

PIKOBAN (AKA SOKOBAN)
FOR PALM PDA AND COMPATIBLES

Version 4.0

User Guide

Pikoban V4.0 User Guide

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Introduction

WHAT'S NEW IN VERSION 4.0

Pikoban version 4.0 requires PalmOS 3.5 and above. Older version of PalmOS is no longer supported due to the need to use newer features only available in PalmOS 3.5.

New Features

- Support GAME-LEVEL Database. Currently limited to 15 games database, this exclude the built-in and the memopad levels.
- User selectable display of LEVEL TITLE and MOVE/PUSH statistics.
- Press anywhere outside the puzzle to launch the MENU.
- User selectable background color and text color.
- Pikoban Tools to create and delete Pikoban game-level database.
- HandEra 330 and Sony Clie with 320x320 Screen. Utilized hi-resolution display on these devices.
- HandEra 330 and Sony Clie with JOG Wheel. Uses JOG WHEEL for movement and undo.
- HandEra 330 Only. Auto screen rotate and soft silkscreen support.

Changes

- The GOTO GAME uses scroll bar, for quick scrolling to the level you want.
- When PIKOBAN is on top a GOAL, the PIKOBAN is displayed differently.

COPYRIGHT AND TRADEMARKS INFORMATION

Pikoban is based on a well known game called Sokoban.

Sokoban is Copyright © 1982 by Thinking Rabbit Inc. Japan.

The Classic Levels 1-50 is Copyright © 1982 by Thinking Rabbit. The Bonus Level 1-40 is Public Domain.

The sample Game-Level database (pikoYoshio.pdb and pikoAutogen.pdb) included in the package are Copyright © 1996-2002 by Yoshio Murase. Distributed with permission. pikoYoshio.pdb contains levels manually created by Yoshio Murase. He published new levels at his web site from time to time. You can visit his website at:

<http://www.ne.jp/asahi/ai/yoshio/sokoban/main.htm>

Autogen.pdb contains computer-generated levels created by Yoshio Murase on the study of Automatic making of Sokoban problems. Looks simple but beware of its challenge.

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Use this program at your own risk !!!

UNREGISTERED VERSION

The unregistered version provides you with a way to evaluate and decide before purchasing. **No refund** will be entertained after the purchase.

The Unregistered Version has the following limitations:

- Unregistered splash screen when starting the game.
- No start-up delay for the first 30 plays. After that, there is a 1 second delay for each start-up.
- All level of The Classic Game can be played. For The Public Domain, Memopad Level and additional Game-Level Database, only the first 3 levels can be played.
- Other features are fully functional.

REGISTRATION INFORMATION

Registration will entitle you to unlimited free upgrade of future release. Release update is 4.x.x. Major version update may require an upgrade fee. Next version update will be 5.x, 6.x and so on.

There are the various methods you can register my Shareware programs.

Method 1. Direct purchase from PilotGear

You can now purchase the software directly from PalmGear at
<http://store.yahoo.com/pilotgears/tankokmun.html>

OR order via phone (US Only) at **800-7419070**.

Method 2. KAGI On-line Registration Service

With the on-line registration service, you can register using your "Visa," "Mastercard," or "American Express".

This is available at:
<https://order.kagi.com/cgi-bin/register1.cgi?89>

For more registration information, please read the REGISTER.TXT file or refer to:
<http://home1.pacific.net.sg/~kokmun/register.htm>
<http://kokmun.freesevers.com/register.htm>

SHAREWARE AND LICENSE AGREEMENT

Pikoban is a Shareware. After registration, you are only license to use it in one machine.

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- Neither text nor any other file is modified in any way. No file may be omitted nor added in the distribution.
- No money may be charged for the program or for any accompanying files, other than the usual downloading time fees charged by commercial BBSes and online services.

I want to know where my program will be distributed. Please notify me if it will be included in printed matter, floppy, or CD-ROM before its publication. No matter what the circumstance, I would strongly appreciate a copy of whatever collection in which it is included.

CONTACT INFORMATION

If you wish to contact me, I can be reached at:

E-Mail : kokmun@pacific.net.sg or tankokmun@yahoo.com

Web Page : <http://home.pacific.net.sg/~kokmun/> or <http://kokmun.freesevers.com>

The Game

Pikoban is a logic puzzle game. You are in a warehouse operating a push vehicle called the Pikoban. In this world, you have no maneuver through the maze to push the cargo boxes scattered around to the respective cargo destination. However you can only push one cargo at a time and you can only move/push in the horizontal and vertical direction only.

You complete the level by pushing all the cargos to its cargo destination.

