Programming Guide

PSW529

V 1.2 February 2005
Dempwolff

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1   Introduction

The PSW529 programming software enables the activation and configuration of the SWISSPHONE RE529 analogue receiver.

You can obtain the programming software either as a component included in the PG529 Programming Set, or as the separate item PSW529 programming software.

PG529 Set (110V AC)   **SW-Art. No. 0951457**

Set contents :

PG529 programming device (110V)	SW-Art.No. 0951449
RS232 connection cable	SW-Art.No. 0240130
Serial adapter	SW-Art.No. 0270350
PSW529 programming software CD	SW-Art.No. 0991975

The programming software CD also contains the accompanying user's guide.

The PSW529 programming software offers the following options:

- Read, modify and program addresses and pager options
- Read-out of software and hardware configurations
- Storage of device configurations and programming parameters as data files

The data file concept for the PSW529 is comprised of two data files:

1.   *.529 data file

This file contains customer-specific programming data, such as addresses and pager options. The pager is programmed by means of this file.

2.   PSW529.ini data file

This file contains parameters for initialising programming software, such as window configurations, etc. This data can be used for future upgrades of the PSW.

2   Installation

2.1   System requirements

IBM compatible PC:
   -   Pentium II (min 200MHz)
   -   32MByte RAM
   -   RS232 interface
Maus: required
	Supported operating systems:
	   - Windows 95/98
	   - Windows ME
	   - Windows NT
	   - Windows 2000
	Windows XP

2.2   Getting started with the programming set

The PSW529 works together as a unit with the PG429.

The programming device is provided with power via the mains power adapter. Use a RS232 cable to connect the programming device to your PC. Now make sure the SWISSPHONE DE900 **is loaded with a power source (**alkaline batteries or rechargeable batteries**)** and insert the device in the programming device.

RS232 - Kabel
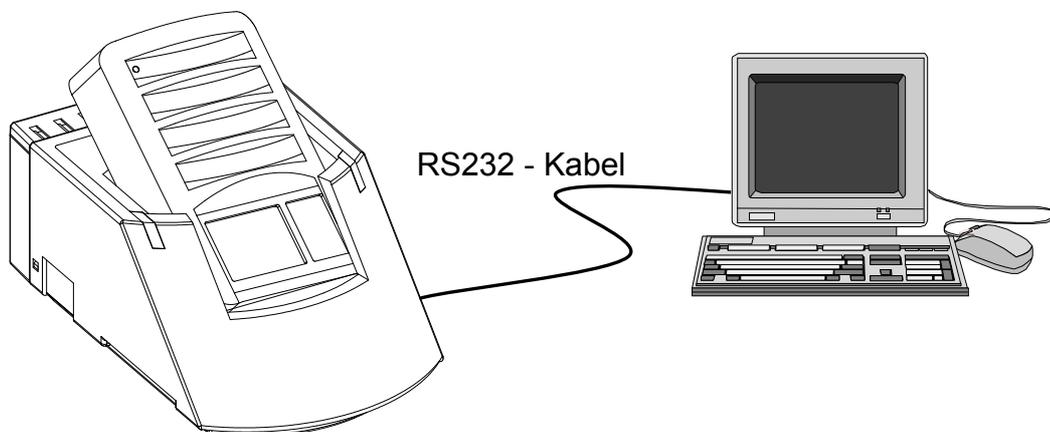
2.3   Installation of the software

The accompanying CD contains a set-up data file which will guide you through the installation process. After the installation is completed, double-click to start the programming software.

2.3.1   Configuring the RS232 interface

Select the port to which the programming device will be connected.

