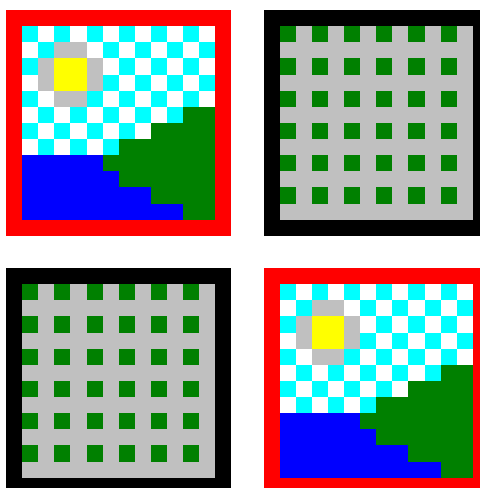


Symbol for Windows

Memory

Version 3

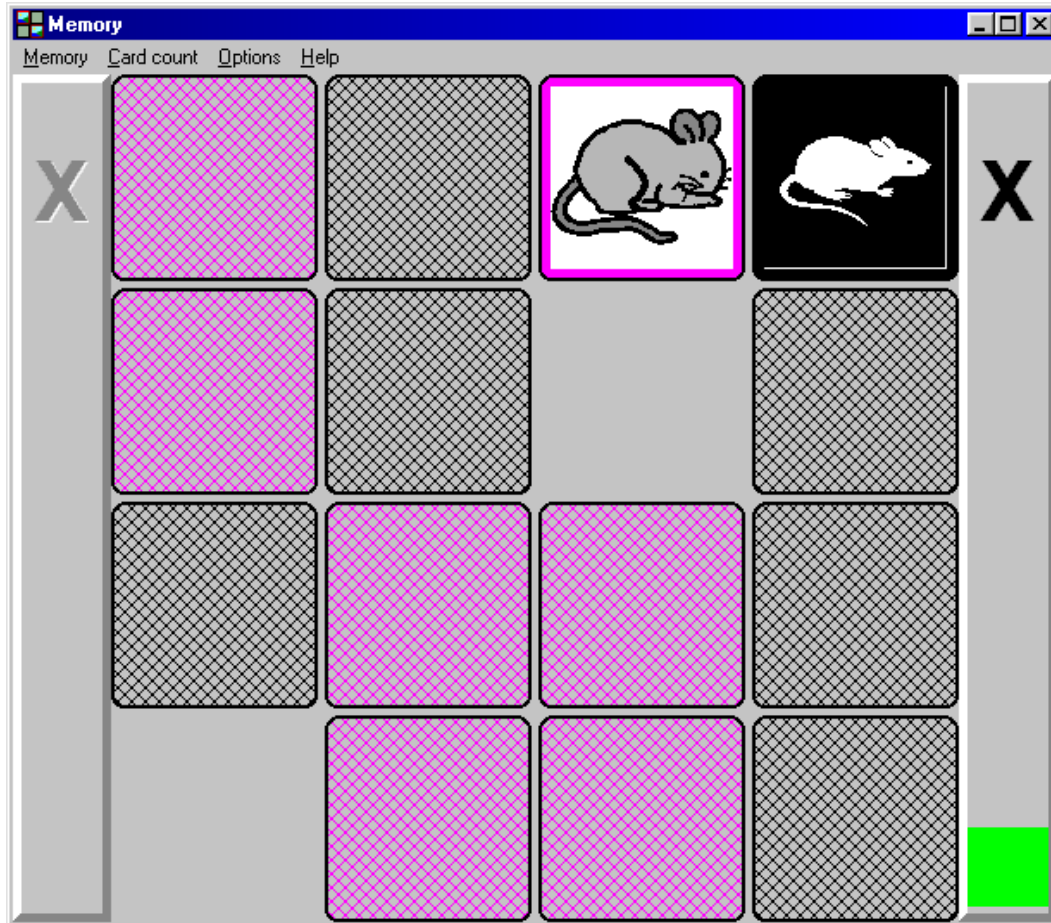


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1. Memory main screen

Run Memory. This can be done by selecting the program's icon the in the Start menu (Programs). You can also double-click the Shell icon on the desktop and choose Memory from the list. You will see an image familiar to this:



Via the settings you can lay all cards open. The game then resembles Lotto. If you use a language database in combination with a symbol database you can make nice reading exercises.