Pikoban can be moved horizontally or vertically only. Built into the game is a smart maze move engine, where you can tap the location you want to move to and it will decide the shortest possible path to the location. If there is any obstruction to the destination, it will not move.

GENERAL FEATURES

Pikoban has the following features:

- Auto graphics resizing. The graphics are automatically resized based on the puzzle size and your screen.
- Stylus smart-move. Just tap to the location you want to move. Smart-move will move there with the least number of moves.
- Built-in 50 classic levels and 40 public domain levels. You can add additional levels via memopad or Game-Level database. (***Unregistered version can only play the first 3 levels in memopad and Game-Level database.***)

For more converted Game-Level database, please visit and download it at:

<http://home1.pacific.net.sg/~kokmun/pikoban/pikoban.htm>

<http://kokmun.freesevers.com/pikoban/pikoban.htm>

- Unlimited undo, with support for UNDO MOVE, UNDO PUSH, UNDO MOVE TILL TAP and UNDO PUSH TILL TAP.
- Hardware key movement. User configurable in PREFERENCES.
- MEMORIZED current positions that you can come back to easily when you are stuck.
- Game-Level statistics for best move/push solution.

- Support Color, Gray scale and black-white display. User selectable in PREFERENCES.
- Support Puzzle size up to 32x32.
- Export solution to memopad for sharing solution with others and to enter Global High-score chart.
- Import solution from memopad.
- On HandEra 330, uses QVGA display and JOG capability.
- On SONY CLIE, uses the Hi-Res 320x320 capability and JOG capability when available.

MINIMUM REQUIREMENTS

Pikoban Version 4.0 requires a minimum of PalmOS 3.5 and above. This program should work with any Palm PDA or it's compatible such as from HandSpring, HandEra and Sony with PalmOS 3.5 and above.

On the HandEra 330 and Sony Clie device, this program uses features unique to these devices to increase the enjoyment of playing Pikoban.

The program requires a minimum of 80K of free memory on your PDA for installation. Additional memory is required for Game-Level database installation. Typical memory requirement for each Game-Level database is around 2K to 10K.

INSTALLATION

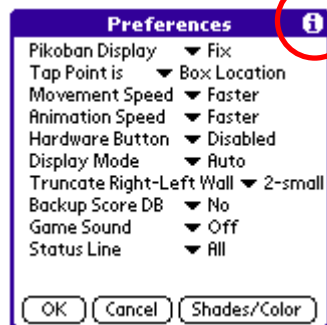
In the software package, there is a file called PIKOBAN.PRC (registered version) or PIKOBANUNREG.PRC (unregistered version). If you have not install your Palm Desktop, please install the Palm Desktop software first before proceeding.

With Palm Desktop installed, follow the following steps to install Pikoban into your Palm PDA:

1. Double click on the PRC file. This will launch the Palm program installer.
2. Select the Hotsync-Id and select OK.. You will see a list of program that will be installed into your Palm PDA on your next Hotsync. At this time if you want to install the optional Game-Level database, select ADD to install PIKOYOSHIO.PDB and/or PIKOAUTOGEN.PDB. You can also select to install the optional PIKOTOOL.PRC. Please refer to the section GAME-LEVEL DATABASE for more information on PIKOTOOL.
3. Perform the Hotsync to complete the installation of PIKOBAN into your Palm PDA.
4. After installation, the PIKOBAN and PIKOTOOL(optional) will appear under the UNFILED category of your program launcher of your Palm PDA.



