# BCS-2® Manual

BCS-2®

BE-CS-2-EN-Inhalt V09-3.0.13

# WARRANTY

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# INTRODUCTION

Dear customer,

We congratulate you on the purchase of this innovative product from our company. With BCS-2® you have a reliable and powerful scan client, which is perfectly adjusted to the specific features of the scanning of books, magazines and bound originals.

The simple and intuitive handling under the familiar Windows interface is one outstanding feature of the BSC-2® software.

BSC-2® supports scanner with network and HiScan interfaces and ISIS/TWAIN drivers. This means: Overhead, flat bed, path-through and microfilm scanner and digital copiers can be used under BCS-2®.

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

The software, that you acquired, is subject to permanent care by our specialists. Should you find any errors or mistakes in the description, please inform us under iwcqs@imageware.de.

If you have questions about the BCS-2® software, then please contact your specialist dealer or directly ImageWare Components GmbH under bcs-2@imageware.de.

We wish you much success.
Sincerely,
ImageWare Components GmbH

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# 1 INSTALLING BCS-2®

## 1.1 Installation prerequisites

An IBM compatible PC (no Mac) with the operating system Windows NT4.0 (Sp 6a), Windows 2000 or Windows XP is required in order to successfully install BCS-2®.

The computer should be equipped with at least a Pentium 1 processor and 64 MB 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 30MB of hard disk space. According to quantity and scan type you should plan on several GB of free hard disk capacity for the scans or scan orders.

## 1.2 Installing the BCS-2® software

- 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 (name/company name).
- Select the folder in which BCS-2® should be installed by clicking on the "**Browse**" button.

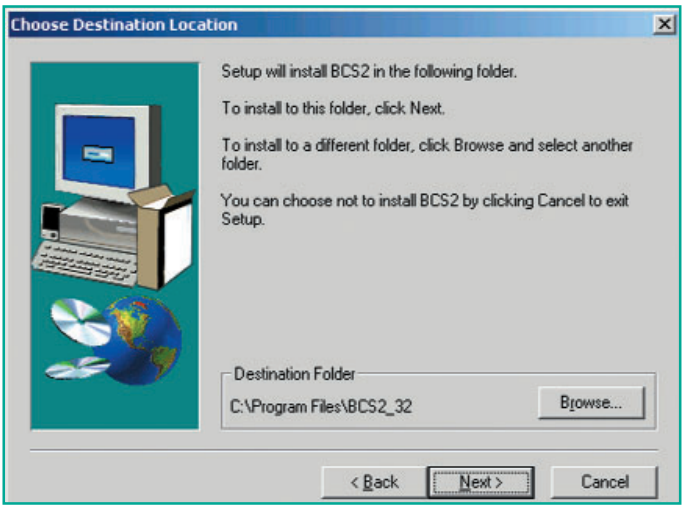


**Fig.: Select installation target path**

If you accept the setup program defaults, then BCS-2® will be installed in the folder C:\Program Files\BCS2_32.

- Choose the default setup type "Standard".

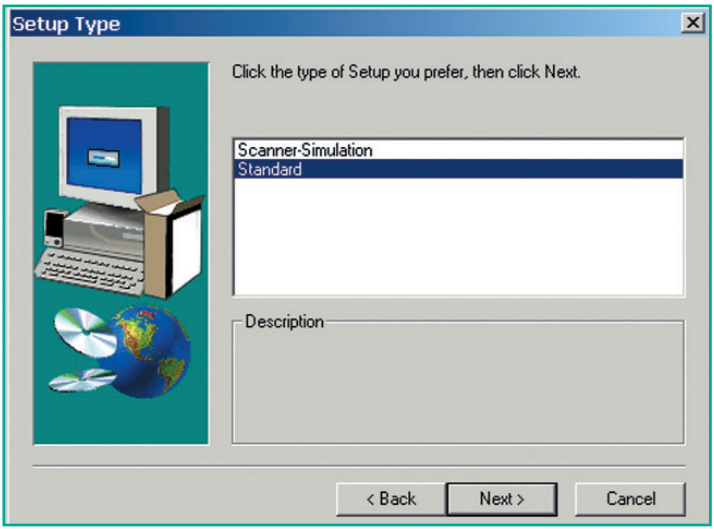


**Fig.: Selection of the setup type**

Using the "**Scanner-Simulation**" setting you can execute the "Scan" function in BCS-2® 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.

## 1.3 Installing BCS-2® updates

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

- Copy all update files from the update directory or the update archive in the BCS-2® installation directory **(Default: C:\Program Files\BCS2_32).**
- Overwrite existing files.

## 1.4 Installing the HiScan driver

To be able to work in BCS-2® with a Bookeye®, which is connected with the computer via a HiScan card, the HiScan card must be installed first.

So that all driver data can be installed and a complete creation of the registration data is made, the **local administrator** must be logged on the PC to be installed. It is not enough to start the HiScan installation only as **User** with administrator rights. In addition, there must be **no** write-protection on the following folders:

- whole BCS-2® installation folder
- "**...\system32\drivers\Hiscan**" in the Windows installation folder (as far as is available) default with WindowsXP: **C:\Windows\system32\drivers\HiScan**
  Default with WindowsNT and Windows2000: **C:\Winnt\system32\drivers\HiScan**
  the BCS-2® CD.

To start the installation of the HiScan driver, execute the file "**setup2.exe**" in folder "**HiScan**" of the BCS-2® CD.

To start with choose the language version.

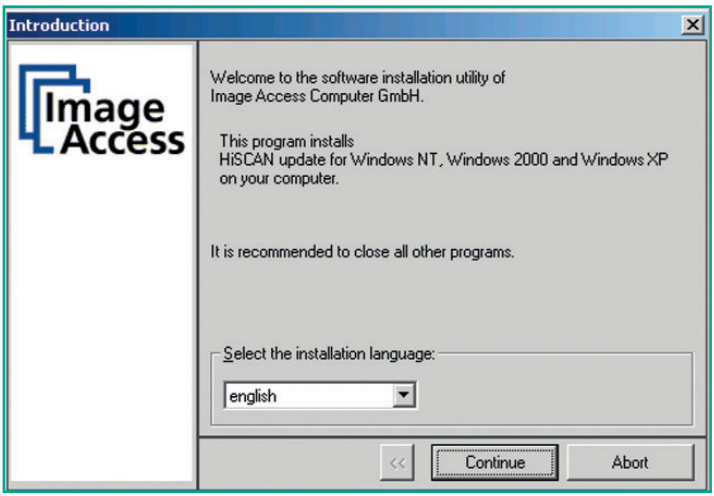


**Fig.: HiScan language selection**

Determine now the components to install. To be able to drive BCS-2® with a Bookeye®-Scanner, select "**Bookeye**" as the scanner type.

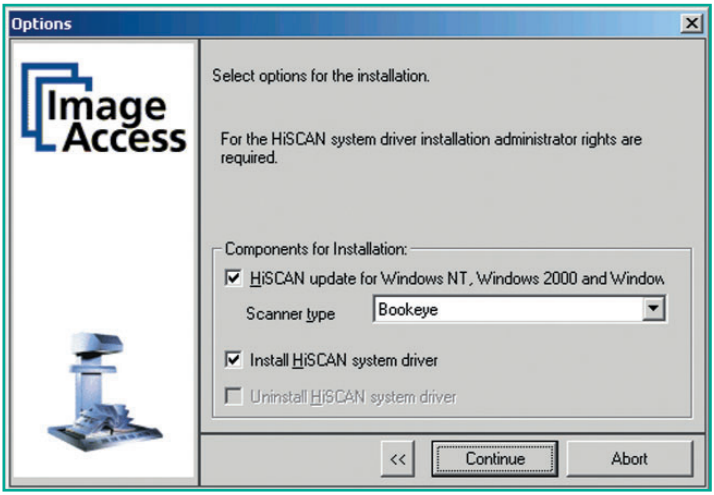


**Fig.: HiScan driver components**

In the next installation step, you must indicate the BCS-2® installation path. As standard, BCS-2® is installed in folder "**C:\Program Files\BCS2_32**". If you have not installed BCS-2® in the standard folder, you can indicate the exact BCS-2® installation path of your BCS-2® installation through "**Edit**".

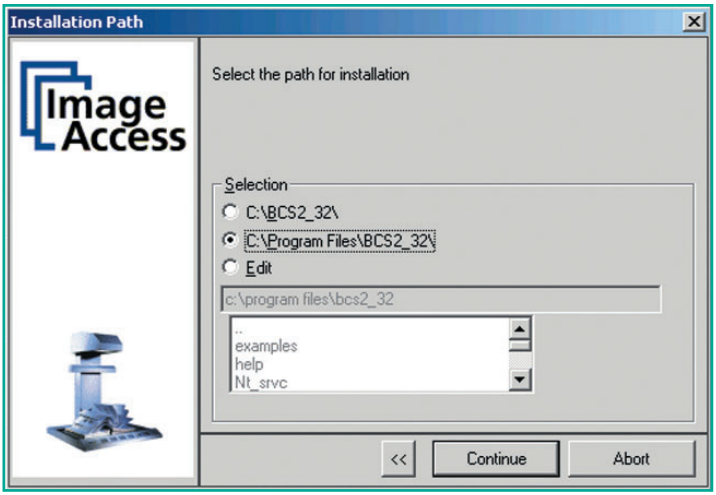


**Fig.: Selecting the BCS-2® installation path**

All installation parameters are displayed in the following window. In order to replace already existing files by the new version, a checkmark must be set next to "**Overwrite existing files**". The next step documents the installation process. After successful conclusion

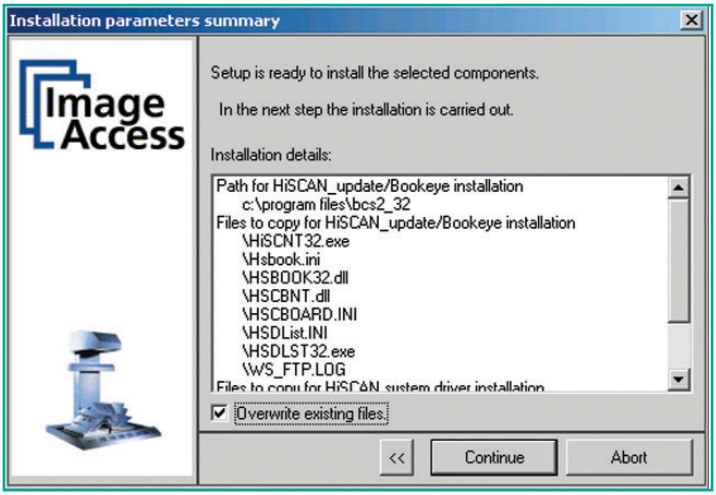


**Fig.: HiScan installation parameter**

of the installation, Windows must be started anew, then and only then the HiScan driver is fully functional. Optionally, Windows can be restarted later (e.g. if data from already opened programs has to be saved).

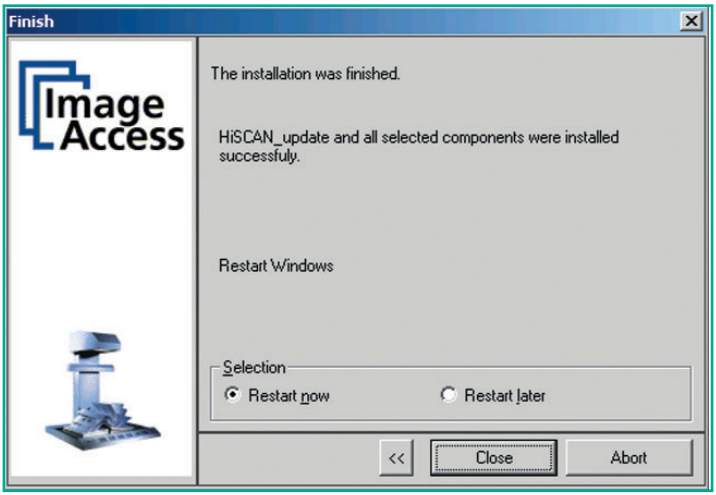


**Fig.: HiScan installation completed**

## 1.5 Installing the ISIS environment (optional)

In order to be able to use BCS-2® with ISIS scanner drivers, a corresponding environment on the target system must exist in addition to the actual scanner drivers. This consists of mainly internally-used drivers for compression and decompression of images as well as their processing.

Before the setting up of an ISIS environment, the ISIS scanner driver should be installed. All ISIS drivers are supplied with a setup, which also installs DLLs etc. in addition to the driver.

If BCS-2® has not yet been installed, this should be made subsequently to the ISIS driver installation (see 1.2 Installing the BCS-2® software). The folders "**zwec78_pixtran**" and "**r57p_pix_sys32**" are to be found under "**...ISIS/ISIS**" on the BCS-2® CD.

The contents of the folder "**zwec78_pixtran**" must be copied into the folder "**<WINDOWS>/PIXTRAN**" and the contents of the folder "**r57p_pix_sys32**" into the folder "**<WINDOWS>/System32**". Overwrite existing files. Then as last step, the "**bcs2.ini**" file must be edited.


**Fig.: Match BCS2.ini for ISIS driver**

**Example:**

Use the scanner MS800. In the section "**[Scanner]**" of the "**bcs2.ini**", the following must be entered:

**ScannerType=4 and ISIS_Name=ms800.**

**ScannerType=4 ➔** must always be set in this way.

**ISIS_Name=ms800 ➔** „ms800" is the exact driver name and is to be found in the device manager.

# 2 BASIC FUNCTIONS

## 2.1 Starting the software

At program start the selected scanner driver is loaded first. If a required directory is missing, an error message appears in which the name and the path of the required directory is specified. The appropriate directory can then be generated, for example in Windows Explorer.

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

## 2.2 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**".


**Fig.: Menu bar**

Under the menu bar is the "**Button bar**".

**Fig.: 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 pressed (!). The description of the button appears immediately in the status bar on the lower border of the program window.

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


**Fig.: Dropdown bar**

The **work surface** consists of two parts. On the **right side**, each opened or scanned image is displayed in its own window. Concurrently on the **left side** are located thumbnails[1] of all opened images with which a faster access is possible.

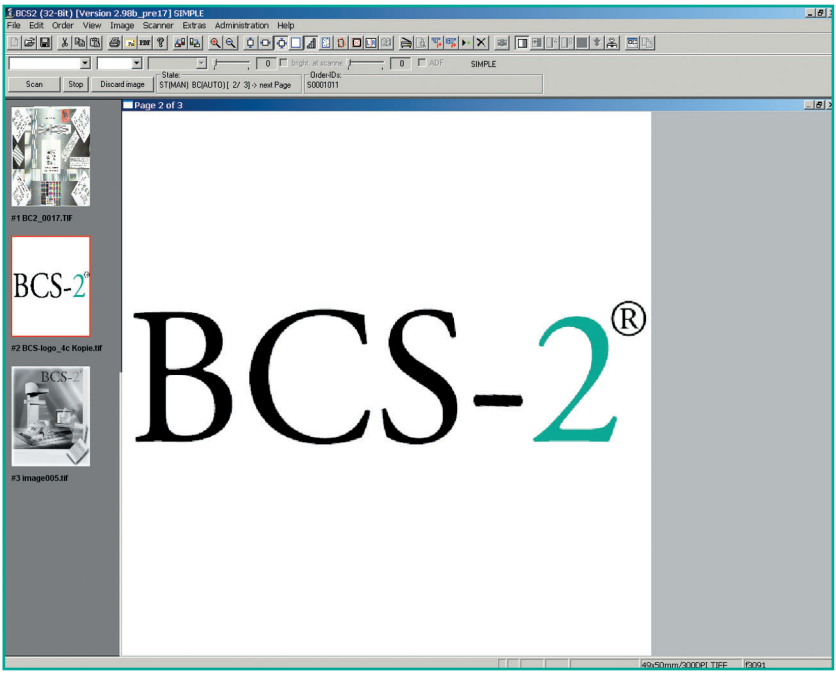


**Fig.: Work surface**

## 2.3 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 and in its own window on the right side.
- In the first drop-down menu the current order mode can be selected.

[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 to the front. **Deleting a thumbnail** (for example with the **[Delete]** button) deletes the corresponding image as well

- In the second 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.
- In the third drop-down menu the **resolution** can be set. This influences the size and quality of the image files generated.
- The fourth drop down menu is for selecting the orientation. Portrait (vertical orientation) and Landscape (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.

## 2.4 BCS-2® keyboard allocation

| Key combination | Function |
|---|---|
| **ESC** | Exit current order (order mode)<br>Close the current order window (single-scan mode) |
| **F1** | Help |
| **F2** | View entire image |
| **F3** | Adapt image to the window height |
| **F4** | Adapt image to the window width |
| **F5** | Adapt image optimally to the window |
| **F6** | Despeckle current image |
| **F7** | Deskew current image |
| **F8** | Toggle grayscale-mode (only bitonal) |
| **F9** | Switch on/off Scan-to-Print function |
| **CTL-F9** | Switch on/off rotate wider images when printing |
| **SHIFT-F5** | In barcode learn mode: delete all rectangles |
| **SHIFT-F9** | Save current order as multi TIFF |
| **F11** | Toggle page separation |
| **CTL-A** | Maximize window automatically |
| **CTL-C** | Clipboard: Copy |
| **CTL-M** | Mail current image (single scan mode)<br>Mail current order (order mode) |
| **CTL-O** | Open file (single scan mode) |
| **CTL-P** | Print current image (single scan mode)<br>Print current order (order mode) |
| **CTL-S** | Scan one page |
| **CTL-V** | Clipboard: Insert |
| **CTL-X** | Clipboard: Cut out |
| **CTL-Z** | Undo changes on current page (UNDO) |
| **Left arrow** | Scroll image left |
| **Right arrow** | Scroll image right |
| **Up arrow** | Scroll image up |
| **Down arrow** | Scroll image down |
| **PgUp** | Thumbnail bar: One image up |
| **PgDn** | Thumbnail bar: One image down |
| **ENTER** | Thumbnail bar: Open/activate current image |

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

## 2.5 The context menu

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

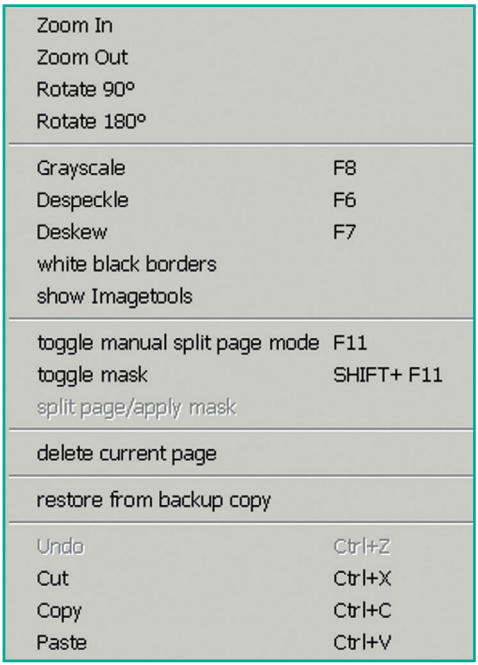


**Fig.: Context menu**

With activated mask or page separation, it is possible to select various specific functions via the context menu. (see 8.3.)

