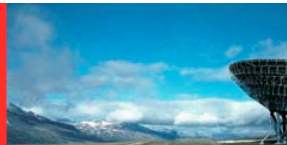


Swissphone DE900/DE920/DE920 Ex/DE925



Swissphone
DE920 Ex / DE925
18.09.2006

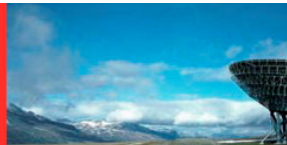


800-822-2180
P&W
Paging & Wireless
Service Center
800-822-2180

SWISSPHONE

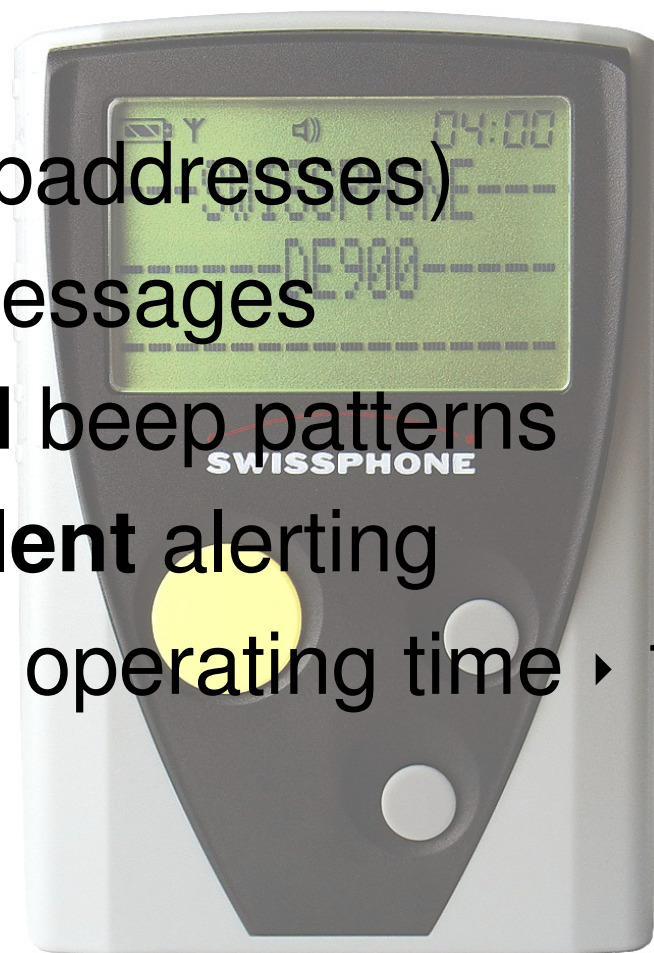
Advantages of the DE9xx product line

- **Exclusive „cell phone like“** design and very easy usage
- **Big** character size
- Bright 3 LED **backlight**
- **Robust and reliable** (IP52/IP54)
- **Very loud** beeper (>80 dBA @ 30cm)
- Outstanding **sensitivity**
 - **reliable reception**
- Battery status indication
- Holster with **locking mechanism**
- Service friendly
- Easy programming via software



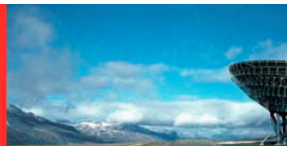
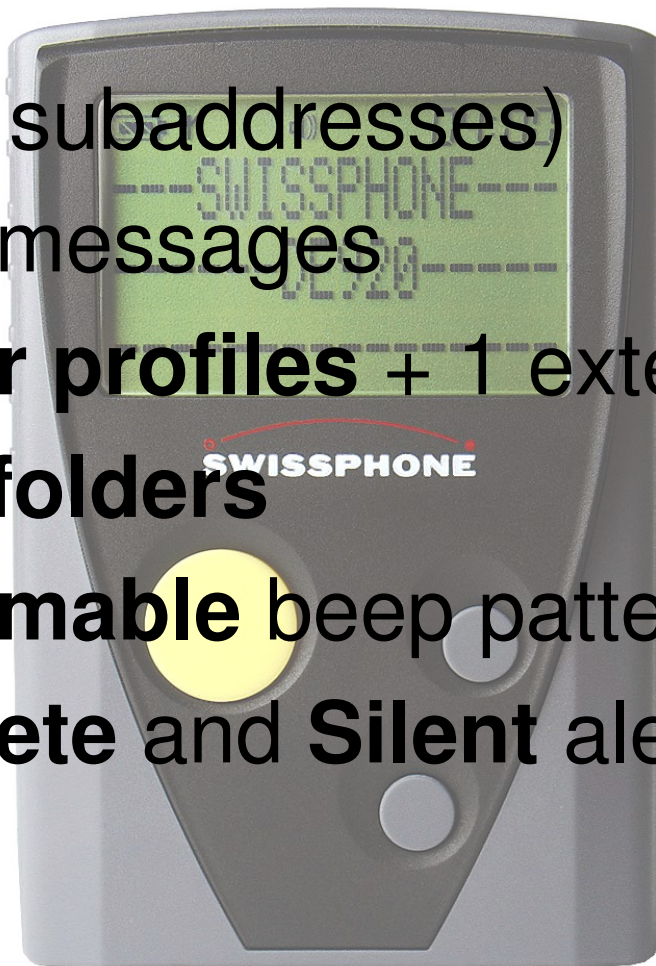
Features DE 900

