

- [Cartridge Utility Documentation](#)
 - [Introduction](#)
 - [Functions](#)
 - [Starting Cartridge Utility](#)
 - [Configuration](#)
 - [User Interface](#)
 - [Read](#)
 - [Write](#)
 - [Format](#)
 - [Cartridge Edit](#)
 - [New](#)
 - [Open](#)
 - [Close](#)
 - [Save](#)
 - [Save As](#)
 - [Page Edit](#)
 - [Browse](#)
 - [Add](#)
 - [CK35 Add](#)
 - [Delete](#)
 - [Show](#)
 - [CK35 Show](#)
 - [Extract](#)
 - [Drag and Drop](#)
 - [Split](#)
 - [Close](#)
 - [IK Test](#)
 - [Close](#)
 - [Getting Started](#)
- [Dialog Manager explained](#)
 - [Introduction](#)
 - [Buttons](#)
 - [Fields](#)
 - [Multiline fields](#)
 - [Tablebox](#)
 - [Tickbox](#)
 - [Access Keys](#)
 - [Scrollbar](#)
 - [Initial Focus en Tab Order](#)
 - [Coloring](#)

Cartridge

Cartridge Utility

Thank you for purchasing a Cartridge product.

This HTML Help file provides the documentation for Cartridge products.

The first part of this document provides information about the functionality of Cartridge products.

The second part of this document provides information about Dialog Manager, the package used to develop Cartridge Utility, the driver program of the Cartridge products.

Last Modification: October 23, 2005 © 2005 [Computerservice SSHS BV](#).

Cartridge

Introduction

Cartridge Utility is the driver program for Cartridge.

The theory behind Cartridge Utility is rather simple. A Cartridge is no more than a piece of memory of 32 kilobyte. The knitting machine can read this memory and most knitting machines can also write the memory.

The idea is that using Cartridge you can also read the memory and can save its contents on your computer. You can also write the stored contents back to Cartridge.

Here we have the first additional application: you will never have the lack of space problem with Cartridge. You can store the contents on your computer. You also get a backup facility for your patterns. You can do this as often as you wish.

Cartridge also solves another problem for you: You can after retrieving the patterns from Cartridge, view the patterns. If you forgot the order of the patterns for example, you can get a picture of the patterns.

You can also compose a new contents of Cartridge on your computer using patterns stored on Cartridge and patterns (DesignaKnit STP/PAT files, Stitch Painter STC files) stored on your computer.

DesignaKnit users can, via the IK (Interactive Knitting) option, knit interactive using the USB port on your computer. An RS232 port is no longer needed.

Cartridge

Functions

Machine	Slot	PPD	DesignaKnit	CartUtil	Pages
KH-940	No	Yes	Yes	Yes	1 x 32K
KH-950i	No	Yes	Yes	Yes	1 x 32K
KH-270	Yes	Yes	Yes	Yes	1 x 32K
KH-930	No	Yes	Yes	Yes	16 x 2K
KH-930M	No	Yes	Yes	Yes	4 x 8K
KH-900	Yes	Yes	No	Yes	8 x 4K
KH-965	Yes	Yes	Yes	Yes	1 x 32K
KH-965i	Yes	Yes	Yes	Yes	1 x 32K
KH-970	Yes	No	No	Yes(*)	1 x 32K
CK-35	Yes	Yes	Yes	Yes	1 x 32K

(*) under development

Legend:

Slot The knitting machine has a cartridge slot

PPD The PPD can program the Cartridge

DesignaKnit DesignaKnit can program the Cartridge (in the PPD)

CartUtil Cartridge Utility can program the Cartridge (connected to PC via USB)

Cartridge

Starting Cartridge Utility

Cartridge is controlled by Cartridge Utility. You can use Cartridge Utility also without a Cartridge connected. In that case you can not make use of reading and writing of Cartridges.

Follow these steps to start Cartridge Utility:

1. Press **Start**
2. Press **Programs**
3. Press **Cartridge**
4. Press **Cartridge Utility**
5. The configuration dialog of Cartridge Utility will be displayed

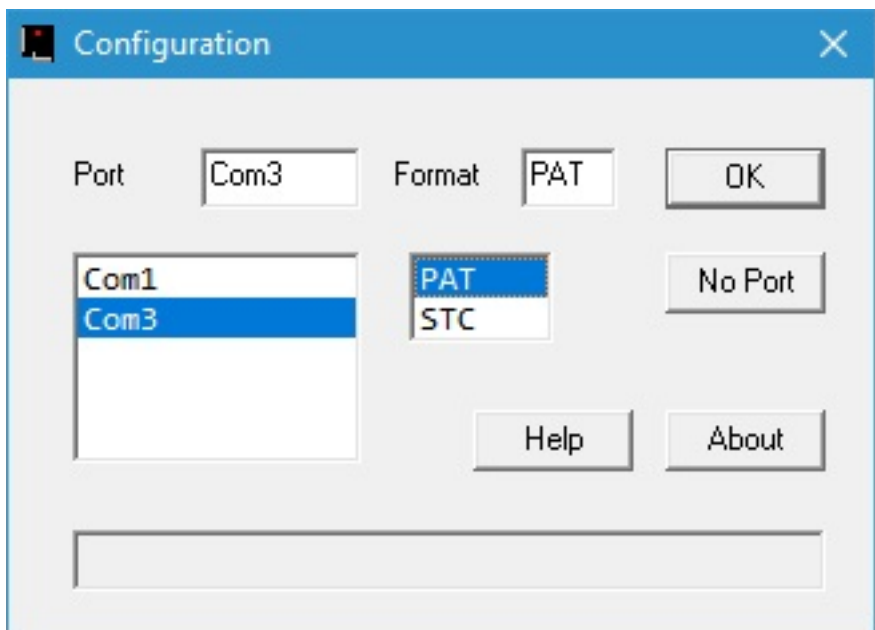


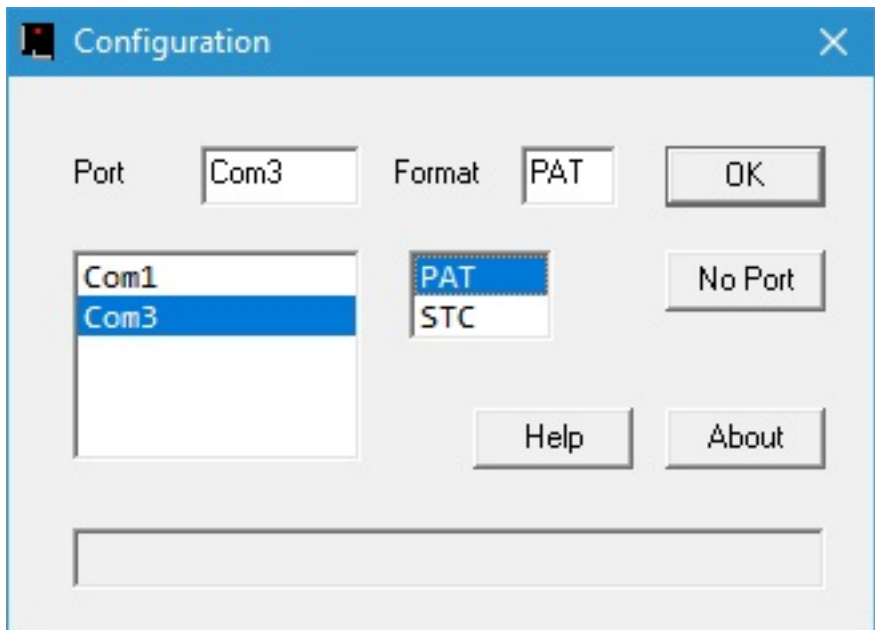
Figure 1

You can also start Cartridge Utility by double clicking on the Cartridge Utility icon on your desktop.

Cartridge

Configuration

When Cartridge Utility starts you first have to set the com port to which the Cartridge hardware is connected. You do this by clicking one of the com ports from the list and then pressing **OK**.



In case the Cartridge is not connected to the com port specified, you will see the message below.



You can show this help file by pressing the **Help** button.

If you click on **About**, Cartridge Utility shows its version and also the version of Windows.

You can choose also to work only on your PC pattern collection and/or to view them. In this case press **No Port**.

The next dialog will be the [User Interface](#) dialog.

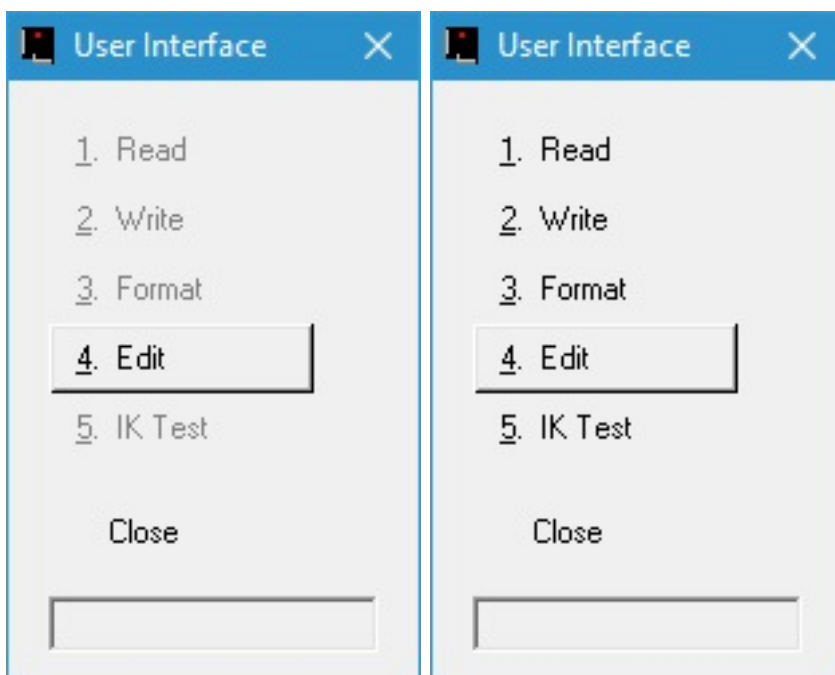
Cartridge

User Interface

There are two variants of the User Interface dialog: one with five black buttons and one with three grey and two black buttons.

You will see the dialog with five black buttons when you have pressed the **OK** button on the configuration dialog.

You will see the dialog with three grey and two black buttons when you have pressed the **No Port** button.



The buttons have the following functions:

[Read](#) Read the contents of the Cartridge

[Write](#) Write to the Cartridge

[Format](#) Format the Cartridge

[Edit](#) Edit a Cartridge file

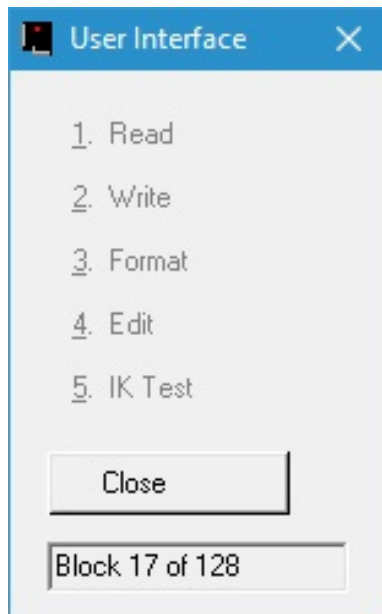
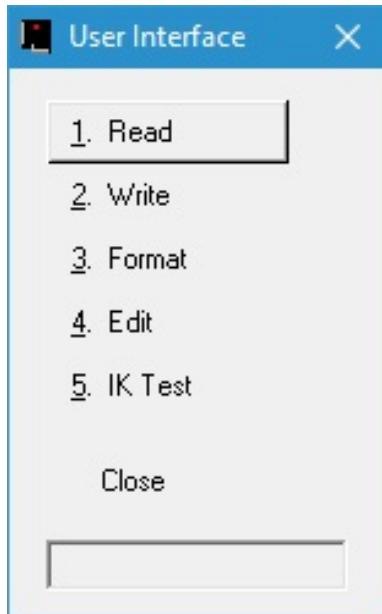
[IK Test](#) Test the Interactive Knitting function

[Close](#) Exit from Cartridge Utility

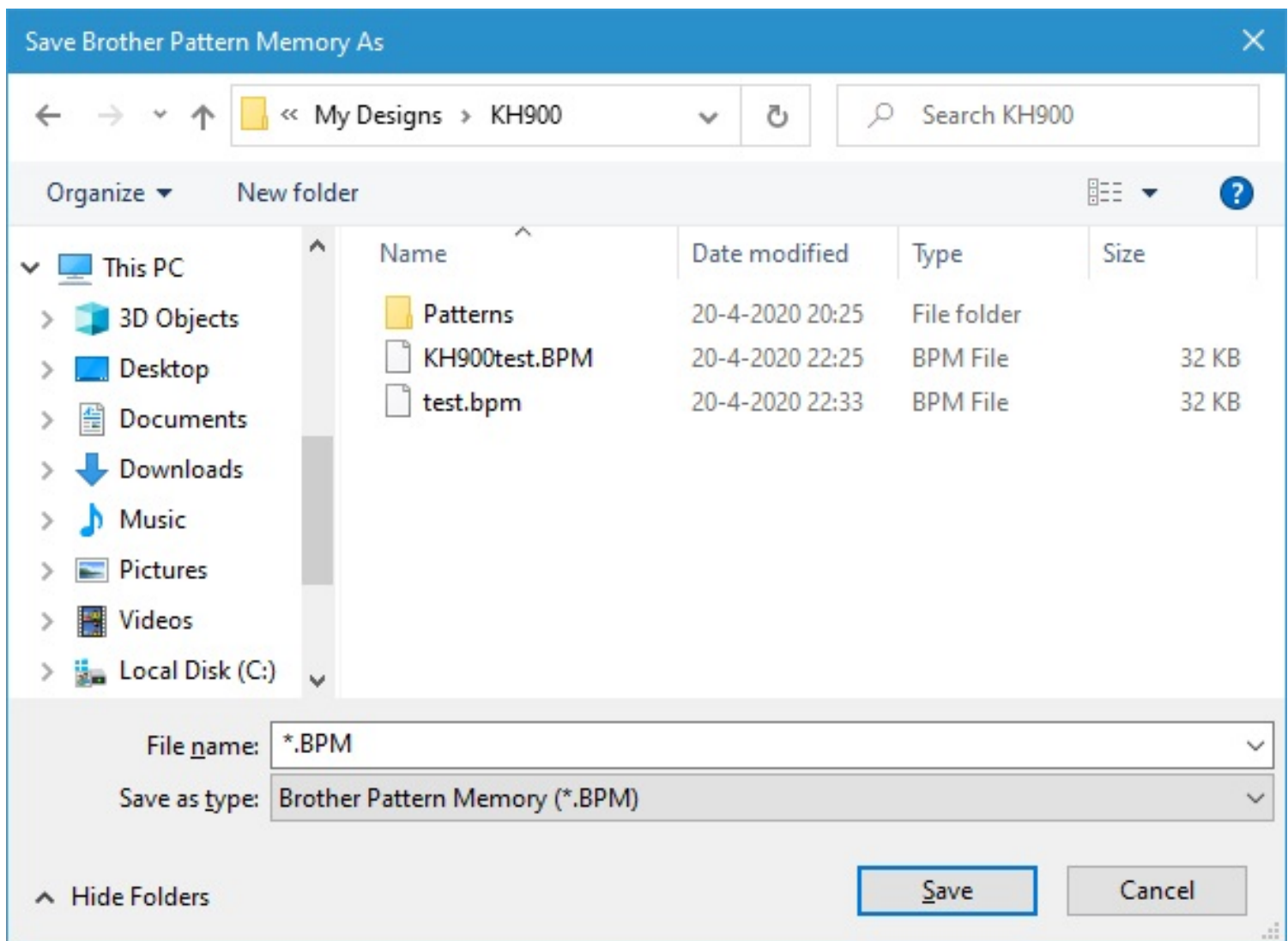
Cartridge

Read

To read the contents of the Cartridge press the button **Read**.



On the Cartridge the green light will go on. In the status field you will be informed about the progress. You can abort the read process by pressing the **End** button on the keyboard.

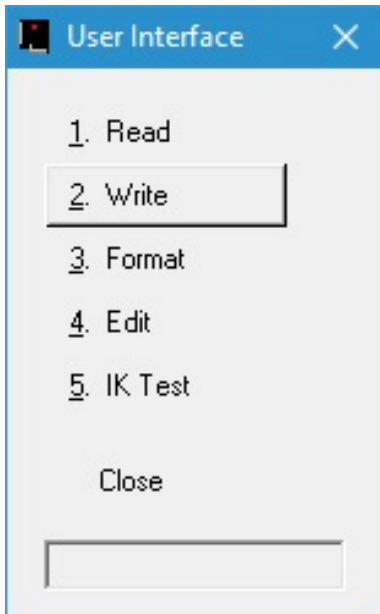


When reading has been completed, the dialog above will be displayed. You can select or create here a folder and type a file name at the star.

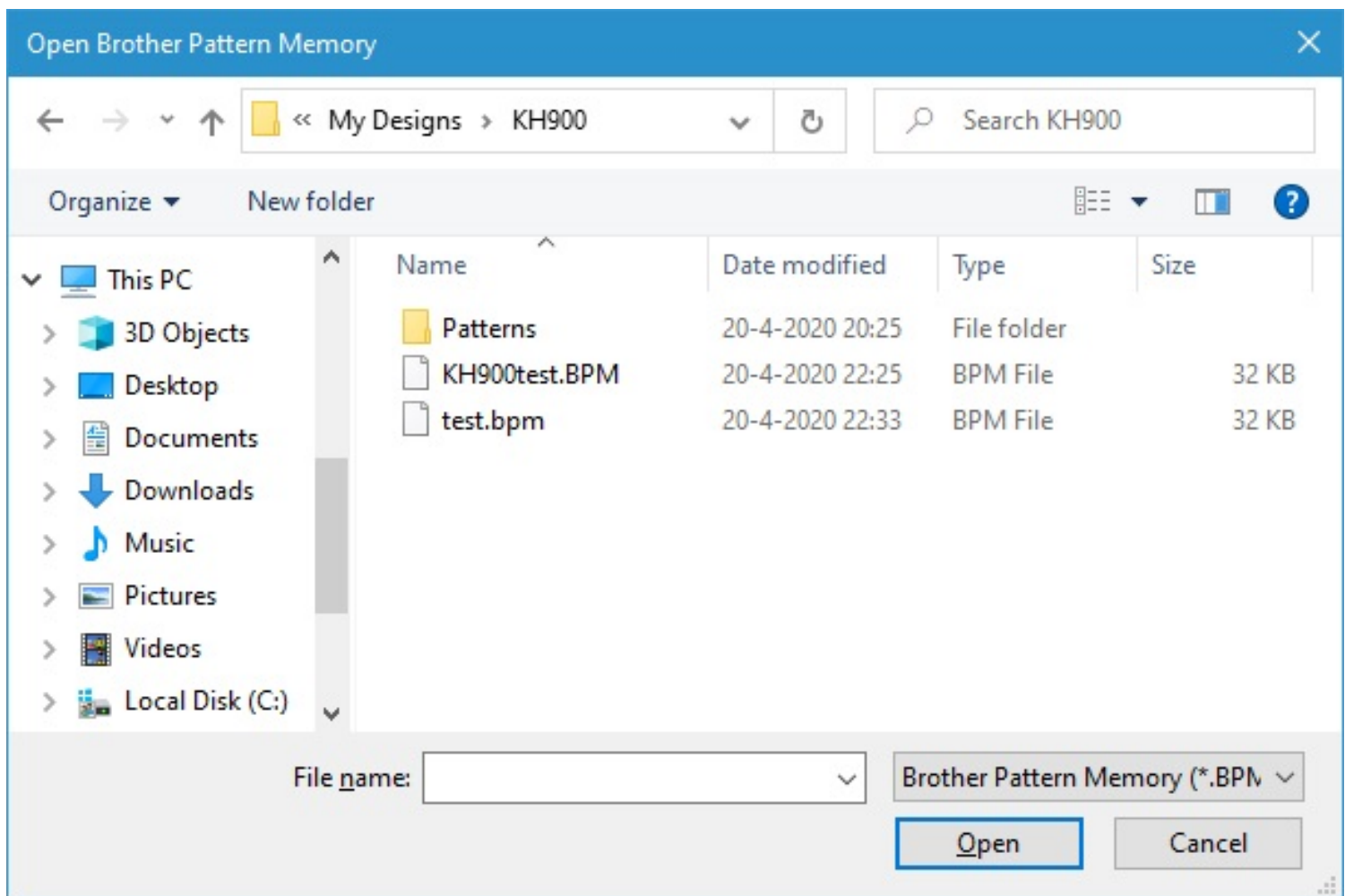
Cartridge

Write

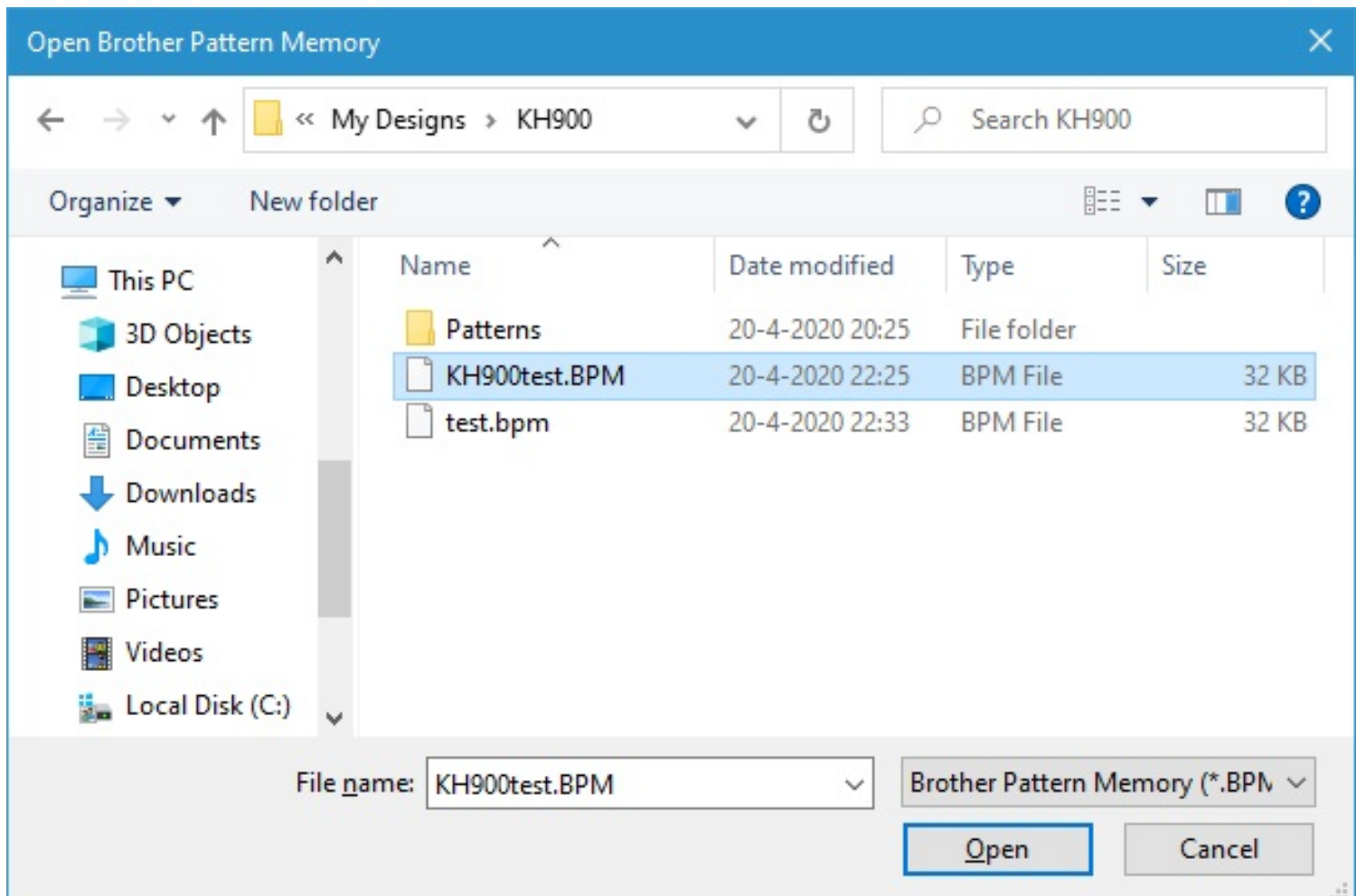
To write a file to the Cartridge press the button **Write**.



