# **PalmLink**

Richard Körber

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PalmLink

COLLABORATORS						
	TITLE :					
	PalmLink					
ACTION	NAME	DATE	SIGNATURE			
WRITTEN BY	Richard Körber	July 10, 2022				

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PalmLink

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# **Chapter 1**

# **PalmLink**

## 1.1 Table Of Contents

Amiga connects to the 3Com Palm v2.0

- -- TABLE OF CONTENTS --
- 1. Introduction how it all started
- 2. Requirements what do you need?
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- E. Credits Thank you!

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## 1.2 Introduction

INTRODUCTION

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Once upon a time, a close friend of mine showed me his new Palm Pilot Personal. I was impressed of this cute little thing. The only drawback was the missing IR interface, so I decided not to buy one yet, and finally I forgot it again.

Then, in the March issue of a major German computer magazine, I read about 3Com's announcement of the Palm III. The Palm III has an IR interface built in, so it was the stuff dreams are made of. :-)

I got more and more curious about the Palm Pilot series, the existing large software pool, its hardware and its operating system. I found out that the Palm is a kind of 'Amiga lite'. It has an 68000 core.

Even more, the Palm outperforms a native Amiga 500 due to its 16MHz clock. The PalmOS is lean and has preemptive multitasking. I still wonder why there are only a few Amiga users who know about it. It is an "Amiga" that you can put in your pocket and have it around you wherever you are. ;-)

Of course, the Amiga is not supported by 3Com. The only chance we had until now was to buy the MacPack and run it on ShapeShifter, or to use all the free Un\*x sources on NetBSD. Both solutions are not very satisfying.

So I had a very close look at the freely available pilot-link source by Kenneth Albanowski (thank you very much, Kenneth). Anyhow, I disliked to do just another Un\*x port. They are slow, memory consuming and require the ixemul.library. In other words: they suck a big deal, compared to native Amiga applications. (Of course, they are still better than nothing. ;-)

So PalmLink is not just a Un\*x port. I wrote it from the scratch new, with a new (and partially unconventional) concept and use of AmigaOS features.

I hope you will enjoy it as much as I do! Richard Körber

## 1.3 Requirements

REQUIREMENTS

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#### PalmLink requires:

· AmigaOS 2.04 or higher, and at least 1MB of RAM. If you have

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large files on your Palm, then you must also have more RAM on your Amiga, since all files are cached in RAM. I also suggest to use a harddisk.

- · 68020 or higher (no FPU or MMU). Special 68000 library included.
- · A 3Com Palm III, Palm IIIx, Palm V, or compatible, with PalmOS 2.0 or higher.

PalmOS 1.0 is not supported. The required workarounds would be implemented rather quickly, but there are more important things.

- · The Palm cradle. Currently, simple serial cables without HotSync button are not supported. Also, do not modify your cradle to save battery power! PalmLink won't work then.
- · A serial interface the Palm cradle is connected with. The serial port must be able to use 8N1 at 9600 baud. It may also support higher rates up to 115200. If you use the internal port, I suggest to use the 8n1.device for better performance. BaudBandit.device should work as well, but this is untested.

## 1.4 Copyright

COPYRIGHT

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Please read the following parts carefully.

If you do not agree to these Copyright notes, you must delete this archive and all related files.

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#### COPYRIGHT

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NOTE: You accept the following terms by starting the software, even for a test drive only.

PalmLink is Copyright © 1998-2000 Richard Körber. All rights reserved. You only have the right to use the software, but no rights on the software itself. Disassembling, resourcing and all other ways of reverse engineering is forbidden.

For the example source codes the GNU General Public Licence applies.

A copy of the GPL should be part of this packet. Note that the GNU General Public Licence only applies where explicitly mentioned. All other files (as e.g. the library itself, or this documentation) are NOT under GPL!

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#### **FREEWARE**

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PalmLink is FreeWare. You are allowed to use the packet without paying a fee or similar to the author.

#### **DEVELOPERS**

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Public Domain and FreeWare developers are allowed to use PalmLink for free.

Commercial Developers (including ShareWare developers) must send me a free copy of the software that uses PalmLink, as well as all updates and upgrades that uses PalmLink. The software must be registered to me and must be fully functional.

