

Version Overview

Version Man.	Date	BCS-2 Version	Modifications/Supplements
V01	05.11.2001	2.77	4.3.5 Drag & Drop functionality
V02	26.02.2002	2.89	0 Imagetools 9.4 Electronic Endorser
V03	13.03.2002	2.91	9.5 Web Publisher
V04	07.08.2002	2.93	2.1 Installation prerequisites 2.2 Installing the BCS-2 software 2.3 Installing BCS-2 updates 2.4 Installing the HiScan driver
V05	14.11.2002	2.96	3.5 Context menus 6.5 Automatic Deskew/Despeckle 6.6 Automatic black edge removal 8.3 Mouse control in mask mode
V06	09.12.2002	2.96k	6.3 Scan mode/Bookeye-Color settings 6.7 Settings for book curve correction 8.5 Whiten black edge
V07	14.04.2003	2.97d	4.2.10 Advanced Configuration of Index Keys 4.3.3 Entry of Indices
V08	11.08.2003	2.97h	9.5.1 The Individual Scenarios (Webpub.)9.5.2 Configurations (Webpub.)11.3. Documentation of BCS-2 Variables11.4. Index

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Table of Contents

1 2		roductiontalling BCS-2	
	2.1	Installation prerequisites	
	2.2	Installing the BCS-2 software	
	2.3	Installing BCS-2 updates	
	2.4	Installing the HiScan driver	
3		sic Functions	
	3.1	Starting the software	7
	3.2	Arrangement of the main screen	
	3.3	Settings of the drop down bar	
	3.4	BCS-2 Keyboard allocation	
	3.5	The Context Menus	
4	Ord	der mode1	1
	4.1	Order mode – why?	11
	4.2	The options dialog	12
	4.2.	1 Scan-Start options	13
	4.2.	2 Barcode Options	13
	4.2.	3 Order mode selection	13
	4.2.	4 Key definition	14
	4.2.	5 Automatic conversion - options	14
	4.2.	6 Settings for single scans and Simple Mode	14
	4.2.	7 PDF Options	15
	4.2.	8 FTP Options	16
	4.2.	9 Password protection for order options: (optional)	17
	4.2.	10 Advanced Configuration of Index Keys	18
	4.3	Working in order mode	20
	4.3.	1 Creating a order	20
	4.3.	2 The order bar	20
	4.3.	3 Entry of Indices	20
	4.3.	4 Scanning in batch mode	21
	4.3.	5 Drag & Drop Functionality	22
	4.3.	6 Ending the order mode	22
	4.3.	7 Working with the Fiche carrier	23
	4.4	The order window	24
	4.4.	1 Important instructions for the order window	24
	4.4.	2 Selecting an order for processing	24
	4.4.		
	4.4.	4 Processing to a multipage TIFF file (optional)	24
	4.4.	5 Transferring orders	24
	4.4.	6 Deleting orders	25
	4.4.	7 Sending an order (optional)	25
	4.4.	8 Use Despeckle on the whole order	25
	4.4.	9 Use Descew on the whole order	25
	4.4.	10 Publishing orders on the Internet (Web publisher)	25
	4.4.	11 Generating a PDF file	25
	4.4.	12 Selection for sending PDF files	26
	4.4.	13 Sending via FTP	26
	4.4.	14 The FTP browser	27
	4.5	Allocate barcode position	28
	4.5.	1 Allocate barcode position – why?	28
	4.5.	2 Allocate barcode position – how?	28

5	Tł	he Fil	e Menu	29
	5.1		c functions of the file menu	
	5.2	Opti	onal special functions: Send to	29
6	Tł		enu: Scanner	
	6.1	Sele	cting the scanner	30
	6.2	Scar	nning from the scanner menu	30
	6.3	Scar	n mode	30
	6.4	Sele	ction: Bitonal – grayscale	31
	6.5	Auto	matic Deskew and Despeckle	31
	6.6	Auto	matic Black Edge Removal	31
	6.7	Bool	curve correction	31
	6.8	Dete	ermine user format	32
	6.9	Fich	e carrier settings	32
	6.9	9.1	Basic fiche carrier settings	32
	6.9	9.2	Fiche definition	
	6.9	9.3	Defining fiches through BCS-2	34
	6.9	9.4	Keys for frame definition	36
	6.10	Auto	matic print out (optional)	36
_	6.11		ate wide images when printing	
7			enu: View	
	7.1		otive functions of the view menu	
_	7.2		m functions of the view menu	
8			enu: Image	
	8.1		Rotation function in the Image menu	
	8.2		special functions in the Image menu	
	8.3		ual page division and screen (optional)	
		3.1	Manual page division	
		3.2	Screen mode	
		3.3	Keyboard layout for manual page division and screen mode	
	8.4	•	getools	
9	8.5 T		en Black Borderenu: Extras	
9			ort license file	
	9.1 9.2	-	ck license	
	9.3		ct language	
	9.4		tronic Endorser	
	9.5		Publisher	
		5.1	The Individual Scenarios	
		5.2	Configurations	
1			onal possibilities	
-	10.1		iple scanners for one directory	
	10.2		BCS-2 INI	
1			xib	
	11.1	• •	rview: Add-on modules / Plugins	
	11.2		rview : BCS-2 Order types	
	11.3		umentation of the BCS-2 Variables	
	11.4			63



1 Introduction

Dear customer,

we congratulate you on the purchase of this innovative product from our company, ImageWare Components GmbH. With BCS-2 scan software you have a new, more powerful, scan-client that enables – like its predecessor – fast, optimized scanning with **Bookeye**®.

The functions of the BCS-2 software are described in detail in this manual. If you are looking for specific information on a certain command or process, then please refer to the table of contents.

Along with a user-friendly user interface and simple handling, order type selection is a new addition.

Predefined order types and export filters are already provided, individual order types with defined index keys and automatic barcode recognition can be defined.

In addition the new BCS-2 now offers:

- · Scanning in order mode with preset parameters or by using the scanner control panel
- Transfer of the data in network directories with defined index files
- Free definition of up to four indices and barcode recognition
- Copy, delete and replace individual error scans
- · edit, transfer, delete, print an entire order
- Option for automatic conversion of the images to standard formats
- Multiscan option permits accessing scanners via the ISIS and/or Twain interface
- Controlling Microfly fiche carriers with software-side raster definition
- Drag & Drop Functionality
- Electronic Endorser
- Web Publisher
- Imagetools
- Automatic Deskew and Despeckle.

The software is subject to permanent care by our specialists. We write QUALITY CONTROL in capital letters. This means that we depend on your collaboration. For errors and oversights please send us an e-mail at: iwcqs@imageware.de.

If you have additional questions, then please contact ImageWare Components at bcs2@imageware.de. Our specialists are pleased to offer advice and to provide further assistance.

We wish you much success in your daily work.

Sincerely

ImageWare Components GmbH

2 Installing BCS-2

2.1 Installation prerequisites

An IBM compatible PC (no Mac) with the Windows NT 4.0 (SP 6a) is required in order to successfully install BCS-2. The computer should be equipped with at least a Pentium 1 processor and 64 MB of RAM.

A system with a 1 GHz processor (or faster), and at least 256 MB RAM should be used for fast and problem-free work with BCS-2.

BCS-2 software takes up about 16MB of hard disk space. You should plan on several GB of free hard disk capacity (according to quantity and scan type) for the scans or scan orders.

2.2 Installing the BCS-2 software

If using BCS-2 with a **Bookeye®** scanner, install the HiScan card first according to the directions in the HiScan manual.

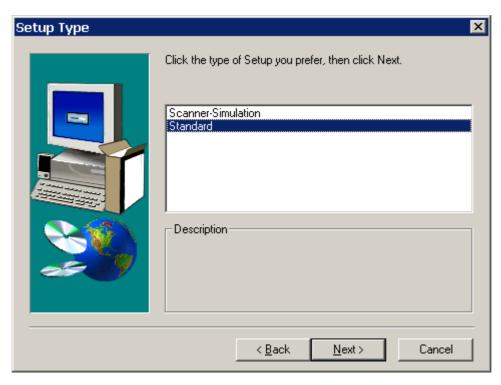
- Insert the BCS-2 CD in the CD ROM drive. Setup starts automatically when the CD is inserted. (If this is not the case, then run the file "Setup.exe" located in the main directory of the BCS-2 CD.)
- Select the language for installation and follow the further instructions of the setup program.
- Enter the user information (your name and the company name).
- Select the file folder in which BCS-2 should be installed by clicking on the "Browse" button.





If you accept the setup program defaults, then BCS-2 will be installed in the file folder "C:\Programs\BCS2_32".

Choose the default setup type "Standard"



Using the "Scanner Simulation" setting you can execute the "Scan" function without a scanner being connected for demonstration or test purposes. In this case BCS-2 takes the images from the "Examples" subfolder.

Clicking on the "Next" button starts the copying of the BCS-2 files into the target file folder.

2.3 Installing BCS-2 updates

A version of BCS-2 must have been previously completely installed.

- Copy the files from the directory "Update x.xx" on the BCS-2 CD into your BCS-2 directory.
 (Default C:\Programs\BCS2 32).
- Overwrite existing files.

2.4 Installing the HiScan driver

For information regarding the correct installation of HiScan drivers, please refer to the HiScan manual.

3 Basic Functions

3.1 Starting the software

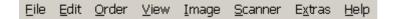
At *program start* the selected scanner driver is loaded first. In the case of the Bookeye scanner, this is the file "*hscboard.dll*" in the BCS-2 directory. For BCS 32 (Windows NT) the kernel driver is automatically loaded when starting. When starting the BCS 32 software the file "hscbnt.dll" is loaded.

If a required directory is missing, then an error message appears in which the name and the path of the required directory are specified. The appropriate directory can then be generated, for example in *Windows Explorer* (Windows 98/NT/2000) or in *File Manager* (Windows 3.1x).

After the start is carried out you are located in a main window of BCS-2

3.2 Arrangement of the main screen

The arrangement of BCS-2 essentially corresponds to that of familiar Windows applications. Under the *title bar* is the *menu bar*.



Under the menu bar is the button bar.

The **button bar** facilitates fast access to the most important functions. If the **meaning of a button** is not clear, then press this button with the *left mouse button* and keep the button depressed (!). The description of the button appears immediately in the status bar on the lower border of the program window. For *BCS 32Bit (Windows NT/2000)* you merely need to move the mouse over the appropriate button to display its meaning or function.



Below the button bar is the **Dropdown-Bar**, which can be used to make all settings essential for the scan process.



The **work surface** consists of two parts. On the **right side**, each open or scanned image is displayed in its own window. Concurrently on the **left side** are located *Thumbnails* of all open images with which a faster access is possible.

3.3 Settings of the drop down bar



Here are the possibilities (from left to right):

- The "Scan" button immediately initiates an individual scan. The image appears now as thumbnail on the left side ¹ and in its own window on the right side.
- In the first drop-down menu the format for the original to be scanned can be selected. The original should be located within the appropriate limitation area on the scanner.
- To the right the resolution can be set. This influences the size and quality of the image file generated.
- The last drop down menu is for selecting the orientation. <u>Portrait</u> (vertical orientation) and <u>Landscape</u> (horizontal orientation) are the possibilities.
- With the fader and the neighboring entry fields you can set a brightness/contrast value from 1 to 255. Lower values mean lower brightness. If the box "bright. at scanner" is checked, then this regulator remains inactive and the brightness can be set at the scanner itself.

-

¹ The thumbnails are miniature representations of the available images. With a single mouse click on a thumbnail, the corresponding image on the right side of the work surface is brought into the foreground. **Deleting a thumbnail** (for example with the **[Delete]** button) deletes the corresponding image as well!