# 3 THE ORDER MODE

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 an order optionally via **barcodes**[2]. Thus it is possible, for example, to allocate a scan order to an 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, printed, transferred or optionally forwarded.

## 3.1 The options dialog

Before creating an order it is advisable to check the options that have been set and to 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
- Settings for single scans and simple mode
- 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 described in chapter 10.3 (BCS-2 ® variables) that is located in the BCS-2® program directory.
- The "Indices" button opens a dialog, in which further options of the index key can be configured .

[2] Barcode: BCS-2® supports the following barcodes: UPC-A / -E, Code 39 / -128, EAN 8/ -13, Interleaved 215 and CODABAR

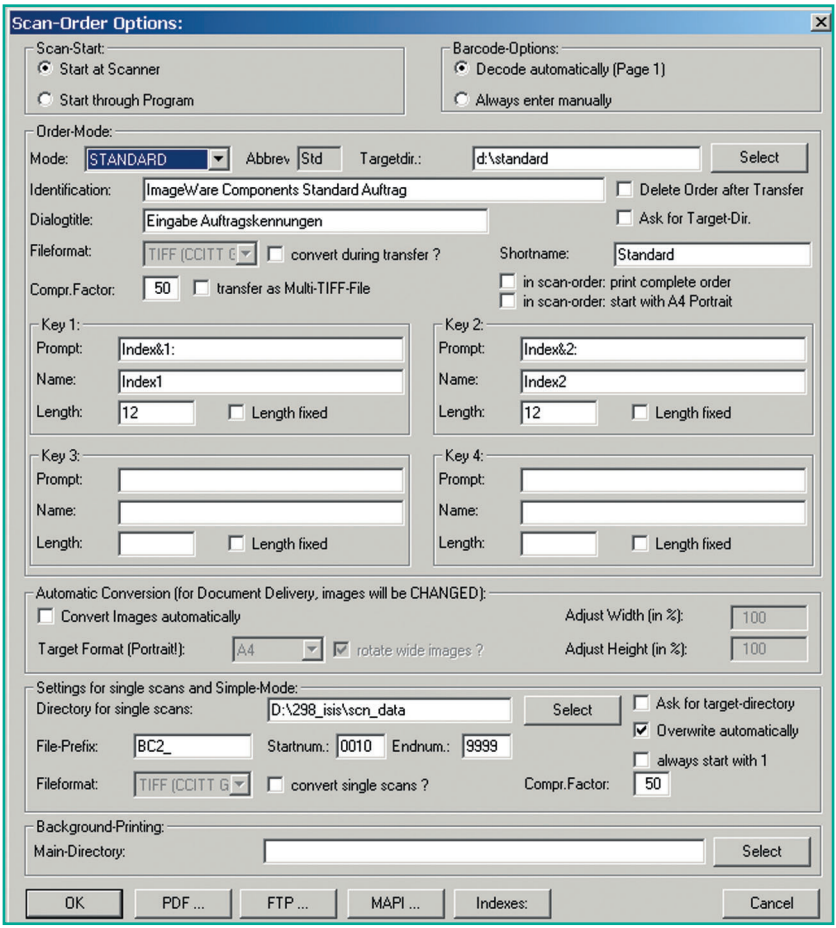


**Fig.: Options-dialog**

### 3.1.1 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) through "**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 originals and activating the scan can be carried out from the same location.

### 3.1.2 Barcode options (optional)

For the entry of indices per barcode, choose between the options "**Decode automatically**" and "**Always enter manually**". 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 "**Assign barcode position**" in the order menu. If automatic recognition is not possible, manual entry of the indices is requested.

### 3.1.3 Order mode selection

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

The selection of a predefined order type is quite simple. Select the appropriate mode from the drop down menu. (The order type can also be changed via the dropdown bar in the main window.) All required entries, even the **key** definition, will now be automatically inserted in the appropriate fields. Orders can now be carried out without further settings. The order settings are adjustable at any time.

For individual settings, select the mode "**Standard**" as originator.
If no indices need to be created and no subfolders are to be generated, then select "**Simple**".

**The different fields have the following significance:**

- **Abbrev:** This is for internal order identification in the order.dat file that is created for each order.
- **Target directory:** 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, which can be selected under **Directory for single scans** (Standard: \scn_data).
- **Identification:** This is displayed when a scan order is loaded.
- **Dialog titel:** Is displayed in the title page of the window for entry of the indices.
- **Fileformat:** By selecting the option **"Convert during transfer"**, the images are converted into the selected format when the order is transferred.
- **Compr Factor:** The value in this field determines the degree of compression when converting into the target format. The entry is in percent.
- **Key:** Here, up to four keys for indices can be defined.

### 3.1.4 The order types

- **Simple:** No indices are necessary for simple orders. The transfer of the order results in copying the image in the target directory.
- **Standard:** 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.

### Optional order types

- **CAR (Computer Aided Retrieval):** See standard order type; difference: When transferring, any available file names are used. There is no sub-directory created for the appropriate order. In the order options, it is possible to check, that the corresponding target directory is queried before the transferring of .
- **Define-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 (chapter 9.7).
- **HeDoc**: This order type is implemented in the HeDoc document delivery system. Scan orders will be delivered through the function (or HeDoc delivery) and according to their delivery type. This order type is only used in the context of HeDoc. Through transferring, the scanned pages will either be delivered per e-mail 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.
- **Church register:** Three keys exist per order: **Vicarage, Volume-no. und Register**. These are requested at the start of the order. Thereby, the values from the last order are taken as suggestive values. The page number of the church register being handled at the moment can be entered page by page. The page numbering is freely configurable .
- **Medea3:** This order type serves for communication between the document delivery systems Medea3 and BCS-2®.
- **DigiTool:** Connection of BCS-2® to ExLibris DigiTool: It is scanned to enter and then uploaded. Meta data are present in the form of order keys.

- **Jason:** 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®.
- **Subito:** 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 a Subito order means that: The images of the order will all be stored in one target directory. For this they are renamed: The BCS-2® 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.
- **Easy-Archive:** Special order type for handing off scanned documents to Easy Archive.

### 3.1.5 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 "**Fixed Length**" 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.

### 3.1.6 Automatic conversion

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 an 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.

**Attention:** 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.

### 3.1.7 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 saved. They are composed by 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.

- 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 "**Overwrite automatically**" is selected, then older files in the target directory will be replaced by newer files without query.
- With the function "**always start with 1**" it is possible to have the counter always start with 1.
- Should the single scans be directly converted into a certain target format, then the function "**Convert single scans**" must be activated.
- The file format can be determined in the dropdown menu, on the left-hand side.
- Depending on the relevant file format, the amount of compression of the image is determined via the field "**Compr. factor**". The rule here: the smaller the value, the higher the compression.

### 3.1.8 Specifying the directory for background printing

Here the spool directory for the function "**Background printing**" can be specified (Chapter 3.3.16). A separate program is required, which monitors this spool directory, and then executes the print order.

### 3.1.9 PDF options (optional)

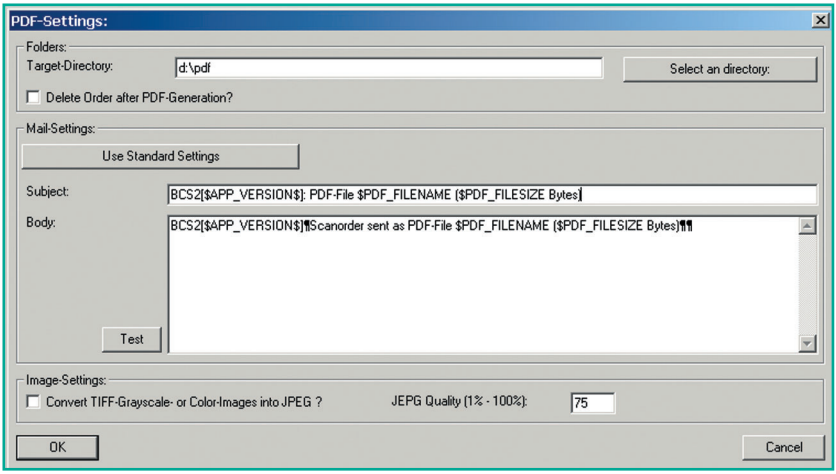


**Fig.: PDF options**

- **Target directory:** This is where you specify the directory in which the completed PDF files should be stored.
- **Select an directory:** You can specify the target directory for the PDF files in a file browser window.
- **Delete order after PDF-Genarating?**: 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, to which the PDF should be sent as an attachment, on a predefined standard mail.
- **Subject + Body**: Here you can even specify the text for the e-mail, 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 quality (1% – 100%)**: This is where the degree of JPEG compression is set. High values mean a low rate of compression. 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.

### 3.1.10 FTP options

After clicking the button "**FTP**[3] " a dialog opens for the **FTP** settings. Here you have a large selection of options available for transfer via FTP. Likewise you specify the basic settings here that the **FTP browser** starts with.

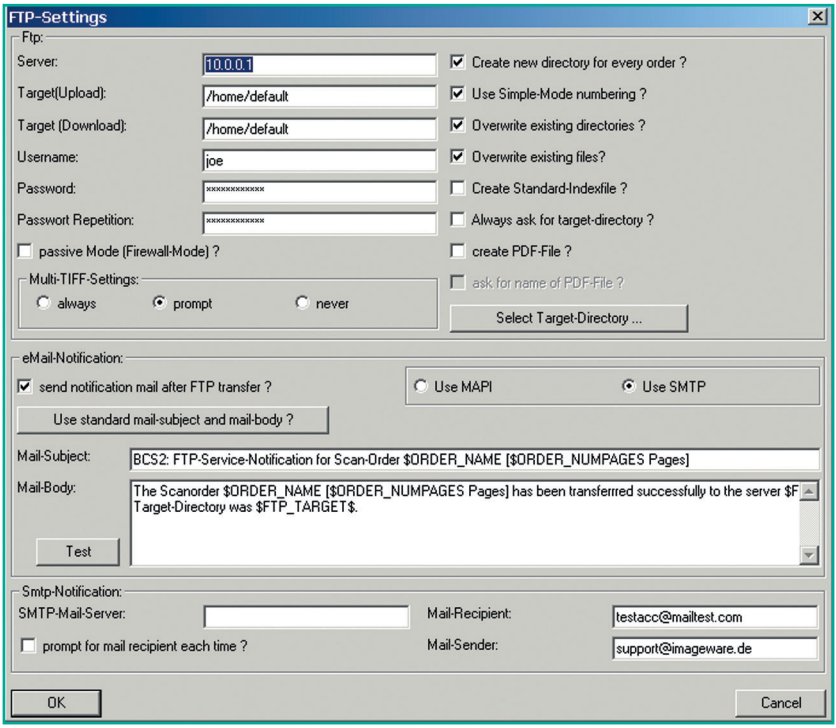


**Fig.: FTP options**

[3] FTP 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 to selected users with user names and password.

- **Server:** This is where you specify the FTP server by entering the IP address or the host name.
- **Target (Upload):** Enter the target directory on the FTP server.
- **Target (Download)**: Enter the download directory.
- **Username:** Enter your username. (for anonymous access usually: anonymous)
- **Password:** Definition of your password for FTP access, the default is your password from the settings.
- **Password Repetition**: For security, repeat the entry of your password 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.
- **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-Indexfile:** If this option is selected, then a standard-indexfile will be created in the target directory for each order when transferring,
- **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.
- **Create PDF-File:** If this option is activated, then a PDF-File will be created from the order in the target directory.
- **Ask for name of PDF-File**: If this option is activated, the PDF-File name can be entered before transfer. Otherwise the order name will be used automatically as PDF-File name.
- **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 transfer:** When you activate this function, the specified recipient will be notified of each transfer via e-mail.
- **Use MAPI/Use SMTP**: Here you can choose whether you want to send the notification mails via your MAPI interface, or directly 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 **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: receiver@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 the recipient should be specified before each sending. This option is recommended for frequently changing recipients.

### 3.1.11 MAPI options

Through the button "**MAPI**" in the order options, you gain access to the dialog, where you can carry out the settings for the sending of e-mails per MAPI.

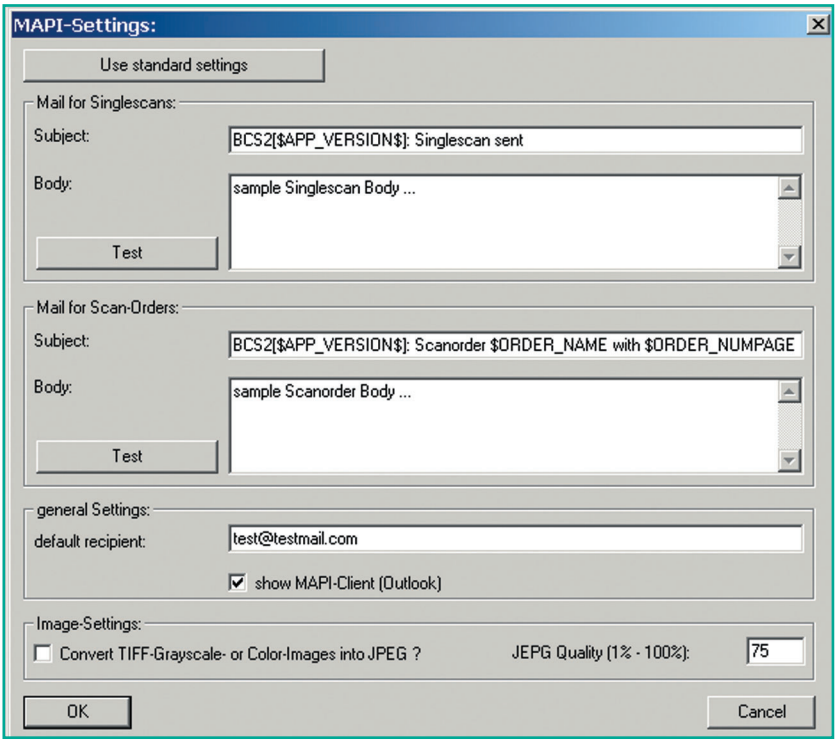


**Fig.: MAPI options**

- **Use standard settings:** Fills out the fields by "**Mail for single scans**" and "**Mail for scan orders**" with standard values
- **Mail for Singlescans/Scan-Orders:** Here, each of the "**Subject**" (ref.) and "**Body**" (content) of the e-mails can be specified. Both normal text and the BCS-2® variables can thereby be used .
- **Test:** An e-mail without attachment is created for testing of the e-mail layout.
- **Default recipient:** When sending the e-mail, the address entered here is used as standard.
- **Show Mapi-Client:** If this function is activated, then the Mapi-Client is called up when e-mails are sent via MAPI (e.g. Outlook). Changes to the e-mail can also be carried out there. If this function is deactivated, then the e-mail will be sent directly to the "**Standard recipient**" without calling up the e-mail client. The field standard recipient in this case should not remain empty.

- **Convert TIFF-Grayscale or Color-Images into JPEG?**: If this function is activated, all TIFF images to be sent are converted into JPEG format. The entry field "**JPEG Quality**" determines the level of compression. Smaller values mean a higher compression and higher values mean a lower compression of the images.

### 3.1.12 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 only once, this means after correct entry, then the options dialog can always be called up again. After restarting BCS-2®, a new password request is made when calling up the order options dialog.

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

### 3.1.13 Advanced configuration of index keys

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 "**Indexes**".


**Fig.: Order index key**

With the checkboxes "**Index is barcode**" you can select which of the indices will be recognized as barcode. De-activating this option prevents barcodes being accidentally recognized in orders of type **Church Register**. If the box "**use last value as default**" is checked, the last index value is proposed again when creating a new order.

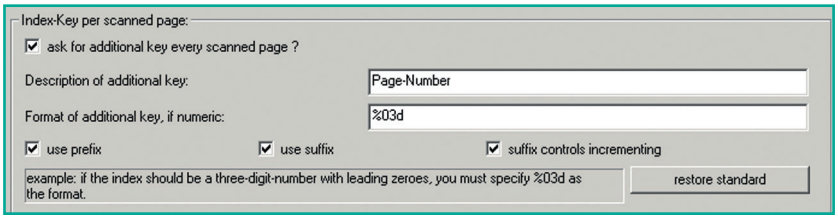


**Fig.: Index key per page**

The interrogation of an extra key per scanned page is possible. The checkbox "**ask for additional key every scanned page?**" must be activated to do this. The pages index can itself be composed of up to three parts: Prefix, actual key (variable part, which can also be automatically incremented) and suffix.

The Option "**Suffix controls incrementing**" causes the following behavior: If this option is activated, then it leads to the suffix field being filled (which was empty before), so that the automatic incrementing is de-activated and the already increased page number is reduced by one.

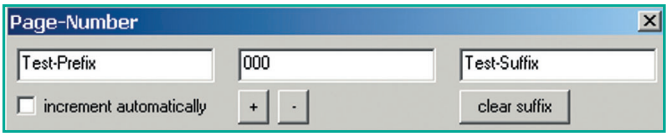


**Fig.: Page number**

When an order is created an extra window appears with the checkbox "**increment automatically**". The next number is then used automatically when a page is scanned. With the buttons "**+**" and "**–**" the index can be raised or lowered manually. If prefix and suffix for the page index are activated, then additional input fields will appear here.

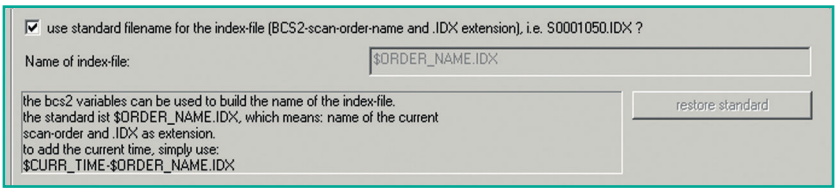


**Fig.: Index file name**

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 filename for index-file...?**" you can configure your own name for the file. BCS-2® variables can be used for this.

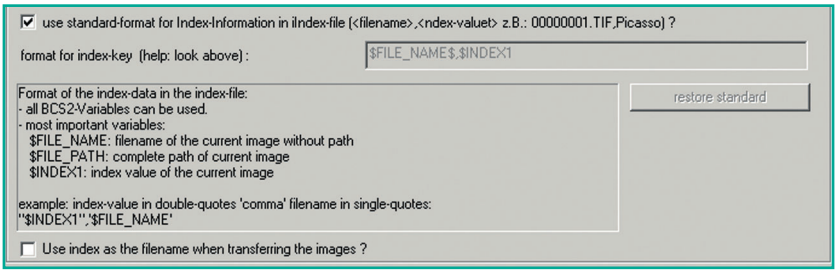


**Fig.: Format for index key**

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 option "**use standard-format for index-Information in index-file**" must be checked.