3   First Steps

Start the PSW529 programming software by double-clicking on the PSW529 icon. The PSW529 user interface is designed as shown below:
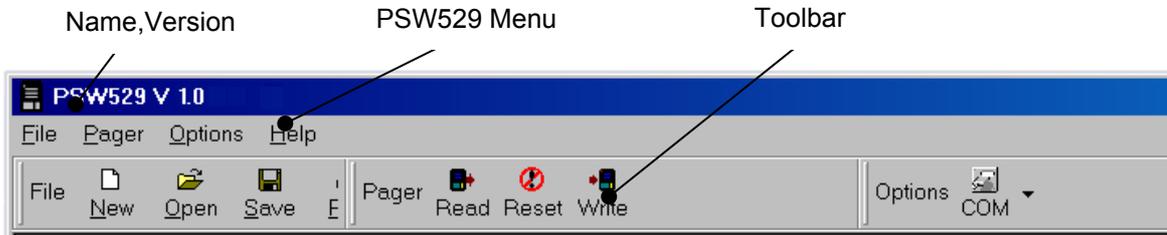
Figure 1: PSW529 user interface (header portion of screen)

In the uppermost left corner of the screen, you will see the name and version of the software (PSW529 V 1.0).

The second line of the header horizontally lists the main menus with their corresponding submenus. The functions are activated directly by means of the keyboard, which enables faster function input. All functions can also be performed using the mouse. The toolbar helps you in this regard.

In the third line, the toolbar displays the various shortcut symbols. These icons enable quick access to the functions. You can arrange the icons as you wish using the left mouse button. The right mouse button can be used to activate or deactivate these.
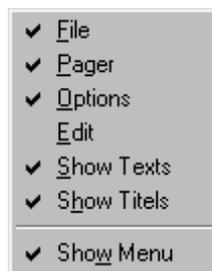
3.1 The second line: Menu and sub-menus

3.1.1 File

New	Define a new pager data file.	
Open	Open an existing pager data file.	
Save	Save current pager file under the existing name.	
Save as	Save current pager file under a new name.	
Print	Print the current pager data file.	
Close	Stop editing of the current pager data file.	
Exit	Exit this program	

3.1.2 Pager

Read	Read out and display the data from the pager.
Reset	Reset the pager to its last programmed state.
Write	Write the current pager data file into the pager memory

3.1.3 Options

Language	Select the desired language.
Com	Set the number of the serial port used to connect the programming device.

3.1.4 Help
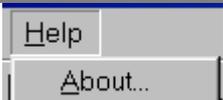
About	Read product information about this software. This data is useful when communicating with our customer service department.

3.2 The toolbar

The first group of icons are Windows standard functions that allow you to perform general administration tasks with pager data.

⬜	Define a new pager data file
📂	Open an existing pager data file
💾	Save the pager data file (using existing name only)
🖨	Print the pager data file

The second group of icons are functions specific to the PSW529 software

📟➡	Pager read-out
🚫	Reset: initialize pager
➡📟	Program pager
🔧	Service Editor

The third group of icons relates to configuration of the programming software

🖥	Selection of the RS232 port

4 Configuration of the Pager

To edit the data for a pager, define a new file (File-New, CTRL-N) or edit an existing data file (File-Open).
Of course, you may also read out from a pager that is already programmed. (Pager-Read)

