

Crafty49's Book Folding Pattern Maker User Guide

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Table of Contents

1. DOCUMENT DETAILS	12
1.1 Summary	13
1.2 Supersedes	13
1.3 Version History	13
1.4 Copyright.....	13
2. RELEASE AND SYSTEM REQUIREMENTS INFORMATION	14
2.1 Software Use.....	15
2.2 Copyright Acknowledgements	15
2.3 End User Licence.....	15
2.4 3rd Party Licence	15
2.5 Release Notes.....	15
2.5.1 Known Issues.....	15
2.5.2 Limitations of the Demo Release	15
2.5.3 Limitations of the Full and Trial Releases	15
2.5.4 Changes Made in Version 1.1.01	16
2.5.4.1 Issues Fixed	16
2.6 Reporting Issues (Bugs)	16
2.7 System Requirements.....	16
3. THE APPLICATION	17
3.1 Description	18
3.1.1 Cut and Fold	18
3.1.2 Mark and Fold	20
3.2 Main Features	21
3.3 Running the Application.....	22
3.3.1 Expired or Invalid Licence	22
3.3.2 Nag Screen.....	22
3.3.3 Licence the Full or Trial Application	23
3.3.3.1 More than One Licence for the Product	24
3.3.3.1.1 Error Messages	24
3.3.3.2 Manually Licence a Product	25
3.3.3.2.1 Error Messages	29
3.3.4 Folder Locations for the Licence File	29
3.3.4.1 Licence File	30
4. MAIN FORM OVERVIEW	31

4.1 Drag and Drop a File.....	32
4.2 Progress Bar.....	33
5. MENU.....	34
5.1 File Menu.....	35
5.1.1 Open	35
5.1.1.1 Error Messages	36
5.1.2 Save Pattern Files As.....	36
5.1.2.1 Error Messages	38
5.1.3 Page Setup	38
5.1.4 Print Preview	38
5.1.4.1 Error Messages	40
5.1.5 Print	40
5.1.5.1 Error Messages	42
5.1.6 Exit	42
5.2 Edit Menu.....	42
5.2.1 Paste.....	42
5.3 Help Menu	43
5.3.1 User Guide.....	43
5.3.2 Installation Folder.....	43
5.3.3 Check for Updates	43
5.3.3.1 Download the New Version	44
5.3.3.2 Installing the Update.....	45
5.3.3.3 Other Error Messages	45
5.3.4 About	46
6. TOOL BARS	48
6.1 Overview.....	49
6.2 Open Button.....	49
6.3 Save Pattern Files Button	49
6.4 Print Preview Button.....	49
6.5 Print Button	49
6.6 Paste Button	49
7. SETTINGS	50
7.1 Set Marking Pattern Type Form.....	51
7.1.1 PDF/Print/Preview Pattern Type Group.....	51
7.1.1.1 Pattern Chart Type.....	51
7.1.1.2 Measure Type Pattern.....	53
7.1.1.3 Chart and Measure Pattern Type	54
7.1.2 Pattern Chart Group.....	54
7.1.2.1 DPI.....	54
7.1.2.2 Fold/Page Numbers	55

7.1.2.3 Set the Page Size	55
7.1.2.4 The Line Spacing and Line Width.....	57
7.1.2.5 Show Centre Lines and Centre Line Width.....	58
7.1.2.6 Known Issues.....	59
8. GROUP PANELS.....	60
8.1 Pattern Details	61
8.1.1 Pattern Type.....	62
8.1.2 Units	62
8.1.3 Other Pattern Details	62
8.2 Original Bitmap or Raster Image	63
8.2.1 Image Width and Height	63
8.2.2 Image Threshold.....	63
8.2.3 Remove Space Around Image.....	65
8.2.4 Remove Column Space Between Shapes	65
8.2.5 Invert Image Colours.....	66
8.2.6 Mirror Image Horizontally	66
8.2.7 Mirror Image Vertically	67
8.2.8 Error Messages	67
8.3 Pattern Image.....	67
8.3.1 Cut and Fold Method.....	68
8.3.2 Mark and Fold Method.....	68
8.4 Pattern Settings.....	69
8.4.1 Book Leaves	69
8.4.1.1 Cut and Fold Only	70
8.4.1.2 Mark and Fold Only	70
8.4.2 Book Height.....	70
8.4.3 Minimum Distance Between Marks.....	70
8.4.3.1 Cut and Fold	71
8.4.4 Fold and Page Numbering	71
8.4.5 Margins and Spaces.....	72
8.4.6 Leaves Before and After Pattern	72
8.4.7 Top and Bottom Margins.....	73
8.4.8 Use Folds Between Pattern (Cut and Fold).....	73
8.5 Create Pattern Button.....	75
8.5.1 Cut and Fold Method.....	77
8.5.2 Mark and Fold	78
8.5.3 Error Messages	79
8.6 Printing and Saving the Pattern Files.....	79
8.6.1 Saving the Pattern Files	79
8.6.1.1 Original Image File.....	80
8.6.1.2 Pattern Preview Image File	81
8.6.1.3 Pattern Marking List File.....	81
8.6.1.4 The Pattern Chart Image File(s)	83
8.6.1.5 The Pattern PDF File	84
8.6.2 Printing the Pattern Files	90
8.6.3 Error Messages	90

9. TUTORIALS.....	91
9.1 Good and Bad Image Files to Use	92
9.1.1 Cut and Fold	92
9.1.2 Mark and Fold	92
9.2 Creating an Image File Using MS Paint.....	94
9.3 Using Inkscape to Create an Image File.....	96
9.3.1 Adding Text.....	97
9.3.2 Adding Vectors.....	98
9.4 Creating the Folded Book from the Pattern Files	98
9.4.1 You Tube Videos.....	99
9.4.1.1 Mark, Cut and Fold.....	99
9.4.1.2 Mark, Cut and Fold Combination.....	99
9.4.1.3 Measure, Mark, Cut and Fold.....	99
9.4.1.4 Measure, Mark and Fold.....	99
9.4.1.5 Mark and Fold	99
10. ACKNOWLEDGMENTS	100
10.1 Pre Release Testers.....	101
10.2 Beta Testers.....	101
10.3 Finished Folded Books Pictures	101
11. APPENDIX.....	102
11.1 Un-Installing	103
11.2 Keyboard Shortcuts.....	104
11.3 Previous Release Notes.....	104
11.3.1 Changes Made in Version 1.1.00	104
11.3.1.1 New Features	104
11.3.1.2 Issues Fixed	104
11.3.1.3 Improvements Made.....	104
11.3.2 Changes Made in Version 1.0.75	104
11.3.2.1 New Features	104
11.3.2.2 Issues Fixed	105
11.3.2.3 Updated.....	105
11.3.2.4 Improvements Made.....	105
11.3.3 Changes Made in Version 1.0.00	105
11.3.3.1 New Features	105
11.3.3.2 Issues Fixed	105
11.3.3.3 Updated.....	106
11.3.3.4 Improvements Made.....	106
11.3.4 Changes Made in Version 0.5.02	106
11.3.4.1 New Features	106
11.3.4.2 Issues Fixed	106
11.3.5 Changes Made in Version 0.5.01	106
11.3.5.1 New Features	106

Crafty49's Book Folding Pattern Maker User Guide V1.1.00

11.3.5.2 Improvements	106
11.3.6 Changes Made in Version 0.5.00	106
11.3.6.1 New Features	106
11.3.7 Changes Made in Version 0.1.05	106
11.3.7.1 New Features	106
11.3.7.2 Improvements	107
11.3.8 Changes Made in Beta/Pre-Release Version 0.1.04	107
11.3.8.1 New Features	107
11.3.8.2 Issues Fixed	107

Table of Pictures

PICTURE 1 CUTE BUNNY CUT AND FOLDED (SUNKEN PATTERN) BOOK BY HELEN RICH ©2016	18
PICTURE 2 CANDLE CUT AND FOLDED (RAISED PATTERN) BOOK BY CHRIS ASHWORTH ©2016	19
PICTURE 3 BALLET WORD FOLDED BOOK BY HELEN RICH ©2015	20
PICTURE 4 WESTIE DOG FOLDED BOOK - DECORATED BY CHRIS ASHWORTH ©2015	21
PICTURE 5 INVALID LICENCE POP-UP	22
PICTURE 6 THE NAG SCREEN FOR A DEMO RELEASE VERSION	23
PICTURE 7 THE LICENCE A PRODUCT DESKTOP APPLICATION	23
PICTURE 8 PRODUCT ACTIVATED/LICENCED OKAY	24
PICTURE 9 MORE THAN ONE LICENCE	24
PICTURE 10 AVAILABLE LICENCES FOR CRAFTY49'S BOOK FOLDING PATTERN MAKER	24
PICTURE 11 THE LICENCE A PRODUCT DESKTOP APPLICATION WITH MANUALLY LICENCE PRODUCT BUTTON	25
PICTURE 12 THE MANUALLY LICENCE A PRODUCT INFORMATION BOX	26
PICTURE 13 THE LICENCES SECTION	26
PICTURE 14 THE MANUALLY LICENCE A PRODUCT WEB PAGE	27
PICTURE 15 THE MANUALLY LICENCE A PRODUCT WEB PAGE WITH LICENCES	27
PICTURE 16 THE MANUALLY LICENCE A PRODUCT WEB PAGE WITH A LICENCE FILE LINK	27
PICTURE 17 FILE DOWNLOAD DIALOGUE IN FIREFOX	28
PICTURE 18 FILE DOWNLOAD DIALOGUE IN INTERNET EXPLORER	28
PICTURE 19 SAVE LICENCE FILE AS DIALOGUE BOX	29
PICTURE 20 HELP MENU	29
PICTURE 21 START MENU ENTRY FOR CRAFTY49'S BOOK FOLDING PATTERN MAKER	30
PICTURE 22 SCREEN SHOT OF THE CRAFTY49'S BOOK FOLDING PATTERN MAKER	32
PICTURE 23 WARNING OF UNSAVED PATTERN FILES	33
PICTURE 24 PROGRESS BAR WITH MOVING BLOCKS	33
PICTURE 25 FILE MENU ITEMS WITH DISABLED ITEMS	35
PICTURE 26 OPEN AN IMAGE FILE	36
PICTURE 27 WARNING OF UNSAVED PATTERN FILES	36
PICTURE 28 THE SET MARKING PATTERN TYPE FORM	37
PICTURE 29 SAVE THE PATTERN FILES	37
PICTURE 30 PRINT PAGE SET-UP FORM	38
PICTURE 31 THE SET MARKING PATTERN TYPE FORM	39
PICTURE 32 PRINT PREVIEW SET-UP FORM (SHOWS THE MARK AND FOLD METHOD PATTERN)	40
PICTURE 33 THE SET MARKING PATTERN TYPE FORM	41
PICTURE 34 PRINT FORM	41
PICTURE 35 WARNING OF UNSAVED PATTERN FILES	42
PICTURE 36 WARNING OF UNSAVED PATTERN FILES	42
PICTURE 37 INSTALLATION FOLDER	43
PICTURE 38 THE CURRENT VERSION IS UP TO DATE	44
PICTURE 39 THERE IS A NEW VERSION AVAILABLE	44
PICTURE 40 NETWORK CONNECTION PROBLEM	44
PICTURE 41 UPDATE SERVER PROBLEM	44
PICTURE 42 SELECT THE LOCATION TO SAVE THE SET UP FILE	45
PICTURE 43 THE FILE HAS DOWNLOADED	45
PICTURE 44 THE 'ABOUT' BOX FOR A DEMO VERSION (EXPIRY DATE LICENCE)	46
PICTURE 45 THE 'ABOUT' BOX FOR A FULL RELEASE VERSION (HARDWARE LOCK LICENCE)	47
PICTURE 46 THE 'ABOUT' BOX FOR A FULL RELEASE TRIAL VERSION (HARDWARE/EXPIRY DATE LICENCE)	47

PICTURE 47 SET MARKING PATTERN TYPE FORM.....	51
PICTURE 48 PATTERN CHART TYPE SETTING	51
PICTURE 49 CHART PATTERN TYPE FOR CUT AND FOLD	52
PICTURE 50 CHART PATTERN TYPE FOR MEASURE AND FOLD	52
PICTURE 51 MEASURE TYPE PATTERN SETTING.....	53
PICTURE 52 MEASURE PATTERN TYPE FOR CUT AND FOLD	53
PICTURE 53 MEASURE PATTERN TYPE FOR MARK AND FOLD	54
PICTURE 54 CHART AND MEASURE TYPE PATTERN SETTING	54
PICTURE 55 THE IMAGE CHART DPI SETTING.....	54
PICTURE 56 TOP/BOTTOM OF PAGE	55
PICTURE 57 TOP/BOTTOM OF PATTERN LINES	55
PICTURE 58 NONE	55
PICTURE 59 THE SET PAGE SIZE OPTIONS ARE DISABLED	55
PICTURE 60 ADJUSTING THE PAGE SIZE AND ORIENTATION TO FIT ON A4 LANDSCAPE	56
PICTURE 61 SET PAGE SIZE OPTION CHECKED.....	56
PICTURE 62 SET PAGE SIZE OPTION.....	56
PICTURE 63 THE BOOK HEIGHT 300MM	57
PICTURE 64 300MM CHART PATTERN ON A A4 LANDSCAPE PAGE	57
PICTURE 65 THE BOOK HEIGHT 175MM	57
PICTURE 66 175MM CHART PATTERN ON A A3 PORTRAIT PAGE	57
PICTURE 67 LINE SPACING AT 2MM.....	58
PICTURE 68 LINE SPACING AT 5MM.....	58
PICTURE 69 LINE WIDTH AT 0.5MM.....	58
PICTURE 70 LINE WIDTH AT 2MM.....	58
PICTURE 71 THE SHOW CENTRE LINES OPTION TICKED.....	58
PICTURE 72 CENTRE LINE WIDTH CONTROL.....	58
PICTURE 73 CENTRE LINES AT THE TOP OF THE PATTERN CHART	59
PICTURE 74 CENTRE LINES AT THE BOTTOM OF THE PATTERN CHART	59
PICTURE 75 SCREEN SHOT OF THE CRAFTY49'S BOOK FOLDING PATTERN MAKER	61
PICTURE 76 THE PATTERN TYPE.....	62
PICTURE 77 THE UNITS.....	62
PICTURE 78 PATTERN NAME, AUTHOR, WEBSITE, COPYRIGHT, AND COMMENTS DETAILS	62
PICTURE 79 THE PATTERN DETAILS FROM THE PATTERN DOCUMENT	62
PICTURE 80 THE ORIGINAL IMAGE FOR CREATING PATTERN FILES.....	63
PICTURE 81 THE THRESHOLD AT 0.5.....	64
PICTURE 82 THE THRESHOLD AT 0.01.....	64
PICTURE 83 THE THRESHOLD AT 1.0.....	65
PICTURE 84 BEFORE THE SPACE HAS BEEN REMOVED AROUND THE IMAGE.....	65
PICTURE 85 AFTER SPACE HAS BEEN REMOVED AROUND THE IMAGE	65
PICTURE 86 BEFORE COLUMN SPACE BETWEEN SHAPES HAS BEEN REMOVED	66
PICTURE 87 AFTER COLUMN SPACE BETWEEN SHAPES HAS BEEN REMOVED.....	66
PICTURE 88 THE IMAGE WITH THE COLOURS INVERTED.....	66
PICTURE 89 THE IMAGE MIRRORED HORIZONTALLY	67
PICTURE 90 THE IMAGE MIRRORED VERTICALLY	67
PICTURE 91 THE CREATED PATTERN IMAGE (CUT AND FOLD)	68
PICTURE 92 THE CREATED PATTERN IMAGE (MARK AND FOLD)	68
PICTURE 93 THE EFFECTS OF REDUCING THE PATTERN PREVIEW IMAGE (MARK AND FOLD).....	69
PICTURE 94 PATTERN SETTINGS.....	69
PICTURE 95 BOOK PARAMETERS AND ACTUAL USED BOOK FOLDS AND PAGES	70
PICTURE 96 AN IMAGE WITH 1MM WHITE LINE	71
PICTURE 97 THE 1MM LINES ARE MERGED TO INTO 1 2MM LINE	71
PICTURE 98 FOLD AND PAGE NUMBERING.....	72
PICTURE 99 MARGINS AND SPACES (MARK AND FOLD).....	72
PICTURE 100 THE ORIGINAL IMAGE AFTER THE SPACE AROUND HAS BEEN REMOVED	72

PICTURE 101 THE PATTERN IMAGE WITH LEAVES BEFORE AND AFTER THE PATTERN	73
PICTURE 102 THE PATTERN IMAGE WITH TOP AND BOTTOM MARGINS.....	73
PICTURE 103 THE BOOK ON THE LEFT USES FOLDS BETWEEN THE PATTERN BY CHRIS ASHWORTH ©2016	74
PICTURE 104 NO FOLDS BETWEEN THE PATTERN IMAGE	74
PICTURE 105 WITH FOLDS BETWEEN THE PATTERN IMAGE	75
PICTURE 106 SPACER FOLDS ON A CHART PATTERN	75
PICTURE 107 SPACER FOLDS ON A TABLE PATTERN	75
PICTURE 108 THE PATTERN PREVIEW IMAGE SHOWING UN-FOLDED LEAVES IN BLUE IN THE CENTRE.....	76
PICTURE 109 MINIMUM DISTANCE BETWEEN MARKS	76
PICTURE 110 ORIGINAL IMAGE WITH THIN BLACK LINE OF LESS THAN 1MM.....	76
PICTURE 111 PATTERN IMAGE WITH THE THIN LINE REMOVED.....	76
PICTURE 112 PATTERN IMAGE WITH THE THIN LINE REMOVED AND BLANK LEAVES REMOVED	77
PICTURE 113 THE BOOK PAGES REQUIRED HAVE INCREASED (CUT AND FOLD)	77
PICTURE 114 THE BOOK PAGES REQUIRED HAVE DECREASED (MARK AND FOLD).....	77
PICTURE 115 THE PATTERN PREVIEW IMAGE SHOWING BLANK FOLDS IN BLUE (CUT AND FOLD).....	78
PICTURE 116 THE BOOK PAGES SET HAVE INCREASED (MARK AND FOLD).....	78
PICTURE 117 THE PATTERN PREVIEW IMAGE SHOWING ALTERNATE FOLDS IN RED (MARK AND FOLD).....	78
PICTURE 118 THE SAVE PATTERN FILES AS DIALOGUE POPUP	80
PICTURE 119 PATTERN FILES SAVED OKAY	80
PICTURE 120 ORIGINAL IMAGE	80
PICTURE 121 PATTERN PREVIEW IMAGE (CUT AND FOLD).....	81
PICTURE 122 PATTERN PREVIEW IMAGE (MARK AND FOLD).....	81
PICTURE 123 PATTERN MARKING LIST SHOWING THE HEADER AND MARKING POINTS (CUT AND FOLD).....	82
PICTURE 124 PATTERN MARKING LIST SHOWING THE HEADER AND MARKING POINTS (MARK AND FOLD).....	82
PICTURE 125 CUT AND FOLD PATTERN CHART IMAGE.....	83
PICTURE 126 MARK AND FOLD PATTERN CHART IMAGE.....	84
PICTURE 127 THE 1 ST PAGE OF THE PATTERN DOCUMENT (CUT AND FOLD).....	85
PICTURE 128 THE 2 ND PAGE OF THE PATTERN DOCUMENT (CUT AND FOLD).....	86
PICTURE 129 THE MARKING POINTS PAGE OF THE PATTERN DOCUMENT (CUT AND FOLD)....	87
PICTURE 130 THE 1 ST PAGE OF THE PATTERN DOCUMENT (MARK AND FOLD).....	88
PICTURE 131 THE 2 ND PAGE OF THE PATTERN DOCUMENT (MARK AND FOLD).....	89
PICTURE 132 THE MARKING POINTS PAGE OF THE PATTERN DOCUMENT (MARK AND FOLD). 90	
PICTURE 133 IMAGE ATTRIBUTES	94
PICTURE 134 WARNING MESSAGE ABOUT CHANGING FROM COLOUR TO BLACK AND WHITE 94	
PICTURE 135 THE BLANK CANVAS	95
PICTURE 136 THE TEXT TOOLBAR.....	95
PICTURE 137 THE TYPED LETTER.....	95
PICTURE 138 THE LETTER MOVED TO THE TOP LEFT	96
PICTURE 139 THE WHITE SPACE REMOVED FROM THE LETTER.....	96
PICTURE 140 TEXT TOOL.....	97
PICTURE 141 FONT PROPERTIES	97
PICTURE 142 THE TEXT	97
PICTURE 143 THE COLOUR PALETTE.....	97
PICTURE 144 THE TEXT IN THE BOOK FOLDING PATTERN MAKER WITH NO TOP OR BOTTOM SPACE.....	97
PICTURE 145 THE RECTANGLE TOOL	97
PICTURE 146 RECTANGLE OBSCURES TEXT.....	98

PICTURE 147 THE TEXT IS NOW ON TOP	98
PICTURE 148 THE RECTANGLE MOVED INTO POSITION	98
PICTURE 149 THE TEXT WITH TOP AND BOTTOM SPACE IN BOOK FOLDING PATTERN MAKER	98
PICTURE 150 UN-INSTALLING FROM THE START MENU (WINDOWS XP)	103
PICTURE 151 CONFIRM UNINSTALL.....	103
PICTURE 152 SUCCESSFULLY UNINSTALLED	104

List of Tables

TABLE 1 IMAGES NOT SUITABLE FOR CUT AND FOLD 92
TABLE 2 IMAGES AND THE PATTERNS CREATED FROM THEM 93

1. Document Details

1.1 Summary

This is the release for the Crafty49s Book Folding Pattern Maker release V1.1.01 user guide.

1.2 Supersedes

None.

1.3 Version History

Version	Date	Details
0.1.00	13 April 2015	Authors & Contributors at this version Ian Wadsworth. First issue.

1.4 Copyright

This document, test files, executables and related files are copyright of Ian Wadsworth (except where indicated), and must not be distributed to any un-authorized testers without the consent of Ian Wadsworth.

2. Release and System Requirements Information

2.1 Software Use

- The software is supplied as is. It may contain defects, and may not be fit for purpose.
- The author cannot be held responsible for any loss of data caused by using the application.
- It has been checked for viruses, but it is up to the user to check that their system have the latest anti-virus software installed and enabled.

2.2 Copyright Acknowledgements

All registered trademarks are recognised, and are not used to exclusively promote the application.

2.3 End User Licence

Please read the document 'eula.rtf'.

- The software is licensed, and is not owned.
- No selling or renting of the executable file
- Internationally copyright protected.
- It may not be re-sold, rented, etc.
- Please don't distribute the executable file, link it to this website

2.4 3rd Party Licence

The software uses a number of Open Source DLL libraries from Empira Software GmbH, Troisdorf (Germany) <http://www.empira.de/>.

2.5 Release Notes

New releases are at <http://www.ideas-r-us-software.uk/Downloads.aspx>, and an update can be checked from within the software (see 5.3.3 Check for Updates).

A help forum is at <http://www.ideas-r-us.co.uk/forum/>

2.5.1 Known Issues

None.

2.5.2 Limitations of the Demo Release

- Cannot save any of the pattern files
- Cannot change any of the Pattern Details
- Limited to a maximum of 75 book leaves
- There is also an expiry date for Demo releases, so the licence `ReleaseDemo1-0-75Expires1Dec2016.licence` will expire on the 1 December 2016

2.5.3 Limitations of the Full and Trial Releases

Trial releases have the features as Full releases, but will have a licence that will expire after a number of months after registration. And can only be used on one computer.

2.5.4 Changes Made in Version 1.1.01

2.5.4.1 Issues Fixed

When used on laptops with a small resolution screen, the 'Create Pattern' button at the bottom right of the main form was 'cut off'. Scroll bars were enabled so that the form could be scrolled to the 'Create Pattern' button.

2.6 Reporting Issues (Bugs)

Issues can be reported by going to the forum at <http://www.ideas-r-us.co.uk/forum/>.

2.7 System Requirements

- Requires Windows XP, Windows Vista, Windows 7, Windows 8.x or Windows 10.
- A mouse or pointing device
- A colour monitor of at least 1080 x 720 pixels.
- At least 13MB of hard disk space
- The application uses about 30MB of DRAM.
- Adobe Reader for viewing the User Guide, from <http://get.adobe.com/reader/otherversions/>.
- Requires the Microsoft .NET Framework 3.5 Service Pack 1 (Requires at least Service Pack 2 Win XP), if not already installed. The installer will detect if the framework is installed or not.
 - If you have Internet access it can be downloaded from <http://www.microsoft.com/en-gb/download/details.aspx?id=25150> (about 235MB)
 - If no Internet access, it may be on the operating systems install disk.

The installed files are: -

```
*.licence  
BookFolding.exe  
Crafty49sBookFoldingPatternMakerUserGuide.pdf  
eula.rtf  
LicenceAProduct.exe  
unins000.dat  
unins000.exe
```

3. The Application

3.1 Description

The art of folding pages of a book to create a raised pattern is called Book Folding or Book Art. There may be other names for it.

The application will simply take a raster image, and create a number of folding/marking points (pattern chart/graph/line/stripes). There is no guarantee that any image used will create a good folded book.

The Cut and Fold is a different method, in that cuts are made into the page of the book and then folded.

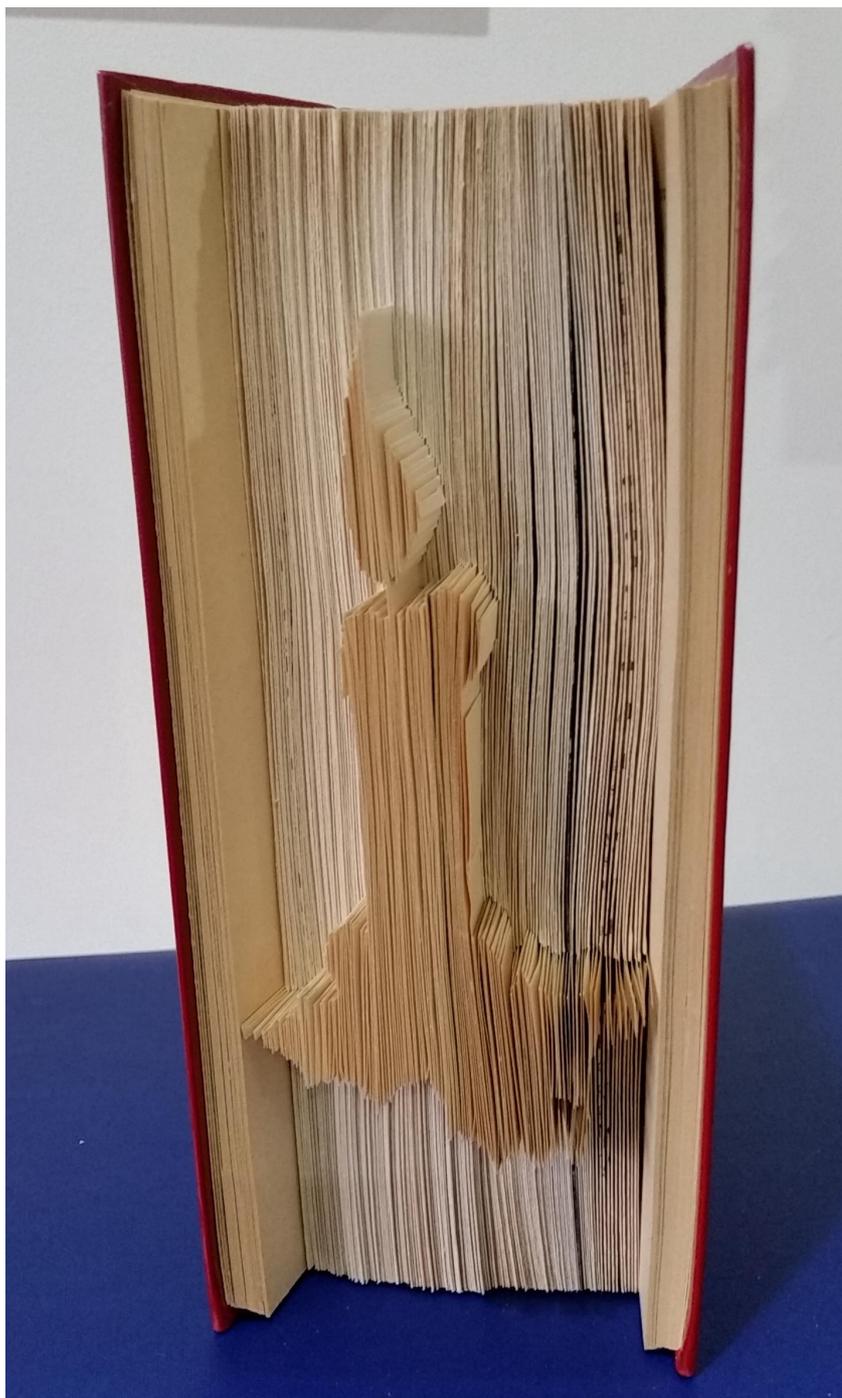
Below are some of the Folded Books made using both the Cut and Fold and the Mark and Fold methods, with the Crafty49's Book Folding Pattern Maker.