## 3.2 Working in order mode

### 3.2.1 Creating an order

Creating an order is quite simple. By selecting the menu item "**Create**" in the "**Order**" menu, an 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.

### 3.2.2 The order bar

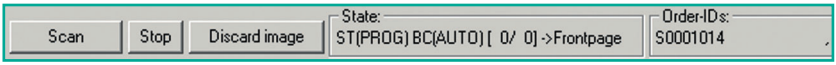


**Fig.: Order bar**

The following possibilities are available here:

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

In addition, different displays appear: Under
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: cover sheet). Under "**Order IDs**" the job 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 executed.

### 3.2.3 Entry of indices

The entry of indices by **barcode** is the simplest method of identifying a scan order or an 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 "**Always enter manually**" in the order menu. If automatic recognition is not possible, manual entry of the indices is requested.
- If "**Always enter manually**" 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 according to 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.

### 3.2.4 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 dropdown bar. From this point on, the entire operation occurs exclusively at the scanner. The scans can be initiated there (for example by footswitch).

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 ensure that the last image 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 always occurs by pushing the "**Scan**" button on the order bar.

### 3.2.5 Drag&Drop functionality

It is possible to allow TIFF or JPG files to "fall" from the 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.

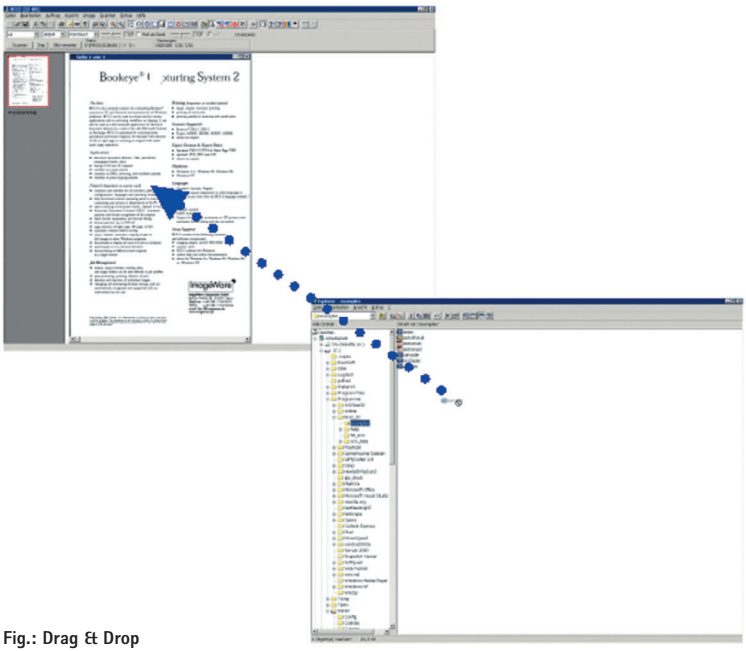

**Fig.: Drag & Drop**

### 3.2.6 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. You will find additional information on the order window in chapter 3.3.

### 3.2.7 Working with the FS-III controller (optional)

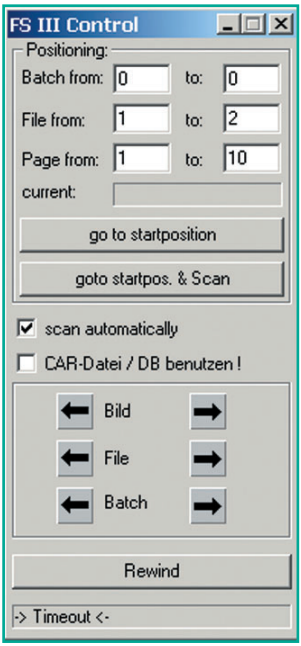


**Abb.: FS-III Control**

The FS-III positioning dialog appears in scan orders, if "**Use FS-III controller in scan orders**" is checked in the basic settings (Chapter 6.11). The FS-III controller can be commanded with this dialog.

- **Positioning:** Here a start position and an end position can be entered. This is where the information made in the basic settings is taken over as preallocation.
- **Go to startposition:** The program goes to the defined position in the positioning fields.
- **Go to startpos. & Scan:** The program goes to the defined position in the positioning fields and the scan is initiated. If a checkmark is set in the "**scan automatically**" box and the TWAIN driver dialog is deactivated, the whole defined area will be scanned.

- **Scan automatically:** If a checkmark is set and the scanner driver dialog is deactivated, the whole defined area will be scanned automatically. After a scan, the next image is positioned on the film. This also takes place, if the scan process was not automatic because of an activated scanner dialog.
- **Use CAR file/DB:** The processing of the respective image on the film can be also taken from a control file (chapter 9.6). This could for example, come from a third system, in the form of an investigation. Using this file, it is then possible to scan.
- **Image/File/Batch:** With these buttons, a single-step positioning can be carried out.
- **Rewind:** The film is wound back.

### 3.2.8 Working with the Mars controller (optional)

If, in the basic settings (chapter 5.12), the use of the Mars controller is activated during scan orders, the positioning dialog appears in scan orders, which can be used for controlling the roll film carrier.

- **Positioning:** Here one start position and one end position can be entered. It is important, that the defined mode also fits to the tasks. If a dual level blip film is to be scanned, then the controller must also be correspondingly defined (typically mode2). In the overview list of the modes (under the mode scroll field) the current allocation of the mode keys is displayed. Directly under the positioning fields the current film position is displayed. This display is updated automatically.
  - **Setting upper blip number:** Sometimes it is necessary, that the current reached position should be given fixed coordinates. Should, for example, an image in the middle of the film receive the image number 1, one takes a position next to this image, enters then the correct coordinate in the upper field and activates this button. Then the controller sets this image to the assigned number and commences from there on to count accordingly. If an image is set in the middle of the film on position 1, then the controller does not move the film further backwards, because the current image is set as the first.
  - **Go to start position:** The program goes to the defined position in the positioning field.
  - **Go to start position & scan:** The program goes to the defined position in the positioning fields and the scan is initiated. If a checkmark is set in the "**Automatic scan**" box and the TWAIN driver dialog is deactivated, the whole defined area will be scanned.

- **Update/ Reset:** The momentarily defined modes are read from the Mars controller and displayed.
- **Automatic scan:** A checkmark here with the scanner driver dialog deactivated, will scan automatically the whole defined area. After a scan, positioning takes place for the next image on the film. This also takes place, if the scan process does not take place automatically because of the activated scanner dialog.
- **CAR file/Use DB:** The control of the relevant images on the film can also be taken from a control file. This could for example, come from a third system, within the frame of an investigation. Using this file, it is then possible to scan.
- **Scroll field mode:** Here, the mode can be changed. A mode change is only possible when the film is ejected, therefore the film is ejected after consultation and then the corresponding film is defined.
- **Single step file/Batch/Image:** With these buttons, a single step positioning can be carried out. Thereby it must be noted, which mode is active. In single level mode, only image-to-image movement is possible, in dual level mode positioning is also possible in batches, and with tri-level films file-to-file positioning is possible.
- **Rewind:** The film is wound back.
- **Status display:** Here, the current status is displayed. If the controller is working, then e.g. film runs will be shown.

### 3.2.9 Working with the Blip Chip controller (optional)

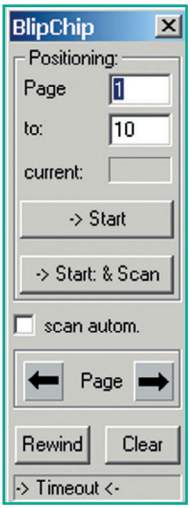


**Fig.: Blip Chip controller**

The Blip Chip positioning dialog appears in scan orders, if "**Use BlipChip in scan orders**" is checked in the basic settings (Chapter 5.13). With this dialog, the BlipChip controller can be commanded.

- **Positioning:** Here, a start position and an end position can be entered.
- **Current:** Shows the current position.
- **Start:** The program goes to the defined position in the positioning field.
- **Start & Scan:** The program goes to the defined position in the positioning fields and the scan is initiated. If a checkmark is set in the "**scan autom.**" box, and the TWAIN driver dialog is deactivated, the whole defined area will be scanned.
- **Page**: With these buttons a single step positioning can be carried out.
- **Rewind:** With "**Rewind**" the film can be wound back.

In the lower display field the current status of the controller is displayed.

### 3.2.10 Working with the fiche carrier (optional)

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.

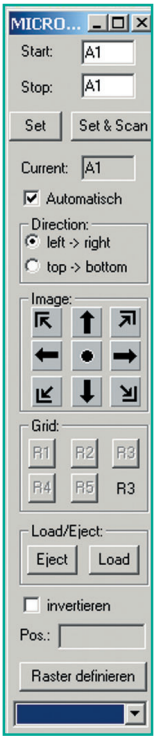


**Fig.: Microfly® control**

- **Start and Stop:** 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!
- **The image group:** With these buttons positioning can also be done completely manually. These keys position this 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.
- The group **Grid** allows a selection of the raster. By pressing on "**R1**" to "**R5**" the respective raster will be activated on the Microfly®.

## 3.3 Working in order mode

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

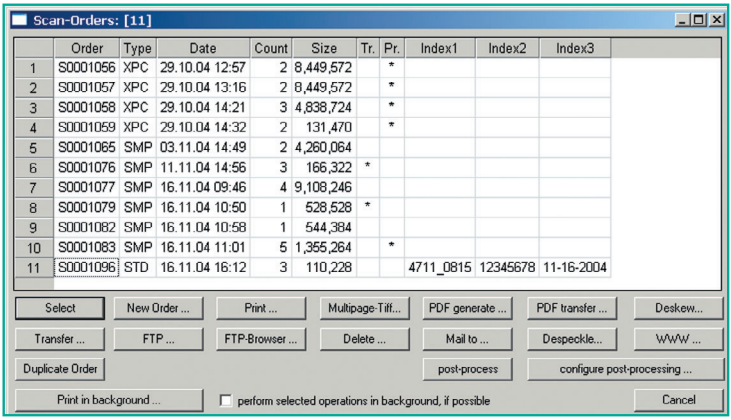


**Fig.: Order window**

The order last processed appears at the bottom. All listed orders can be processed from here.

Following information is displayed to the orders:

- **Order:** Name of the order
- **Type:** Order type
- **Date:** Date the order was created
- **Count:** Number of images contained in order
- **Size:** Size of order in kilobytes
- **Tr.:** A marker appears here for already transferred orders.
- **Pr.:** Here is registered whether the order has been printed.
- **Index1,2,3,...:** Here, should the situation arise, the applied indices of the current order types are displayed.

Through double click on one of the column headings, the order lists can be sorted.
So this way it is possible, that e.g. all not yet transferred orders are listed one below the other. A double click in the left upper corner of the table selects all orders, alternatively this is possible via keyboard with: "**CTRL-SHIFT-END**". In this way, all orders can be processed in one step (e.g. deleted), even if the list is very long.

### 3.3.1 The order menu

The order menu is opened by clicking with the right mouse button in the order list. All (otherwise response only via buttons) actions can be initiated from this menu.


**Fig.: Order menu**

The function "**make backup copy**" creates a backup copy of all images in an order, independent of a fixed batch operation. After running the operation, and according to needs, all steps can be undone or single images can be returned to their previous condition.

### 3.3.2 Selecting orders for processing

Simply select the appropriate orders from the order window. By clicking with the left mouse button on the corresponding orders will highlighted them with a colour. An area of orders can be selected by using the SHIFT-key and clicking the mouse.

### 3.3.3 Printing orders

Through activating the button "**Print**", the selected orders will be printed in their entity. The printed orders are then marked in the column "**Pr.**".

### 3.3.4 Processing to a Multipage-TIFF file

Through pressing the button "**Multipage-TIFF**", you can generate a multipage-TIFF file from a selected order. A dialog is opened, in which you can select a name and directory for your multipage-TIFF file. After confirming with "OK", the file is generated immediately.

### 3.3.5 Generating a PDF file

Through activating the button "**PDF generate**", PDF files are generated from the selected orders and transferred into the target directory. The orders remain in the order selection.

### 3.3.6 Selection for sending PDF files

Activate the button "**PDF-Transfer**" in the order window. 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 option.

Select with the mouse the PDF files that you would like to send per e-mail, to display or to delete, and then click on the appropriate button.

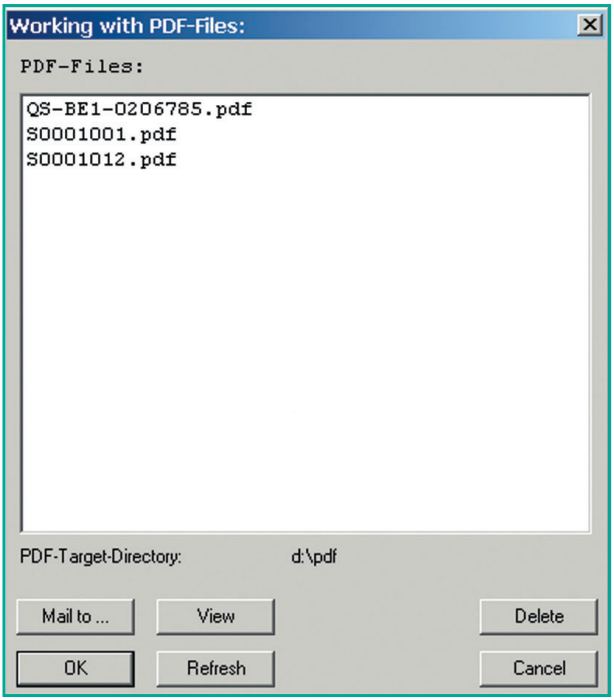


**Fig.: Processing PDF files**

### 3.3.7 Use deskew on the whole order

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

### 3.3.8 Transferring orders

Simply select the appropriate orders from the order window. Then through activating the button "**Transfer**", the selected orders are transferred directly into the current designated directory under the mode selection. If in order options "**Delete order after transfer**" is activated, the transferred orders are 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.

### 3.3.9 Sending via FTP

Through activating the button "**FTP**", you get access, depending on your FTP settings, either to the FTP browser (to select the target directory), to a query, whether you would like 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 in the FTP settings, 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.

### 3.3.10 The FTP browser

If you already have experience with FTP, then the functions of the FTP browser will immediately be 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 settings, 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.

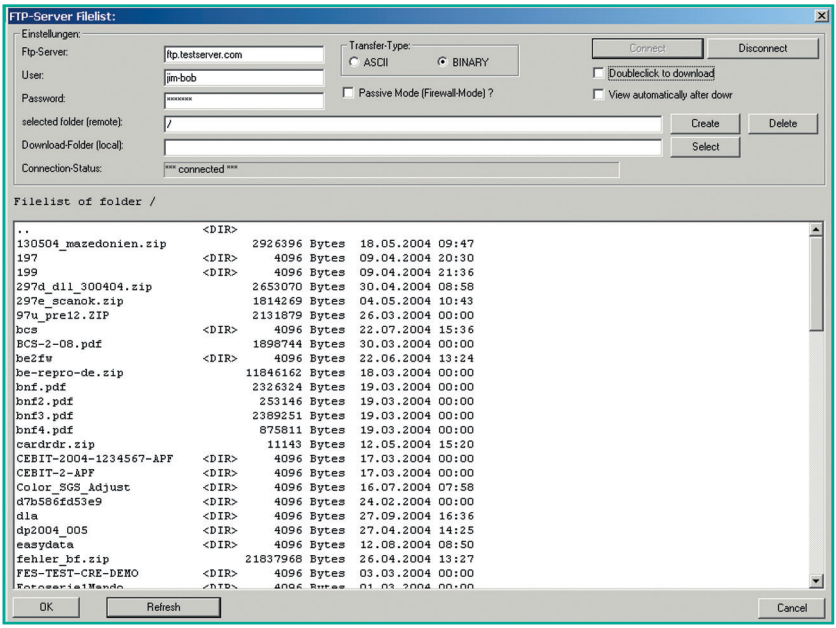


**Fig.: The FTP browser**

- **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 (remote):** Enter the target directory on the FTP server here.
- **Download-Folder (local):** Enter the download directory in which all files downloaded via FTP are copied.
- **Select:** Here you can select the download directory 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.
- **Doubleclick 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 doubleclick.
- **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.

### 3.3.11 Deleting orders

Through activating the button "**Delete**", the selected orders can be deleted. What appears next is a security query. As soon as you click "**Yes**" the selected orders will be deleted.

### 3.3.12 Sending orders

The sending of selected orders is initiated by activating the button "**Mail to**". 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).

**Note**: When converting a JPG file into a multipage TIFF, it is to be noted, that the generated Multipage-TIFF can take up a very large memory capacity.

### 3.3.13 Use despeckle on the whole order

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

### 3.3.14 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 9.10 (Web-Publisher).

### 3.3.15 Duplicate orders

With the function "**Duplicate Order**", the selected orders in the order list are duplicated. The order numbers of the duplicates are counted in running order as from the highest order number of the available orders in the orders list.

### 3.3.16 Background printing

If the button "**Print in background**" is activated, the images of the selected scan orders are copied into a new folder inside the spool directory. The spool directory can be determined in the order options.

For the printing of these orders filed in the spool directory, a separate program is required, which monitors the spool directory to be configured.

### 3.3.17 Post-process

With "**Post-process**", it is possible, to carry out a number of image operations on complete orders in a predefined series. Through activating the button "**Post-process**", the image operations are then applied to the marked orders in the order list.

Through the button "**configure post-processing**", the settings for the reworking of the orders can be carried out.

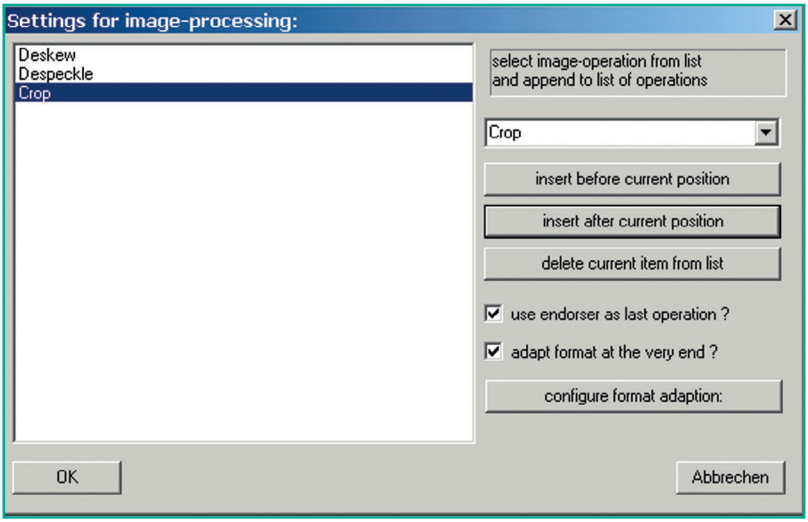


**Fig.: Reworking order**

- To insert an image operation into the list, select an image operation from the drop down list.
- Through pressing the buttons "**Insert before current position**" or "**Insert after current position**", the operation is inserted either above or below a marked operation in the list.
- To remove an image operation from the list, select the entry in the list to be removed and then activate the button "**delete current item from list**".
- If the function "**Use endorser as last operation?**" is activated, then the electronic endorser (Chapter 10.9) is used after the available operation on the images in the list.
- It is possible to adjust the format of the images as closing operation. For this, the function "**Adapt format at the very end?**" must be activated.