4.1 Addresses

The address editor is the first tabbed screen of the window that appears displaying pager configuration data. This screen displays all addresses that can be configured for the SWISSPHONE RE529. To access the individual configurations, first select the corresponding coding option. Then simply click in the entry field that you would like to modify.
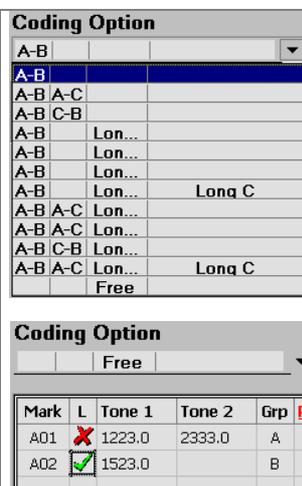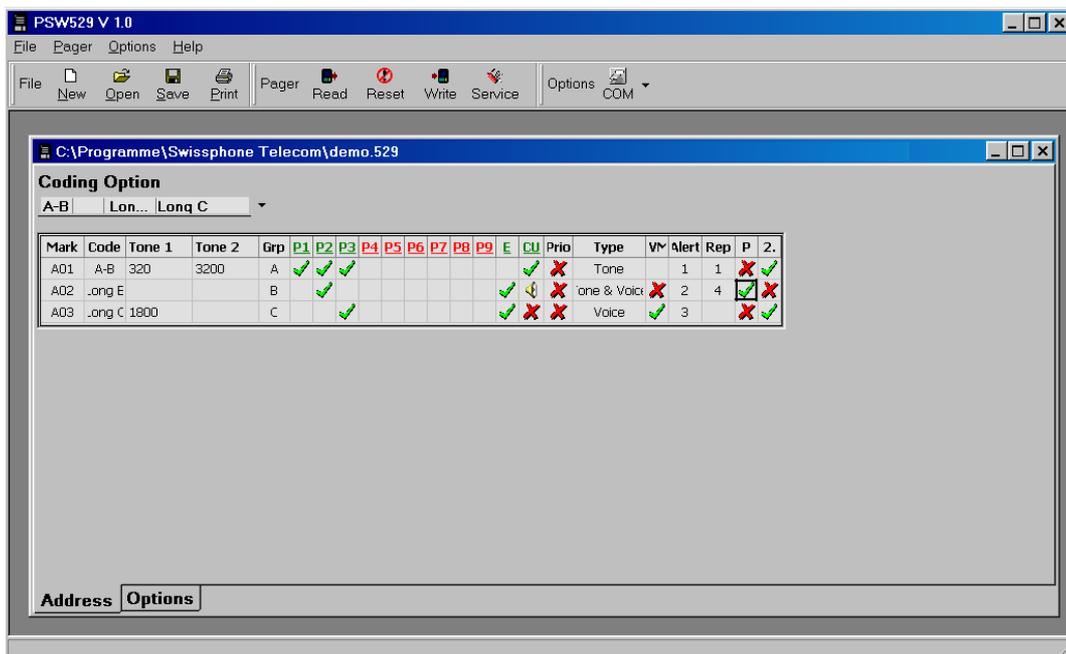
Coding Option

Select from the existing address structures. The entry fields specifying the tone frequencies for the addresses will now be displayed. Fill these out after mouse-clicking directly in the desired field. Enter in the frequency in hertz.

If you select "Free", you can enter in tone frequencies for 16 addresses independent of one another. Begin by entering in the tone frequencies, line by line. You can define a long tone by specifying Tone 1 only and then activating √ "L"

The following table explains the meaning of the other configuration parameters:

	Mark Address Mark Shown On Display
 Mark A01 A02	The LCD displays this abbreviated name when the address is called. Any of the three character spaces can be either blanks or display numbers "0" to "9" and letters "A" to "F". This abbreviated name is also displayed when the memory is queried.

	Tone1 Tone2 Tone of Address
**Code	Tone 1	Tone 2	Grp** A-B	320	3200	A .ong A			B **L	Tone 1	Tone 2	Grp** ✗	320.0	3200.0	A ✓	320.0		B	Enter the tone frequency expressed in hertz in the Tone1 and Tone 2 columns. Pay attention to the designation under "Code". You enter the tone frequencies only one time. For example, if the "A" tone is used multiple times, then it is entered only in the uppermost position. The subsequent corresponding fields are blocked. If the **Coding Option** "Free" is selected, the column "L" (Longtone enable) appears instead of the column "Code". This option enables you to program a long tone. To do so, enter the frequency in the field "Tone1" and activate √ this function.

	Grp Address Group

**Grp	P1	P2	P3	P4	P5**
					A
					
					Address group ▶ A
					           ▶ B
					           ▶ C
					           ▶ D
						Addresses can be assigned to four different groups. When a new message is received, the assigned arrow is shown on the LC display. It is allowed to assign multiple addresses to the same group.
						
						Select one of the four groups.

	P1 to **P9** Profiles
rp	**P1	P2	P3	P4	P5	P6	P7	P8** A	✓	✓	✓ B		✓ C		✓ D			✓ Address on/off in profile 3	This feature is more than just a switch: Define the profiles that can be selected on the pager. For example, P1 can be designated as "Off Duty", P2 as "On Duty" and P3 as "On-Call". You may define up to 9 profiles. The active profile is highlighted on the pager display. A selected profile only responds to calls whose addresses are marked with a green checkmark √. Prerequisite: The menu point "Profiles" under Options must be activated. **Menu** P0 Profiles ✓

	E Extension Profile On / Off
9 **E** 0 ✓	This feature can be programmed in the same manner as Profiles. The Extension Profile on the pager can be switched on/off at any time. Prerequisite: The menu point "Profiles" under Options must be activated.