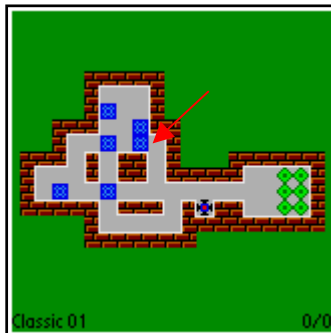
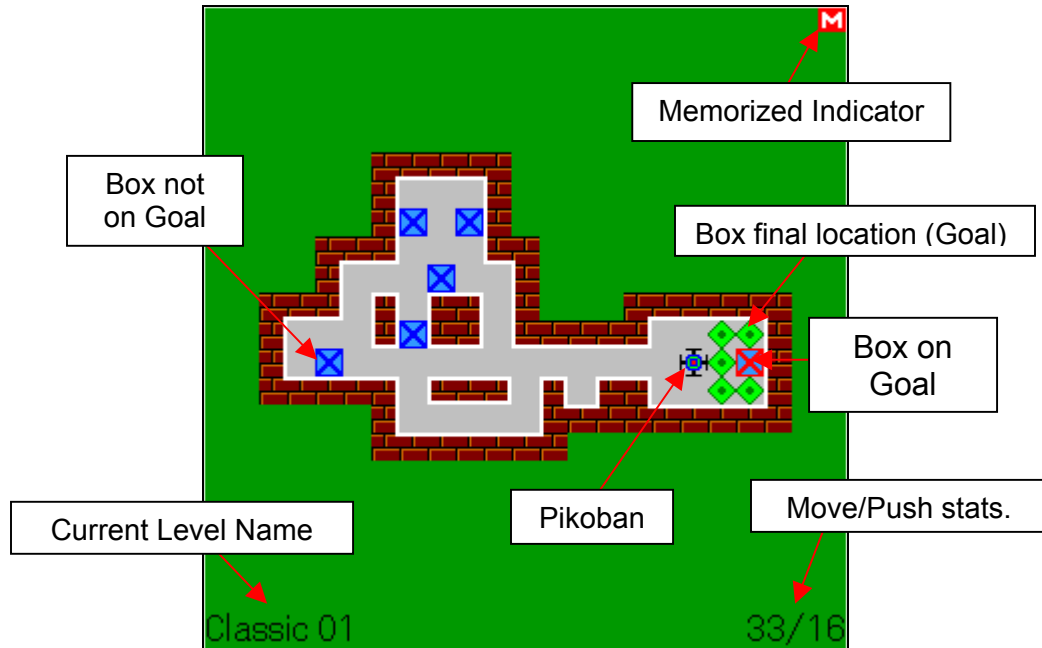
5. Click on Pikoban to launch the program. If this is the first time you run Pikoban or upgrading from previous version, you will be guided to the PREFERENCES screen.



6. Press the "i", on the top-right hand corner of the PREFERENCES screen for a description on each of the options or refer to the section GAME MENU in this manual.

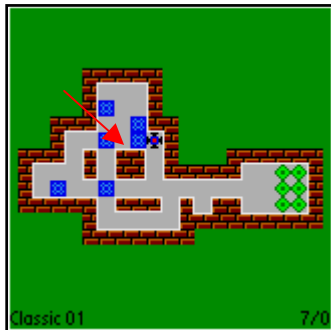
HOW TO PLAY

The following screen shows the objects on the screen and it's meaning.



To move Pikoban, just tap on the location where you want to move. In the example, the red arrow shows the location I want to move.

To push the box on the left of Pikoban, you need to tap at the location show by the red arrow. Remember, you can only move/push in the horizontal and vertical direction. You can only push one box at a time.



Tips: You can move around the cargo instead of pushing it, by tapping on Pikoban first and then the destination where you want it to move. When it is in move mode only, the pikoban will be inverted. If blinking is enabled, the blinking rate is faster.

This does not save any tapping stroke but do make it easier on the player, cause now you no longer need to tap to another

destination before tapping into the final destination.

The level is completed when all the boxes are at the goal location.

GAME MENU

To access the various features of Pikoban, you need to access the game menu. Press the MENU button to get to the game menu. The MENU button is shown below.



The Game Menu is divided into four main categories. Each category provides a group of functions. Each function of the MENU has a shortcut.

Tips: In Pikoban, you can access the MENU by writing the one letter representation. For example, to perform “RESET LEVEL” you only need to write the letter “R” in the graffiti area. The shortcut character is shown in bracket.

Tips: In Pikoban, you can access the MENU by pressing anywhere on the screen that is outside the puzzle. This is the area paint with the background color. In the example above, the background is GREEN.

Commands Menu

Reset Level [R]	Reset the current level and start over.
Goto Game-Level/Stats [G]	Allow you to change the game/Level and view the game/level best score for each level.
Next Level [N]	Play next level.
Prev Level [P]	Play previous level.
Memorized [M]	Memorized current positions. An indicator "M" at the top right corner will reminds you of a saved positions. Only one position can be saved. Subsequent saving will overwrite last saved position.
Recall [C]	Restore memorized positions. Nothing happens when there is nothing to recall. Use the "M" indicator at top right corner to know if there is any saved position.
Preferences [F]	Setup game preferences.

Rotate Screen (HandEra 330 only) [S]	This menu only appears on the HandEra 330 device. This allows you to manually rotate the screen.
--	--

Undo Menu

Undo Box Push [B]	Undo your last box push.
Undo push till tap [Z]	Continuously undo one box push at a time until the screen is tap.
Undo Move [U]	Undo your last move.
Undo move till tap [T]	Continuously undo one move at a time until the screen is tap.

Tools Menu

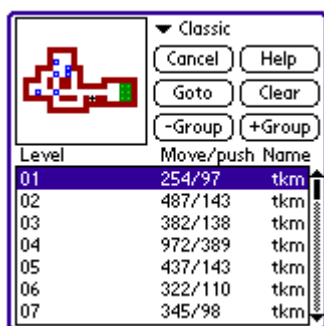
Export moves [E]	Export your current level moves to memopad.
Import moves [I]	Import solution from memopad into current level.