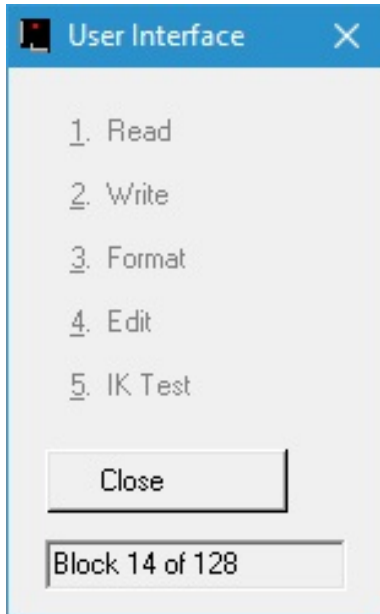
You will see a dialog where you can select the file that has to be written.



Click on the file that you want to write, and the dialog will look like the one below.



Press **Open** to start writing.

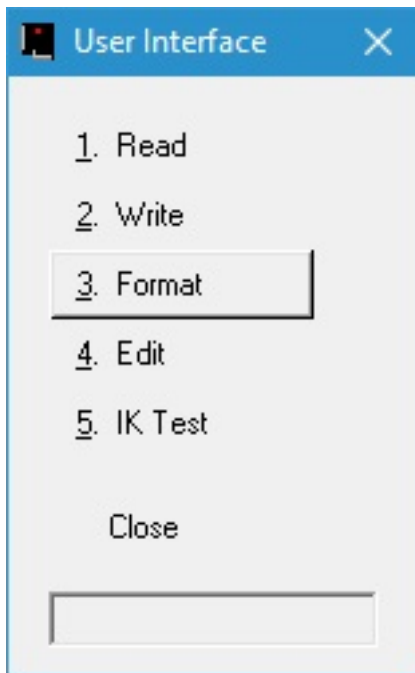


On the Cartridge the red light will go on. In the status field you will be informed about the progress. You can abort the write process by pressing the **End** button on the keyboard. When writing has been completed, you will see the User Interface dialog.

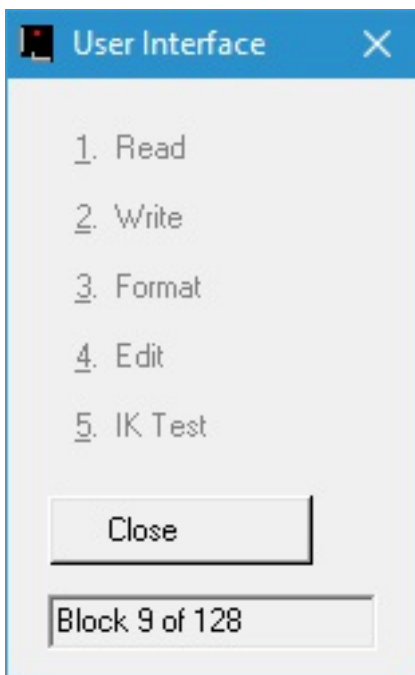
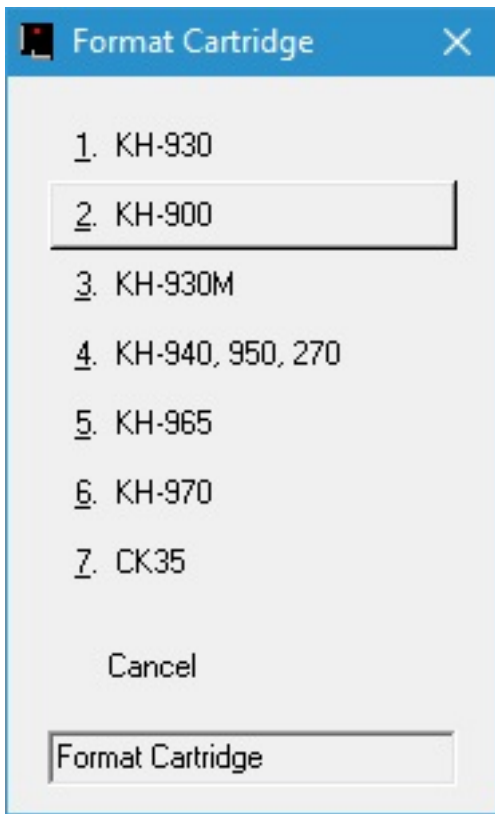
Cartridge

Format

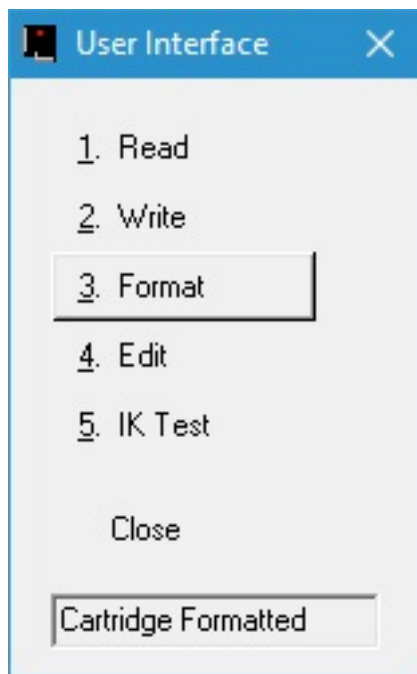
To format the Cartridge, press the button **Format**.



Select from the dialog below for which machine you want to format.



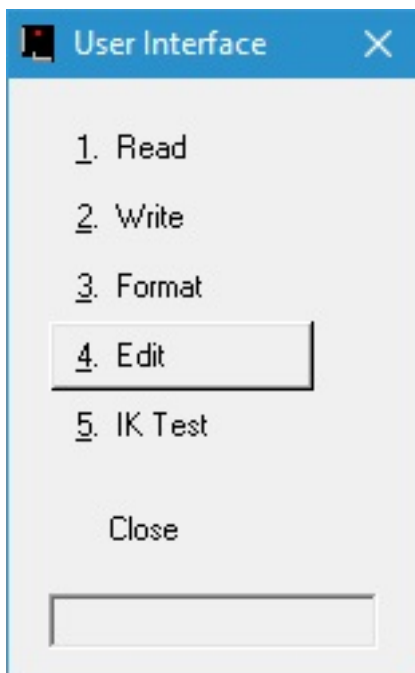
On the Cartridge the red light will go on. In the status field you will be informed about the progress. When the formatting has been completed, you will see the User Interface dialog.



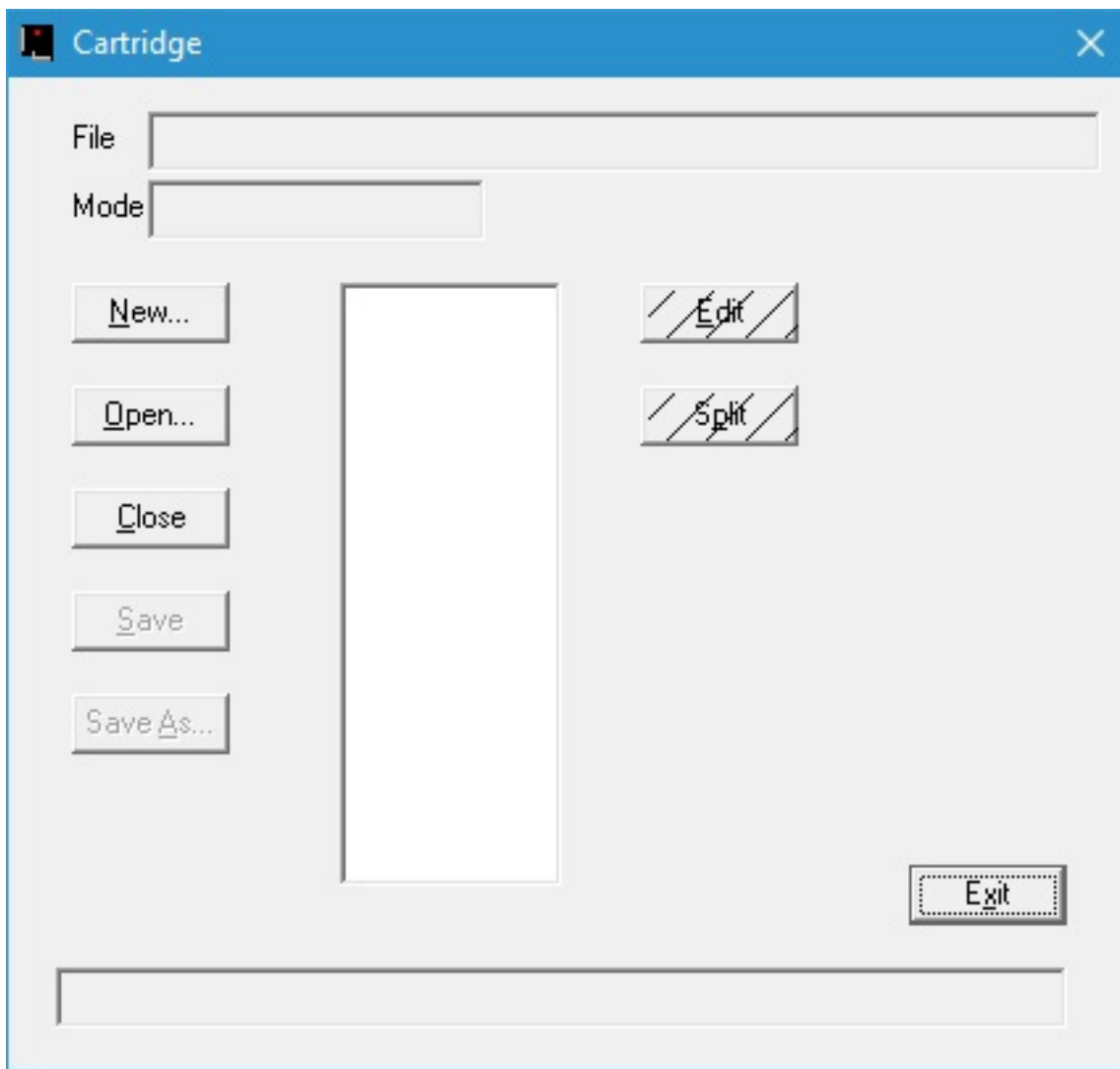
Cartridge

Edit Cartridge

To edit the stored contents of the Cartridge press the button **Edit**.



Now you see:



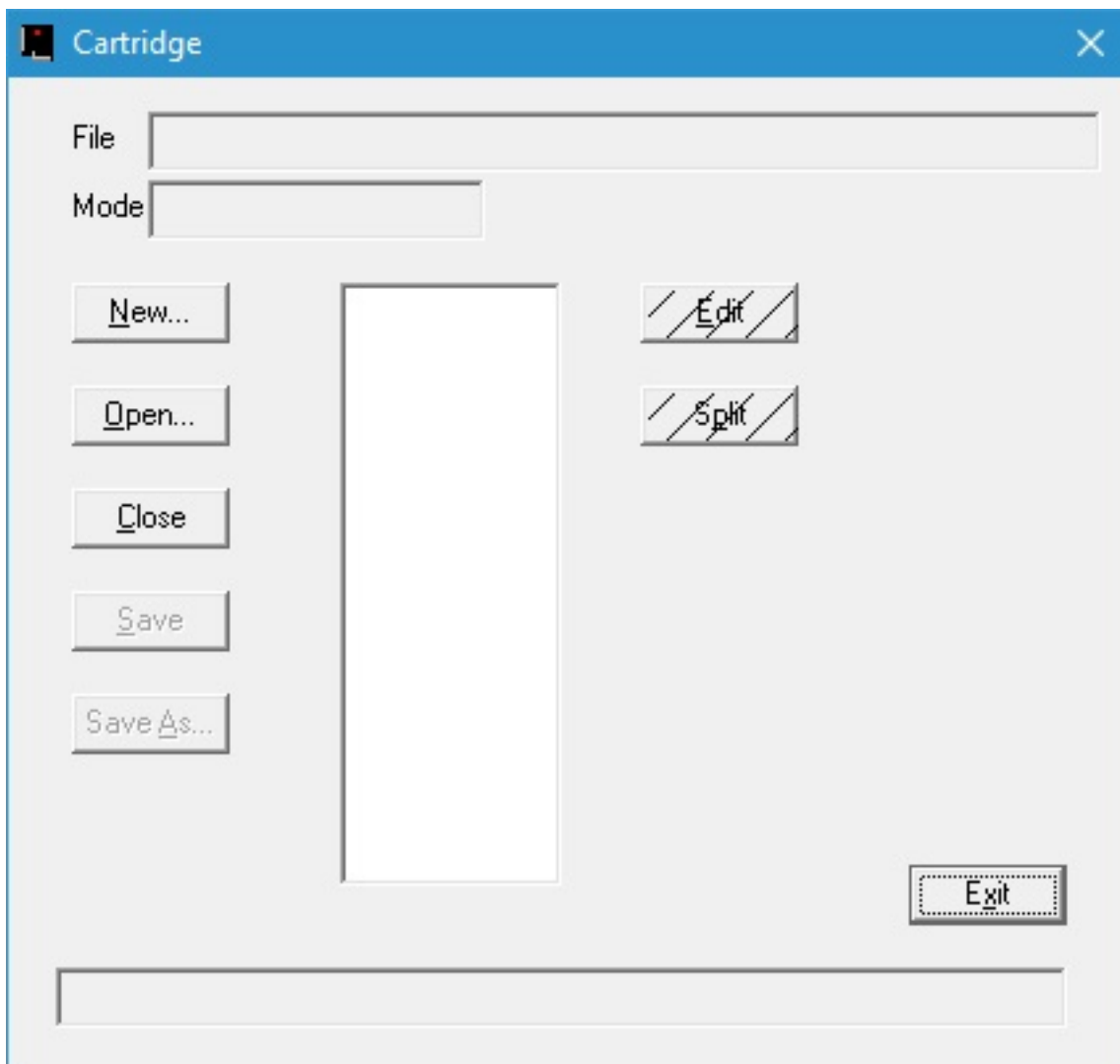
The buttons have the following functions:

- [New](#) Create a new Cartridge file
- [Open](#) Open an existing Cartridge file
- [Close](#) Close the Cartridge file
- [Save](#) Save the Cartridge file
- [Save as](#) Save the Cartridge file with a new filename
- [Edit Page](#) Edit a page of the Cartridge file
- [Split](#) Split the contents of the Cartridge file
- [Exit](#) Exit from Edit

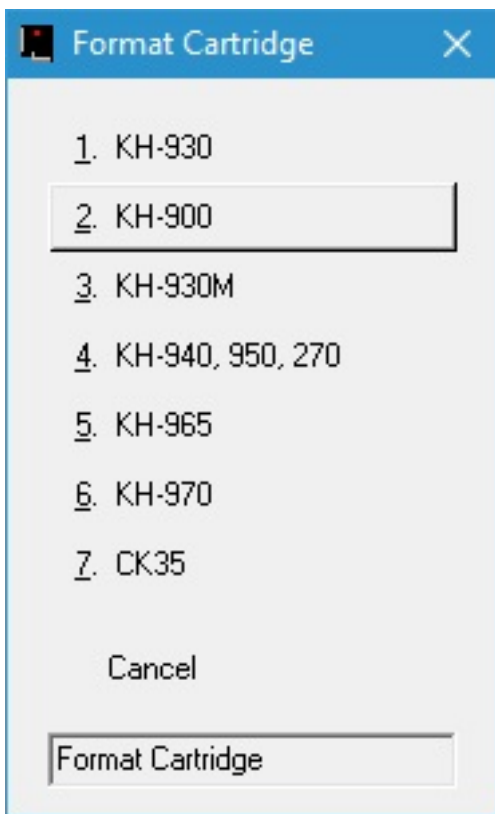
Cartridge

New

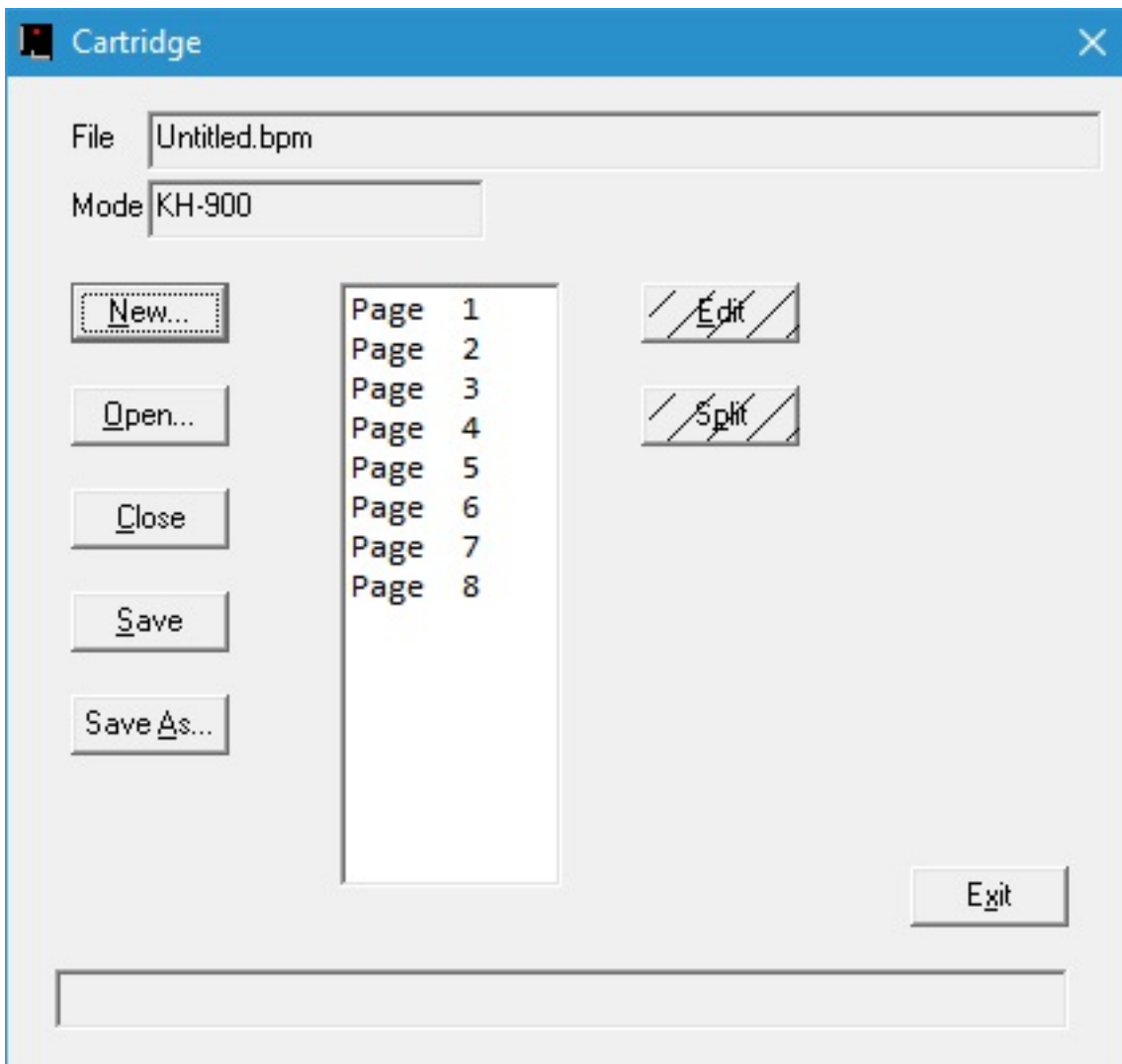
To create a new Cartridge file press the button New.



You will be asked for which machine the Cartridge file has to be made.



When you have made your choice, the dialog below will be displayed.

