### ScannTECH.

# hiving scanning icrofilming



ProServ#

## ScannTECH 400i / 600i



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#### 1 Introduction

Dear customer,

With buying the ScannTECH 400i / 600i you have decided for a powerful appliance. During the daily work with this system you will soon appreciate the easy operating, the high reliability and the high quality which are essentials for performing your work very well.

In case of questions arising unexpectedly, please do not hesitate to contact our firm. Be assured that we will promptly assist you.

ProServ Datentechnik GmbH Robert-Bosch-Straße 2-4 D-61184 Karben Telephone (0049)-(0)6039 4803-0 (0049)-(0)6039 4803-80

E-mail: info@proservgmbh.de

#### 2 General Information

#### 2.1 Description

Digitalisation is done through the most up-to-date scanning technique by two CCD-cameras at 400 dpi or three CCD-cameras at 600 dpi respectively and with a variously selectable optical resolution performance of 100 to 400/600 dpi up to the format DIN A0 – in colour, gray scale and black-and-white.

#### 2.2 Conditions of installation and power connections

The ScannTECH 400i / 600i has to be connected only with the current and frequency indicated on the type plate. Before initial operation, please check these data with your power supply data.

The place where the appliance will be installed must have enough space to ensure safe and correct service and maintenance working.

The appliance has to be accessible from all sides (see installation plan).

Avoid direct shining light onto the machine (sunlight or lamps etc.).

#### 2.3 Safety notes

If you follow all these safety notes, we guarantee safe working with your ScannTECH 400i / 600i. The safety check was done acc. to the German rule VBG 4. Please note the following instructions very carefully before the initial use of the appliance to secure safe working and a long lifetime.

- Connect your machine only to a duly installed electric line.
   Faulty grounding of the appliance may lead to an electric shock.
- Never connect the appliance with a socket by a non-grounded adapter.
- Follow all safety information fixed at or inside the appliance...
- Never place your appliance direct to a heating or other heat radiation and do not expose it to direct sunlight.
- · Never close or reduce the ventilation, for that may lead to overheating.
- Never manipulate the electric or mechanic safety arrangements.
- Only the use of material, accessories and spare parts approved by ProServ guarantees you safe and continuous working.
- Never do maintenance work that is **not** described or which you have not been instructed for.
- Covers and housings, which are screwed, may only be opened or removed when you pay attention to the usual safety rules and to the fixed instruction signs.
- If your appliance makes unusual noise or strange smell, turn it off with the mains switch and call your service engineer.

For more information relating to the safety of your appliance and the materials supplied by ProServ or with other questions, our service department is always prepared to help you.

#### 3 Technical Data

#### Technical Data

Maximum size of master

>A0 (1270 mm x 914 mm =

50 inch x 36 inch)

Book holder

motor-driven, for books up to 25 cm thick

and max. weight 25 kgs

Scanhead

max. optical resolution

400 dpi or 600 dpi,

data transfer - RJ 45 interface

Weight of underframe

 $\pm$  175 kgs

Weight of scanhead

 $\pm$  35 kgs

#### **4Description of Hardware**

#### 4.1 Basic design

#### 4.1.1 Main switch

The main switch of the ScannTECH 400i / 600i is in the spar of the underframe, at the left front side (see pict. 4.1.1.).

#### Pict. 4.1.1



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#### 4.1.2Foot Switch

The foot switches lie on the floor in front of the appliance, depending on the position needed for operation. The double-foot switch serves for the control "up" or "down" of the book holder plate; the single one is for triggering the scanning process (see pict. 4.1.2).

Pict. 4.1.2 Footswitch / Handset





Foot switch (left) = trigger - starts scanning process

Double-foot switch (right) = left one: bookholder "down",
right one: bookholder "up"

Handset (option)

#### 4.1.3Book cradle

The book cradle with its support plates which can be moved horizontally is for the height balancing and for the contact pressure of an open book towards the glass plate (see pict. 4.1.3).

There can be scanned books and other masters of a thickness of up to 250 mm and a weight of max. 25 kgs.

