User Guide for

USB Stick ◆ CopyStation

Thank you for deciding to buy an altec product. In order to ensure correct functioning and to avoid problems when installing this high-quality German-made product, please read the entire manual and carefully observe the following points:

- Observe the general guidelines when handling components or modules which can be damaged by electrostatic charge or discharge (this applies to the products described in this manual).

- If you should encounter any problems during the installation or use of this product, please contact our service department and ask for technical advice. If you do not do this, your guarantee rights may be impaired.
  Support hotline, Monday to Friday, 11 am to 3 pm German time (CET):
  Phone **+49-511-9 83 81-70** or eMail **support@altec-cs.com**

License Agreement

This is a legal agreement between you, the user, and altec ComputerSysteme GmbH. This agreement covers the altec USB Stick CopyStation Software. All rights not expressly granted under this agreement are reserved by the manufacturer of the Software. By installing or using the Software you agree to be bound by the terms of this agreement. If you do not agree to these terms, promptly return all Software items (disks, written materials, and packaging) and delete any installed Software.

You may use one copy of the Software on only one product at a time. If you have multiple licenses for the Software, you may use as many copies at any time as you have licenses. You may make one copy of the Software solely for backup or archival purposes. You may not rent or lease the Software. You may not reverse engineer, decompile, or disassemble the Software.

altec ComputerSysteme GmbH does not warrant that the functions of the Software will meet your requirements or that operation of the Software will be uninterrupted or error free. altec ComputerSysteme GmbH disclaims all other warranties, express or implied. In no event shall altec ComputerSysteme GmbH be liable for any damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information, or other pecuniary loss).

altec ComputerSysteme GmbH disclaims all liability for errors in this manual. Liability for direct or consequential damages which arise in connection with the use of this documentation is specifically excluded insofar as this does not contradict the law.

Table of contents

1. Introduction

1.1 Product description

The USB Stick CopyStation allows for easy duplication of data images to up to seven USB memory sticks simultaneously.

This copy solution is a combination of an in-house developed bilingual (English and German) copy software for Windows 2000 and XP with a USB 2.0 hub.

System requirements for using the USB Stick CopyStation include a PC or notebook with Microsoft Windows 2000 or XP and a free USB port. For maximum speed a USB 2.0 hi-speed port is required.

An optional software interface for data exchange with external applications allows you to integrate a software into the copying process for modifying the data to be copied, e.g. by assignment of a serial number or data encryption.

Additionally, another software option is available for creating and copying smaller image files. With this, USB sticks where much less data is stored than the actual storage capacity permits can be programmed much quicker.

1.2 Features

◆ Entry Level solution for the duplication of data images to up to seven USB memory sticks simultaneously.

◆ In-house developed copy software with the same «look & feel» as all other altec CopyStations, for Windows 2000 and XP.

◆ English or German user interface selectable.

◆ Job Wizard to specify parameters for the copy job such as the image file name, number of copies and whether to verify after writing or not.

◆ Supplied with active USB 2.0 hi-speed hub (full software functionality can only be ensured with the delivered USB hub); compatible with USB 2.0 and 1.1 memory sticks.

◆ Copies up to seven USB 2.0 sticks with 256 MB in less than 2 minutes (speed depends on USB stick type and USB connection).

◆ Optional software interface for data exchange with external applications to allow customization of individual data, e.g. with serial number or data encryption.

◆ Software option for creating and copying smaller image files. With this, USB sticks where much less data is stored than the actual storage capacity permits can be programmed much quicker.

◆ Software customizing to customer needs is possible.

1.3 Scope of delivery

◆ Quick Start Guide. Software and User Guide (as PDF file) on a CD ROM.

◆ USB 2.0 hub with seven slots for USB memory sticks and active power supply via power unit with 3 A at 5 V (100 - 230 V mains).

2. Installing the USB CopyStation

2.1 Installing the USB hub

Connect the USB hub to a free USB port of your PC or notebook. The computer can be on. For an optimal transmission rate **please use a USB 2.0 hi-speed port**.

The hub is hot-pluggable and does not require any drivers when run under Windows 2000 or XP.