3.1.1 Cut and Fold

Picture 1 Cute Bunny Cut and Folded (Sunken Pattern) Book by Helen Rich ©2016

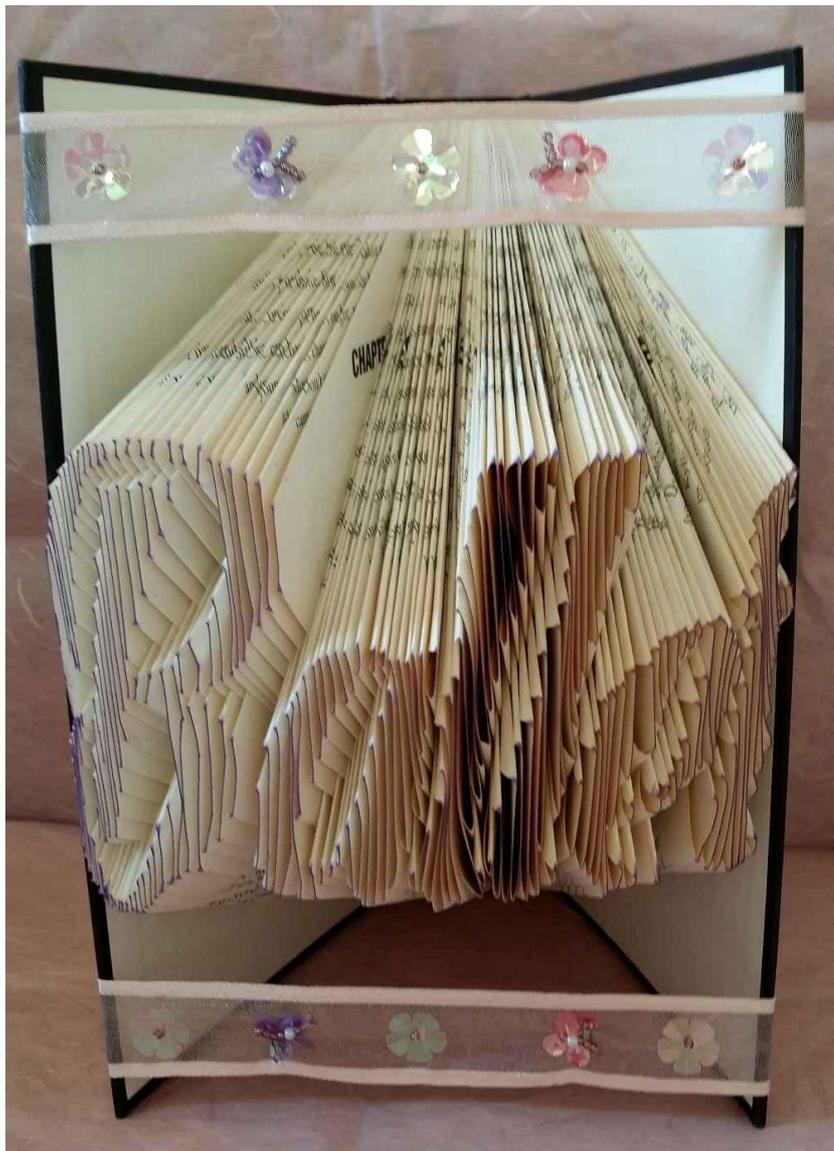


Picture 2 Candle Cut and Folded (Raised Pattern) Book by Chris Ashworth ©2016

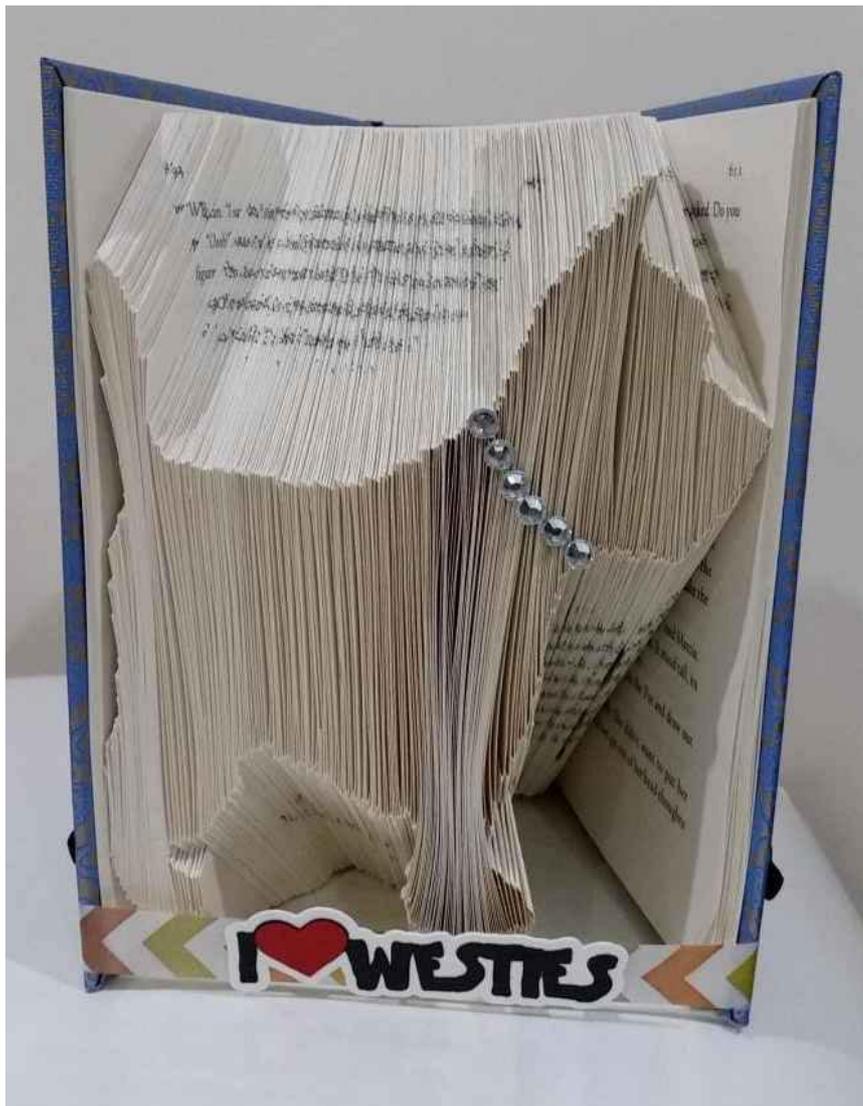


3.1.2 Mark and Fold

Picture 3 Ballet Word Folded Book by Helen Rich ©2015



Picture 4 Westie Dog Folded Book - Decorated by Chris Ashworth ©2015



3.2 Main Features

This application will create a set of book art or book folding patterns from a raster (bitmap) image. These include a preview pattern image, and a list of fold marking points for the book.

- Uses the Measure, Mark, and Fold Method (shortened to Mark and Fold), and the Measure, Mark, Cut and Fold Method (shortened to Cut and Fold)
- Book size is from 5cm/50mm to 40cm/400mm
- The number of folds can be up to 1,000 (2,000 pages)
- Removes blank book leaves from the design pattern
- Removes excess white from around the design pattern
- Invert (make negative), and Mirror the design pattern
- Add top and bottom margins to the design pattern
- Add blank leaves before and after the design pattern
- Adds 'spacer folds' between the design pattern for the Cut and Fold method
- Choose between leaf or page numbering, with an adjustable start value
- Supports most of the common raster image files
- Image files can be dragged and dropped onto the main form
- Copy and paste, from applications such as Paint and Word
- Creates a PDF file with preview images and pattern marking points, pattern chart/graph/line/stripes

- Creates separate preview images and a CSV file of marking points for creating custom documents

The supported raster image formats are: -

- Bitmap (.bmp, .dib)
- GIF (.gif)
- JPEG (.jpg, .jpeg, .jpe, .jfif)
- PNG (.png)
- TIFF (.tif, .tiff)

3.3 Running the Application

There are three ways that the Crafty49's Book Folding Pattern Maker application can be started: -

1. Clicking on the desktop program icon (if created).
2. From the start menu -> Programs -> Ideas R Us Software -> Crafty49's Book Folding Pattern Maker -> Crafty49's Book Folding Pattern Maker (if created).
3. By clicking on the `BookFolding.exe` in the folder where the application was installed. The default is `C:\Program Files\IdeasRUsSoftware\Crafty49sBookFoldingPatternMaker`

The main form will appear (see Picture 22 Screen Shot of the Crafty49's Book Folding Pattern Maker).

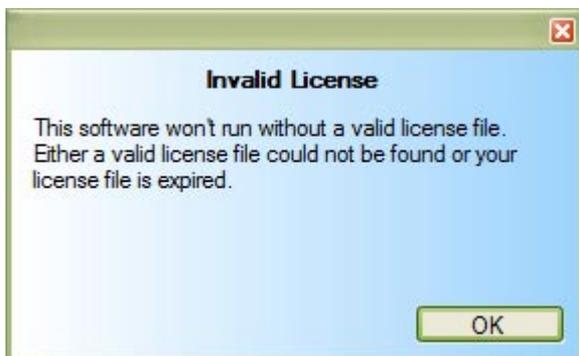
When the application is first run, there can be quite a long start up delay. After that, the start up will be much quicker. This will always be the case when the system is restarted.

3.3.1 Expired or Invalid Licence

The application requires a valid licence file (ending in `*.licence`), otherwise a pop-up will appear (see Picture 5 Invalid Licence Pop-up).

- Full release with hardware lock, runs on 2 computers per licence
- Trial release with hardware lock an expiry date, runs on 1 computer per licence
- Demo release with an expiry date, runs on any computer with licence

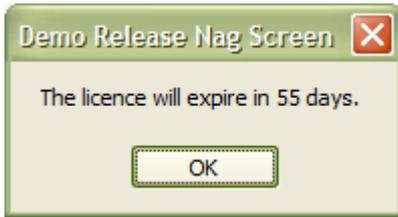
Picture 5 Invalid Licence Pop-up



3.3.2 Nag Screen

This will only be seen with a Demo (un-licenced) version.

Picture 6 The Nag Screen for a Demo Release Version



3.3.3 Licence the Full or Trial Application

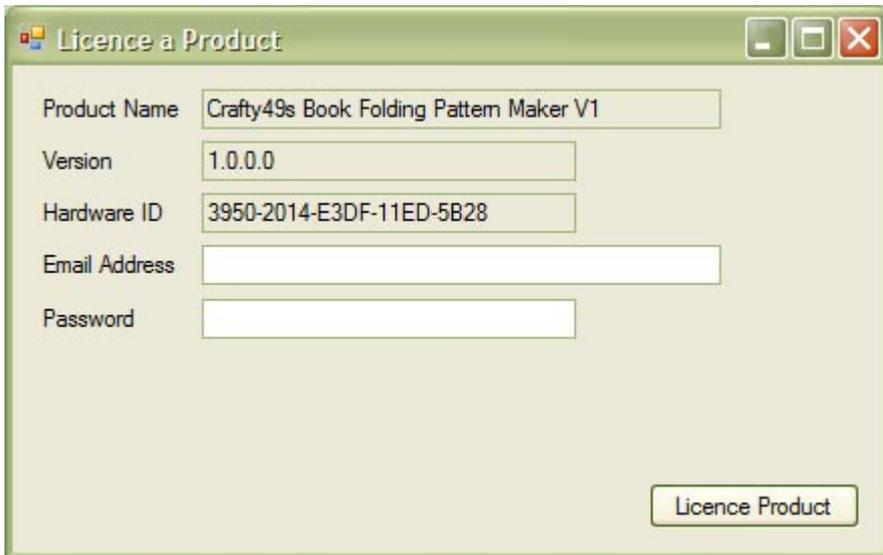
This requires Internet access, for either the 'Licence a Product' desktop application or manually via the Ideas R Us Software website (<http://www.ideas-r-us-software.uk/>).

The Full and Trial release versions need to be licenced/activated first before they can be run. If not an Invalid Licence pop-up will appear (see Picture 5 Invalid Licence Pop-up). The Full and Trial versions are the same; it's the licence file that will be different.

Upgrading from a Trial to a Full licence requires the 'Licence the Product' application to be run again.

The Licence a Product' desktop application would have normally run when 'Crafty49's Book Folding Pattern Maker' was first installed (see Picture 7 The Licence a Product Desktop Application), but it can be run any time after installation.

Picture 7 The Licence a Product Desktop Application



Enter the email address and password that was emailed to you after purchasing the software (the email address used for PayPal), or that you used to log into the Ideas R Us Software website if that has been changed.

Click on the 'Licence Product' button. If the email address, password, product and hardware ID are valid, then after a short delay, the message box will be displayed (see Picture 8 Product Activated/Licenced Okay). Clicking 'Ok' will start 'Crafty49's Book Folding Pattern Maker' and verify that the licence is valid/correct.

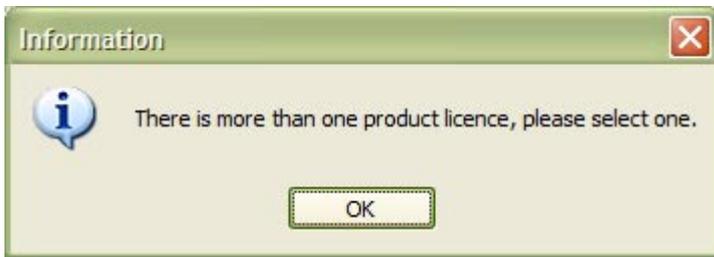
Picture 8 Product Activated/Licensed Okay



3.3.3.1 More than One Licence for the Product

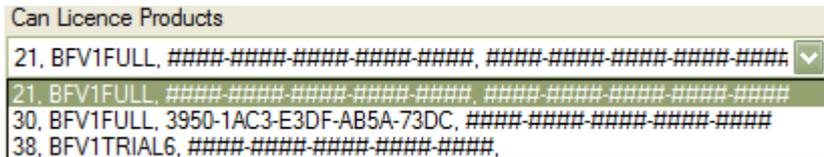
If there is more than 1 licence, such as a Trial and Full version, a message box will be displayed (see Picture 9 More than One Licence).

Picture 9 More than One Licence



Clicking 'Ok' will display the 'Can Licence Products' drop down list for the product and the hardware ID (see Picture 10 Available Licences for).

Picture 10 Available Licences for Crafty49's Book Folding Pattern Maker



The current hardware ID (see Picture 7 The Licence a Product Desktop Application) is not in the 'Can Licence Products' list, since there can only be one hardware ID for that email address/account and software product. The hardware ID is unique for each computer.

- 21 is the licence ID
- BFV1FULL is the code for 'Crafty49's Book Folding Pattern Maker'
- '####-####-####-####-####' indicates a licence that is not activated, it can be used with any hardware ID (2 for Full versions, and 1 for Trial versions)
- '3950-1AC3-E3DF-AB5A-73DC' indicates a licence that has been activated with that hardware ID

The current hardware ID cannot overwrite a different hardware ID in a licenced product.

Select a product to licence from the list, click the 'Licence Product' button, and then after a short delay a message box will appear (see Picture 8 Product Activated/Licensed Okay). Clicking 'Ok' will start 'Crafty49's Book Folding Pattern Maker' and verify that the licence is valid/correct.

3.3.3.1.1 Error Messages

- No product has been found to register. The application will close.

- Cannot create the hardware ID. Please try again.
- The network connection is not available.
- The email address has too few characters.
- The password has too few characters.
- The login email address or password is not correct.
- Cannot connect to the Licensing Server. Please try again later.
- There are no licenced products.
- Cannot get a licence file.
- Error reading from the database.

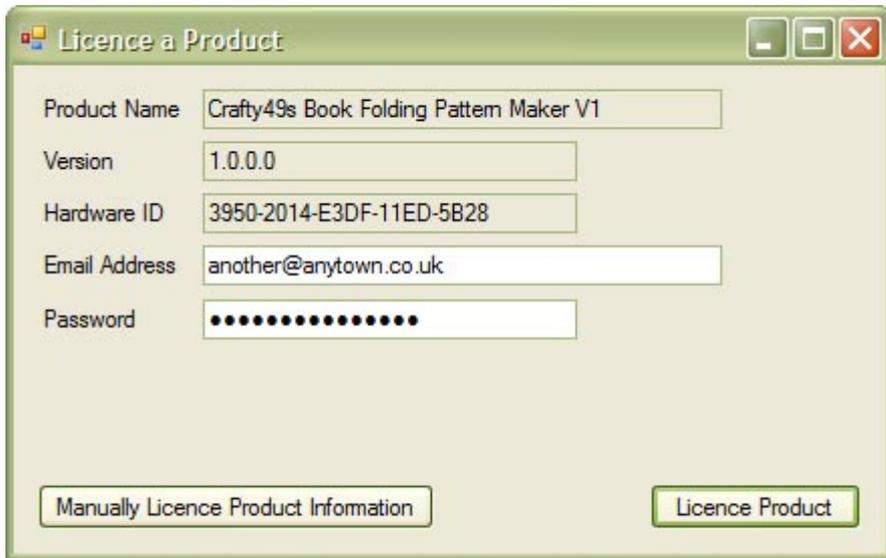
3.3.3.2 Manually Licence a Product

This would normally be done when the computer that a product is to be used on has no Internet connection.

Find out where 'Crafty49's Book Folding Pattern Maker' was installed (see 3.3.4 Folder Locations for the Licence File), and start the 'LicenceAProduct.exe' application. You need this to create the hardware ID string that is going to be used via the Ideas R Us Software website.

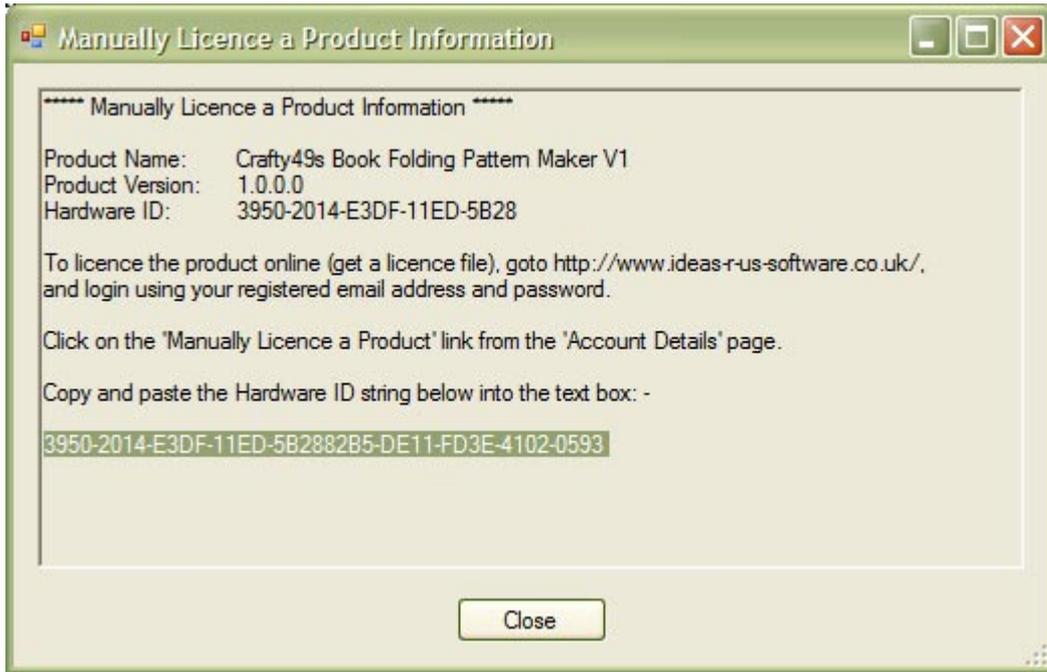
Enter an email address, and a password (doesn't have to be the correct one), and then click on the 'Licence Product' button. An error message will appear, click 'Ok' and the 'Manually Licence a Product Information' button appears (see Picture 11 The Licence a Product Desktop Application with Manually Licence Product Button).

Picture 11 The Licence a Product Desktop Application with Manually Licence Product Button



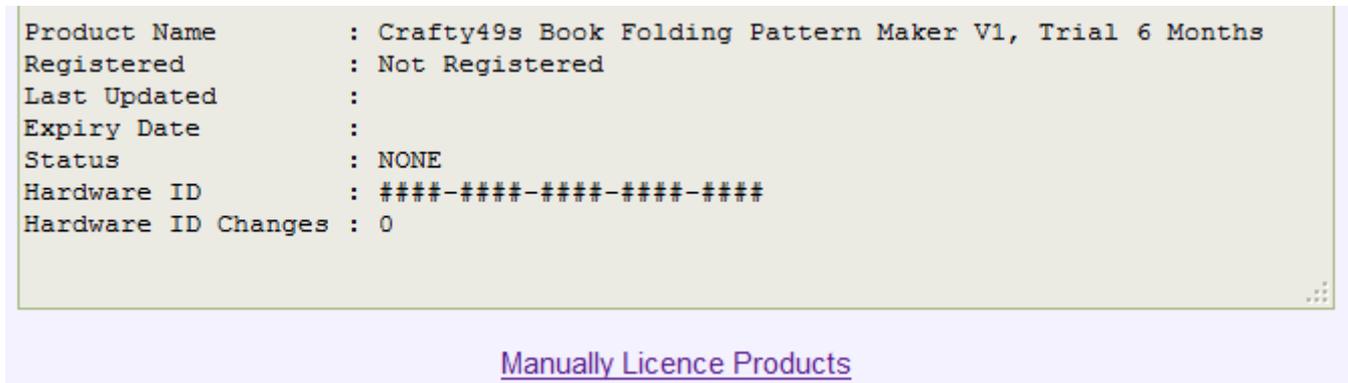
Click the 'Manually Licence a Product Information' button, a form will appear (see Picture 12 The Manually Licence a Product Information Box) select and copy the Hardware ID string (or all the information), and save it to a file on removable media. You could write down the hardware ID string as well.

Picture 12 The Manually Licence a Product Information Box



- Go to the Ideas R Us website (<http://www.ideas-r-us-software.uk/>), and login using the email and password that was sent to you after you purchased the software (the email address used for PayPal), or that you used to log into the Ideas R Us Software website if that has been changed.
- Scroll down to the Licences section (See Picture 13 The Licences Section)
- Click on the link 'Manually Licence Products'

Picture 13 The Licences Section



- Select the product to licence (see Picture 14 The Manually Licence a Product Web Page)
- Enter the hardware ID string from the 'Manually Licence a Product Information' box
- Click on the button 'Get Licences for Hardware ID'

Picture 14 The Manually Licence a Product Web Page

Manually Licence a Product

This is to manually licence either Crafty49's Book Folding Pattern Maker or Cutter Controller software (full or trial release), if the installed software is on a computer that isn't connected to the Internet. The licence file is then copied to where the software is installed.

Normally the process of licencing the software is done during installation using the 'Licence a Product' application, which connects to the Internet.

Products:

Hardware ID String:

Can Licence Products:

Licence Download Link:

There will be one or more licences. Select the licence required, and then click on the button 'Licence and Register Product' (see Picture 15 The Manually Licence a Product Web Page with Licences).

Picture 15 The Manually Licence a Product Web Page with Licences

Manually Licence a Product

This is to manually licence either Crafty49's Book Folding Pattern Maker or Cutter Controller software (full or trial release), if the installed software is on a computer that isn't connected to the Internet. The licence file is then copied to where the software is installed.

Normally the process of licencing the software is done during installation using the 'Licence a Product' application, which connects to the Internet.

Products:

Hardware ID String:

Can Licence Products:

Licence Download Link:

To save the licence file, click on the Licence Download Link (see Picture 16 The Manually Licence a Product Web Page with a Licence File Link).

Picture 16 The Manually Licence a Product Web Page with a Licence File Link

Manually Licence a Product

This is to manually licence either Crafty49's Book Folding Pattern Maker or Cutter Controller software (full or trial release), if the installed software is on a computer that isn't connected to the Internet. The licence file is then copied to where the software is installed.

Normally the process of licencing the software is done during installation using the 'Licence a Product' application, which connects to the Internet.

Products:

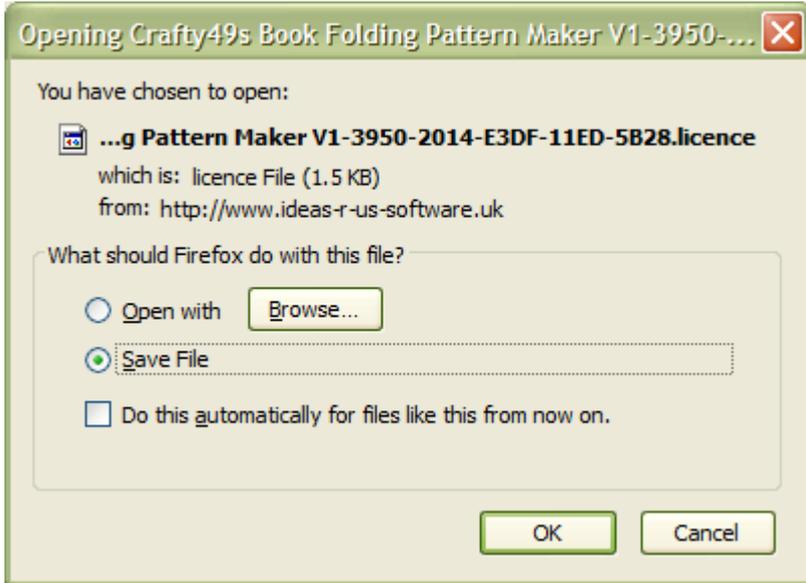
Hardware ID String:

Can Licence Products:

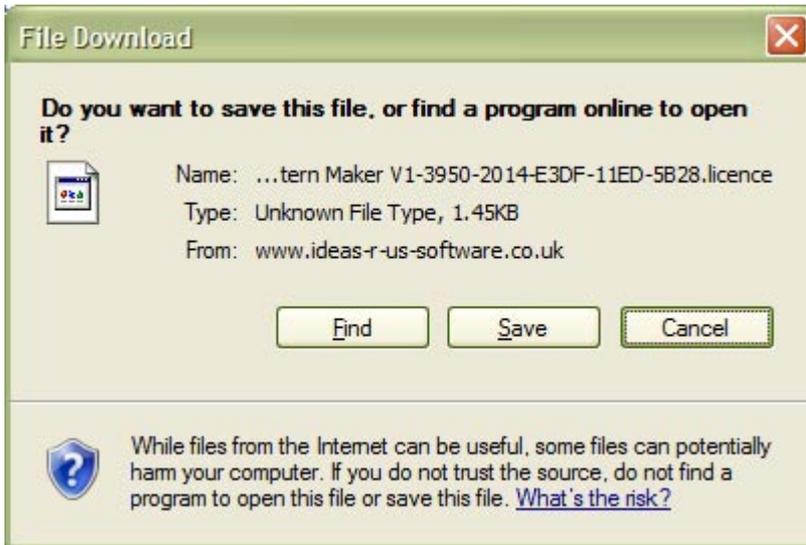
Licence Download Link: [Crafty49s Book Folding Pattern Maker V1-3950-2014-E3DF-11ED-5B28](#)

Click the 'Ok' (Firefox, Picture 17 File Download Dialogue in Firefox) or the 'Save' (Internet Explorer, Picture 18 File Download Dialogue in Internet Explorer) button.