Info Menu

Help [H]	Summary instructions about the game objective.
To create memo level [L]	Information on how to create a game/level in the memopad.
About [A]	Author information.

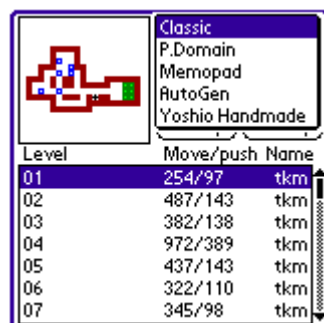
GOTO GAME/LEVEL STATS

To change to another game, select the GOTO GAME-LEVEL/STATS menu. You will see a screen similar to the following.



To change level, press on the level name and select “GOTO” button. A preview of the level is shown on the top right hand corner. You can scroll quickly up/down by dragging the scroll bar on the right of the level.

The move/push and name statistics for MEMOPAD and additional game-level may not be accurate in this menu. This may happen when the old memopad defined levels have been solved and is now overwritten with a new level definition. The move/push statistic is verified when the level is selected.



To select a new game, tap on the current game name. You can then select the game you want from the list. The first three game is always Classic, P.Domain and Memopad. Any additional game-level database installed will appear after that in sorted sequence. In this example, there are two game-level database installed, they are AutoGen and Yoshio Handmade.

Select the game, and the last played level for the game is automatically selected.

Other buttons on this screen has the following function.

HELP: To get the on-line help.

-/+ GROUP: Jump to previous/next group. This made it easier to go through group of puzzles in the list. For the level title in memopad, I recommend the use of Group name follow by level number, to group the levels together. The level numbers within the group should have the same number of numerals. To do this prefix the level number with zeroes as required.

eg. Easy 01, Easy 02, Easy 20, Hard 001, Hard 002, Hard 100

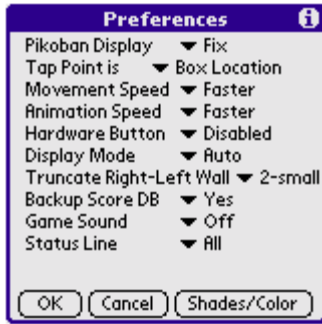
GOTO: Play the selected level.

CLEAR: Clear the current level statistics. To clear all statistics in current game, clear 3 different levels and you will be given an option to clear all.

UP/DOWN HARD BUTTON: Scroll through the level.

CONFIGURING GAME PREFERENCES

You can customize the behavior and look and feel of the game through the GAME PREFERENCES. To customize the game, select the PREFERENCES menu.



PIKOBAN DISPLAY: Controls the blinking of Pikoban to indicate its location. Blink (small) will enabled blinking when the boardsize is larger than 22x22.

TAP POINT IS: To indicate the tap point is either the box or Pikoban location while box is pushed.

MOVEMENT SPEED: Control how fast Pikoban moves.

ANIMATION SPEED: Control how fast Pikoban moves during auto replay, import and undo..till tap animation.

HARDWARE BUTTON: When set to Movement, the hard key is used for movement. The movement is defined as follows:

KEY	Function
Up Key	Move Pikoban up.
Down Key	Move Pikoban down.
Address Key	Move Pikoban to the left.
Todo Key	Move Pikoban to the right.
Calender Key	Select previous level.
Memopad Key	Select next level.

DISPLAY MODE: Auto will use the highest possible display mode. B&W is black and white. Gray is shades of Gray.

TRUNCATE LEFT-RIGHT WALL: The puzzle is always enclosed by wall. To have larger object size you can enable display truncation, which will cause some part of the wall on both sides to be truncated from the display. Select 1 for minor truncation and 2 for more truncation. Set to 1-small or 2-small to enable truncation when the board size is larger than 22x22. In some puzzle this option has no impact.

BACKUP SCORE DB: By default the score database is not backup during HotSync. Set YES to backup the score DB.

STATUS LINE: Control the display of the current Game Level title and move/push statistics.

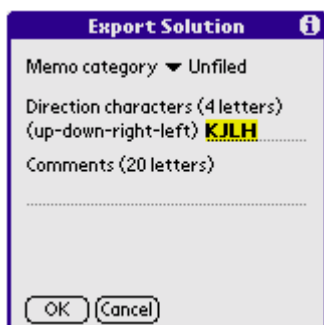
ROTATE TO ENLARGE (HandEra 330 only): When enabled, the screen will be rotated to allow larger game board size. Changes to this setting will only be effective on the next new game.