3.4 BCS-2 Keyboard allocation

ESC	In order mode: End of the order mode and back to the order window. In the order window: Closes the order window
F1	Help
F2	View: entire image
F3	View: adapt to the page height
F4	View: adapt to the page width
F5	Adapt to the window
F6	Image: Despeckle
F7	Image: Deskew
F8	Image: Gray scale view
F9	Automatic print out
F11	Manual page division
PgDn	Thumbnail bar: One image down
PgUp	Thumbnail bar: One image up
Ctrl PgUp	Thumbnail bar: Back to the first image
Ctrl PgDn	Thumbnail bar: Forward to the last image
Left arrow	Scroll to the left
Right arrow	Scroll to the right
Up arrow	Scroll up
Down arrow	Scroll down
Delete	Delete the current image
Shift delete	In order mode: Cut out: The current page will be cut out onto the clipboard / Otherwise the key has no function
Insert	Not relevant
Shift insert	Insert: Inserts a page from the clipboard into the order.
Shift insert	Copy: current page will be placed on the clipboard.
Ctrl-C	Copy: current page will be placed on the clipboard. (As above)
Ctrl-M	In order mode: Sends the order In scan mode: Sends the current page
Ctrl-P	In order mode: Prints the current page / otherwise: prints the current page
Ctrl-S	Scans
Ctrl-V	Insert: Inserts a page from the clipboard into the order. (As above)
Ctrl-X	In order mode: Cuts out: current page will be placed on the clipboard. Scan individual scan mode: Key has no function (as above)
Ctrl-Z	Undo
Ctrl-F9	Rotate wide images when printing
Ctrl-N	New file
Ctrl-O	Open file

It is possible to operate BCS-2 using the keyboard only



3.5 The Context Menus

The menu is activated with the right mouse button in the displayed image. Standard operations on the image can be carried out, e.g. zoom in, zoom out, rotate, despeckle, etc.

Zoom <u>I</u> n Zoom Ou <u>t</u> Rotate 90° Rotate 180°	
<u>G</u> rayscale	F8
<u>D</u> especkle	F6
Des <u>k</u> ew	F7
white black borders	
show Imagetools	
toggle manual split page mode	F11
toggle mask	SHIFT+ F11
split page/apply mask	
delete current page	
<u>R</u> estore Image	Ctrl+Z

The mask and red separation line also have their own context menu with appropriate functions.

See 8.3.

4 Order mode

4.1 Order mode – why?

• BCS-2 allows you to handle complete scan orders directly at the scanner with the lowest expended effort:

- Up to four indices (keys) can be defined and can be read in on the first page of a order optionally via barcodes². Thus it is possible, for example, to allocate a scan order to a order number and to a customer number via the barcode. For this the order ticket is scanned as the first page of a scan order and the barcode information is read-in automatically.
- If all pages have been scanned, then the complete order can be forwarded for further processing temporary saved, print, transfer or optionally forwarded.

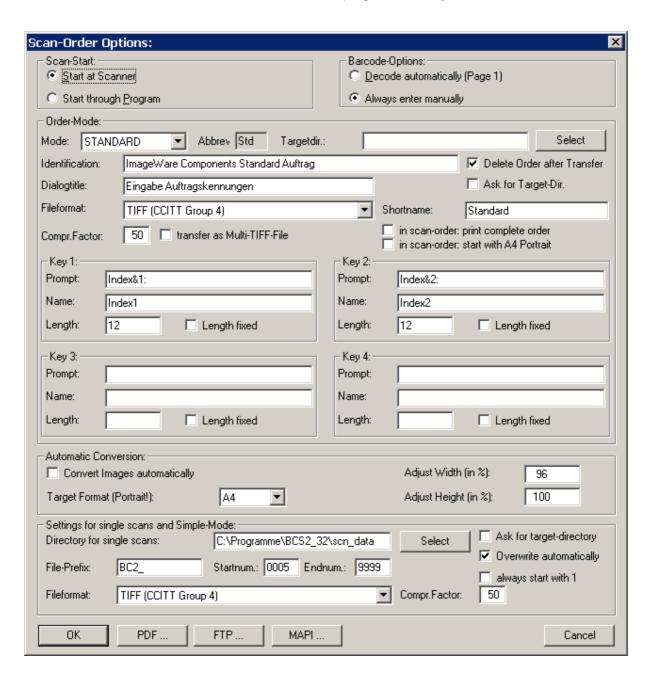
_

² BCS-2 support the following barcodes: UPC-A / -E, Code 39 / - 128, EAN 8 / -13, Interleaved 215 und CODABAR.

4.2 The options dialog

Before creating an order it is advisable to check the options that have been set and change them if required. To do this select the item "Options" in the "Order" menu. Now a dialog opens in which you can make settings to the order mode.

- Scan-Start
- Barcode-Options
- · Order mode with entry of up to four indices
- Automatic conversion
- Under settings for single scans and simple mode you can make several settings for these order types
- The "PDF" button opens a dialog for specifying the settings for the PDF-Conversion.
- The "FTP" button opens a dialog for specifying the FTP-Settings.
- The "MAPI" button opens a dialog for specifying the texts for automatically generated E-Mails, on which the scans are attached when sending via email. The variables used for this are listed in the file "BCS-2VARS.txt" that is located in the BCS-2 program directory.



4.2.1 Scan-Start options

Here you can select, by simply clicking with the mouse, whether you want to start the individual scans at the scanner itself (for example using the foot switch) [Start at scanner] or from the software [Start through program].

The Scan-Start at the scanner itself enables a very effective working method because placing the original and activating the scan can be carried out from the same location.

4.2.2 **Barcode Options**

Here you can switch the optional automatic entry on and off Indices per Barcode by simply clicking with the mouse on [Decode automatically (page 1)] (ON), and on [Always enter manually] (OFF).

The program expects the barcodes on the first page for automatic entry. The position and assignment of the individual barcodes to the indices must have been entered by the program previously under the item Barcode Assign position in the Order menu. If the automatic entry is not successful then the indices will be manually requested.

4.2.3 Order mode selection

In the "Order mode" area of the option dialog you can select a predefined order mode and edit it yourself.

The selection of predefined mode is quite simple. Select the appropriate mode from the "Mode" drop down menu. All required entries, even the key definition, will now be automatically inserted in the appropriate fields. Orders of the corresponding type (for example Jason or Subito) can now be processed without further settings. However it is also possible, to change the settings as desired.

If you want to make individual settings, then it is usually best to start with "Standard" mode. If no indices need to be created and no subfolders are to be generated, then select "Simple".

The different fields have the following significance:

- Abbrey: This is for internal order identification in the order dat file that is created for each order.
- Target dir: This is where the directory is specified in which the entire order will be transferred (exported) upon completion. If no directory is specified, then the entire order is transferred to the directory specified in the BCS2.INI. (Default: \scn_data).
- Identification: This is displayed when a scan order is loaded.
- Dialog title: Is displayed in the title page of the dialog for entry of the indices.
- Key: Here you can defined up to four keys for indices.

4.2.4 Key definition

In the areas "Key 1" to "Key 4", up to four indices can be defined for the current order mode key. Three entries are required per index:

- Prompt: The name should be entered here, under which the index will be requested during manual entry. If the corresponding field is accessible via shortcut, then an "&" symbol must precede the desired character within the prompt.
- Name: This designates the name, under which the index in the concluding transfer generated order.dat is stored in the target directory.
- Length: If the "Length fixed" box is checked, then the obligatory length of the index can be specified. If the "Fixed Length" is not checked, then the length downwards remains open.

4.2.5 Automatic conversion - options

This is where you can make settings for converting (shaping) all entered images to a single format.

If "Convert images automatically" is checked, then all scans entered in a order will be automatically converted to the format specified in the "Target Format" field. This is particularly useful if you want to easily create the complete order in a printable format.

The following target formats are available:

A2, A3, A4, A5, Legal, Letter, DLetter

Conversion is only to Portrait.

On the right side it is possible to adapt width and height. This is useful to prevent the disappearance of image borders when using printers without automatic scaling.

<u>Please Note</u>: The scan will be converted without any consideration for the size of the scanned material. Small originals can be enlarged and large originals can be reduced in size to the point that they are unreadable. This means that the utility of the results should be checked.

4.2.6 Settings for single scans and Simple Mode

Under "Settings for single scans and Simple mode the directory for single scans can be specified in the options dialog. This is where all executed scans other than orders will be stored (and they will not be deleted when exiting BCS-2.)

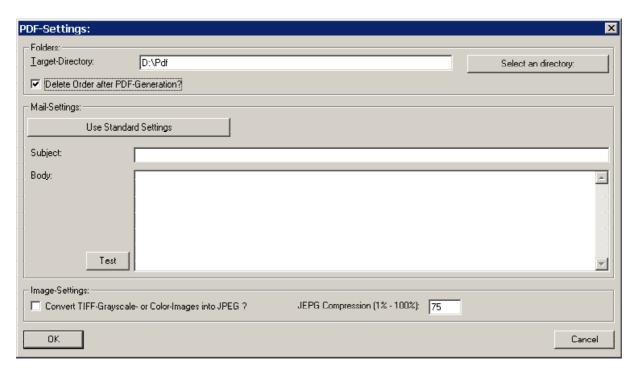
Furthermore it is possible to determine the file names under which the single scans and scans in Simple mode will be named. They are comprised on a freely selectable prefix and a number, that increases in an increment of 1 with each scan. You can specify the starting and ending number in the appropriate fields.

With the function "Always number from 1" it is possible to have the counter always start with 1.

If the "ask for target directory" is selected, then a dialog appears before each single scan, where the target directory can always be specified.

If automatic overwrite is selected, then older files in the target directory will be replaced by newer files without query.

4.2.7 PDF Options



Target directory: This is where you specify the directory in which the completed PDF files should be stored.

Select a directory: You can specify the target directory for the PDF files in a file browser window.

Delete order after generating PDF: If this has been checked, then the order will be deleted after generating the PDF files.

Use Standard Settings: Here you can reset the presettings for text and subject of the mail with which the PDF to be sent as an attachment, on a predefined standard mail.

Subject + Body: Here you can even specify the text for the Email, on which the PDF files to be sent are attached. For this you have the variables available, that are listed in the text "BCS2VARS.txt" that is located in the BCS-2 program directory.

Test: This is a possibility to test the layout of the mail to be sent.

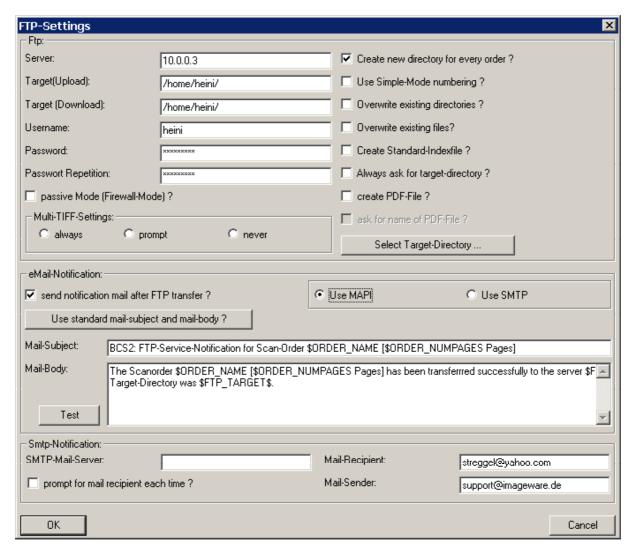
Convert TIFF grayscale or color images into JPEG: If this function is activated, then the TIFF grayscale or color images will be converted into JPEG format.

JPEG Compression (1% - 100%): This is where the degree of JPEG compression is set. The stronger the compression, the less disk storage is required by the image within the PDF file. However extremely high compression rates can strongly reduce the image quality.

4.2.8 FTP Options

After clicking the button "FTP" a dialog opens for the FTP³ settings. Here you have a large selection of options for transfer via FTP.

Likewise you specify the basic settings here that the *FTP* browser starts with.



- **Server:** This is where you specify the FTP server by entering the IP address, or the host name.
- **Target:** Enter the target directory on the FTP server here.
- User name: Enter your user name here. (for anonymous access usually: anonymous)
- Password: Enter your password for FTP access. The default is your password from the settings.
- Password Repetition: Enter your password again for security reasons for FTP access.
- Create a new directory for every order: If you activate this function, then a new directory will be created for each of the orders to be transferred into the FTP directory.

³FTP stands for File Transfer Protocol, and is used for copying files in the Internet. FTP is possible with most Internet browsers. To use FTP enter "ftp://... instead of http://...". Most FTP servers have guest access (anonymous FTP). Access can be limited with user names and password.

Use Simple Mode numbering: If this option is active then the naming system specified under settings for simple scans and simple mode will be used to name the transferred files.