Picture 17 File Download Dialogue in Firefox

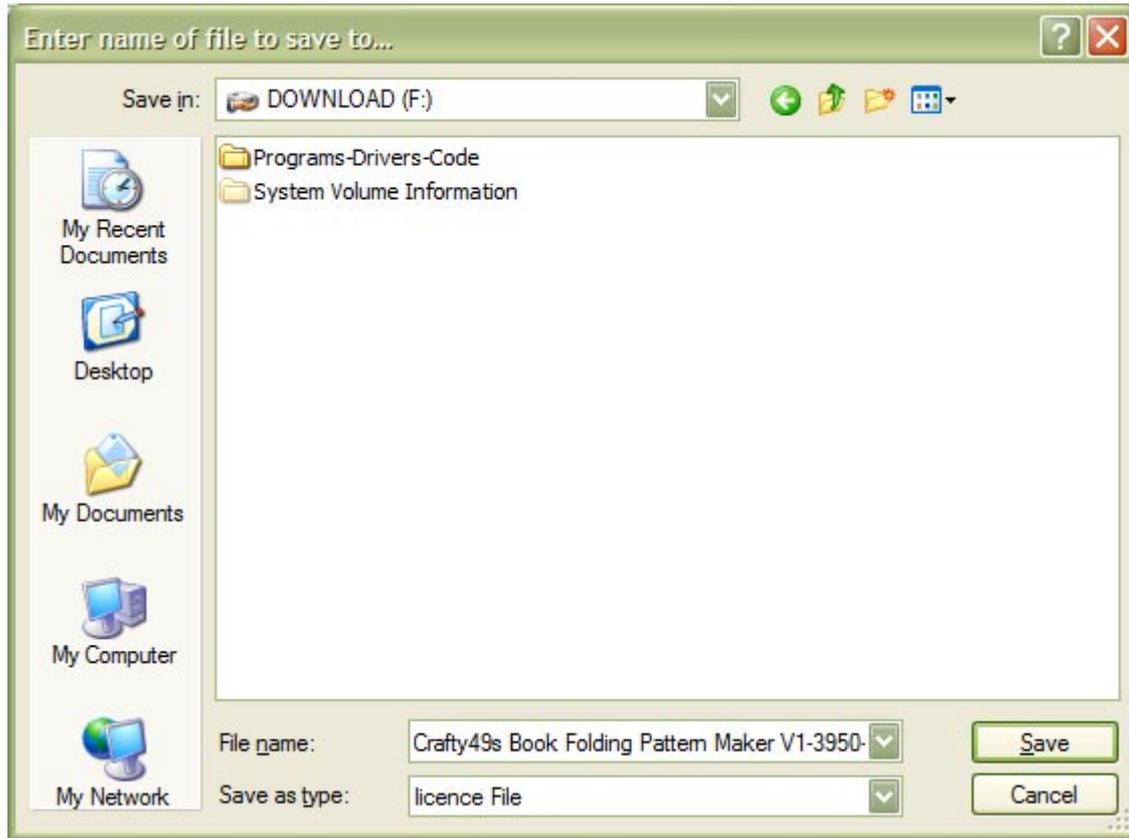


Picture 18 File Download Dialogue in Internet Explorer



Navigate to the removable media device, and change the licence filename to `BookFoldingV1.licence`, and click the 'Save' button (see Picture 19 Save Licence File as Dialogue Box).

Picture 19 Save Licence File as Dialogue Box



On the computer with the product to licence, copy the `BookFoldingV1.licence` file to the Installation folder, and overwrite the existing licence file. Start 'Crafty49's Book Folding Pattern Maker' to verify that the licence is valid/correct.

3.3.3.2.1 Error Messages

- The hardware ID is not in the correct format, correct length, or invalid. Please enter again.
- Cannot read any licences from the database.
- Cannot get a licence file.
- The licence file cannot be saved.

3.3.4 Folder Locations for the Licence File

Their location depends on the Operating System.

The Licence File can be viewed from the *Help -> Installation Folder* (see 5.3.2 Installation Folder) menu.

Picture 20 Help Menu



If the 'Start Menu' (see Picture 21 Start Menu Entry for Crafty49's Book Folding Pattern Maker) was selected during install (not for Windows 8.x), then the folders can be accessed by clicking on the folder link. 'Crafty49's Book Folding Pattern Maker Folder' for the licence file.

Picture 21 Start Menu Entry for Crafty49's Book Folding Pattern Maker



3.3.4.1 Licence File

The licence file (*.licence) for a Demo, a Full or a Trial version is in the same folder where the application is installed.

For 32-bit Operating Systems, the default location is: -

```
C:\Program Files\IdeasRUsSoftware\Crafty49sBookFoldingPatternMakerDemo  
C:\Program Files\IdeasRUsSoftware\Crafty49sBookFoldingPatternMakerFull
```

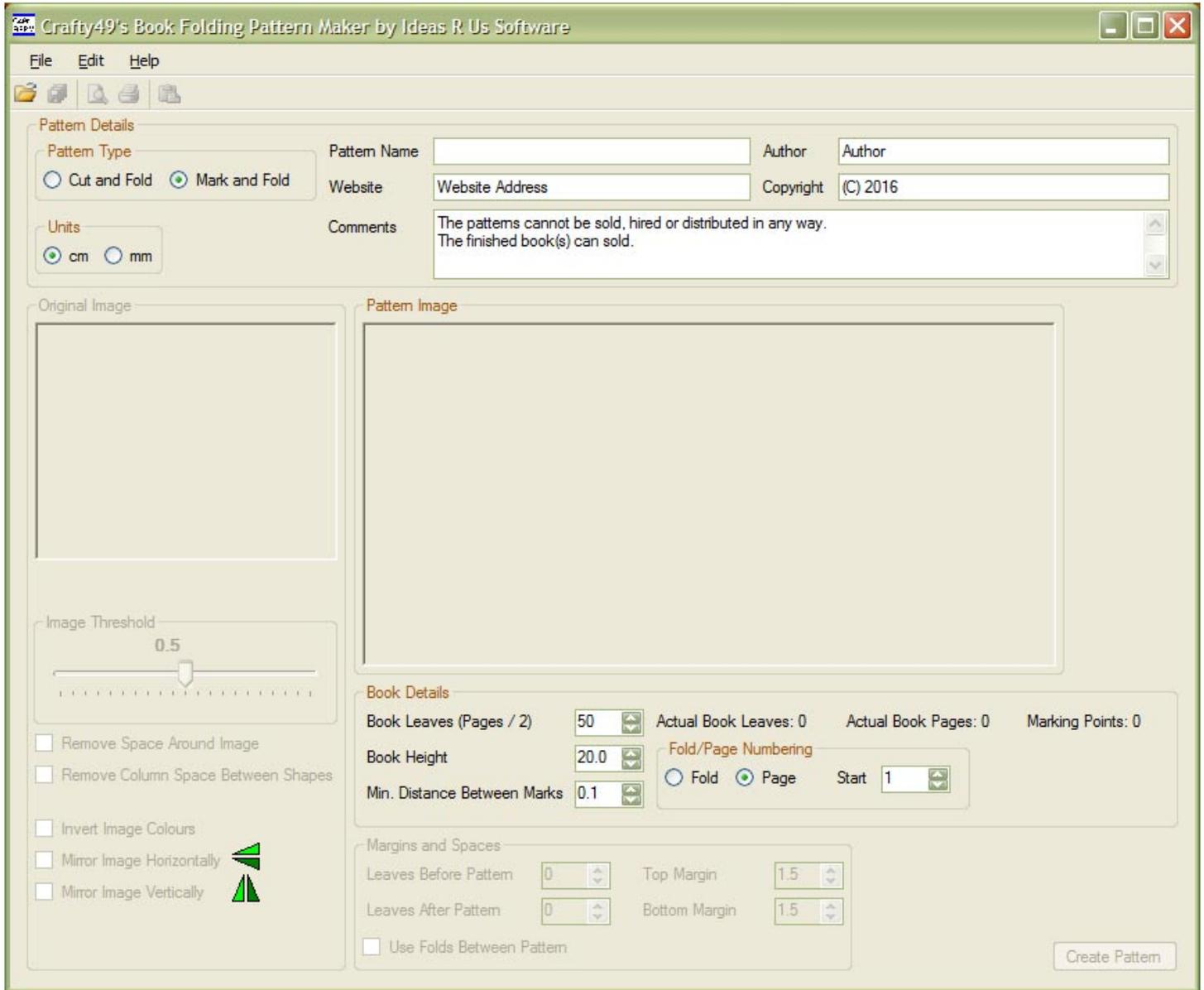
For 64-bit Operating Systems, the default location is: -

```
C:\Program Files (x86)\IdeasRUsSoftware\Crafty49sBookFoldingPatternMakerDemo  
C:\Program Files (x86)\IdeasRUsSoftware\Crafty49sBookFoldingPatternMakerFull
```

4. Main Form Overview

This is the main form after starting.

Picture 22 Screen Shot of the Crafty49's Book Folding Pattern Maker



4.1 Drag and Drop a File

Drag and Drop a file from a file viewer such as Explorer onto the form's 'canvas'.

Select a file, then click and hold the mouse button. When the mouse is moved it will change to a  symbol (no drop).

Drag the file onto the Crafty49's Book Folding Pattern Maker 'canvas'; the cursor will change to a  symbol (drop and copy). Release the mouse button and the image should appear in the 'Original Image'.

If the form's 'canvas' is hidden, drag the file to the Crafty49's Book Folding Pattern Maker task bar button. The form will now be visible.

If the pattern files have not been saved, then a warning message will appear. Click 'No' to go back and save the pattern files, or 'Yes' to continue.

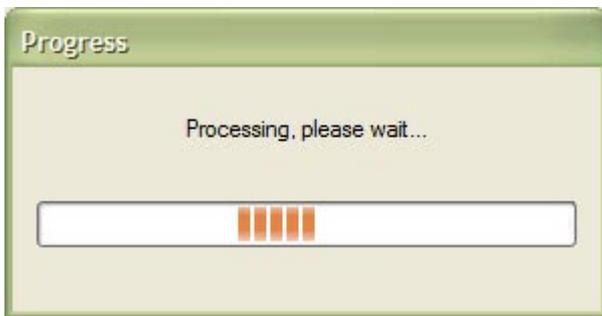
Picture 23 Warning of Unsaved Pattern Files



4.2 Progress Bar

When an operation is expected to take some time, the Progress Bar with moving blocks will be shown. Currently Print, Print Preview and Save Pattern Files As will display the progress bar.

Picture 24 Progress Bar with Moving Blocks



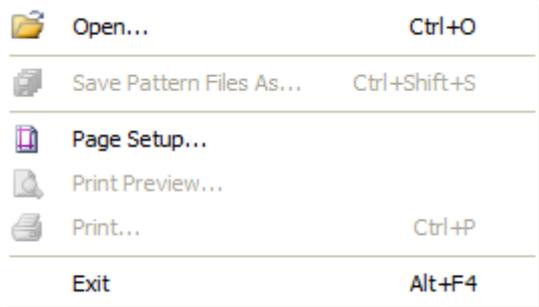
5. Menu



- File Menu
- Edit Menu
- Help Menu

5.1 File Menu

Picture 25 File Menu Items with Disabled Items



- Open
- Save Pattern Files As
- Page Setup
- Print Preview
- Print
- Exit

5.1.1 Open

Menu -> File -> Open

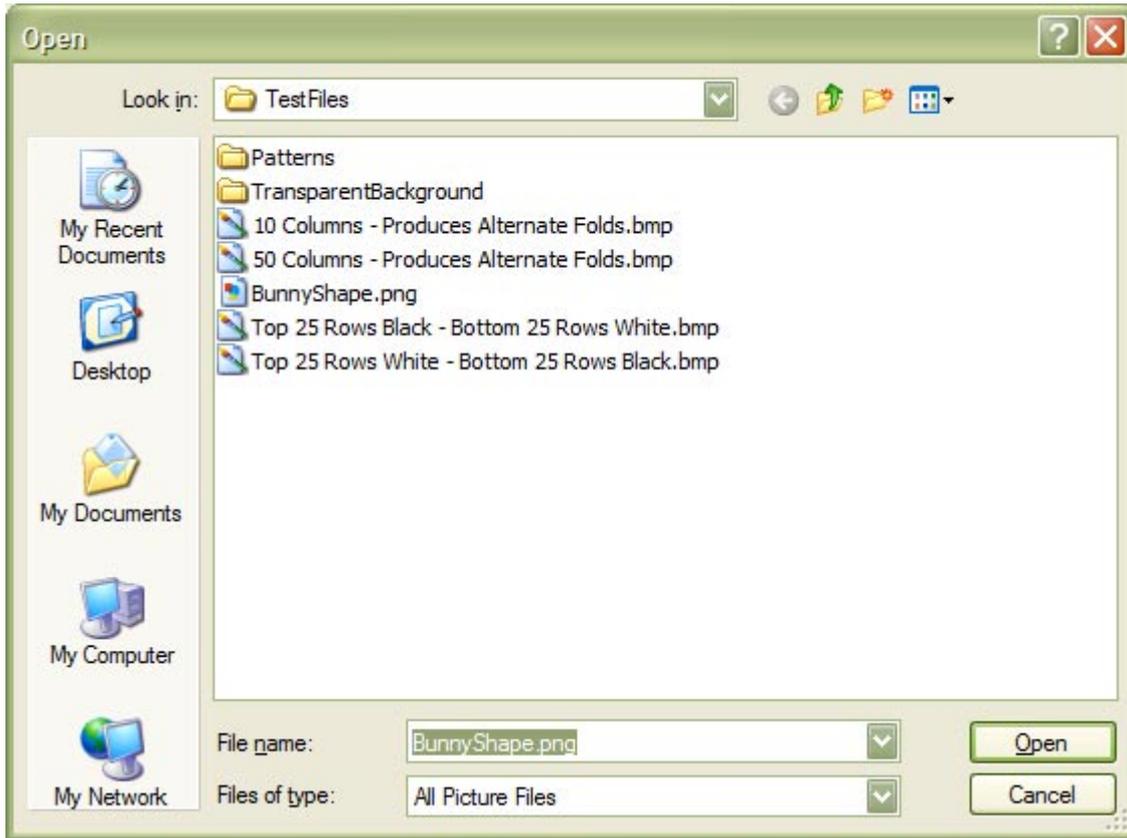
Ctrl + O

Toolbar, see 6.2 Open Button

Opens a raster image file.

Clicking the item will show a standard Windows 'Open File' dialogue box. Select any supported raster file to load it.

Picture 26 Open an Image File



If the pattern files have not been saved, then a warning message will appear. Click 'No' to go back and save the pattern files, or 'Yes' to continue.

Picture 27 Warning of Unsaved Pattern Files



5.1.1.1 Error Messages

The file type is not supported.
Error converting the image to greyscale.

5.1.2 Save Pattern Files As

Menu -> File -> Save Pattern Files As

Ctrl + Shift + S

Toolbar, see 6.3 Save Pattern Files Button

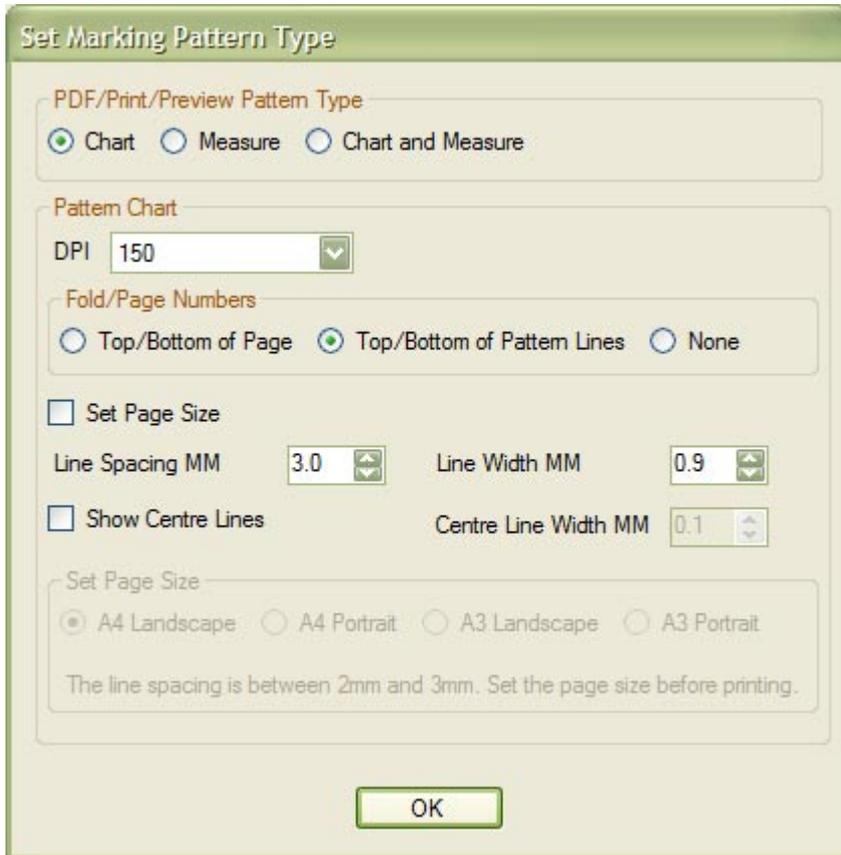
This will be greyed out if no pattern files exist.

Saves a set of pattern files to disk. The PDF file is created as an A4 or A3 page, but will be scaled when printed. Also see 8.6.1 Saving the Pattern Files.

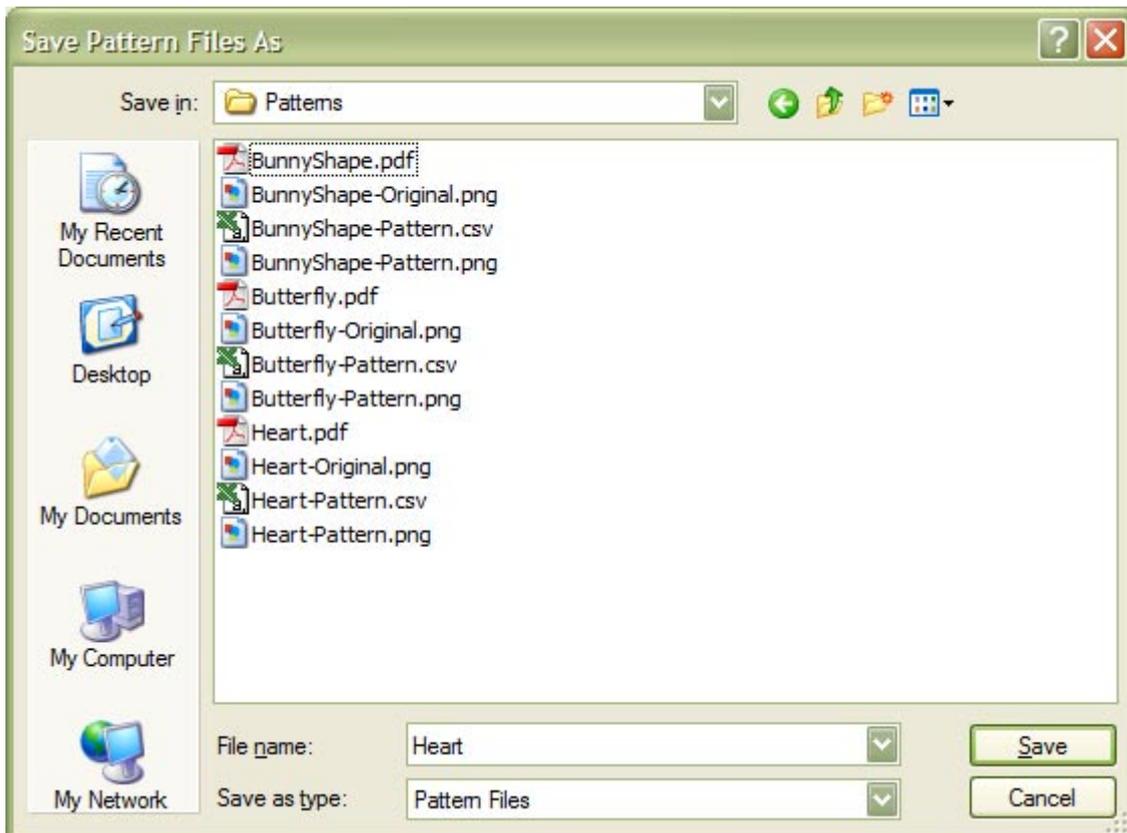
The 'Set Marking Pattern Type' will first appear. See 7.1 Set Marking Pattern Type Form.

Set the values then click the OK button to show the Save Pattern Files as dialogue form.

Picture 28 The Set Marking Pattern Type Form



Picture 29 Save the Pattern Files



Note: Patterns created with a large number of book leaves may take some time, and a Progress Bar will appear (see Picture 24 Progress Bar with Moving Blocks).

5.1.2.1 Error Messages

Error creating the pattern document.
Error creating the preview image.
Error saving the pattern files.
The pattern chart cannot be created.

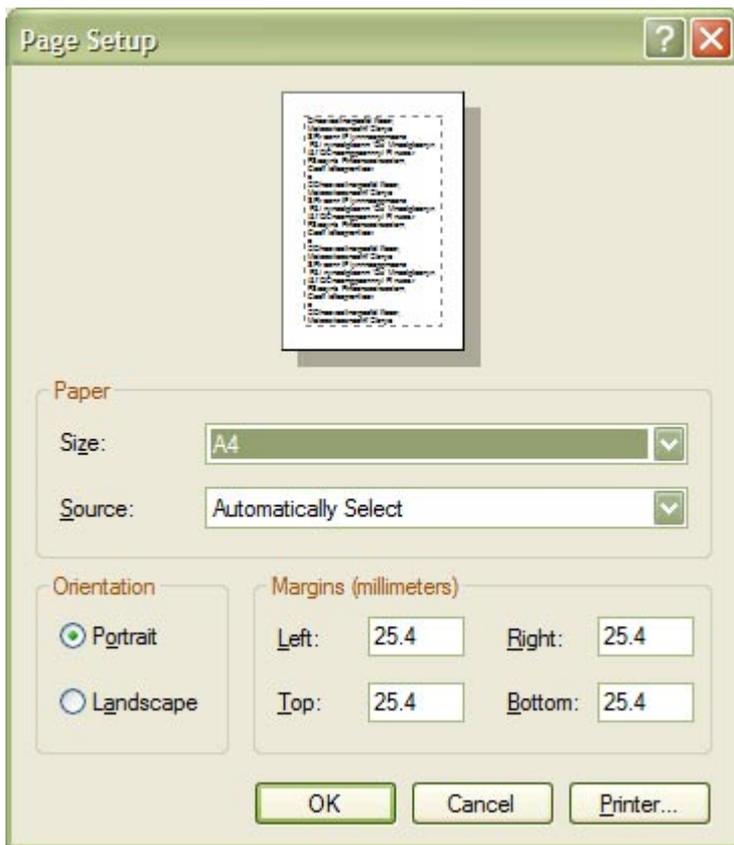
5.1.3 Page Setup

Menu -> File -> Page Setup

This is the standard Windows Page Set-up form that sets the paper size, paper orientation, paper/printer margins and printer.

Use A4/Letter, since the patterns are designed to fit onto an A4 sheet of paper.

Picture 30 Print Page Set-up Form



5.1.4 Print Preview

Menu -> File -> Print Preview

Toolbar, see 6.4 Print Preview Button

Is greyed out when there is no pattern files to print.

This is the standard Windows Print Preview form that shows what the patterns should look like when printed. This will also show what the PDF file will look like when the patterns are saved (see 8.6.1.5 The Pattern PDF File).

The 'Set Marking Pattern Type' will first appear. See 7.1 Set Marking Pattern Type Form.
Set the values then click the OK button to show the Print Preview Form dialogue.

Picture 31 The Set Marking Pattern Type Form

Set Marking Pattern Type

PDF/Print/Preview Pattern Type

Chart Measure Chart and Measure

Pattern Chart

DPI 150

Fold/Page Numbers

Top/Bottom of Page Top/Bottom of Pattern Lines None

Set Page Size

Line Spacing MM 3.0 Line Width MM 0.9

Show Centre Lines Centre Line Width MM 0.1

Set Page Size

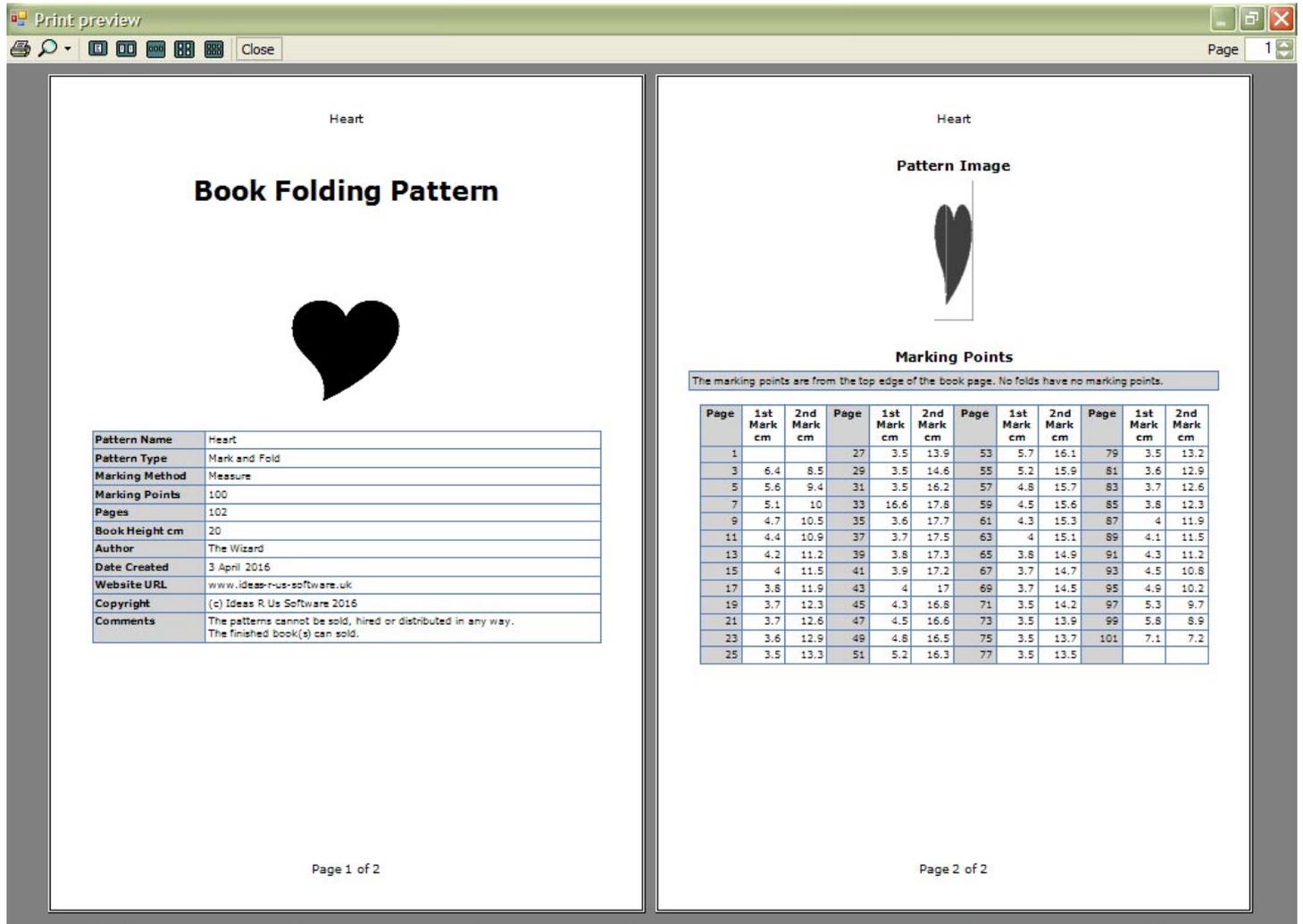
A4 Landscape A4 Portrait A3 Landscape A3 Portrait

The line spacing is between 2mm and 3mm. Set the page size before printing.

