h format               |
| Setting                         | automatically via PC APP |
|                                 | Remote programming       |
| Announcement review at occupied | Spooler 15min            |



up to 5 reminders per day  
 "10 o'clock" "Please take medication"

**SMOKE ALARM DETECTION**

Configuration none  
 Immediately ready for operation  
 compatible with all smoke/heat detectors  
 Activation on charger  
 Audio Analysis SWEEP Comb Filter  
 Detection rate type >99%  
 False alarm type <0.1%  
 Alarm progression situational

automatic helper  
 Help numbers 3  
 Name and phone number  
 Contacts with emergency aid (neighbour, caretaker)  
 Repetitions at the factory 0  
 Announcement: Smoke alarm, address, access iVA  
 Election process secured by iCM  
 Detecting invalid call attempts iCM  
 Emergency number (without iCM) 1  
 professional help or call center



The alarm of Smoke, Heat, Carbon Monoxide Detector is automatically reported via help call list

**Remote programming**

Setting parameters of external call  
 Parameter input keyboard phone  
 Procedure DTMF

Set time Header = TIME  
 Waiting time Read aloud Set Header = READ  
 Format #HEADER value

**Time Value** #ZEIT  
 hh= 00 ... 24  
 mm= 00 ... 59

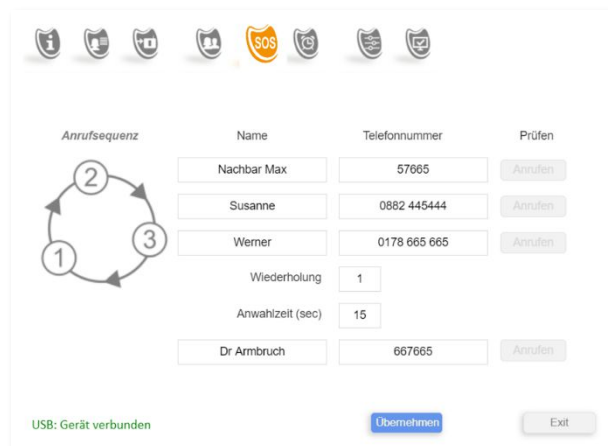
**Waiting time Value #READ** X  
 fast = 1 second => X = 1  
 slow = 2 seconds=> X = 2

**iCM intelligent CALL MANAGER**

Call analyzer for all help numbers  
 Targets Detecting Invalid Connections  
 Perform automatic call sequences safely  
 Recognition of occupied tone  
 safe exit call by occupied tone

invalid connections  
 Mobile phone out of reach  
 not switched on  
 answering machine

all phones answering machine without ringtone  
 Call call with call duration <2 seconds  
 Dialing time longer than set call duration



securing call sequence in case of fall and smoke alarm  
 identifying invalid connections

**PC APP**

compatible with WIN PC  
64 bit system

Download via Internet [www.pcapp.net](http://www.pcapp.net)  
Barrier-free operation (blind persons) NVDA, JAWS

Voice selection PC APP and Device automatically  
via download PC APP

**System aids**

System time automatically over PC time  
Version Software Release  
Upgrade device software  
Registration base station PIN up to 8 digits  
Unsubscribe Base Station  
Reset (RESET 1) factory setting  
Reset (RESET 2) ex works setup

**personal settings**

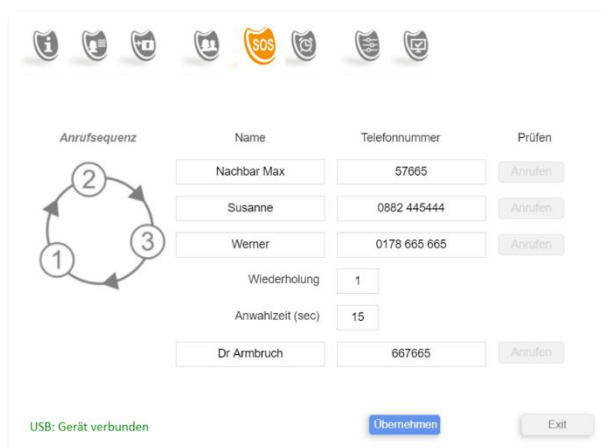
personal data Name, place of residence, access  
Phone book 10 numbers with names  
Call for help Call Sequence + Repetition  
Reminders Time + Statement  
Enter the time announcement time