OK BUTTON: Press OK to save the new setting.

SHADES/COLOR BUTTON: For gray and color display, press this button to configure the background, text and outer wall color. You will be shown a gray/color palette for the background, text and outer wall. Pressing this button will save your new setting as well.

EXPORTING/IMPORTING MOVES

To export current level moves to MEMOPAD, do the following:



- Select the EXPORT MOVES menu.
- Select the memopad category where you want to store the moves.
- Define the four movement characters; the default is xsokoban style, which is KJLH.
- Provide a 20 letters comments.
- Press OK and if successful a message will appear.

Note: The generated memo title will be as follows:

<level> <(moves/push)> <comments>

eg. If the level is Classic 1 with 250/90 moves/push and the comment is "Unsolved", the memo title will be "**Classic 01 (250/90) Unsolved**"

You can use the export feature to:

- Show other users your solution.
- Saved uncompleted game/level for later completion.
- Analyze your solution.

To import moves from MEMOPAD:



- Select the game/level you want to import solution to.
- Select IMPORT MOVES menu.
- Select the memopad category where you want to import from.
- Define the four movement characters; the default is xsokoban style, which is KJLH.
- Select the memo and press OK

Note: The import function will automatically select the first memo within the category that matches the level description.

Tips: During animated playback, use the up-down key to change the animation speed. Tap anywhere on screen to forward to last move. For HandEra 330 and Sony Clie with JOG support, you can use the JOG to slow/speed-up the playback speed. Rotate clock-wise to speed up and anti-clockwise to slow down.

If sound is enabled, you can mute the sound temporary with the Address-Key.

ADDITIONAL GAME/LEVEL

Other than the two built-in game levels, there are two other ways to play with additional game-levels.

They are:

- Memopad game-level
- Game-Level Database

There are many levels available in the Internet that you can download and play in Pikoban. Search with the keyword "Sokoban". I will make available new game levels to download from my website in Game-Level Database format. Levels contributions are most welcome, but do respect the author copyright.

Do visit Pikoban dedicated website for new information and to download additional level:

<http://home.pacific.net.sg/~kokmun/pikoban/pikoban.htm>

<http://kokmun.freesevers.com/pikoban/pikoban.htm>

MEMOPAD GAME-LEVEL

Through the memopad, you can store and create new game-level for Pikoban. All Memopad Pikoban game-level must be defined under the Pikoban category

There are two ways to define MEMOPAD Level.

METHOD 1. Direct definition on the Palm PDA

To create MEMOPAD defined levels, do the following:

1. Launch MEMOPAD.

2. Define a new category with the name 'Pikoban', without the quote and observed case.
3. In the Pikoban category, create a new memo.
4. In the memo, the first line is the title for the level. For level copyright information specify '(c)' follow by the copyright owner. Please note that 'c' is in lower case.

For the level title, I will recommend the use of a puzzle group name followed by the level numbers. The level numbers within the group should have the same number of numerals.

To do this prefix the level number with zeroes as required.

eg. Puzzle Group "Kids", which has 20 levels, the title will be like Kids 01 (c)1999 Kiddy, Kids 02 (c)1999 Kiddy, ..., Kids 20 (c)1999 Kiddy

Puzzle Group "TKM", which has 100 levels, the title will be like TKM 001 (c)1990 Tan KM, TKM 002 (c)1990 Tan KM, ...,TKM 010 (c)1990 Tan KM, TKM 011 (c)1990 Tan KM, ...,TKM 100 (c)1990 Tan KM

By following this recommendation for level title, you can easily jump from one puzzle group to another, by using the -/+GROUP button in the GOTO GAME LEVEL screen.

Board layout start from line 2, and uses the standard XSB format with the following symbols.

- # for Wall
- . for Goal
- \$ for Box
- for Box on goal
- @ for Pikoban
- + for Pikoban on goal
- <space> for Floor

To make it easier to compose level on the memopad, you can use the following symbols as well:

- n for Wall
- g for Goal
- b for Box
- d for Box on goal
- p for Pikoban

- q for Pikoban on goal
- u for Floor

The puzzle size is limited to 20x20 cells. You can have up to 9999 memopad levels.

eg.

```
TKM Sample 001 (c)2000 Tan KM
#####
#..      #@#
# .      $  #
#####$$  #
      #    #
      #####
```

The level sequence, will be as it appeared in your MEMOPAD. If you have followed the LEVEL TITLE naming recommendation, you can turn on the MEMOPAD SORT option to have the level appearing in the sequence you have defined.

METHOD 2. Define via the Palm Desktop

The memopad game-level is stored in CSV format, that you can import your memopad via the Palm Desktop. Follow the following steps to import the CSV file. CSV, are comma seperated value which is recognised by the Palm Desktop Memopad.