OK

Note: Patterns created with a large number of book leaves may take some time, and a Progress Bar will appear (see Picture 24 Progress Bar with Moving Blocks).

Picture 32 Print Preview Set-up Form (Shows the Mark and Fold Method Pattern)



5.1.4.1 Error Messages

- Error creating the pattern document.
- Error creating the preview image.
- Error saving the pattern files.
- The pattern chart cannot be created.

5.1.5 Print

- Menu -> File -> Print
- Ctrl + P
- Toolbar, see 6.5 Print Button

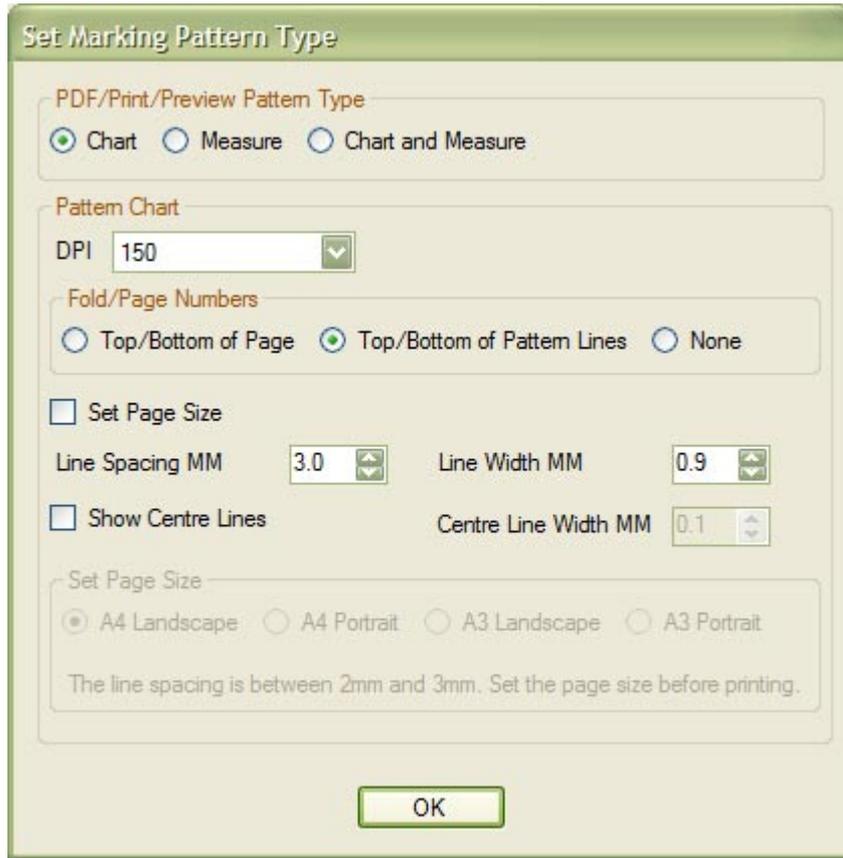
Is greyed out when there is no pattern files to print.

This is the standard Windows Print form where a printer can be selected. Make sure you've set it up correctly before clicking the 'Print' button.

The 'Set Marking Pattern Type' will first appear. See 7.1 Set Marking Pattern Type Form.

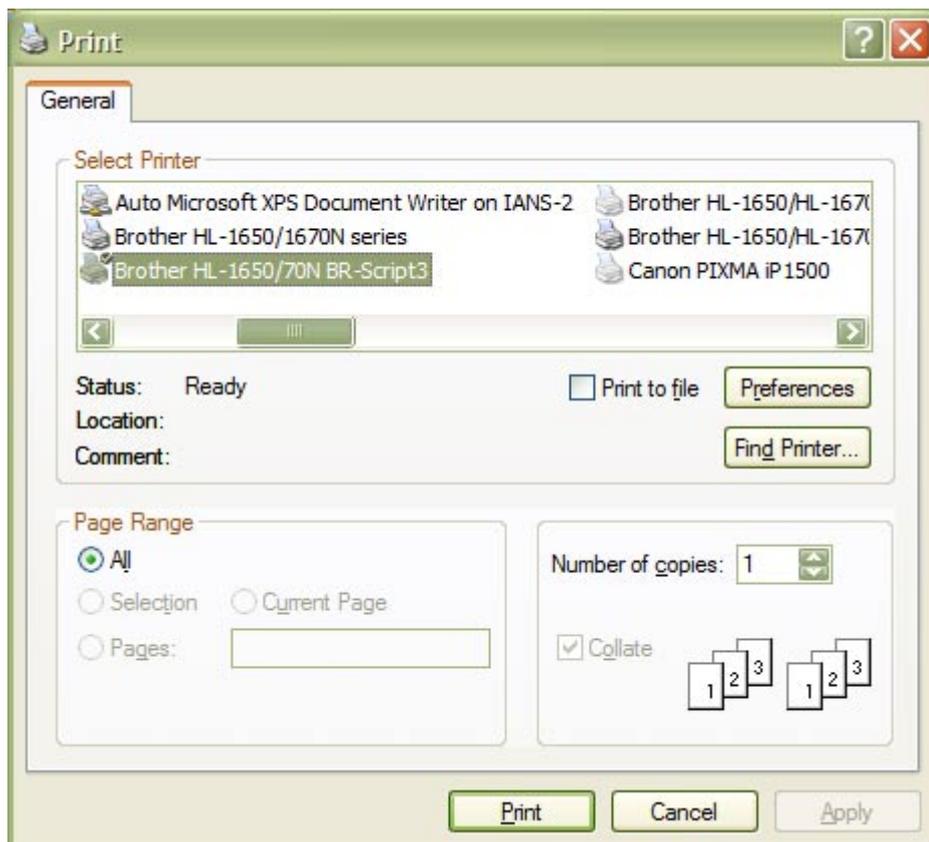
Set the values then click the OK button to show the Print Form dialogue.

Picture 33 The Set Marking Pattern Type Form



Note: Patterns created with a large number of book leaves may take some time, and a Progress Bar will appear (see Picture 24 Progress Bar with Moving Blocks).

Picture 34 Print Form



5.1.5.1 Error Messages

Error creating the pattern document.
Error creating the preview image.
Error saving the pattern files.
The pattern chart cannot be created.

5.1.6 Exit

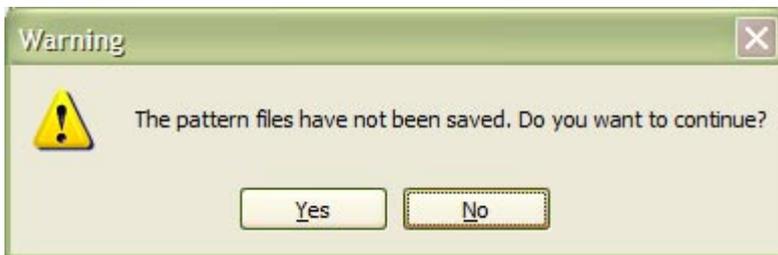
Menu -> File -> Exit

Alt + F4

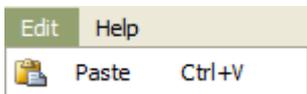
Exit or closes the application.

If the pattern files have not been saved, then a warning message will appear. Click 'No' to go back and save the pattern files, or 'Yes' to exit.

Picture 35 Warning of Unsaved Pattern Files



5.2 Edit Menu



- Paste

5.2.1 Paste

Menu -> Edit -> Paste

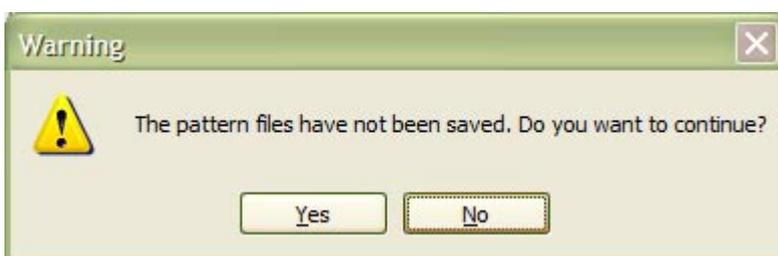
Ctrl + V

Toolbar, see 6.6 Paste Button

Pastes a copied raster image into the 'Original Image' picture box

If the pattern files have not been saved, then a warning message will appear. Click 'No' to go back and save the pattern files, or 'Yes' to continue.

Picture 36 Warning of Unsaved Pattern Files



5.3 Help Menu



- User Guide
- Installation Folder
- Check for Updates
- About

5.3.1 User Guide

Menu -> Help -> User Guide

You are reading it! This will open the PDF User Guide. A PDF reader must be installed to view the User Guide; otherwise an error message will be displayed.

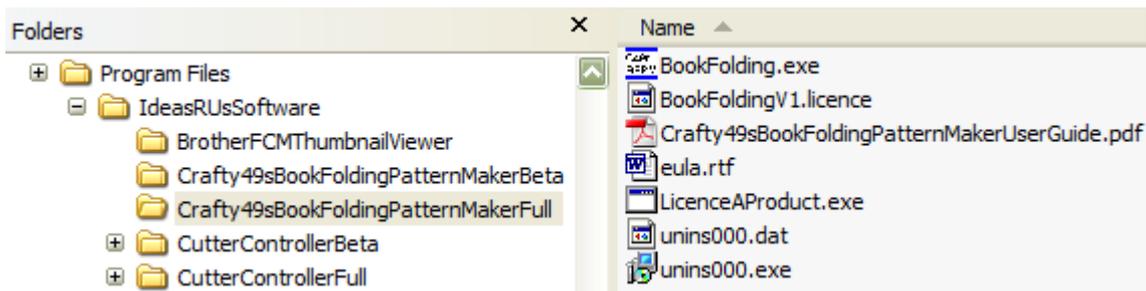
It is located in the Installation Folder, or in the Documents sub-folder (see 5.3.2 Installation Folder).

5.3.2 Installation Folder

Menu -> Help -> Installation Folder

This will open the folder where 'Crafty49's Book Folding Pattern Maker Folder' is installed. If it cannot, an error message will be displayed.

Picture 37 Installation Folder



5.3.3 Check for Updates

Menu -> Help -> Check for Updates

Ctrl + U

Checks if there is an update to the current application.

The latest release/update is also available from the Ideas R Us Software website (www.ideas-r-us-software.uk), from the Downloads web page.

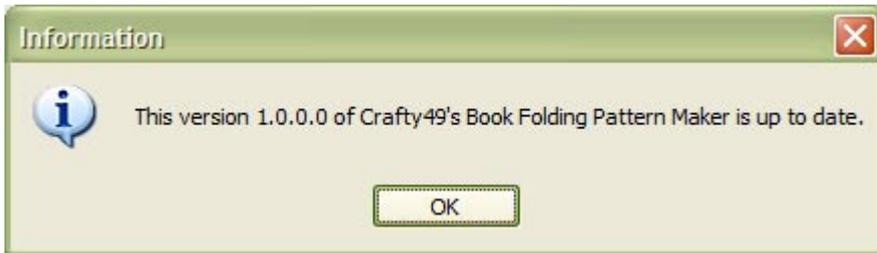
If the version is up to date, the message box in Picture 38 The Current Version is up to Date will be displayed.

If there is an update available, the message box in Picture 39 There is a New Version Available will be displayed.

If there is a problem with the network connection or the update server, the message box in Picture 40 Network Connection Problem or Picture 41 Update Server Problem will be displayed.

Note: There may be a delay before a pop-up message box, or an error message appears.

Picture 38 The Current Version is up to Date



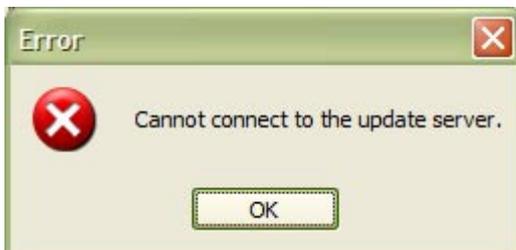
Picture 39 There is a New Version Available



Picture 40 Network Connection Problem



Picture 41 Update Server Problem



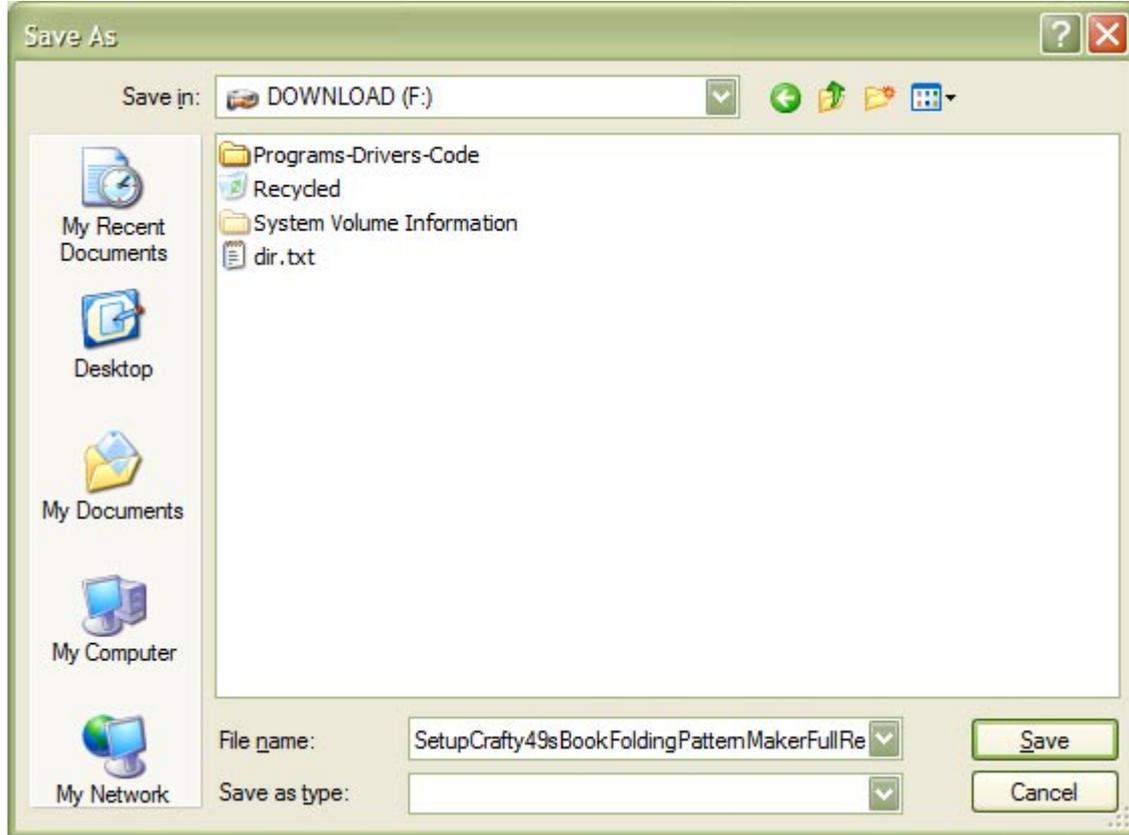
5.3.3.1 Download the New Version

To download the new version, click the 'Yes' button in Picture 39 There is a New Version Available, the 'Save As' dialogue box will appear (see Picture 42 Select the Location to Save the Set up File). Clicking the 'No' button will cancel the download.

Select the folder where the download file is to be saved (the file name can be renamed if required), then click the 'Save' button. After the file has finished downloading, a message will be displayed. Click the 'OK' button.

Note: There is a short delay while the file is downloading.

Picture 42 Select the Location to Save the Set up File



Picture 43 The File has downloaded



5.3.3.2 Installing the Update

To install the update, the Crafty49's Book Folding Pattern Maker application must be closed down.

An installation guide is available if help if needed with the install. See the Downloads web page from the Ideas R Us website (www.ideas-r-us-software.uk).

5.3.3.3 Other Error Messages

These are system errors.

- The version information on the server is incorrect.
- The version information file on the server is missing.
- The download link on the server is missing.

- The setup file on the server is missing.

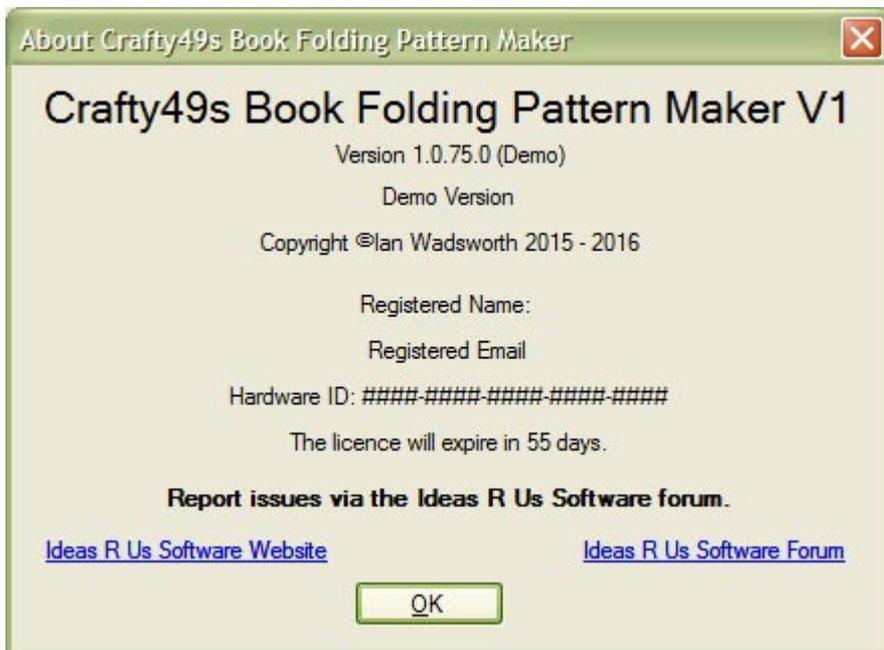
Note: Under certain conditions if the server is down or there is no network connection, these can also be displayed.

5.3.4 About

*Menu -> Help -> About
F1*

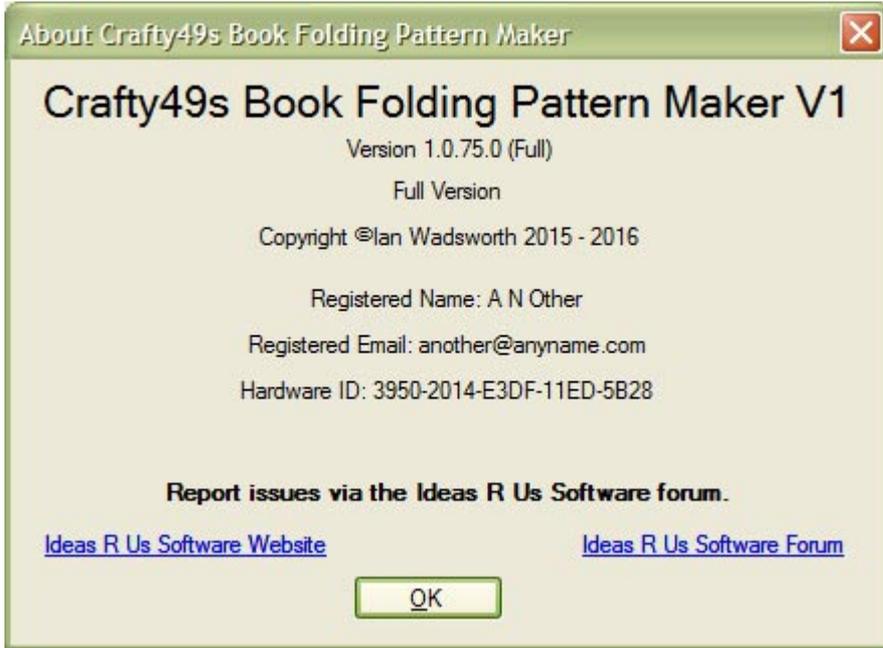
Shows the 'Crafty49's Book Folding Pattern Maker', which is just version information, and where to report issues with the application.

Picture 44 The 'About' Box for a Demo Version (Expiry Date Licence)



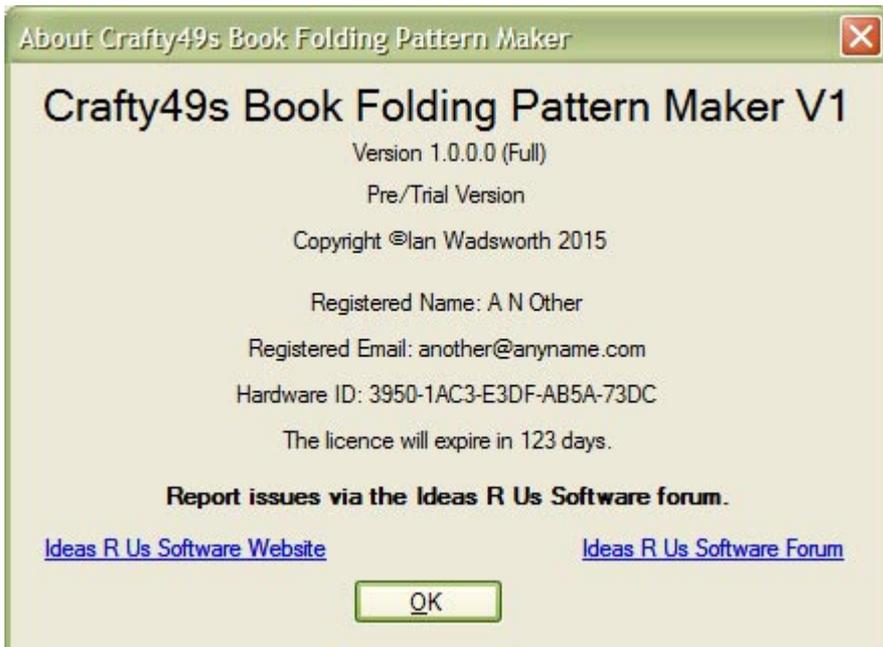
For a registered full release version, the information is as shown below.

Picture 45 The 'About' Box for a Full Release Version (Hardware Lock Licence)



For a registered Full Trial release version, the information is as shown below.

Picture 46 The 'About' Box for a Full Release Trial Version (Hardware/Expiry Date Licence)



6. Tool Bars



6.1 Overview

- Open
- Save Pattern Files As
- Print Preview
- Print
- Paste

6.2 Open Button



Opens a raster image file.

Also see the menu item in 5.1.1 Open.

6.3 Save Pattern Files Button



Saves the created pattern files to disk.

Also see the menu item in 5.1.2 Save Pattern Files As.

6.4 Print Preview Button



Previews the Marking Pattern and preview images to be printed.

Also see the menu item in 5.1.4 Print Preview

6.5 Print Button



Prints the created Marking Pattern and preview images to the selected printer.

Also see the menu item in 5.1.5 Print.

6.6 Paste Button



Pastes a copied clipboard raster image to the 'Original Image' picture box. Also see the menu item in 5.2.1 Paste.

7. Settings

7.1 Set Marking Pattern Type Form

Sets which marking pattern type or types will be in the PDF file or the print output.

This will appear when selecting Print, Print Preview or Save Pattern Files as.

The Chart images will also be saved when saving the pattern files (see 8.6.1 Saving the Pattern Files), even if the Chart option is not selected.

Picture 47 Set Marking Pattern Type Form

7.1.1 PDF/Print/Preview Pattern Type Group

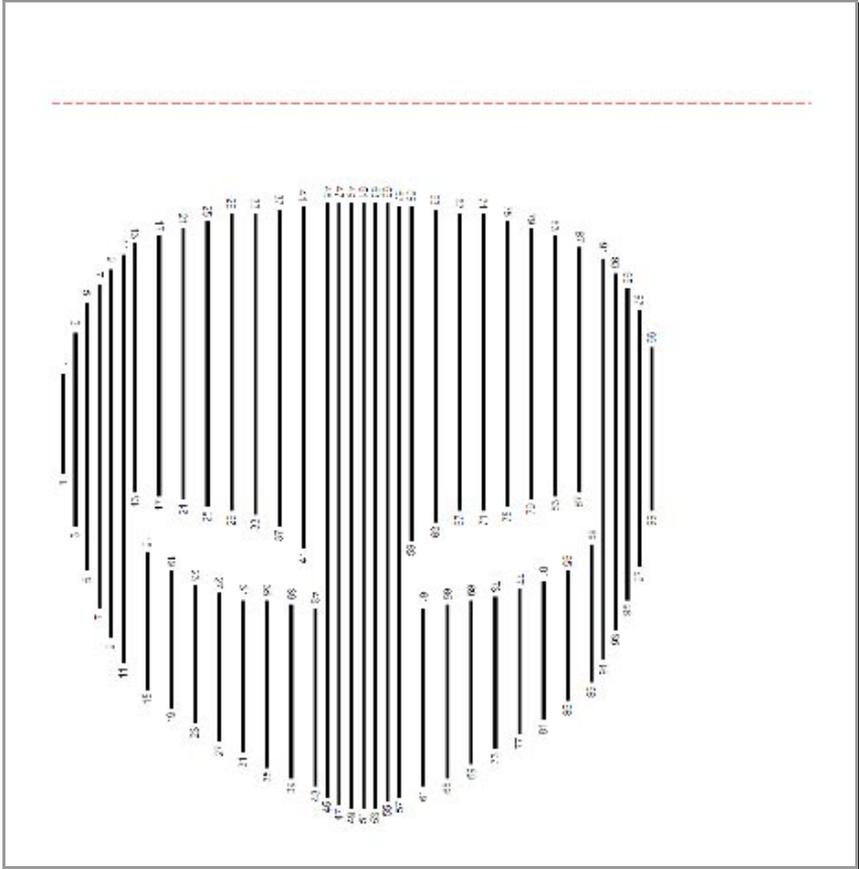
Select between Chart, Measure and Chart and Measure pattern types for the PDF or Print output. The methods can Cut and Fold or Measure and Fold.