- Via the button "**Configure format adaption**" the settings for the format match can be carried out.

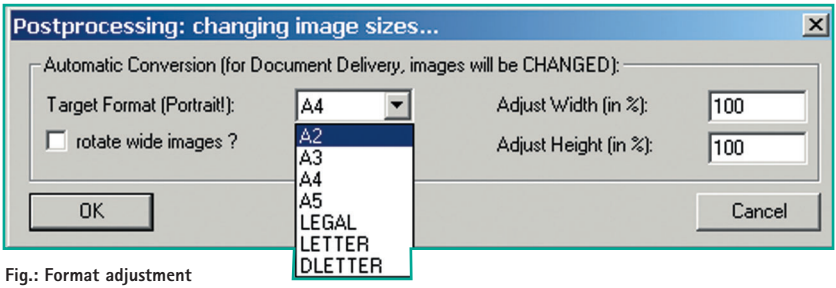


**Fig.: Format adjustment**

- **Target Format:** Here, a fixed target format can be defined, on which all images are scaled.
- **Rotate wide images?**: The images are rotated automatically, if necessary, in order to adjust them optimally to the target format. It is recommended, to select this function, to avoid compressions when matching the sizes.
- **Adjust Width/Height (in %)**: The values in these fields determine the percentage horizontal and vertical compression of the image.

## 3.4 Assign barcode position

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 an order number, and to a customer number via the barcode on a pre-designed order sheet.

If "**Decode automatically**" is selected in the options dialog under the barcode options, 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.

Select "**Set barcode position**" from the order menu. Now the request appears: "**Please select barcode area using the mouse**". 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 pressed.
- 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, and no other than this code, 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.
- Repeat this process until all indices have their barcode!

For the changes to become effective, you must end BCS-2® and restart it. Now the automatic indices entry can be made automatically.

# 4 THE FILE MENU

## 4.1 Basic functions of the file menu

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

- **Open:** After selecting the menu item, the usual dialog appears for loading files. Select the directory in the right window and select the file to be loaded in the left window. You can select between JPEG, GIF, PNG and TIFF files under the drop down menu "**File type**". Entire orders can be loaded from the order window.
- **Save:** Saves the image currently highlighted (in the thumbnails), format and name can be selected in a browser window.
  **Attention:** Multipage-TIFFs are not supported.
- **FTP browser**: Opens the FTP browser (chapter 4.3.10).
- Individual scans or entire orders can be directly generated as PDF files with **"Save as PDF file**". This menu item is also available via the **"PDF**"toolbar button.
- **Print:** The current image will be printed. If you want to print an entire order, you can do this from the order window.
- **Printout output A4 fix:** If this option is activated, the resulting printout from the printer is in A4 format.
- **Printer output A3 fix:** If this option is activated, the resulting printout from the printer is in A3 format.
- **Duplex output fix:** If this option is activated, the resulting printout (if the corresponding printer is available) is always on the front and rear side.
- **Output format from printer driver:** With activated option, the defined printout format in the printer driver is taken for printing.
- You can configure your printer as usual under "**Printer setup**".
- **Exit:** BCS-2® is ended.

## 4.2 Function: Mail to

To send a scan, simply select "**Mail 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.

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

# 5 THE SCANNER MENU

## 5.1 Selecting the scanner

Scanner selection is done quickly and easily via the menu item "**Select a Scanner**" 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**".

## 5.2 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 "**Start at scanner**".

## 5.3 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.

For addressing the scanner via HiScan 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 BCS-2® in single scan 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 "**Select a 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**". In this window, the firmware version and serial number of the scanner addressed via network are also displayed.

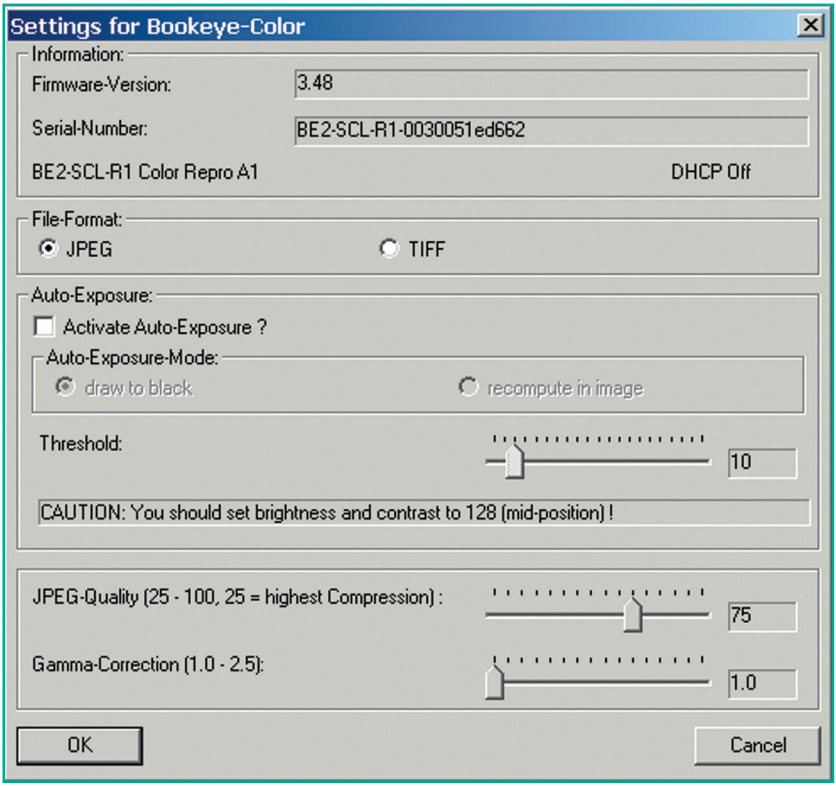


**Fig.: Bookeye settings**

- **File-Format:** you can select whether the scanner transfers the scanned image to BCS-2® as JPEG or TIFF file.
- **Auto-Exposure:** Here the Auto-Exposure mode of the Bookeye® scanner addressed via network can be activated. Two operating modes are supported. In the first, all image-pixels, which lie under the threshold value, are turned to black **(turned to black)**, in the other **(adjust image)** the image is examined and made to fit.
- **JPEG-Quality:** Dictates the quality of the JPEG image. High values mean a high picture quality and a low degree of compression.
- **Gamma-Correction.**: 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.

## 5.4 Selection: Bitonal – grayscale - color

Here you can choose whether to scan in **black and white (bitonal)**, **grayscale (4/8) bit** or in **color**. The possibility of individual settings is dependent on the individual scanner used.

## 5.5 Automatic inverting

If "**Invert automatically**" is activated, the colors for each scanned image are reversed.

## 5.6 Automatic deskew and despeckle

If "**Deskew/Despeckle automatically**" is activated, then these corrections are automatically made for each scan.

## 5.7 Automatic black border removal

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

## 5.8 Scan-Quality-Levels

BCS-2® can manage four different combinations of brightness and contrast. These values can be selected through the keyboard using "**CTRL-Q-1**" to "**CTRL-Q-4**".
The special keyboard can be used here. Alternatively, these settings are also reachable via the menu: Menu: "**SCANNER/Set Scan-Quality-Levels**" and menu: "**SCANNER/Scan-Quality-Levels**"

## 5.9 Bookfold-Correction

Insure that the book is laid on the scan surface approx. 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 the Bookfold-Correction**":

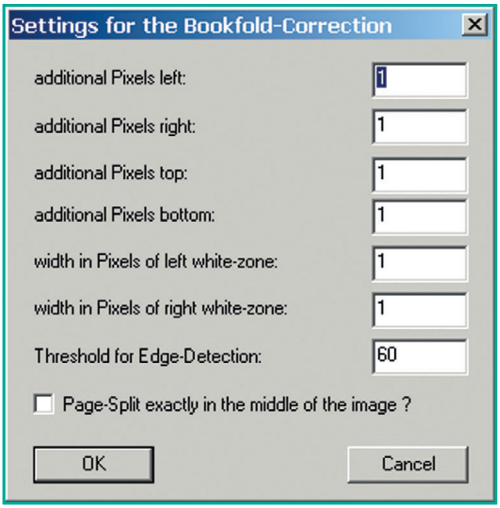


**Fig.: Bookfold-Correction**

**Additional Pixels left/right/top/bottom**: This determines how much is cut off the edges of the book fold correction. Positive values cause less to be removed from the automatically detected edge. Negative values increase the area cut off the edge.

**Width in Pixels of left/right white-zone:** An n-pixel wide area left or right from the center of the image can be filled with white.

If "**Page-Split exactly in the middle of the 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 fold area.

## 5.10 Define user format

With "**Define user format**" a certain part of the scanning area can be determined for scanning. If this function is selected, the complete surface will be scanned. You can use the mouse to determine an area to be scanned as user format.

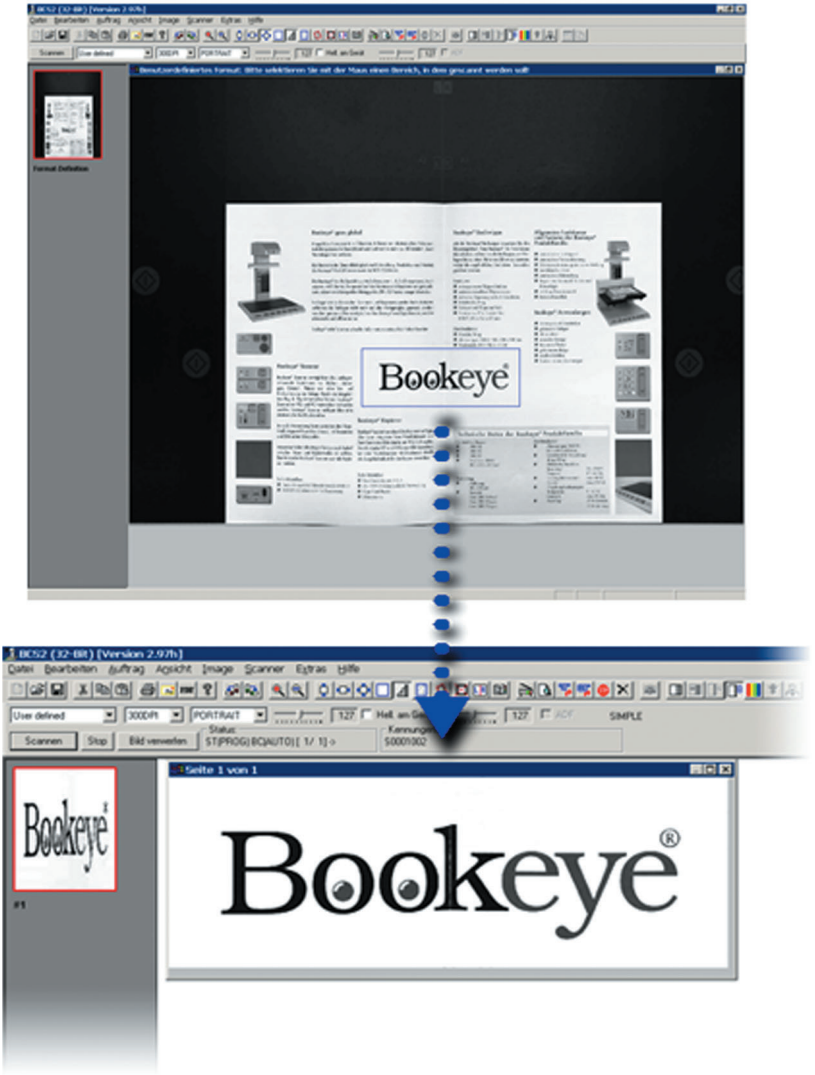


**Fig.: User format setting**

In order to scan the determined area, "**User defined**" must be set in the dropdown bar.

## 5.11 FS-III settings

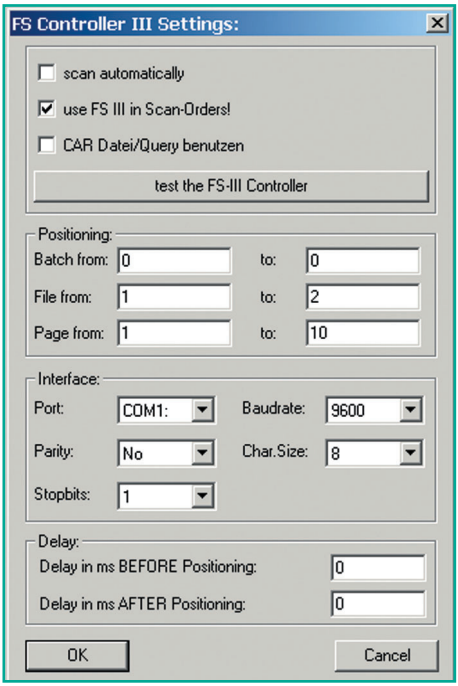


**Fig.: FS-III settings**

- **Scan automatically:** This pre-allocation regulates whether the selected area of the fiche should be scanned automatically in the scan order.
- **Use FS-III controller in Scan-Orders:** This checkmark must be set, so that the FS-III controller can be used inside scan orders. It ensures that the positioning dialog appears in scan orders, and can be used for controlling the film carrier.
- **CAR Datei/Query benutzen:** The control of the respective images on the film can also be taken from a control file (chapter 9.6). This could for example have evolved from a third system within the scope of an investigation. Scanning can then take place with this file.
- **Test the FS-III controller:** By activating this box, the positioning dialog is opened for testing. Scanning is not possible at this position.
- **Positioning:** Here, default values can be given for the film areas to be scanned. These are then implemented when displaying the positioning dialog in the scan order.

- **Interface:** Here the interface is configured to the controller. Typically as: COM1, 9600 Baud, 1 Stop-Bit, 8-Bit digit size and no parity.
- **Delay:** Should there be mis-positioning, because the transport speed is not right, a delay can be set here before and after the positioning. Because here the specifications are in milliseconds, it makes sense to test values above 100 msec..

## 5.12 Mars controller settings

- **Scan automatically:** This pre-allocation regulates whether the selected areas should be scanned automatically in the scan order.
- **Use Mars controller with orders:** This checkmark must be set, so that the Mars controller can be used at all inside scan orders. It ensures that the positioning dialog appears in scan orders, and can be used for controlling the roll film carrier.
- **CAR Datei/Query benutzen:** The processing of the respective image on the film can be also taken from a control file (chapter 9.6). This could for example have evolved from a third system within the scope of an investigation. Scanning can then take place with this file.
- **Device type**: Here the right type of Mars controller must be defined. A correct setting is important, because both devices operate partly with other commands.
- **Positioning:** Here, default values can be given for the film area to be scanned . These are then implemented when displaying the positioning dialog in the scan order.
- **Interface:** Here the interface is configured to the controller.
  Typically as: COM1, 9600 Baud, 1 Stop-Bit, 8-Bit digit size and no parity.
- **Delay:** Should there be mis-positioning, because the transport speed is not right, a delay can be set here before and after the positioning. Because here the specifications are in milliseconds, it makes sense to test values above 100 msec..
- **Test Mars controller:** By activating this box, the positioning dialog is opened for testing. Scanning is not possible at this position.

## 5.13 BlipChip controller settings

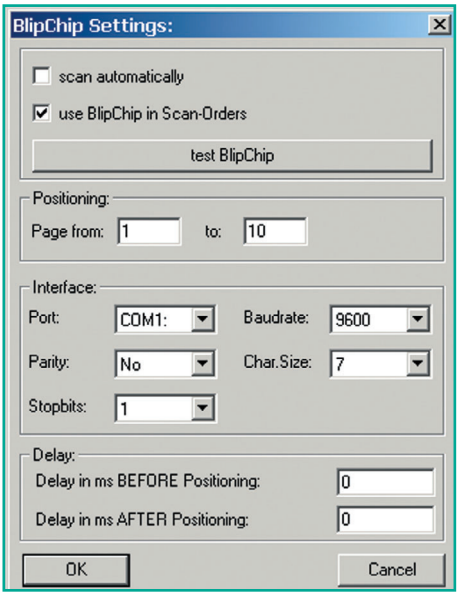


**Fig.: BlipChip controller settings**

- **Scan automatically:** This pre-allocation regulates whether the selected areas should be scanned automatically in the scan order.
- **Use BlipChip in Scan-orders:** This checkmark must be entered, so that the BlipChip controller can be used at all inside the scan orders. It ensures that the positioning dialog appears in the scan orders, and can be used for controlling.
- **Test BlipChip:** By activating this box, the positioning dialog is opened for testing. Scanning is not possible at this position.
- **Positioning:** Here, default values can be set for the film area to be scanned. These are then used when displaying the positioning dialog in the scan order.
- **Interface:** Here the interface is configured to the controller.
  Typically as: COM1, 9600 Baud, 1 Stop-Bit, 8-Bit digit size and no parity.
- **Delay:** Should there be mis-positioning, because the transport speed is not right, a delay can be set here before and after the positioning. Because here the specifications are in milliseconds, it makes sense to test values above 100 msec..

## 5.14 Fiche carrier settings

### 5.14.1 Basic fiche carrier settings

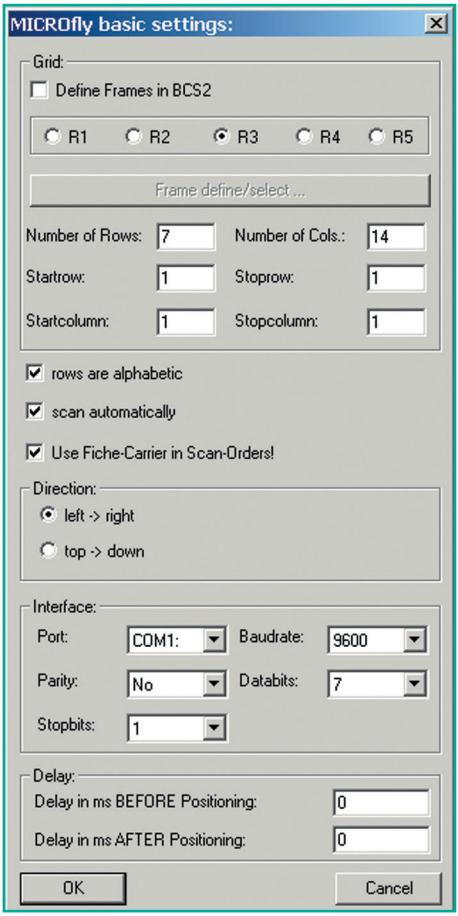


**Fig.: Microfly basic settings**

- **Grid:** This pre-allocation regulates the raster definition of the fiches.
- **Rows are alphabetic:** 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.
- **Scan automatically:** 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 the carrier will be really 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).
- **Delay:** Should there be mis-positioning, because the transport speed is not right, a delay can be set here before and after the positioning. Because here the specifications are in milliseconds, it makes sense to test values above 100 msec..