- Overwrite existing directories: If this option is selected, then previously existing directories will be overwritten without a confirming dialog, if they have the same names as a new directory.
- **Overwrite existing files:** If this option is selected, then previously existing files will be overwritten without a confirming dialog, if they have the same names as a new directory.
- **Create standard index file:** If this option is selected, then a standard index file will be created in the target directory for each order when transferring, as it is also transferred together with normal transferring orders into the respective target directory.
- Always ask for target directory: If this option is selected, then you will be required to enter or confirm the target directory before each FTP transfer. This simplifies a frequent change of directories.
- **Select target directory:** You have the possibility here to search for the FTP target directory, by browsing through the FTP directory structure with the *FTP-Browser*.
- **Multi-TIFF Settings:** Here you can select whether you will send your orders standard as Multipage-TIFF, whether you will be asked before each sending, or whether you want to send the orders exclusively as individual TIFF files.
- **Send notification mail after FTP transmission:** If you activate these functions, the specified recipient of each FTP transmission will be notified per E-Mail for example so that he knows that the data are now available for download.
- **Use MAPI/Use SMTP:** Here you can choose whether you want to send the notification mails via your MAPI interface, or direct via SMTP.
- **Use standard mail-subject and mail-body:** This is where you can reset the presettings for text and subject of the mail on a predefined standard mail, which should suffice for notification that an order has been received.
- Mail-Subject/Mail-Body: Here you can specify the text for a notification mail for the recipient specified below. For this you have the variables available that are listed in the text "BCS2VARS.txt" located in the BCS-2 program directory.
- **SMTP-Mail Server:** You can enter the SMTP host name (for example smtp.provider.net) or also specify the IP address.
- Mail recipient: Here you specify the (standard) recipient of the notification (for example: empf@provider.net).
- **Mail Sender:** Here you specify the (standard) sender of the notification (for example: YourName@provider.net).
- **Prompt for mail recipient each time:** Here you can select whether you will be prompted for the recipient before each sending. This option is recommended for recipients frequently change.

4.2.9 Password protection for order options: (optional)

When this option is specified in the license file, then a password request will be made before opening the order-options-dialog. The dialog will only be released after correct password entry.

The request occurs once only this means the options dialog can always be called up after correct entry.

After restarting BCS-2, a new password request is made when calling up the order-options-dialog.

After password entry it is possible the *change the password*. This requires entering the new password twice.

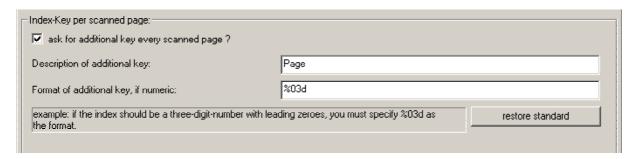
You can set more advanced parameters for the indices, and configure the file name and contents of the index file, in the Order Options sub-dialog "Indices"

4.2.10 Advanced Configuration of Index Keys



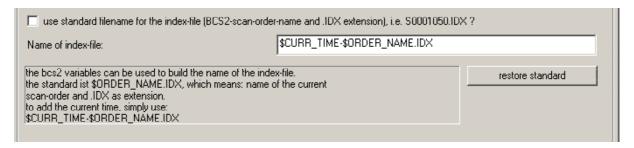
With the checkboxes "Index is barcode" you can select which of the indices will be recognized from barcodes. De-activating this option prevents barcodes being accidentally recognized in orders of type "Church Register".

If the box "Take last value as default" is checked, the previous value is preset when creating a new order.

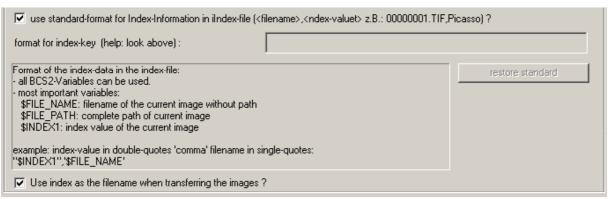


The interrogation of an extra key per scanned page is possible. The checkbox "Interrogate an extra key per scanned page" must be checked to do this. The name and format can be given in the text fields.

When an order is created an extra window appears with the checkbox "auto-increment". The next number is then used automatically when a page is scanned.



A standard name can be used for the index file. This consists of the BCS-2 order name and the extension "IDX". If you de-activate the checkbox "Use standard name for index...?" you can configure your own name for the file. BCS-2 variables can be used for this.



A standard format or an individual configuration can also be used for the index information in the index file.

If the extra key is to be used as the file name for the transferred images, the checkbox "Use index as file name for transferred images?" must be checked.

4.3 Working in order mode

4.3.1 Creating a order

Creating a order is quite simple. By selecting the menu item "Create" in the "Order" menu, a order is immediately created according to the settings in options dialog. Now the order bar appears under the drop down menu, the "Scan" button disappears, and the mode name appears at the same time to the right.

After pressing the "Scan" button you can directly begin work if "Start at scanner" has been selected under the Scan-Start-Options. Otherwise the first scan is executed.

4.3.2 The order bar

The following possibilities are available here:



- · Scan: The order will be start
- · Stop: The order is ended
- Discard image: An image can be deleted from the order.

In addition, different displays appear:

Under Status:

ST = Status (MAN/PROG)

- MAN = Scan by starting at scanner
- PROG = Scan by starting through button in the program

BC = Barcode (AUTO/MAN)

- AUTO = Automatic barcode recognition is active
- MAN = Barcode recognition is switched off

Modifying these settings is possible in options dialog:

[x/y] = [current page / total number of pages]

Behind the arrow is the display of the following (expected) page (for example: coversheet).

Under Order IDs the order number comes first. Then the respective indices are listed.

After pressing the "Scan" button you can directly begin work if "Start at scanner" has been selected under the Scan-Start-Options, otherwise the first scan is already executed.

4.3.3 Entry of Indices

The entry of indices by barcode is the simplest method of identifying a scan order or original.

For automatic capture the program expects the barcodes on the first page of the order. The position and allocation of the individual barcodes to the indices has to be made known to the program in advance with "Allocate barcode position" in the order menu. If automatic recognition is not possible, manual entry of the indices is requested.

If "Always manual" is selected in the Barcode Options dialog, index entry is always manual at the start of the order.

Individual lists of order indices can be created and managed per order type.

A separate list can exist for each key in the dialog for index entry after scanning the first page of an order.

The number of entries is displayed on the right next to the entry field (which also functions as a list box).

For each of the four indices there is a button to transfer the current entry into the list or remove the current entry from the list.

The lists themselves are managed in the same directory as the scan orders. The files are named for the order type, e.g. for STANDARD orders: Std KEYS.DAT.

Each entry is in a separate line. The number of the index is at the beginning of the line.

Example: STANDARD order with three indices:

1:blue 2:Vol 1 3:Heinz 1:red 2:Vol 2 3:Paul.

The order is not important – BCS-2 recognizes to which key the text belongs from the first two characters of the line.

The keys are sorted alphabetically in the dialog.

4.3.4 Scanning in batch mode

If "Start at scanner" has been selected under the Scan-Start-Options, then the order can be processed in batch mode. Processing the order starts by pressing the "Scan" button on the drop down bar. From this point on the entire operation occurs exclusively at the scanner. The scans can be initiated there (by footswitch) for example.

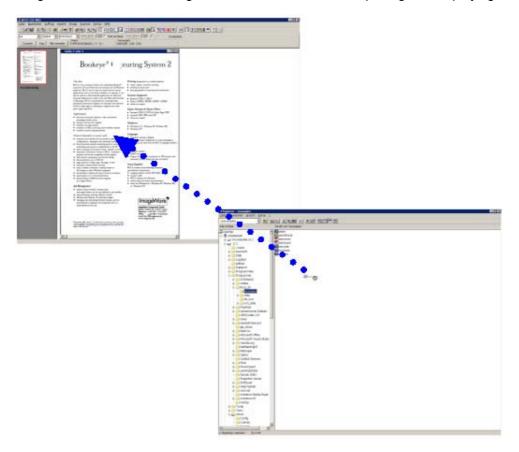
If a scan should not succeed, it can be deleted at any time by selecting the appropriate thumbnail and then pressing the [Delete] button or the "Discard Image" button. Please note that a system question still appears asking for confirmation before deleting. If an image is to be inserted in an existing sequence, then the thumbnail should be highlighted behind which the image is to be inserted. Subsequent scans will now be inserted at this point.

You must insure that the last image (thumbnail) has always been selected (highlighted) for normal continuation of the order.

If "Start through Program" has been selected under Scan-Start-Options, then initiating the scan occurs respectively by pushing the "Scan" button on the order bar.

4.3.5 Drag & Drop Functionality

It is possible to allow TIFF or jpg files to "fall" from Explorer into BCS-2. These files will thus be integrated in the order. In single scan mode this results in opening and displaying the appropriate file.



4.3.6 Ending the order mode

To end order mode, simply click with the *left mouse button* on the "Stop" button on the order bar.

The order will now be ended and the order selection window (order window) opens.

4.3.7 Working with the Fiche carrier



If in *Basic adjustments* the use of the carrier has been activated, and if the interface is correctly configured, a small dialog appears in a scan order in the upper right corner of the screen that remains visible the whole time. You can control the Microfly work with this dialog.

<u>Start and Stop:</u> determines the section of the fiche to be traveled to. This is where the information made in the basic settings is taken over as preallocation.

If in a concrete case other areas of the fiche have been entered, then these coordinates can be entered with *Start* and *Stop*. Afterwards press the *Set* button to insert these coordinates.

The checkbox mark at "Automatic" determines whether the scan process of the current section of the fiche should run automatically. However, the scanner dialog with the ISIS or TWAIN driver must be deactivated so that this can happen!

<u>The "Image" Group:</u> With these buttons positioning can also be done completely manually. These keys position the Microfly either in one of the four corners, in the middle, or always one step to the left, to the right, or one step up or down.

Load/Eject: The "*eject*" button controls the ejection of the fiche. The "*Load*" button controls the loading of the fiche.

<u>The "Grid" Group:</u> allows a selection of the grid. By pressing on R1 to R5 the respective grid will be activated on the Microfly.

4.4 The order window

4.4.1 Important instructions for the order window

By selecting the menu item "Select" in the "Order" menu, or by ending the order mode, you move to the order window.

All orders that have not yet been transferred or deleted appear in the order window. The order last processed appears at the bottom.

ATTENTION: <u>All</u> orders are displayed here and can be processed – regardless of the selected order mode in which they were created. However they will be handled according to the current settings with no regard for the mode of their creation (the current mode is visible on the title bar of the order window). This means for example they could possibly be transferred into incorrect directories. If required you must select the adjust settings.

You can select the desired order here (click once with the left mouse button,) it then has a colored background and you can determine what happens to it:



4.4.2 Selecting an order for processing

Simply select the appropriate order from the order selection window. By clicking on the appropriate order with the left mouse button (it now has a background color) and then activating the "Select" button you arrive directly in the order mode.

For this it is crucial that you read the important notes about order selecton window!

4.4.3 Printing an order

Simply select the appropriate order from the order mode. By clicking on the appropriate order with the *left mouse button* (it now has a background color) and then activating the "*Print*" button, the complete order will be printed.

4.4.4 Processing to a multipage TIFF file (optional)

Simply select the appropriate order from the order mode. By clicking the *left mouse button* on the appropriate order (it now has a background color) and then activating the *"Multipage-TIFF"* button you open a dialog in which you can select a name and a directory for your multipage-TIFF file. After confirming with *"OK"*, the file is generated immediately.

4.4.5 Transferring orders

Simply select the appropriate order from the order mode. By highlighting the orders with the left mouse button (these now have a colored background) and then activating the "*Transfer*" button the selected orders will be transferred directly into the current directory specified under Mode-Selection. The selected orders will now be deleted from the working directory. The scans will be transferred together with the file "order.dat" that describes the order into the target directory, however without the *Thumbnails*.



4.4.6 Deleting orders

Simply select the appropriate order from the order mode. By highlighting the orders with the left mouse button (these now have a color background) and then activating the "Delete" button the system will ask for delete confirmation. As soon as you click "Yes" the selected orders will be deleted.

4.4.7 Sending an order (optional)

Simply select the appropriate order from the order mode. By clicking on the appropriate order with the left mouse button (it now has a background color) and then activating the "Send" button the send will be organized. Before sending you will be asked if the order should be saved as Multipage TIFF. This has the advantage that only a single file needs to be sent. After this selection the order will be transferred via MAPI to your mail software and an automatically generated message will be attached containing all data relevant to the order (including the indices).

For this it is crucial that you read the important notes about selection window!

4.4.8 Use Despeckle on the whole order

Activating the "Despeckle" button removes impurities from all images in the selected orders.

4.4.9 Use Descew on the whole order

Activating the "Deskew" button optimally aligns all images of the selected orders automatically.