7.1.1.1 Pattern Chart Type

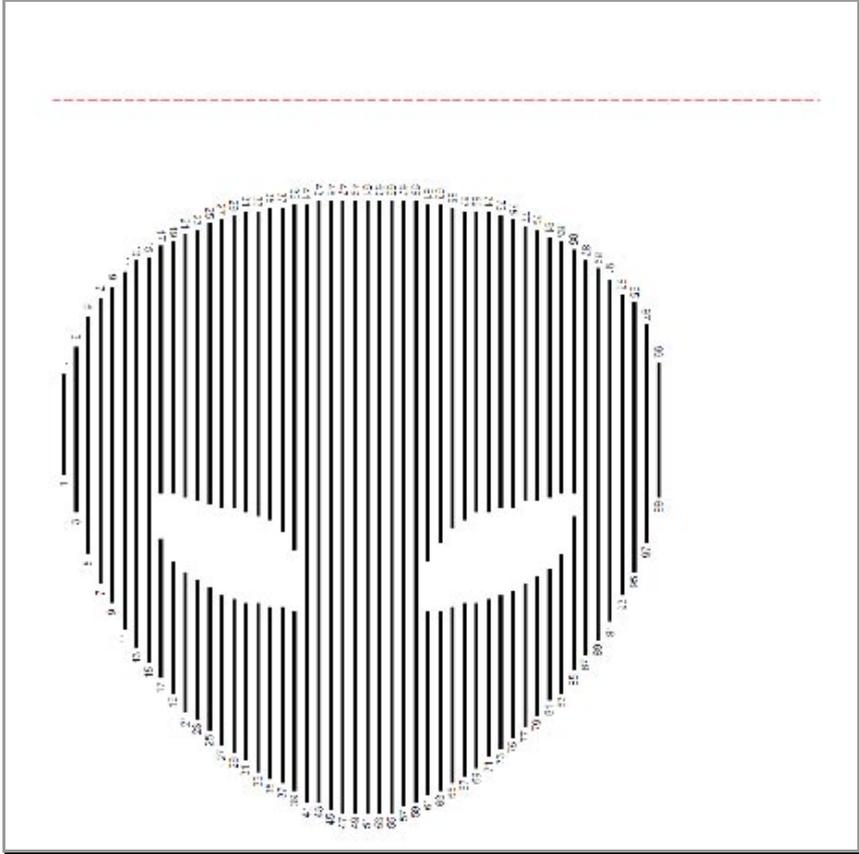
Picture 48 Pattern Chart Type Setting

This setting will create a Chart or Graph or Line or Stripe pattern that doesn't require the marking points to be measured. See Picture 49 Chart Pattern Type for Cut and Fold and Picture 50 Chart Pattern Type for Measure and Fold.

Picture 49 Chart Pattern Type for Cut and Fold



Picture 50 Chart Pattern Type for Measure and Fold



The PDF and Printed output has these problems: -

- Not be accurate from the top of the page, due to printer margins and fold/page margins
- The printer driver scales pattern to fit printer margins and page
- The Pattern Chart image is stretched to fit on the page.

7.1.1.2 Measure Type Pattern

Picture 51 Measure Type Pattern Setting



This setting will create a table of measuring values used to mark the cut/fold points. See Picture 52 Measure Pattern Type for Cut and Fold and Picture 53 Measure Pattern Type for Mark and Fold.

Picture 52 Measure Pattern Type for Cut and Fold

Heart

Pattern Image

Marking Points for Cut Lines

The marking points are from the top edge of the book page. No folds have no marking points.
SF = Spacer Fold

Page	Measure, Mark, Cut and Fold Marking Points cm												
1	5.9	6.4											
3	SF												
5	4.6	7.7											
7	SF												
9	4.1	8.4											
11	SF												
13	3.6	8.9											

Picture 53 Measure Pattern Type for Mark and Fold

Heart

Pattern Image



Marking Points

The marking points are from the top edge of the book page. No folds have no marking points.

Page	1st Mark cm	2nd Mark cm	Page	1st Mark cm	2nd Mark cm	Page	1st Mark cm	2nd Mark cm	Page	1st Mark cm	2nd Mark cm
1	5.9	6.4	77	1.5	13.9	153	4.2	16.5	229	1.5	13.2
3	5.1	7.1	79	1.5	14	155	4.1	16.4	231	1.5	13.1
5	4.6	7.7	81	1.5	14.3	157	3.9	16.4	233	1.5	13
7	4.2	8.1	83	1.5	14.6	159	3.6	16.3	235	1.5	12.9
9	4.1	8.4	85	1.5	15.1	161	3.5	16.2	237	1.6	12.7

7.1.1.3 Chart and Measure Pattern Type

Picture 54 Chart and Measure Type Pattern Setting

PDF/Print/Preview Pattern Type

Chart
 Measure
 Chart and Measure

This setting will create both a Chart and Measure Pattern type. See 7.1.1.1 Pattern Chart Type 7.1.1.2 Measure Type Pattern.

7.1.2 Pattern Chart Group

The settings can only be changed when the Pattern Type is Chart or Chart and Measure.

7.1.2.1 DPI

DPI

This is the DPI (Dots per Inch) of the Chart image. 75 DPI is the lowest quality, with 600 DPI being the highest quality.

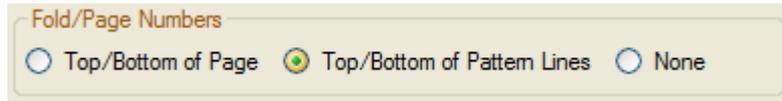
Picture 55 The Image Chart DPI Setting

DPI

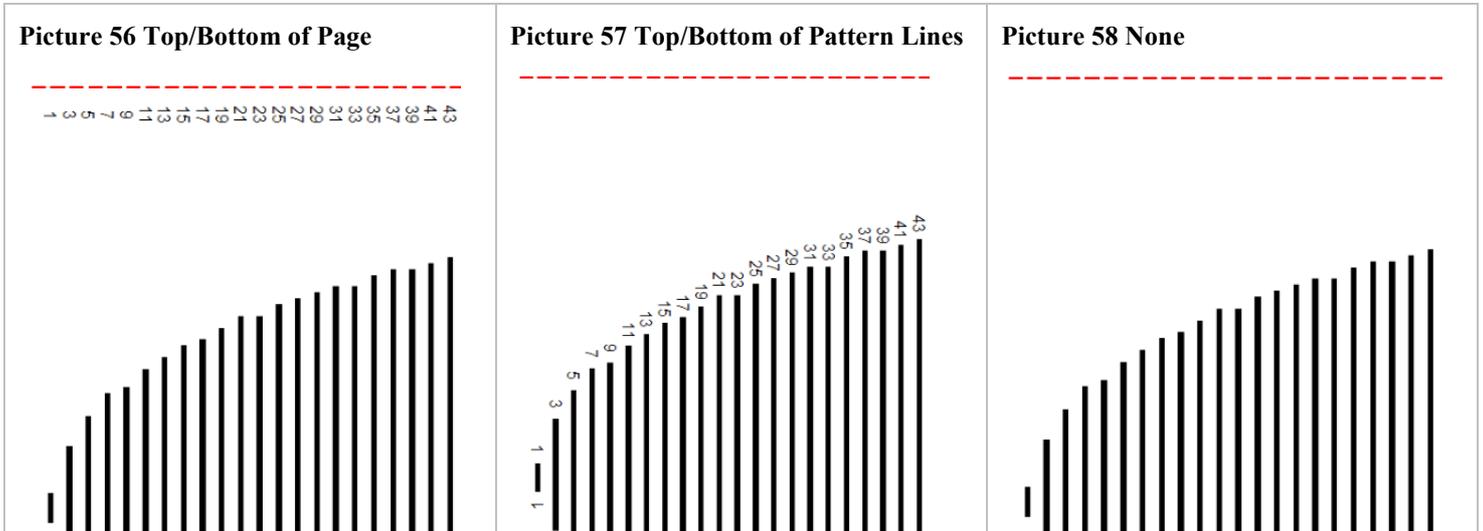
Fold

T

7.1.2.2 Fold/Page Numbers



Sets the position of the Fold or Page numbers. The top and bottom numbers are rotated by 180 degrees to each other.



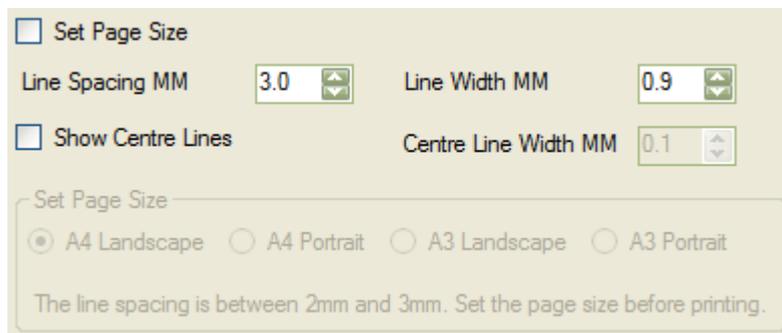
7.1.2.3 Set the Page Size



When the Set Page Size is not ticked, the Set Page Size options are disabled (see Picture 59 The Set Page Size Options are disabled).

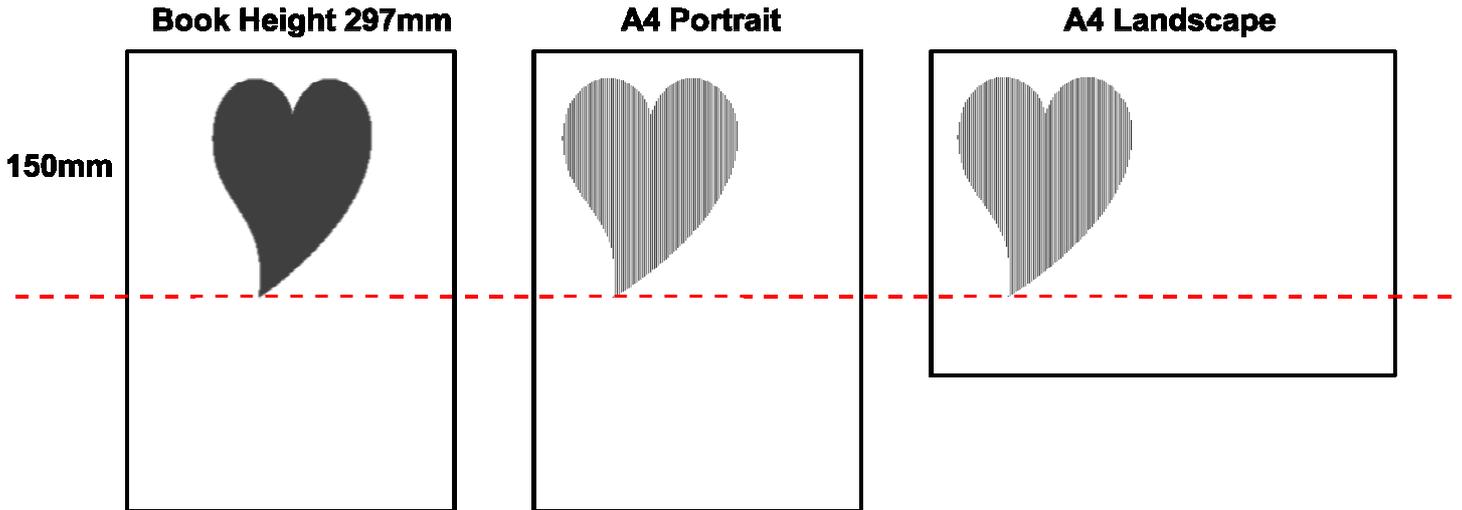
The Page Size and Orientation will be adjusted to fit the pattern height.

Picture 59 The Set Page Size Options are disabled



In Picture 60 Adjusting the Page Size and Orientation to fit on A4 Landscape, it shows the pattern height from the top of the book, to the bottom of the lines (the red dashed line) is 150mm. The book height is 297mm, which is the same size as an A4 Portrait page. The Pattern Chart won't be on an A4 Portrait, since it will fit onto A4 Landscape.

Picture 60 Adjusting the Page Size and Orientation to fit on A4 Landscape



The sequence of page size adjustment is: -

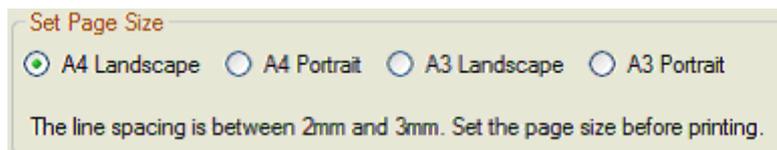
- A4 Landscape, 297mm x 210mm
- A4 Portrait, 210mm x 297mm
- A3 Landscape, 420mm x 297mm
- A3 Portrait, 297mm x 420mm

Picture 61 Set Page Size Option Checked



When the Set Page Size is ticked, the Set Page Size options are enabled.

Picture 62 Set Page Size Option

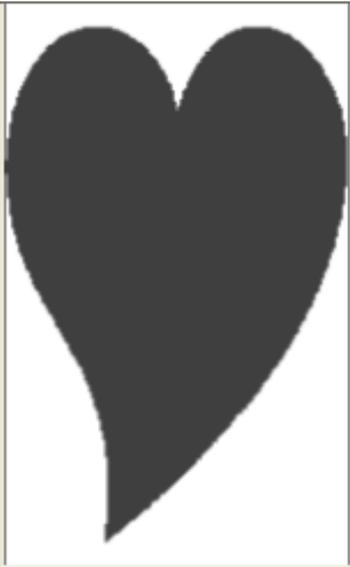


This does not fit the Chart Pattern to a single page, but will reduce the Chart Pattern height to fit the height of the page. The Line Spacing will be adjusted between 2 to 3mm, and there may be more than one page.

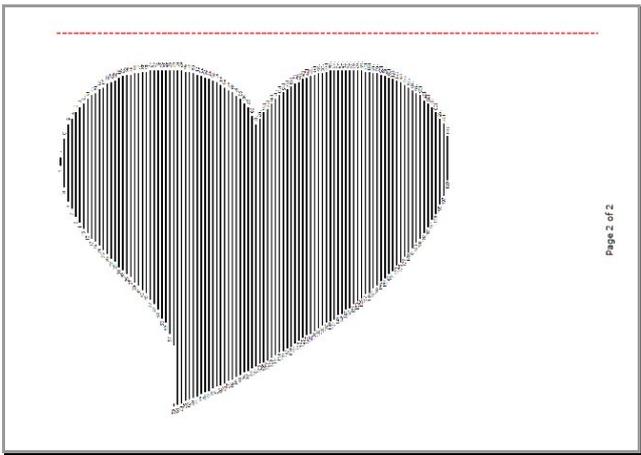
It will not increase the pattern height to fit the page (see Picture 63 The Book Height 300mm Picture 64 300mm Chart Pattern on a A4 Landscape Page).

If the book height were 300mm, it would normally require an A3 Landscape page. With A4 Landscape selected, the Chart Pattern height will be adjusted to fit on an A4 Landscape page (see Picture 64 300mm Chart Pattern on a A4 Landscape Page). The number of A4 pages used is dependant on the number of book leaves.

Picture 63 The Book Height 300mm

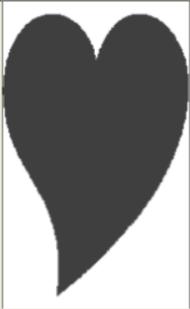


Picture 64 300mm Chart Pattern on a A4 Landscape Page

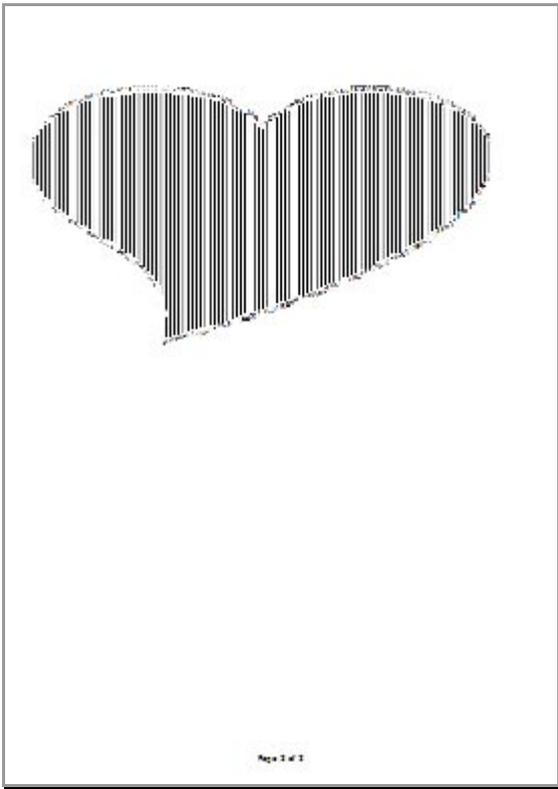


If the Book Height is smaller then the selected page size, the Chart Pattern is not adjusted to the height of the page (see Picture 66 175mm Chart Pattern on a A3 Portrait Page). The number of A3 pages used is dependant on the number of book leaves.

Picture 65 The Book Height 175mm



Picture 66 175mm Chart Pattern on a A3 Portrait Page



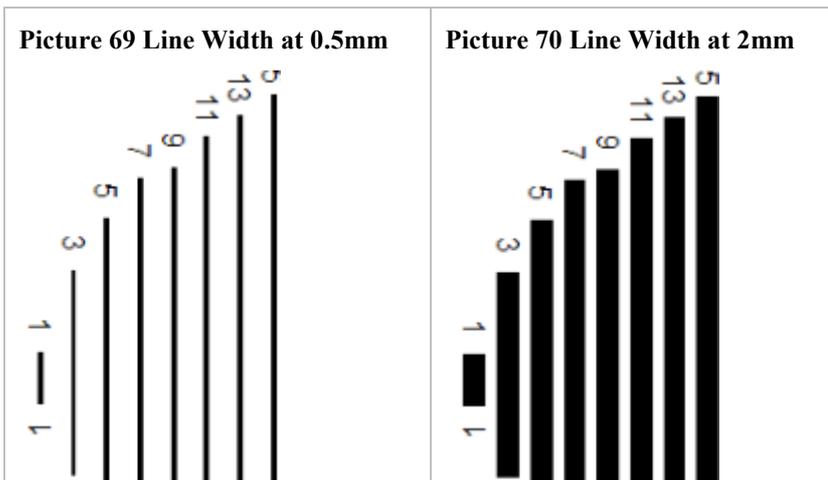
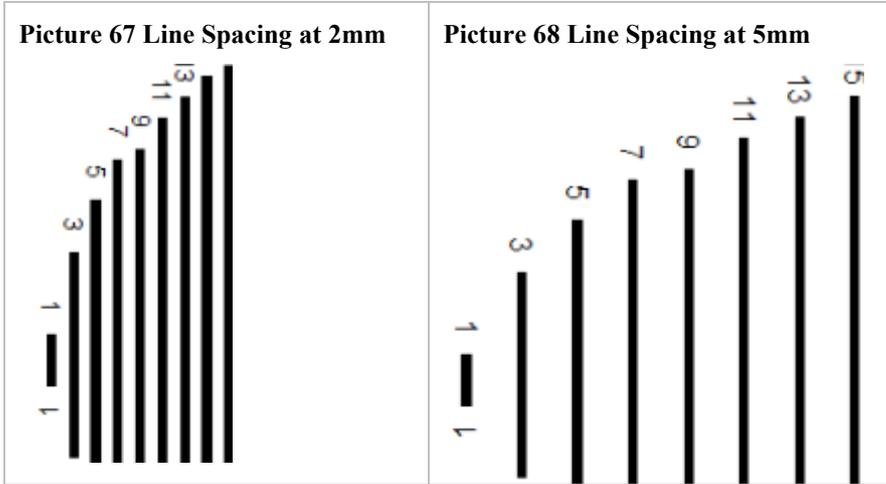
7.1.2.4 The Line Spacing and Line Width

Line Spacing MM

Line Width MM

This can only be set when the Set Page Size is not ticked.

This is the Line Spacing and Line Width between the Pattern Lines. The Line Spacing is from 2mm to 5mm, and the Line Width is from 0.5mm to 2mm.



7.1.2.5 Show Centre Lines and Centre Line Width

Show Centre Lines

When the Show Centre Lines option is ticked, lines the full length of the pattern, from the top of the Pattern (see Picture 73 Centre Lines at the Top of the Pattern Chart), to the bottom of the Pattern (see Picture 74 Centre Lines at the Bottom of the Pattern Chart) will be drawn using the Centre Line Width value (from 0.1mm to 0.5mm).

Picture 71 The Show Centre Lines Option Ticked

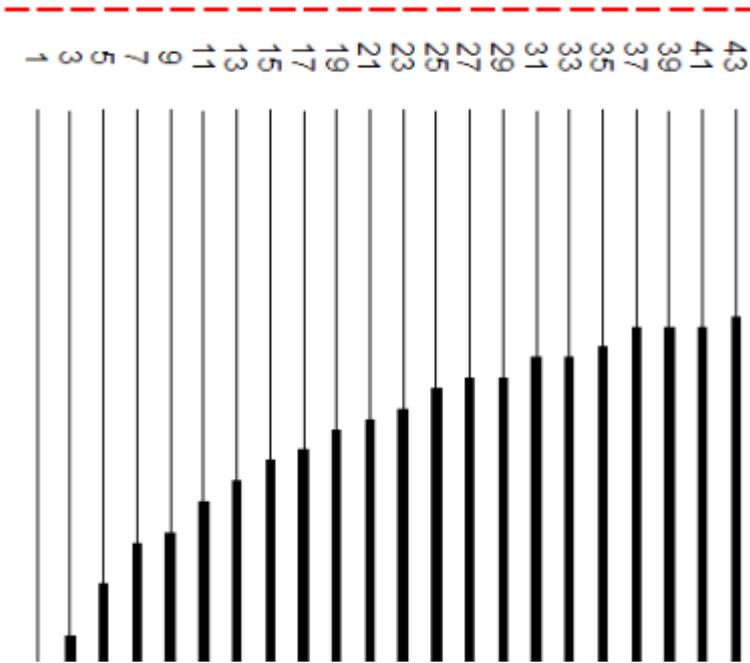
Show Centre Lines

The Centre Line Width can only be changed when the Show Centre Line option is ticked.

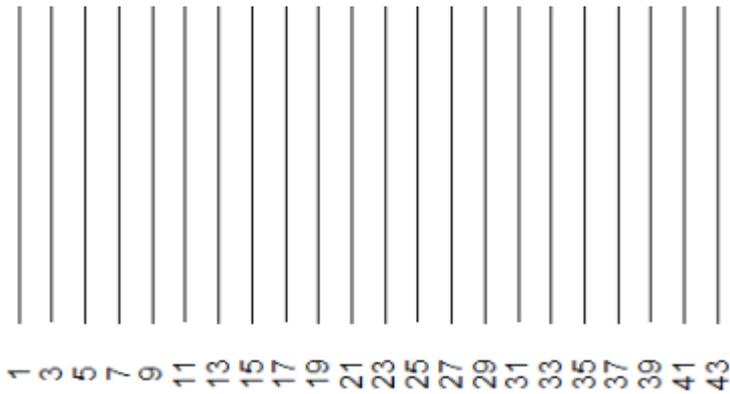
Picture 72 Centre Line Width Control

Centre Line Width MM

Picture 73 Centre Lines at the Top of the Pattern Chart



Picture 74 Centre Lines at the Bottom of the Pattern Chart



7.1.2.6 Known Issues

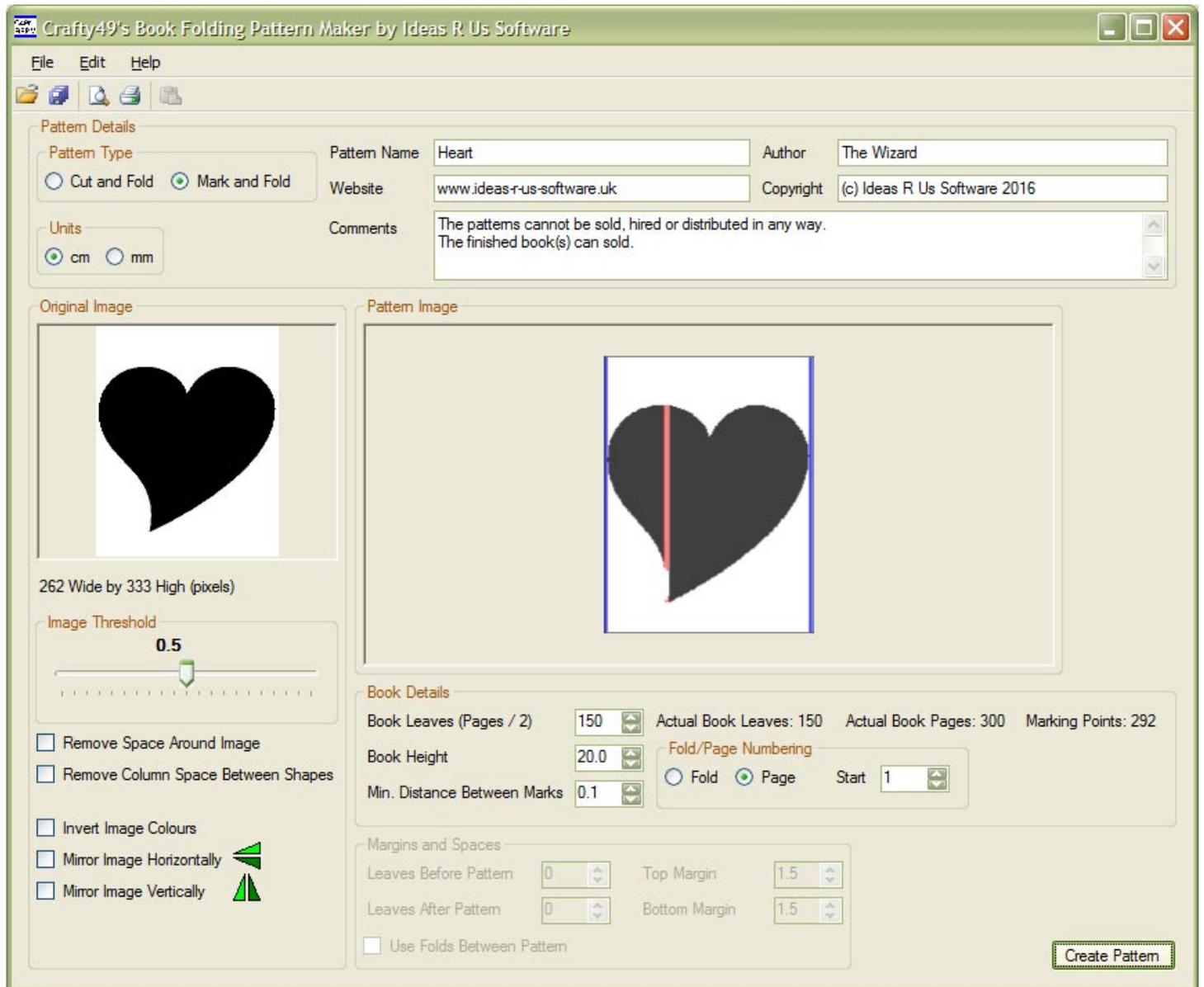
- There may be only one Pattern Line on the page
- The Pattern Chart isn't centred

8. Group Panels

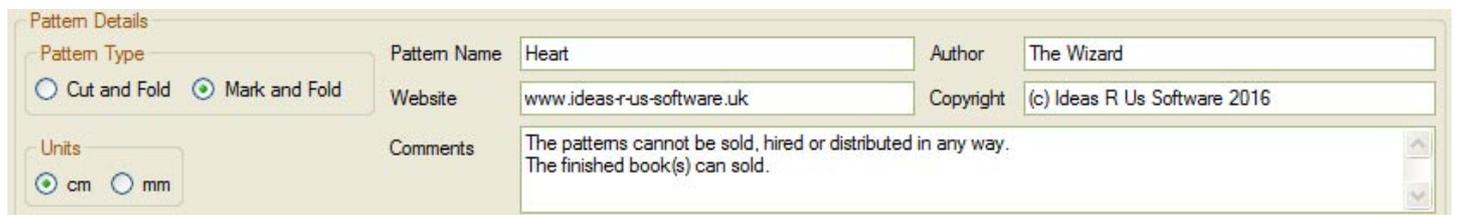
- Pattern Details
- Original Image
- Pattern Image
- Book Details

Changing any of the values in these group panels will disable the printing and saving functions until the pattern is created again.

Picture 75 Screen Shot of the Crafty49's Book Folding Pattern Maker



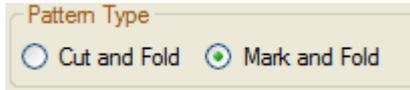
8.1 Pattern Details



8.1.1 Pattern Type

The pattern type can either be Cut and Fold (Measure, Mark, Cut and Fold) or Mark and Fold (Measure, Mark and Fold) method.

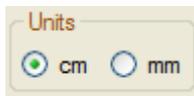
Picture 76 The Pattern Type



8.1.2 Units

Selecting either cm (centimetres) or mm (millimetres) for the units will change the Book Height, Minimum Distance Between Marks, the Top and Bottom Margins, and the Marking Points on the pattern.