1. Startup your Palm Desktop
2. Select MEMO application.
3. In the Memo Pad Category, create the Pikoban category.
4. Select Pikoban category.
5. Select File and then Import.
6. Select Comma Seperated (*.csv) for Files of Type.
7. Select the CSV file and press Open.
8. You will see the Specify Import Fields screen. On the left is the "Palm Fields" which shows Memo, Private and Category. All three should be selected.
9. Press "OK" to complete the import process.
10. Hotsync your PalmPilot.

To create your own level in the Palm Desktop, select MEMO application and create new memo in the "Pikoban" category. Follows METHOD 1 instructions and when done, do a sync to sync the level into your Palm device.

Note: The level definition when view in the actual PalmPilot and Palm Desktop looks weird. This is due to the propotional font. When viewed under fix font, eg. Courier it will be ok.

GAME-LEVEL DATABASE

Game-Level Database provides an easy way to add new game-level to Pikoban. The Game-Level database has a PDB extension and is installed into your Palm PDA like any Palm application (PRC).

Pikoban Game-Level Database has the following internal attributes:

- External Database Name: <game_name> (You can call it any name)
- Internal Database Name: piko<game_name>
- Creator: TKM5
- Type: PIKO

For example, the AutoGen Game-Level Database has the following attributes:

- External Database Name: Autogen.pdb
- Internal Database Name: pikoAutoGen
- Creator: TKM5
- Type: PIKO



To simplify the creation and to manage the game-level database, you need to install the PIKOTOOL.PRC.



There are two main functions of Pikoban Tools:

- To create Game-Level Database.
- To delete Game-Level Database currently installed.

Create Game-Level Database

This function will convert your currently defined game-level in memopad to Pikoban Game-Level database.

There are currently two options when creating Game Database.

- Create Game DB(Cat.) – Use this when you want to convert all the game-level stored within a memopad category. Each record within the category is a level definition.
- Create Game DB (Memo) – Use this when you want to convert one record within a memopad into a game database. All game-levels are stored within a single record in XSB format.

Create Game DB (Cat.)

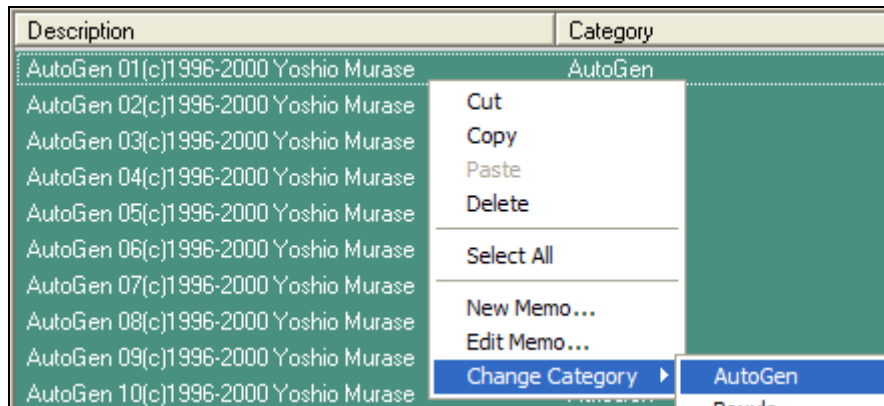


Do the following to convert a memopad category into game-level:

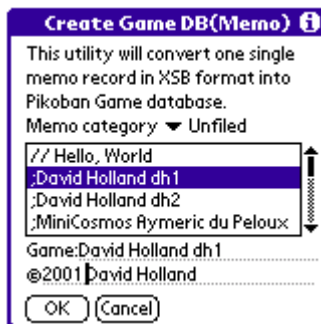
1. Select CREATE GAME DB (Cat.) in Pikoban Tools.
2. Select the MEMOPAD CATEGORY to convert. In the example, the AutoGen category is selected.
3. Provide an optional Game Name. If no name is provided the selected category name will be used as the Game Name.
4. Press OK to convert and you will see a successful completion message.
5. To quit Create game Database, press CANCEL.

In the example, pikoAutoGen game-level database will be created. During hotsync, pikoAutoGen.PDB will be backup into your PC. You can pass this file to others to play the game-level. You can rename this file to any name, for example pikoAutoGen.PDB can be renamed to EXAMPLE.PDB and the game level name will still appear as AutoGen when installed into Pikoban.

The copyright information is retrieved from the first game-level definition. The rest of the other copyright information and level title is ignored. If you have multiple game defined in the memopad and will like to convert it to game-level database, it is best to put them into different category. You can do this easily on the Palm Desktop, as it allows you to select multiple records and move them into the category you want, as shown below.