- **8 RIC** (32 subaddresses)
- **32** canned messages
- **8 predefined** beep patterns
- **Loud** and **Silent** alerting
- Up to **3300 h** operating time ▶ 19 weeks (ECO-Mode)



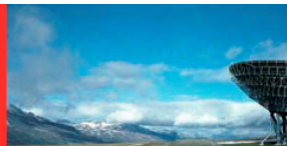
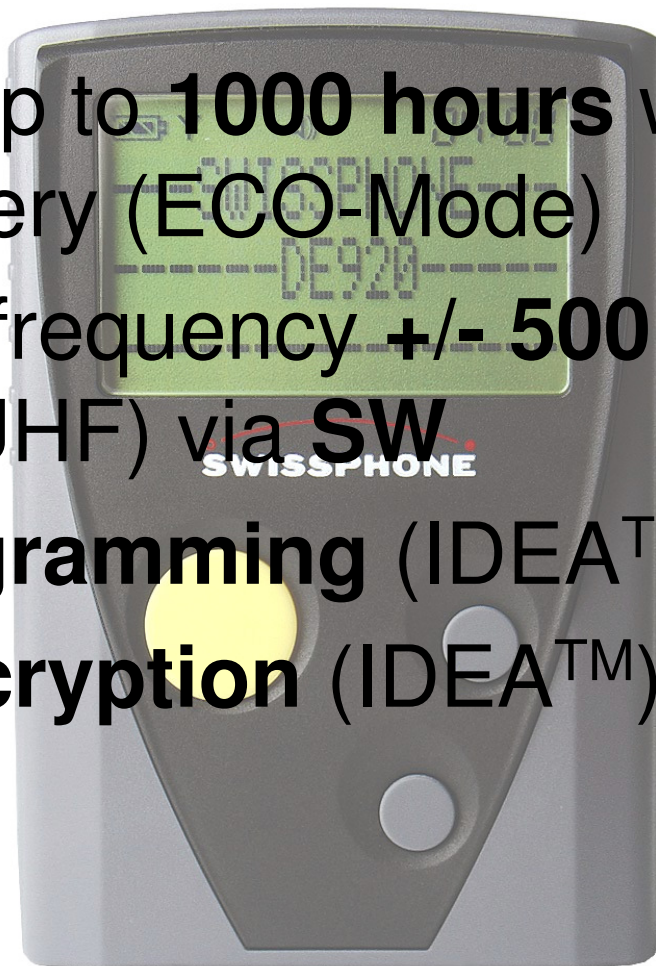
Features DE920/DE920 Ex/DE925 1/2

- **32 RIC** (128 subaddresses)
- **128** canned messages
- **9 alerts/user profiles** + 1 extension profile
- **2 message folders**
- **16 Programmable** beep patterns
- **Loud, Discrete** and **Silent** alerting and **Off**



Features DE920/DE920 Ex/DE925 2/2

- Battery life up to **1000 hours** with 2000mAh alkaline battery (ECO-Mode)
- PLL: center frequency **+/- 500 kHz** (VHF), **+/- 1 MHz** (UHF) via SW
- **On-Air Programming** (IDEA™ encrypted)
- **Optional encryption** (IDEA™)



DE920 Ex, mobile alarming in hazardous areas

Compliance: II 2 G EEx ib IIC T4

II All areas except mining

2 Hazard: occasional (< 1000h / year, zone 1)

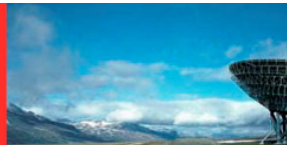
G Indicator of atmosphere type (G = gas)

EEx Certified explosion protection EN50014, 50020

ib Intrinsic safety, for use in zone 1 + 2

IIC Highest explosion group, typical gas: Hydrogen

T4 Maximum permitted temperature 135°C



DE925

- Cell phone like operation
- 5-line backlit full graphic LC Display with 105 characters
- Possible display types (line x character):
 - 5 x 16
 - 5 x 20
 - 5 x 21



DE920/DE920 Ex/DE925 profiles

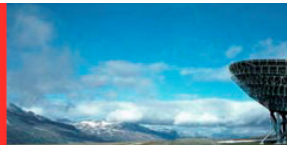
9 user profiles



- All addresses can be allocated to each profile
- Different alert patterns per profile