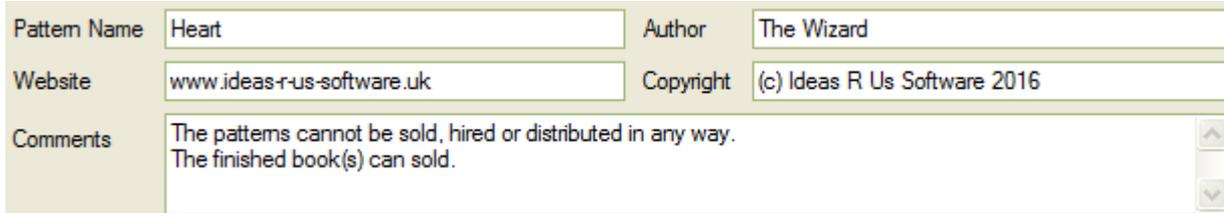
Picture 77 The Units



8.1.3 Other Pattern Details

The Pattern Name, Author, Website, Copyright and Comments will be added to the printable or PDF file Pattern documents (see Picture 79 The Pattern Details from the Pattern Document).

Picture 78 Pattern Name, Author, Website, Copyright, and Comments Details



Picture 79 The Pattern Details from the Pattern Document

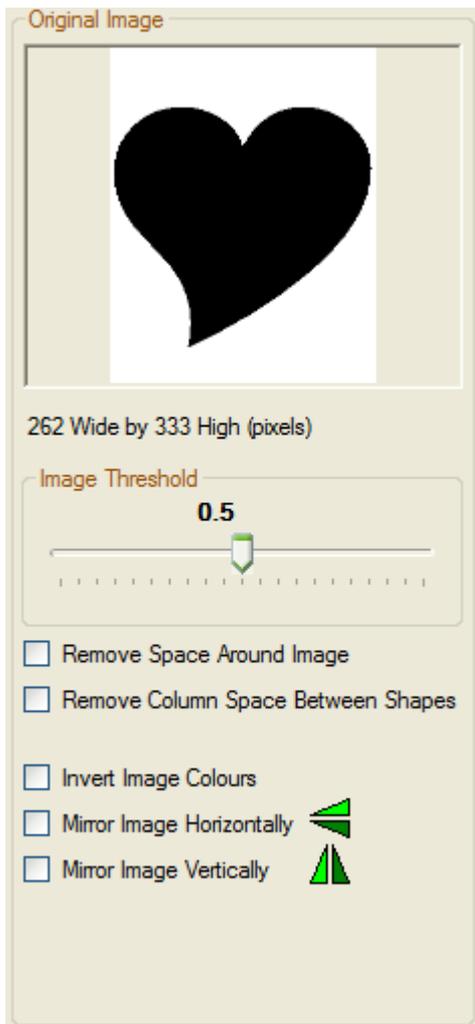
Pattern Name	Heart
Pattern Type	Mark and Fold
Marking Method	Chart
Marking Points	292
Pages	300
Book Height cm	20
Author	The Wizard
Date Created	29 March 2016
Website URL	www.ideas-r-us-software.uk
Copyright	(c) Ideas R Us Software 2016
Comments	The patterns cannot be sold, hired or distributed in any way. The finished book(s) can sold.

8.2 Original Bitmap or Raster Image

This is the raster image file that is used to create the pattern files (see Picture 80 The Original Image for Creating Pattern Files). It is not the original source image or file, which may be in colour.

Opening a file, dragging a file, or pasting a file will reset the Image Threshold to 0.5, and un-tick all the check boxes in the Original Image group box.

Picture 80 The Original Image for Creating Pattern Files



8.2.1 Image Width and Height

The image's width and height is displayed (see Picture 81 The Threshold at 0.5).

The size of the original image will be scaled to the height (image height) and to the number of folds (image width) of the book. So a book pattern of 200mm high and 100 folds (200 pages) will be scaled to 200 pixels high by 100 pixels wide.

8.2.2 Image Threshold

Adjusting the threshold value will change the density of the image. A correct value can be around 0.5 (see Picture 81 The Threshold at 0.5), but this is not always the case.

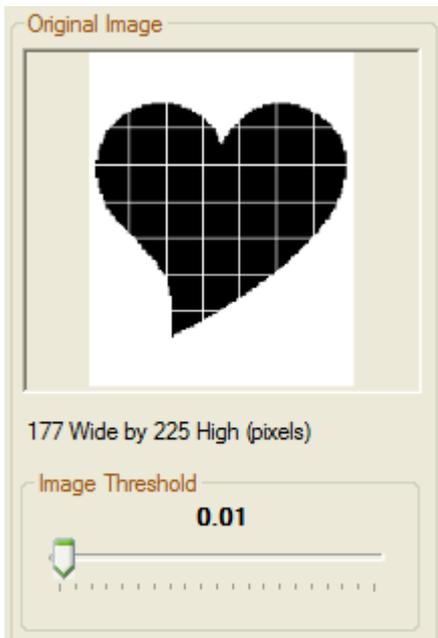
If the value is too low, the image will be light and have no fill (see Picture 82 The Threshold at 0.01).

If the value is too high, the image will have the very light areas becoming dark, or the entire image will be black (see Picture 83 The Threshold at 1.0).

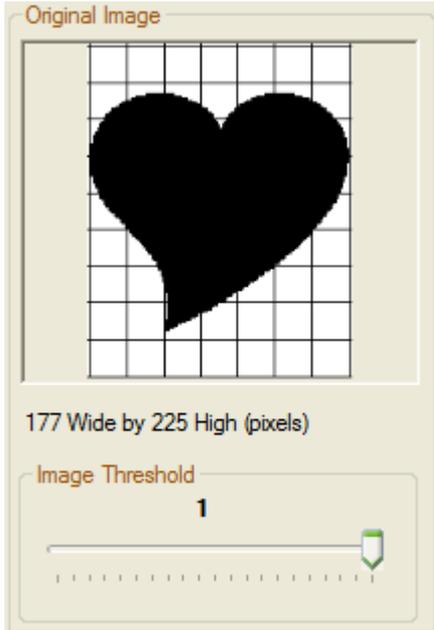
Picture 81 The Threshold at 0.5



Picture 82 The Threshold at 0.01



Picture 83 The Threshold at 1.0



8.2.3 Remove Space Around Image



When ticked, all the space around the black is removed (see Picture 85 After Space has been removed around the Image).

Picture 84 Before the Space has been removed around the Image



Picture 85 After Space has been removed around the Image



8.2.4 Remove Column Space Between Shapes

Remove Column Space Between Shapes

Blank (non-black) columns will produce patterns that have blank or unfolded book leaves. In most cases this is not required, but in some it is. Checking or ticking the 'Remove Column Space Between Shapes' will remove any blank column from between the black parts of the image. See Picture 87 After Column Space Between Shapes has been removed.

This may not be always desirable. In Picture 87 After Column Space Between Shapes has been removed, both the letters 'L' in 'Hello' have been merged together.

Picture 86 Before Column Space Between Shapes has been removed



Picture 87 After Column Space Between Shapes has been removed



8.2.5 Invert Image Colours

When ticked, the image colours are inverted (made negative), black becomes white, and white becomes black.

Invert Image Colours

Picture 88 The Image with the Colours Inverted



8.2.6 Mirror Image Horizontally



When ticked, the image is mirrored or flipped about the horizontal axis.

Picture 89 The Image Mirrored Horizontally



8.2.7 Mirror Image Vertically



When ticked, the image is mirrored or flipped about the vertical axis.

Picture 90 The Image Mirrored Vertically



8.2.8 Error Messages

Error adjusting the image threshold.

Error removing space from around the image.

Error processing the image.

Error removing columns from the image.

Error inverting the image.

8.3 Pattern Image



- Cut and Fold (is Measure, Mark, Cut and Fold)
- Mark and Fold (is Measure, Mark and Fold)

This does not show what the finished width of the folded book will look like, since: -

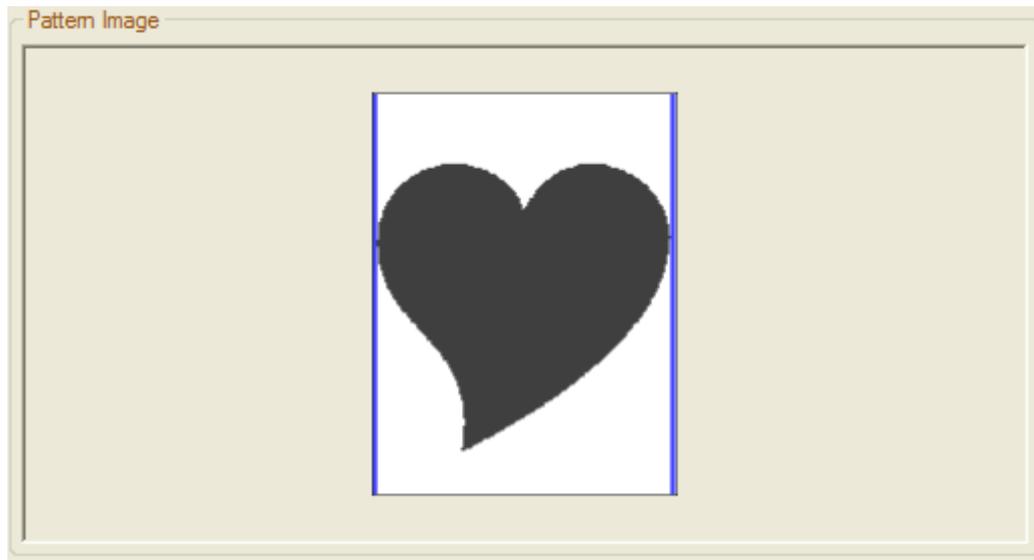
- The number of fold/pages
- Depends on how tightly the folds are made
- How flat the folds lie
- How much the book is 'squished' (flattened)

See also Picture 93 The Effects of Reducing the Pattern Preview Image (Mark and Fold).

8.3.1 Cut and Fold Method

This is created after the 'Create Pattern' button has been clicked. The blue lines are blank folds; see Picture 91 The Created Pattern Image (Cut and Fold).

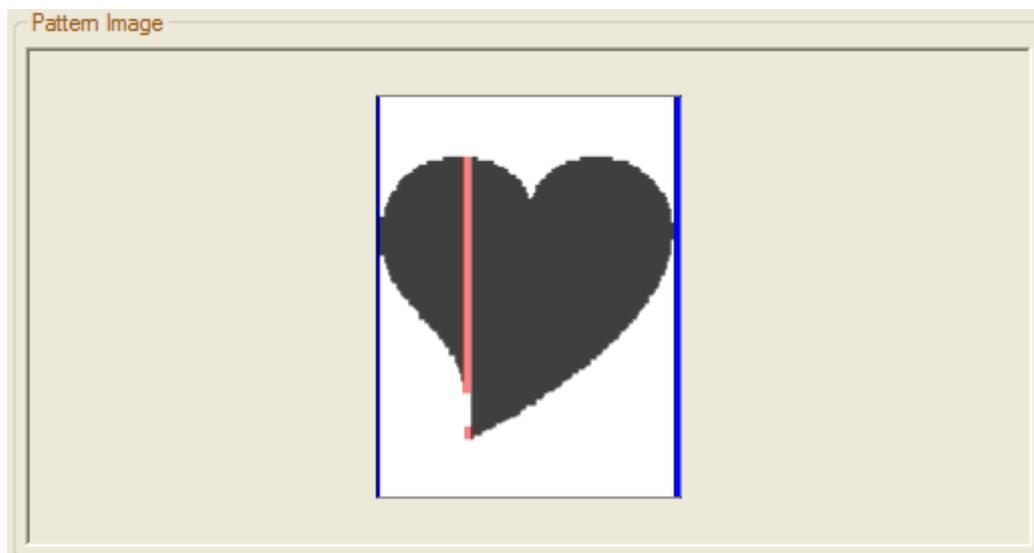
Picture 91 The Created Pattern Image (Cut and Fold)



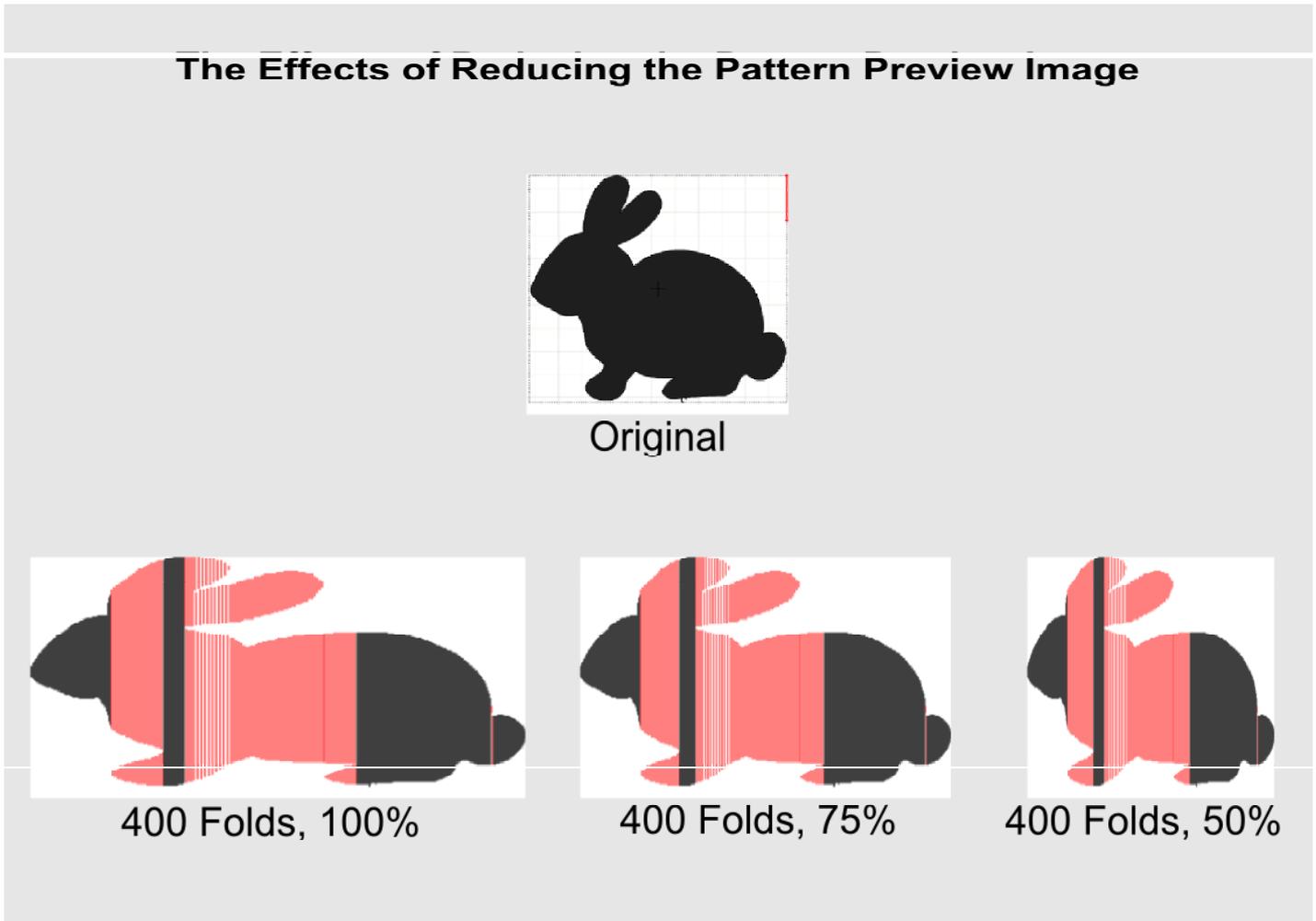
8.3.2 Mark and Fold Method

This is created after the 'Create Pattern' button has been clicked. The blue lines are blank folds, and the red lines are 'alternate folds' (see Picture 92 The Created Pattern Image (Mark and Fold)).

Picture 92 The Created Pattern Image (Mark and Fold)



Picture 93 The Effects of Reducing the Pattern Preview Image (Mark and Fold)



8.4 Pattern Settings

The Pattern Settings default values are below when the application is first started.

Picture 94 Pattern Settings

Book Details

Book Leaves (Pages / 2) 50 Actual Book Leaves: 0 Actual Book Pages: 0 Points: 0

Book Height 20.0

Min. Distance Between Marks 0.1

Fold/Page Numbering

Fold Page Start 1

Margins and Spaces

Leaves Before Pattern 0 Top Margin 1.5

Leaves After Pattern 0 Bottom Margin 1.5

Use Folds Between Pattern

Create Pattern

8.4.1 Book Leaves

This is the number of required book leaves, but more or less can be created.

The values are from 10 to 1,000 inclusive.

A book leaf is not the same as a book page. A book leaf has two sides or two pages.

The higher the number of book leaves, the finer the pattern, but the longer it will take to fold or cut and fold.

The Actual Book Leaves may not be the same as the required number of book leaves, see Picture 95 Book Parameters and Actual Used Book Folds and Pages.

Picture 95 Book Parameters and Actual Used Book Folds and Pages

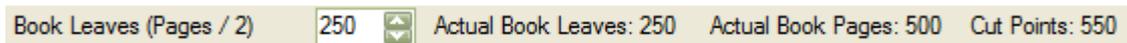


The screenshot shows a control panel titled "Book Details" with the following settings:

- Book Leaves (Pages / 2): 250
- Actual Book Leaves: 251
- Actual Book Pages: 502
- Marking Points: 420
- Book Height: 20.0
- Min. Distance Between Marks: 0.1
- Fold/Page Numbering: Fold Page
- Start: 1

8.4.1.1 Cut and Fold Only

The Cut Points are the number of cuts to be made. This number is also in the Pattern Details Document Table; see Picture 127 The 1st Page of the Pattern Document (Cut and Fold).



The screenshot shows the control panel with the following settings:

- Book Leaves (Pages / 2): 250
- Actual Book Leaves: 250
- Actual Book Pages: 500
- Cut Points: 550

8.4.1.2 Mark and Fold Only

If the book contains 300 pages, then set the Book Leaves to half of that, or 150. The final number of book pages is dependant on whether the image produces 'alternate' folds.

Normally there are only two folds per book leaf, one at each corner. If a line through the drawing is split into two or more parts (the centre of the letter 'O' for instance), each of the lines will be folded onto alternate book leaves. See the red lines in the pattern preview for Picture 117 The Pattern Preview Image Showing Alternate Folds in Red (Mark and Fold).

The Marking Points are the number folds to be made. This number is also in the Pattern Details Document Table; see Picture 130 The 1st Page of the Pattern Document (Mark and Fold).



The screenshot shows the control panel with the following settings:

- Book Leaves (Pages / 2): 250
- Actual Book Leaves: 251
- Actual Book Pages: 502
- Marking Points: 420

8.4.2 Book Height

This is the height of the book, which is parallel to the book's spine.

The values are from 5 to 40cm or 50 to 400mm inclusive.

8.4.3 Minimum Distance Between Marks

The minimum distance between pairs of marking points, or the minimum length of the vertical black and red lines on the Pattern Preview image. For Cut and Fold, it is also the minimum gap between two vertical black lines.

A value of 1mm will exclude all that are 1mm or less. Increasing this value will reduce the number of folded pages, and the level of detail.

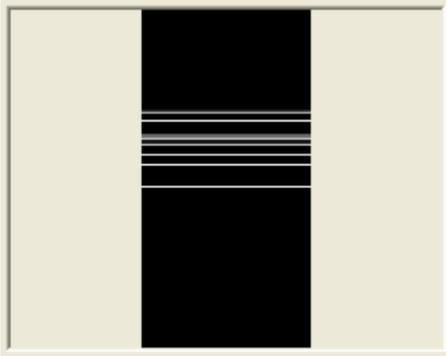
The values are from 0.1cm to 1cm or 1 to 10mm inclusive.

8.4.3.1 Cut and Fold

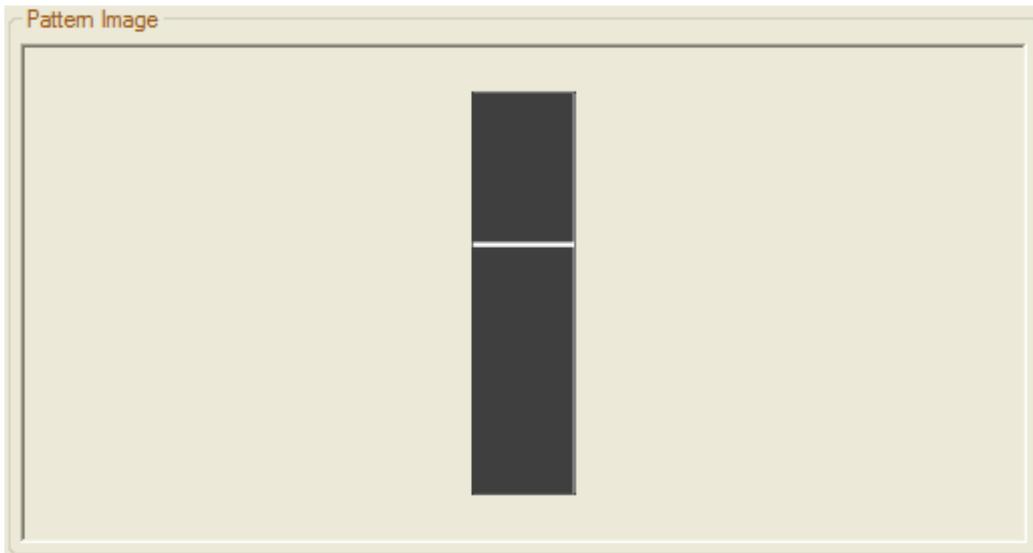
For the Cut and Fold method, the lines can be merged.

When set to 2mm, the lines are merged. This can produce a distorted image see Picture 97 The 1mm Lines are merged to into 1 2mm Line.

Picture 96 An Image with 1mm White Line



Picture 97 The 1mm Lines are merged to into 1 2mm Line



8.4.4 Fold and Page Numbering

The Pattern Files numbering can be set to either Folds or Pages.

When Fold numbering is used, the sequence is all the numbers, e.g. 1, 2, 3, 4...

When Page numbering is used, the sequence will be odd, e.g. 1, 3, 5, 7...

The Start number is fold/page start sequence. The minimum value is 1, and the maximum value is 25% of the required Book Leaves (see 8.4.1 Book Leaves).

A book with 100 folds or 200 pages will have a maximum Start value of 25 folds, or 50 pages.

For Page numbering, the Start number is odd (1, 3, 5, etc).

Picture 98 Fold and Page Numbering



8.4.5 Margins and Spaces

This is only active when the 'Remove Space Around Image' check box is ticked (see 8.2.3 Remove Space Around Image). Changes to the Leaves Before, Leaves After, Top Margin, Bottom Margin, and Folds Between Pattern will only appear in the Pattern Image picture box (not the Original Image), when the 'Create Pattern' button is clicked.

Picture 99 Margins and Spaces (Mark and Fold)



Picture 100 The Original Image after the Space Around has been removed

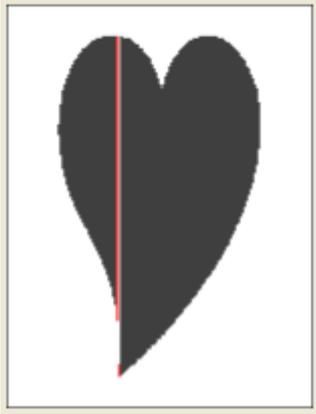


8.4.6 Leaves Before and After Pattern

These are the unmarked or uncut leaves (they may also be folded) before or after the pattern image. This does not change the required number of Book Leaves.

The minimum values are 0, and the maximum values are 25% of the required Book Leaves (see 8.4.1 Book Leaves).

Picture 101 The Pattern Image with Leaves Before and After the Pattern



8.4.7 Top and Bottom Margins

This is the space that is added to the Top and Bottom of the pattern image.

The minimum values are 1.3cm (13mm), and the maximum values are 25% of the Book Height (see 8.4.2 Book Height).

Picture 102 The Pattern Image with Top and Bottom Margins



8.4.8 Use Folds Between Pattern (Cut and Fold)

This will only be enabled with the Cut and Fold Pattern Type (see 8.1.1 Pattern Type).

Normally the page is folded down to add some 'bulk' or 'fill' to the pattern. In Picture 103 The Book on the Left uses Folds between the Pattern by Chris Ashworth ©2016, the book on the left uses folds between the pattern, whilst the book on the right does not.

Picture 103 The Book on the Left uses Folds between the Pattern by Chris Ashworth ©2016



When use folds option is ticked, the pattern image becomes grey (see Picture 105 With Folds Between the Pattern Image).

Picture 104 No Folds Between the Pattern Image



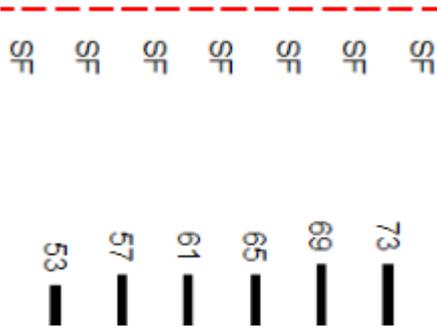
Picture 105 With Folds Between the Pattern Image



On the created patterns (Print or PDF) they are indicated by the abbreviation SF (Spacer Folds) for both the Chart and Table patterns.

Picture 106 Spacer Folds on a Chart Pattern

Heart



Picture 107 Spacer Folds on a Table Pattern

Page			
1	5.9	6.4	
3	SF		
5	4.6	7.7	
7	SF		
9	4.1	8.4	
11	SF		

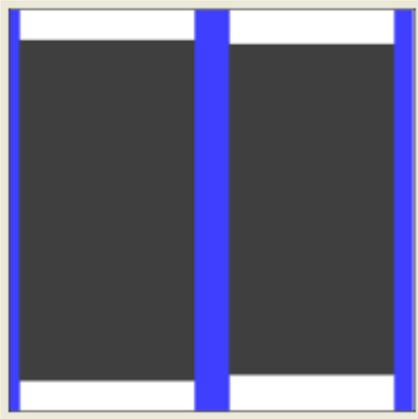
8.5 Create Pattern Button

The Pattern Preview Images will be different depending if the pattern type is Cut and Fold or Mark and Fold (see 8.1.1 Pattern Type).

Click on the 'Create Pattern' button, and the preview pattern image and actual or calculated book folds/pages used are created.

The thin black rectangle is the preview pattern image's border, the black lines are the normal folds, and the blue lines are blank or un-folded leaves.

Picture 108 The Pattern Preview Image Showing Un-folded Leaves in Blue in the Centre



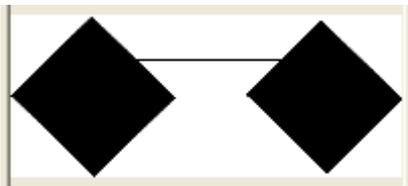
The 'ticking' of the 'Remove Column Space Between Shapes' and 'Min Distance Between Marks' affects the Pattern Image after the 'Create Pattern' is clicked.

In Picture 110 Original Image with Thin Black Line of Less than 1mm, the width of the line is less than 1mm. This setting will remove the line and replace it with blank leaves/pages (indicated by the blue lines) as shown in Picture 111 Pattern Image with the Thin Line Removed.