		CU	Charging Unit Alert Mask

CU   Charging Unit Alert Mask

Define pager behaviour when attached to the charger: Activate √ or deactivate **X** an alarm tone as programmed in the pager. If you select the loudspeaker icon, a loud alarm tone will be emitted even if the pager is set to "Silent".

Prio   Priority Address

If the user has set his/her pager to "Silent", the addresses with activated √ priority will nonetheless emit a loud alarm melody. (The pager's "Silent" option may be disabled in the corresponding menu tab under **Options**.)

Type   Type of Address

This feature allows you to set the address type: "Tone" plays the alarming melody after receiving a valid address. A "Voice" address switches on the speaker without playing the alarming melody. "Tone & Voice" sounds the alarm immediately after the address is recognised and switches on the loudspeaker.

VM   Voice Memory

Select the functionality of the addresses: Activate √ the speech memory to record a vocal announcement in the pager's memory. (Only for Memo pagers. No memory can be activated for addresses of the "Tone"- **Type** , see above.)

Alert   Alert Pattern

Assign the acoustic alarm melody to the addresses. You can define the acoustic alarm signals under **Options**. You may define up to 8 different melodies.

Rep   Alert Pattern Repetition

Define how often the alarm melody is repeated.

P   Pause Between Alert Pattern

Activate √ a pause between the melody's repetition cycles.

2.   Alert for Second Tone Time

The alarm signal continues to be emitted as long as the 2nd tone is detected. In the case of a long tone, the alarm signal continues to be emitted as long as the tone is detected. If this feature is deactivated **X**, the alarm signal will be played as defined in **Options**.

4.2 Options

The Options tab allows you to define general properties of the pager itself. These settings do not affect the addresses. Examples: alarm melodies, operation menu, type of rechargeable battery and many others besides these. Click on the fields and features that you wish to activate √ or deactivate **X**. Similar to Windows Explorer, the folders can be opened (contents visible) or closed (contents hidden).
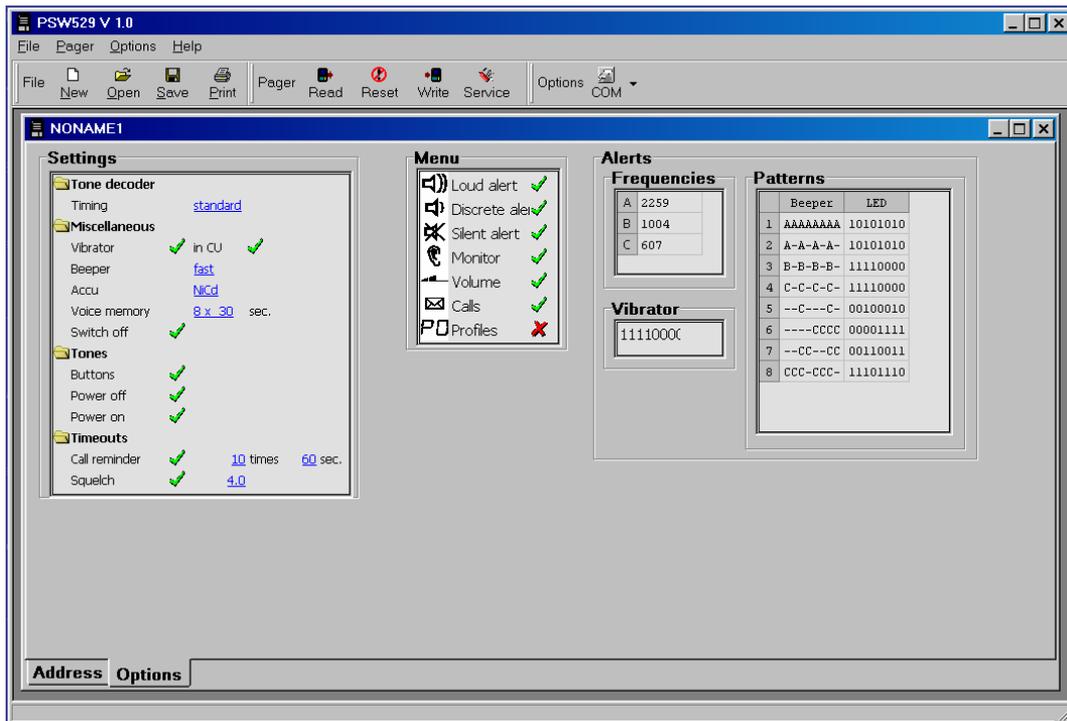
4.2.1 Menu