Pict. 4.1.3

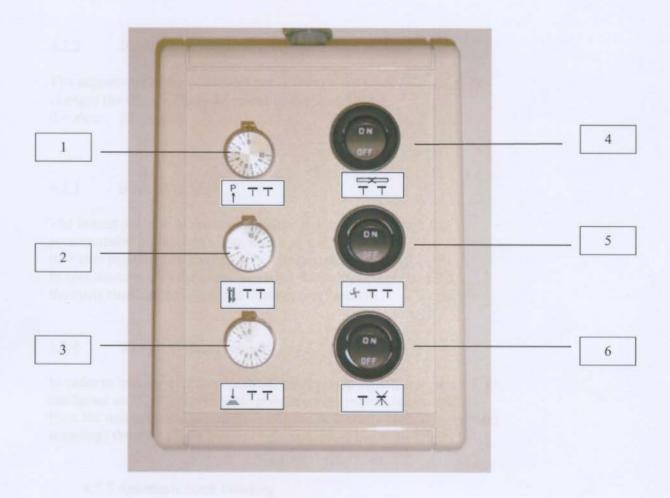


#### 4.1.4 105° Book support (option)

With the option of a 105° book support this can be also done in a way of special care for the book.

#### 4.2 Operating panel

Pict 4.2, 1 - 6



- 1 Adjustment of book contact pressure at the top
- 2 Adjustment of speed
- 3 Adjustment of book-stop down varies the book elevation
- 4 W/o glass ON glass plate stays at the back
- 5 Automatic elevation of the book the book is automatically lowering after scanning
- 6 Big book plate OUT (only A0-systems)

#### 4.2.1 Book contact pressure -at the top-

Through adjusting the potentiometer at the operating panel (pict 4.2 - 1) the upper stop and the contact pressure of the book holder against the glass plate become variable. The book contact pressure can be preselected by that. (0 = little contact pressure / 10 = full contact pressure).

#### 4.2.2 Book holder speed

The adjustment of the potentiometer at the control panel (pict.4.2 -2) changes the speed of the movement of the book holder. 0 = slow 10 = quick

#### 4.2.3 Book-stop down

The lowest position of the book holder can be varied through the potentiometer at the control panel (see pict. 4,2 -3). (0 = stop position at the arliest / 10 = lowest stop position). In combination with the automatic book lowering (see para 4.2.5) the cycle time can be optimised through this function.

#### 4.2.4 W/o glass plate (option)

In order to make use of this function, the flip-flop switch (see pict.4.2 4) can be set on "ON" and the glass plate becomes moved backward. Now the masters to be scanned are stopped in the scan level (non-contact scanning) through a light barrier (right and left in the main spars).

#### 4.2.5 Automatic book lowering

When the flip-flop switch (pict. 4.2 -5) is in position ON, the book holder is automatically moved downward after every scan. By that, with scanning of books the pages can be speedily turned over and pressed down again (see also 4.2.3).

#### 4.2.6 Book plate OFF (only A0-systems)

When the flip-flop switch (see pict. 5.2. -6) is turned ON, the non-divided part of the book holder is switched off motor-powered. This function is only sensible when the balancing plate is not used. It is advisable to switch off at the lowest position.

#### 4.3 Scanner slide

Before the scanner is switched on, please watch that there is no dirt on the glass plate.

#### 4.3.1 Network / data adaptation

The network / data adaptation (RJ 45) is at the rear left side of the scanner slide and causes the data transfer from the scanner slide to the control-PC.

#### 4.3.2 Mains connection / mains switch

The scanner slide is connected through its mains connection cord and the cold-appliance plug only with the cold-plug socket at the rear of the underframe and is power-supplied by that. It has an own lighted circuit closer at the rear left.

#### 4.3.3 Positioning of the scanner slide

- a) Initial position: with switching on automatically at the reference point (back).
- b) During operation: depending on selected scan size, at "offset stop" or initial position of the previous scan format.

#### 4.3.4 Whitebalancing

After switching on, the whitebalancing can be done through a software command with ProView, however only if required. The balancing pattern supplied with is supposed for this purpose.

After triggering the whitebalancing, the scan head moves into the pre-defined position where the balancing pattern is supposed to be. Clean printing paper also can be used as balancing pattern. However, the background must not be translucent.

#### 4.3.5 ON/OFF – push-button at the scanner slide

The scanner slide has an On/Off – push-button at the left front. It works functionally on the internal Motherboard and consequently boots the PC up or down.

#### 5 Operating Process

5.1 To turn the machine on

#### 5.1.1 Scanning operation

- a) Before switching on, check that the glass plate is clean..
- b) Turn on the main switch.
  - c) Turn on the switch of the scan head.
  - d) Check the scan head and start the scanner through a short pressing on the On/Off – push-button (see also para 4.3.5). After a few seconds the lamp in the scanner begins to lighten and the integrated PC gets started.
  - e) Switch on the external PC and the monitor and load the software. After the switch-on phase the scan function gets released.