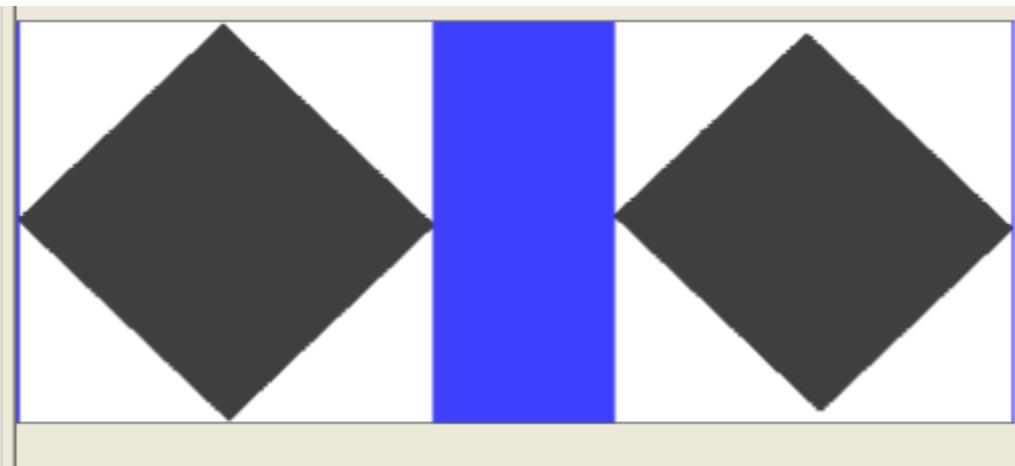
Picture 109 Minimum Distance Between Marks



Picture 110 Original Image with Thin Black Line of Less than 1mm

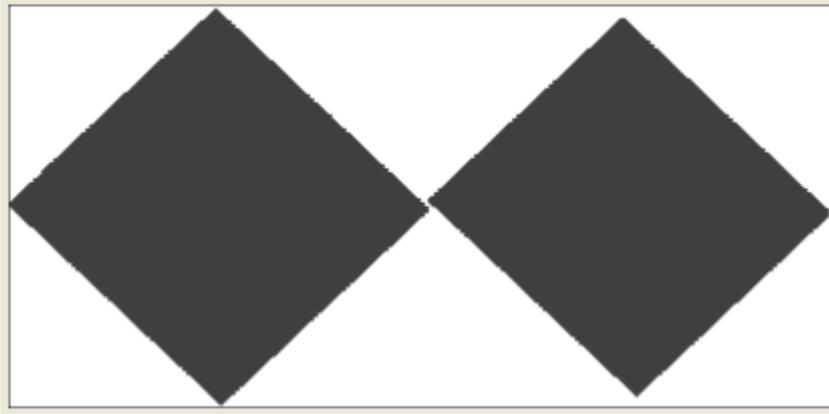


Picture 111 Pattern Image with the Thin Line Removed



If 'Remove Column Space Between Shapes' is ticked, then the pattern image will have the blank leaves removed as shown in Picture 112 Pattern Image with the Thin Line Removed and Blank Leaves Removed.

Picture 112 Pattern Image with the Thin Line Removed and Blank Leaves Removed



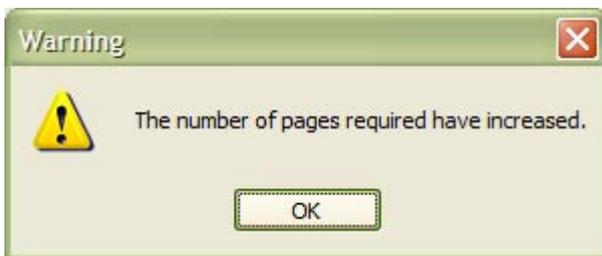
Note: - With a high number of 'Book Leaves', the preview pattern image may appear to have missing lines. This is due to the scaling of the preview image. The saved preview pattern image will be correct.

8.5.1 Cut and Fold Method

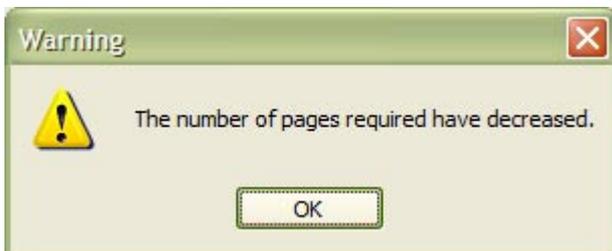
For the Cut and Fold setting, when the Actual Book Leaves is different from the required Book Leaves, a pop message appears as in Picture 113 The Book Pages required Have Increased (Cut and Fold) or Picture 114 The Book Pages required have decreased (Mark and Fold), and the text 'Actual Book Leaves' turns to red (see Picture 95 Book Parameters and Actual Used Book Folds and Pages).

It may be possible to create the exact number by either increasing or decreasing the book leaves and creating the preview pattern again.

Picture 113 The Book Pages required Have Increased (Cut and Fold)



Picture 114 The Book Pages required have decreased (Mark and Fold)



The blue lines are the blank or un-folded book leaves. For the start and end of the book, these can be left in, but if they are in the middle for example, the 3-D effect will not be as good (see Picture 108 The Pattern Preview Image Showing Un-folded Leaves in Blue in the Centre). The Original Image will have to be edited, see 8.2.3 Remove Space Around Image and 8.2.4 Remove Column Space Between Shapes.

Picture 115 The Pattern Preview Image Showing Blank Folds in Blue (Cut and Fold)



8.5.2 Mark and Fold

For the Mark and Fold setting, when the Actual Book Leaves exceeds the required Book Leaves, a pop message appears as in Picture 116 The Book Pages set Have Increased (Mark and Fold), and the text 'Actual Book Leaves' turns to red (see Picture 95 Book Parameters and Actual Used Book Folds and Pages).

If 'alternate' folds have been produced, then the book leaves and total book pages may have been increased or decreased. It may be possible to create the exact number by either increasing or decreasing the book leaves and creating the preview pattern again.

Picture 116 The Book Pages set Have Increased (Mark and Fold)



The red lines are the 'alternate' folds (see Picture 117 The Pattern Preview Image Showing Alternate Folds in Red (Mark and Fold)). There can only be 2 folds per book leaf.

The blue lines are the blank or un-folded book leaves. For the start and end of the book, these can be left in, but if they are in the middle for example, the 3-D effect will not be as good (see Picture 108 The Pattern Preview Image Showing Un-folded Leaves in Blue in the Centre). The Original Image will have to be edited, see 8.2.3 Remove Space Around Image and 8.2.4 Remove Column Space Between Shapes.

Picture 117 The Pattern Preview Image Showing Alternate Folds in Red (Mark and Fold)



8.5.3 Error Messages

Error creating the pattern from the image.

Error creating the preview image.

Error creating the preview image. Too many alternate pages?

Error creating the pattern from the image.

8.6 Printing and Saving the Pattern Files

The pattern file set consists of: -

- *.Original.png
- *.Pattern.png
- *.Pattern.csv
- *.pdf
- *.P*.png

The PDF file is a formatted document that contains the ‘*.Original.png’, ‘*.Pattern.csv’, ‘*.Pattern.png’ and ‘*.P*.png’ files.

The other files can be used to create a custom layout using a desktop publishing package or a Word Processing package.

Note: Patterns created with a large number of book leaves may take some time, and a Progress Bar will appear (see Picture 24 Progress Bar with Moving Blocks).

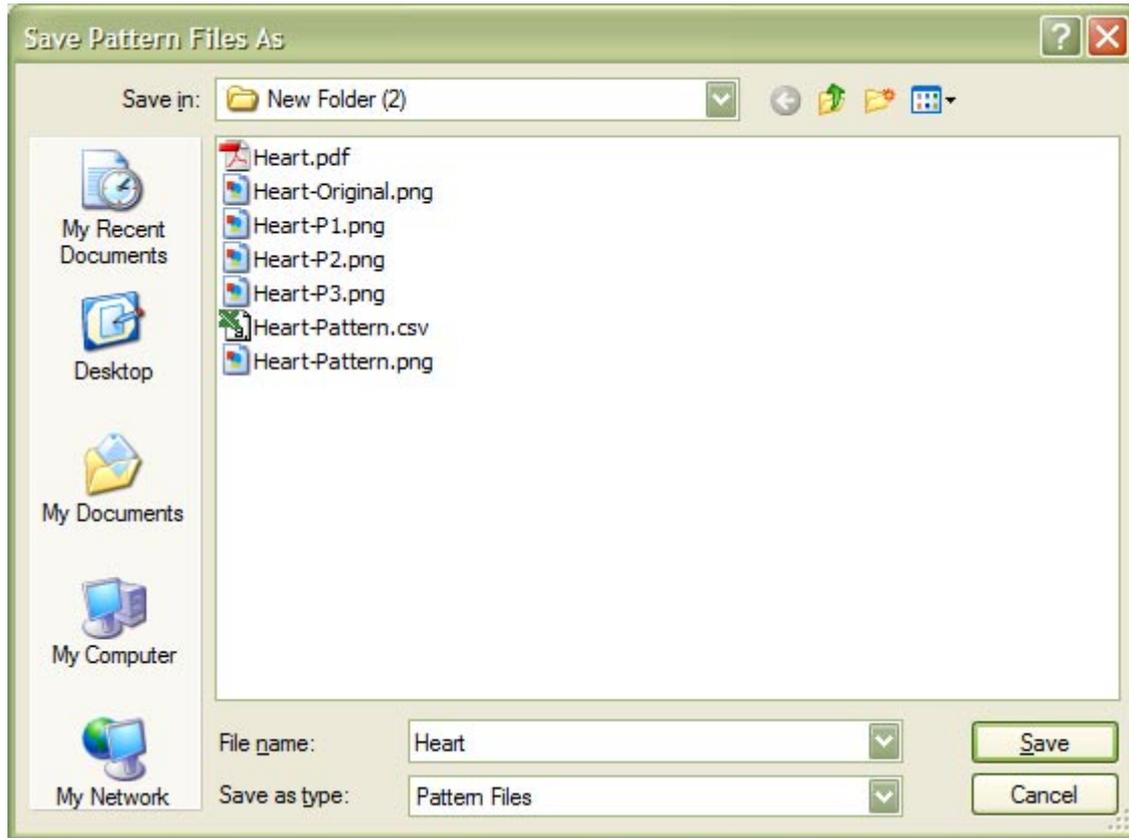
8.6.1 Saving the Pattern Files

Clicking the toolbar button  or clicking the menu item Save Pattern Files as from File, will display the Save Pattern Files dialogue box (see Picture 118 The Save Pattern Files As Dialogue Popup).

The pattern files are the pattern preview image and the pattern-marking list, as well as a PDF document file. The file name is the base file name, and a suffix of ‘*.Original.png’, ‘*.Pattern.csv’, ‘*.Pattern.png’ and ‘*.P*.png’ will be added.

Clicking the ‘Save’ button saves the set of pattern files to disk. Any existing files will be over written without warning. A pop-up message box will be displayed if the patterns have been saved okay (see Picture 119 Pattern Files Saved Okay), or if there is an error saving the files.

Picture 118 The Save Pattern Files As Dialogue Popup



Picture 119 Pattern Files Saved Okay



8.6.1.1 Original Image File

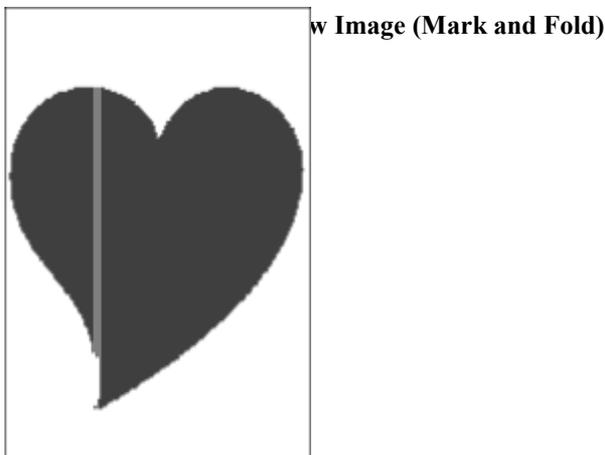
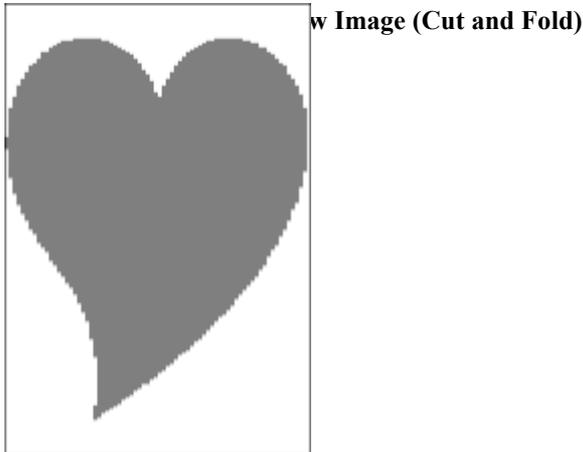
The Original Image file ('filename-Original.png') is the same as displayed in the Original Image group panel (see Picture 120 Original Image), and not the image file that was opened or pasted.

Picture 120 Original Image



8.6.1.2 Pattern Preview Image File

The Pattern Preview Image file ('filename-`Pattern.png`') is the same as displayed in pattern preview group panel (see 8.3 Pattern Image) but with a lot more detail, and no coloured lines.



8.6.1.3 Pattern Marking List File

This can be used in a Spread Sheet application such as Microsoft's Excel to create a custom formatted set of cutting or marking points.

The Pattern Marking List CSV file (`filename-Pattern.csv`) consists of the header, and the cut or fold marking points.

The Header contains: -

- The 'Page' is the book page; it can also be 'Fold'.
- The 'Cutting Points' (Cut and Fold)
- The 'Top' fold is the marking point in mm measured from the top of the book page (Mark and Fold).
- The 'Bottom' fold is the marking point in mm measured from the top of the book page (Mark and Fold).

Spacer folds for Cut and Fold will have SF in the Cutting Points column (see Picture 123 Pattern Marking List Showing the Header and Marking Points (Cut and Fold)).

Blank or not folded leaves will not have any cutting or marking points in the fold columns (see Picture 124 Pattern Marking List Showing the Header and Marking Points (Mark and Fold)).

Picture 123 Pattern Marking List Showing the Header and Marking Points (Cut and Fold)

	A	B	C	D	E	F
1	Page	Cutting Points (cm)				
2	1	5.9	6.4			
3	3	SF				
4	5	4.6	7.7			
5	7	SF				
6	9	4.1	8.4			
7	11	SF				
8	13	3.6	8.9			
9	15	SF				
10	17	3.3	9.3			
11	19	SF				
12	21	3	9.6			
13	23	SF				
14	25	2.7	10			
15	27	SF				
16	29	2.6	10.2			

Picture 124 Pattern Marking List Showing the Header and Marking Points (Mark and Fold)

	A	B	C	D	E	F
1	Page	1st Mark	2nd Mark (cm)			
2	1					
3	3					
4	5	7.3	7.6			
5	7	6.4	8.5			
6	9	6	8.9			
7	11	5.8	9.1			
8	13	5.6	9.4			
9	15	5.4	9.7			
10	17	5.2	9.9			
11	19	5.1	10			
12	21	5	10.2			
13	23	4.8	10.3			
14	25	4.7	10.5			
15	27	4.6	10.7			
16	29	4.5	10.8			

8.6.1.4 The Pattern Chart Image File(s)

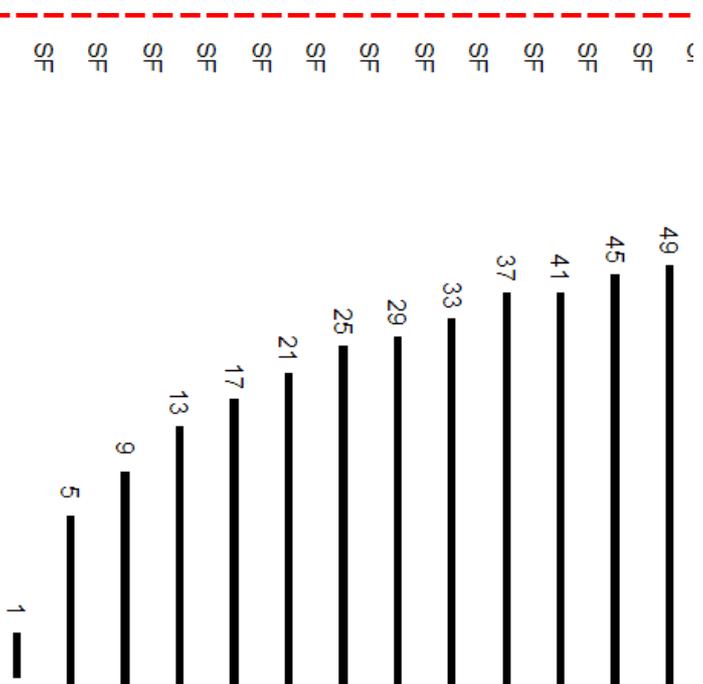
These are always created when the pattern files are saved, and depending if the Chart Pattern Type option was selected, may not be in the PDF file. See 7.1 Set Marking Pattern Type Form.

The pattern chart images(s) will have a file name of 'filename-Px.png', where 'Px' is the page number starting at 1. If the Measure Pattern Type option is selected, the default or previous settings for the Chart Pattern will be used.

Any existing files matching the file name filename-Px.png' will be deleted first. An existing 3-page image pattern may have been changed to fit on 2 pages, and page 3 isn't wanted.

The red line indicates the top of the pattern.

Picture 125 Cut and Fold Pattern Chart Image



Picture 126 Mark and Fold Pattern Chart Image



8.6.1.5 The Pattern PDF File

This is a pre-formatted document file that contains the pattern details, the original image, the pattern preview image, and a table of cutting or marking points. It is a quick and easy way to produce patterns for selling or distribution.

The 'Date Created' is the current time of the computer (see Picture 127 The 1st Page of the Pattern Document (Cut and Fold)).

The Cut and Fold or Mark and Fold PDF's are very similar.

Picture 127 The 1st Page of the Pattern Document (Cut and Fold)

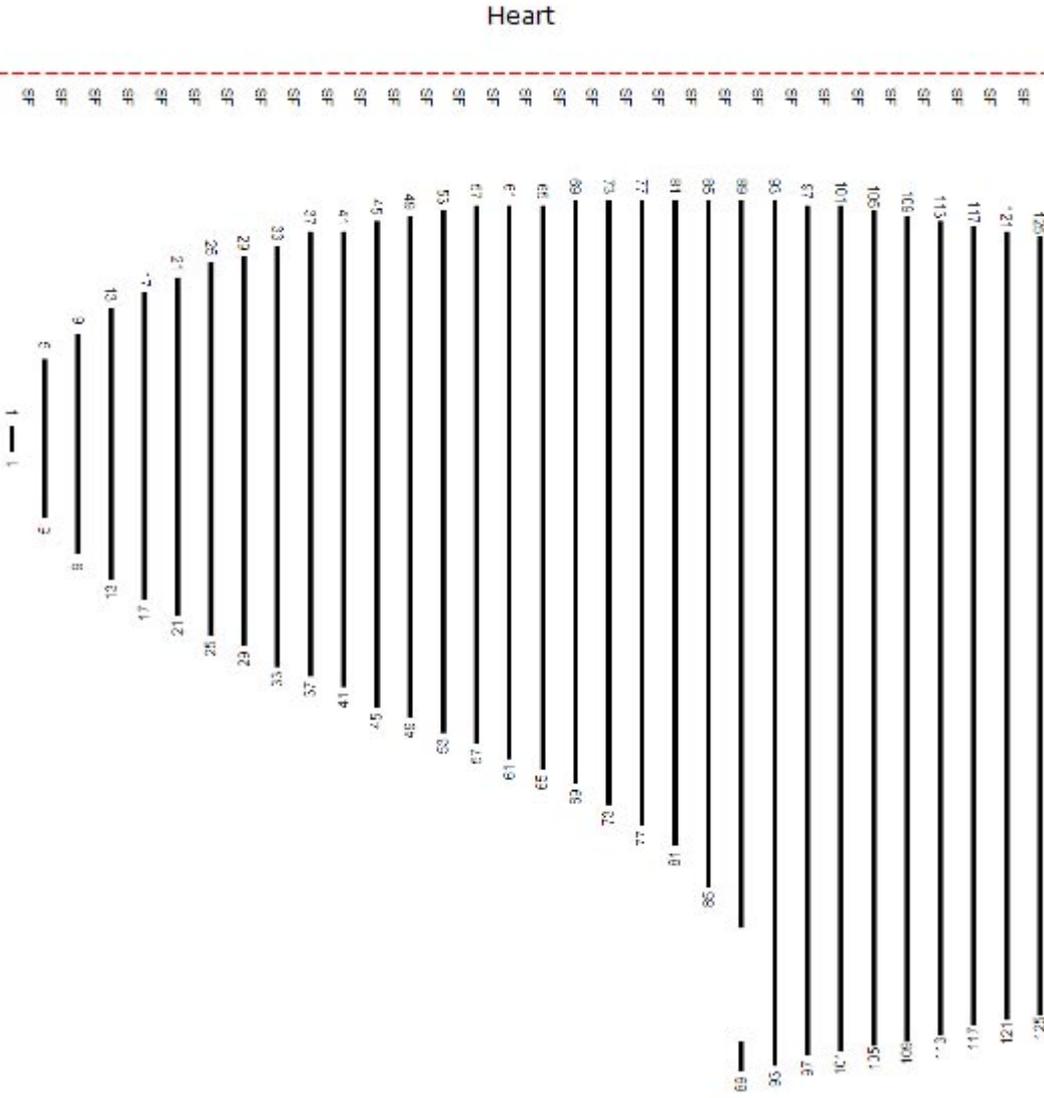
Heart

Book Cutting and Folding Pattern



Pattern Name	Heart
Pattern Type	Mark, Cut and Fold
Marking Method	Chart, Measure
Number of Cuts	152
Pages	300
Book Height cm	20
Author	The Wizard
Date Created	29 March 2016
Website URL	www.ideas-r-us-software.uk
Copyright	(c) Ideas R Us Software 2016
Comments	The patterns cannot be sold, hired or distributed in any way. The finished book(s) can sold.

Picture 128 The 2nd Page of the Pattern Document (Cut and Fold)



Picture 129 The Marking Points Page of the Pattern Document (Cut and Fold)

Heart

Pattern Image



Marking Points for Cut Lines

The marking points are from the top edge of the book page. No folds have no marking points.
SF = Spacer Fold

Page	Measure, Mark, Cut and Fold Marking Points cm												
1	5.9	6.4											
3	SF												
5	4.6	7.7											
7	SF												
9	4.1	8.4											
11	SF												
13	3.6	8.9											

Picture 130 The 1st Page of the Pattern Document (Mark and Fold)

Heart

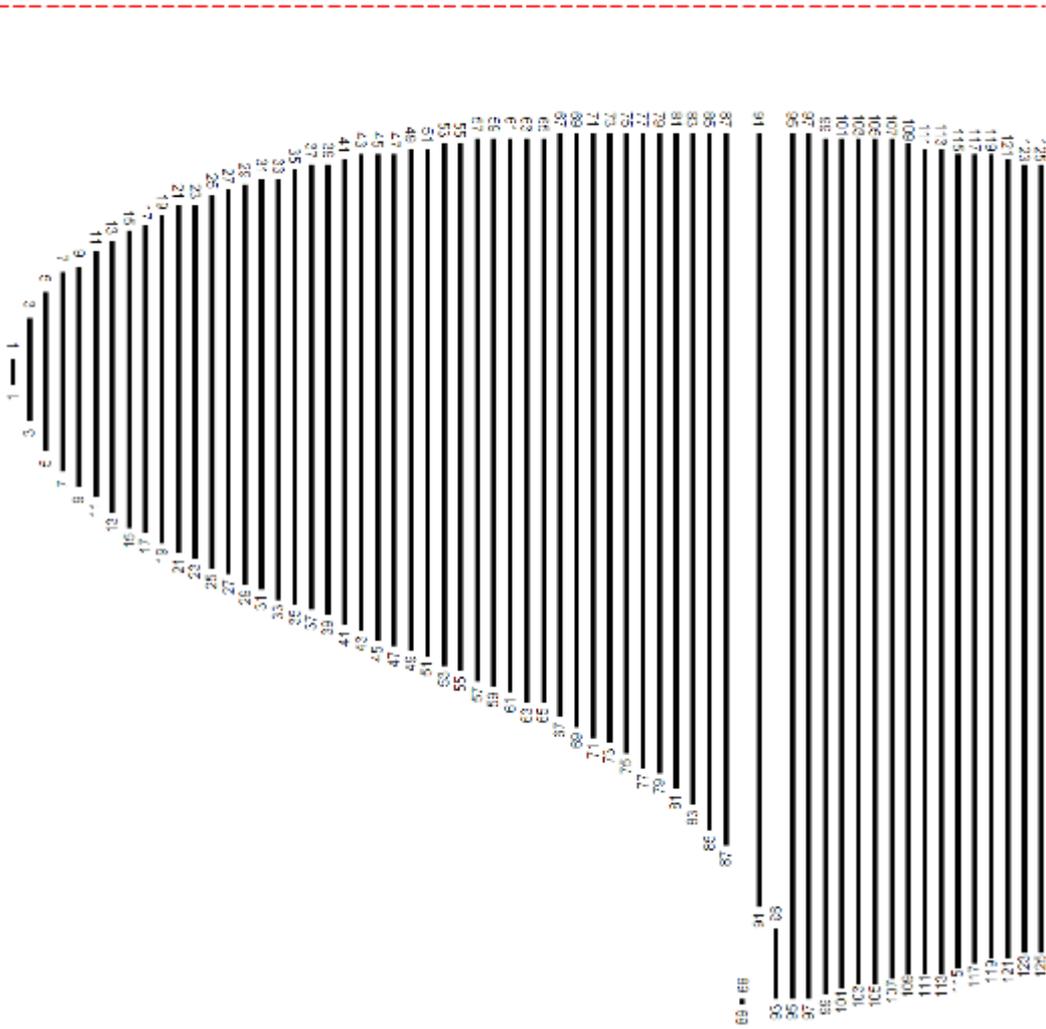
Book Folding Pattern



Pattern Name	Heart
Pattern Type	Mark and Fold
Marking Method	Chart, Measure
Marking Points	300
Pages	300
Book Height cm	20
Author	The Wizard
Date Created	29 March 2016
Website URL	www.ideas-r-us-software.uk
Copyright	(c) Ideas R Us Software 2016
Comments	The patterns cannot be sold, hired or distributed in any way. The finished book(s) can sold.

Picture 131 The 2nd Page of the Pattern Document (Mark and Fold)

Heart



Picture 132 The Marking Points Page of the Pattern Document (Mark and Fold)

Heart

Pattern Image



Marking Points

The marking points are from the top edge of the book page. No folds have no marking points.

Page	1st Mark cm	2nd Mark cm	Page	1st Mark cm	2nd Mark cm	Page	1st Mark cm	2nd Mark cm	Page	1st Mark cm	2nd Mark cm
1	5.9	6.4	77	1.5	13.9	153	4.2	16.5	229	1.5	13.2
3	5.1	7.1	79	1.5	14	155	4.1	16.4	231	1.5	13.1
5	4.6	7.7	81	1.5	14.3	157	3.9	16.4	233	1.5	13
7	4.2	8.1	83	1.5	14.6	159	3.6	16.3	235	1.5	12.9
9	4.1	8.4	85	1.5	15.1	161	3.5	16.2	237	1.6	12.7

8.6.2 Printing the Pattern Files

To print the created pattern, see 5.1.3 Page Setup, 5.1.4 Print Preview, and 5.1.5 Print

To print PDF files, a PDF reader must be installed. A PDF reader can be downloaded from Adobe's website <http://get.adobe.com/reader/otherversions/>.

Some modern Internet browsers will read PDF files.

8.6.3 Error Messages

Error creating the preview image.

Error creating the preview image. Too many alternate pages?

Error creating the pattern document.

Error creating the PDF file.

The pattern document cannot be previewed or printed.

Error saving the pattern files.