### 5.14.2 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 through BCS-2® can be made by pressing the button "**Define/select raster...**".

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!

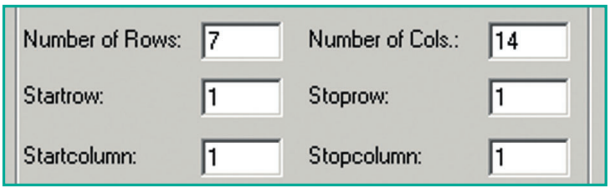


**Fig.: Fiche layout**

Startrow, stoprow, startcolumn, and stopcolumn 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 Mircrofly®.


**Fig.: Fiche raster**

### 5.14.3 Define 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.

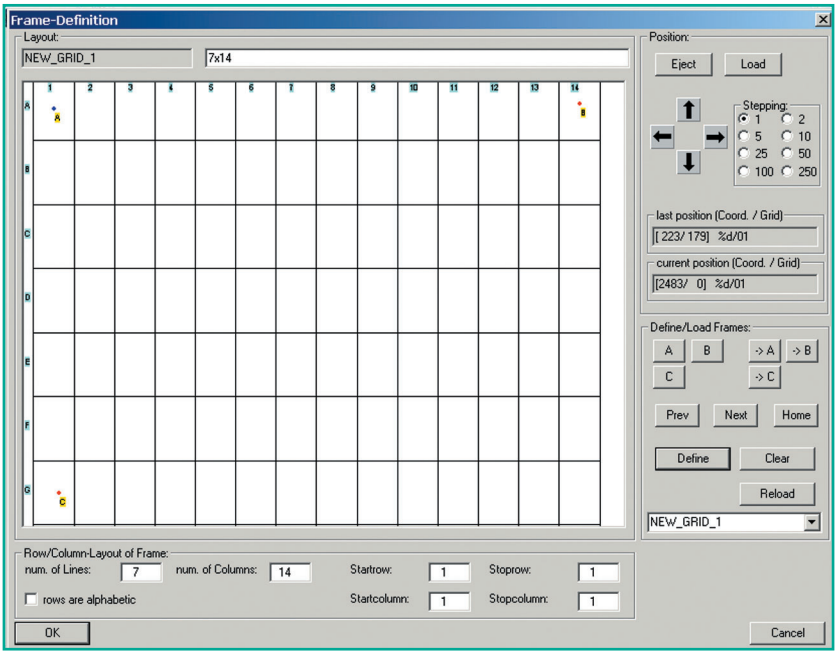


**Fig.: Frame Definition**

**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.
- Attention: Do not forget the startcolumn/row and the stop/columnrow! These values serve later as pre-allocation for the area of the fiche to be scanned in a scan order.
- Now, a name must be assigned for this fiche. (It is best to use a name that indicates the geometry, like e.g. 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 type more in detail.
- Now the fiche will be defined through 3 points. These points are identified with A, B, and C. Applied 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 is traveled over exactly in the reverse direction.

This is achievable when defining the frame by simply changing 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 useful combinations are permitted. After definition of the fiches (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 frame)

**Executing a deskew:**

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

**Instructions for keyboard operation:**

- Using the keys "**Home**", "**PgUp**", "**End**" and "**PgDn2**", 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). In addition you can position on the absolute coordinates with the left mouse button.
  With the right mouse button the frame can be tested: If a frame has been correctly defined, then the right button is used to position on the respective frame point. In this regard it is does not matter which point you click on in the respective frame: BCS-2® calculates which is the correct frame point and positions accordingly.

## 5.14.4 Keys for frame definition

| Key combination | Function |
|---|---|
| **Cursor left** | Position to the left or based on current stepping |
| **Cursor right** | Position to the right or based on current stepping |
| **Cursor up** | Position up or based on current stepping |
| **Cursor down** | Position down or 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** | 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) |
| **P** | Go to previous image (Prev) |

### 5.15 Print after scan (optional)

The optional function "**Print after scan**" 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!

### 5.16 Rotate wide images on print

With "**Rotate wide images on print**" you can make sure that the printout always has the optimal appearance (this requires a portrait printer). This function can likewise be initiated via shortcut with "**CTRL–F9**".

## 6 THE EDIT MENU

- **Undo:** Here, all image processing functions, which were applied to the current picture, are undone.
- **Restore current image from backup:** If the function Create backup copy is implemented on the current order in the order window, then using "**Restore current image from backup**" single images in the order can be returned into the previous state.
- **Undo the whole batch operation:** With this function, all images in an order can be restored completely after using the order restore processing function. To be able to execute the function, the mode "**Make Backup copy before batch operation**" (**menu: Administration → Order administration**) must be active.
- **Cut:** Moves the current image to the clipboard.
- **Copy:** Creates a copy of the current image in the clipboard.
- **Paste:** Inserts the image in the clipboard into the order.

# 7 THE VIEW MENU

## 7.1 Adaptive functions of the view menu

Four 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.
- **Fit to 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.
- **Fit to 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.
- **Fit to window:** When this function is activated, the image is adapted to the height and width of the window.

If the function "**Maximize window automatically**" is activated, then the window is always maximized on the work surface.

## 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.
- **Zoom out:** In this case you zoom out of the image: The image segment becomes larger and the view becomes smaller and smaller.

The functions "**Zoom in**" and "**Zoom out**" can also be reached through the context menu (right mouse button). If you want to enlarge a certain image area, you can simply **highlight** it. The program then overlays it automatically.

# 8 THE IMAGE MENU

## 8.1 The rotation function in the image menu

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

If one of the following functions is activated, the images are rotated automatically to the right according to the corresponding number of degrees after each scan.

- **Rotate 90° automatically**
- **Rotate 180° automatically**
- **Rotate 270° automatically**

A subsequent additional rotation of the images can take place with the following functions.

- **Rotate 90°:** The image is rotated 90 degrees to the right.
- **Rotate -90°:** The image is rotated 90 degrees to the left.
- **Rotate 180°:** The image is turned "upside down".
- **Rotate 10°+:** The image is rotated 10 degrees to the right.
- **Rotate 10°-:** 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 functions,** the image menu offers some very convenient special functions for improving the scan image quality.

- **Grayscale:** This 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 reduced through the settings.
- **Despeckle:** Small speckles (impurities) on the image will be automatically removed.
  The application of this function is only recommended for bitonal devices.
- **Deskew:** The image is automatically and optimally lined up.
- **Invert:** The image colors are reversed.

- **White black borders:** The black area around a scanned image can be colored white. This can be useful for preventing black stripes during a skew correction.

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

- **Configure Black-Border-Removal:** Here, settings for the Black-Border-Removal can be made. The best results are gained with the application of bitonal images.

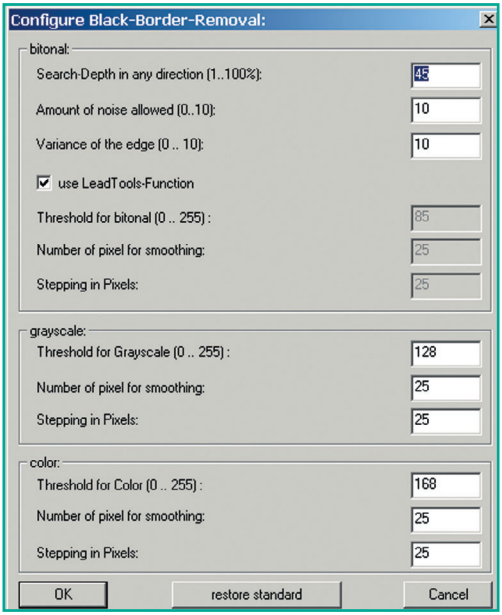


**Fig.: Configure Black-Border-Removal**

With bitonal images, it can be selected whether the LeadTools-Function or an alternative algorithm is applied in the removal of black border. In order that the black border suppression can be used with the LeadTools-Function, the function marked "**Use LeadTools-Function**" must be checked. The LeadTools-Function delivers the best results with most of the images.

For the **LeadTools-Function**, the following parameters can be changed:

- **Search-Depth in any direction:** Permitted values are 1...100. This value determines, how much percent of the dimension is sought in the respective direction (top to bottom, bottom to top, left to right and right to left) for the transition from black to white in the image. The default value is 45 %, i.e. a search is made for the edge in every direction of up to 45 % in the image.

- **Amount of noise allowed:** This parameter regulates how much noise is permitted. Legal values are from 1...10. The default value is 10, i.e. a lot of noise is permitted.
- **Variance of the edge:** This parameter regulates how much variation in the form of the edge is permitted. Legal values are 1...10, the default value is 10, i.e. a large variation is permitted.

The following parameters can be changed in the internal function:

- **Threshold value for Bitonal/Grayscale/Color:** Brightness values between 0 (black) and 255 (white) from which the algorithm recognizes the transition to white.
- **Number of pixels for smoothing:** This figure determines the number of pixels through a sliding average to check the threshold value.
- **Stepping in Pixels:** This figure determines the exactness of the examination: With a value of e.g. 10 , a test is carried out every 10 lines or columns. The established value is the valid for this line/column and the previous other 9 also.

## 8.3 Manual split page mode and mask

### 8.3.1 Manual split page mode

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

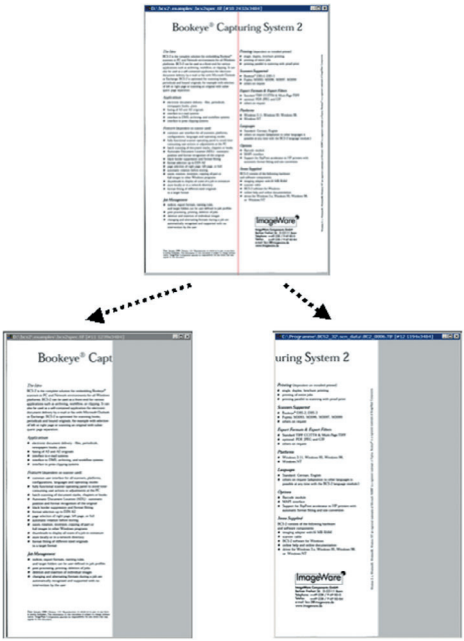


**Fig.: Split page mode**

You change to this mode using the "**Toggle manual split page mode**" in the context menu (right mouse button) or via the "**Toggle manual split page mode**" in the image menu. This applies for the order mode as well as for the single scan mode.

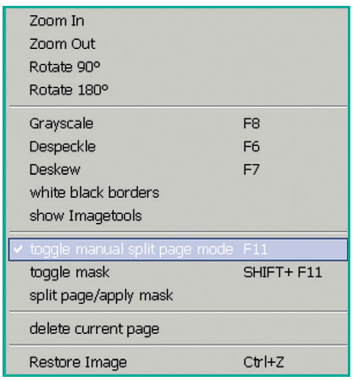


**Fig.: Toggle split page mode**

In splite page 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 "**Split page/apply mask**", the page separation is activated at the defined point. The old image is removed and two new images are created: The left and the right half.

Optionally, the central area of the original image can be removed (e.g. to remove the shadow of the book fold. A left border can be set for this purpose using the "**L**" key. The red separating line then forms implicitly the right-hand 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 left border disappears.

### 8.3.2 Mask mode

In mask mode an area of the original image is defined, that after separation comprises the resulting image. The basic idea is, that e.g. during scanning a large number of images, always the same image cut-outs are exempted (e.g. with micro- fiches). As option the described page separation can be carried out additionally.

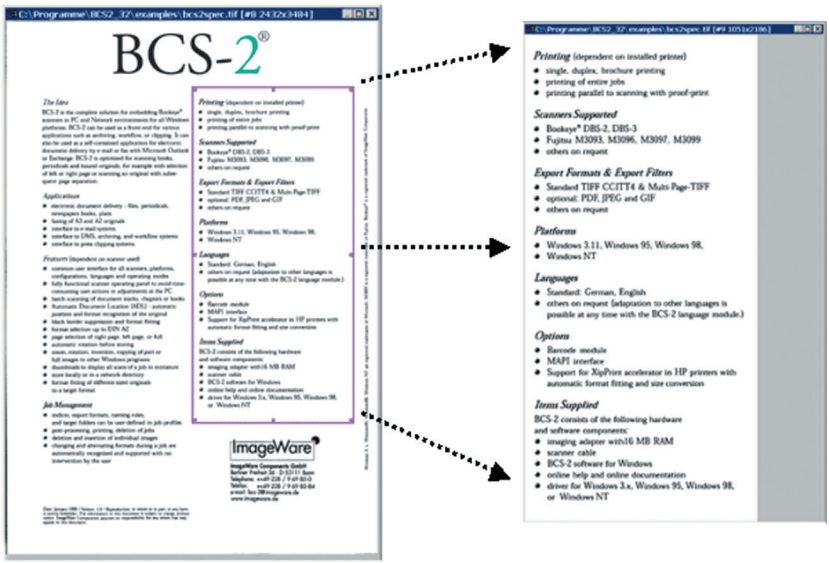


**Fig.: Cut out mask**

Mask mode is activated after selection of "**Toggle mask**" in the context or the image menu.

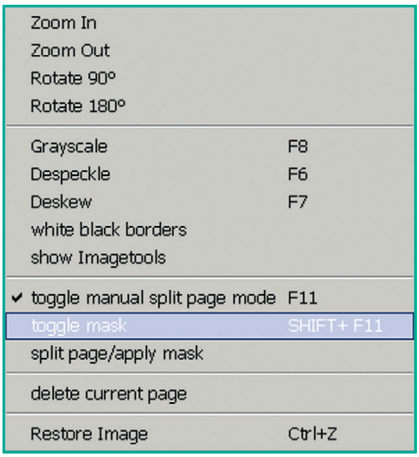


**Fig.: Toggle mask**

To use page separation and mask at the same time, select by activated mask "**Toggle split-line in mask**".

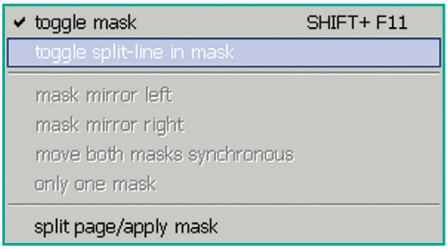


**Fig.: Toggle separation line**

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

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

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

### 8.3.3 Keyboard layout for manual splite page and mask mode

As alternative to mouse controlling, the mask/page separation can also be controlled completely by the keyboard.

| Key combination | Function |
|---|---|
| **F11** | Changes to splite page mode. After pressing F11 the pure page separation mode is active. The mask 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 increment, without: largest increment. |
| **Right arrow key** | Movement: to the right, size change: horizontal larger, CONTROL: smallest increment, SHIFT: middle increment, without: largest increment. |
| **Up arrow key** | Movement: up, size change: vertical smaller. CONTROL: smallest increment, SHIFT: middle increment, without: largest increment. |
| **Down arrow key** | Movement: down, size change: vertical larger, CONTROL: smallest increment, SHIFT: middle increment, without: largest increment. |
| **M** | Switches to mask mode. The red split-line appears in the mask or is positioned in the middle of the masks. The separating line moves when the mask moves. |
| **P** | In mask mode: Mask positioning mode: The mask is (together with the split-lines) on the image |
| **I** | In mask mode: Switches to the split-line: If this key is pressed the separating line for page split page mode can be moved within the mask. This key always toggles between mask control and split-line: control. |
| **J** | In splite page mode: Switches on the concurrent movement of left and right borders |
| **L** | Specification of the left border: the current position of the red split-line is fixed and displayed as blue line. The red line forms the right border implicitly. The split page mode is then working: left edge to left border, and right border to right edge. |
| **R** | The left border is removed again. Only the red split-line executes the split page mode. |
| **H** | In mask mode: The split-line is hidden. A split page mode is no longer executed. RETURN produces only the consideration of the mask; this means the old image will be replaced by the content of the mask. |

## 8.4 Imagetools

Imagetools provide the possibility to change the contrast and the brightness of the scanned image. The Imagetools can be either displayed or hidden via "**Show Imagetools**" in the context menu (right-hand mouse button) or via the menu "**Image**" with the option "**Show Imagetools**".


**Fig.: Imagetools**

There, with the use of the buttons "**–**" and "**+**", the brightness as well as the contrast can be increased/decreased. For bitonal images however only a contrast change is possible, brightness correction is not. The changes will only be written after pushing the "**Apply**" button. With "**Restore**" the original condition will be restored.

# 9 THE EXTRAS MENU

## 9.1 Import license file

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

When you have selected the function, 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 your license is valid 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 Send licensing form via e-mail to ImageWare Components

To be able to generate a license file for your system, ImageWare Components requires information about the system used. The function "**Send licensing form via e-mail to ImageWare**" generates an e-mail automatically, that you must fill out with your address data.

## 9.4 Prepare licensing form for printing / fax

As alternative to sending the licensing form per e-mail, there is the possibility of sending the form per post or fax. The function "**Prepare licensing form for printing/fax**" opens an automatically generating text file, that you must fill out with your address data. You can print out this file and send it per post or fax it to ImageWare Components.

## 9.5 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.

## 9.6 CAR (Computer Aided Retrieval) [optional]

BCS-2® can use a control file for FS-III and Mars 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 film. The format of the ASCII file is freely configurable in BCS-2®.

### 9.6.1 CAR file input

- **CAR file:** Here, path and file name of the ASCII file are indicated. Through the button "**Selection**" the ASCII file can be selected with a file browser. In the field below, the contents of the ASCII file are displayed.
- **With field description in line 1:** Here can be indicated, whether the control file contains a preliminary line with field names.
- **Fields optional in quotation marks:** The fields can also optionally defined in quotation marks. Here you can determine whether to use quotation marks. In the selection field "**Quotation marks**" beneath, such characters are interpreted as quotation marks.
- **Field separators:** This selection field determines which characters separate the fields.
- **Field number film/image/file/batch:** Here can be determined which field number contains the respective data.
- **Preset file name:** When this option is checked, it is possible to define 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.
- **Generate import files for Docuware:** Through this option it can be determined whether Docuware import files have been generated.

### 9.6.2 Position in CAR file

In the window "**Position in CAR file**" a line from the control file can be selected with a double click. The program then goes to the image number in the selected line via the controller.

BCS-2® then calls the user thereby to insert the corresponding film.

## 9.7 Additional TIFF-Tags (optional)

In the dialog "**Additional TIFF-Tags**" Tiff tags can be defined. These are, insofar a special order type Define-Tags is selected, implemented in the image of an order.

