



Frequently Asked Questions

Transparent Document Carrier

Abstract

Image Access scanners are not only a peripheral, like other scanners and printers, they also include a Linux PC which can actively send data to various network resources.

WideTEK scanners are designed to achieve best scan quality at highest speed, but can be individually configured to reduced speed, if required for example, to scan fragile, valuable documents. Nevertheless, it is possible to benefit from the WideTEK scanner's scan speed by protecting delicate, valuable documents as well as crumbled, torn or partially destroyed documents with the transparent document carrier.

The pictures in this FAQ are only examples and might not exactly match the kind of documents that you typically have to handle, but we believe that this FAQ can provide answers to most questions regarding the use of the document carrier. The intended target audience is both the operator, who handles the documents and the administrator, who maintains the scanner and defines scan templates.

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1. Confidentiality

Status	Interested Party	Source	PDF
Public Information	Image Access Support	Yes	Yes
	Authorized Service Providers	No	Yes
	Image Access Customers	No	Yes

2. Revision History

Date	Rev.	Name	Description of Change	Reason of Change
31.03.2017	1.0	TI	Initial Version	
03.04.2017	1.1	CRI DI	Content edited corrected	Publishing (short instruction)
02.03.2018	1.2	ERI DI	Minor corrections, formatting	Publishing (FAQ)

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5. Purpose

The purpose of this document is to answer frequently asked questions about the handling of the transparent document carrier and the proper scan settings for the use of the carrier.

6. Scope

The scope of the document includes all WideTEK wide format scanners and the handling of large and delicate documents.

The target audience for this FAQ document is the operator of a Scan2Net scanner and the administrator of the customer PCs. The administrator should have experience setting up a Scan2Net scanner and especially in creating scan templates. The operator should be familiar with working with a Scan2Net scanner and he should know how to use preset scanning templates.

7. Affected Products

Product	Description, Meaning
WideTEK	Wide format scanner. More at: www.imageaccess.de/?page=ScannersWideformat
A0-ENVELOPE	ISO/DINA0, 49" x 37", ANSI-E and ARCH-E
A1-ENVELOPE	IS1/DINA1, 37" x 26", ANSI-D and ARCH-D

8. Terms and Definitions

Term	Description, Meaning
Scan2Net	Technology from Image Access implemented in many scanners. More at: www.imageaccess.de/?page=SoftwareScan2Net
WideTEK	Wide format scanner. More at: www.imageaccess.de/?page=ScannersWideformat

9. Introduction

9.1. Transparent document carriers for fragile document handling

Extra strong, clear and antistatic transparent document carriers protect your most fragile documents while enabling you to scan at the very high speeds attainable on WideTEK sheet feed scanners. The document carriers can be used on all sheet feed scanners, including the WT36DS double sided 36" CCD scanner, for scanning double sided documents in a single pass through the scanner. The carriers protect not only the documents themselves but also preserve the color of the scanner's background drums, whether they are black or white.

Document carriers consist of two sheets, both of which are clear. They are 165µm thick and open on three sides for ease in handling. When preparing to scan valuable, fragile, brittle and torn documents; the carriers can be opened, and the documents inserted while the carrier is held by the scanner. Only the top sheet needs to be lifted and can be folded back over the scanner for loading documents. This unique feature works perfectly together with all WideTEK scanners, from CIS based WT36CL to the CCD based top model WT48 and the WideTEK 36DS duplex scanner, as previously noted. Scanning cycle times for wrinkled, crumbled or partially destroyed documents are typically faster and definitely safer, compared to feeding them

directly. Extra slow scanning speeds are no longer necessary.

9.2. Features of the Transparent Document Carriers

Available in two sizes: A0 (49" x 37") and A1 (37" x 26")

Two clear sheets attached, 165µm thick and open on three sides

Works with CIS and CCD scanners including duplex model

Scan at high speeds while protecting fragile or damaged documents

Preserves the color of the scanner's background drum

Antistatic, extra strong material for prolonged use

9.3. Market Applications

Newspaper scanning

Conversion projects including delicate, valuable, old and crumpled documents

Scanning and restoring partially destroyed documents

10. Usage

As soon as the scanner's paper sensor detects the transparent carrier, it pulls it in to the starting position. The envelope can be opened with the top laying over the scanner's upper body. Then, the document can be easily inserted and the carrier can be closed. The pictures 1 - 4 show a full sequence. It should be noted, that the carrier does not have to be removed for a consecutive scan.

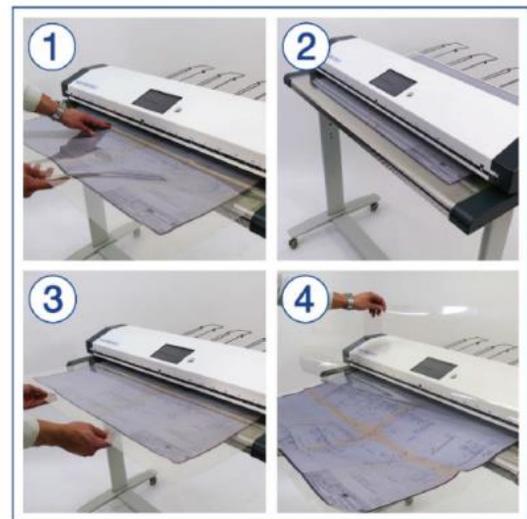


Figure 1: Handling of the transparent document carrier

11. Limits of operation

Although the the document carriers are transparent, they change the scanning results:

- The document carrier covers the normal scan background inside the scanner and will effect the document format detection.
- The optical characteristics of the document carrier will restrict the image quality.

11.1. Automatic document format detection

One effect is that the document width detection, which is processed when a document is detected under the paper sensor, will always recognize the width of the carrier and not the width of the document inside the carrier. Therefore, the document size mode 'Auto' will fail and provide the full width of the carrier.

Use the document size mode 'Crop and Deskew' instead.

The 'Crop and Deskew' process is optimized to recognize dark edged documents on a black scan background, white documents on a white scan background and grey newspapers on a grey scan background. The optical characteristics of the document carriers will downgrade the capabilities of this process slightly.

Modify the parameter **Auto Density** in ScanWizard, if necessary.

Raise the value to 80 if parts of the carrier appear all around the document.

On the Scan2Net API level (external applications): `autoformat_density:80`

11.2. Image Exposure

The scanned images from the document inside the document carrier will look slightly yellow.

This can be corrected with modified parameters:

On a WideTEK 36|44|48-600:

In ScanWizard: **Gain Red**:0, **Gain Green**:1, **Gain Blue**:1

On the S2N API level (external applications): `gain_r:0, gain_g:1, gain_b:7`

On a WideTEK 36CL-600:

In ScanWizard: **Gain Red**:0, **Gain Green**:2, **Gain Blue**:9

On the S2N API level (external applications): `gain_r:0, gain_g:2, gain_b:9`

After this, the images are still somewhat low in contrast.

This can be corrected with modified parameters:

For natural exposure:

In ScanWizard: **Brightness** 55%, **Contrast** 55%

On the S2N API level (external applications): `bright:140, contrast: 140`

For saturated exposure:

In ScanWizard: **Brightness** 60%, **Contrast** 60%

On the S2N API level (external applications): `bright:153, contrast:153`

12. Known Issues

None.

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