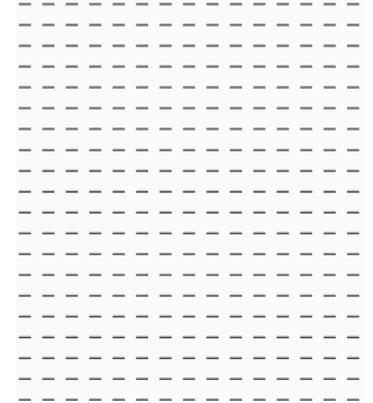
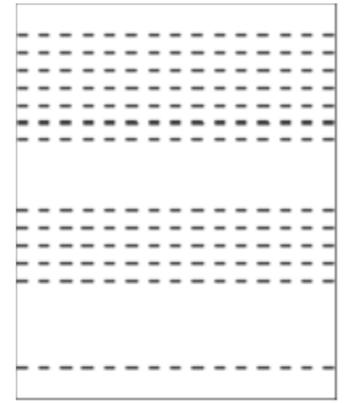
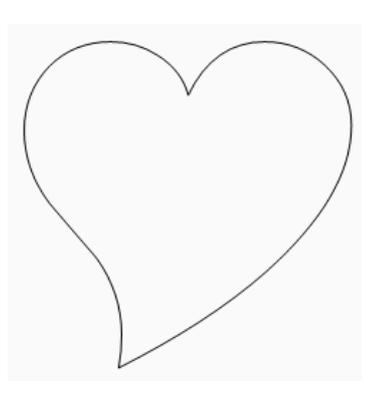
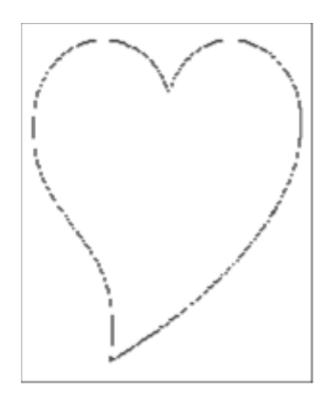
9. Tutorials

9.1 Good and Bad Image Files to Use

9.1.1 Cut and Fold

- All the images for Mark and Fold are good images to use
- Too little contrast, the pattern cannot be seen against the background
- Too much detail, some of the fine lines will be lost
- Bad images
 - Chequered squares/dots
 - Lots of fine lines, can be removed during 'Create Pattern'

Table 1 Images not Suitable for Cut and Fold

Original – Dashed Lines	Pattern – Dashed Lines	Original – Heart Outline	Pattern – Heart Outline
			

9.1.2 Mark and Fold

- Too little contrast, the pattern cannot be seen against the background
- Too much detail, some of the fine lines will be lost
- Too many holes will create too many alternate folds

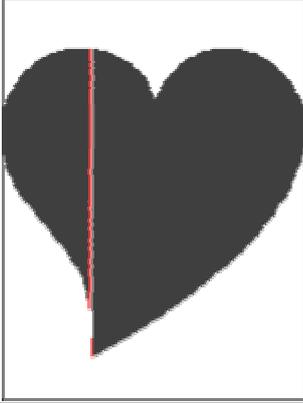
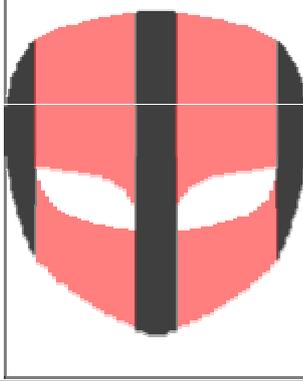
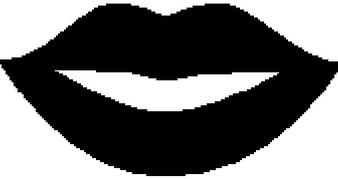
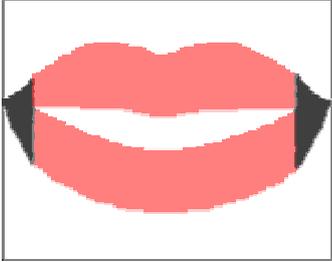
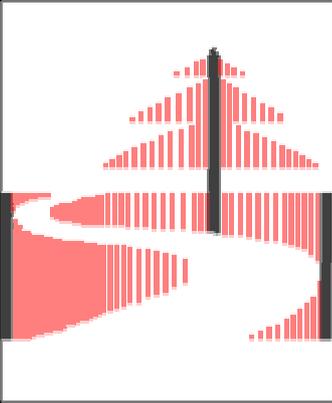
All the images and patterns below (see Table 2 Images and the Patterns Created from them) had the column space removed, and had 150 book leaves (300 pages).

The best image to use is the Heart, with only a few alternate folds. The least suitable image is the Tree and Winding Path, with mostly alternate folds, and gaps white gaps between the alternate folds.

Increasing the number of book leaves used, may improve the look of the folded book for the Tree and Winding Path pattern. The only way to be sure is to fold a book from the pattern.

All the images are from the Webdings, from Microsoft.

Table 2 Images and the Patterns Created from them

<p>Original – Heart</p> 	<p>Pattern - Heart</p> 	<p>Original – Alien Head</p> 	<p>Pattern – Alien Head</p> 
<p>Original - Lips</p> 	<p>Pattern - Lips</p> 	<p>Original – Musical Note</p> 	<p>Pattern – Musical Note</p> 
<p>Original – Tree and Winding Path</p> 	<p>Pattern – Tree and Winding Path</p> 		

9.2 Creating an Image File Using MS Paint

In this tutorial, a single letter will be created using the built in fonts.

Start the Paint application, Start -> Programs -> Accessories -> Paint

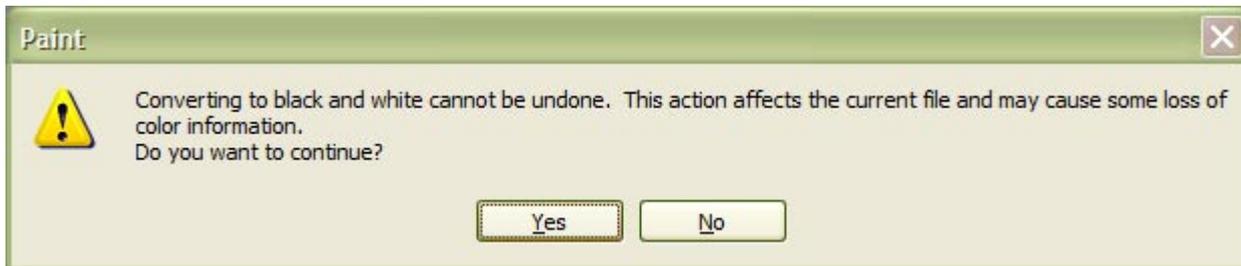
Set the image size to say 3" x 3", Menu -> Image -> Attributes (see Picture 133 Image Attributes)

Click 'Yes' to the pop up 'Converting to black and white cannot be undone' (see Picture 134 Warning Message about Changing from Colour to Black and White).

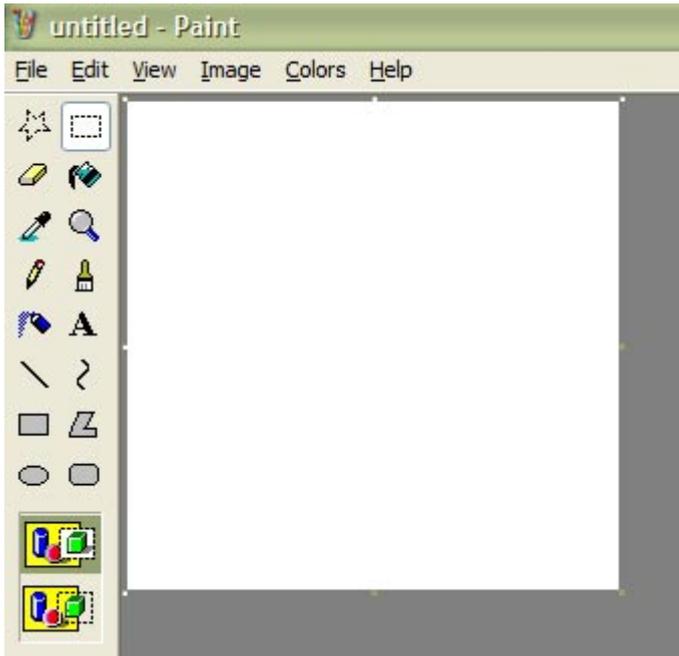
Picture 133 Image Attributes



Picture 134 Warning Message about Changing from Colour to Black and White



Picture 135 The Blank Canvas



Click on the Text icon 'A' on the tool panel to select Text mode, and click on the top left corner of the white canvas. A flashing cursor will appear. Adjust the font size to 150 pixels, select a font style, and decoration (bold, italic, underline).

The text toolbar should appear, if not, click Menu -> View -> Text Toolbar (see Picture 136 The Text Toolbar).

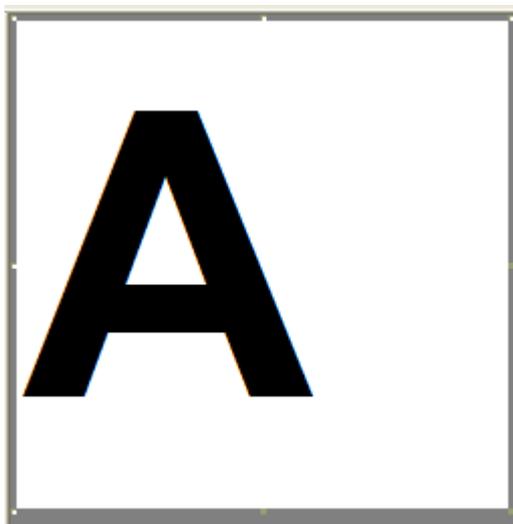
Select the Text icon again, and click on the top left corner, the marquee (dashed line) will be resized.

Picture 136 The Text Toolbar



Click onto the canvas, and type a letter, this will appear on the canvas.

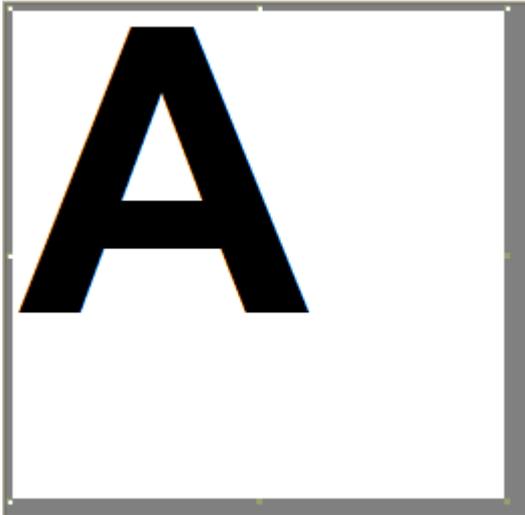
Picture 137 The Typed Letter



The letter is in the wrong place and has too much white space.

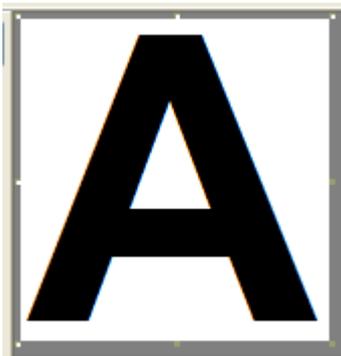
To move the letter, click on the marquee icon  on the tool panel, and drag the marquee as close to the letter as possible. Move the selected letter to where you want (a 4-headed arrow will appear when the cursor is in the marquee area). See Picture 138 The Letter Moved to the Top Left.

Picture 138 The Letter Moved to the Top Left



To remove the excess white from the right hand side and the bottom, either change the size of the image attributes (see Picture 133 Image Attributes above), or drag the bottom right corner of the white canvas (marked by a little green dot), it will change to a diagonal double headed arrow).

Picture 139 The White Space Removed from the Letter



To save the image, Menu -> File -> Save As, and select any image type. You may get a warning if the colours haven't been changed to Black and White, but that can be ignored.

9.3 Using Inkscape to Create an Image File

This was done using Inkscape version 0.48.4, but other versions should be okay to use.

Inkscape is a free open source vector editing (it can import bitmap/raster images) application that can be used to create the pattern image. It is available from the Inkscape website <http://inkscape.org/en/download/> or <http://inkscape.org/en/download/windows/>.

Inkscape works well with text, just add some, select it, copy it to the clipboard and then paste it into the Book Folding Pattern Maker. It also works well with vector images.

9.3.1 Adding Text

Select the Text tool for the tool bar.

Picture 140 Text Tool



Select the Font, Size and any decorations (bold, italics, etc)

Picture 141 Font Properties



Click anywhere in the drawing area, a flashing 'insert' will appear. Type any text you want, or type single letters and move them into position.

Picture 142 The Text



Select the fill colour by clicking the colour palette, and the stroke to 'none' by shift and clicking the 'X'. It doesn't need to be black.

Picture 143 The Colour Palette



If the text were to be pasted into the Book Folding Pattern Maker, there would be no space at the top and bottom of the book.

Picture 144 The Text in the Book Folding Pattern Maker with no Top or Bottom Space



To add some white space, add a rectangle box and fill the colour with white, and the stroke as 'none' or white.

Picture 145 The Rectangle Tool



If the rectangle is moved over the text, it will obscure the text. The rectangle needs to be lowered using the menu command Object->Lower (or use the Page Down key).

Picture 146 Rectangle Obscures Text



Picture 147 The Text is now on Top



Resize the rectangle and move it into the required position. The width is about the same as the text width.

Picture 148 The Rectangle Moved into Position



Select both the text and rectangle and copy them into the clipboard (Ctrl + C), then paste into Book Folding Pattern Maker.

Picture 149 The Text with Top and Bottom Space in Book Folding Pattern Maker



The SVG drawing can be saved for later, but to use it in Book Folding Pattern Maker, it must be a bitmap/raster image.

9.3.2 Adding Vectors

To use a vector file, just load it into Inkscape (or create one from scratch) and make sure that there is a solid fill of black.

Don't forget to add space at the top and bottom of the image.

9.4 Creating the Folded Book from the Pattern Files

You will need: -

- A ruler in centimetres (cm) or millimetres (mm)
- Optionally a setsquare
- A bone folder to crease the pages
- Pencil or pen
- Eraser/rubber
- Elastic band to keep the folded pages out of the way
- A hardback book with the correct number of pages, and of good quality paper
- A print out of the preview pattern image and pattern marking list
- Some patience

9.4.1 You Tube Videos

These are some videos (there are may more) showing how the books are folded. The Measure, Mark, Cut and Fold and Measure, Mark and Fold are what this software uses.

9.4.1.1 Mark, Cut and Fold

Peerless Designs – Cut and Fold TV Show – How To

<http://www.youtube.com/watch?v=z38AwE9K1JY>

9.4.1.2 Mark, Cut and Fold Combination

All in the Folds - Fold and cut and fold combination method

<http://www.youtube.com/watch?v=XSO9pJxT29c>

9.4.1.3 Measure, Mark, Cut and Fold

Heather Duncan - Cut and fold book folding

http://www.youtube.com/watch?v=1ofDaAc9K_o

Cristina Holgersson - Book folding Cut and fold technique

http://www.youtube.com/watch?v=0QP_Y2O8l2g

9.4.1.4 Measure, Mark and Fold

Debbi Moore – Bookfolding Guide

<http://www.youtube.com/watch?v=JxdG3r4zbJA>

Loulou Purple Crafts – How I Make my Book Folding Art

<http://www.youtube.com/watch?v=HcWakg9htQ8>

Susan Middleton – An Introduction to Book Folding

<http://www.youtube.com/watch?v=LR7D1hbFp3U>

Jacob Stocks – Book Folding Vid

<http://www.youtube.com/watch?v=vPCQUI3GMS0>

The Bookfolding and Craft Café - How to do bookfolding for beginners

<http://www.youtube.com/watch?v=xgRFKzkDMQw>

9.4.1.5 Mark and Fold

Peerless Designs – Book Folding Instructions

<http://www.youtube.com/watch?v=f3juDLmoXk4>

10. Acknowledgments

I would like to thank the following for their assistance whilst developing this application.

10.1 Pre Release Testers

Chris Ashworth (Chris A), also for the term 'squishing'

Mary Pelling (Mary P)

Helen Rich (Crafty49), whom the application takes it's name from.

10.2 Beta Testers

Helen Rich (Crafty49)

10.3 Finished Folded Books Pictures

Chris Ashworth for the Candle (Cut and Fold) and Westie Dog (Mark and Fold)

Helen Rich for the Cute Bunny (Cut and Fold) and Ballet Word (Mark and Fold)

11. Appendix

11.1 Un-Installing

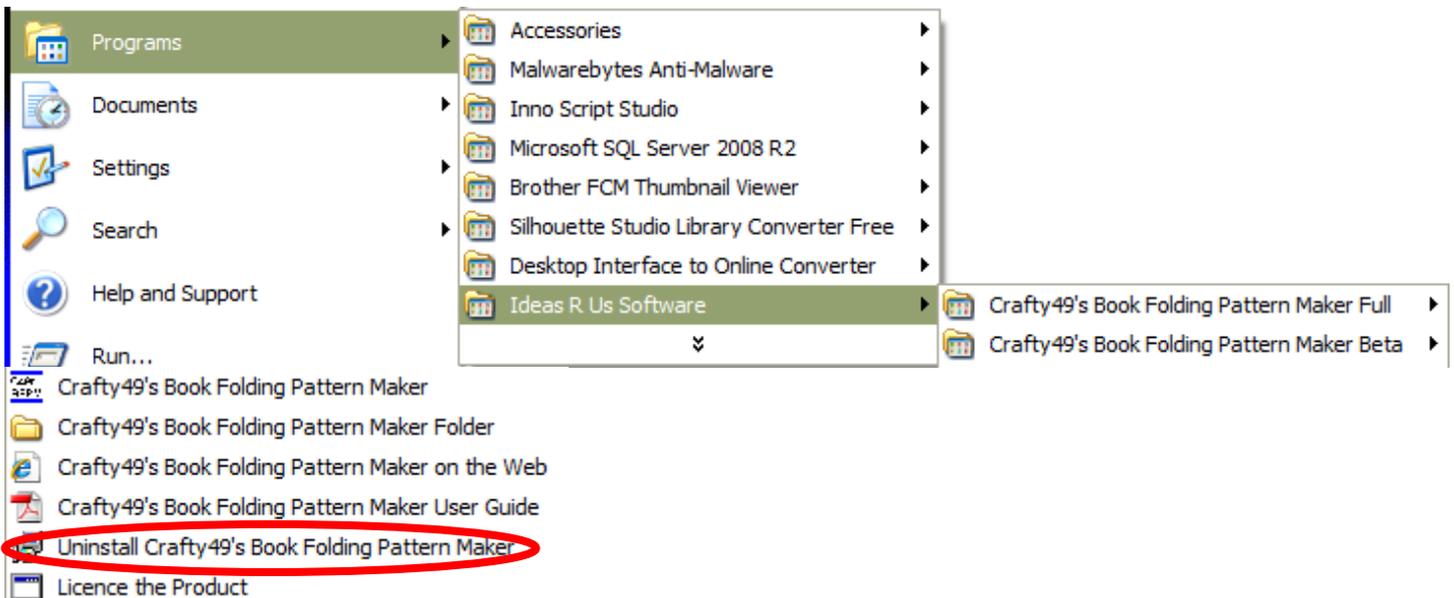
The Crafty49's Book Folding Pattern Maker application can be un-installed from the Start Menu (see Picture 150 Un-installing from the Start Menu (Windows XP)).

If there isn't a Crafty49's Book Folding Pattern Maker Start Menu folder, the program can be un-installed from the Windows 'Add/Remove Programs' control panel.

It can also be un-installed from double clicking on the `unins000.exe` in the Crafty49's Book Folding Pattern Maker installed folder. This is usually in the `C:\Program Files\IdeasRUsSoftware\Crafty49sBookFoldingPatternMakerFull` folder for a Full release, or `C:\Program Files\IdeasRUsSoftware\Crafty49sBookFoldingPatternMakerDemo` for the Demo release.

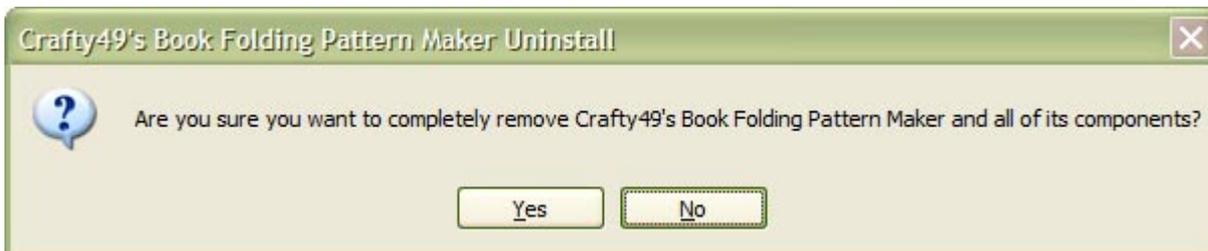
The `*.licence` file will not be deleted.

Picture 150 Un-installing from the Start Menu (Windows XP)



A confirmation pop-up message box will be displayed, click 'Yes' to install, and 'No' to cancel uninstall.

Picture 151 Confirm Uninstall



The Crafty49's Book Folding Pattern Maker application has been successfully removed.

Picture 152 Successfully Uninstalled



11.2 Keyboard Shortcuts

Open File	Ctrl + O
Save Pattern Files As	Ctrl + Shift + S
Exit Program	Alt + F4
Paste Image	Ctrl + V
Help	F1
Check for Updates	Ctrl + U

11.3 Previous Release Notes

11.3.1 Changes Made in Version 1.1.00

11.3.1.1 New Features

- A Pattern Chart/Graph/Line/Stripes for marking the points, as opposed to measuring them.
- A count of the number of cuts for a Cut and Fold pattern, the number of Folds for a Mark and Fold pattern, are displayed on the form and in the Pattern Details section on the Print/PDF output.
- The pattern details Author, Website URL, Copyright and Comments are now saved and loaded automatically.

11.3.1.2 Issues Fixed

When a new image is loaded and the 'Remove Space Around Image' is checked, the Margins and Spaces group box is not disabled. Fixed.

11.3.1.3 Improvements Made

- The date format was changed from 01 January 2016 to 1 January 2016 on the Pattern Details section on the Print/PDF output.
- Added the Pattern Type and Marking Method used to the PDF/Print document details.

11.3.2 Changes Made in Version 1.0.75

11.3.2.1 New Features

- Measure, Mark, Cut and Fold Method (shortened to Cut and Fold)
- Removes excess white from around the design pattern
- Invert (make negative), and Mirror the design pattern
- Add top and bottom margins to the design pattern
- Add blank leaves before and after the design pattern
- Add 'spacer folds' between the design pattern for the Cut and Fold method
- Choose between leaf or page numbering, with an adjustable start value

11.3.2.2 Issues Fixed

- A black line was added to the right-hand side of the bitmap. This caused the bitmap to shrink when 'Remove Column Space between Shapes' was set and the bitmap didn't contain any blank columns. Fixed.
- 'Remove Column Space between Shapes' was removing 1 more blank column than it should. Fixed.
- When an error occurred creating a pattern document, the progress form was blocking the error message pop up, making it difficult to close without moving the progress form. Fixed.
- The size of the book in the PDF pattern documents didn't show decimal centimetres. Fixed.
- With no original image loaded, ticking the 'Remove Space between Shapes' check box caused an error. Disabled the group panel 'Original Image' until an image was loaded. Fixed.
- For the Demo version, the Units group box and the Pattern Name text box was disabled when the Pattern Details grouped box was disabled. Fixed.
- An error creating PDF/Pattern files wasn't disabling various controls to stop the pattern being printed or saved. Fixed.
- When an image was loaded, the threshold and check boxes in the Original Image group panel were not reset to their starting values. Fixed.

11.3.2.3 Updated

Changed the text 'Beta' to 'Demo' in a number of forms/pop up boxes.

11.3.2.4 Improvements Made

- The form's maximum control has been re-enabled.
- Any image that contains a transparent background is changed to white. Some of the newer options in the Original Image group box didn't work correctly with a transparent background.
- The option to 'Remove Blank Columns' from the Original Image has been changed to 'Remove Column Space between Shapes'.
- To be consistent with the Cut and Fold method, any blank leaves removed due to the 'Min Distance Between Marks' setting, are not removed for the Mark and Fold method.
- The pattern details boxes are made bigger.
- The way the Pattern Image is created from the Original Image.
- The Pattern Preview Image when saved as PDF and pattern files, contained red (alternate lines) or blue (blank folds) indicator lines. This was okay when creating the pattern to see how the pattern would look, but not in finished documents or files. Removed text in the PDF file that described what the lines were.

11.3.3 Changes Made in Version 1.0.00

The version change jump is to coincide with the Full release version.

11.3.3.1 New Features

- Added a menu item for User Guide in the Help menu.
- Added a menu item for the Installation Folder in the Help menu.
- An 'Product Brand' icon to the .exe file and to the main form

11.3.3.2 Issues Fixed

- When a non-picture file is opened, an out of memory exception error occurs. Fixed
- Any patterns created and not saved when a new image was opened, an image dropped onto form, an image pasted or the application was closed, would be lost. A pop-up message box will ask whether to continue with operation or not. Fixed.

11.3.3.3 Updated

- Changed a link on the *Help* -> *About* Form to 'ideas-r-us-software.co.uk', and changed the name from 'Ideas R Us' to 'Ideas R Us Software'

11.3.3.4 Improvements Made

Disabled the form's maximise control button, since no form controls are re-sizable.

11.3.4 Changes Made in Version 0.5.02

11.3.4.1 New Features

- An option to remove the blank/un-folded page leaves from the pattern, by removing the blank/white space from the bitmap. It will also remove any blank leaves when the pattern is created.
- A print preview button to the toolbar.

11.3.4.2 Issues Fixed

There was an error when saving the pattern files on Windows 7/8.x/10. Fixed.

11.3.5 Changes Made in Version 0.5.01

11.3.5.1 New Features

- The application can now exit when the form-closed button is clicked or when the menu item File->Exit is selected. It will also check and warn of unsaved pattern files.
- A progress pop-up box when printing/previewing and saving the pattern files.
- Saving the pattern folding/marking points as CSV file when saving the pattern set files, instead of the pattern table as a text file.

11.3.5.2 Improvements

The paste button and menu item are only enabled when there are supported bitmap/raster image in the clipboard.

11.3.6 Changes Made in Version 0.5.00

11.3.6.1 New Features

- The Original Image bitmap (what appears in the Original Image group panel) is now saved with the pattern set.
- Replaced the old formatted pattern document with a visually improved version that has the pattern details on the first page.
- The formatted pattern document is also saved as a PDF file with the pattern set.
- Any changes that have been made to the Original Image threshold, the Pattern Details, or Book Details, will disable the Print/Preview and Save All Pattern files until the pattern have been created.

11.3.7 Changes Made in Version 0.1.05

11.3.7.1 New Features

- Selecting of the units cm or mm on the form.
- The pattern file of folding/marking points to use cm or mm.
- Blue lines to the pattern preview image to indicate blank or non-folded pages.

11.3.7.2 Improvements

- Changed the form layout. Added group panels and moved controls.
- Renamed 'Total Pages' to 'Actual Pages' on the form.
- Removed the 'Folded Pages' count on the form. All the pages can be folded, and not just the marked ones.
- The Pattern Image was stretched too much when the book leaves increased. Removed all the zoom and resize controls, and just scale the pattern image to fit when necessary.

11.3.8 Changes Made in Beta/Pre-Release Version 0.1.04

11.3.8.1 New Features

- A menu item to check for updates for new versions/releases.
- A licence Nag screen for Beta releases with an expiry date.
- An about box with licence info.
- The pattern output is 4 columns.
- Paste bitmaps/raster images from clipboard, using the keyboard, menu or toolbar.
- Drag and drop of a supported bitmap/raster file onto the form.
- Printing of the original bitmap, pattern bitmap and patterns.

11.3.8.2 Issues Fixed

- The book leaves entered did not create the correct number of leaves due to 'alternate' folds. The number of book leaves entered is now exact or near enough. Fixed.
- The total page count was 1 greater than it should be. Fixed.