**Audio Settings**

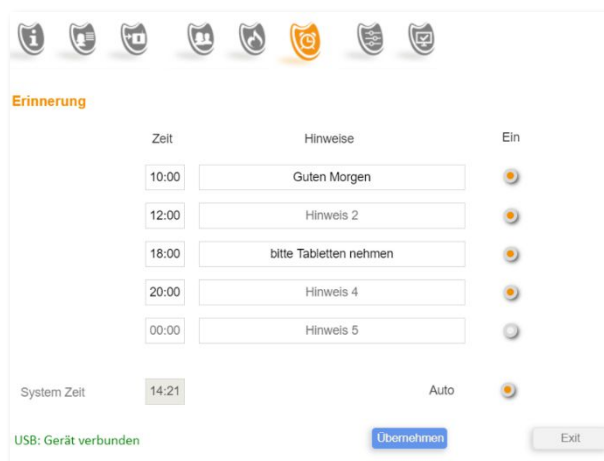
iVA voice assistant ready to use  
available languages see [www.pcapp.net](http://www.pcapp.net)  
Volume in 5 steps  
ex factory medium  
Call tone 5 polyphonic melodie  
ex factory Old Style  
volume in 5 steps  
ex factory medium  
Phone call volume in 5 steps  
ex factory medium



local PC APP via USB to WIN PC



Configuration sheet: Call for help



Configuration Sheet: Reminders

**iVA integrated SPRACHASSISTENT**

Available languages see [www.pcapp.net](http://www.pcapp.net)

Use in the product, among others

Sign up base station positive message

Negative message with indication cause

personal data name, address, access

Announcement for automatic calls

Phone book announcement name of the caller

Selection Contact with namen

Call for help Announcement of selected contacts and status

Situation message to called contact

for automatic calls for help

Reminder Announcement Time and Instruction

fixed time announcements

Time of spontaneous time announcement on request

Error messages for all operating states

Warnings battery charge status and radio range

situational recommendations fall events

**Battery Data**

|                                 |                         |
|---------------------------------|-------------------------|
| Technology                      | Lithium Ion             |
| physical capacity               | 450mAh                  |
| charging capacity (reduced )    | 375mAh                  |
| Standby Device                  | > 2 days                |
| Call 10 min                     | standby reduction by 5% |
| continous call                  | max 3,5h                |
| max telephony for standby 1 day | 45 min                  |

reduction of capacity due to charging cycles typically: 1 charging per day

|                           |               |
|---------------------------|---------------|
| 500 cycles (ca 1,5 years) | capacity -10% |
| resulting standby         | ca. 45h       |
| 700 cycles (ca 2 years)   | capacity -20% |
| resulting standby         | ca. 40h       |
| 850 cycles (ca 2,5 years) | capacity -30% |
| resulting standby         | ca. 35h       |

Warranty on Battery 6 months

**PRODUCT LABELLING**

|                                   |   |
|-----------------------------------|---|
| Product class                     | DECT home emergency call with fall detector |
| Type                              | DA1450                                      |
| Name                              | DECT Telecare                               |
| Ident number                      | 1450.1000.00                                |
| Serial number                     | IPEI  |
| CE about Notified Body            | NB 700                                      |
| DECT Module                       | DA1253-type DOSCH&AMAND                     |
| WEEE (disposal/recycling)         | DE 23 684 005                               |
| Taric Code (Customs Code Product) | 85171200                                    |

**Commissioning**

Prerequisite operational DECT base station

Plug & Play up and running in 2 steps

1. Press the anmungbase call button
2. Control call ringing, call acceptance

automatic takeover 1st call

in phone book instead of No 10

for all emergency number manual, fall, smoke

personal configuration via PC APP

Prerequisite WIN 64 bit

Remote configuration on request

**DELIVERABLES**

|                                    |                                |
|------------------------------------|--------------------------------|
| Basic unit                         | DA1450                         |
| Charging Battery                   | Qi Charging Disc               |
| Connection to charging disk and PC | USB cable                      |
| Power supply charging disk         | USB plug-                      |
| PC APP                             | Download Internet on WIN 64bit |
| Application                        | shoulder strap textile         |
| Commissioning                      | Quick Start Guide              |



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