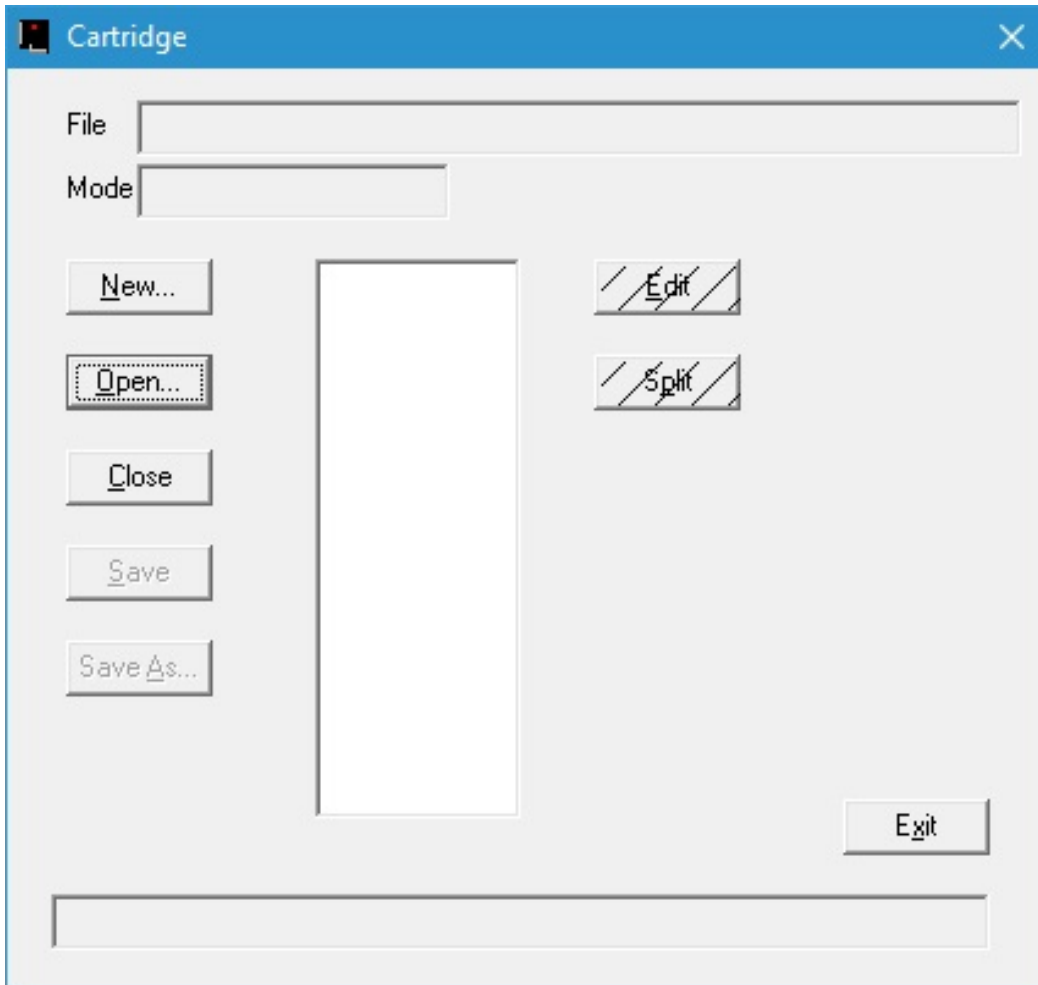


In the middle column you see the page partitioning of the Cartridge.

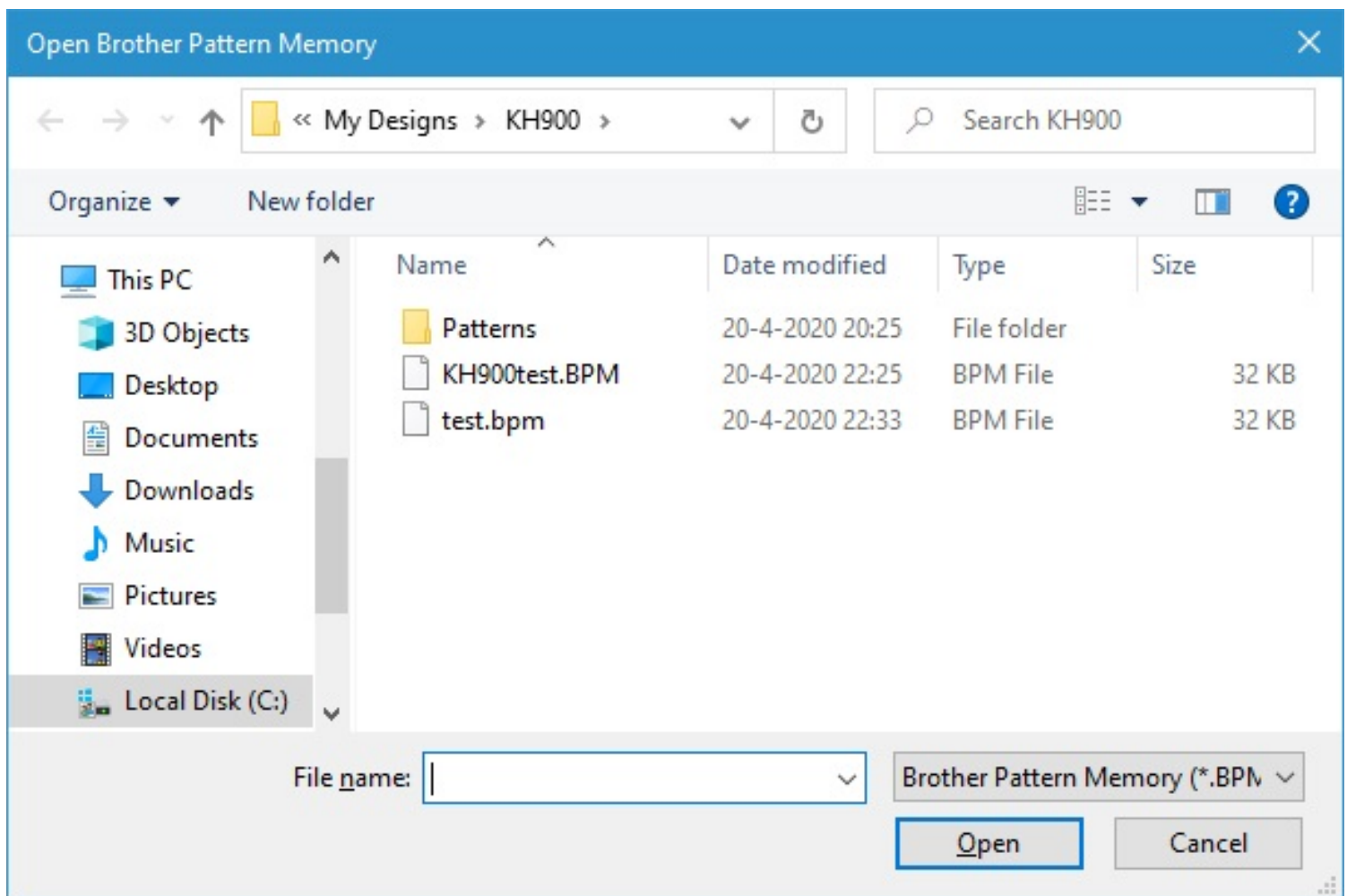
Cartridge

Open

To open an existing Cartridge file press the button **Open**.



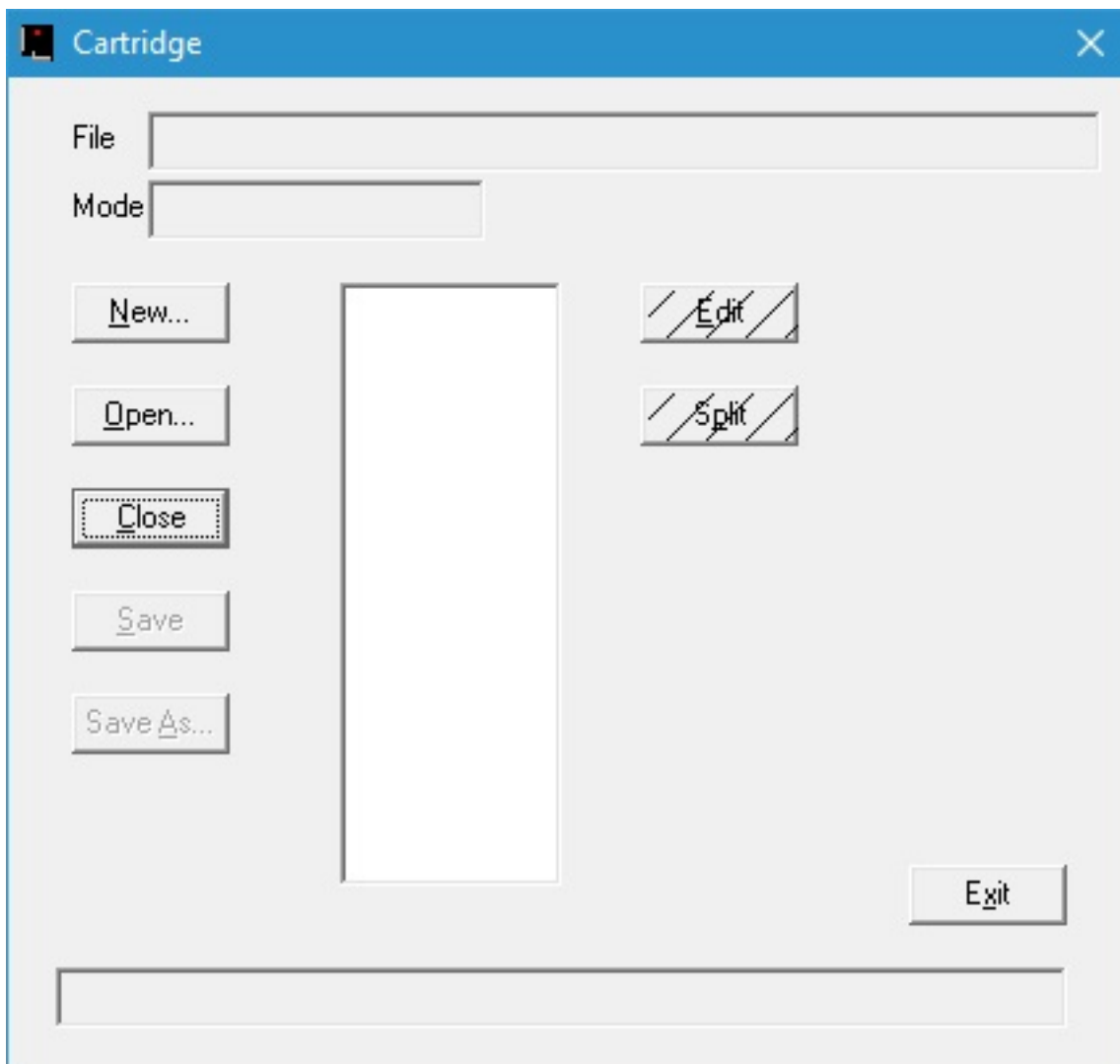
You see now the Open dialog. Select a Cartridge file and press **Open**



Cartridge

Close

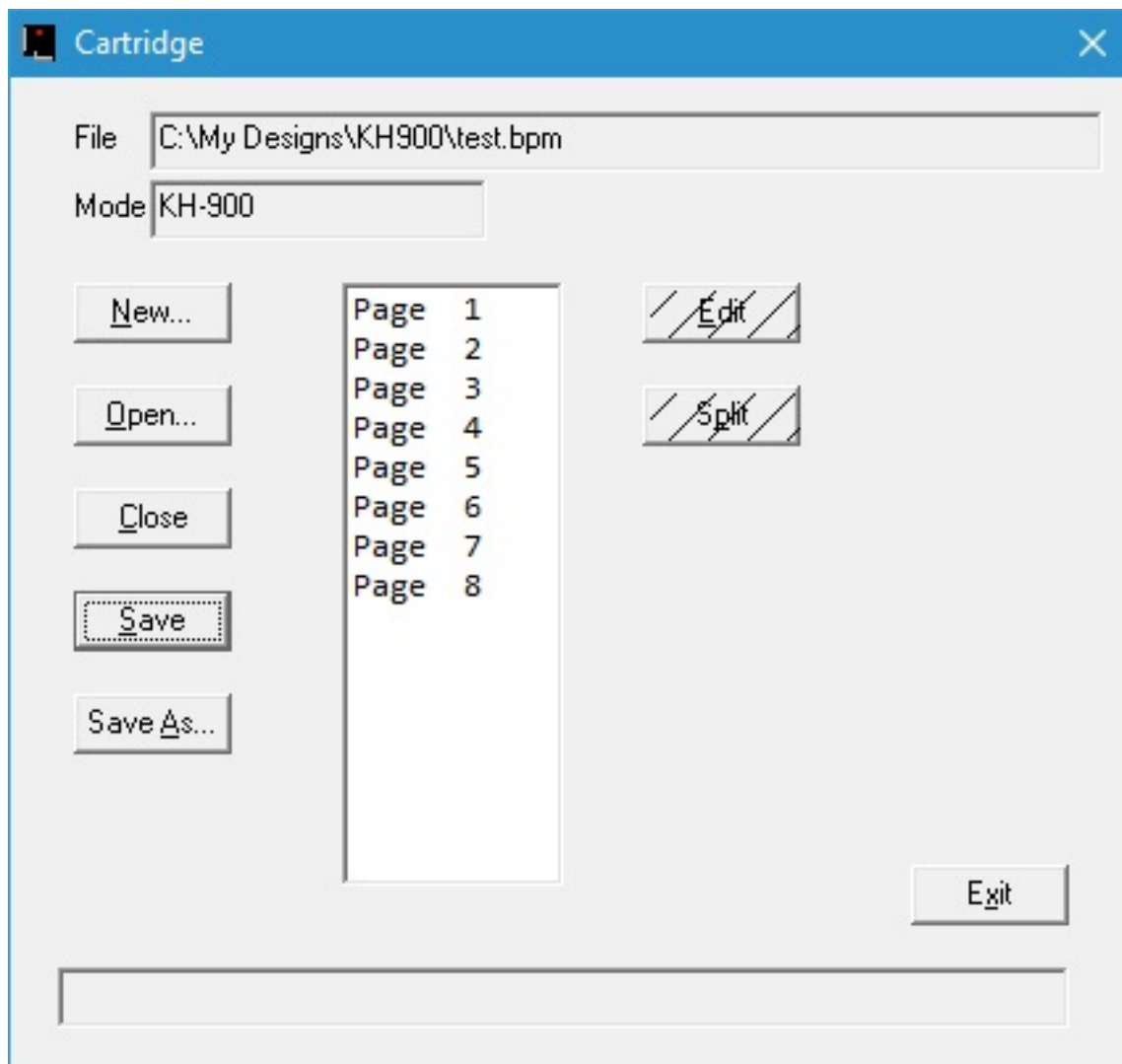
To close a Cartridge file press the button **Close**.



Cartridge

Save

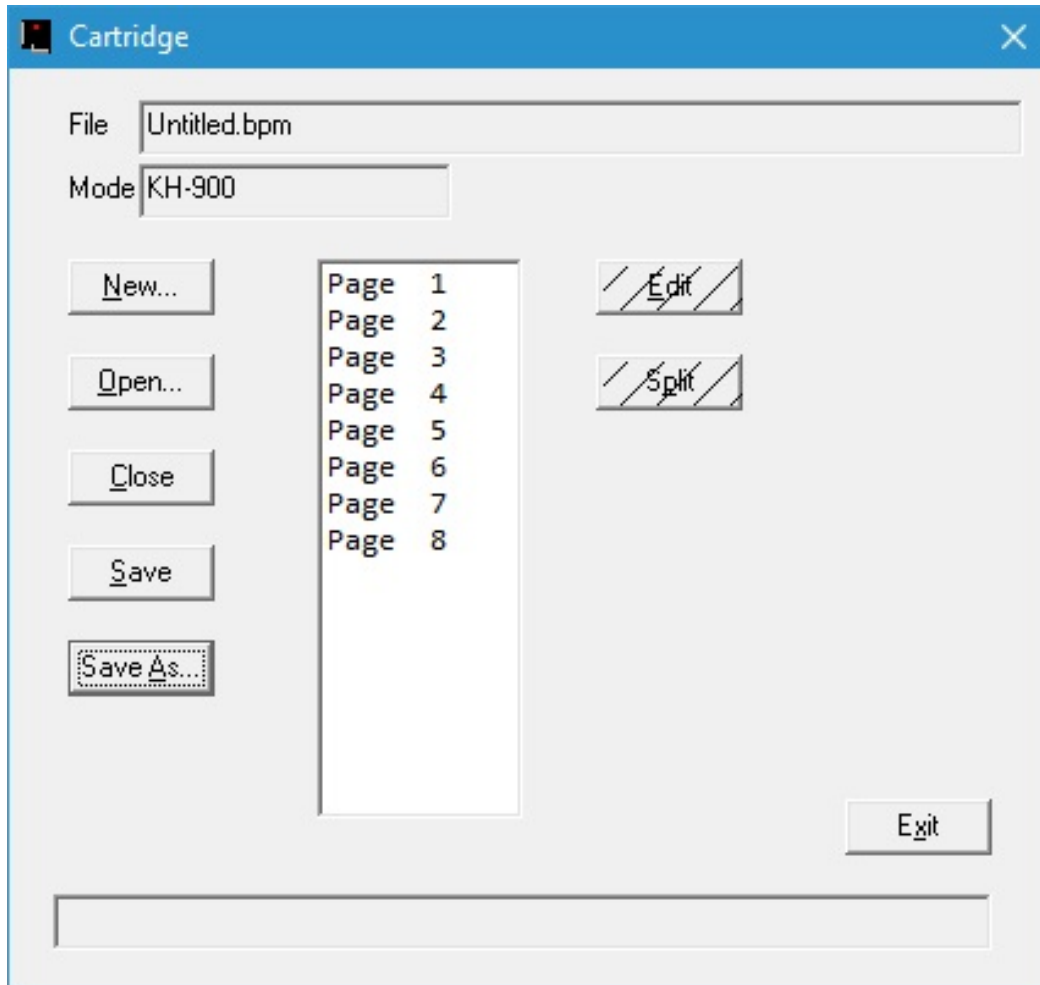
To save the displayed Cartridge file press the button **Save**.



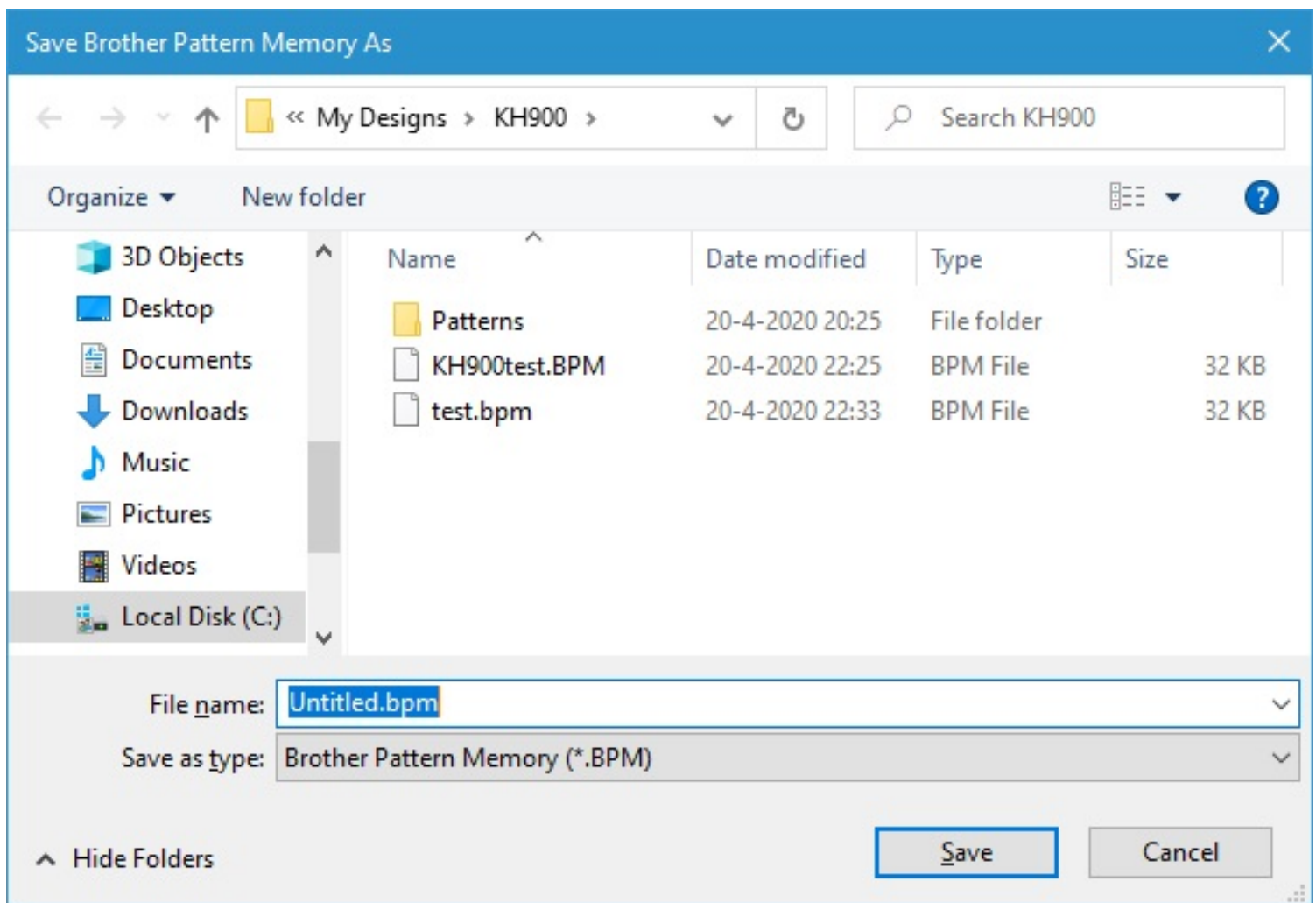
Cartridge

Save As

To save the displayed Cartridge file to a different file name, press the button **Save As**.