The user's actions can have a significant effect on the way his/her pager operates. He or she selects the various functions from the menu.

It is often not reasonable to make all the functions available to the user. Activate √ or deactivate **X** specific menu functions. Determine the order in which the user will be lead through the function selection on the LCD. Change this order with your mouse using "drag & drop". The function listed uppermost in the list will be the first presented to the user.

The following operating conditions may be adjusted:

	Loud Alert Incoming alarms are audibly signalled at high volume. Pay attention that the user has an alternative function available. (Discrete or Silent Alert) If none of the alert levels (Loud, discrete or silent) are activated, the pager will always emit a loud alarm signal.
	Discrete Alert The pager emits an alarm signal using a short acoustic signal and the vibrator. Activate an alternative function (see Loud Alert)
	Silent Alert The pager emits an alarm signal using only the vibrator. Activate an alternative function (see Loud Alert)
	Monitor Independent from the alarm function, the user can monitor radio communications. Does not require any alternative function.
	Volume The user himself can specify the volume of alarm melodies and vocal message announcements. If this function is deactivated **X**, the loudspeaker will emit at high volume.
	Calls Enables the user to listen to stored messages and then delete them at his discretion. (Memo only) If Calls is deactivated **X**, the user can only listen to stored messages through the express memo function - but not delete them.
	Profiles This menu function allows the user to select the combinations defined under addresses P1 to P9 and E. If this function is deactivated **X**, then no profile is activated and all programmed addresses are active.
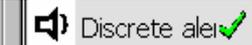
4.2.2   Settings

Click on a folder to display its contents. Clicking on the blue, underlined property link allows you to toggle between the various options.

Tone Decoder

By default, the Tone Decoder is set to **standard**. "Standard" is programmed with a reaction time to match most networks. If you would like to use the pager in a fast network (e.g. Fast Plectron), Swissphone recommends switching the timing to **fast**.

In case you need a more sophisticated solution, please contact your local dealer.

Settings
Tone decoder
Timing   standard

Miscellaneaus

Vibrator Use the left icon to activate √ or deactivate **X** the vibrator function. The right icon allows you to specify whether the vibrator remains active when the pager is attached to the charger.

Beeper If the alarm melody seems to play too slowly, set the playback speed to **fast**.
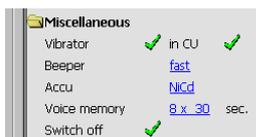
rechrg Batt   If you use a rechargeable battery (recommended by Swissphone), please specify the correct type here. Doing so allows the pager to more accurately estimate the battery's residual energy level and to display this information on the LCD.

Voice Memory   Specifies how the voice memory is to be allotted. Take into consideration the settings entered under **Address– Type** when allotting memory. (Memo only)

Switch Off   Permits √ the user to shut off the device. You may also prohibit **X** shut-off. In the latter case, the pager operates until the battery is empty.

Miscellaneous
Vibrator   ✔ in CU   ✔
Beeper   fast
Accu   NiCd
Voice memory   8 x 30   sec.
Switch off   ✔

Tones

Buttons   Activates √ the typical "click" sound when buttons are pressed.

Power Off Activates √ the "Power Off" sound that is played when the pager is shut off. It serves as a warning signal to avoid unintentional shut-off.

Power On Activates √ a user attention signal when turning on the pager. In this way, you know the loudspeaker is working.