In normal cases, it is not necessary to connect the power supply unit delivered with the device to the USB hub, as 500 mA power supply via the USB bus is sufficient for most of the USB sticks. If, however, you should encounter any problems regarding the USB stick recognition on your computer, using the power supply unit may help.

When you connect a USB stick to the hub, the operating system recognizes the new hardware, creates a directory for the new removable medium and opens the Explorer window. You can either ignore or close the Explorer window.

2.2 Installing the software

Copy the "USB-Copy_v102" **program folder** from the software CD **to your computer hard disk**. You can freely select the target directory.

In order to start the USB Stick CopyStation program, double-click the "**usbcopy.exe**" file in the program folder.
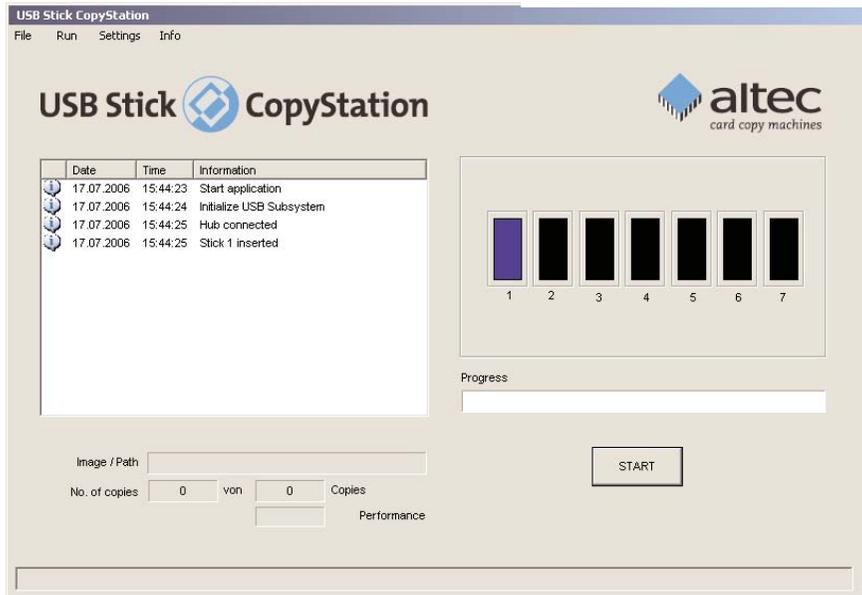
3. Making image copies

3.1 Start of the program and user login

After the first start of the program "**usbcopy.exe**" you have to select German or English as the user interface language (see figure left). This can be changed later (see page 14).

After every start of the program, you have to accept the license agreement by clicking "OK". A login window appears (see figure right). You can then log into the program by typing in the Username **admin** and Password **admin**.

After a login with Username **user** and Password **user**, you have limited access to program functionalities. Only existing jobs can be opened and executed.
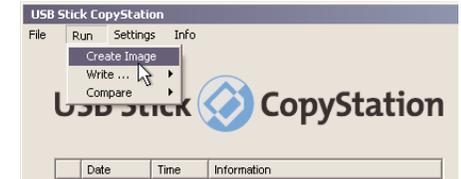
3.2 Creating an image

After successful login as **admin**, connect the master stick to the USB hub.

If the data to be copied is not yet available on the USB stick, you can also copy it to the stick using the Windows Explorer.
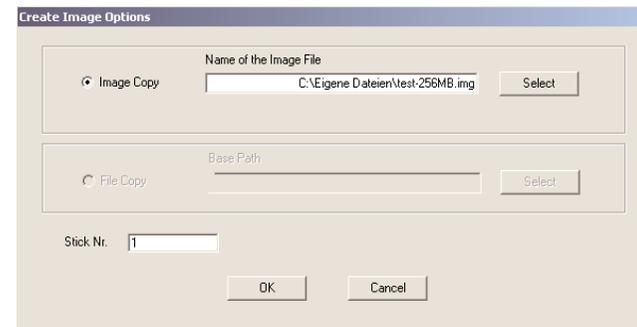
When the system recognizes the USB stick, one of the seven slots on the software screen changes color and becomes blue. Additionally, the message "Stick x inserted" appears in the information window (see figure on the previous page).