To mention it once again: ShareWare is also considered as commerical! You are allowed to put the palmlink.library to your software packet, as long as you state in your documentation that you are using PalmLink by Richard Körber, and that updates can be found at this URL: http://shredzone.home.pages.de

### COPYING

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You can copy the packet as long as it remains entire and unchanged. You are allowed to compress the packet using a customary compression software (as lha, lzh, lzx, dms). You must not compress single files of the packet (e.g. PowerPacker or Imploder).

#### DISTRIBUTION

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You must not exceed an usual price on the market for your working and material. This means a maximum of 5 DM (or the equivalent amount in other currencies) for disks and 35 DM for CD-ROMs containing a PD software collection.

I explicitly permit the distribution via AmiNet, Meeting Pearls and other well-known PD series.

I explicitly forbid 3Com to advertise with the existence of this software.

#### LIABILITY

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You are using the program as it is, with all flaws, and on your own risk! I grant no warranty for the software meeting a special purpose. This software may cause financial damage or harm people.

This software could also:

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- · change, delete or invalidate data on your Palm
- · destroy the Palm, the cradle or the Amiga
- · void the warranty of the Palm

Please consider this anytime. If you have important data on your

Palm, make sure to backup it using original 3Com software.

#### **LIMITATIONS**

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You are not allowed to use this software and its results

- · for fascist or military purposes, including the transfer of appropriate software and data
- · if your Palm contains critical data, or if people's life or property relies on the Palm
- $\cdot$  if you do not agree to the copyright note

In this case you must delete the software and all related,

transferred, received and generated files immediately!

#### COPYRIGHTS AND TRADEMARKS

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3Com, Palm, Palm III and HotSync are Trademarks or Registered

Trademarks of 3Com respectively, see http://www.3com.com . 3Com was

formerly known as US-Robotics.

Amiga is a trademark of it's current owner. ;->

All other copyrights and trademarks are held by their owners.

### 1.5 Installation

#### INSTALLATION

The document is not completed here. Just a quick guide:

-> libs To your system's LIBS:

Choose between the 68020 version and the

68000 version (palmlink.library\_000)

- -> arexx Some ARexx examples, not required
- -> developer A developer should know where to place them
- -> examples Only interesting for developers
- -> PalmLink.guide To where you collect good documentations; ^)
- -> PalmTransfer To C: or any other directory within Shell path
- -> PalmTime To C: or any other directory within Shell path

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## 1.6 Usage

USAGE

The document is not completed here. Just a quick guide:

PalmTime

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Shows the Palm time

SHOW/S Shows the Palm time

DEVICE/K Serial device to use (def. serial.device)

UNIT/K/N Unit of this device (def. 0)

MAXBAUD/K/N Maximum baud rate to use (def. 28800)

PalmTransfer

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Makes backups of your Palm databases, or installs new software

BACKUP/S Backup the database (DIR)

If a database entry was not changed compared

to the backup, it will not be read. If a

database has been deleted from the Palm,

its file will be deleted as well.

RESTORE/S Restore a backup (DIR)

Put all database files back to the Palm.

Also, see FAQ.

INSTALL/S Install a file (FILE)

Installs a .prc or .pdb file. If the database

does already exist, it will be deleted.

MERGE/S Merge a file (FILE)

Installs a .prc or .pdb file. If the database

does already exist, it will be merged.

FETCH/S Fetch a database (NAME)

Read a database to a .prc or .pdb file.

DELETE/S Delete a database (NAME)

Deletes a database from the Palm

LIST/S List all databases

A list of all databases in RAM and ROM

PURGE/S Purge deleted records

Remove all deleted records from Palm RAM

DIR/K Backup directory (if required)

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(DIR): The directory for the backup files

FILE/K Filename (if required)

(FILE): Name of a .prc or .pdb file

NAME/K Database name (if required)

(NAME): Name of a database entry of the

Palm (case sensitive!)