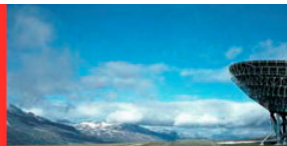
Extension profile

- Activates additional addresses to the selected profile



Profile example DE920/DE920 Ex/DE925

	RIC	Typ	P1	P2	P3	P4	P5	P6	P7	P8	P9	E	LGM	Piep	Prio	Z	O	I	Fixmeldung	A
1 A	500	Alpha	✓										✓	1	✗	✓				✗
B		Alpha											✓		✗	✓				✗
C		Alpha											✓		✗	✓				✗
D		Alpha											✓		✗	✓				✗
2 A	501	Alpha	✓	✓									✓	2	✗	✓				✗
B		Alpha											✓		✗	✓				✗
C		Alpha											✓		✗	✓				✗
D		Alpha											✓		✗	✓				✗
3 A	502	Alpha	✓	✓	✓								✓	3	✓	✓				✗
B		Alpha											✓		✗	✓				✗
C		Alpha											✓		✗	✓				✗
D		Alpha											✓		✗	✓				✗
4 A	503	Alpha	✓		✓								✓	4	✓	✓				✗
B		Alpha											✓		✗	✓				✗
C		Alpha											✓		✗	✓				✗
D		Alpha											✓		✗	✓				✗
5 A	504	Alpha										✓	✓	5	✗	✓				✗
B		Alpha											✓		✗	✓				✗
C		Alpha											✓		✗	✓				✗
D		Alpha											✓		✗	✓				✗
6 A	502	Alpha				✓							✓	6	✗	✓				✗
B		Alpha											✓		✗	✓				✗
C		Alpha											✓		✗	✓				✗
D		Alpha											✓		✗	✓				✗
7 A	503	Alpha				✓							✓	6	✗	✓				✗
B		Alpha											✓		✗	✓				✗
C		Alpha											✓		✗	✓				✗
D		Alpha											✓		✗	✓				✗



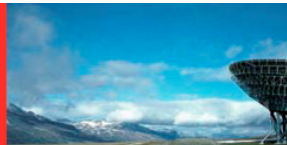
Easy programming via PSW900 software

The screenshot displays the PSW900 software interface with several panels:

- Menu:** A list of functions with status indicators. 'MESSAGE' (Read, Delete, Delete all, Protect) and 'ALERT' (Loud, Discrete, Silent, Off) have green checkmarks. 'ALARM CLOCK' (On / Off, Set time, Snoozer), 'STATUS', 'ALERT OPTIONS' (Profile, Alertpattern, Call reminder, EA-monitor, DynGo system, Out of range), 'SETTINGS' (Set time, Set date, Language, Light, Battery, LCD-contrast, ECO-mode), and 'SWITCH OFF' all have red 'X' marks.
- Settings:** A list of settings with status indicators. 'Additional functions' (DynGo, Idea) and 'Messages' (Folder-Chars, Time stamp, Wordwrap, Reminder beep, Message terminator, Fast read, Net-ID = EA-Delimiter, Max. tolerated erroneous chars) have red 'X' marks. 'Default Settings' (Language, Acoustic out of range, Alert, Rechg batt, ECO-mode, EA-Monitor, Snoozer, Light) and 'Miscellaneous' (Receiving frequency, Baudrate, Inverse data, Simple Mode, Button click) also have red 'X' marks. 'Timeouts' (Display, Call suppression, Out of range, Call reminder, Low battery reminder) have numerical values.
- Starttext:** A text field containing '---SWISSPHONE---' and '---DE920---'.
- Names:** A table listing profiles P1 through P9, E, CM, Folder A, and Folder B.
- Info:** A table showing technical specifications for the DE920 | alpha device, including Type, Serial, Order, Print / Rep, Band, Switch.range, Modulation, FW / SW, PSW / Prod, NiCd capacity, NiMH capacity, and Tuning Freq.
- On Air Programming key:** A field containing a red 'X' and a long string of zeros.

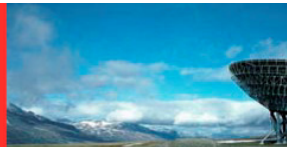
At the bottom of the interface, there are buttons for 'RIC', 'Options', 'Canned', and 'Tones'.

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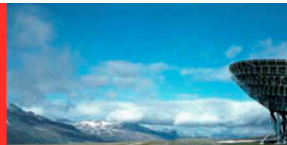
Optional IDEA™ encryption feature

- Developed at **ETH Zurich**, Ascom patent
- Key length **128 bits**
 - if 1 Mio computers tested 1 Mio combinations per second \Rightarrow 10 trillion years
- Used for PGP and e.g. TV decoders
- Fully integrated end-to-end encryption of messages



Advantages of the IDEA™ encryption

- Protection against unauthorised reading of alarms
- Protection against traffic analysis
- Protection against replay of alarms (time offset protection)



On-Air Programming (IDEA™ encrypted)

- Date and time setting
- IDEA key change (only IDEA pager)
- Profile change
- Shutdown
- Reactivation