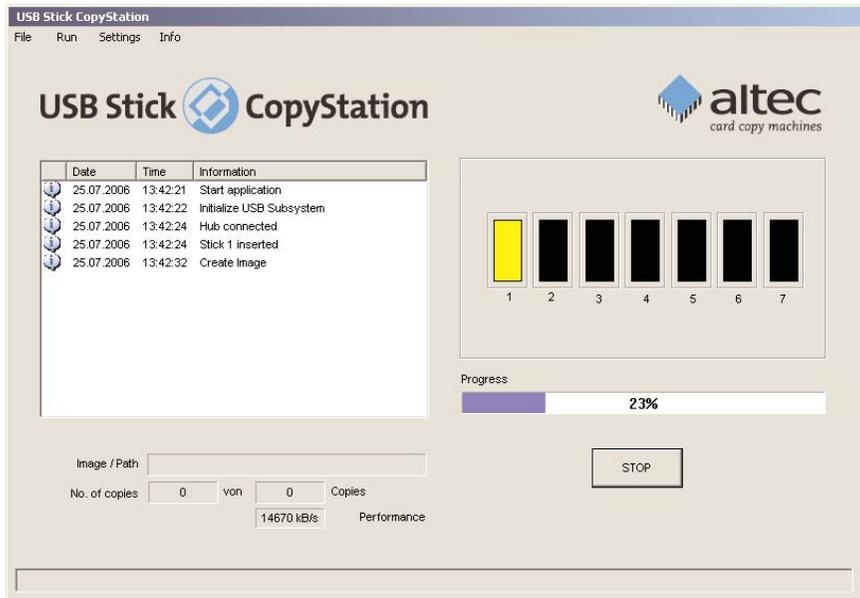Empty slots or unrecognized USB sticks are displayed in black color.

Select the "**Create Image**" command from the "**Run**" menu in order to create an image of the master USB stick.

After clicking the "Select" button, enter the name and location for your image file. Assign the file extension ".img" and click the "Save" button to save the file. Select the desired USB stick by entering the stick No., beginning with No. 1 on the left hand side (see figure below).

Once you have clicked the "OK" button, the read action is started. The progress is indicated by a progress bar with a percentage value. The slot color then changes to yellow (see figure on the next page).

When the progress bar reaches 100%, the message "Operation done" appears in the information window and the slot color changes to green, indicating successful creation of the image.

3.3 Optional: Creating a short image

This feature is only available if you have purchased the software option Short Image Files (Item number: 31AL1812).

USB sticks often only need to be partly filled with data. The rest of the media is left empty and can be used by the customer to store his or her personal files. The Short Image Files software option significantly speeds up copying smaller amounts of data.

The short image files software option currently only supports the FAT16 file system, which limits the maximum capacity of the USB stick to 2.0 GB. Support for the FAT32 file system will be available soon.
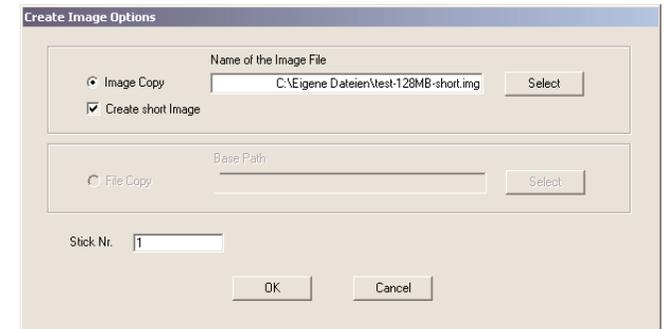
The FAT (File Allocation Table) of the file system stores information on memory areas which contain user data. By analyzing the FAT, the CopyStation software can determine the last block of memory which contains user data. If you create a short image file, it only contains data up to and including the last used block.

To maximize the speed benefit (minimize the size of the short image file), the master (source) USB stick should not have fragmented data blocks. Data blocks get fragmented if the USB stick has often been written to since it was last formatted. If necessary, format the source USB stick and copy the data back on again before using it to create the short image file.