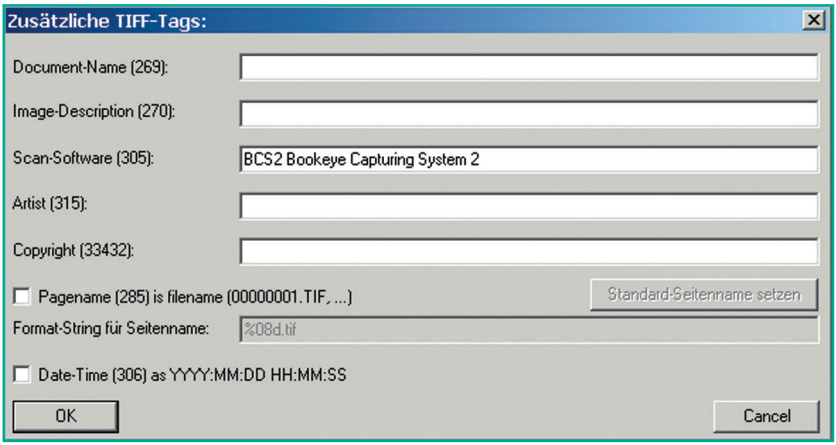


**Fig.: TIFF-Tags**

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.

On/Off switchable tags:

- **Pagename (285) is filename:** When this TIFF-Tag is switched on, the file name is used as page name.
- **Date-Time (306)**: When switched on: Information on date and time in the format **YYYY:MM:DD HH:MM:SS**.

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.

## 9.8 Coin slots/ SmartCardReader (optional)

Two different pay devices can be connected to the BCS-2® . If both devices are active, it is possible to change from one to the other at any suitable time during operation. BCS-2® can be configured, so that certain actions (e.g. printing, FTP upload, sending e-mails etc.) can be made payable. The pay device settings are safeguarded in BCS-2® with "**Password query**". When the function is called for the first time, no password is defaulted, and all you need is press "**Enter**". Then a query follows, whether the password should be changed. Now you can determine a password for access to the pay devices configuration. This query appears after each successful entry of the password.

### 9.8.1 Coin slot/Smart Card Reader cost configuration

By selecting the menu point "**Coin slot/SmartCardReader cost configuring**" the dialog "**Configure costs per click and action**" opens up.

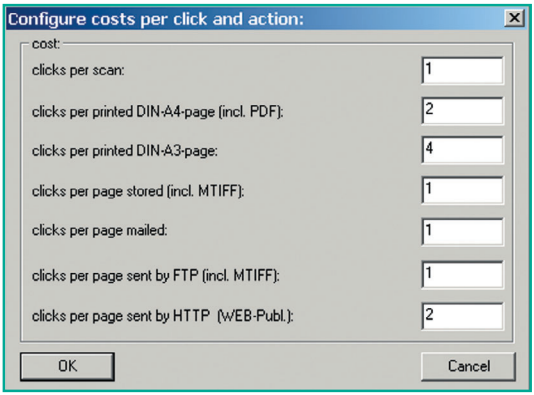


**Fig.: Setting costs**

The values in the fields determine how many clicks for the respective action are sent to the pay device for payment.

### 9.8.2 Coin slot/ Smart CardReader interface configuration

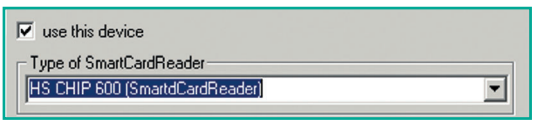


**Fig.: Select device**

Via the dropdown menu "**Device type**" it is possible to select the type of pay device to be connected. The checkbox "**Use this device**" must be checked to enable BCS-2® to use the selected device.

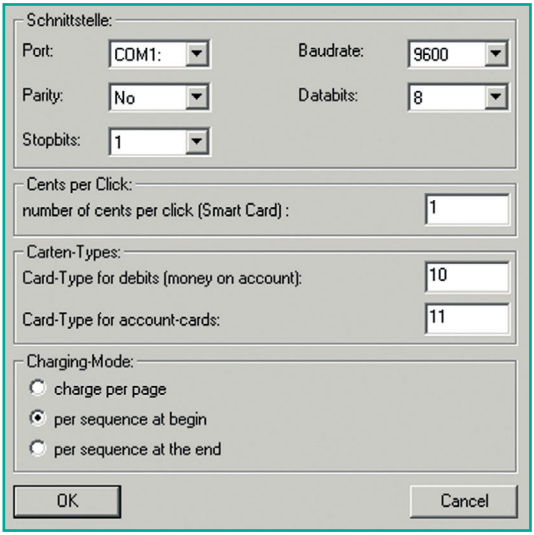


**Fig.: Coin slot /SmartCardReader interface**

### Schnittstelle

- With **Port** it is possible to determine to which port the respective device is to be connected.
- Through the fields "**Baudrate**", "**Parity**", "**Databits**" and "**Stoppbits**" further settings for these fields can be carried out. Settings in these fields are dependent on the type of pay devices used.

### Cents pro Click

- With "**Number of cents per click (Smart Card)**" the number of cents can be preset for the Smart Card per click when using a SmartCardReader.

### Card-Types

Two types of Smart Cards are supported: Chip cards (containing credit) and account cards. With chip cards, charges are deducted against the amount of cents on the card. With account cards, every click is counted onto the card, i.e. the number of used clicks is stored on the card. In order to differentiate between the two types of cards, each respective card must be known.

- Under "**Card Type for debits (money on account)**" can be determined which type of card is to be used for payment.
- Under "**Card-Type for account-cards**" can be determined which type of card is to be used for payment.

**Charging-Mode**

Here can be determined when the payment for the clicks takes place: per page, at the start of the procedure or at the end of the procedure.

### 9.8.3 Select coin slot / SmartCardReader

If two pay devices are connected to the BCS-2® , then with "**Select coin slot /SmartCardReader 1/2**" it is possible to change between the two devices.

### 9.8.4 Load card / eject all cards

- With "**Load card**" the card is loaded by active CardReader. If there is no card in the CardReader, then BCS-2® requests the user to insert a card.
- With "**Eject all cards**" all cards connected to the SmartCardReader will be ejected.

## 9.9 Electronic endorser (optional)

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**".

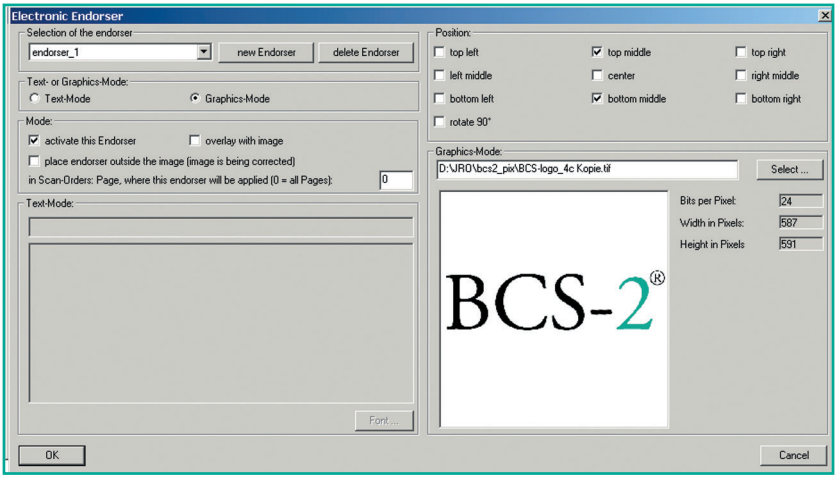


**Fig.: Endorser**

- **Selecting of the endorsers:** 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:** Here the respective endorser is activated. 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**".

## 9.10 Web-Publisher (optional)

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:**

- You have 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 approx. 80 – 100 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**".

## 9.10.1 Upload settings

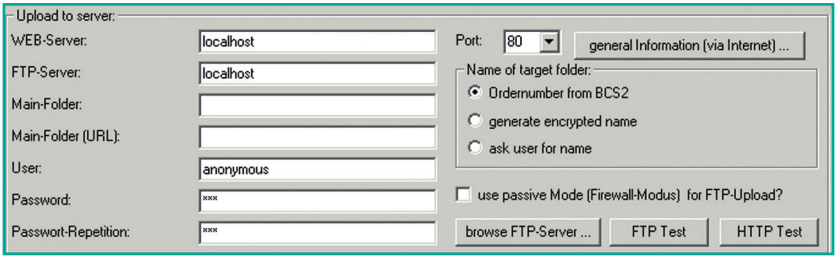


**Fig.: Upload settings**

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 are 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-Folder:** Here the directory of the FTP server is specified under which the target directory of the order is to be created.
- **Main-Folder (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 target folder:** Here you can select how the names of the target folder will be generated. The order number from BCS-2® can be inserted as file name, an encrypted name of 32 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...**" (4.3.10 The FTP browser). The buttons "**FTP Test**" and "**HTTP Test**" allow you to test the access to the FTP server and the web server.

### 9.10.2 Image-Options

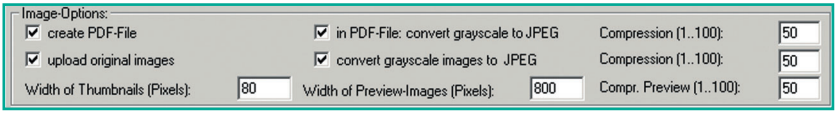


**Fig.: Image-Options**

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.
- **Width of Thumbnails (Pixels):** The width of the generated thumbnail can be specified in pixels.
- **Width of Preview-Images (Pixels)/Compression preview:** The width of the preview image and the compression strength can be specified here.

### 9.10.3 E-mail settings

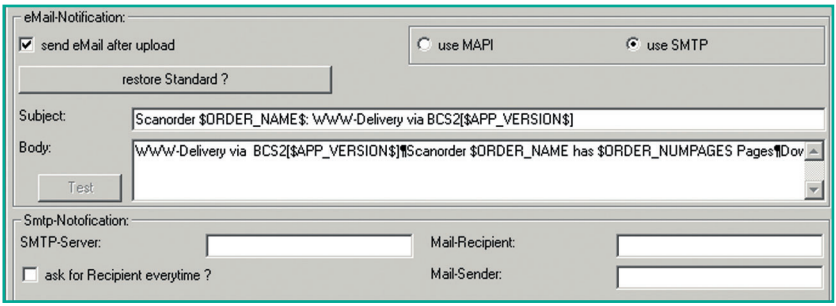


**Fig.: E-mail settings**

The **E-mail-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 e-mail.

- **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/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" that is located in the BCS-2® program directory.
- **SMTP-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: receiver@provider.net).
- **Mail-Sender:** Here you specify the (standard) sender of the notification (for example: YourName@provider.net).
- **Ask for Recipient everytime:** Here you can select whether the recipient should be specified before each sending. This option is recommended for frequently changing recipients.

### 9.10.4 Show in browser after upload


**Fig.: Test in browser**

With the option: "**Show in browser after successful upload?**", the result can be directly displayed in the browser after successful upload.

### 9.10.5 HTML-Settings

By pushing the button "**HTML-Settings**" in the window „**WEB Publisher-Settings**" the following window opens:

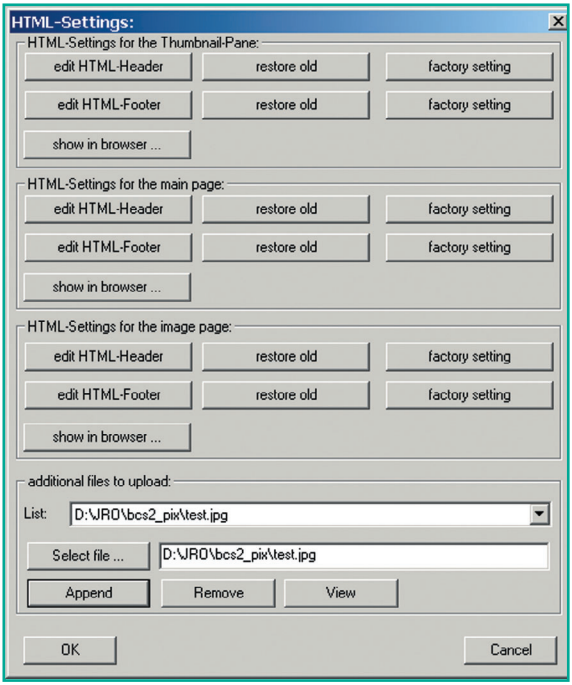


**Fig.: HTML-Settings**

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.

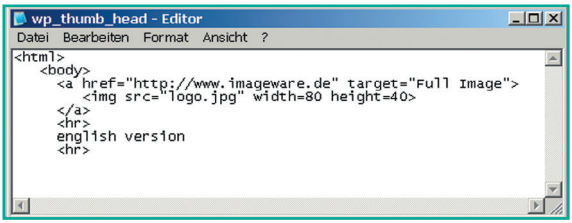


**Fig.: Edit header**

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

- **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 setting:** 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.

**Additional files for the upload:**

- Here, you can indicate additional JPG files, which are transferred during upload in the target folder.
- By clicking on "**Select file**", you can select the file in the file browser. The path can be entered directly into the text field, on the right side, next to the button.
- With "**Append**" the file is then added to the list of files to be transferred.
- To remove an entry from the file list, select the entry and then activate the button "**Remove**".
- "**View**" opens the preselected viewer for JPG files in Windows and displays the current selected image.

### 9.10.6 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.

**Notes**

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.

**Notes**

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 demonstration purposes. 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. Any browser in the network should be able to understand these URLs and display the generated pages.

### 9.10.7 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 (this means 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.

**Specific 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.

Everything for web publishing via BCS-2® should now happen in the directory www_bcs2 under htdocs. The FTP upload occurs under the account "**bcs2_upload**".

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

- 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**". That means that all accounts on this UNIX system can read the files.

**Configuration of the web server without 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 a 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.

BCS-2® should not file through FTP, but through the file system of images and HTML pages in the area of the web servers. The e-mails, that BCS-2® sends for notification, should not be URLs which refer to the file system, but "correct" URLs, which can also be activated 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.

**Specific 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 via BCS-2® should now happen in the directory www_bcs2 under htdocs. The upload is to occur in the file system.

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

- WEB server: **pc_web**
- FTP server: **localhost**
- Main directory: C:\Programs\Apache Group\Apache\htdocs\www_bcs2
- Main directory (URL): www_bcs2
- User: No entry needed!
- Sample generated URL: http://pc_web/www_bcs2/S0001050

**Attention:**

- 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 entered 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 without available FTP server.

**Specific 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

## 9.11 Document delivery systems

The description of the settings for the document delivery systems are contained in separate documents.

## 9.12 XPC (xPrint interface)

The description of the settings for the XPC (xPrint interface) are contained in separate documents.

# 10 THE MANAGEMENT MENU

## 10.1 Order administration / make backup copy before batch operation

If the mode "**make backup copy before batch operation**" is activated, a backup copy of all images of the order is made before carrying out a batch operation on a scan order. After carrying out the batch operation, all and/or single images can be selectively returned to their original condition/state.

## 10.2 Set BCS-2® user

Here, a BCS-2® user name (e.g. in the form of a nickname) can be entered.


**Fig.: User entry**

## 10.3 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, BCS-2® journals, 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 after the 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"

### 10.3.1 BCS-2® variables management

Here, the current values and a description of the single BCS-2® variables are displayed. It is possible to define own variables. These user variables can be assigned an own value and description.

To get the current value of a variable displayed, click onto the system or user variable, or select this with the arrow keys. In the fields under the variables list the corresponding value and description are displayed.

**Beispiel**:

As a possible name for user under "**BCS2 Set user**", the name "**Bob**" is entered.
If the system variable "**APP_USER**" is selected in the variables management, then the word "**Bob**" is displayed as value of the variables.

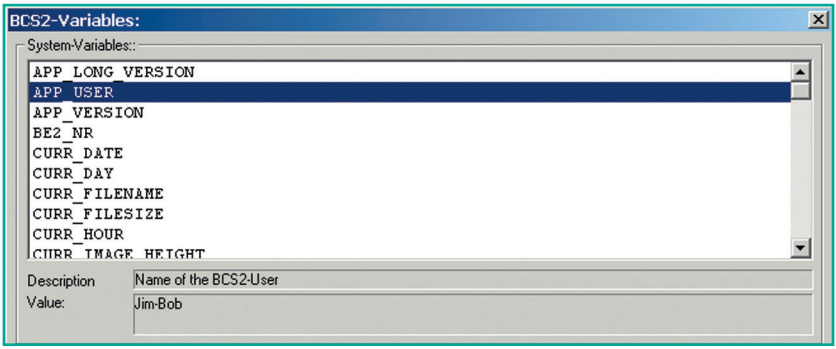


**Fig.: BCS-2® variables list**

**Create a user variable:**

In order to create a user variable, you must click on the button "**New**". Now the name and the description of the variable can be entered.

The variable now appears in the list of user variables. Through a double click onto a user variable, a value can be assigned or an available value changed.

Removal of the BCS-2® user variable is performed by using the button "**Delete**". The selected variable in the list is then duly deleted.

## 10.4 Journals (optional)

The BCS-2® journals offer the possibility to generate user-defined entries in lists for certain transactions or events in BCS-2® . Thus, for example, an entry in the journal is generated when transferring an order, which records the current BCS-2® user, the name of the transferred order, the date and the time, etc..

Journals can be displayed in BCS-2® and exported as text or HTML files.

### 10.4.1 Journal administration

In the journal administration, journals can be selectively or completely activated / deactivated. New journals can be defined as well as available journals being changed or deleted.

**Journal control:**

To be able to use the journal function in BCS-2® , the field "**Activate journalling in BCS-2 ?**" must be activated.

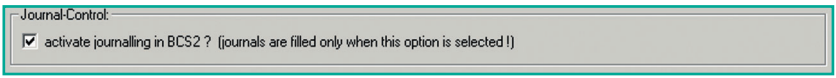


**Fig.: Activate journal**

If this checkmark is not set, then also the single activated journals in BCS-2® will not be listed.

**Load/create/delete journal:**

Here is the selection list, which allow to load the journals into the management. There is a field on the right hand side which displays how many entries are to be found in the selected journal.


**Fig.: BCS-2® journal selection**

- A new journal can be created by activating the button "**New**". After entering the journal name, the new journal is then inserted into the selection list.
- With the button "**Copy**", the complete journal definition of an available journal can be copied into a new journal.
- After clicking on the button "**Copy**", a new name for the journal copy must be entered. The journal copy is then filed under this name in the list and can be selected and changed if the case should arise.

- To delete a journal, simply click on the button "**Delete**". The current loaded journal in the management is hereby deleted.
- In order to be able to get a journal into BCS-2®, the field "**Activate this journal**?" must be activated.

**Journal definition:**

Through the journal definition, it is determined, for which transactions/events certain user-defined entries are made in the journal by BCS-2®. Here it is also defined, where the journals are to be exported under which file names.

**Journal description:**

Here, a short text to describe the journal can be entered. This description appears when exporting or displaying as HTML file in the headline of the journal.