4.4.10 Publishing orders on the Internet (Web publisher)

Select the appropriate order in the order list and activate the button "WWW". The Web Publisher settings are described in the chapter 9.5.

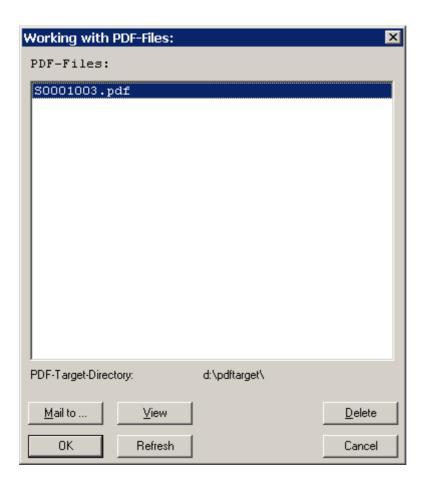
4.4.11 Generating a PDF file

Simply select the appropriate order from the order mode. By clicking on the appropriate order with the left mouse button (it now has a background color) and then activating the "*PDF Generation*" button, the selected order is transferred into the target directory, however it also in the order selection.



4.4.12 Selection for sending PDF files

Activate the button *Transfer PDF* in the order mode. You are now in the selection window for transferring PDF files. All PDF files located in the PDF target directory are displayed in this window. All PDF files are stored here that you have generated with the PDF generate option. Select with the PDF files with the mouse that you would like to send per Email and then click on the button "Send to…".



4.4.13 Sending via FTP

Simply select the appropriate order from the order mode. By clicking with the left mouse button on the appropriate order (it now has a color background) and then activating the FTP... button you end up, depending on your "FTP...", either in the FTP-Settings (to select the target directory), with a question of whether you want to send the order as multipage TIFF, or to a dialog in which you can confirm or change the recipient of the notification mail.

If you have selected neither of these query options, then the selected order will be sent directly according to the settings. If multiple query options have been selected, then the questions appear one after the other.

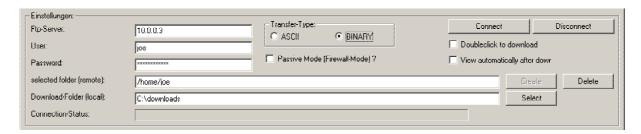
4.4.14 The FTP browser

If you already have experience with *FTP*, then the functions of the FTP browser will probably be immediately clear to you.

You have the possibility here to select an FTP directory, to view it, or to download files from it.

In the FTP <u>Settings</u>, you will mainly use the browser to specify a standard FTP directory. For this, you must simply browse in the appropriate directory (as you would for usual file selection) and confirm with *OK*.

Use the *Refresh* button to update the display of the respective directory.



- **FTP Server:** This is where you specify the FTP server by entering the IP address or the host name.
- User: Enter your user name here. (for anonymous access usually: anonymous)
- **Password:** Enter your password for the FTP access. The default is your password from the settings.
- **Selected folder:** Enter the target folder on the FTP server here.
- Download folder: Enter the download folder in which all files downloaded via FTP are copied.
- **Selection:** Here you can select the download folder by browsing through the directory structure of your system.
- Connection Status: Here you can see whether an FTP connection is currently in place.
- Connect: Here you can establish an FTP connection in case of a disconnect.
- **Disconnect:** Here you can disconnect the FTP connection.
- **Double click to download:** If this option is selected, then you can simply copy each file located in an FTP directly into your download directory with a double click.
- **Transfer type:** Here you can choose between ASCII transfer and binary transfer. Normally you will only use binary transfer. The ASCII transfer is mainly suitable for texts.

4.5 Allocate barcode position

4.5.1 Allocate barcode position – why?

BCS-2 offers you optionally the possibility to define up to four indices for scan orders. Thus it is possible to allocate a scan order to a order number, and to a customer number via the barcode on a pre-designed order sheet.

If "Automatic Entry" is selected in the Options Dialog, BCS-2 expects the barcodes on the first sheet of an order.

BCS-2 merely has to "know" where the barcodes are located on the first sheet. It learns this via the "Assign Barcode Position" option in the "Order" menu.

If BCS-2 has entered the position of the barcodes, then a new entry is no longer required as long as the barcode position has not changed.

4.5.2 Allocate barcode position – how?

Select "Assign Barcode Position" from the "Order" menu. Now the request appears: "Please select barcode areas with the mouse now". Confirm with "OK".

Determining the barcode areas is now quite simple:

- Scan or load a document that has the barcodes to be learned in the appropriate locations.
- Go with the mouse pointer into a corner of an area in which a barcode is located.
- Press with *left mouse button* and keep it depressed.
- Drag the mouse and draw a box over the entire area in which this barcode (and no other even on later sheets) is located.
- Release the left mouse button.
- If the message "Barcode was not recognized" appears, then confirm and try it again!
- It is better to make the fields too large rather than too small! For later scans the barcodes could be offset somewhat. BCS-2 only needs to recognize the area in which the entire code is guaranteed, and however where, other than itself, no other barcode is located.
- If the recognition is successful, then you should allocate the barcode to an index in the window that appears after confirming the success message. Highlighting with the left mouse key and confirming with OK does this. Now you must agree to the saving of the position in the INI file.
- · Repeat this process until all indexes have their barcode!

For the changes to become effective, you must end BCS-2 restart it.

Now you are ready for the automatic index entry.

5 The File Menu

5.1 Basic functions of the file menu

The essential functions of the file menu are comparable to those in other Windows applications.

The functions "New", "Save under" and "Print Preview" are currently not in use. BCS-2 automatically saves your files.

- **Open file:** After selecting the menu item, the usual dialog appears for loading files. Select the directory in the right window of the directory and select the file to be loaded in the left window. You can select between JPEG and TIFF files under the drop down menu "File Type".
- **Save file:** Saves the image currently highlighted in the thumbnails, format and name can be selected in a browser window. **Attention:** Multipage TIFFs are not supported.

Entire orders can be loaded from the order window.

- Individual scans or entire orders can be directly generated as PDF files with **File/Save as PDF file...** This menu item is also available via the **"PDF"** toolbar button.
- You can configure your printer as usual under "Printer Settings".
- **Print:** The current image will be printed. If you want to print an entire order, you can do this from the order window.
- Exit: BCS-2 is ended.

5.2 Optional special functions: Send to

To send a scan (that is an image), simply select "Send to..." in the file menu. The image that you can select by clicking on the corresponding thumbnail can now be transferred to your MAPI-compatible mail software.

BCS-2 generates a new message, that contains important information about the image and attaches it to this message as a TIFF file.

If you want to send an entire order, you can do this from the order mode.

6 The menu: Scanner

6.1 Selecting the scanner

Scanner selection is done quickly and easily via the menu item "Scanner Selection" in the scanner menu.

Now drivers are loaded and scanners are searched. After a short time a window appears with a list of the available scanners. Select the desired scanner by clicking once with the left mouse button and then confirm with OK.

6.2 Scanning from the scanner menu

By selecting the menu item "Scan" in the scanner menu you can initiate a scan at any time, if you are not in the order mode and have selected order mode.

6.3 Scan mode

In BCS-2 there is the optional possibility to address scanners not only via a HiScan interface but also via TWAIN, ISIS, network, or via an external DLL as well.

For this the respective mode must be selected in the scanner menu.

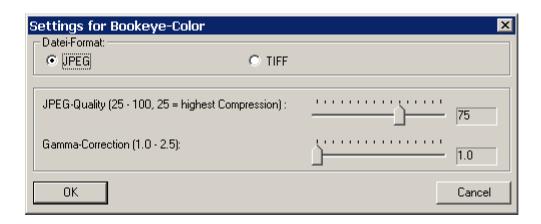
The driver files required for the HiScan connection are delivered with BCS-2 as standard.

For addressing the scanner via TWAIN or ISIS, it is necessary, to install the driver associated with the respective scanner.

By selecting the item "Use TWAIN/ISIS interface" you can scan in single scan mode or order mode from the respective interface, and you can also make scanner specific settings there.

If multiple scanners are installed on the system, then the desired scanner can be selected for the work with BCS-2 via "Selecting the scanner" or in network mode the name and the IP address of the scanner can be specified.

If Network Mode has been selected, then the file format and JPEG compression can be set and the gamma correction performed via "Network scanner settings...".



File Format:

you can select whether the scanner transfers the scanned images to BCS-2 as JPEG or TIFF files.

JPEG Quality: you can set the JPEG compression. A high value ("75") means a low

compression and therefore high image quality. However, higher image quality

results in larger files.

Gamma-Corr.: Gamma correction is used to correct differences in brightness of the colors or

gray levels. Values greater than "1.0" result in a brightening of the image.

Black and white remain unaffected by the correction.

6.4 Selection: Bitonal – grayscale

Here you can choose whether to scan in black and white *(bitonal)* or in grayscale *(4/8)* bit. This setting applies only for scanners that are addressed via a HiScan card.

6.5 Automatic Deskew and Despeckle

If automatic deskew and/or despeckle are activated, these corrections are automatically made for each scan.

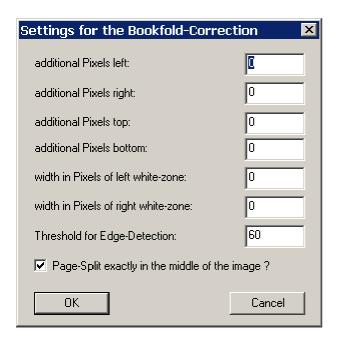
6.6 Automatic Black Edge Removal

If this function is activated, the black edge around the image will be removed automatically for each scan.

6.7 Book curve correction

Insure that the book is laid on the scan surface app. 5 cm from the lower edge in the direction of the scan neck.

If the scanner is controlled by a HiScan card, the following further settings can be made in "Settings for Book Curve Correction":



Additional Pixels left/right/top/bottom:

This determines how much is cut off the edges of the book curve correction.

Positive values cause less to be removed from the respective edge. Negative values increase the area cut off the edge.

Whitening Width left/right in Pixels:

An n-pixel wide area left or right of the image can be filled with white.

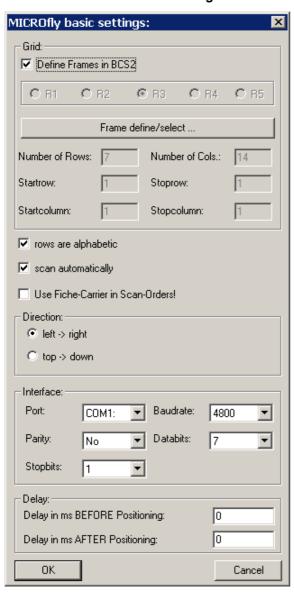
If "Page Separation exactly in center of image?" is activated, the page separation is performed in the center of the base plate. If this option is de-activated, the page separation is performed in the center of the detected book curve area.

6.8 Determine user format

You can use the mouse to determine an area to be scanned. In order to scan the determined area, "User defined" must be set in the Dropdown-Bar.

6.9 Fiche carrier settings

6.9.1 Basic fiche carrier settings



Grid: This pre-allocation regulates the grid definition.

Name lines alphabetically: When this setting is activated then lines are identified with letters.

This means that entries like scan from A1 to D4 etc. can be made later. Most fiches have such a structure.

Automatic scan: This pre-allocation regulates whether the selected area of the fiche should be scanned automatically in the scan order.

Use the fiche carrier in scan orders! Only when this box is checked will the carrier actually be used.

Direction: This pre-allocation regulates whether the fiche will be scanned from left to right (line by line) or rather from top to bottom (column by column).

Interface: At this point the serial interface parameters must be set accordingly: Port (typically COM1), baud rate (mostly 4800 or 9600 baud), parity (mostly: no parity), number of data bits (7), and stop bits (1).

6.9.2 Fiche definition

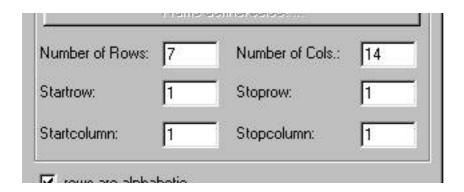
There are two ways to define fiches:

1. Through BCS-2:

For this you must select "Define fiches through BCS-2". Then a definition of the fiche can follow by pressing the button define/select grid.

2. On the Microfly:

First the fiche layout must be entered. For this the number of lines and columns of the current fiche type is entered. At this point all entries must be *numeric*!