The menu

The menu (below the caption) gives access to all program settings. If you don't know how to use a menu, read the documentation supplied with MS Windows.

Many users of this game won't be able to handle a menu.

Press the F10 key on the keyboard (or go to Options – Hide menu) to switch to the special user mode. In this mode the menu is invisible. Repeat this procedure to make the menu visible again.

Scoring

When a player selects two cards, which belong together, the player gains a point. A light green field at the side of the screen represents a point. The player who has gained most of the points is the winner.

New game

When a player selects the button 'New game', the computer shuffles the cards. It is impossible to restart a game and have the same symbols at the same spot. This button can be hidden; see the next chapter.

2. Settings

2.1 Number of cards

To change the number of cards, go to Card count, in the menu. Choose the right number of columns and rows.

2.2 Number of players

Go to Options – User settings, in the menu. You can choose to play with one or two players.

2.3 Input: standard, scanning or joystick

The way the program is operated can be adjusted to each individual player.

Go to Options – User settings, in the menu. Next to the number of players (one or two) you will see two buttons labelled 'Input options'. If there is only one player, only one of these buttons is enabled.

There are three operation methods, 'Standard', 'Scanning' and 'Joystick'. The last method doesn't work on all computer systems.

Standard means, using the mouse and keyboard. Press the button Options to prevent the program to react when the user involuntarily clicks a mousebutton (for instance when the player is suffering from a tremor).

- The program won't react when the mousebutton is pressed down shorter than the **tremor time**.
- When the left mousebutton is pressed down (longer than the tremor time) the program won't respond to the following mouseclicks during the **debounce time**.

Scanning is the alternative for operation via mouse and keyboard. Instead the user handles one or two switches. With the switch or switches he or she can move the cursor or stop it, and make selections. Press the button Scan options to adjust this mechanism to the player. See section 'Scan options' for further explanation.

2.4 Changing turns

If there are two players, there is one **X** on the left side and another **X** at the right side. The **X** flashes at the side of the player whose turn it is.

You can let the players change turns automatically. Go to Options – User settings, in the menu. Check 'Automatically change user'.

When one of the players has chosen two cards that don't belong together, the other player may give it a try.

When the players don't change turns automatically, they can switch using the small **V** button.

2.5 Turning the cards

Every time when a player has selected two cards, they must be either taken away (if they belong together) or turned back.

You can instruct the program to do this after a couple of seconds (1 to 100). Go to Options – User settings and check 'Automatically turn cards after'.

If this option is not checked, the player must make a third selection to make the program turn the cards or take them away.

2.6 Allow cheating

Go to Options – User settings, in the menu. Check 'Allow cheating'. The players may now reconsider, after the choice of the first card. They are allowed to turn this card back and choose another card. When a player has selected two cards, it is not possible to turn back one of the cards.

2.7 Restart button

To hide the Restart button, go to Options – User settings, in the menu. If the option ‘Show Restart button’ is checked, click this option to uncheck it.

When a player selects the button ‘New game’, Memory starts a new play using the same settings (databases, symbols etc; see the next chapter). The computer shuffles the cards, so it is impossible to restart a game and have the same symbols at the same spot.

2.8 Sound on/off

The quickest way to turn the sound on or off, is by pressing the Ctrl+S keys on the keyboard. It is also possible to do this using the menu, Options – Sound. If Sound is checked the sound is on, otherwise the sound has been turned off.

2.9 Play with cards open

Choose **Options – Show open cards**, to play with open cards instead of having the cards turned upside down. The game then resembles Lotto.