**Assign transactions:**


**Fig.: Transactions**

Here, it is determined, for which transactions an entry in the journal is made. In order to take up a new transaction allocation in the list, a transaction must be selected in the selection list and the button "**add**" clicked on. Through the button "**remove**", entries can be removed from the list.

If, e.g. the entry "**ORDER_TRANSFER**" is included in the list, then there is an entry in the journal each time an order is transferred.

**Column definitions:**

Column definitions determine which data/information is entered into which column of the journals by the BCS-2® . The entry can thereby be made in combination with constant text via the BCS-2® variables (system and user variables) .

In order to define a new column, the column print must be first determined. The BCS-2® variables can be inserted into the column print field in two different ways. For this, you must click onto the column print field.

It is given a yellow background displaying that the field is activated. Now the variables can:

**a**.) be selected from the upper list and via the button "**appy variable**" adopted in the column print field.

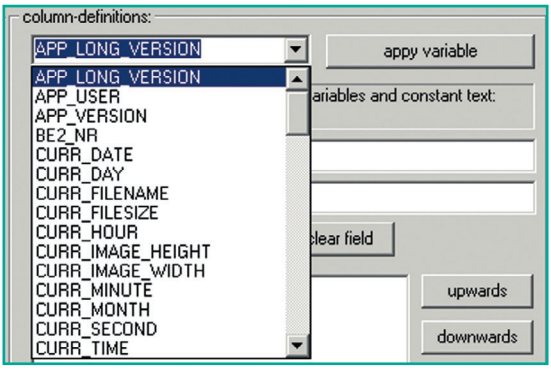


**Fig.: Column-definitions:**

or

**b**.) via the button "**BCS2 variables selection for active field**". A window is opened, in which the variables can be selected and added to the field via the button "**Adopt**" .

For every column, a heading can be added in the field "**Column-Header**". The so defined column can now be adopted in the column definition list via "**add**".

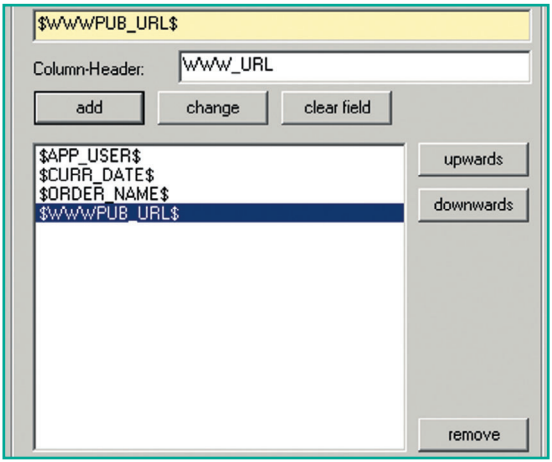


**Fig.: Column headings**

Should the heading or the print of a column be changed, then it must first be selected from the list. The changes in the respective column are then adopted by pressing the button "**change**".

With the button "**clear field**", the column print field and the column heading field are deleted in order to define e.g. a new column. The chronological order of the columns in the journal can be modified upwards or downwards via the buttons. The selected entry in the list is either moved up or down as desired.

With the button "**remove**", the marked column definitions in the list can be removed.

With the column delimiter list you can determine with which characters the single columns in the journal are separated. With the selection "**Quotation marks**" you can determine with which characters the columns are formulated.

**Target folder and file name of journals:**

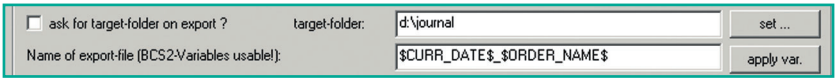


**Fig.: Journal target folder and file name**

Here you can determine, into which target folder and under which name the respective journal is exported. By clicking the button "**set**", a browser opens, which determines the target folder.

If the option "**ask for target–folder on export?**" is activated, the target folder is queried every time the journal is exported. The file name can be composed by BCS-2® variables and constant text by analogy to the definition of the column print.

### 10.4.2 Display or export journals

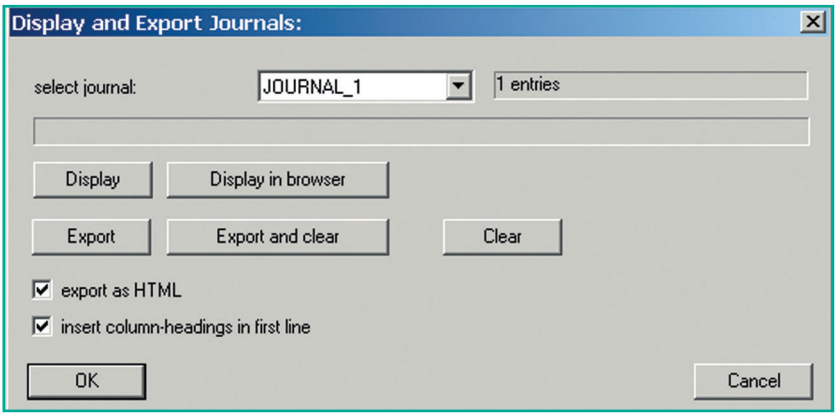


**Fig.: Display / Export journals**

With "**Display or Export Journals**", the journals can be exported as text files or displayed in the browser, and it is possible to determine whether the file is exported as text or as HTML file.

In order to display a selected journal, you must click on the button "**Display**" or "**Display in browser**". Now the program to display text files, defined as standard under Windows, and the standard HTML browser open.

The export of a journal with the target folder and the file name defined in the journal management takes place through the buttons "**Export**" or "**Export and clear**".

With exporting and emptying, the entries in the journal are deleted after exporting. The emptying of a selected journal takes place by activating the button "**Clear**". With the option "**Export as HTML**", you can determine whether the journal is exported as HTML or as text file.

Should the column headings be inserted in the first line of the journal, then the option "**Insert column-headings in first line**" must be activated.

## 10.5 Archiving of cover sheets

The BCS-2® journal offers the possibility, to generate user-defined entries in BCS-2® for certain transactions or events. Thus, for example, an entry in the journal is generated when transferring an order, which records the current BCS-2® user, the name of the transferred order, the date and the time, etc..

### 10.5.1 Basic settings of cover sheet archiving

In order to file the cover sheet in the defined folder, a checkmark must be set next to "**Cover sheets are archived when transferring orders**".

### 10.5.2 Definition of file structure

Here, the directory levels can be determined, in which the cover sheets are to be archived.

**Determine number of cover sheets:**

The number of cover sheets to be archived can be defined through the selection "**Number of cover sheets to be archived**". Values of 1 to 10 can be taken directly from the selection menu.

**Adding a directory level:**

In order to define a directory level, the name of the directory can be entered directly into the input field or put together with assistance from the BCS-2® variables. Through activating the button "**Add**", the name is added into the input field of the directory level list.

The uppermost directory can also be determined using the button "**Uppermost directory**". A browser window is then opened, in which the directory can be selected.

**Change/shift/delete a directory level:**

UIn order to change a directory name in the list, the name must first be selected by double-clicking it in the list. The name appears in the input field and can be changed now. With the button "**Change**", the changed name can then be adopted in the list.

Using the buttons "**Up**" and "**Down**", a selected entry can be shifted in the directory name list. Click on the button "**Remove**", and a selected directory level is deleted.

**Directory and file name display:**

The complete directory and file names of the cover sheets are displayed in the lower part of the cover sheet management.

## 10.6 Import-Settings

With the import module, files of the following type can also be inserted:

- PDF files
- Winword documents
- Excel sheets
- Powerpoint presentations
- Pure text files (.txt)
- HTML files (.htm oder .html)
- ZIP files

In the Import-Settings, you can indicate a directory, in which there are files, which should be inserted in the order.

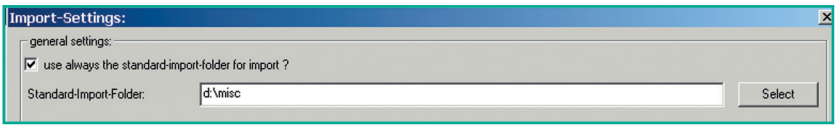


**Fig.: Import-Settings**

If certain files are added to the order through the menu point "**Import image files**", then BCS-2® adopts the path from the import settings. This happens only if the point "**Use always the standard-import-folder for import ?**" is activated.

## 10.7 Receipt printout (optional)

In BCS-2® it is possible, e.g. within the framework of a costing-payment system, to print payment receipts for certain processes. The content of the receipts can be defined with free text and the BCS-2® variables.

### 10.7.1 Receipt printout configuration

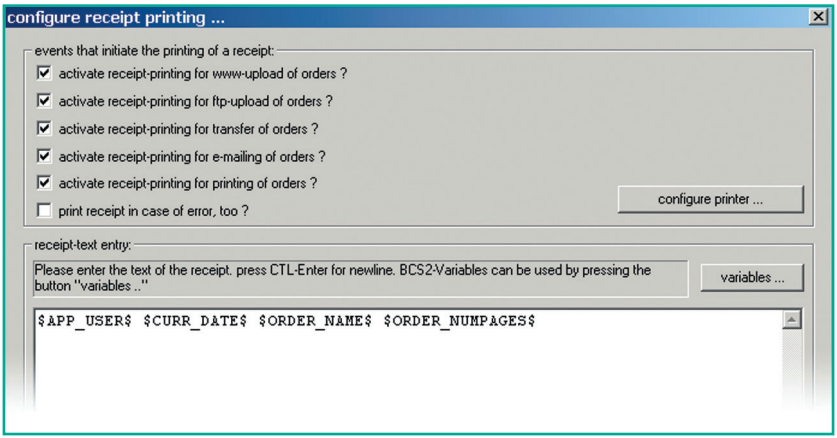


**Fig.: Receipt printout configuration**

- Processes, which trigger a receipt print: Here you can determine for which processes a receipt is printed in BCS-2®. Via the option „**Print receipt in case of error, too?**" you can determine whether a receipt should be printed, even though a process has not been successfully concluded.
- **Configure printer:** The command to print the receipt should be set with the button standard to the standard command. With "**Configure printer**", the printer to print out the receipts can be selected.
- **Receipt-text entry:** Here, you can define the contents of the receipt. To insert variables or input text, click in the text field. The field is now marked yellow. Using the button "**Variables**", the BCS-2® variables can now be selected or free text can be entered.

### 10.7.2 Reprint last receipt

Carrying out the function "**Reprint last receipt**" results in the last printed receipt being printed again.

# 11 ADDITIONAL POSSIBILITIES

## 11.1 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%ld.JOB
  JobNumberOutFormat=S%07ld.JOB
  e.g. in:
  JobNumberInFormat=W%ld.JOB
  JobNumberOutFormat=W%07ld.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.

## 11.2 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:

**The test mode:**

With the test mode it is possible to show the program functionality even without a scannerr.

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 scan]

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: at least 10% 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**" 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.

User defined variables:

A list of the user's own variables can be maintained in the section **[UserVariables]**. Here, new variables can be defined by **<Variablename>=<Value>**.

**Example:**

**[UserVariables]**

**IWCHPE=Heinz Peters**

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

With the test mode 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_

## 11.3 The DDE interface (optional)

**DDE** stands for "**Dynamic Data Exchange**" and is the standard interface between any number of Windows applications. It does not matter, whether the partners are both 16-Bit applications or 32-Bit applications or mixtures of both. With help from the **DDE interface** it is possible, for all Windows applications, which support **DDE**:

- to scan one page with BCS-2® (thereby file name to be indicated if reqd.)
- to open a scan order with BCS-2® and to scan pages in the scan order
- to make or check the current settings (format, resolution, orientation).
- to export a BCS-2® order
- to send a BCS-2® order per mail
- to send a BCS-2® order per FTP
- to print a BCS-2® order
- etc.

With the **DDE interface** is supplied a DDE test application in the form of an Access97-databank (file: **ddetest.mdb**). All available commands and queries can be tested with this application. This is exemplary when the creation and processing of an order is realized. Lists of all available commands and queries can be found in chapters 12.3 and 12.4.

# 12 APPENDIX

## 12.1 List of variables

| Name | Meaning | Example |
|---|---|---|
| APP_VERSION | Short version BCS-2® version | 2.27 |
| APP_LONG_VERSION | Long version BCS-2® version as in the about dialog | |
| BE2_NR | BE2 serial number | |
| CURR_TIME | Current time | 11:09:22 |
| CURR_DATE | Current date | 10.05.2004 |
| CURR_FILENAME | Current file name | |
| CURR_FILESIZE | Size of current file | |
| CURR_HOUR | Current hour | 11 |
| CURR_IMAGE_HEIGHT | Height of current image | |
| CURR_IMAGE_WIDTH | Width of current image | |
| CURR_MINUTE | Current minute | 58 |
| CURR_MONTH | Current month | 7 |
| CURR_SECOND | Current second | 55 |
| CURR_YEAR | Current year | 2004 |
| FTP_HOST | FTP server | |
| FTP_USER | FTP user who performed transfer | IWCHPE |
| FTP_TARGET | FTP target directory | /home/bcs2/ |
| FTP_DOWNLOAD_LINK | Link to storage location on | http://home/rlo/bcs2/S0001050 |
| HISCAN_NR | Serial no. of HiScan | 1234567 |
| ISIS_VERSION | Version status of ISIS driver | |
| LEAD_VERSION | Version information about the LeadTools | |
| LICENSE_CUSTOMER | Customer name | |
| LICENSE_EXP_DATE | License expiry date | 31.12.2004 |
| LICENSE_SERIAL_NO | BCS-2® serial number | |
| LICENSED_OPTIONS | Current licensed options | |
| NETBIOS_NAME | NetBIOS name of PC | |
| NETWORK_INFO | Information on the installed net cards | |
| PDF_FILENAME | Name of the PDF file to be transferred | S1001058.PDF |
| PDF_FILESIZE | Size of PDF file | 1000498 |
| ORDER_TYPE | Order mode | SIMPLE |
| ORDER_NUMPAGES | Number of pages of order | 15 |
| ORDER_KEY1 | Index1 | |
| ORDER_KEY2 | Index2 | |
| ORDER_KEY3 | Index3 | |

| Name | Meaning | Example |
|---|---|---|
| ORDER_KEY4 | Index4 | |
| ORDER_NAME | Job number of the order | S10001047 |
| ORDER_NAME_MD5 | MD5-Hash of the current order number | |
| ORDER_NUMKEYS | Number of keys of the order | 2 |
| ORDER_MULTI_TIFF | If the order was saved as Multi-TIFF corresponding, otherwise empty. | ...the order is saved as Multi TIFF ... |
| OS_TYPE | Information on the operating system (Windows) | Build: 1381 Service Pack 6 |
| PRINTER_DRIVER | Driver name of the selected printer | |
| PRINTER_NAME | Name of selected printer | |
| PRINTER_PORT | Port (connection) of the selected printer | |
| REC_PRINTER_DRIVER | Driver name of the selected printer | |
| REC_PRINTER_NAME | Name of the selected receipt printer | |
| REC_PRINTER_PORT | Port (connection) of the selected receipt printer | |
| SYS_USER | Name of the user logged on the operating system (Windows) | |
| SYSTEM_INFO | Information on the computer | Processor: Intel Level: Pentium Pro or Pentium II, Revision: 4711 |
| TR_DESCRIPTION | Journal: Name of the current transaction | |
| TR_ID | Journal: Number (ID) of the current transaction | |
| TR_NAME | Journal: Short name of the current transaction | |
| WWWPUB_URL | Web-Publisher: URL of main page, for integration in e-mails | |

## 12.2 CTRL-N transactions

The key sequence "**CTRL-N xxx**" allows to access a large number of functions within BSC-2®.

| CTRL-N transactions | |
|---|---|
| **Number** | **Function** |
| **Menu: File...** | |
| 0001 | Open file |
| 0002 | Save file |
| 0003 | File: FTP browser |
| 0004 | File: FTP browser |
| 0005 | File: Send to |
| 0006 | File: Print |
| 0008 | File: Print fix to A4 |
| 0009 | File: Print fix to A3 |
| 0010 | File: Print duplex printout |
| 0011 | File: Print normal |
| 0012 | Set printer |
| 0032 | File: Exit (exit program) |
| **Menu: Edit...** | |
| 0013 | Edit: Undo |
| 0014 | Edit: Cut out |
| 0015 | Edit: Copy |
| 0016 | Edit: Insert |
| 1801 | Edit: Restore single images from backup |
| 1802 | Edit: Restore all images from backup |
| **Menu: Order...** | |
| 0017 | Order: Create new order |
| 0018 | Order: Select order |
| 0019 | Order: Import .... |
| 0020 | Order: Set order options |
| 0021 | Order: Assign barcode position |
| 0099 | Order: Delete current page of order |
| 0119 | Order: Exit order |
| 0120 | Order: Change order indices |

| CTRL-N transactions | |
|---|---|
| **Number** | **Function** |
| **Menu: View...** | |
| 0022 | View: Original size |
| 0023 | View: Adapt to window width |
| 0024 | View: Adapt to window height |
| 0025 | Adapt (optimally) to window |
| 0026 | View: Toggle maximize window automatically |
| 0027 | View: Zoom in |
| 0028 | View: Zoom in |
| **Menu: Scanner...** | |
| 0033 | Scanner: Select scanner .... |
| 0034 | Scanner: HiSCAN mode |
| 0035 | Scanner: Network mode |
| 0036 | Scanner: Settings network scanner |
| 0037 | Scanner: Call network scanner WebInterface |
| 0038 | Scanner: TWAIN mode |
| 0039 | Scanner: ISIS mode |
| 0040 | Scanner: Use TWAIN/ISIS interface... |
| 0041 | Scanner: Scan page |
| 0042 | Scanner: Toggle preview scan |
| 0043 | Scanner: Beep before the scan: Toggle |
| 0044 | Scanner: Bitonal scan |
| 0045 | Scanner: Scan in 16 grayscales |
| 0046 | Scanner: Scan in 256 grayscales |
| 0047 | Scanner: Scan in color |

| CTRL-N transactions | |
|---|---|
| **Number** | **Function** |
| **Menu: Scanner...** | |
| 0048 | Scanner: Toggle automatic inverting |
| 0049 | Scanner: Toggle automatic deskewing |
| 0050 | Scanner: Toggle automatic despeckle |
| 0051 | Scanner: Toggle automatic black edge suppression |
| 0052 | Scanner: Toggle automatic compression (JPEG) |
| 0053 | Scanner: Set JPEG compression factor |
| 0054 | Scanner: Set scan quality levels |
| 0055 | Scanner: Use scan quality level 1 |
| 0056 | Scanner: Use scan quality level 2 |
| 0057 | Scanner: Use scan quality level 3 |
| 0058 | Scanner: Use scan quality level 4 |
| 0059 | Scanner: Toggle duplex scanning (ISIS) |
| 0060 | Scanner: Toggle book fold correction |
| 0061 | Scanner: Set book fold correction .... |
| 0062 | Scanner: Activate endorser (main switch) |
| 0063 | Scanner: Improved bitonal interpolation |
| 0064 | Scanner: Set user defined format |
| 0065 | Scanner: Set FS-III controller ... |
| 0066 | Scanner: Set Blip Chip controller ... |

| CTRL-N transactions | |
|---|---|
| **Number** | **Function** |
| 0067 | Scanner: Set microFly ... |
| 0068 | Scanner: Toggle automatic printout |
| 0069 | Scanner: Toggle rotate wide images when printing |
| 0118 | Scanner: Toggle photo mode |
| 5150 | Scanner: Driver training mode on |
| 5151 | Scanner: Driver training mode off |
| 5152 | Scanner: HIDE driver dialog with direct control ON |
| 5153 | Scanner: Scanner: HIDE driver dialog with direct control OFF |