When making copies using a short image, it is only necessary for the CopyStation to write data to some of the memory blocks in the USB stick. This leads to a speed advantage. However, if the destination USB stick has already been used to store files, some of the unused and unwritten blocks may still contain old data. Although the old data will not appear as files in the file system (directory), in some cases the data can be analyzed using special software tools. This could present a security risk if the USB stick was previously used to store sensitive information.

For short images too, the capacity of the master (source) USB stick must be identical to the capacity of the destinatiion sticks (the sticks onto which you want to copy). We recommend that you use the same manufacturer and model for the master stick and the destination sticks.

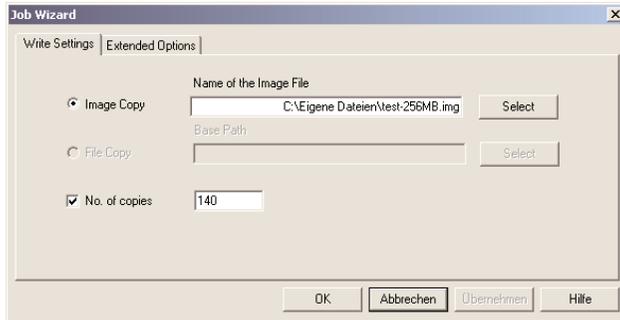The "**Create Image Options**" dialog box is shown when you choose "**Create Image**" in the "**Run**" menu.

If you check the "**Create short image**" checkbox, the CopyStation software will create a normal image and a second image with the file extension "**.img.short**". Use the second image to create a short image job.
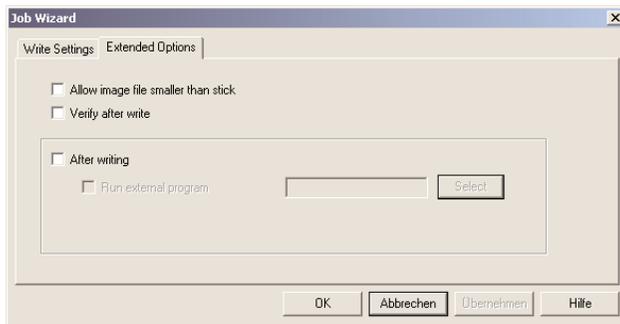
3.4 Creating a job

Select the "**New Job**" command from the "**File**" menu in order to create a new copy job with the Job Wizard.

In the Job Wizard, select an image by clicking the "Select" button. Then choose an image from the standard Windows open dialog which appears.

Tick the "No. of copies" check box and enter the number of copies you want to produce (see figure above).

After clicking the "**Extended Options**" tag (see figure above) you can define whether the data is to be verified after writing or not. The data **verification** process takes around the same time as copying.
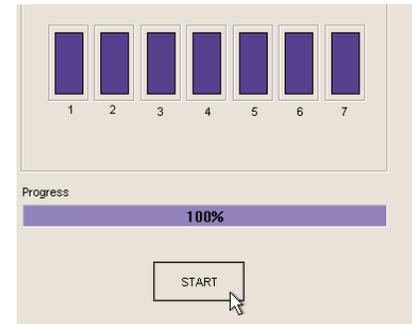
Via the "Extended Options" tag you can also **set up optional software extensions** like the interface to external applications, e.g. to assign a serial number or create and copy smaller image files (see also chapter 5 on p. 16).

Clicking the "OK" button opens the standard Windows save dialog, where you can enter the name and location for the job file. Assign the file extension "**.job**" and click the "Save" button to save the file.