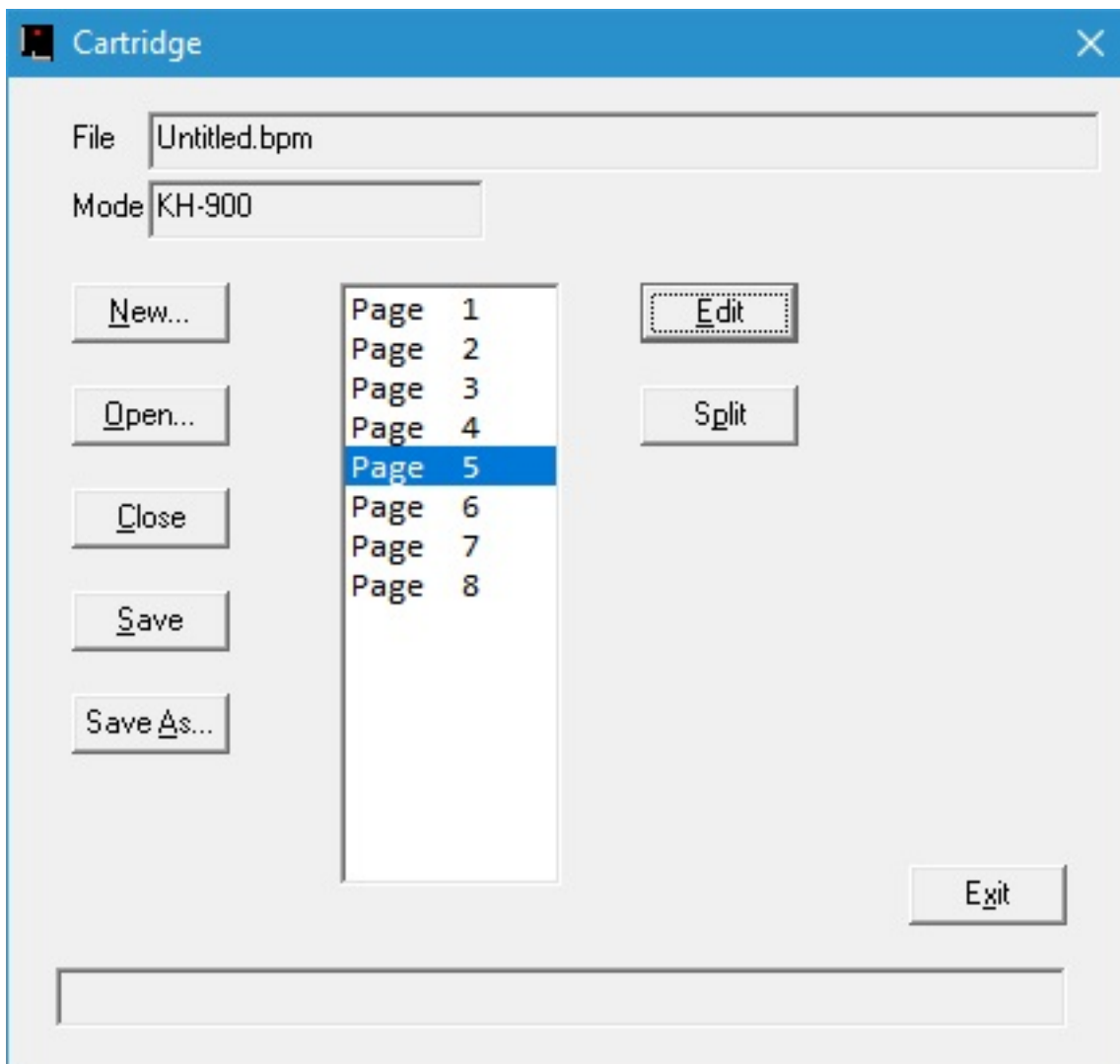
You can select or create a folder and type a file name instead of Untitled. Press **Save** to save the Cartridge file.



Cartridge

Edit Page

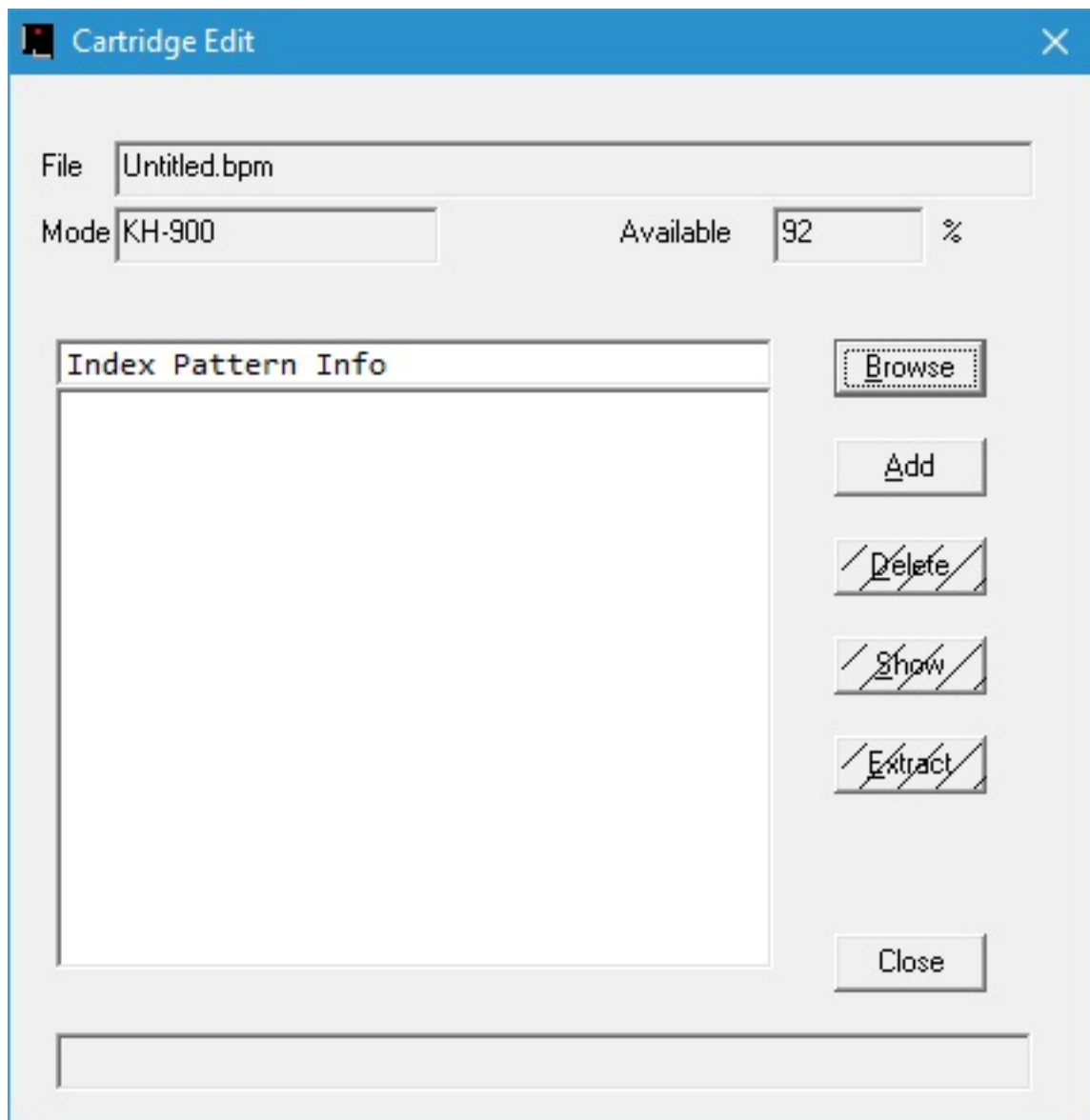
If you want to edit a page, select the page by clicking on it and then press **Edit**.



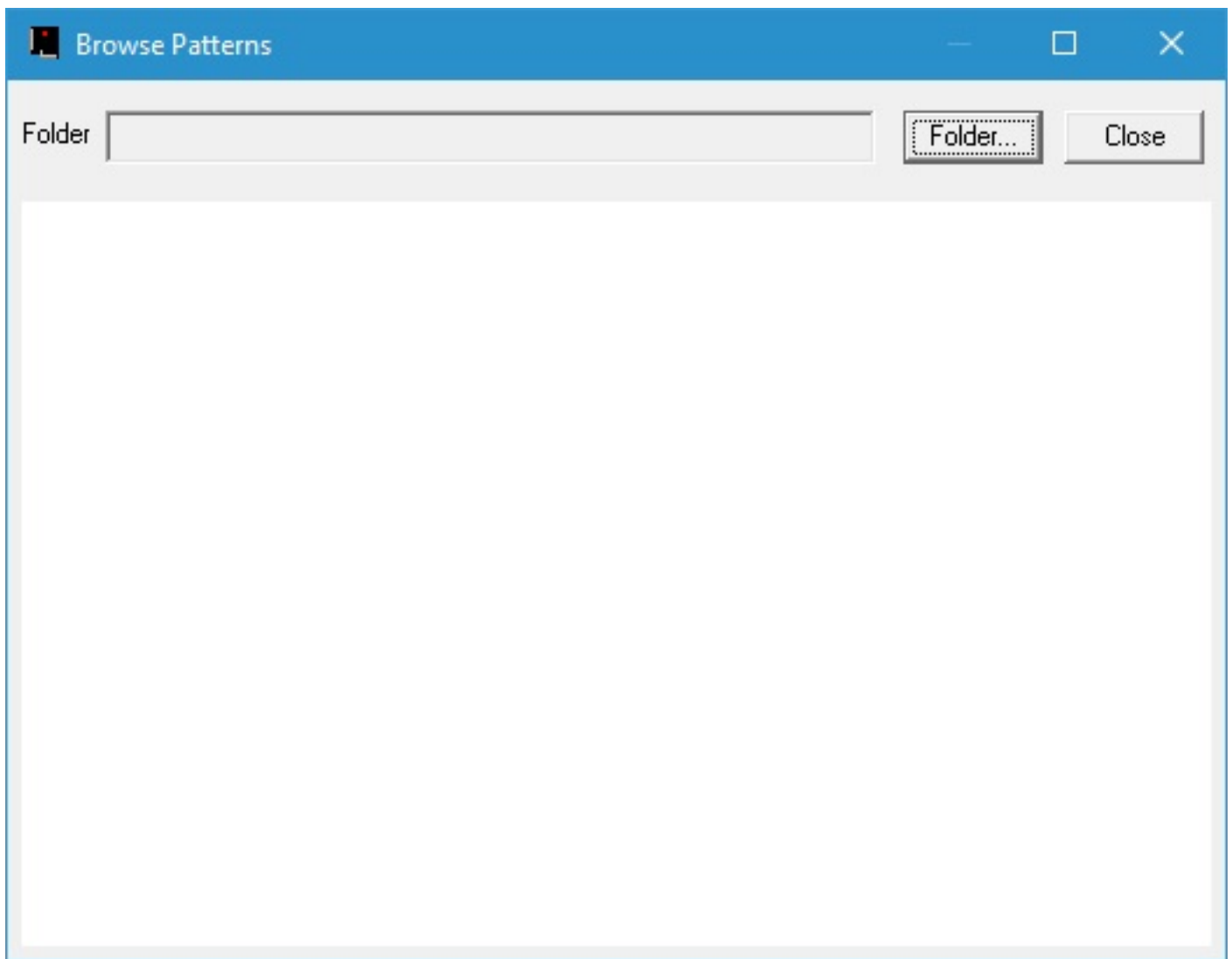
Cartridge

Browse

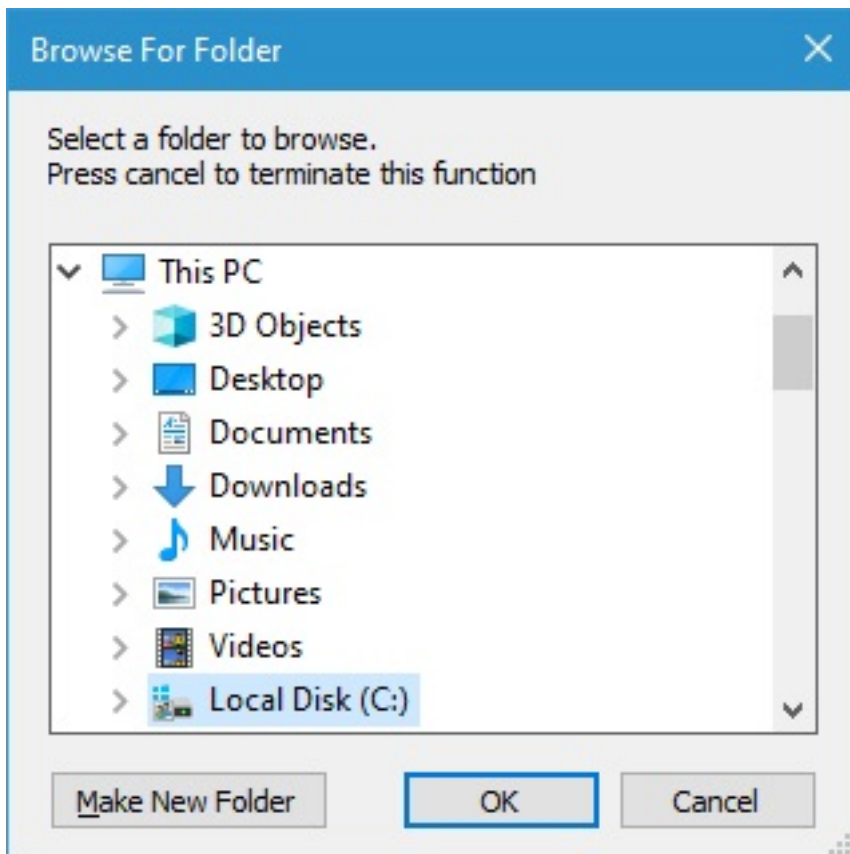
You can browse your computer for one or more patterns. Press the **Browse** button for browsing.



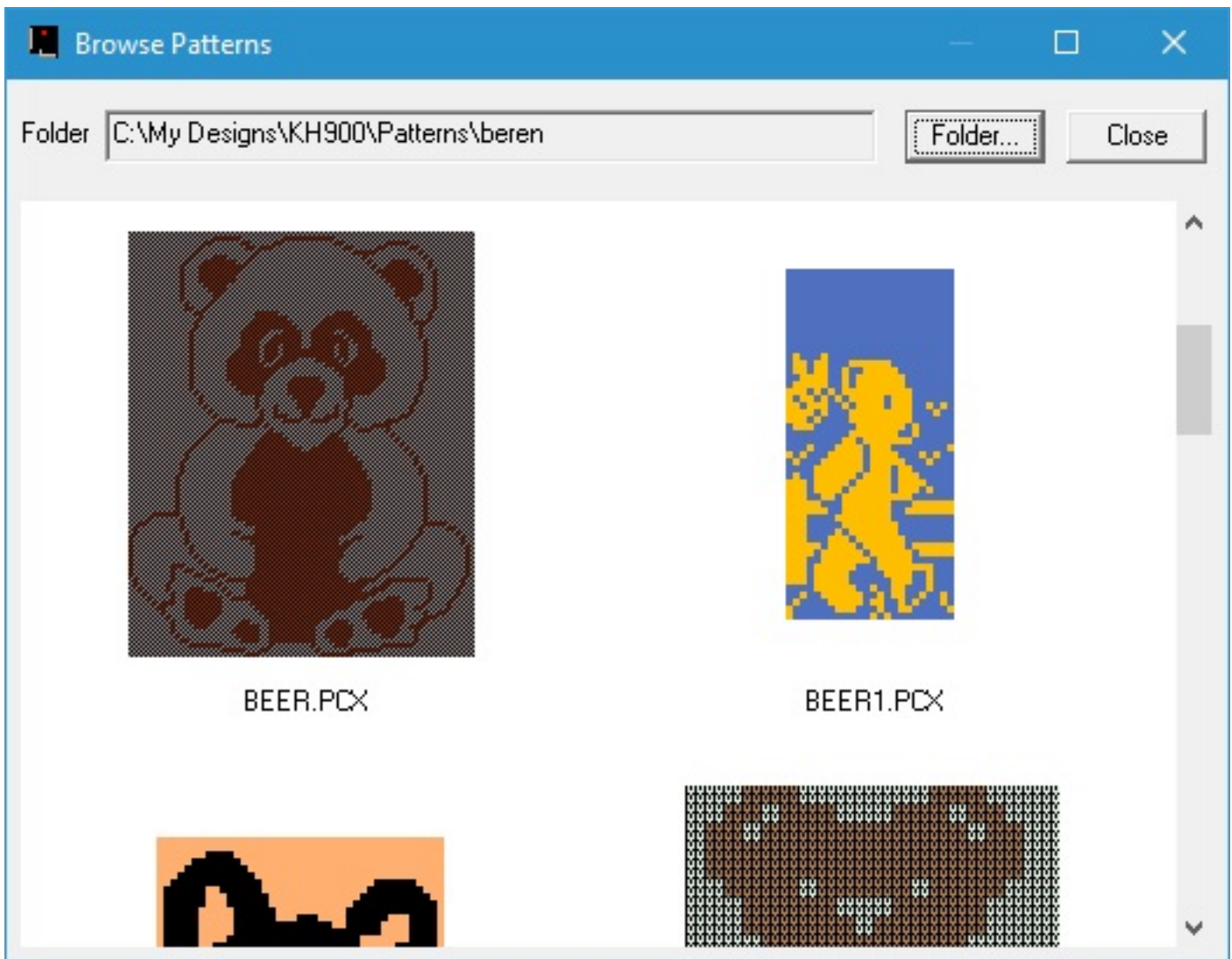
You will see a new independent dialog like the one below.



Press the **F**older button to select the folder containing your patterns.



You will see the Browse for folder dialog. By pressing the plus sign (+) next to a folder, you can open sub folders. Select the folder of your choice and press **OK**.

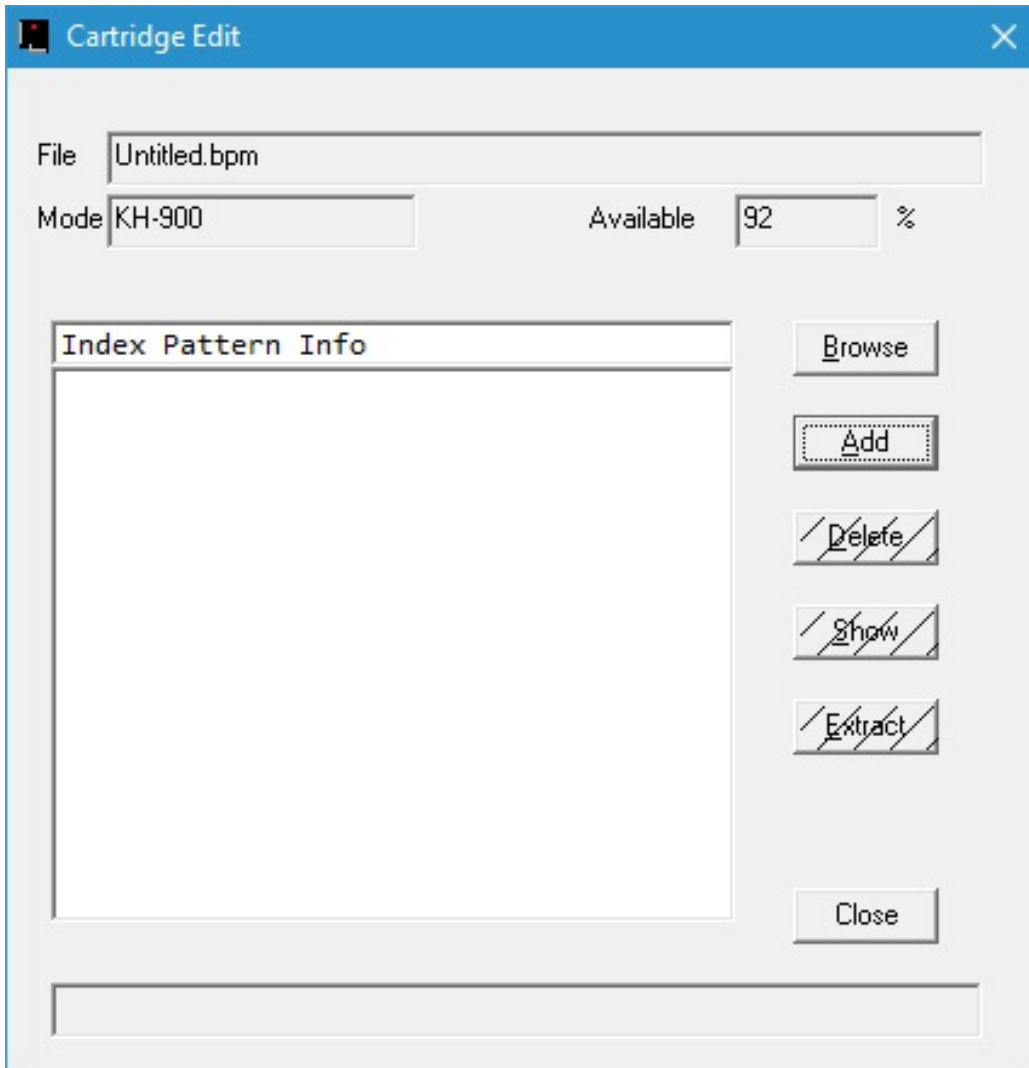


By moving the scroll bar you can view all patterns in a folder.
The Browse dialog can be resized by dragging the borders or the corners of the dialog.
Another cute feature of the Browse dialog is ["Drag and Drop"](#).