If you use this setting and one language database in combination with a symbol database (see paragraph 3.1.1, Kind of symbols or language), you can make nice reading exercises.

2.10 Display symbols in black and white

Choose **Options – Black and white**, if you want symbols to be displayed without colours.

Note: when you check this option, it doesn’t start a new game, as is the case with many of the other options.

3. How to create, save and open games

A Symbol for Windows Memory game is in fact a collection of settings. The computer uses these settings to fill the cards. To these settings belong the database(s) with which you play, the selected concepts and the colour of the cards (for each database).

3.1 Choose symbols and/or language

3.1.1 Kind of symbols or language

Go to Memory – Choose symbols... in the menu.

Below the words 'Kind of symbols' you will see two edit boxes. Click the small arrow at the right of the topmost edit box. Choose a database from the list that appears, either a symbol database or a language (a database with all the concepts in one language).

If you want to play with symbols from one database, you have to select the same database in the second edit box. If one of the two kinds of symbols is 'Numbers', the other database is ignored.

If you want to play with symbols from two different databases, you have to select the second kind of symbols in the second edit box. When playing with two databases, the player has to find every two cards with the same *meaning*. For instance, in a game about animals played with symbols from PCS and Picto, the player will have to combine the PCS cat with the Picto cat. If played with symbols from COMPIC and the English database, the player has to combine the COMPIC cat with the word 'cat'.

If you don't select a symbol database at all, the cards will show numbers instead of symbols, pictures or photos.

3.1.2 Choose concepts

As soon as you have selected one database (see the previous paragraph) the list in the middle is filled with 'concepts' (meanings) that are represented by one or more symbols in that database.

When you select a second, different database, the program fills the list in the middle with concepts that occur in both databases.

You can select concepts for the game, moving them to the list at the right; use the arrow buttons to do this.

When you click on a concept in the list at the right, you get two previews at the bottom.

At the left you see the images that belong to the chosen concept in the first database.

At the right you see the images that belong to the chosen concept in the second database.

You can select one image in the first, and one in the second database, to be used in the game. You do this simply by clicking on the image.

The category structure at the left serves as an aid to look for concepts or to compose thematic games. A plus ([+]) before the name of a category shows that the category has one or more subcategories.

Notes:

- If you select fewer concepts than needed with the current number of cards, Memory will use all concepts once and use numbers for the rest of the cards.
- If you select more concepts than needed for the current number of cards, the computer makes a selection from these concepts. This is done every time when a new game is started.

3.2 Use your own image files

You can play Memory using your own image files.

Click on the button *Import...* and select the file with the image or photo. Click on OK. The filename will be put in the list of chosen concepts.

Note:

With the Symbol for Windows Image Manager you can make your own, new eigen Symbol for Windows databases. The new database can be used as one of the databases for a Memory exercise. This way you can combine your images and photo's with other symbol databases, which isn't possible with single image files.

3.3 Use colours

You can use one colour or two different colours for the back of the cards.

Go to Memory – Choose symbols... in the menu.

Under the words 'Kind of symbols' you see two editboxes that contain the name of a database or the word 'Numbers'. To the right of each editbox you see a coloured field. By default it is green. Click on the field to select another colour.

The new colour will be applied to all cards with a symbol from the matching database. For instance: the first kind of symbols is Picto and the first colour is blue; the second kind of symbols is PCS and the second colour is red. When you click OK, Memory starts a new game with these settings. You will see blue and red cards. Blue cards are PCS cards; red cards are Picto cards.

Notes:

- If you have selected the same database in both editboxes, you can't play with two different colours. The colour in the *first* field is ignored.
- If one of the two kinds of symbols is 'Numbers', the colour in the *second* field is ignored.

3.4 Save a game

Go to Memory – Save... in the menu. Select a directory and type a filename; then click OK. A name in which the symbol kind(s) and the theme are mentioned is very practical.

Note: the number of cards is not included in these settings.