Tones
Buttons   ✔
Power off   ✔
Power on   ✔

Timeouts

Call Reminder

Optical Call Reminder (icon)   If this function is activated √, the pager's red LED blinks when a call is recognised.

Acoustic Call Reminder ([numbers])   The alarm pattern is repeated as soon as the pause time (in seconds) expires.

Squelch   If this function is activated √, the pager stays alerted for a [number] of seconds after carrier signal is missing. During this delay time, a returning carrier makes the pager to switch on the speaker again.
If this function is switched off, the pager will be immediately turn silent if the carrier signal is absent. Only the next alert will activate it.
Setting this delay time to "0" keeps the pager alerted until you press the execute key.

4.2.3 Alerts

Defines the various alarm melodies. With practice, the user will recognise the alarming addresses by their corresponding melodies.

Frequencies

Specify the three audio frequencies A, B, C (in hertz) with which you will compose the melodies in the following instructions.

Patterns

Beeper   Define up to eight melodies for the loudspeaker by specifying the audio frequencies (A,B or C) for each melody. A minus sign "-" creates a short pause. (e.g. ABA-ABA-). The melody length is limited to a maximum of eight characters. The number of the pattern can then be assigned under Address-Alert.

LED   Similarly, the LED's can be programmed to light in a characteristic rhythmic sequence. "1" switches on the red LED, "0" shuts it off. Enter in a maximum of eight digits per pattern.

Vibrator

Similar to the LED's, the vibrator can also be programmed to turn on and off to a characteristic rhythmic sequence.

5   Service Dialog

The Service Dialog is an aid for service centres of Swissphone RE529 pagers. Nevertheless, some of the functions are made to check the pager. For the non documented functions, please refer to your service manual.
Please leave this service dialog with resetting the pager. This makes sure to have the pager back in the correct operation modus.
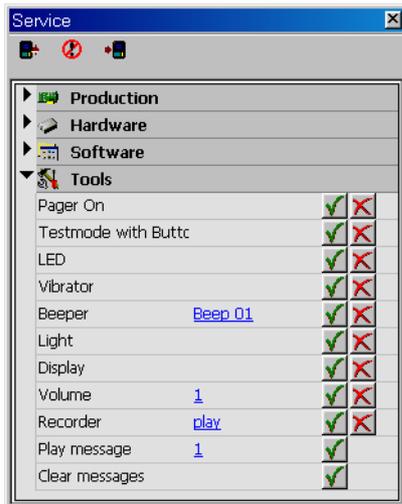
Tools

Switch the functions on √ and off **X** to check the pagers proper operation. You may change blue underlined values with a mouse click onto them.
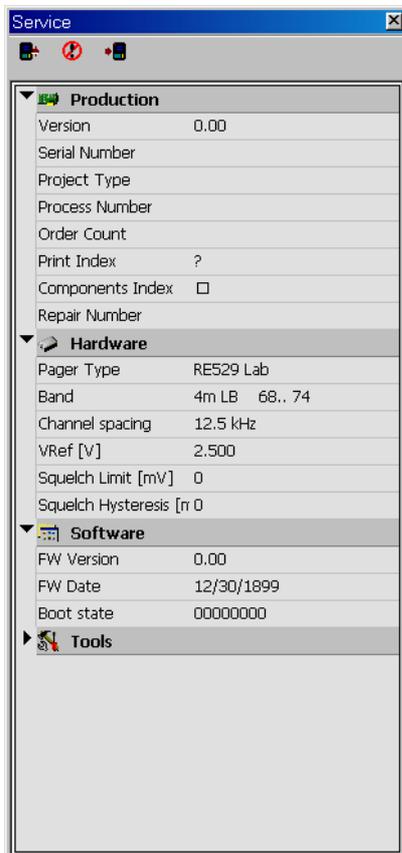
Production
Hardware
Software

These functions are for service staff only. After passing a Swissphone Service Training, you will obtain a service manual. Therein you will find the needed descriptions. Additionally, you need to unlock this software to get access to these functions.
Since these parameters are very critical for the reliable operation of the pager, a locked version is not able to create a non-working pager. Anyhow, you may read the settings in any case.