Create Game DB (Memo)



Do the following to convert a single record in XSB format into game-level:

1. Select CREATE GAME DB(MEMO) in Pikoban Tools.
2. Select the MEMO CATEGORY where the XSB record is located.
3. Select the specific record to convert.
4. Provide a Game name and an optional copyright information.
5. Press OK to convert and you will see a successful completion message.
6. To quit Create Game DB, press CANCEL.

To get the definition into your Palm PDA, you need to use the Palm Desktop utility. Open a new record in the memo and perform cut and paste of the new XSB into your new memo. Perform a hotsync and the new record will be in your Palm PDA. For level stored in XSB format, do know that there is a limit of 4K size per record in the memopad. This is a memopad limitation. When you encounter this limit, you can either use Create Game DB(Cat.) method or remove all comments from the record.

All comments within the XSB record is ignored, and there is a need to separate each level by a blank line or a comment line.

Delete Game-Level Database

This function allows you to delete currently installed game-level database. Do the following to delete the game-level database:



1. Select DELETE GAME DB in Pikoban Tools.
2. Select the Game to delete from the list.
3. Press OK to delete. A message will appear indicating the delete completion.
4. Do note that there is **no delete confirmation**, please verify before pressing OK.
5. To quit DELETE GAME DATABASE, press CANCEL.

HANDERA 330 SUPPORT

On the HandEra 330, Pikoban will exploit features unique to this device.

HIGHER SCREEN RESOLUTION: The game utilized the higher screen resolution available on the HandEra 330 device. Pikoban will dynamically resize the board display based on the available resolution and displayable area.

SILKSCREEN: On running, the silkscreen will be minimized to gain extra displayable area. You can set it to automatically rotate the screen to display a larger board size when possible. This setting is available in ROTATE TO ENLARGE in PREFERENCE menu. The default is AUTO-270, which will rotate the screen 270 degrees for larger board size display. The silkscreen can be minimized/maximized manually and the board will be resized accordingly.

SCREEN ROTATION: There is an extra ROTATE SCREEN in the MENU. This allows you to rotate the screen manually. When screen is rotated, and the HARDWARE BUTTON is enabled, the direction of the movement changes according to the screen rotation.

For example:

	NO ROTATION	270° ROTATION
Up Key	Move Up	Move Right
Down Key	Move Down	Move Left
Address Key	Move Left	Move Up
Todo Key	Move Right	Move Down
Calendar Key	Previous Level	Next Level
Memopad Key	Next Level	Previous Level

JOG WHEEL and AUXILIARY BUTTON: The Jog Wheel can be use for Pikoban movement. Rotate the JOG to select movement direction. Press The JOG to move. Press AUXILIARY button to UNDO PUSH.

SONY CLIE SUPPORT

On the Sony Clie, Pikoban will exploit features unique to this device.

HIGHER SCREEN RESOLUTION: On Sony Clie that has a higher screen resolution (320x320), the game will use the hi-res mode of the device. Pikoban will dynamically resize the board display based on the available resolution and displayable area.

JOG WHEEL: The Jog Wheel can be use for Pikoban movement. Rotate the JOG to select movement direction. Press The JOG to move. Press BACK button to UNDO PUSH.

Note: The program is JOG ASSIST aware. Hack that changes the JOG feature may interfere with the JOG capability built into this program.

SUBMITTING HIGH-SCORE

The Xsokoban Web-page maintained a Global High Score at:

<http://xsokoban.lcs.mit.edu/cgi-bin/xsokoban/best-scores>

The Classic Levels 1-50 is similar to XSokoban Levels 1-50, and the Public Domain Levels 1-40 is similar to XSokoban Levels 51-90.

You can participate in the score by submitting your solution. Use the export feature to store your solution.

Information is available at the following web address on how to submit your score.

<http://xsokoban.lcs.mit.edu/~andru/xsokoban/manual-solve.html>

Game Version History

Version 4.0 – 22nd February 2002

Pikoban version 4.0 requires PalmOS 3.5 and above. Older version of PalmOS is no longer supported due to the need to use newer features only available in PalmOS 3.5.

New Features

- Support GAME-LEVEL Database. Currently limited to 15 games database.
- User selectable display of LEVEL TITLE and MOVE/PUSH statistics. Change through PREFERENCES.
- Press anywhere outside the puzzle to launch the MENU.
- User selectable background color and text color.
- Pikoban Tools to create and delete Pikoban game-level database.
- HandEra 330 and Sony Clie with 320x320 Screen. Utilized hi-resolution display on these devices.
- HandEra 330 and Sony Clie with JOG Wheel. Uses JOG WHEEL for movement and undo.
- HandEra 330 Only. Auto screen rotate and soft silkscreen support.