#### Important:

Before making scans accurate to size the scanner has to warm itself up for at least 30 minutes.

#### 5.2 Positioning the master

Before putting on a master, the book cradle has to be moved down through the foot switch or the optional handset. After aligning, the plates of the book holder are moved upward through the corresponding foot or hand button till the master lies flat under the glass plate As long as one of the push-buttons for the upward or downward moving of the book holder is being kept pressed and the top or lowest end position has not been reached, the book cradle keeps moving. By that, during the upward moving there can be <u>also</u> affected the pressing of the scan master against the glass plate.

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#### 5.2.1 Flatbed version

For scanning of drawings, drafts etc. a balancing plate is laid on the levelling book plates. For that, the support plates are moved at the left and right to their outer stops.

The master are aligned in center at the front edge onto the balancing plate (see pict. 5.2.1).

#### Pict. 5.2.1



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#### 5.2.2 Books on the book cradle

Using book-levelling plates (w/o flatbed plate laid on), the book is positioned at the same alignment positions as described at para 5.2.1 (see picts. 5.2.2 and 4.1.3 page 9).

Depending on the thickness of the spine, the book plates should be spread or pushed together in order to secure an optimal position of the book.

Pict. 5.2.2



#### 5.2.3 105°-book support (option)

This book support secures particularly careful working.

At first, one half of the book, e.g. all pages with uneven numbers, are scanned and microfilmed page by page, and then the other half with the even numbers after the book has been turned. It is advisable to select the function "increase counter by 2". By that, the pages become graded in series.

#### 5.3 Operating the scanner

#### 5.3.1 Software setting

(see description of software ProView from "scan dialog" on.

#### 5.3.2 Positioning of the scanner

The scanner becomes automatically positioned in accordance with the scan length put in.

#### 6 Cleaning

#### 6.1 Basic appliance

#### 6.1.1 Glass plate

The glass plate - particularly its underside (focusing area) - .has to be clean and must not be scratched. For cleaning, you can use an alcoholmixed glass-cleansing fluid and a soft and non-fluffy cloth. (e.g. microfibre).

#### 6.1.2 Whitebalancing foil

The calibrating foil for whitebalancing must not be scratched or dirty. If there is used white paper instead of this foil, it should be unused and avoided the background to be translucent.

#### 6.1.3 Scanner guides

The guiding ways must not be dirty.

#### 6.1.4 Book cradle

When the contact pressure of the book is beginning to lessen, the tension of the toothed belts of the book plates has to be increased and the spring packs are to be renewed respectively (maintenance work to be done by a technician).

#### 6.2 Scanner

Depending on the total number of scans and the dirt accumulation, the conveyor belts of the scanner are to be cleaned with a rubbercylinder cleaner. If necessary, the tension of the belts has to be increased.

7	Accessories	(options)
7.1	105° Book support	
7.2	Suction tool	
7.3	Transmitted-light unit	up to A1



#### Konformitätserklärung EC Declaration of Conformity

In Sinne der EG- Maschinenrichtlinie 2006/42/EG, Artikel 1, Absatz 2, k As defined by machinery directive 2006/42/EC, article 1, paragraph 2, k

Hiermit erklären wir, dass die Scannsysteme (ScannTECH) und Mikrofilmsysteme (PS2002) und die Kombisysteme (Hybrid-Systeme)

Herewith we declare that the Scansystems (ScannTECH) and microfilm systems (PS2002) and the combined systems (Hybrid-Systems)

ScannTECH 402i, 602i, 401i, 401i tm, 400i, 601i, 601i tm, 601i ms (602i-3), 600i, 600i fb, 600i ms, 800i, PS2002, Hybrid-Systeme 401i, 601i, 400i, 600i

folgenden einschlägigen Bestimmungen entsprechen: the following specialist regulations correspond to them:

· Niederspannungsrichtlinie 2006/95/EG i. d. aktuellen Fassung / in the actual version

Angewendete harmonisierte Normen, insbesondere Applied harmonised standards, in particular

- DIN EN ISO 12100-1/-2
- DIN EN 1010
- DIN EN 60204-1

Angewendete nationale technische Normen und Spezifikationen, insbesondere Applied national technical standards and specifications in particular

BGV A3 § 5 Abs. 1

Karben, den 10.10.2013

(Ort, Datum der Ausstellung / date)

E. Reinke (Beauftragter / Mandatory)

(Unterschrift / signature) \*

\*rechtsverbindlich; mit Angaben zum Unterzeichner / legally binding; with declaration to signer