Cartridge

Add

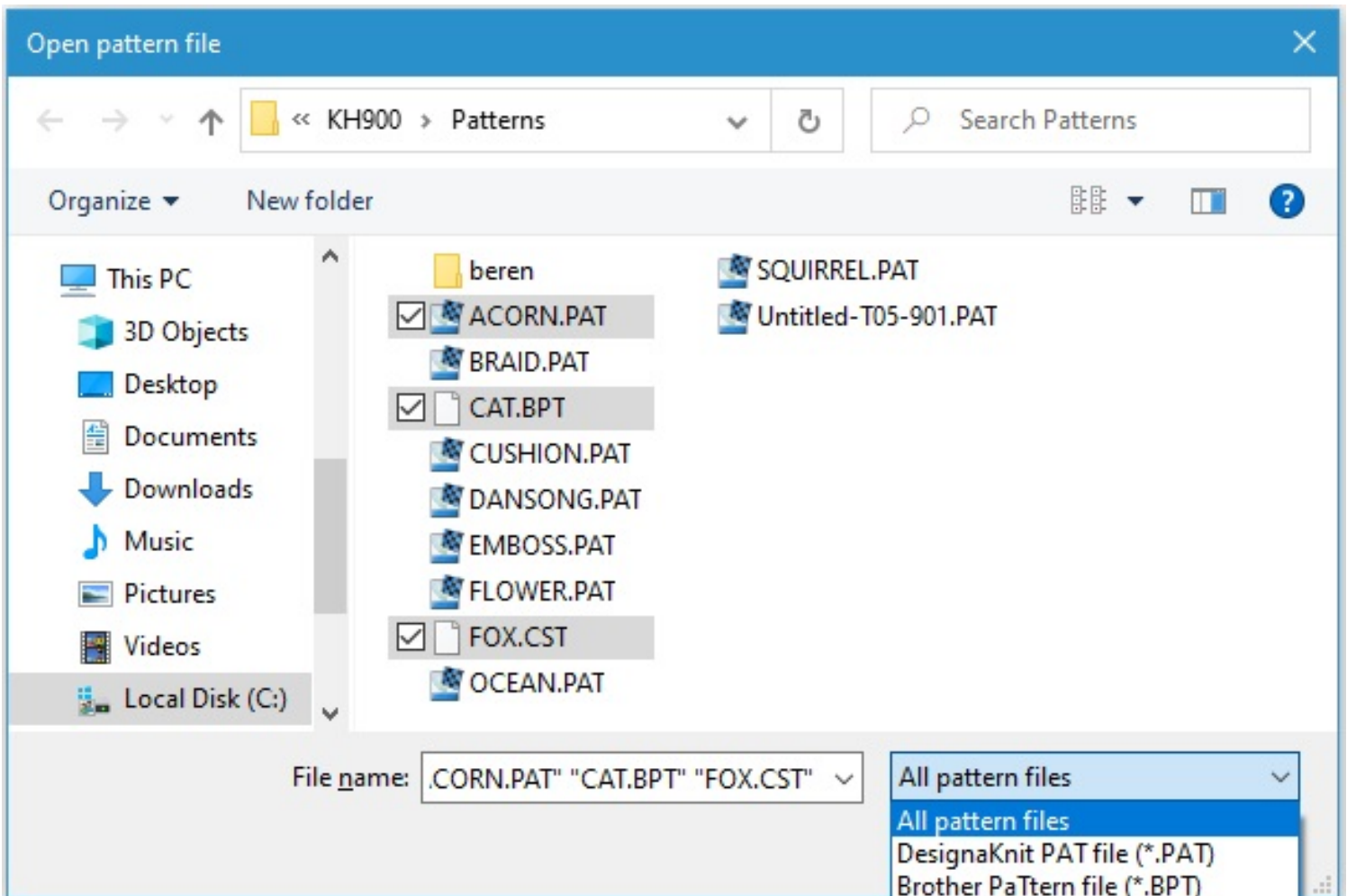
To add one or more patterns to this page, press button **Add**.



Note: for the CK35 you can add patterns and blocks. Click [here](#) for CK35.

On the dialog below you can select one or more patterns. Press **Open** to add the file(s) to the page.

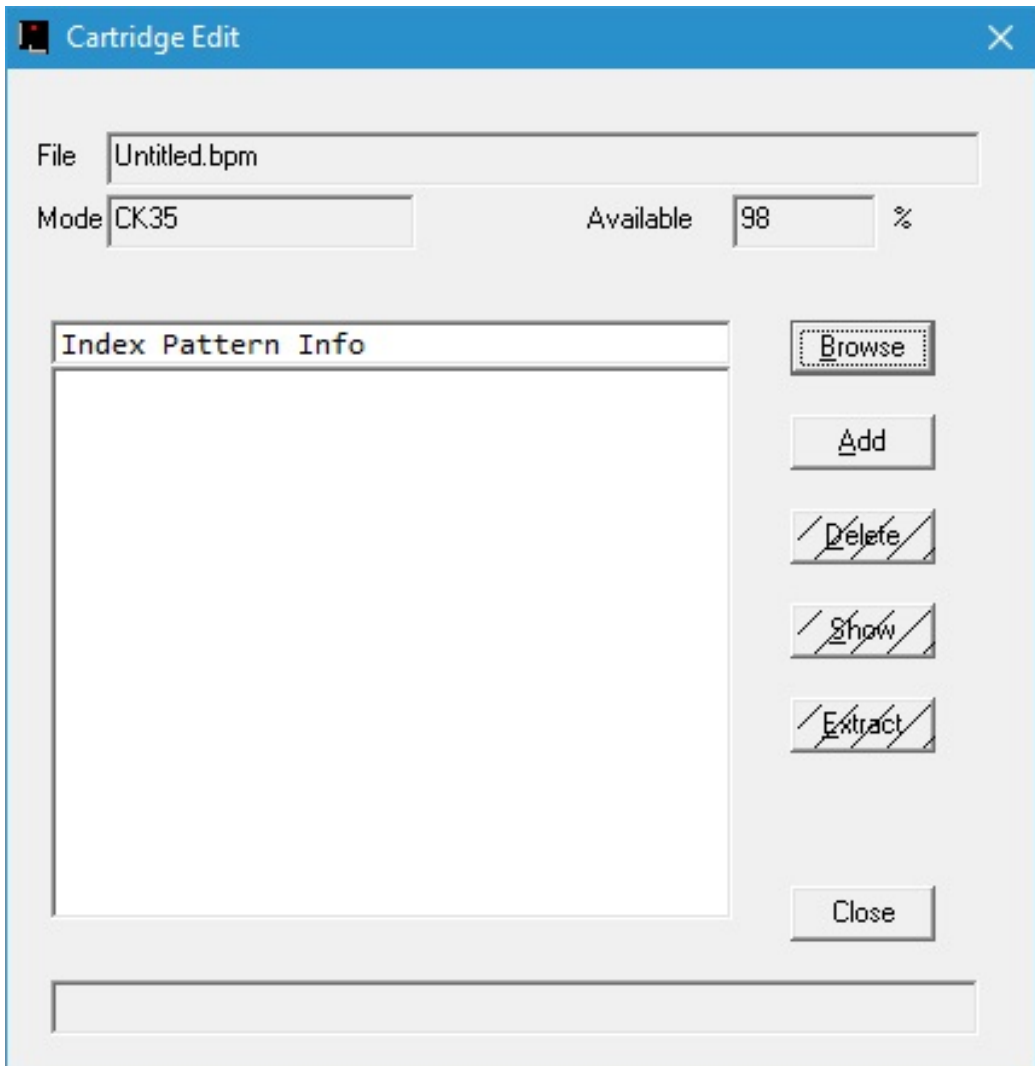
As you can see below, Cartridge Utility supports multiple file formats. You can select multiple files with different file formats in one pass. In case you want to see files of a particular format only, select the required format in the "Files of type" drop down box.



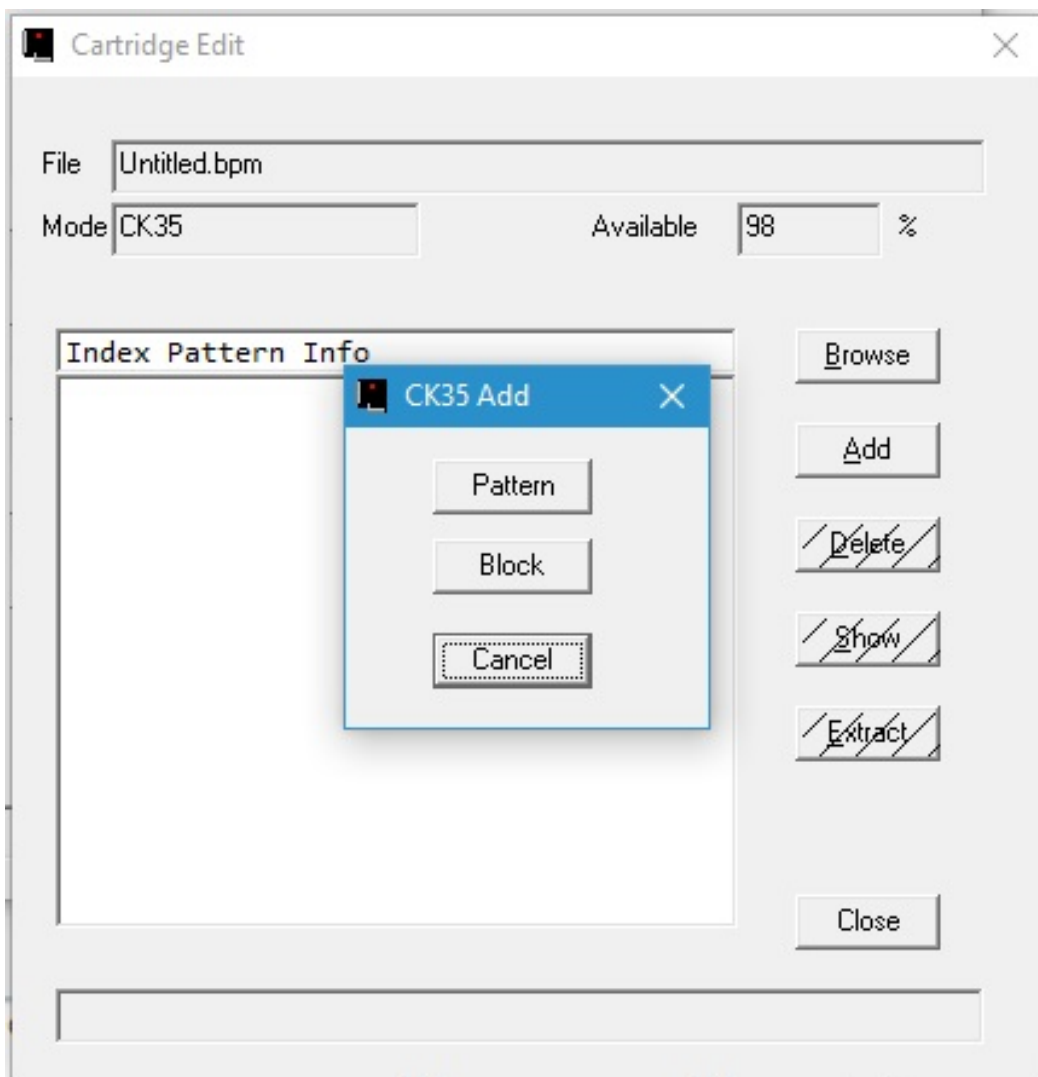
Cartridge

CK35 Add

To add one or more patterns to a page, you press the **Add** button.
You can also press the **Add** button to add a block.



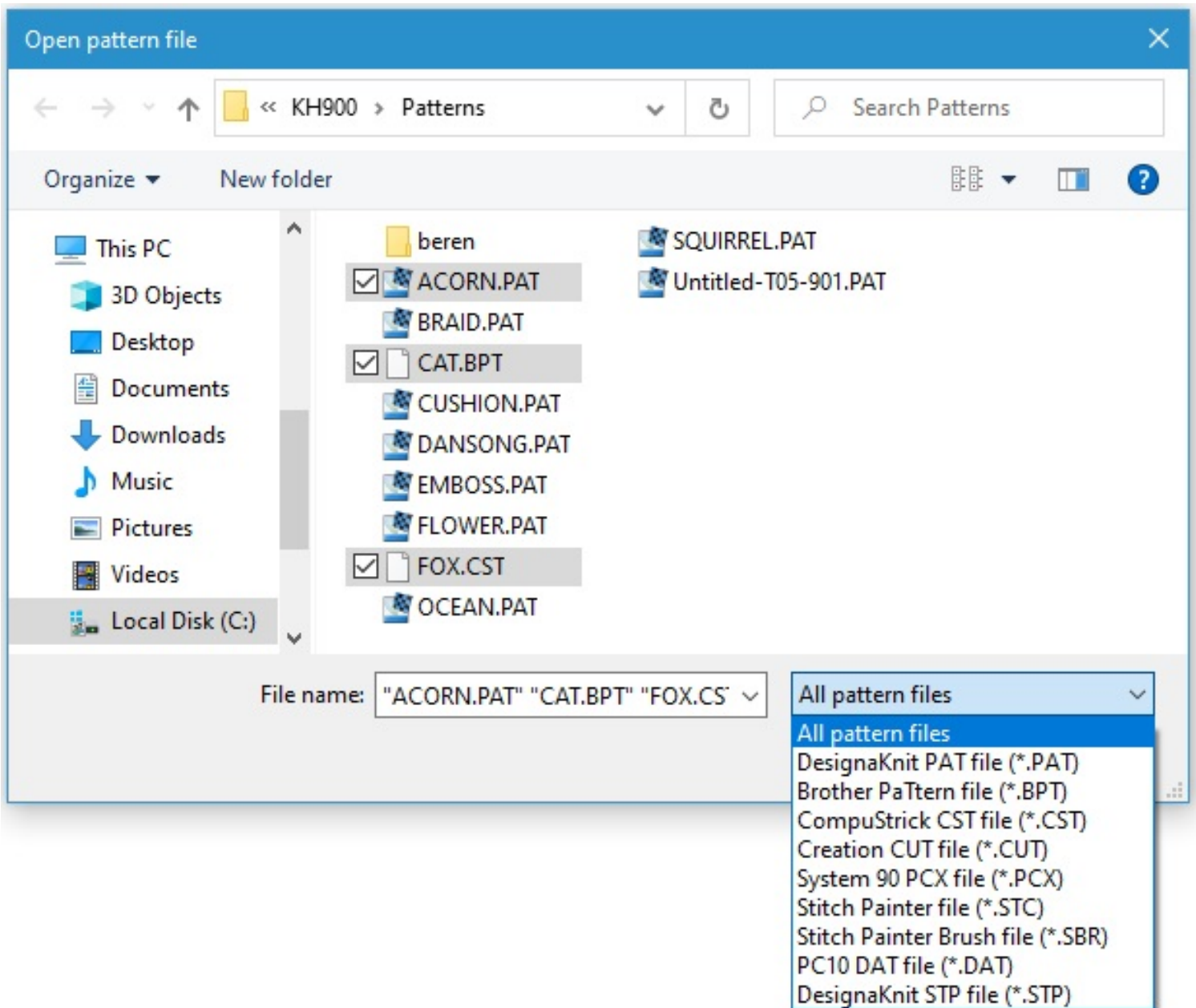
After pressing **Add**, you may choose whether you want to add one or more patterns or that you want to add a block.



If you press **Pattern**, you see the next dialog.

On the dialog below you can select one or more patterns. Press **Open** to add the selected patterns to the page.

As you can see below, Cartridge Utility supports multiple file formats. You can select multiples files in multiple file formats in one go. If you want to see files of a particular type, select the desired file type into the "Files of type" list.



If you picked **Block** when you had to choose between **Pattern** and **Block** you will see:

Block Editor - Block

Block No. Total Rows

Pattern No

Stitches / Rows

Start Row

Knitting Rows

End Needle Selection

Arrange

Pattern Position

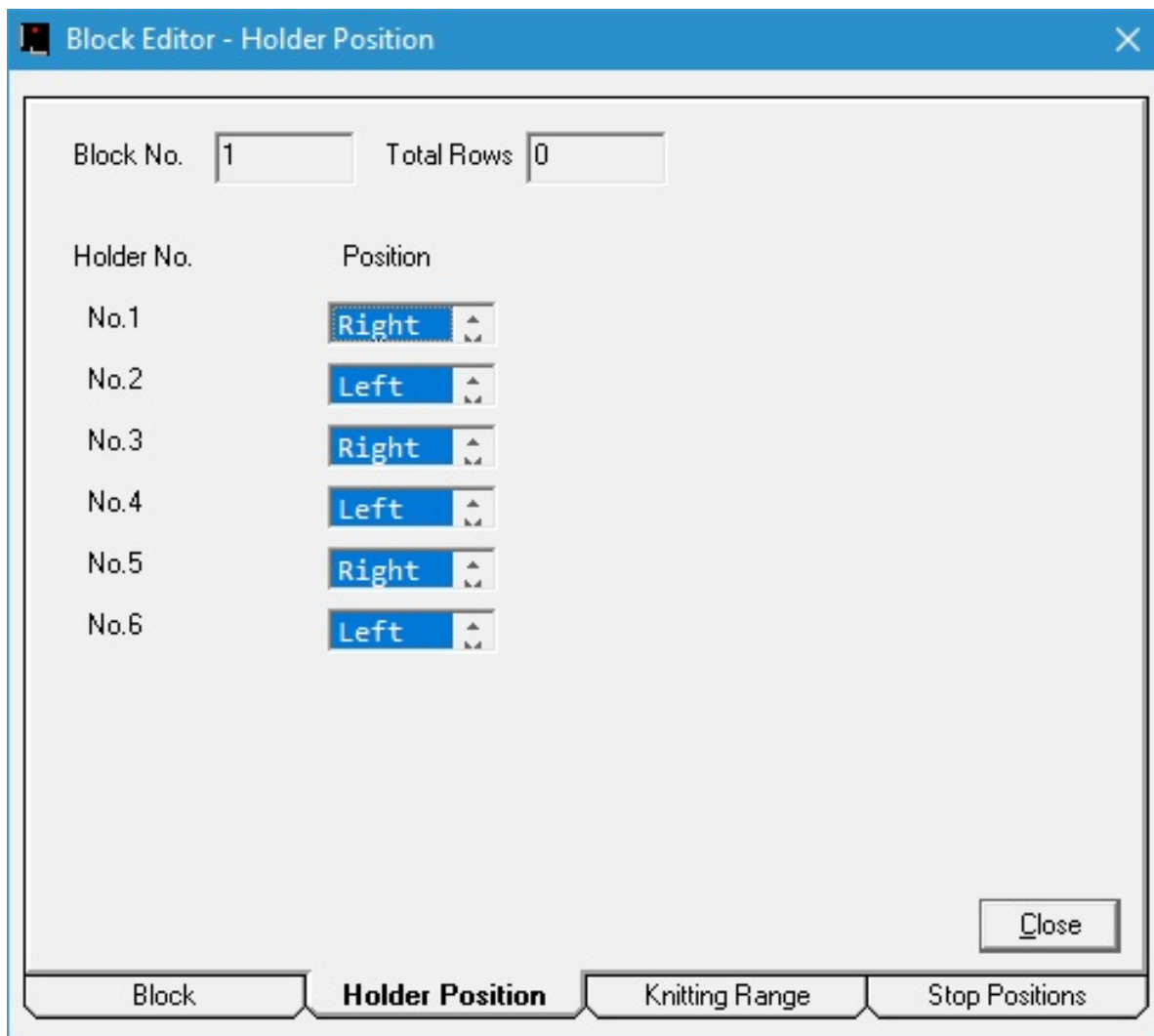
Block | Holder Position | Knitting Range | Stop Positions

The block added is the same as would be added if you had chosen "Create new block" in the menu "Block for knit" on the PPD35.

You can start programming the block straight away.

The Blok Editor has 4 tabs: Block, Holder Position, Knitting Range and Stop Positions. These tabs corresponds with the description on page 51 in the book Design System Cartridge, Instruction Manual.

Block data is documented on page 53 and further.



Holder Positions is documented on page 66.

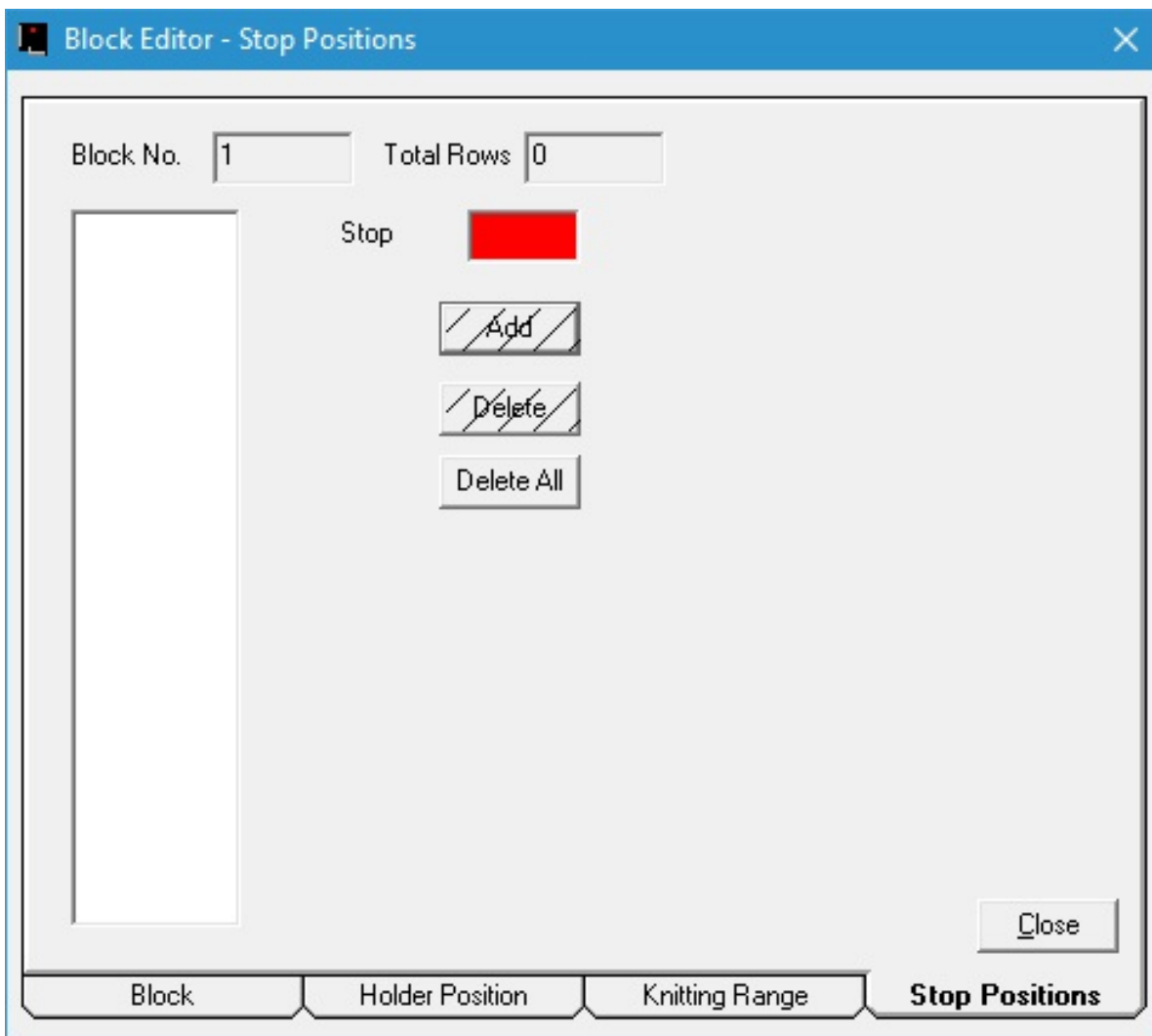
Block Editor - Knitting Range ✕

Block No. Total Rows

	Left Side		Right Side		Start Row
	R/L	Needle	R/L	Needle	
No.1	<input type="text" value="1"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="1"/>
No.2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
No.3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
No.4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

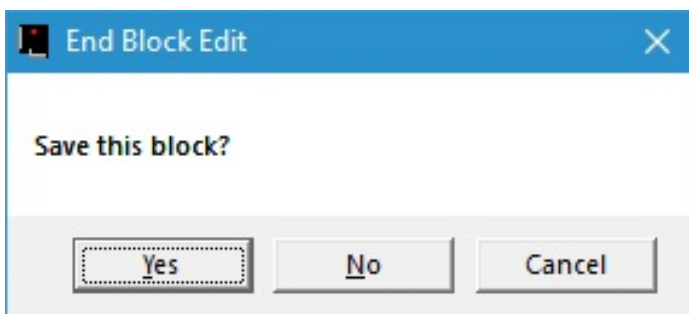
Block Holder Position **Knitting Range** Stop Positions

Knitting Ranges is documented on page 67.