## Scanner: Formats, orientations and resolutions

**Formats**

| | |
|---|---|
| 5000 | Set format MANUAL / PANEL |
| 5001 | Set format A0 |
| 5002 | Set format A1 |
| 5003 | Set format A2 |
| 5004 | Set format A3 |
| 5005 | Set format A4 |
| 5006 | Set format A5 |
| 5007 | Set format A6 |
| 5008 | Set format LEGAL |
| 5009 | Set format LETTER |
| 5010 | Set format DLETTER |
| 5011 | Set format B0 |
| 5012 | Set format B1 |
| 5013 | Set format B2 |
| 5014 | Set format B3 |
| 5015 | Set format B4 |
| 5016 | Set format B5 |
| 5017 | Set format B6 |
| 5018 | Set format C0 |
| 5019 | Set format C1 |
| 5020 | Set format C2 |
| 5021 | Set format C3 |
| 5022 | Set format C4 |
| 5023 | Format C5 setzen |

| CTRL-N transactions | |
|---|---|
| **Number** | **Function** |
| **Scanner: Formats, orientations and resolutions** | |
| **Formats** | |
| 5024 | Set format C6 |
| 5025 | Set format USER1 (USER-DEFINED) |
| 5026 | Set format USER2 (AUTO) |
| 5027 | Set format USER3 |
| 5028 | Set format USER4 |
| 5029 | Set format SPECIAL |
| 5030 | Set format A2 R |
| 5031 | Set format A3 R |
| 5032 | Set format A4 R |
| 5033 | Set format A5 R |
| 5034 | Set format A6 R |
| 5035 | Set format LETTER R |
| **Orientations** | |
| 5100 | Set orientation PORTRAIT |
| 5101 | Set orientation LANDSCAPE |
| **Resolutions** | |
| 5200 | Set resolution MANUAL / PANEL |
| 5201 | Set resolution 75 DPI |
| 5202 | Set resolution 100 DPI |
| 5203 | Set resolution 150 DPI |
| 5204 | Set resolution 200 DPI |
| 5205 | Set resolution 240 DPI |
| 5206 | Set resolution 300 DPI |
| 5207 | Set resolution 400 DPI |
| 5208 | Set resolution 600 DPI |
| 5209 | Set resolution 800 DPI |
| 5210 | Set resolution 1000 DPI |
| 5211 | Set resolution 1200 DPI |
| 5212 | Set resolution 2400 DPI |
| **Menu: Extras...** | |
| 0029 | Extras: Load card only once ... |
| 0030 | Extras: Eject all cards |
| 0031 | Extras: Load card without possibility to abort (card MUST be inserted!) |

| CTRL-N transactions | |
|---|---|
| **Number** | **Function** |
| 0070 | Extras: Import license file |
| 0071 | Extras: Check license |
| 1700 | Extras: Prepare license form for printing |
| 1701 | Extras: Send license form per e-mail |
| 1750 | Extras: Document delivery services (Medea 3 or MyBib-eDoc): Enter comment for order |
| 0072 | Extras: Language: German |
| 0073 | Extras: Language: English |
| 0074 | Extras: Language: Italian |
| 0075 | Extras: Language: French |
| 0076 | Extras: Language: Spanish |
| 0077 | Extras: Language: Portuguese |
| 0078 | Extras: Language: Russian |
| 0079 | Extras: Language: Greek |
| 0080 | Extras: Language: Dutch |
| 0081 | Extras: Input CAR file... |
| 0082 | Extras: Position in CAR file ... |
| 0083 | Extras: Additional TIFF tags ... |
| 0084 | Extras: Coin slot/ SmartCardReader costs... |
| 0085 | Extras: Configure coin slot/ SmartCardReader 1 interface ... |
| 0086 | Extras: Configure coin slot/ SmartCardReader 2 interface ... |
| 0087 | Extras: Select coin slot/ SmartCardReader 1 |
| 0088 | Extras: Select coin slot/ SmartCardReader 2 |
| 0089 | Extras: Web-Publisher settings ... |
| 0090 | Extras: MEDEA3 settings ... |
| 0091 | Extras: MyBib eDoc settings... |
| 0092 | Extras: SISIS server settings... |
| 0093 | Extras: Electronic endorser ... |
| 0094 | Extras: GlobalMail settings ... |

| CTRL-N transactions | |
|---|---|
| **Number** | **Function** |
| **Menu: Extras...** | |
| 0095 | Extras: GlobalMail: well legible address |
| 0096 | Extras: GlobalMail: illegible address |
| 0097 | Extras: Configure server mode |
| 0098 | Extras: Toggle server mode |
| 0099 | Still FREE |
| 0400 | Extras: XPC settings... |
| 0401 | Extras: XPC Auftrag: WWW-Upload durchführen |
| 0402 | Extras: XPC order: Print and pass to server |
| **Menu: Management...** | |
| 0100 | Management: Set BCS2 user |
| 0101 | Management: Toggle query BCS2 user at start |
| 0102 | Management: BCS2 variables... |
| 0103 | Management: Manage journals... |
| 0104 | Management: Export or display journals ... |
| 0105 | Management: Archiving of coversheets... |
| 0106 | Management: Configure receipt print ... |
| 0107 | Management: Reprint last receipt |
| 0108 | Management: Import settings ... |
| 0109 | Management: Manage export definitions ... |
| 0110 | Management: Manage index definitions ... |
| 1800 | Management: Order management: Toggle backup mode for batch operation ... |
| **Menu: Image...** | |
| 0130 | Image: Toggle auto-rotate 90 |
| 0131 | Image: Toggle auto-rotate 180 |

| CTRL-N transactions | |
|---|---|
| **Nummer** | **Function** |
| 0132 | Image: Toggle auto-rotate 270 |
| 0133 | Image: rotate 90 |
| 0134 | Image: rotate -90 |
| 0135 | Image: rotate 180 |
| 0136 | Image: rotate 10 |
| 0137 | Image: rotate -10 |
| 0138 | IImage: Toggle grayscale mode |
| 0139 | Image: Despeckle |
| 0140 | Image: Deskew |
| 0141 | Image: Invert |
| 0142 | Image: Suppress black border and zoom out image (NOT IMPLEMENTED) |
| 0143 | Image: Whiten black border |
| 0144 | Image: Configure black border suppression... |
| 0145 | Image: Toggle manual page separation |
| 0146 | Image: Toggle mask |
| 0147 | Image: Separate page / apply mask |
| 0148 | Image: Toggle display image tools |
| 0149 | Image: Reactivate |
| 0151 | Image: SWITCH ON manual page separation |
| 0152 | Image: SWITCH OFF manual page separation |
| **Menu: Help...** | |
| 0111 | Help: Content |
| 0170 | Help: Keyboard allocation and shortcuts, transaction codes |
| 0112 | Help: About BSC2... |
| 0113 | Help: ImageWareComponents Homepage |
| 0114 | Help: BCS2 Releasenotes |
| 0115 | Help: Prepare support inquiry for printing ... |

| CTRL-N transactions | |
|---|---|
| **Number** | **Function** |
| **Menü: Hilfe...** | |
| 0116 | Help: Support inquiry per e-mail... |
| 0117 | Help: Support inquiry per e-mail with current scan... |
| **Special functions...** | |
| 0007 | Exit order, go to top level, close order list |
| 0300 | ESPECIALLY FOR "START AT SCANNER": Exit order, go to top level, close order list |
| 1001 | Exit order WWW-Upload last order of list reopen last order of list |
| 1002 | NOTE: This transaction only functions, if the current order is opened at the moment. Exit order print current order without printer-selection dialog! Reopen current order |
| 1003 | NOTE: This transaction only functions, if the current order is opened at the moment. Exit order WWW upload current order reopen current order |
| 1004 | Eject all cards exits order |
| 1005 | Exit order create new order |
| 1006 | Exit order transfer order create new order |
| 1007 | Exit order transfer order |

| CTRL-N transactions | |
|---|---|
| **Number** | **Function** |
| 1008 | TEST: SWITCH ON: Perform BEFORE next scan page separation, or apply mask |
| 1009 | TEST: SWITCH OFF: Perform BEFORE next scan page separation, or apply mask |
| 1010 | Exit order (other technique, SAFER) transfer order |
| 1011 | Create new order Starte Scan |
| 1012 | Exit order delete order reset scanner |
| 1013 | Exit order reset scanner |
| 1014 | Mail current order per MAPI, remain in order |
| 1015 | Scan page SWITCH ON page separation before the next scan |
| 1016 | Scan page auto switch off page separation SWITCH OFF page separation before the next scan |
| **Set order type ...** | |
| 2000 | Set order type SIMPLE |
| 2001 | Set order type STANDARD |
| 2002 | Set order type MyBib-eDoc |
| 2003 | Set order type HEDOC |
| 2004 | Set order type HEDOC2 |
| 2005 | Set order type Heimeier |
| 2006 | Set order type Euro Archiv |
| 2007 | Set order type EASY Archiv |
| 2008 | Set order type Hyp Archiv |
| 2009 | Set order type Xerox Documentum |
| 2010 | Set order type JASON |
| 2011 | Set order type Subito |

| CTRL-N transactions | |
|---|---|
| **Number** | **Function** |
| **Set order type ...** | |
| 2012 | Set order type Wageningen |
| 2013 | Set order type Define TIFF Tags |
| 2014 | Set order type CAR File/Query |
| 2015 | Set order type Medea3 |
| 2016 | Set order type Global Mail |
| 2017 | Set order type Church register |
| 2018 | Set order type Sisis |
| 2019 | Set order type FIZ |

| CTRL-N transactions | |
|---|---|
| **Number** | **Function** |
| 2020 | Set order type Cendris |
| 2021 | Set order type INDEX |
| 2022 | Set order type EXPORT |
| 2023 | Set order type DigiTool |
| 2024 | Set order type Scan to WEB |
| 2025 | Set order type PTV |
| 2026 | Set order type XPC |
| **Special functions...** | |
| 9000 | Call IWC Bugzilla |

## 12.3 Available commands of the DDE interface (via DDEExecute)

| Command | Arguments | Explanation | Example |
|---|---|---|---|
| **ACTIVATE** | none | brings BSC-2® in the foreground | ACTIVATE |
| **CLOSE_APP** | none | ends BCS-2® | CLOSE_APP |
| **CLOSE_ORDER** | none | closes the current BSC-2® BSC-2® scan order and returns to the top level of the application | CLOSE_ORDER |
| **CLOSE_WINDOW** | none | closes the current viewer (only applies for single scan mode) | CLOSE_WINDOW |
| **CREATE_ORDER** | none | creates a new order; but before, the application should be prepared to this with RESET_APP | CREATE_ORDER |
| **DESKEW** | none | carries out a deskew | DESKEW |
| **DESPECKLE** | none | carries out a despeckle | DESPECKLE |
| **EXISTS_ORDER** | <order> | checks, whether the mentioned order exists. If not, an error is produced by DDE, which should be recognized by the calling program. | EXISTS_ORDER S0001044 |
| **EXPORT_ORDER** | <order> or empty | exports the order named by the argument or empty or the currently processed order | EXPORT_ORDER S0001044 |
| **FTP_DOWNLOAD_FILE** | <server>, <username>, <password>, <mode>, <remote_file>, <local_file> | performs an FTP download, server, username and password are required <mode> can either be A or I (Ascii mode or image mode); NOTE: remote_file must be completely distinct regarding the user account! See opposite example | FTP_DOWNLOAD_FILE ftp.microsoft.com, bgates, madonna, I, pub/winnt/readme.doc, C:\billy\docs\readme.doc |
| **FTP_ORDER** | <order> or empty | sends the order via FTP | FTP_ORDER S0001010 |

| Command | Arguments | Explanation | Example |
|---|---|---|---|
| **FTP_UPLOAD_FILE** | <server>, <username>, <password>, <mode>, <local_file>, <remote_file> | performs an FTP upload. Server, username and password are required; <mode> can either be A or I (Ascii mode or image mode); NOTE: remote_file must be completely distinct regarding the user account, see opposite example | FTP_UPLOAD_FILE ftp.microsoft.com, bgates, madonna, I, C:\AUTOEXEC.BAT, /home/bgates/stuff/ test.bat |
| **FIT_TO_HEIGHT** | none | adjusts the image in the viewer to the height of the window | FIT_TO_HEIGHT |
| **FIT_TO_WIDTH** | none | adjusts the image in the viewer to the width of the window | FIT_TO_WIDTH |
| **FULL_BITMAP** | none | represents the image in original size | FULL_BITMAP |
| **GRAY_SCALE** | none | toggles grayscale mode | GRAY_SCALE |
| **LOAD_FILE** | <file> | loads the named file in a new viewer | LOAD_FILE C:\SCANS\IMAG 0099.TIF |
| **MAXIMIZE** | none | zooms in the BCS-2® application to maximum size | MAXIMIZE |
| **MAIL_ORDER** | <order> or empty | sends the order per e-mail | MAIL_ORDER |
| **MINIMIZE** | none | minimizes the BSC-2® application | MINIMIZE |
| **OPEN_ORDER** | <order> | opens the corresponding order for processing | OPEN_ORDER S0001055 |
| **PHOTO_MODE** | none | toggles photo mode | PHOTO_MODE |
| **PRINT_ORDER** | <order> or empty | prints the order | PRINT_ORDER |
| **REMOVE_ORDER** | <order> | deletes the order | REMOVE_ORDER S0001099 |
| **RESTORE** | none | presents the BSC-2® application normally | RESTORE |
| **SCAN_1_BPP** | none | switches in HiScan mode to bitonal scanning | SCAN_1_BPP |
| **SCAN_4_BPP** | none | switches in HiScan mode scanning with 4 grayscales | SCAN_4_BPP |
| **SCAN_8_BPP** | none | switches in HiScan mode scanning with 8 grayscales | SCAN_8_BPP |
| **SCAN_ORDER_PAGE** | none | scans a page in the opened order | SCAN_ORDER_PAGE |

| Arguments | Argumente | Explanation | Example |
|---|---|---|---|
| **SCAN_TO_FILE** | <file> or empty | scans a page in single or empty scan mode, if no file name is given, BSC-2® selects the next one | SCAN_TO_FILE C:\IMAGE.TIF |
| **SET_DDE_CMD_ SEPARATOR** | the comma (,) | sets the parameter separator for DDE calls, this command makes sense if the given parameters contain themselves commas (reason: at the moment there is no possibility to include the DDE parameter e.g. through quotation marks) | SET_DDE_CMD_ SEPARATOR $ |
| **SET_DPI** | 100DPI, ... | sets the resolution of the scanner | SET_DPI 300DPI |
| **SET_FORMAT** | A2, A3, A4,... | sets the format | SET_FORMAT A3 |
| **SET_MAPI_DEFAULT_ RECIP** | none | sets the standard e-mail receiver, with it the e-mail is defaulted | SET_MAPI_DEFAULT_ RECIP rasche@image ware.de |
| **SET_MAPI_MULTI_TIFF** | 0 or 1 | sets the multi Tiff mode scan orders, so that in case of DDE the query for the Multi-Tiff drops | SET_MAPI_MULTI_TIFF 1 |
| **SET_ORIENTATION** | PORTRAIT, ... | sets the orientation | SET_ORIENTATION LANDSCAPE |
| **SET_PARTNER_HWND** | Window-Handle (long integer) | sets the Window handle of the DDE caller, i.e. the program, which telecommands the BCS-2®; with this information BCS-2® can e.g. bring the application to be called in the foreground again (see also SHOW_ BACK_BUTTON) | SET_PARTNER_HWND 245313442 |
| **SET_BRIGHTNESS** | <zahl> | sets the brightness | SET_BRIGHTNESS 127 |
| **SHOW_BACK_BUTTON** | <text>, | makes visible a button in the order view, which enables switching back to another application (typically the program which telecommands BCS-2® via DDE). <text> is the text, which shall be displayed in the button, <width> is the width of the button in pixel | SHOW_BACK_BUTT ON zurück zum Posteingang, 150 |

| Command | Arguments | Explanation | Example |
|---|---|---|---|
| **RESET_APP** | none | resets the application:<br>order mode:<br>the order is exited.<br>Singlescan mode:<br>all open viewers<br>are closed | RESET_APP |
| **ROTATE** | <angle> | rotates the image | ROTATE 90 |
| **TOGGLE_AUTO_COMPRESS** | none | toggles auto compression with Bookeye-GS-scanning | TOGGLE_AUTO_COM PRESS |
| **TOGGLE_BOOKFOLD** | none | switches on and off the book fold correction (only Bookeye®) | TOGGLE_BOOKFOLD |
| **ZOOM_IN** | none | zooms into the image | ZOOM_IN |
| **ZOOM_OUT** | none | zooms out of the image | ZOOM_OUT |

## 12.4 Available queries of the DDE interfaces (via DDERequest)

| Request | Explanation | Example display |
|---|---|---|
| GET_DPI | Current scanner resolution | 300DPI |
| GET_FORMAT | Current scanner format | A4 |
| GET_LAST_FILENAME | Last allocated filename | C:\IMAGES\BCS20099.TIF |
| GET_LAST_ERROR | Last error status | SCAOERR_NOERR |
| GET_ORIENTATION | Current orientation | LANDSCAPE |
| GET_BRIGHTNESS | Current scanner brightness | 127 |
| GET_SCANNER_NAME | Name of set scanner | Bookeye |
| GET_SCANNER_CODE | Scanner code of set scanner | 196 |
| GET_IMAGE_WIDTH | Width in pixel of last scanned image | 2592 |
| GET_IMAGE_HEIGHT | Height in pixel of last scanned image | 3507 |
| GET_CURRENT_ORDER | Name of current scan order | S0001020 |
| GET_ORDER_NUMPAGES | Number of pages of current order | 23 |
| GET_APP_VERSION | Version recognition of BCS-2® | Version 2.02 (32Bit) .... |
| GET_FTP_STATUS | Empty string, if everything is ok, otherwise error message | 530 LOGIN INCORRECT |
| GET_DDE_CMD_SEPARATOR | Delivers the current DDE command separator back (as string) | , |
| GET_BCS2_HWND | Delivers the Window handle of the application window of BCS-2 (long integer) | 24561242 |

# 13 INDEX

## U



## V



## W



## Z