3.5 Open a game

Go to Memory – Open... in the menu to open a previously saved game. Memory loads the settings and starts a new game with those settings.

4. Scan options

Scanning enables end users to operate Symbol for Windows software (such as the Personal Communicator and Memory) by themselves. All they need is one or two switches.

4.1 Switch connection types

The switch(es) can be connected to the printer port or the serial port of the computer. Joystick buttons, mousebuttons and keyboard keys can also be used as switches; generally they will only be brought into action for testing purposes.

After connecting the switch(es), joystick, mouse or keyboard to the computer, select the correct kind of switches in the Scanning Options dialog.

4.1.1 Switches on printer port

For switches connected to the printer port you need to give the port number.

Advanced settings

Note for technicians: the 'Advanced settings' button opens up a dialog to change the switch input connection type. For each switch you can choose from <N.C.>, DNS, OOP. We've already put out the settings for Handicom's printer port connector. Click the button of the same name to adjust the settings to this connector type.

4.1.2 Joystick buttons

To be able to use joystick buttons as switches, you have to fill out the right port number.

4.1.3 Switches on serial port

For switches connected to the serial port, you have to give the port number.

Advanced settings

Note for technicians: press the 'Advanced settings' button to open a dialog about the switch input connection type. For each switch you can choose from <N.C.>, RLSD, RI, DSR, CTS. Output signals can be DSR and/or CTS.

When you are using Handicom's serial port connector, the Chameleon 3 or the Wivik connector, you can press the button of the same name. The settings will be adjusted automatically. (The buttons for the Chameleon 3 and the Wivik connector are disabled because we don't have all the technical specifications for these connector types yet.)

4.1.4 Keys (keyboard)

To fill in a key that should be used as a switch, press the key once.

Notes:

- In running mode the Symbol for Windows software responds only to those keyboard keys which are indicated as 'switches'. It won't react to other keys. However, Alt + F10 can still be used to switch to the facilitator mode.
- When you switch to another program while the Symbol for Windows program is running in running mode, the other program behaves in precisely the other way: it responds to all keys like it normally does, except to the two keys which are indicated as 'switches'. Despite it's being put into the background, the Symbol for Windows program still responds to those two keys.

4.1.5 Mousebuttons

No further information is needed if the mousebuttons are used as switches.

Note: When the mouse is used for scanning purposes, the mouse pointer disappears in running mode. The program only reacts to mouseclicks, not to the moves of the mouse. Meanwhile, the mouse can't be used in other programs, since the Symbol for Windows program reacts to the mouseclicks!

4.2 Switch number and function (scan technique)

One or two switches can be used to operate this Symbol for Windows program. In both cases there are two scanning techniques to choose from. Each scan technique has its own characteristics. It depends on the user which scan technique will be best.

In the '2 Switch' scan techniques, it can't be said beforehand which task will be assigned to which switch. This will show as soon as you start to use the program in the scanning mode.

1 Switch auto scan: The cursor moves automatically. The user must push the switch at the right moment to make a selection.

1 Switch user scan: The user must press the switch and keep it pressed down to move cursor. To make a selection, the user must stop pressing the switch at the right moment.

2 Switch single step: The first switch is used to move the cursor, step by step. With the other switch the user can select the column/row/field etc. that the cursor indicates.

2 Switch user scan: The cursor moves automatically as long as the first switch is pressed down. It stops when the user releases the switch. The second switch must be used to confirm the selection.

4.2.1 Option: balanced input

For users who use two switches it is recommendable to use the balanced input method. With this method you use one switch per scan level.

Normally one switch is used to move the cursor. The other switch is used to make a selection or confirm a selection.

With the balanced input method, the switches change functions as soon as a selection is made or confirmed. So then the other switch is used to move the cursor and the first switch is used to make a selection or confirm a selection.

This method prevents overburdening of one hand (or foot, or neck, or whatever body parts are used to handle the switches) because the user has to use both switches about as many times.