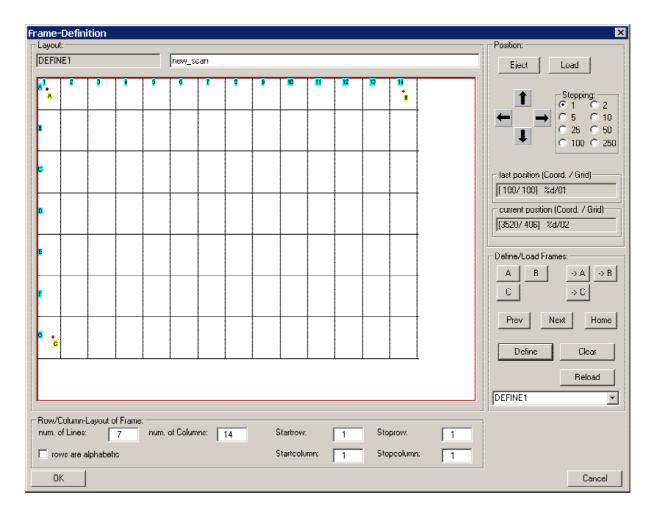
Start line, stop line, start column, and stop column are the pre-allocations for the section of the fiche to be traveled over in scan operation.

The selection R1 to R5 specifies which raster will be automatically set on the MICROfly.



6.9.3 Defining fiches through BCS-2

The control field in the frame definition window has the focus (is activated) when a red border appears. Only when this field has the focus, can you position using the keyboard. After opening the frame definition dialog this field automatically has the focus.



The definition of a fiche then goes like this:

First enter the geometry of the fiche:

Enter the columns and the numbers of the lines in the appropriate fields of the dialog window.

In addition do not forget the start column/line and the stop/column line. These values serve later as pre-allocation for the area of the fiche to be scanned in a scan order.

After this a name must be assigned for this fiche. (It is best to use a name that indicates the geometry, like 14x28 for a fiche with 14 lines and 28 columns.) In the upper field of the dialog you can also enter a longer text to describe the fiche in more detail.

Now the fiche will be described through 3 points. These points are identified with *A*, *B*, and *C*. Relative to the geometry of the fiche *A* should be *upper left*, *B upper right*, and *C* either *left bottom* or *right bottom*.

These three points can be freely positioned, so that the user determines in what manner the fiche will be traveled:

Basically a fiche is always traveled over from A to B in the direction of point C.

In this regard the position of the points does not play a role. Normally you will set point *A* in the upper left of the fiche, point *B* in the upper right, and point *C* in the last line below point *A*. The individual images will then be located in a line-based manner from *A* in the direction of *B*, at the end of a line the system moves to the next line etc. When working with rotating prisms it is necessary that the horizontal direction be traveled over exactly in the reverse direction.

This is achievable when defining the frame by simply switching the *A* and *B* positions in the above example: *A* is right and *B* left. In precisely the same manner it is possible to set *A* and *B* below and point *C* above the others: In this case the fiche will be scanned from the *bottom* to the *top*. All sensible combinations are permitted. After definition of the fiche (with key *D*, or by pressing the *Define* button) a raster is drawn that is labeled accordingly.

In this manner it is always evident how the fiche should be traveled over in an order: Always from *A* to *B* in the direction of C. (Please note: In the order itself you can also switch between *left/right* and *up/down*. This is always based on the current raster)

Executing a diagonal correction:

For changing fiches of the same geometry it can occur that the raster must be readjusted. In this case simply push the *Define Raster* button again in the MICROfly control in the scan order. The raster definition dialog will be displayed and the current raster is already loaded. Now the three definition points *A*, *B*, and *C* can be adjusted accordingly. Afterwards the raster will be stored again (press the *D* key, or the define button, and confirm the change of the raster).

Instructions for keyboard operation:

Using the keys *Home*, *PgUp*, *End* and *PgDn*, the fiche can be quickly positioned in each of the four corners. Using the cursor keys you can then make finer adjustments. In this regard we recommend that you vary the stepping stored by keystroke incrementally:

First position generally with large steps (such as 100 or 250 points per movement) then switch to smaller stepping.

Stepping is selected via the keys 1...8 (or it can be selected in the dialog using the appropriate buttons).

Instructions for mouse operation:

With the left mouse key the focus is set in the field (red border) or the field is activated. In addition you can position on the absolute coordinates with the left mouse button. With the right mouse key the raster can be tested:

If a raster has been correctly defined, then the right button is used to position on the respective raster point. In this regard it is does not matter which point you click on in the respective raster: BCS-2 calculates which is the correct raster point and positions accordingly.

6.9.4 Keys for frame definition

B Set point B C Set point C CTRL-A Go to point A CTRL-B Go to point B CTRL-C Go to point C D Save current frame (Define) E Eject fiche (Eject) L Load fiche H Go to Al (home position of the frame) N Go to next image (next)	Cungan laft	Desition to the left based on surrent sterning	
Cursor up Position up based on current stepping Cursor down Position down based on current stepping Home Go to the upper left corner PgUp Go to the upper right corner Number pad 5 Go exactly to the middle End Go to the left lower corner PgDn Go to the lower right corner 1 Stepping 1 2 Stepping 2 3 Stepping 5 4 Stepping 10 5 Stepping 25 6 Stepping 50 7 Stepping 100 8 Stepping 250 A Set point A B Set point B C CTRL-A Go to point B CTRL-B Go to point C D Save current frame (Define) E Eject fiche (Eject) L Load fiche H Go to Nat (Nome position of the frame) N Go to next image (next)			
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PgDn Go to the lower right corner 1 Stepping 1 2 Stepping 2 3 Stepping 5 4 Stepping 10 5 Stepping 25 6 Stepping 50 7 Stepping 100 8 Stepping 250 A Set point A B Set point B C Set point C CTRL-A Go to point A CTRL-B Go to point B CTRL-C Go to point C D Save current frame (Define) E Eject fiche (Eject) L Load fiche H Go to Next image (next)	Number pad 5	Go exactly to the middle	
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Stepping 2 Stepping 5 4 Stepping 10 5 Stepping 25 6 Stepping 50 7 Stepping 100 8 Stepping 250 A Set point A B Set point B C Set point C CTRL-A Go to point A CTRL-B Go to point B CTRL-C Go to point C D Save current frame (Define) E Eject fiche (Eject) L Load fiche H Go to next image (next)	PgDn	Go to the lower right corner	
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5 Stepping 25 6 Stepping 50 7 Stepping 100 8 Stepping 250 A Set point A B Set point B C Set point C CTRL-A Go to point A CTRL-B Go to point B CTRL-C Go to point C D Save current frame (Define) E Eject fiche (Eject) L Load fiche H Go to A1 (home position of the frame) N Go to next image (next)	3	Stepping 5	
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CTRL-B Go to point B CTRL-C Go to point C D Save current frame (Define) E Eject fiche (Eject) L Load fiche H Go to A1 (home position of the frame) N Go to next image (next)	С	Set point C	
CTRL-C Go to point C D Save current frame (Define) E Eject fiche (Eject) L Load fiche H Go to A1 (home position of the frame) N Go to next image (next)	CTRL-A	-	
D Save current frame (Define) E Eject fiche (Eject) L Load fiche H Go to A1 (home position of the frame) N Go to next image (next)	CTRL-B	Go to point B	
E Eject fiche (Eject) L Load fiche H Go to A1 (home position of the frame) N Go to next image (next)	CTRL-C	Go to point C	
L Load fiche H Go to A1 (home position of the frame) N Go to next image (next)	D	Save current frame (Define)	
H Go to A1 (home position of the frame) N Go to next image (next)	E	Eject fiche (Eject)	
N Go to next image (next)	L	Load fiche	
3	Н	Go to A1 (home position of the frame)	
	N	Go to next image (next)	
F Go to previous image (Prev)	P	Go to previous image (Prev)	

6.10 Automatic print out (optional)

The optional function "Automatic Print out" in the scanner menu extends your Bookeye® with the function of a copy machine.

When this function is selected, each scan will be automatically printed out – even in order mode!

6.11 Rotate wide images when printing

With *Rotate wide images when printing* you can insure that the printout always has the optimal appearance (this requires a portrait printer).

This function can likewise be initiated via shortcut with CTRL-F9.

DS-2 Manual

7 The menu: View

7.1 Adaptive functions of the view menu

Three functions are located in the "View" menu that facilitate image handling on the work surface. These functions are particularly useful for large images.

- Original size: The image will be displayed in original size. Each captured pixel is displayed in this view. Thus the view can become quite large.
- Adapt to window width: When this function is activated, the image will be reduced or enlarged so
 that it is adapted precisely to the width of the window. The dimension ratios remain intact. If the
 size of the window changes then the image adapts itself accordingly.
- Adapt to window height: When this function is activated, the image will be reduced or enlarged so
 that it is adapted precisely to the height of the window. The dimension ratios remain intact. If the
 size of the window changes then the image adapts itself accordingly.

It is not possible to adapt to window width and height concurrently!

7.2 Zoom functions of the view menu

The zoom functions enable simple enlargement and reduction of certain image sections.

- Zoom in: You can zoom into the image here. You get a smaller and smaller section in a larger and larger display. This function can be executed significantly faster if you double click with the left mouse button in an area of the image.
- Zoom out: In this case you zoom out of the image: The image segment becomes larger and the view becomes smaller and smaller. This function can be executed significantly faster if you double click with the right mouse button in an area of the image.

If you want to enlarge a certain image area, you can simply highligt it. The program then overlays it automatically.

8 The menu: Image

8.1 The Rotation function in the Image menu

If a scan is not aligned as desired, then alignment correction is easily possible in the *Image* menu.

The following rotation possibilities are provided for this:

- 90 degrees: The image is rotated 90 digress to the right.
- -90 degrees: The image is rotated 90 digress to the left.
- 180 degrees: The image is turned "upside down".
- 10 degrees: The image is rotated 10 degrees to the right.
- -10 degrees: The image is rotated 10 degrees to the left.

The two 10 degree functions are mainly designed to straighten out scans that are inserted diagonally. Automatic alignment is possible with the optional *Deskew-Function*.

These functions can be completely reversed or undone with the menu item "Restore".

8.2 The special functions in the Image menu

Other than the Rotation function image menu offers some very convenient special functions for improving the scan image quality.

- Grayscale: The setting has no impact on the image file itself. However it significantly improves the display quality, as harsh edge contrasts are softened by grayscale. For extreme enlargements the quality can be lessened through the settings.
- Despeckle: Small speckles (impurities) on the image will be automatically removed.
- Deskew: ...completely automatic optimal alignment of the image.

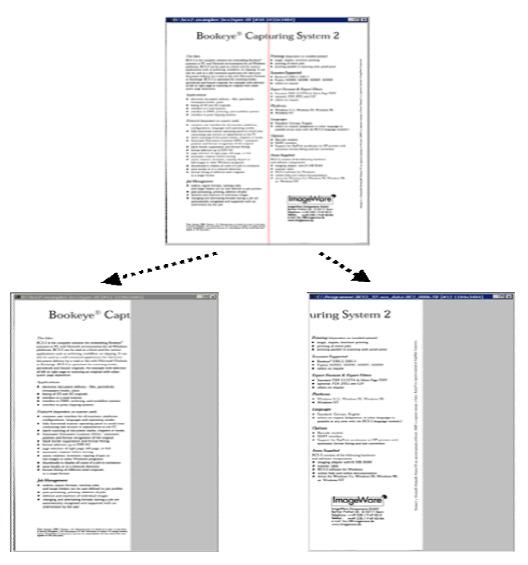
These functions can be completely reversed or undone with the menu item "Restore".



8.3 Manual page division and screen (optional)

8.3.1 Manual page division

With the manual page division it is possible to retroactively divide an image at a certain point.



You change to this mode using the "toggle manual page division" in the context menu (right mouse button). This applies for the order mode as well as for the single scan mode.





In page division mode, a red separating line can be moved over the image.

To move the separating line to the left or to the right:

move the mouse pointer over the red separator line. The mouse pointer turns into a double-headed arrow. Move the line by holding down the left mouse button.

By selecting "Separate page or Use Mask" in the context menu, the page separation is activated. The old image is removed and replaced by two new ones for the left and right pages.