3.5   Starting a copy job

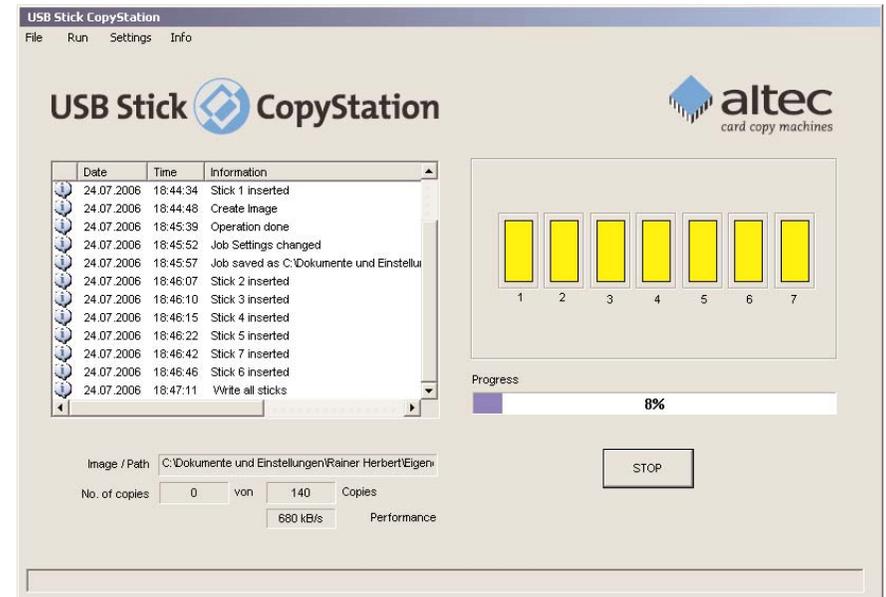Remove the master USB stick from the hub and insert the 7 USB sticks to which the data is to be copied.
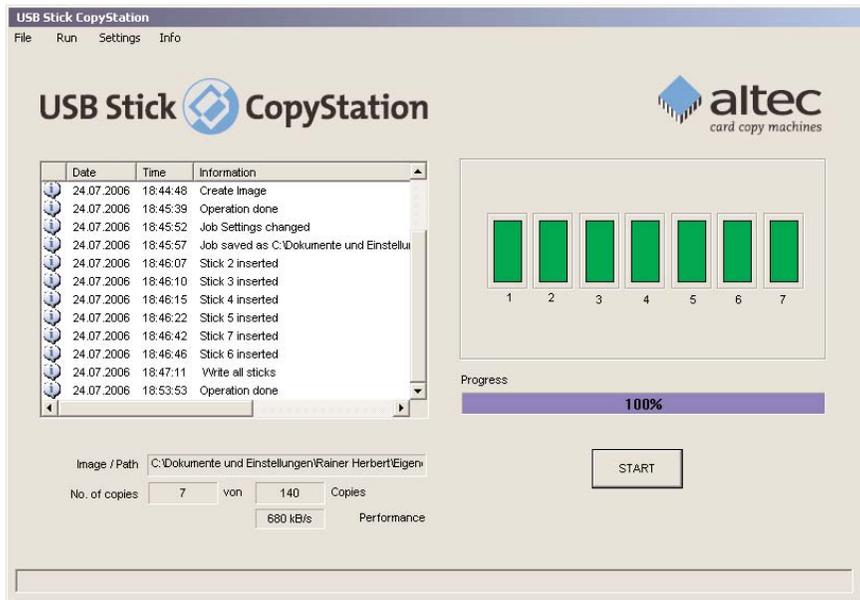
Depending on your Windows setup, an Explorer window may appear for each USB stick which the operating system recognizes as new hardware. You can either ignore or close these Explorer windows.
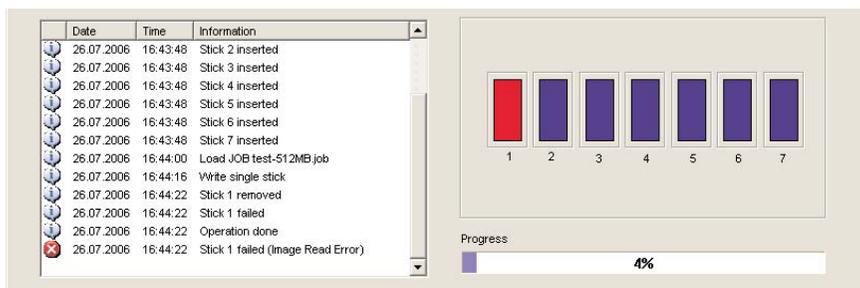

Click the "START" button (see figure on the left) to start USB stick programming (see figure below).

When the progress bar reaches 100%, the message "Operation done" appears in the information window and the slot color changes to green, indicating that data has been copied successfully to the first seven USB sticks (see figure below).

A red slot display and an error message in the information window indicate that data copying to a USB stick has failed (see figure below).