DEVICE/K Serial device ("serial.device")

UNIT/K/N Serial unit (0)

MAXBAUD/K/N Maximum baud (57600)

Examples:

Backup Palm data using 8n1.device

PalmTransfer BACKUP DIR Work:PalmArchive SD=8n1.device

Restore the backup on duart.device unit 1 and 115200 bps

PalmTransfer RESTORE DIR Work:PalmArchive SD=duart.device SU=1 SB=115200

Install a new program

PalmTransfer INSTALL FILE Work:PalmSoftware/demosoft.prc

Delete a database entry

PalmTransfer DELETE NAME "ExampleDB"

List all database entries

PalmTransfer LIST

### 1.7 Env Variables

ENVVARIABLES

Since V2.0, PalmLink supports these env variables:

PALMLINK\_DEVICE The device to be used by default. If not given,

"serial.device" will be used.

PALMLINK\_UNIT Serial unit to be used by default. If not given,

"0" will be used.

PALMLINK\_RATE Default baud rate to be used. If not given,

"57600" will be used.

Example: add these commands into your user-startup, to use your MFC

board, serial slot 1, at 115200 baud:

setenv PALMLINK DEVICE duart.device

setenv PALMLINK\_UNIT 1

setenv PALMLINK\_RATE 115200

This are only default settings, which can be overridden as usual (e.g.

by the PalmTransfer's SD, SU and SB parameters).

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## 1.8 MailingList

#### MAILINGLIST

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You are invited to join the Palmiga mailing list. This mailing list is made for anyone who owns a Palm and an Amiga.

Just send a mail to palmiga-subscribe@egroups.com . You don't need to write anything into the subject line or into the body.

After you have joined, you can post to this list by sending a mail to palmiga@egroups.com . Please note that you must join the list and you must use the address you have subscribed with, if you want to contribute. This is necessary to keep the list spam free.

You can unsubscribe anytime, just send another mail to palmiga-unsubscribe@egroups.com .

BTW: EGroups will not sell your E-Mail address, neither will I. Please inform yourself about the privacy policy at http://www.egroups.com.

### 1.9 Address

ADDRESS

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You can reach me through one of the following ways:

**E MAIL** 

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Use e-mails if ever possible. My address is:

shred@shredzone.de

If, for some reasons, you should have trouble to contact me under

this address, you can also write to:

rkoerber@gmx.de

shred@web.de

Please do not send mails larger than 40KB without prior permission.

If you should have serious trouble reaching me, check my web page for other e-mail addresses.

**SNAIL MAIL** 

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If you do not have an e-mail account, you may also write a snail mail. Include a preformatted floppy disk and sufficient stamps if you want to

```
get an update this way!
Richard Körber
Überm Rost 13
51465 Bergisch Gladbach
Germany
WORLD WIDE WEB
Updates are available through my web page. URL:
http://www.shredzone.de
Also, have a look at Project Palmiga. It is a place where Amiga Palm
users can come together:
http://palmiga.home.pages.de
SUPPORT BBS
My support BBS Eratosthenes went offline on January 3rd, 2000.
There is no other official support BBS.
PRETTY GOOD PRIVACY
If you feel that way, you may also use PGP (note that the use of
PGP is restricted in some countries). My PGP public key is attached
below.
Type Bits/KeyID Date User ID
pub 1024/3D5D331D 1997/01/08 Richard Koerber <shred@chessy.aworld.de>
-----BEGIN PGP PUBLIC KEY BLOCK-----
Version: 2.6.3i
mQCNAjLTMucAAAEEAOMY/3jzWBFV2Annpc6/VPhZQqF81btsqjyRR670uOELH+iO
PXkrXX7IEo1vtNbKAc/MKDkcn2p4g5159yK2OoZkoqFsCs1JXzFLVfAM41tvaNG0
RTibFJAYCZ03umli5q4EtCj1DCMMeZGzmyAO9mpfuyIC+k6qu/NEvrU9XTMdAAUR\\
tChSaWNoYXJkIEtvZXJiZXIgPHNocmVkQGNoZXNzeS5hd29ybGQuZGU+iQCVAwUQ\\
M0R4IfNEvrU9XTMdAQGe5gQAizTK/KmKymt5GtQQL1PW7m7tmZYBqglwtbSf7RBF
fnntdkyeTQvRlbfjSAKjMYD0ZV34JtjMPJrRifIF6J6abSMQ1xT8IrEpyV8JrRcW\\
Tjb4YEz+qEqo0Pj+l/87fqez1vUpTz19C5R5KNqHBk7/icCBGKuoLGtAmR6oifj4
PKc=
=GI6y
----END PGP PUBLIC KEY BLOCK-----
```

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#### 1.10 FAQ

#### FAQ

I always get a 'bad baud rate' error. What can I do?