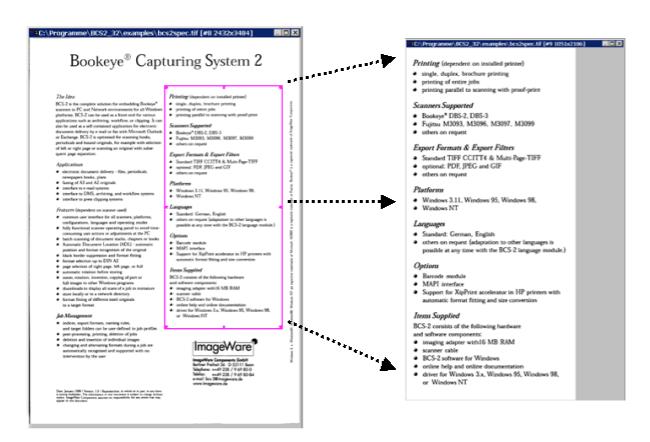
Optionally, the central area of the original image can be removed. A left border can be set for this purpose using the $\bf L$ key. The red separator line is then the implicit right border and must be to the right of the left border. When the left border has been set, it remains visible as a blue line.

If the separation is performed now, one page is from the left to the left border and the other page from the separation line to the end.

This mode can be deactivated with the **R** key. The blue line disappears.

8.3.2 Screen mode

In screen mode a rectangular area of the original image is defined, which comprises the resultant image after partitioning.

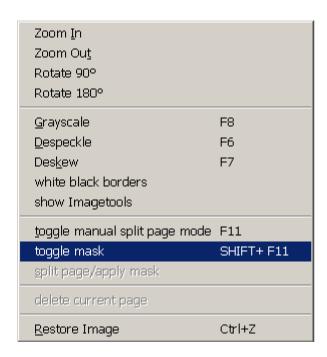


You can still choose to execute the above-mentioned page division.

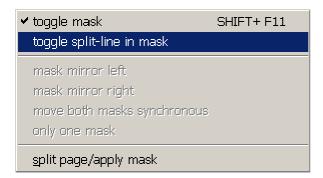
The basic idea is for example when scanning a large number of the same images the same problem should always be solved: only a particular segment is relevant per image, (for example in the case of micro fiches), this segment is to be cut out for post-processing, and if desired it is to be divided into a left and right page.



Screen mode is selected with "Toggle screen" in the context menu.



To use page division and screen at the same time, select "Toggle separation line in screen" in the context menu.



To change the size of the screen, position the mouse pointer on the side to be moved and drag it with the left mouse button pressed.

With the mouse pointer inside the screen, you can move the entire screen by dragging it with the left mouse button pressed.

The image will be replaced by the contents of the screen when you select "**Separate pages or Use screen**". If separation lines for page division were also active, the contents of the screen are separated into two pages. A left and right border can also be used.

8.3.3 Keyboard layout for manual page division and screen mode

Key	Meaning
F11	Changes to page division mode. After pressing F11 the pure page division mode is active. The screen mode can be reached by pressing M (see below)
1	Stepping 1: Smallest stepping increment
2	Stepping 2: middle stepping increment
3	Stepping 3: largest stepping increment
Left arrow key	Movement: to the left, Size change: horizontal smaller. CONTROL: smallest increment, SHIFT: middle step, without: largest increment.
	Movement: to the right, <u>Size change:</u> horizontal larger. CONTROL: smallest increment, SHIFT: middle increment, without: largest increment.
	Movement: up, size change vertical smaller. CONTROL: smallest increment, SHIFT: middle step, without: largest increment.
	Movement: down, size change vertical larger. CONTROL: smallest increment, SHIFT: middle increment, without: largest increment.
	Switches to screen mode. The red separating line appears in the screen or is positioned in the middle of the screen. The separating line moves when the screen moves. The same applies for the left border
Р	In screen mode screen positioning mode: The screen is positioned (together with the separating lines) on the image
I	In screen mode Switches to the separating line: If this key is pressed the separating line for page division can be moved within the screen. This key always toggles between screen control and separating line control.
J	Switches on the concurrent movement of left and right borders.
	Specification of the left border: the current position of the red separating line is fixed and displayed as blue line. The red line comprises the right border implicitly. The page division is then working: left edge to left border, and right border to right edge.
R	The left border is removed again. Only the red separating line executes the page division.
	In screen mode: The separating lines will be hidden. A page division will no longer be executed. RETURN produces only the consideration of the screen; this means the old image will be replaced by the content of the screen.

8.4 Imagetools

Imagetools provide the possibility to change the contrast and the brightness of the scanned image.

If the "Show Imagetools" option is activated in the "Image" menu, then a small dialog appears over the image.



In this dialog the contrast as well as the brightness can be reduced or increased by using the "-" und "+" buttons. For bitonal images however only a contrast change is possible, brightness correction is not.

The changes will be written after pushing the accept button.

With "Restore" the original condition will be restored.

Selecting the menu item turns off the dialog.

8.5 Whiten Black Border

With "Whiten Black Border" the black area around a scanned image can be colored white. This is useful for preventing black stripes during a skew correction.



9 The menu: Extras

9.1 Import license file

Here you can import a license file (*.liz) that has been sent to you from ImageWare, this silence allows the unlimited use of BCS-2 with the options you have selected.

When you have selected the functions, you reach a dialog that enables the selection of a license file. If your license file is valid, then you receive a short confirmation. Otherwise you will be informed of the reason that it is not valid.

9.2 Check license

Here you can learn, whether a valid license is available for the version of BCS-2 used. More detailed information is available to you under the menu item *About BCS-2* in the *Help* menu.

9.3 Select language

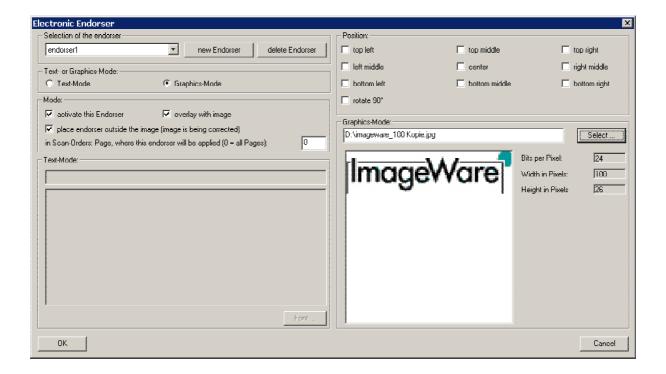
Here you can choose from among the available languages. This function is implemented if there are times when you want to use the software in another language. A few messages however will appear as before in the language selected at installation.

9.4 Electronic Endorser

With this function, texts and/or bitmaps can be overlaid in scanned images.

You can choose whether the information will be integrated into the image or placed outside the image on the edges.

The Endorser is configured under *Extras/Electronic Endorser*



 Selecting the Endorser: Endorsers that are inserted with the button "New Endorser" can be selected here.

- Delete endorser: Deletes the currently selected Endorser.
- **Text or Graphic mode:** Here you can select between text and graphic mode.
- Mode: The respective Endorser can be activated and you can also select here whether the Endorser will be overlaid in the scanned images and/or inserted on the exterior.
- **Text Mode**: In text mode the text to be overlaid can be entered in the "Text Mode" line. In the box below a preview of the overlay is displayed.
- Font: Opens a window in which font, font size, font degree, display type, and color can be set.
- Position: Determines the position of the overlay in the image.
- **Graphic Mode:** Here you can select an image file (JPG, TIFF, PNG and GIF) that is to be overlaid in the scanned images.

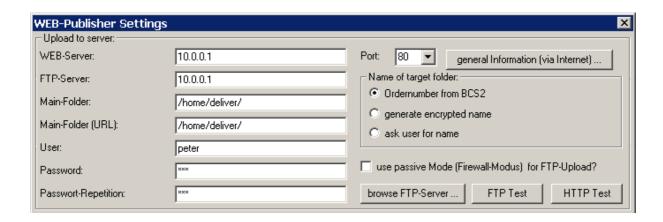
The endorser is turned on and off via the menu: *Scanner-> "Activate Endorser"* or by using the key combination "CTRL-E".

9.5 Web Publisher

The BCS-2 Web Publisher allows you to publish scan orders from BCS-2 directly on the Internet. The following features are supported for this:

- Simple access to single images via a thumbnail bar
- Each image can be evaluated in a preview view. The appropriate pages can be read directly online. A typical JPEG file in A4 format scanned in color will take ca. 80 90 KB as JPEG file, because the images are calculated down to the resolution of a standard monitor.
- The original images (TIFF or JPEG in full resolution) can be directly downloaded from the Internet onto the local system.
- If desired the entire scan order can also be made available as PDF file and likewise transferred directly onto the local system.

The Web Publisher is configured under Extras/Web Publisher - Settings



Under "Upload to Server" the following settings can be made:

- Web Server/Port: Here the host name or the IP address and the port of the Web server is specified.
- **FTP Server:** Here the host name or the IP address of the FTP server is specified to which the orders are to be uploaded.



- **Main directory:** Here the directory of the FTP server is specified under which the target directory of the order is to be created.
- Main directory (URL): This is where the main directory of the web server is specified.

If **localhost** is entered for web and for FTP server, and if the upload main directory is in the local file system (that means normal windows path names are used), then the Web Publisher works completely locally.

- User: The user name for FTP access is entered.
- Password: The password for FTP access is entered.
- Password repetition: The password is entered here again for the FTP access for security reasons
- Name of the target directory: Here you can select how the names of the target directories will be generated. The order number from BCS-2 can be inserted as file name, an encrypted name of 28 characters can be generated, or the name of the respective order can be entered by the user before transfer.



The FTP browser opens with the button "Browse FTP server..." (3.4.11 the FTP browser)
The buttons "FTP Test" and "HTTP" test allow you to test the access to the FTP server and the web server.



The following can be specified in the "Image options":

- **Create PDF file**: If this option is activated, then BCS-2 also generates a PDF file additionally from the order and transfers it into the target directory.
- In PDF file: Convert grayscale to JPEG/ Compression (1...100): With this option you can specify that grayscale images in the PDF file are converted to JPEG and the compression strength can be set.
- **Upload original images:** If this option is activated, then original images from the order will also be transferred into the target directory.
- Convert grayscale images to JPEG/ Compression (1...100): With this option the original images can also be converted to the JPEG format to reduce the image's memory requirements. The compression strength can also be set here between 1 and 100.
- Thumbnail width (pixels): The width of the generated thumbnail can be specified in pixels.
- **Preview image width (pixels)/Compression preview:** The width of the preview image and the compression strength can be specified here.



The **Email notification** function offers the following options:

- **Send Email after Upload:** When you activate this function, the specified recipient will be notified of each transfer via Email.
- **Use MAPI/Use SMTP:** Here you can chose whether you want to send the notification mails via your MAPI interface, or direct via SMTP.
- Restore Standard: Here you can reset the pre-settings for text and subject of the mail to a
 predefined standard mail.
- **Subject/Text:** Here you can specify the text for a notification mail for the recipient specified below. For this you have the variables available that are listed in the text "BCS2VARS.txt" that is located in the BCS-2 program directory.
- **SMTP-Mail Server:** You can enter the SMTP host name (for example smtp.provider.net) or also specify the IP address.
- **Mail recipient:** Here you specify the (standard) recipient of the notification (for example: empf@provider.net).



- **Mail Sender:** Here you specify the (standard) sender of the notification (for example: YourName@provider.net).
- Ask for mail recipient each time: Here you can select whether the recipient should be specified before each sending. This option is recommended for frequently changing recipients.

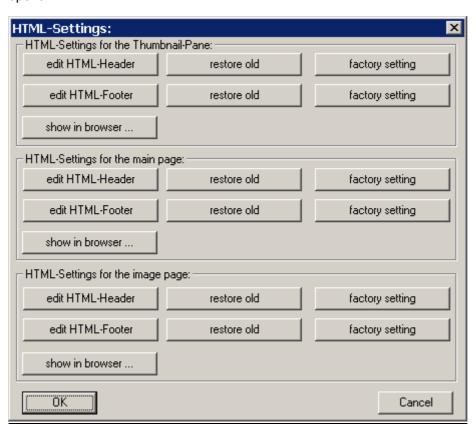


With the option: show in Browser after successful upload.

The result can be directly displayed in the browser after successful upload.

HTML settings:

By pushing the HTML-Settings ... buttons in the "WEB-Publisher settings" the following window opens:



Here you can make adaptations of the HTML header and footer directly in the HTML source text.