Stop positions is documented on page 70.

After you're done programming the block, you can end the programming by pressing the **Close** button. Each tab has a **Close** button. This button ends the editing of the block. Close is the same as "End block" on page 64.



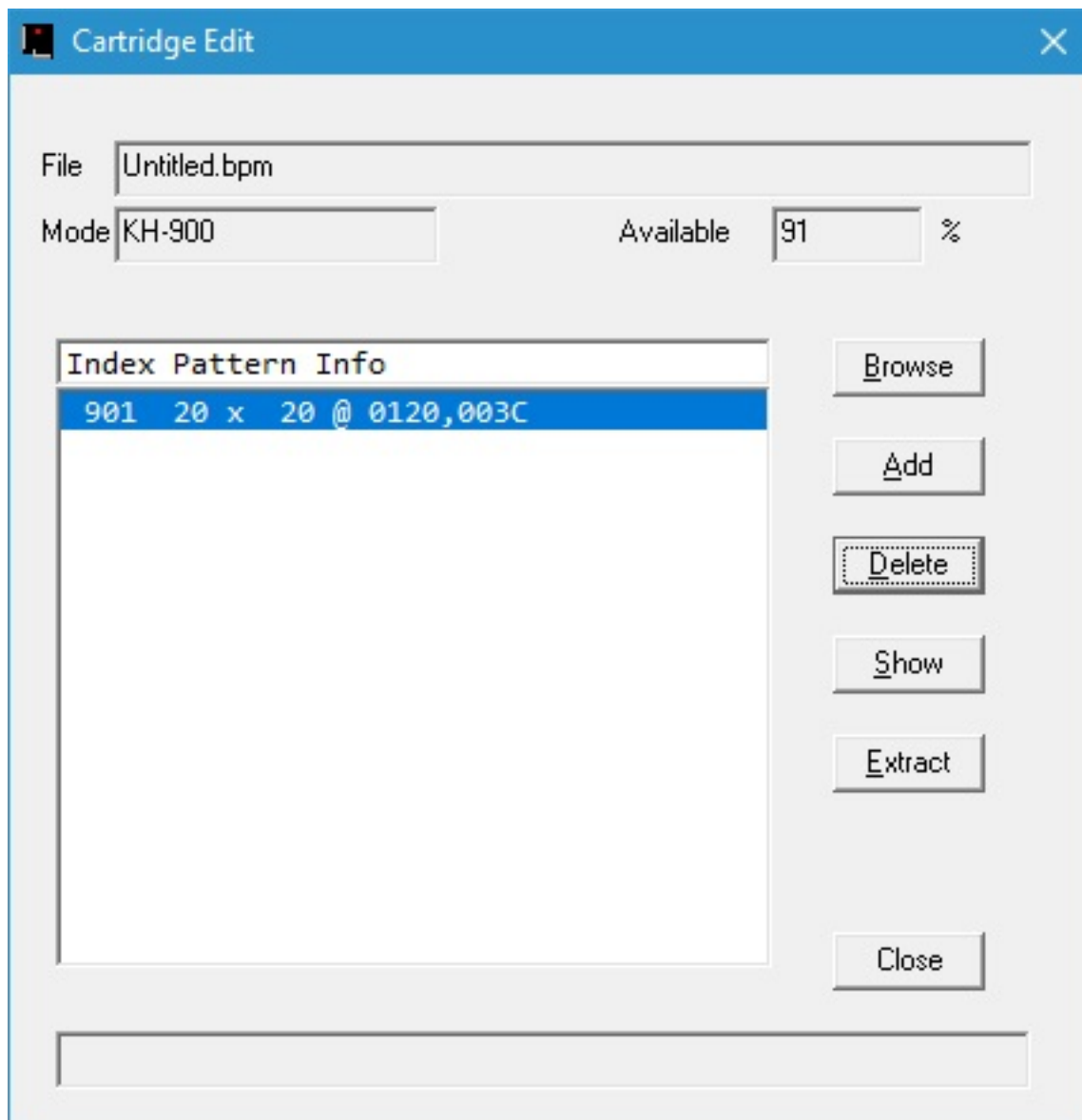
After pressing **Close** you will be asked to save the block. There are three possible answers:

- Yes:** the block will be added to the contents page as a complete block.
- No:** the block remains in the table of contents as a not complete block.
- Cancel:** continue programming the block.

Cartridge

Delete

To delete a pattern from this page, select the pattern and press the button **Delete**

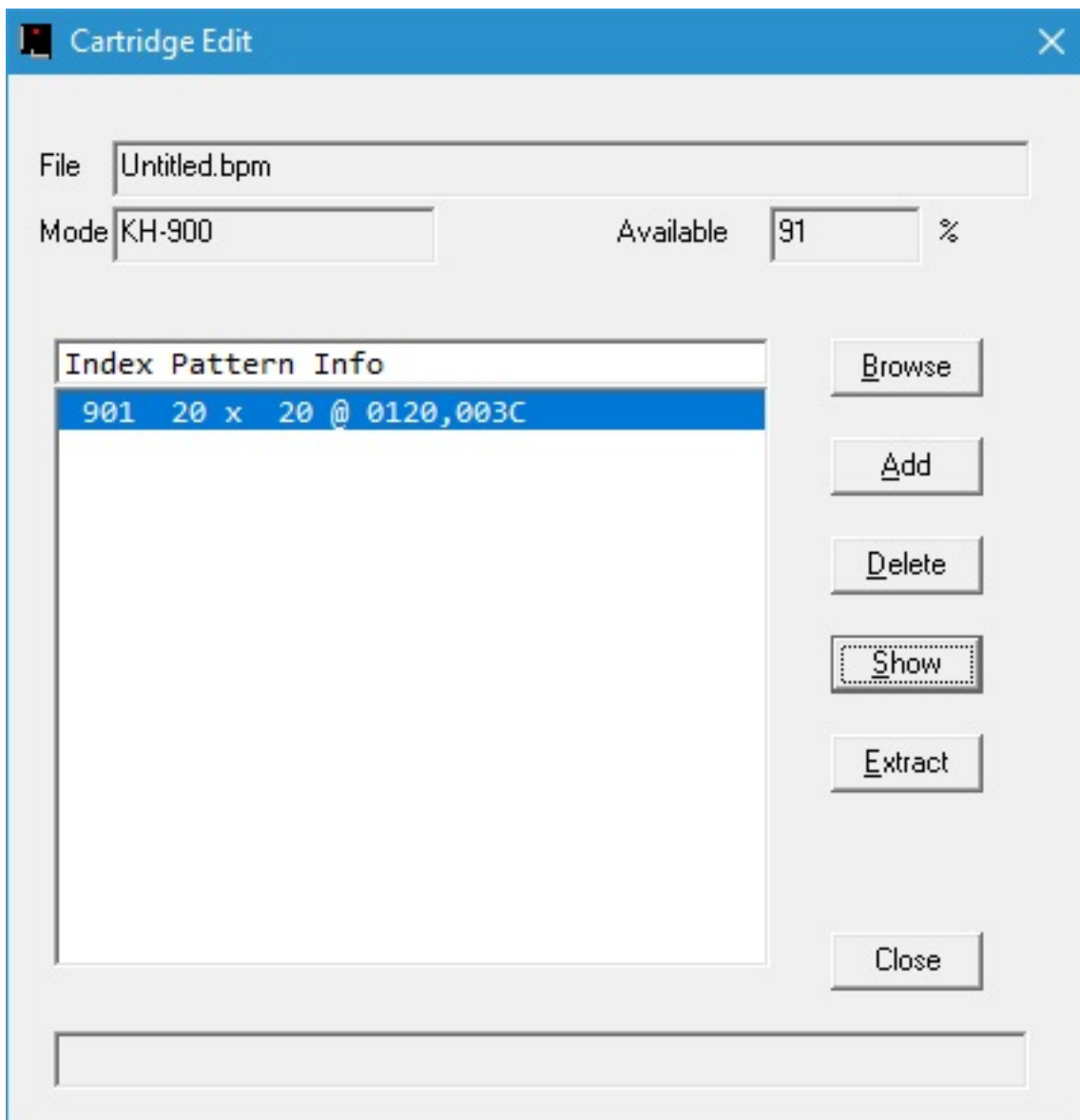


For CK35 cartridges is also possible to delete a block with this function.

Cartridge

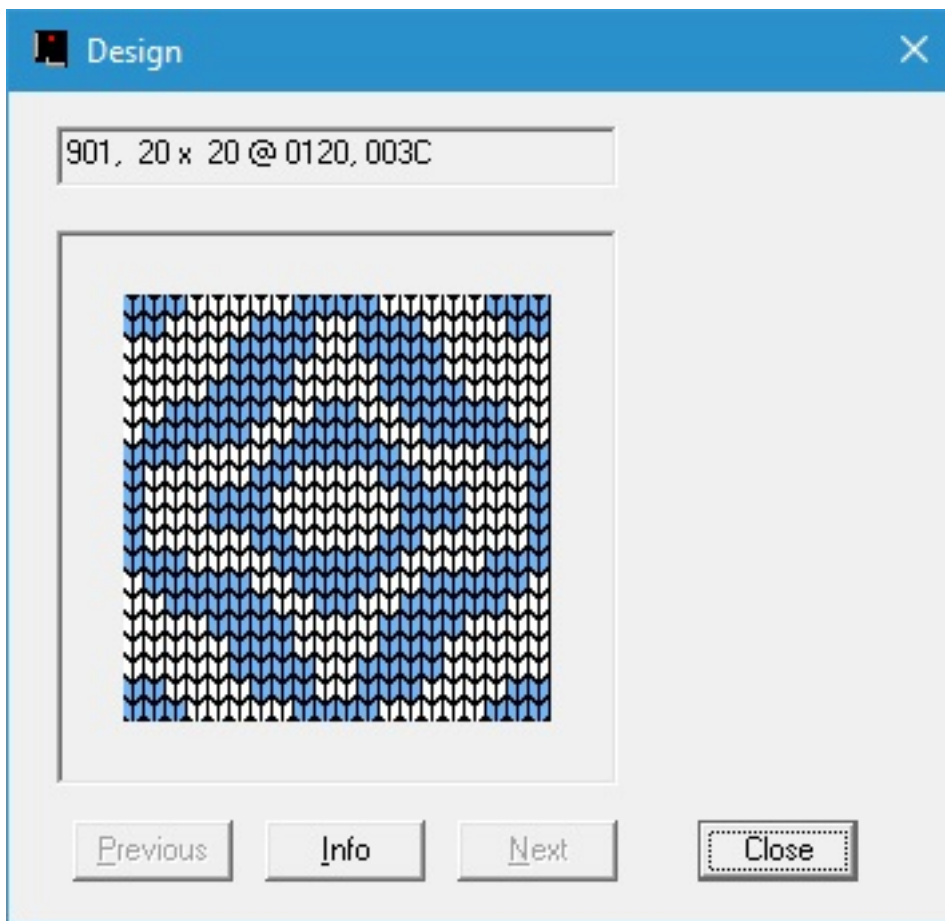
Show

To view pictures of the patterns on this page, select a pattern and press the button **Show**.



Note: for the CK35 you will see patterns and blocks. Click [here](#) for CK35.

The dialog below shows the selected pattern.

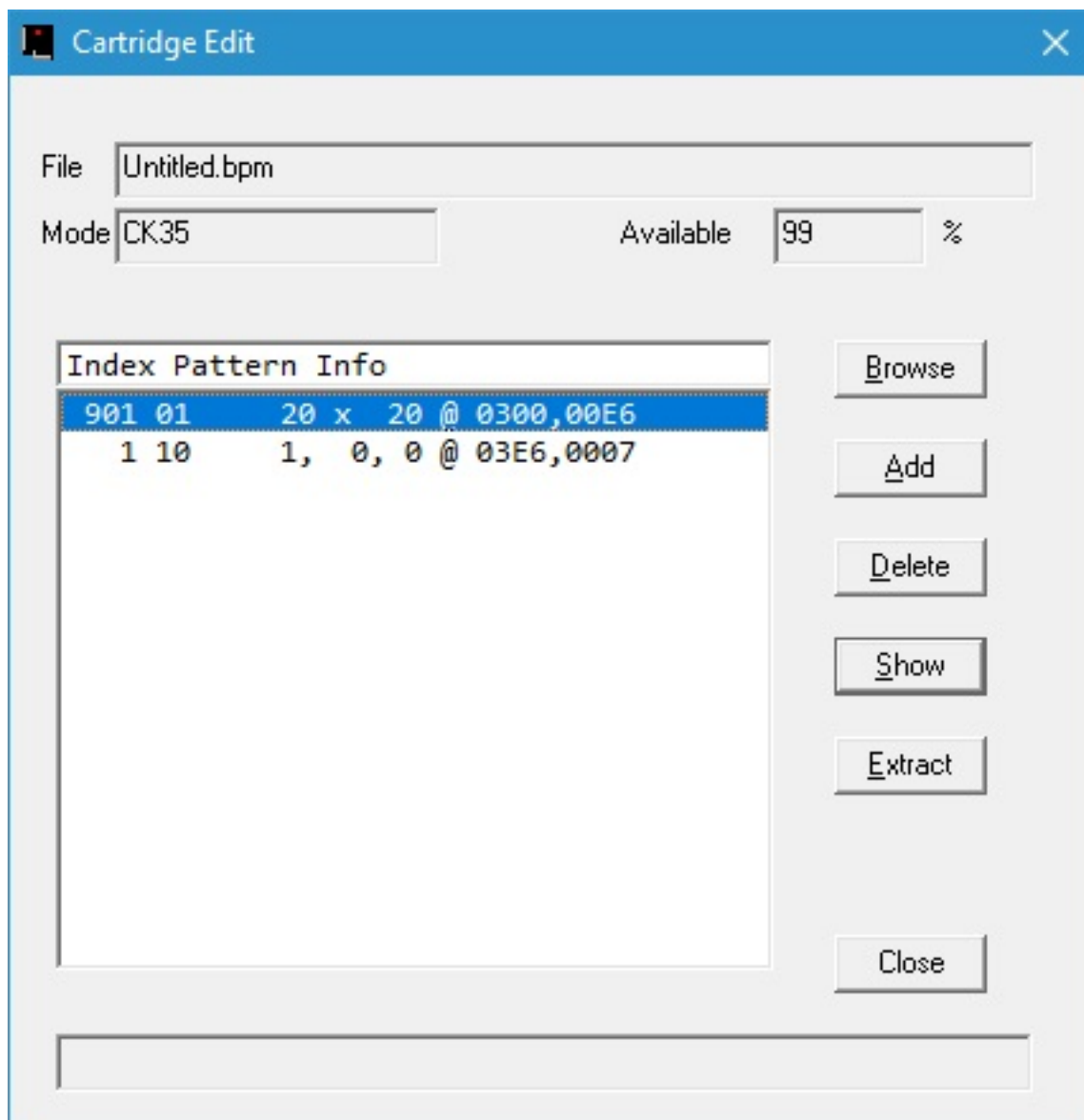


Press **Previous** to view a picture of the previous pattern.
Press **Info** to display information about the displayed pattern.
Press **Next** to view a picture of the above pattern.
Press **Close** to exit from Show.

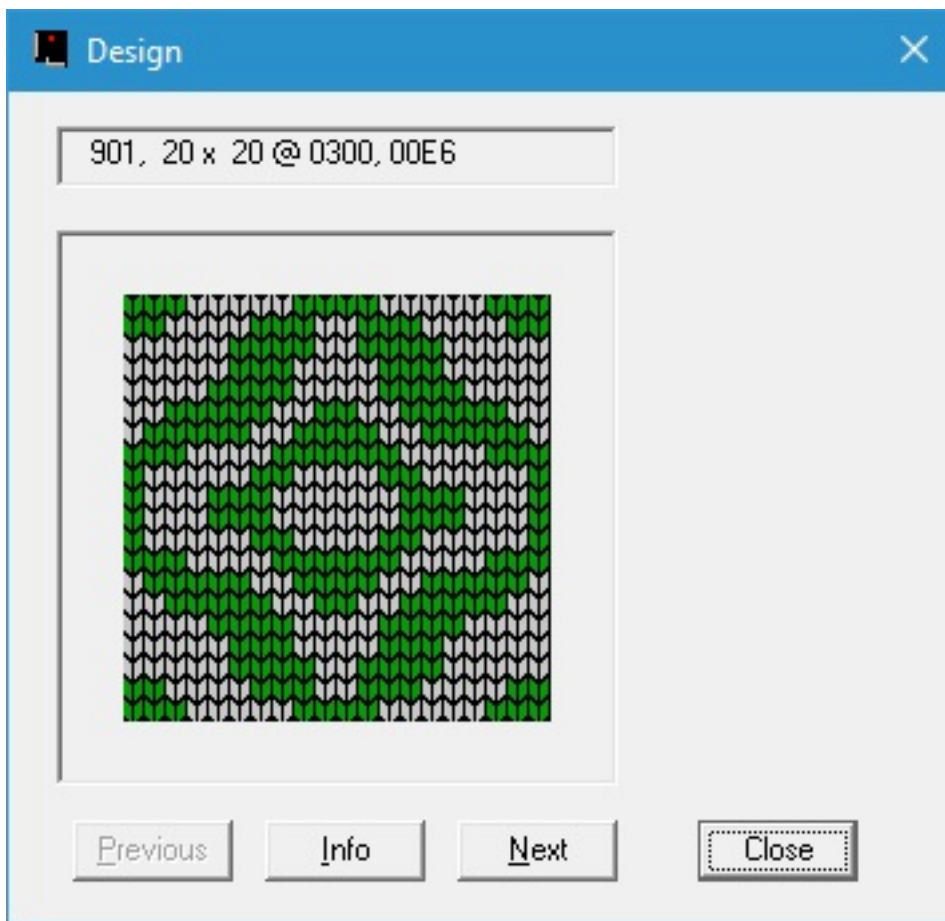
Cartridge

CK35 Show

To display pictures of patterns on this page or to show the information in a block, you select a pattern or a block and press the **Show** button.



The dialog below shows the selected pattern.



- Press **Previous** to display a picture of the previous pattern.
- Press **Info** to display information about the displayed pattern.
- Press **Next** to display a picture of the next pattern.
- Press **Close** to close the window.

Below you see the information about the selected pattern. The information is documented on page 33 of the Design System Cartridge, Intruction Manual.

Pattern Information CK35 [X]

Type:

PatNo:

Stitches:

Rows:

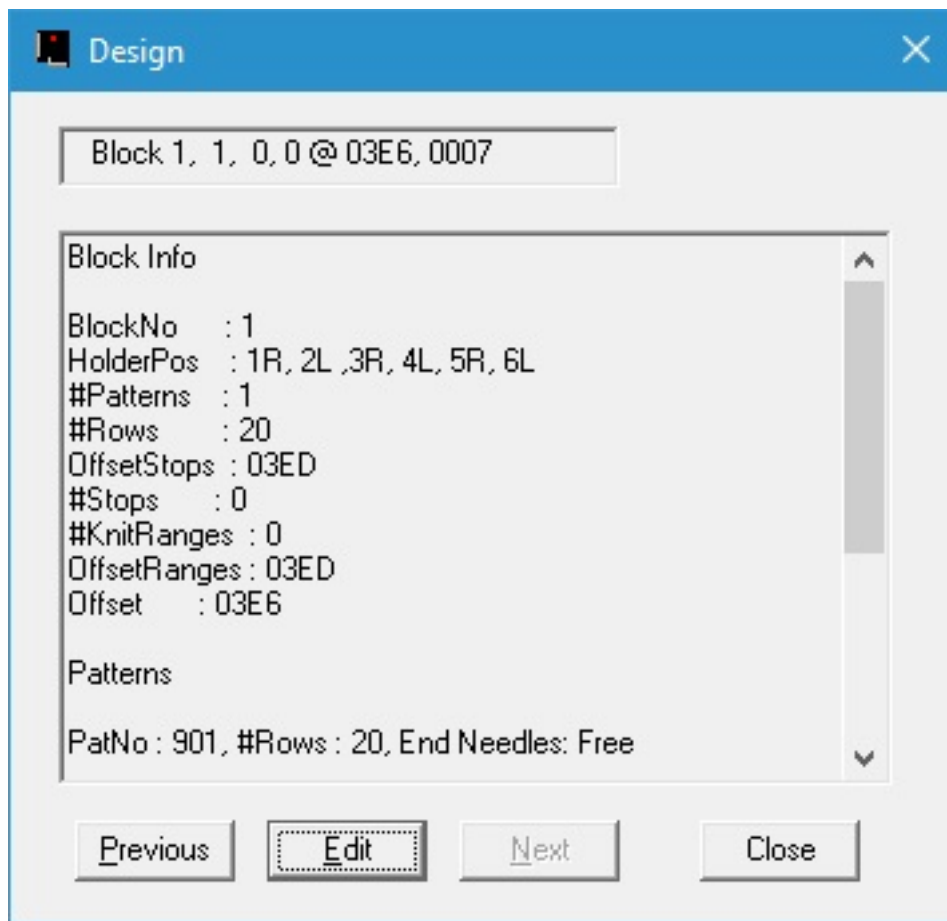
Yarn	Color	Brightness	Raw
1	3	2	23
2	14	2	2E
3	12	2	2C
4	8	2	28
5	6	2	26

Holder Info:

Rack Info:

Row	Raw	Holder	Stop	Rack
1	03	1 2	0	
2	03	1 2	0	
3	03	1 2	0	
4	03	1 2	0	
5	03	1 2	0	
6	03	1 2	0	
7	03	1 2	0	
8	03	1 2	0	
9	03	1 2	0	
10	03	1 2	0	
11	03	1 2	0	
12	03	1 2	0	

If you had selected a block when you pressed **Show**, you see the dialog below. The contents of the block is represented in text. You also can see that the caption of the **Info** button is replaced by **Edit**.