There is a checkbox in the bottom left of the scan settings dialog. Check this to activate the balanced input method.

4.3 Cursor movement (scan strategy)

The cursor always starts by indicating the elements in the main window of the program. This is scan level 0.

In Memory it means the cursor indicates the charts area, the Restart button (if visible) and the Player's area (if there are two players who don't change turns automatically).

Level 1 to 4

Every time when the user makes a selection, the next scanning level is activated (level 1-4). For instance, on scan level 0 the user selects the chart. The cursor enters the chart and the next scanning level becomes active.

On every scan level (higher than 0) the cursor can indicate either...

- halves – the chart is divided in halves. It can split the chart in two halves horizontally (check this option if you want that) or vertically.
- rows or columns – the cursor goes on by indicating rows, or columns. When the option 'Row first' is checked, the cursor starts by scanning the rows (a vertical movement).
- fields – the cursor always ends doing a linear scan, giving the user the possibility to select a field.

For every scan level you can determine what the cursor must do.

Halves can be divided in half

If a chart is very big, it might be a good idea to use half-scanning on two or more successive scan levels. For instance, choose half scanning for level 1 (split vertically) and

half-scanning – split horizontally on level 2. The user will now be able to select e.g. the right half of the chart first; next, the right half is divided in two halves horizontally and the user can select the upper or lower half.

Linear scanning follows row/column scanning

If the cursor is instructed to indicate rows or columns on a certain level, it must do a linear scan on the next scan level. The user selects a row or a column; logically the next step is to choose a field in that row or column.

Maximum number of rounds

Set a maximum number of rounds for each level. When the maximum number of rounds is reached before the user makes a selection the cursor returns to the previous scanning level.

Note: the user might have to wait a long time before the cursor has returned to scan level 0, if the number of rounds is high on all levels, and if the default action after selection is not 'go outmost' (see the next paragraph).

4.4 Default action after selection

Where does the cursor go after the user has made a selection? This depends on the setting for the 'default action after selection'.

The cursor can...

- **stay at the currently active point;** this means the cursor stays at the same scan level and it resumes the linear scan, moving on from the field the user selected.
- **go home;** the cursor stays at the same scan level and it resumes the linear scan, but it doesn't move on from the selected field; it returns to the start of that scan level.
- **go out;** the cursor falls back to the previous scan level and moves on from the point where the user made the previous selection.
- **go out then home;** the cursor falls back to the previous scan level, but it starts at the beginning of that level instead of moving on from the point where the user made the previous selection.
- **go outmost;** the cursor returns to scan level 0.
- **go outmost and in again;** the cursor returns to scan level 1.

Note:

If the user wants to return to scan level 0 (e.g. in the Personal Communicator if he wants to select the sentence bar) and the cursor does not return to that scan level 0 after a selection, the user can stop making selections. The cursor will do the maximum number of rounds on the current level; it will then fall back to the previous level, do the maximum number of rounds on that level; etceteras. The user might have to wait a long time before the cursor has returned to scan level 0.

4.5 Timer settings

Step time (in milliseconds)

The Step time is the time the cursor takes for every step. For instance, if the step time is 500 milliseconds, the cursor waits half a second on every item (the button bar, the sentence bar, a button, the chart, a half, a row, column, or a field).

Restart extra scan time (percentage)

The 'Restart extra scan time' is the time added to the step time for the first step at each scan level. For instance if the step time is 1000 milliseconds (1 second) and the restart extra scan time is 100 percent, the cursor waits 2 seconds on the first step of each level.

Tremor delay and Debounce delay (in milliseconds)

Some users who have a tremor can press a switch by accident. If the program would react to those accidental movements, it would cost the user a lot of time to undo what the program does next.

To make the program react to a switch, the switch must be pressed longer than the **tremor time**.

When a switch is pressed longer than the tremor time, the program reacts to this signal and then it stops reacting to the switches, until the **debounce delay** is over.

If there are two switches the tremor delay and debounce delay will be the same for both.