• "Edit HTML header" and "Edit HTML footer": These buttons open a text editor window.

Here you can now edit the source text of the header or footer of the thumbnail bar, the control page or the image page respectively.

- "Restore old": This function makes it possible to undo the changes carried out on the respective source text. This means the condition is restored that existed before opening the HTML settings.
- "Factory settings": This option changes the respective header or footer back into the default condition.
- "Show in Browser": Here the changes of the respective header or footer can be displayed directly in the web browser.

9.5.1 The Individual Scenarios

Normal Case:

BCS-2 is to be used in the Internet or Intranet, typically publishing to a web server with a UNIX operating system. The data are transferred with FTP, and this requires a suitable account on this server (see below).

Normally, a web server will be running on this computer, typically an Apache web server.

Note

For this case set the parameters FTP-Server and Web-Server to the name of the UNIX-computer.

A variant of this case is when the web server is running on the same PC as the scanner, and the uploading of the images by BCS-2 does not occur with FTP but via the normal file system.

This case is also described below.

Note

For this case set the parameter FTP-Server to localhost and the parameter Web-Server to the name of the PC.

Completely Local Case:

BCS-2 is to be run on a notebook for demonstrations and there is no web server or FTP server. The generated HTML pages and the images can be viewed locally with a browser. BCS-2 only has to generate a different URL and copy the files locally.

Publication in an Intranet without a web server:

This is the case where no web server is to be used, but the generated HTML structures and images are to be accessed in the local network with a browser.



A web server is not necessary in this case, as the URLs can be generated to point to the file system of the computer and any browser in the network should be able to understand these URLs and display the generated pages.

9.5.2 Configurations

Configure web server and FTP server (e.g. under UNIX or Linux)

Be sure to note the following when configuring the FTP server: the uploaded files must be readable by the web server, i.e. the file access rights that the FTP server allocates when creating the uploaded files must include read access for the web server.

This note applies primarily to UNIX systems (Linux, HP-UX, AIX, Solaris, ...). The umask setting of the FTP server is decisive. If there are problems displaying the pages, check the access rights of the uploaded files. Most FTP servers allow the access rights of the files that they create to be changed.

In the case that the web server runs under a different UNIX account than the FTP user who uploads the files (this will normally be the case), the access rights of the files must include read rights for all users.

Example:

The Apache web server is installed on a UNIX system named astra23 under /usr/local/httpd.

The Apache server is running on the UNIX system under the account **nobody**. The document directory is htdocs. Everything that the web server delivers is under /usr/local/httpd/htdocs.

For web publishing with BCS-2, everything should happen in the directory www_bcs2 under htdocs-.

The FTP upload occurs under the account bcs2_upload.

The following values would then be set up in BCS-2 for the web publisher:

• WEB-Server: astra23

• FTP-Server: astra23

- Main directory: /usr/local/httpd/htdocs/www_bcs2
- Main directory (URL): www_bcs2
- User: bcs2_upload
- Sample generated URL: http://astra23/www bcs2/S0001050

It is important that the web server, which accesses the files under the account **nobody**, can read the files created by the account **bcs2_upload**. Only then will the web server be able to deliver the files to requesting browsers.

This can be achieved for example by setting the umask for the account **bcs2_upload** to **022**, which means that all accounts on this UNIX system can read the files.

Configure a web server without an FTP server under Windows

This is the case when a single stand-alone PC is to be setup

- as a scan station with BCS-2 and
- as the web server to deliver the files created by the web publisher.

First the Apache web server must be installed on the PC. This has a setup routine that is used in the normal way. It is recommended to install the web server as a system service so that it is automatically available when the computer is started. There are menu items for this available after the Apache installation, which must be called up once by the administrator.

Now, BCS-2 should not deliver via FTP, but create the images and HTML pages in the file system of the web server. The e-mails that BCS-2 sends as notifications should not contain URLs that point to the file system, but should be normal URLs that can be accessed from outside.

The correct setup in the web publisher is: set FTP-Server to **localhost** and Web-Server to the real name under which the PC can be reached in the Internet.

Example:

The Apache web server is installed on a PC named **pc_web** under C:\Programme\Apache Group\Apache.

The document directory is **htdocs**. Everything that the web server is to deliver is on the computer under C:\Programme\Apache Group\Apache\htdocs.

Everything for web publishing should now happen in the directory www_bcs2 under htdocs.

The upload is directly to the file system.

This results in the following example values to the web publisher setup in BCS-2:

- WEB-Server: pc_webFTP-Server: localhost
- Main directory: C:\Programme\Apache Group\Apache\htdocs\www_bcs2
- Main directory (URL): www_bcs2
- User: no entry needed!
- Sample generated URL: http://pc_web/www_bcs2/S0001050

Note: the upload to the file system is requested by setting the value of FTP-Server to localhost.

Generating the normal URLs is requested by setting the value of Web-Server to pc_web.

Local Operation:

If **localhost** is given for FTP-Server and the main directory is a normal Windows path, upload will not occur with FTP but with normal file system operations.

In this way, either a scan order can be viewed in a local browser for demonstration purposes, or work can be made possible with a local web server but no available FTP server.

Example:

The scan PC is called pc_web , the document directory is $C: \www$. The upload is to occur in the file system.

The following example values are used for the web publisher in BCS-2:

- WEB-Server: localhost
- FTP-Server: localhost
- Main directory: C:\www
- Main directory (URL): C:\www
- User: no entry needed!
- Sample generated URL: file://C:\www\S0001050

10 Additional possibilities

10.1 Multiple scanners for one directory

When multiple scan stations serve one Medea directory, it can cause problems due to the same file names.

To solve this problem, intervention in the ordrmgr.ini file is required. This intervention is relatively simple, however an experienced user should only carry it out.

Proceed as follows after a new installation before the first scan:

- Open the file "ordrmgr.ini" in the "scn data" directory.
- Search for the section "[Subito]".
- Change the letter "S" to any other letter desired in the following entries:

JobNumberInFormat=S%Id.JOB

JobNumberOutFormat=S%07Id.JOB

For example in:

JobNumberInFormat=W%Id.JOB

JobNumberOutFormat=W%07Id.JOB

- Save the file
- The file "jobno.dat" will be automatically generated with the format specified in the ordrmgr.ini after the first transfer.

If an installation and a "jobno.dat" is already present, then proceed as follows:

- Delete (or transfer) all available orders in BCS-2, so that the window under "Order Select" is empty.
- Delete the file "jobno.dat" in the "scn_data" directory.

Proceed as described above.

10.2 The BCS-2 INI

A few settings can be made in this INI file that cannot be made in the software itself. In normal operation these settings are not necessary. Errors can make the program non-functional!

For experienced users however there should be no problem making these settings:

Testmode

With the testmode it is possible to show the program functionality even without a scanner. To do this, search for the following entries:

TestMode=0 FakePageFile= FakeHeaderFile= Start Number=1 Prefix=BC2

Change these settings as follows:

TestMode=1 FakePageFile=[Path and name of TIFF file, that is to be loaded instead of a FakeHeaderFile=[Path and name of TIFF file, that is to be loaded instead of a scan] Start Number=1



Prefix=BC2

Thumbnail Format

The program creates thumbnails when buffering an order, so that when the order is called up again it can be loaded faster. This becomes particularly noticeable in the case of memory intensive formats, meaning high resolution and/or large formats. The format of these thumbnails is determined in the following.

```
[ThumbNails]
Enable=1
PaneWidth=180
ImageWidth=120
ImageHeight=150
DescrHeight=15
ImageDelta=10
;
```

Check for free disk space

The available disk space is checked when starting the program and for each call-up of the order options

The default setting is: <u>at least 10%</u> of the space on the disk in question must be free. The system checks for the directory of the single scan and for the directory of the scan orders. It is possible that these reside on different drives.

The entry *MinPercentFree* in the *[GENERAL]* section of the *BCS2.INI* INI file regulates the check: An entry in percentage must be specified here.

If the INI entry is missing, then the default value of 10 is used.

11 Appendix

11.1 Overview: Add-on modules / Plugins

LC = License Code S = Standard O = Optional

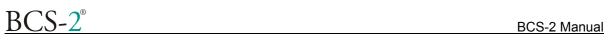
P = Created as part of projects

ITEM NO.	LC	Description	
BE-CS-2-BAR	BAR	Barcode module:	0
		The barcode module allows the automatic recognition of various barcodes on scanned materials. Two applications for the barcode are differentiated in BCS-2:	
		Barcode on the start page of a scan order: Up to 4 barcodes will be recognized, that also serve as index information for the concrete scan order.	
		Barcode on each page of an order: An additional barcode can be recognized per page.	
		The module contains a barcode learning function that supports a simple definition and use of barcodes.	
		Orders can be processed and post processed in order systems based on order numbers coded as barcodes.	
		The major barcodes are supported like Code30, EAN 8 and 13, ITF, and Code128 (Codabar).	
BE-CS-2-CAR	CAR	CAR (Computer Aided Retrieval):	0
		With the help of CAR BS-2 can use a control file for FS-III controller systems, this file specifies which images are to be scanned from which films. In this regard, BCS-2 alerts the user to change the appropriate films.	
		The format of the ASCII control file is freely configurable:	
		Thus you can specify:	
		Whether an introductory line with field name is present.	
		Which character separates the individual fields.	
		Which character is the quotation mark, if quotation marks are used.	
		whether the respective file name to be taken is in one of the fields (as target when transferring the order). If this option is not checked, then the file name will automatically be composed based on film number and image number.	
		The control file is not bound to an order and can be used in multiple orders if desired.	
		Order type CAR -> Order types-overview.	

ITEM NO.	LC	Description	
BE-CS-DDE	DDE	DDE Interface:	0
		DDE stands for "Dynamic Data Exchange" and is the standard interface between any number of Windows applications. With the BCS-2 DDE interface it is possible to control BCS-2 and thus all BCS-2 supported scanners via other programs. These other programs can be classic Microsoft applications like Access, Word, or Excel, as well as individual programs on the basis of C++ or visual basic if they also support DDE.	
		The following functions can also be controlled by the call out program via DDE in BCS-2:	
		 Scan pages and hand-off the file name and save location in the process. 	
		Open scan order and scan pages in the scan order.	
		Make or check the current settings (format, resolution, orientation).	
		Export BCS-2 order.	
		Send the BCS-2 order per Email.	
		Send the BCS-2 order per FTP.	
		Print BCS-2 order.	
		• etc.	
		The BCS-2 DDE interface is compatible to all BCS-2 add-on modules like MAPI, PDF, and FTP and supports all functions provided by these add-on modules.	
BE-CS-2-FTP	FTP	FTP Module:	0
		With the FTP module it is possible to transfer scan orders to a freely selectable FTP server. The "FTP" function is available as an option in the order window under the familiar BCS-2 interface. The entire document is stored on a defined FTP server via binary transfer. At the same time an email with the "Hyperlink" to the files is generated per MAPI or SMPT. The FTP access can be opened via an anonymous access or a password to be given one time.	
BE-CS-2-FC	FMT	Format converter:	О
		The format converter allows conversion into the following image formats: GIF, PNG and JPEG. With this you can freely set the degree of compression for compressed formats.	
BE-CS-2-IEC	IEC	Image Enhancement:	0
		This module contains functions for image improvement. Deskew: Optimally aligns the image completely automatically. Despeckle: Small speckles (impurities) on the image will be automatically removed.	