Changes

- The GOTO GAME uses scroll bar, for quick scrolling to the level you want.
- When PIKOBAN is on top a GOAL, the PIKOBAN is different.

Version 3.1 - 15th March 2001

- Unreleased update. All enhancements/changes incorporated into Version 4.0

Version 3.0 - 12th July 2000

Pikoban Version 3.0 and above requires a minimum PalmOS 3.0 and above to run. For older PalmOS user, please use the older version of Pikoban.

New Features

- Unlimited undo, with support for undo move, undo push, undo push till tap, and undo move till tap. Theoretically able to store around 3000 moves.
- Playback speed changes during undo move/push till tap.
- Export moves to memopad, with user defined move characters.
- Import moves from memopad for solution playback or restore game to export status.
- Auto replay at end of each level, to playback your solution.
- Basic sound effect. Set in preference.
- New movement control. You can now control Pikoban to move around the cargo instead of pushing it, by tapping on Pikoban first and then the destination where you want it to move to.

Updated

- Level title display in Goto Games-Levels/Stats, to show level numbering when title is too long.

Version 2.1 - 23rd June 2000

Version 2.1 requires a minimum PalmOS 3.0 and above to run. For older PalmOS user, please use the older version of Pikoban.

PalmOS 2.0 is dropped from this version onward. This is due to the limitation of PalmOS 2.0 memory stack and is not able to support the large board size of 32x32.

New Features

- Support for board size up to 32x32.
- Option for Right/Left Wall truncation.
- Options to backup the score/statistics database.
- Current title level is display at the bottom of the screen.

Updated

- Corrected Classic levels copyright information.

- When hardware key is enabled for movement, the Calender Button when pressed will go to the previous level and the Memopad button will go to the next level.
- Code optimization to speed up response.
- The Display Warning when using grey-scale for PalmOS older than 3.5 will only display once for each game session.
- The MEMORIZED indicator is now at top right hand corner.
- Display is smoother during update.

Fix

- Preview screen displaying rubbish when no level is defined in MEMOPAD.

Version 2.0 - 18th June 2000

New Features

- Support B&W, Gray Scale (4 and 16) and Color display.
- Move and push statistics and person initial.
- Best move/push statistics for each Game Level.
- Support New Level via Memopad.
- Smart menu. You can just write the menu shortcut character without specifying the menu shortcut. eg. Just write "U" or "u" to Undo.

Bug Fixes

- Resolves compatibility issues with PalmOS 3.5.
- Fix undo problem after Memory-Recall.

Version 1.9.2 - 6th April 1999

- Resolves compatibility issues with TRG memory.

Version 1.9d - 30th January 1999

- Fix display problem in Goto Game/Level for Palm OS 1.x.
- Fix undo box moves, with "Combine box moves enabled" when Pikoban is "trapped".
- Fix DB error while exiting from game (in rare cases).

Version 1.8 - 5th December 1998

- The PRC is now smaller than before. 29K compare to previous version, which is 32K. Registered users will benefit much more (32K memory saving) cause both Game Levels are now available in one single game.
- Change Undo Last Move to Undo box moves. You can now undo the last ten box movements.
- Combine box move for undo. When enabled in preferences, the same box movement will be combined as a single move for undo.
- Support Hardware key for movement. Enable it within Preferences.
- All new Goto Game/Level. Ability to switch between the two available games (Registered Users only) and Level.
- It now shows, which level has been solved with a TICK. You can mark/unmark the level.
- Support Palm III list icons.
- Resolve compatibility issues with the new generation of Palm EZ processor.

Version 1.7 - 8th June 1998

- All new flexi movement. If there is a path to the location you specified, it will find it and move there in the shortest path possible. Special thanks to Arsène von Wyss for giving me the insight on the implementation.

Version 1.6 - 23rd May 1998

- Double L-path movement.
- Corrected the Same Level play when a puzzle is solved.
- Fix PalmPilot III compatibility.

Version 1.5 - 30th May 1997

- Boxes on goal location are shown differently.
- Fix display problem when the menu shortcut is used.
- Nicer "Memorize" indicator.
- Corrected the misleading 50+ buttons in the GOTO Panel.

Version 1.2 - 21st May 1997

- Added Next Level and Prev Level menu.
- Added ability to memorized current position and ability to restore memorized position.
- Some minor bug fixes (Memory shortage problem after long play and blinking within MENU).

Version 1.1 - 6th April 1997

- The graphics are bigger and easier to see for some levels.
- L-path movement capability, to reduce screen tapping.

Version 1.0 - 2nd April 1997