If you press **Edit**, you can edit the block as documented in the topic [Add](#).



Block No. Total Rows

Pattern No

Stitches / Rows

Start Row

Knitting Rows

End Needle Selection

Arrange

Pattern Position R/L Needle No

901

Add Before

Add After

Delete

Delete All

Close

Block

Holder Position

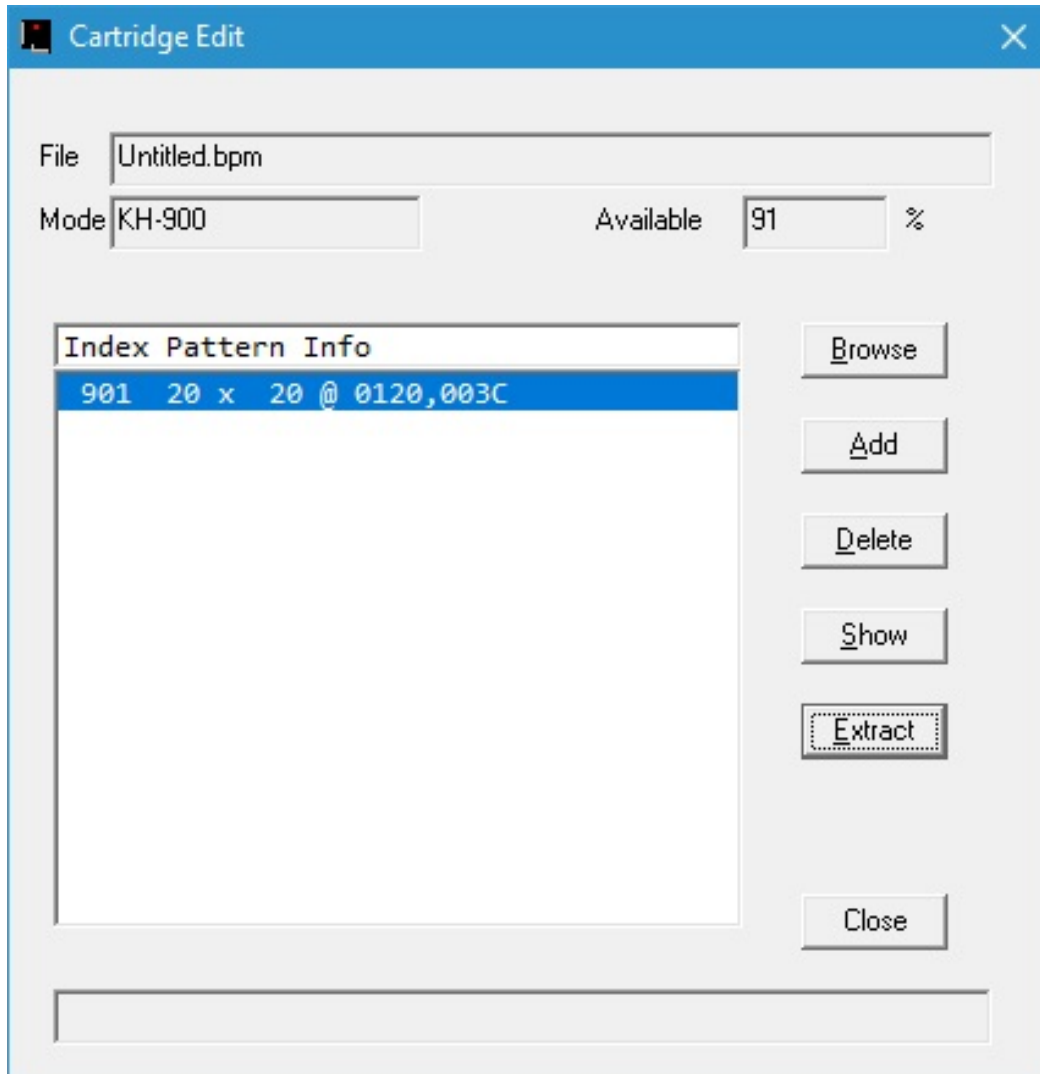
Knitting Range

Stop Positions

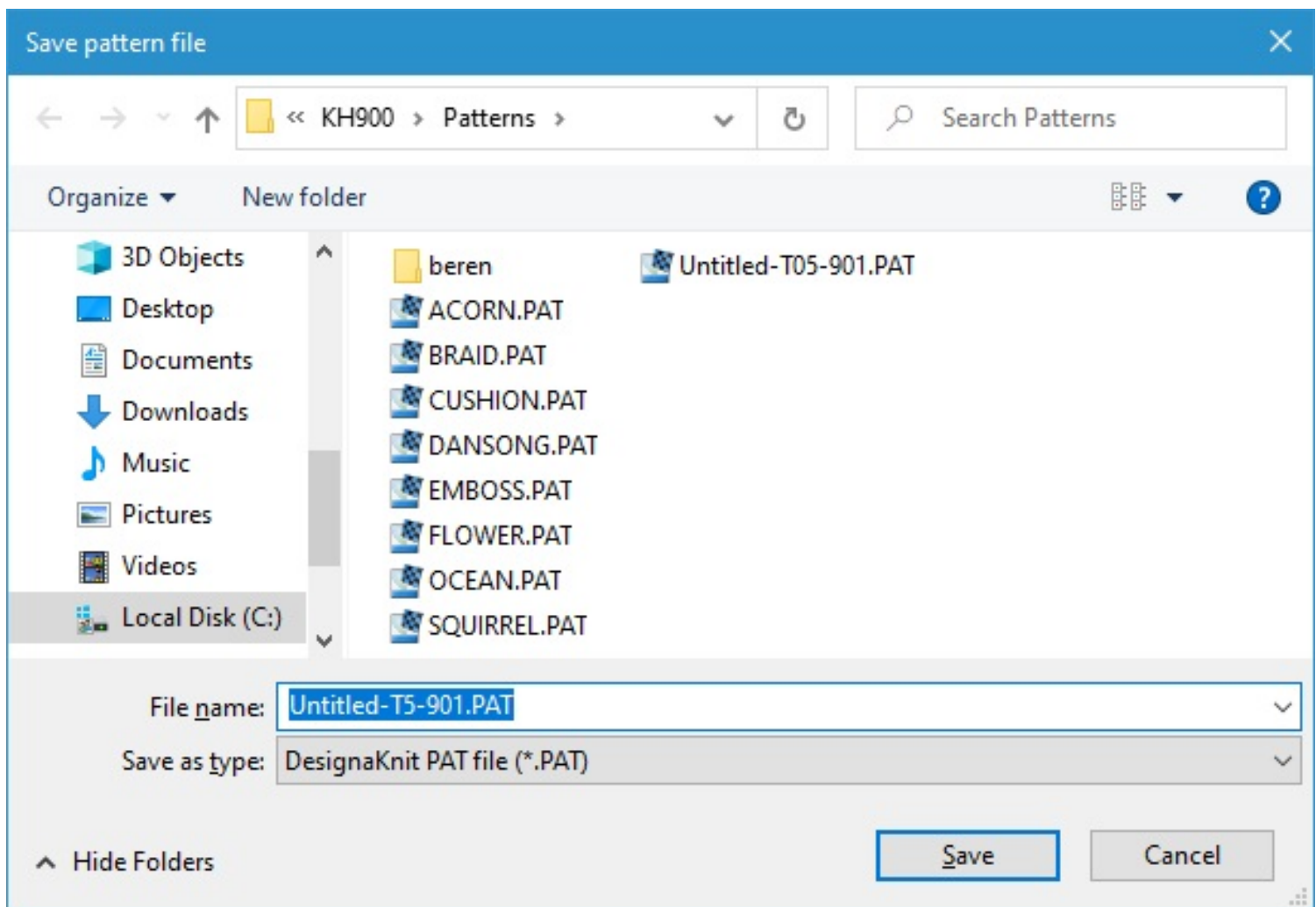
Cartridge

Extract

To save a pattern on this page (as PAT file or as STC file) on your computer, press **Extract**.



You will see now a dialog where you can select or create a folder and type a file name over the star. A proposal for the filename is already prefilled. The extension you specify (PAT or STC) determines the type of file that will be stored.

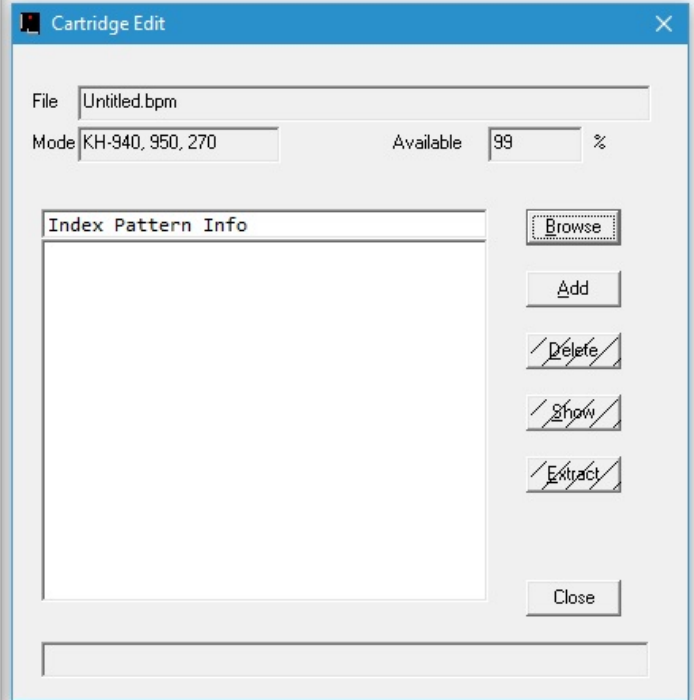
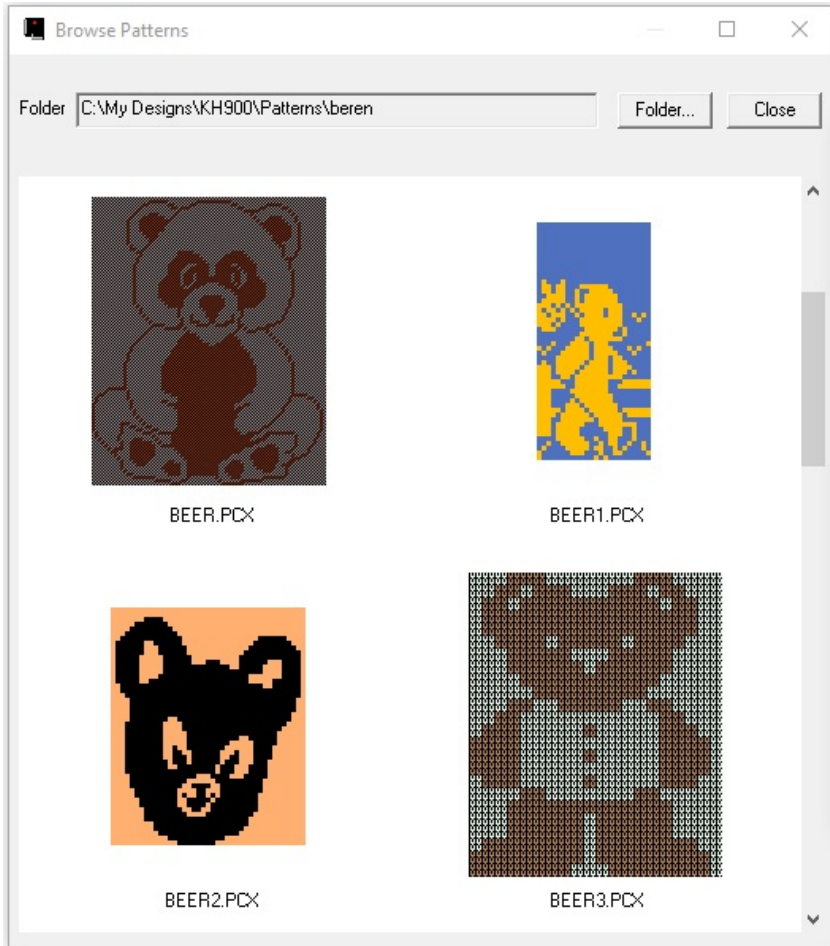


Press **Save** to save the pattern.

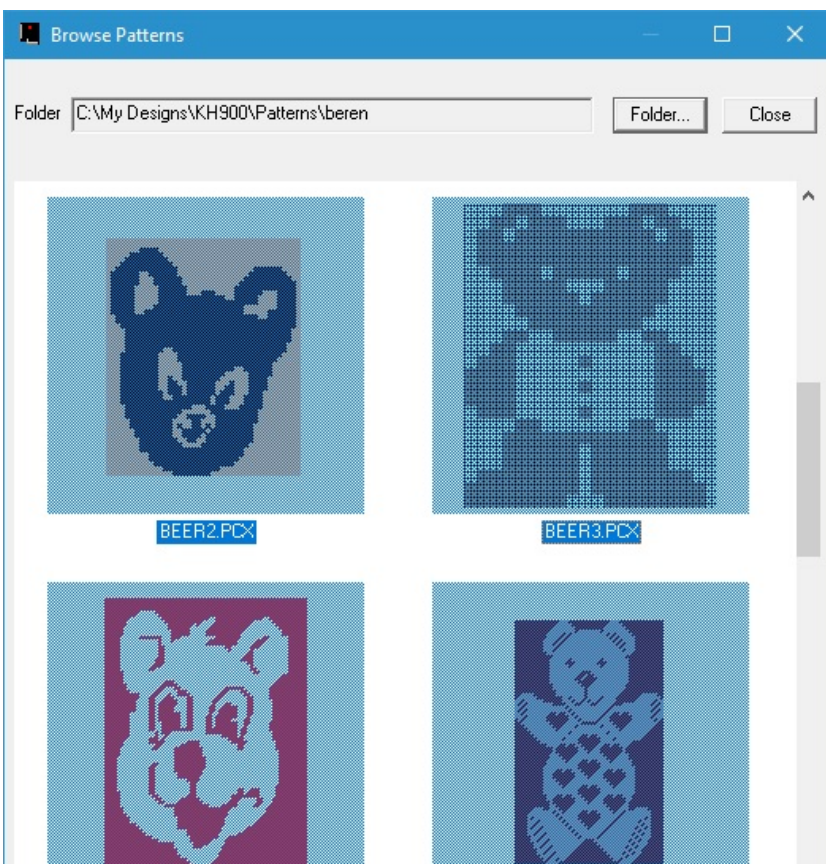
Cartridge

Drag and Drop

The Drag and Drop functionality enables you to drag one or more patterns from the Browse dialog and drop them on the Cartridge Edit dialog. Make sure that both Browse dialog and Cartridge Edit dialog are visible.



Select one or more patterns on the Browse dialog.





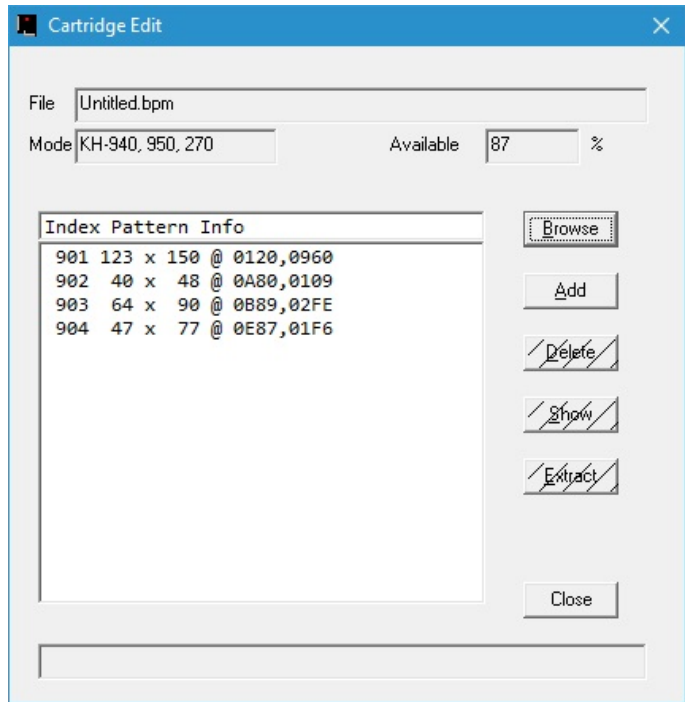
Press and hold the left mouse button on one of the selected patterns.
The mouse cursor changes as soon as you move the mouse (left mouse button still down) into:



Move the mouse cursor above the white area on the Cartridge Edit dialog. As soon as the mouse cursor arrives above the white area, the mouse cursor changes into:



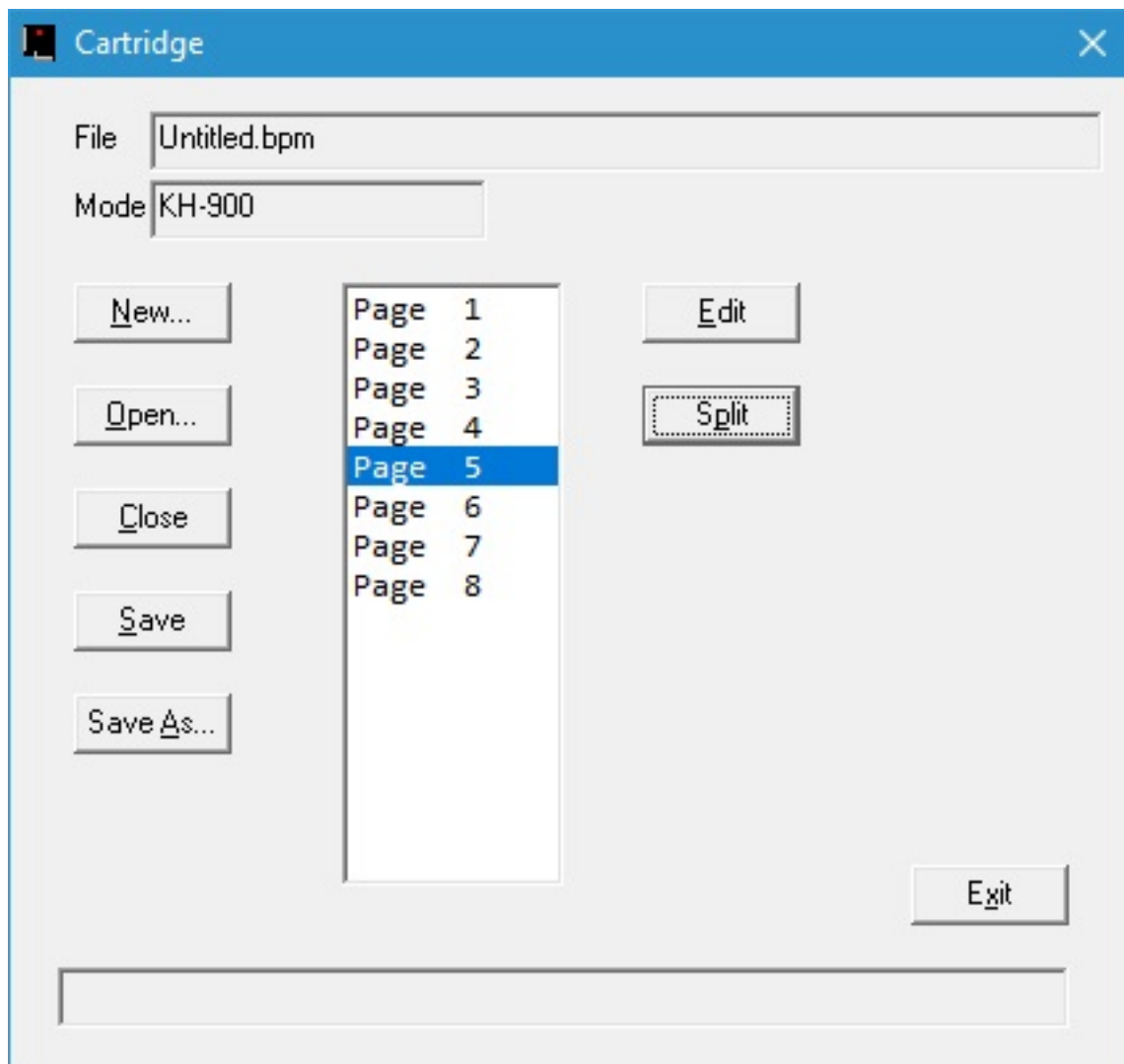
Now release the left mouse button. The selected files will be added to your pattern collection.