ITEM NO.	LC	Description	
BE-CS-2-MS	TWAIN ISIS	Multiscan-Module: The multiscan module allows concurrent control of up to 4 scanners under the BCS-2 user interface on one PC. In addition to a Bookeye, two additional scanners can be activated via ISIS and/or TWAIN drivers, for example: Ricoh, Canon, Agfa, Epson etc. Switching between the scanners is not only possible between individual scan orders but can also be done between individual scans within an order.	O
MF-CS-2-MFC	IMC	MICROfly Module: The BCS-2 MICROfly Module permits the control of a MICROfly fiche carrier by BCS-2. In BCS-2 a raster for the fiches can be freely defined. This means it is possible to automatically scan complete fiches from BCS-2 orders.	О
BE-CS-2-MAPI	MAPI	MAPI Module: The MAPI Module makes it possible to send scanned documents directly from within BCS-2. This means that the documents do not require an intermediate save in order to send them in an Email after a program change. The send function via MAPI is available in Scan Mode, and in addition, can be started from the order administration. When selecting the module, an Email is generated in which the scanned documents are automatically inserted as attachment. Each scan can be handed-off as single TIFF (one TIFF per scan) or all scans can be handed off collectively as Multi-page TIFF. The module supports MS Outlook, Exchange, Lotus Notes, Netscape and other applications with MAPI interface.	
N/A	PLG	Plugin DLL: With this function a DLL can be integrated into BCS-2 that is used by BCS-2 for certain order types. The name of the DLL and the functions used are controlled via a number of certain INI entries in the BCS-2.INI file.	Р
BE-CS-2-PDF2	PDF	PDF Module: With the PDF Module scan orders in BCS-2 can automatically be converted into PDF format. PDF is available as an option in the order window. After conversion the familiar BCS-2 functions like sending via Email are also available for the PDF documents.	
BE-CS-2-PWD	PWD	When this option is specified in the license file, then a password request will be made before opening the order options dialog. The dialog will only be released after correct password entry. The request occurs only once, this means after correct entry, then the options dialog can always be called up again. After a new start of BCS-2 then a new password request is made when calling up the <i>Order options</i> dialog. After password entry it is possible to change the password. This requires entering the new password twice.	0



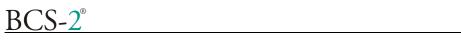
ITEM NO.	LC	Description	
	STP	Scan-to-Print Module:	
		With this function it is possible to output scanned images directly to the printer in parallel with the scan process.	
BE-CS-2-MSK	MSK	Page division with screen: Manual page division: With manual page division it is possible to retroactively divide an image at a certain point. Optionally a middle area of the original image can also be cut out. Screen mode In screen mode a rectangular area of the original image is defined, that after partitioning comprises the resulting image. In this regard you can still choose to execute the above mentioned page division.	O

11.2 Overview: BCS-2 Order types

LC = License Code

S = Standard
O = Optional
P = Created as part of projects

P = Created as p	LC	Description		
		-		
BE-CS-2-CAR	CAR	CAR (Computer Aided Retrieval): Like the STANDARD order type, except when transferring the available file names will be used and no subdirectory will be generated for the respective order. Furthermore it is possible to check in the order options that before transferring the user will be asked to specify the respective target directory.	0	
BE-CS-2-DTT	DTT	Extra TIFF Tags: This order type is derived from the standard order. In addition it offers the possibility to define TIFF tags that are inserted in the TIFF images of the order. The values for the tags can be entered in a new dialog. There are two types of tags: those for which text can be entered in an entry field, and those that can be switched on and off. See below. The new dialog is located in the BCS-2 menu under Extras/additional TIFF tags		
		These are the individual tags:		
		Document Name (Tag No. 269):		
		Document Description (Tag No. 270):		
		Scan software (Tag No. 305):		
		Artist (Tag No. 315):		
		Copyright information (Tag No. 33432):		
		• Switchable ON/OFF: when switched on: Page name (Tag No. 285); here the file name (0000001.TIF,) is used as page name.		
		Switchable ON/OFF: when switched on: Information on date and time (Tag No. 306) in the format YYYYY:MM:DD HH:MM:SS		
		NOTE: The tag will only be saved when the order is transferred. At this point in time the current values of the tag are inserted. This means if at the beginning the scan of the order, values for the date were entered other than those for the date of the transfer, then the last ones will be taken!		
BE-CS-2-EAS	EAS	Connection to Easy Archive system Special order type for handing off scanned documents to Easy Archive.	Ο	
	HED	HEDOC: This type is implemented in the HeDoc document delivery system. Scan orders will be delivered according to their delivery type through the transfer function (or HeDoc Delivery). This order type differs from the other order types in that it is only used in the context of HeDoc. Through transferring, the scanned pages will either be delivered per Email or per FTP, or they will be printed out for postal delivery. For this purpose BCS-2 communicates with a database in which the literature orders are saved. BCS-2 is the capturing and delivery component of the HeDoc system.	P	



Item no.	LM	Description	
N/A	HEI	Heimeier:	Р
		This order type represents a customer specific solution: The pages of the order are converted in a PDF file when transferring. The first page of the order – the cover sheet – contains a barcode (that can also be read manually). This barcode has the structure ZZZZZYYNNN where:	
		ZZZZZ : five place reference number	
		YY : Code for the year	
		NNN three digit counter.	
		This barcode comprises the file name of the PDF file that BCS-2 generated from the scanned pages. Underneath the target directory of this order type a subdirectory is generated for each year encountered. For example 2001, 2000, etc. In this subdirectory the respective PDF file is stored. If a PDF file already exists by this name, then it will be overwritten after user confirmation. Addendum to the page division: This is different than the standard behavior with this order type. After dividing a page in the order the	
		system moves to the next page that has not been divided. Normally, after the division, the first half of the divided page is the active page.	
BE-CS-2-JAS	JAS	Jason:	0
		BCS-2 is used as a scan component of the JASON system. This order type is used in the context of JASON/MEDEA. The pages of an order will be newly numbered when transferring and the order directory will be renamed using the JASON order number. This number was stored as barcode on the cover sheet (first page) of the order and was recognized by BCS-2.	
BE-CS-2-SUB	SUB	Subito:	0
		BCS-2 is also implemented in the SUBITO environment as a scan station. The cover sheet of an order contains two barcodes: Customer number and order number. These are the two indices of this order type. The transfer of Subito order means that: 1. the images of the order will all be stored in one target directory (Subito target directory -> order options). For this they are renamed: The BCS-3 order number forms the file name. In the file ending the number is counted up beginning with 1. A special file – the description file – is created without ending, likewise with the BCS-2 order number as file name. This description file contains the two reference numbers, among other things, that have been recognized from the cover sheet as barcodes. In addition, this file also contains the number of scanned pages, the number of pages to be invoiced etc.	

Item no.	LM	Description	
N/A	WAG	Wageningen:	0
		This new type uses the plugin DLL functionality of BCS-2. when creating an order of this type the CHECK_ORDER function of the DLL plug-in is called up. It is responsible for checking whether the key, inserted as parameter (order ID), is present in the database and if it is in the correct condition or status. If yes, then TRUE is returned. When transferring the order a DLL function in turn is called up: GET_TARGET_FORMAT. This supplies the target format for the target order (MTIFF, TIFF or PDF) and the location at which BCS-2 should save the file.	
N/A	N/A	Simple:	S
		Simple order type, that belongs to the standard range of BCS-2: No indices are necessary for simple order. The transfer of the order results in copying the images in the target directory.	
N/A	N/A	Standard:	S
		This is the standard order type in BCS-2: Up to four indices can be freely defined (order options). Optionally these four indices on the cover sheet of the order (1st page) can be coded per barcode. The barcode areas can be freely defined per index in BCS-2. Transferring copies the images in a newly generated directory underneath the target directory for standard orders. The newly generated directory will be named with the order number. In addition to the images a small ASCII file named ORDER.SUM will also be created. The most important data of the order are stored in this file.	

11.3 Documentation of the BCS-2 Variables

In some strings, variables can be inserted that are expanded when the string is used.

Uses: e-mail-Subject and e-mail-Body for MAPI interface, SMTP notification with FTP transfer, etc.

To use a variable, it must be preceded by a \$-sign. One of the following characters must come after the variable so that BCS-2 can recognize the end of the variable name:

1. Space (X'32'): this is the normal case. The space is preserved on expansion.

Let VAR1 have the value 123

Text: "\$VAR1 is a number "

After expansion: "123 is a number "

2. Another \$-sign. This allows strings to be concatenated.

Example:

Let VAR1 have the value 123

Text:"[\$VAR1\$] is a number "

After expansion: "[123] is a number "

User-defined variables:

to give even greater flexibility, a list of the user's own variables can be maintained in the file *BCS2.INI* in the section [UserVariables]. These are defined by <Variablename>=<Value>.

e.g.

[UserVariables]

IWCHPE=Heinz Peters

would define the variable IWCHPE, which expands to Heinz Peters.



List of Variables

Name	Meaning	Example
APP_VERSION	Brief BCS2 version	2.27
APP_LONG_VERSION	Full BCS2 version as in the About dialog	
CURR_TIME	Current time	
CURR_DATE	Current date	
CURR_FILENAME	Current file name	
CURR_FILESIZE	Size of current file	
CURR_IMAGE_HEIGHT	Height of current image	
CURR_IMAGE_WIDTH	Width of current image	
FTP_HOST	FTP server	www.imageware.de
FTP_USER	FTP user, who performed the transfer	IWCHPE
FTP_TARGET	FTP target directory	/home/bcs2/
FTP_DOWNLOAD_LINK	Link to storage location on FTP server	http://home/rlo/bcs2/S0001050
HISCAN_NR	Serial-no. of HiScan	1234567
PDF_FILENAME	Name of the PDF file to be transferred	S1001058.PDF
PDF_FILESIZE	Size of the PDF file	1000498
ORDER_TYPE	Order mode	JASON
ORDER_NUMPAGES	Number of pages in order	15
ORDER_KEY1	Index1	
ORDER_KEY2	Index2	
ORDER_KEY3	Index3	
ORDER_KEY4	Index4	
ORDER_NAME	Job number of the order	S10001047
ORDER_NUMKEYS	Number of keys in the order	2
ORDER_MULTI_TIFF	If the order was stored as a Multi- TIFF, corresponding text, otherwise empty.	the order will be stored as a Multi Multi-TIFF
WWWPUB_URL	Web-Publisher: URL of the main page for insertion in e-mails.	

11.4 Index

A	Н
access rights 50	HiScan 5, 6, 31
	HTML 48
В	HTML footer 48 HTML header 48
barcode 11, 13, 18, 20, 28	TITIVIE Header 40
Barcode Position 28 Basic adjustments 23	I
batch mode 21	Imagetools 43
bitonal 31	import 44
Black Edge Removal 31 Body 15	index file 18 indices 11, 13, 18, 20, 21
Book Curve Correction 31	INI file 52
Bookeye® 5, 36	install 5
brightness 8, 43 button bar 7	installation 44 Interface 32
button bar /	Interface 32 Internet 49
\mathbf{C}	Intranet 49
context menu 10	IP address 30
contrast 8, 43	ISIS 23, 30
conversion 12, 14	J
D	JPEG 15
definition 33	JPEG compression 15, 30
delete 25	K
Deskew 25, 31, 38	
Despeckle 10, 25, 31, 38 diagonal correction 35	key 14, 18, 21 key definition 13
Dialog title 13	Keyboard allocation 9
disk space 53	_
download folder 27 Drag & Drop 22	${f L}$
Dropdown-Bar 7, 32	layout 15, 33
-	license 44 license file 17
E	Linux 50
edge contrasts 38	
Endorser 44, 45 error message 7	M
Explorer 22	MAPI 12, 17, 25, 47, 61
external DLL 30	Mask 10, 40 Medea 52
F	menu bar 7
	Microfly 23
fiche carrier 32 foot switch 13	MICROfly 33 Multipage TIFFs 29
Format 14	multipage-TIFF 24
FTP 12, 16, 49, 51	Multi-TIFF 17
FTP browser 16, 17, 27	N
G	network 30
Gamma correction 30, 31	noth of the
grayscale 15, 31, 38	O
Grid 23, 32	options dialog 12, 20
	Options dialog 20
	order 20, 22

BCS-2®

skew correction 43 SMTP 17, 47, 61

BCS-2 Manual

order bar 21, 22 Start at scanner 13 order mode 12, 22, 24, 29, 30, 36, 39 start column 33 Start line 33 Order mode 13 order number 20 Start through program 13 order options 53 Status 20 order type 20 stop column 33 order window 24, 29 stop line 33 Subject 15 Szenarios 49 P page division 39, 40 T Password 16, 17 PDF 12, 15, 26, 45, 47 Target 16 PDF Generation 25 target formats 14 prefix 14 testmode 52 Preview image 47 thumbnail 7, 8, 21, 29, 45, 47, 53 print 24 title bar 7 Print 29 transfer 24 Print Preview 29 Transfer type 27 Printer Settings 29 TWAIN 23, 30 program start 7 U R UNIX 49, 50 raster point 35 Update 6 Rotation function 38 Upload 47 user information 5 \mathbf{S} V scan orders 11 Scanner Simulation 6 variables 12, 18, 61 Scan-Start 12, 13 sending 26 W Sending 25 Web Publisher 25, 45, 51 separating line 40 Web-Server 49, 50, 51 Server 16 setup 5 Z simple mode 12, 16 Simple Mode 14 zoom functions 37