Remove the USB sticks to which you copied data, insert new (empty) USB sticks, and click the "START" button again.

Continue to exchange USB sticks and restart the copy action until the selected number of copies is reached and the "**Job finished**" window shown below appears.

You can re-use the saved copy job any time. You can also modify the settings after selecting the "**Job Settings**" option from the "File" menu and then save the modified job under a new name.

4. User software menus and functions

4.1 "File" menu

In this menu, you can create, save, open or modify jobs, or exit the program.

➜ **"New Job"** creates a new job. Select an image file in the Job Wizard (see p. 9). Enter the number of copies you want to produce (see p. 10). On the "Extended Options" tag, you can choose verification after writing, if required (see. p. 10).

➜ **"Open Job"** opens an already existing job via the standard Windows open dialog.

➜ **"Save Job"** saves an open job.

➜ **"Save Job as"** saves a job under a new name.

➜ **"Job Settings"** opens the Job Wizard where you can modify and save an open job. If no job has been opened, the command has the same effect as the "New Job" command (see above).

➜ **"Exit"** terminates the program.

4.2 "Run" menu

In this menu you can create image files and select direct copy or verify commands for single or all USB sticks.

➜ **"Create Image"** reads and saves the entire data image of a USB stick (see p. 7ff.).

➜ **"Write . . . Single Stick"** opens the "Write Options" dialog where you can select an image file and USB stick slot. After confirming the selection with "OK", data copying to the selected USB stick is started.

➜ **"Write . . . all Sticks"** opens the "Write Options" dialog where you can select an image file. After confirming the selection with "OK", data copying to all USB sticks is started.

➜ **"Compare . . . Single Stick"** opens the "Write Options" dialog where you can select an image file and USB stick slot. After confirming the selection with "OK", data comparison between the image file and the selected USB stick is started.

➜ **"Compare. . . all Sticks"** opens the "Write Options" dialog where you can select an image file. After confirming the selection with "OK", data comparison between the image file and all USB sticks is started.

4.3 "Settings" menu

In this menu you can select the user interface language.

➜ **"Language"** opens the "Select Language" window where you can select German or English as the user interface language. Note that standard Windows dialogs are always in the language of the used operating system.

4.4 "Info" menu

In this menu you can open this manual as a PDF file and call up information about the program.

➜ **"Help"** opens this manual as a PDF file in the selected user interface language. Please note that you can only read this file if Adobe Reader has been installed on your computer. You can find the Adobe Reader setup files on the CD delivered with your USB Stick CopyStation.

The manual resides in the program folder and can be called up directly from this location.

➜ **"About"** opens the program's information window where you can find the software revision number and the license agreement.

5. Extensions to the software

The following software extensions are available:

◆ Optional software interface for data exchange with an external application, allows customization, e.g. with serial number or data encryption.
Item number: 31AL1811

◆ Software option for creating and copying smaller image files. With this, USB sticks where much less data is stored than the actual storage capacity permits can be programmed much quicker.
Item number: 31AL1812

Software customization to comply with the customer's needs is possible. Please do not hesitate to contact us.

6. Technical specifications

Hardware
– Interface	USB 2.0 Hi-Speed
– Supported storage media	USB 1.1 or 2.0 memory sticks
– Slots	seven; 11.5 mm gap between the slots

Performance
– Data transfer rate (example)	7 USB 2.0 sticks à 256 MB in less than 2 min. (speed depends on USB Stick type and USB connection)

Software
– Compatible with	Windows 2000 and XP

Mechanical
– Dimensions USB Hub	99.6 x 59.5 x 25.7 mm (WxDxH)

Environment
– Temperature	0° to +40°C (operating) 0° to +95°C (non-operating)
– Humidity	5% to 95%, non-condensing

Electrical
– DC input voltage	USB Bus powered (500 mA at 5 Volt) or via power supply with 3 A at 5 Volt (100-230 V)

Accessories
– 31AL145S	Software interface for exchanging data with external applications
– 31AL1812	Software option Smaller Image Files

Solstice Technologies
For more information call toll free 1-866-357-4321 or e-mail: mailto:sales@solstice-inc.com
Ph: 240-235-0602 Fax: 240-359-4090