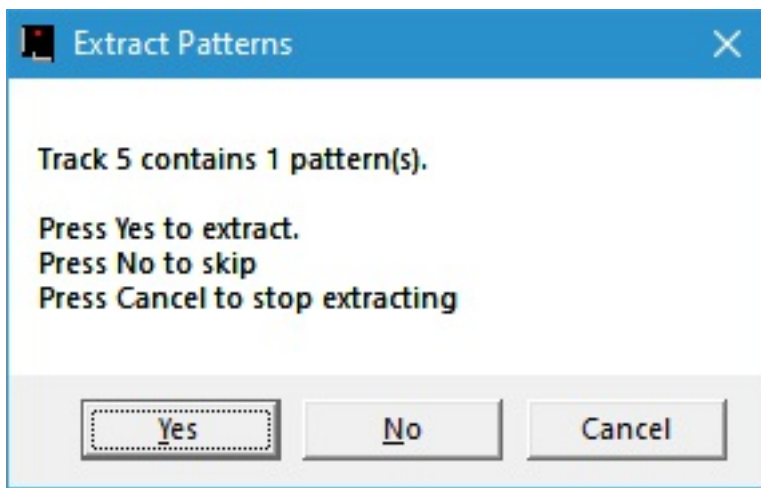
Cartridge

Split

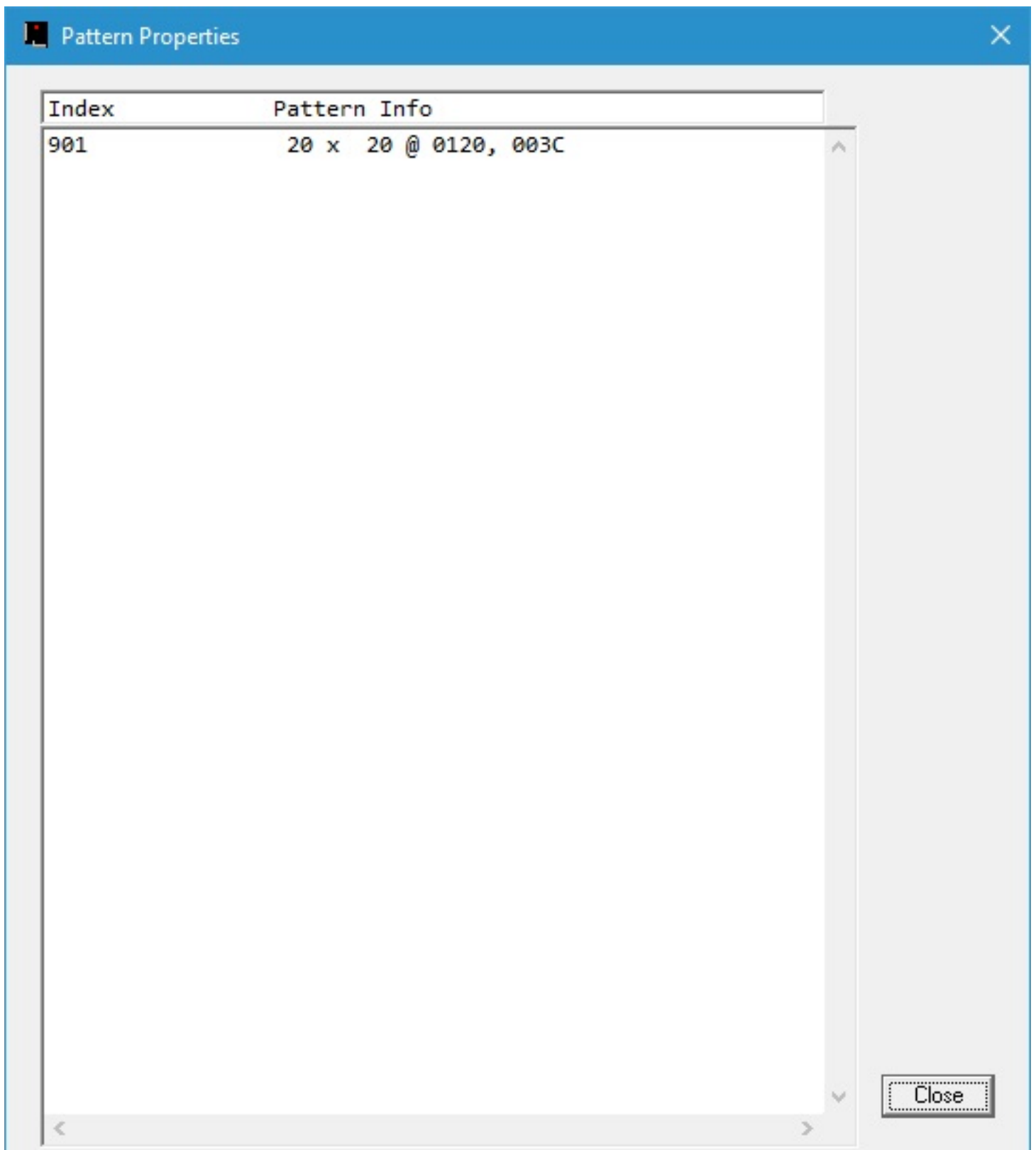
To split a page of the displayed Cartridge file, select a page and press the button **Split**.



Cartridge Utility will tell you how many designs on the page exist. If you want to split now, press **Yes**. If not, press **No**.



The files, PAT or STC files, that are created by split, are stored in the same folder as the Cartridge file.



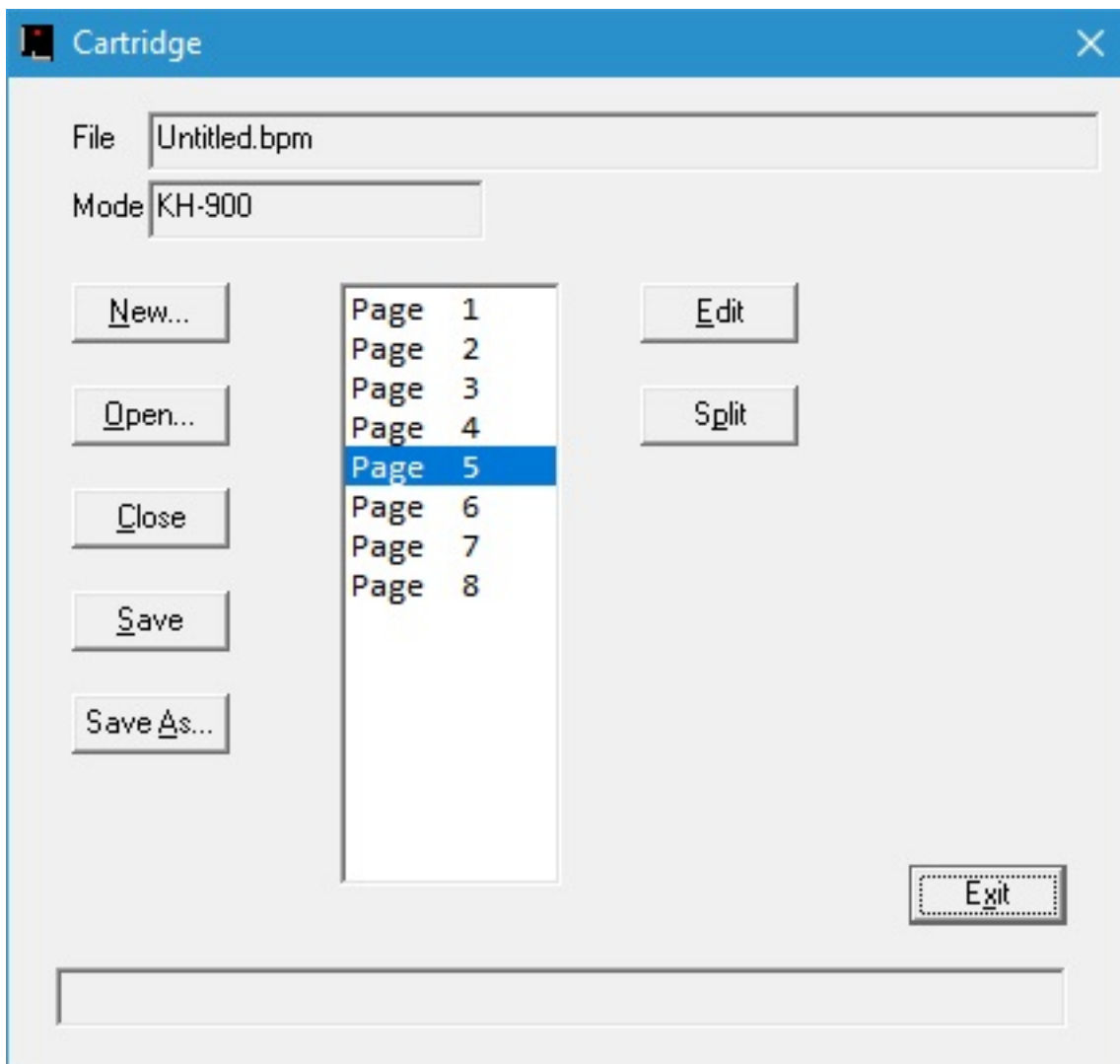


When splitting has finished, you will get an overview of the splitting.

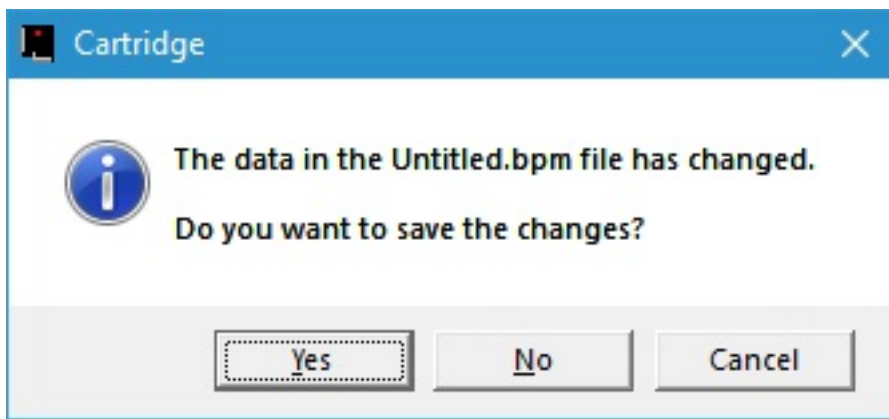
Cartridge

Exit

Press **Exit** to exit from the editing of Cartridge files.



If you have not saved your work, the following dialog will be displayed:



Press **Yes** to save your work now

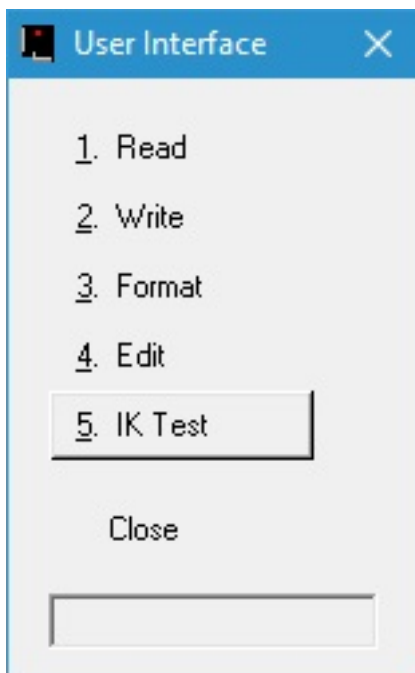
Press **No** to discard your work

Press **Cancel** to continue editing

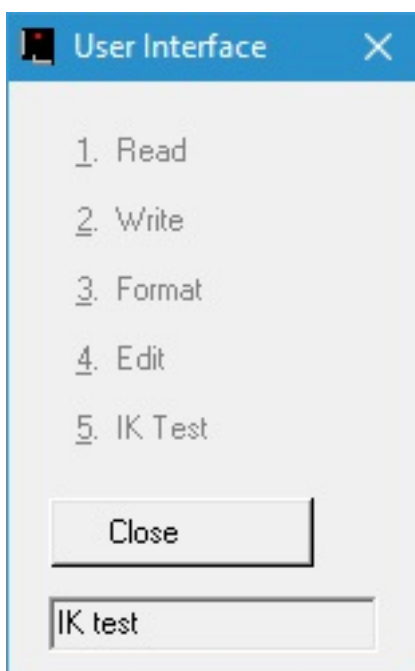
Cartridge

IK Test

To perform the Interactive Knitting test, press the button **IK Test**.

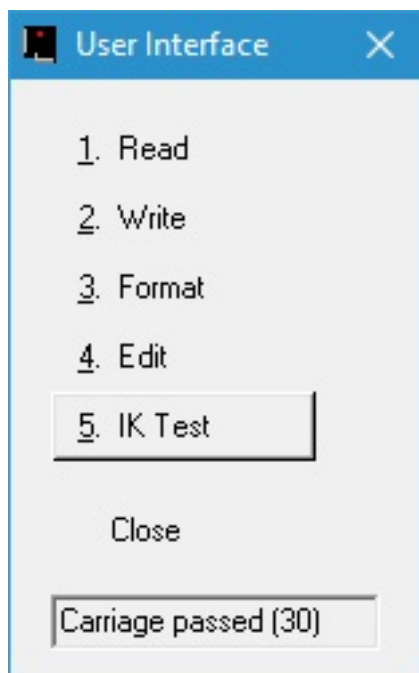


You will see



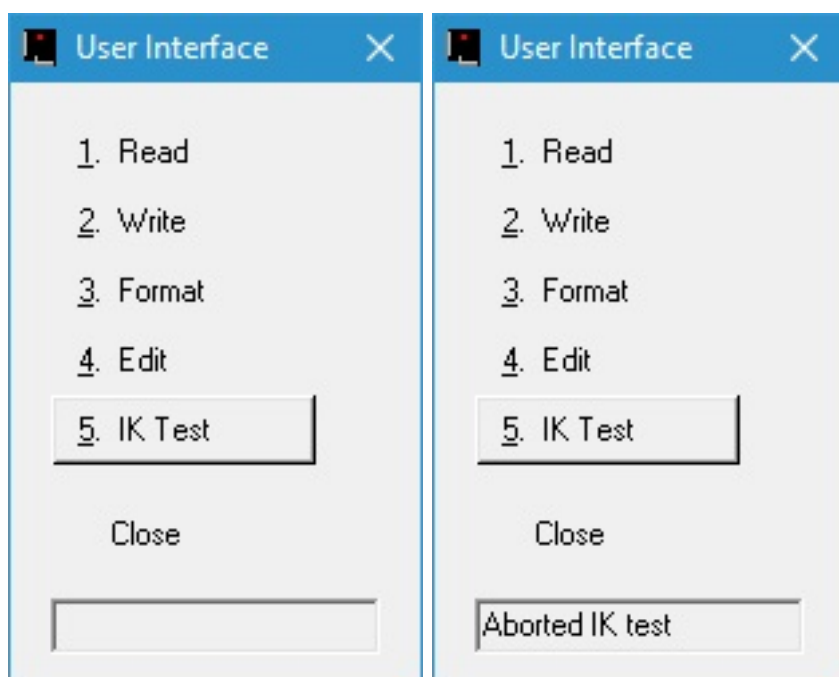
The Status field contains the text **IK Test** and most buttons are disabled for 30 seconds. During this time you can move the knitlink arm close to the red dot on the IK interface.

If you got close enough you will see:



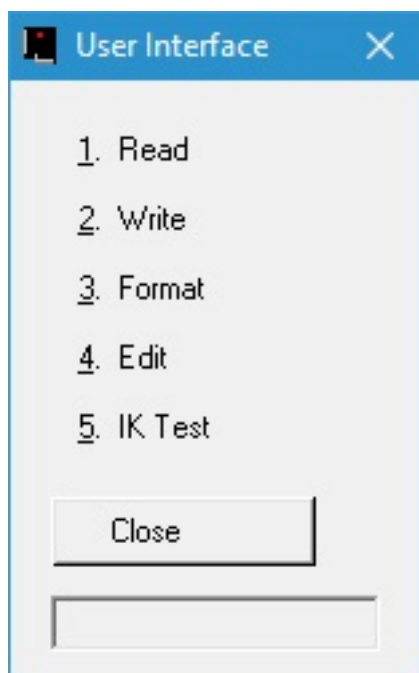
The IK Test can also be terminated in two more ways: The timer expires or you press the **End** key.

You will see respectively:



Cartridge

Close



You close Cartridge Utility by pressing the button **Close** or on the cross in the right top corner of the dialog box.

Cartridge

Getting Started

Parts list

1. [Cartridge](#)
2. USB Cable
3. CDROM with Cartridge Utility software and USB drivers
4. Cable for interactive knitting with DesignaKnit (optional)

Software Installation

Note: INSTALL THE SOFTWARE BEFORE YOU CONNECT THE CARTRIDGE TO THE COMPUTER

1. Put the Cartridge installation CD in the CDROM drive
2. The Cartridge installation program will start automatically
3. When autorun is not enabled on your computer, look for the CDROM and double-click setup.exe in the root of the CD
4. Follow the instructions on the screen, the InstallShield installation wizard will guide you through the process
5. After a successful installation, the configuration dialog of Cartridge Utility will be displayed.

Note 1: It is recommended to install Cartridge Utility to the suggested folder.

Hardware Installation

1. Connect the [B](#) connector of the USB cable to the [USB](#) port at the backside of your Cartridge
2. Connect the [A](#) connector of the USB cable to a free USB port on your computer
3. Check the green light to go on and flash one time green/red, and stays off afterwards.
4. Windows will indicate "New hardware found"
5. Preferably let Windows search for the drivers
6. If not found, tell Windows that the drivers are on the CDROM
7. If Windows indicates that the drivers are not compatible, press "Continue anyway"
8. The USB Serial Converter is now installed
9. Windows will indicate again "New hardware found"
10. Preferably let Windows search for the drivers
11. If not found, tell Windows that the drivers are on the CDROM
12. If Windows indicates that the drivers are not compatible, press "Continue anyway"
13. The USB Serial port is now installed
14. The installation has finished now
15. On some systems a restart is required after the installation of the USB drivers

Knit and Sew

Dialog Manager

Dialog Manager is, as its name suggests, a package that manages dialogs. Dialog Manager makes the life of the Windows dialog programmer easier by taking away the boring Windows dialog hassle, enabling the programmer to concentrate on user functionality.

Dialog Manager also provides additional functionality on top of the Windows dialog functionality. The visible additional features used in this application include:

- Hatched buttons: a button is dependent on the contents of one or more fields, where the fields don't meet the expectations of the button. The user can click a hatched button to find out which fields don't meet the expectation of the button.
 - Field coloring: when a button has the focus, fields on which the button depends are colored to show the user that user action is required.
 - Propagation: when a row in a table is selected, the fields in the row are propagated into individual fields.
-

Knit and Sew

Dialog Manager - Introduction

A Dialog Manager application presents you with one or more dialogs.

[Getting Help For a Dialog.](#)

A dialog can contain:

- [Buttons](#)
- [Single-line Fields](#)
- [Multi-line Fields](#)
- [TableBoxes](#)
- [TickBoxes](#)

You can use the mouse or the keyboard to navigate a dialog.

[Access Keys](#)

[Scroll Bar](#)

[Initial Focus and Tab Order](#)

[Coloring](#)

Knit and Sew

Dialog Manager - Buttons

A dialog normally contains an **OK** button, a **Cancel** button, and one or more action buttons. You can 'press' a button with a mouse click or with the keyboard:

- Pressing the **Enter** key is equivalent to pressing the default button, which is the button with a heavy dark border. The default button is the one that has the [focus](#), or, if no button has the focus, the one set up as the default. The Dialog Manager makes the last button pressed the default.
 - Pressing the spacebar is equivalent to pressing whichever button has a dotted rectangle around its text label.
 - If a button's label contains an underlined character, pressing the **Alt** key together with that character's key is equivalent to pressing that button.
-

Knit and Sew

Dialog Manager - Fields

A single-line field is for display or entry of a character string. When a Dialog first displays, a field in which you can enter text is usually empty, but in some cases it contains default text.

When a field allows you to enter text, you can click to place the cursor within the existing text and use the keyboard to edit it. The **Home** key moves the cursor to the beginning of the string, and the **End** key moves it to the end. The **Delete** key deletes characters following the cursor, and the **Backspace** key deletes characters before the cursor.

You can highlight text by dragging the cursor across it. The **Delete** key deletes highlighted text, and typing new text replaces highlighted text.

Knit and Sew

Dialog Manager - Multi Line Fields

A multi-line field is for display or entry of a character string. When a Dialog first displays, a field in which you can enter text is usually empty, but in some cases it contains default text.

When a field allows you to enter text, you can click to place the cursor within the existing text and use the keyboard to edit it. The **Home** key moves the cursor to the beginning of the string, and the **End** key moves it to the end. The **Delete** key deletes characters following the cursor, and the **Backspace** key deletes characters before the cursor.

You can highlight text by dragging the cursor across it. The **Delete** key deletes highlighted text, and typing new text replaces highlighted text.

Pressing **Control+Enter** moves the cursor to a new line.

Knit and Sew

Dialog Manager - TableBox

A TableBox displays a list of items. Scroll through the list using the scroll bar, and select an item in one of these ways:

- double click on it
- click on it and press **Enter**
- use the arrow keys to highlight it, and press the spacebar

The colour of the table changes on mouse-up (when the focus changes) and on mouse-down (when the selection changes). You can deselect a row by pressing the **Delete** key.

Knit and Sew

Dialog Manager - TickBox

A TickBox is used to enable or disable an option. The option is enabled when an X appears in the TickBox and disabled when the TickBox is empty.

Last Modification: December 10, 2004 © 1999-2004 [Computerservice SSHS BV](#).

Knit and Sew

Dialog Manager - Access Keys

An access key lets you use the keyboard to activate a [single-line field](#), [multi-line field](#), [Button](#), [TickBox](#), or [TableBox](#) in a dialog. When a character in the item's label is underlined, you can activate the item by pressing **Alt** together with the key corresponding to that character.

Last Modification: July 20, 2004 (c) Copyright 2004, [Jos Timmermans](#)

Knit and Sew

Dialog Manager - Scrollbar

A scrollbar appears at the right or bottom edge of a [TableBox](#) or [multi-line field](#) when its contents are not completely visible. Each scroll bar contains two scroll arrows and a scroll box that enable you to scroll through the contents of the TableBox or field.

Last Modification: December 10, 2004 © 1999-2004 [Computerservice SSHS BV](#).

Knit and Sew

Dialog Manager - Initial Focus and Tab Order

When a control is active, it is said to have the focus, which means that you can act on it. For example, if a field has the focus, you can type in it.

You can use the Tab key to move the focus and activate controls in a dialog. The tab order is the order in which controls become active when you use **Tab**. Using **Tab** is particularly useful and natural for moving from one text field to another.

Knit and Sew

Dialog Manager - Coloring

Coloring or hatching of fields, tables, or buttons occurs when some action is required before a button can be pressed. Read-only fields that are dependent on an unsatisfied button are hatched whenever the button is grayed.

Last Modification: December 10, 2004 © 1999-2004 [Computerservice SSHS BV.](#)

Knit and Sew

Dialog Manager - Get Help For a Dialog

When the Dialog Manager presents you with a dialog, you can get help by pressing F1. This displays a dialog where you can choose (when available):

- General displays this Help
- Forms displays Help for the application
- Field displays Help for the field that has the focus

You can also use the Forms key or Field key to go directly to the corresponding Help.