Your serial device is not able to generate the baud rate that was suggested by the Palm. Try to lower the maximum baud rate that is used by PalmLink. A maximum baud rate of 9600 should work in any case.

My Palm always falls back to 57600, though I set 115200 bps.

115200 bps is only supported with PalmOS 3.2 or higher.

I have modified my cradle to save the battery power.

By this modification, the DSR line is cut. The DSR line is used by the PalmLink library, because there is NO way on the Amiga to do CTS/RTS handshaking without checking the DSR line as well. This is an AmigaOS restriction. You must fix this line if you want to use PalmLink!

I have some problems with installing Palm files or restoring backups.

BlitzBlank seems to be the troublemaker. Remove it from your WBstartup or startup-sequence. This is advisable, anyhow, since the BlitzBlank startup code is rather buggy. ;(

On restore, some files fail with error code 9

This means that the file does already exist and is not replaceable.

Just ignore this error. It is harmless.

## 1.11 History

#### HISTORY

V2.0 (7. 1.2000)

- · Millennium release :-)
- · PLTAG\_SerialTimeout can now be set to 0. In this case, no timeout checking will occur.
- · Added env variables PALMLINK\_DEVICE, PALMLINK\_UNIT and PALMLINK\_RATE to set the default connection parameters
- · Raised default baud rate to 57600. Most Amiga should support this.

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· Added 115200 baud to the internal list of Palm rates.

(Since PalmOS 3.2, this rate is supported! :)

· Added PL\_GetBaudRate(), to read the baud rate negotiated with the Palm. Bumped to V2 because of this new method. [Ralph Torchia]

- · Added PALM\_GetBaudRate ARexx command
- · Bugfix: PALM\_LastError required three parameters instead of one.
- · Forgot to document PLTAG\_AbortMask, sorry
- · Reviewed the whole developer documentation, since a lot of people complained about inconsistencies.

V1.2 (24. 4.1999)

· Bugfix: A wierd, magic number was written into .prc and .pdb files if there was no backup time available. Now, 0 is written as it should. PalmLink will correct bad files while reading. I suggest to make an entire backup of your Palm, and restore the backup.

V1.1 (28. 2.1999)

- · Added ARexx port and basic functionalities
- · Some minor bug fixes
- · Removed bugs in pragma file
- · 68000 library included

V1.0 (25. 9.1998)

- · Fixed the maxbaud recognition, now BSC MultiFace cards are working as well [a lot of people complained]
- · PalmTransfer can be aborted with CTRL-C. Anyhow, you have to press it twice in some situations...;-)

V0.7beta (1. 7.1998)

- · Fixed an Enforcer hit in PalmTransfer. It was quite serious, but the backups are all right. [Jens Gelhar]
- · Added Assembler include files
- · Added Amiga-E include files [Dominique Dutoit]

V0.6beta (21. 6.1998)

- · First release
- · Still beta, please be careful! Before you use PalmLink, try to make a backup of all Palm data using an original 3Com software, or be prepared to lose all your data.

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## 1.12 Credits

#### CREDITS

I wish to thank all those people (in no special order) :

I also want to credit:

Dominique Dutoit for the AmigaE include files

3Com for their Palm

Kenneth Albanowski for pilot-link (a packet for Un\*x). It helped me

a LOT, though my library was written from the scratch new.

EGroups for providing free mailing lists

Frank Wille for PhxAss, the best FreeWare assembler available

Dietmar Eilert for his great Editor GoldED

And of course, I want to thank all my beta testers, everyone on the

Palmiga mailing list, and all the people who sent me a mail! Keep on! :-)

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\\ // -- Amiga - Cow inside --

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