

Operating manual

Software module S!MPATI® TimeLabs
for S!MPATI® software

Imprint
Operating manual for SIMPATI® TimeLabs software
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1 INFORMATION ABOUT THIS DOCUMENT

1.1 Scope of application

This document applies to the Simpati TimeLabs software module from software version 2.2.x.x. In Simpati TimeLabs, the software version is displayed in the **Help** menu.

1.2 Target group

This document is for the user.

1.3 General notes

- ▶ Read this document first to avoid malfunctions and any associated consequential damage.
- ▶ Retain this document for later reference.
- ▶ Observe the safety regulations during use.
- ▶ Read other associated operating manuals and safety regulations prior to use.

1.4 Symbols and notes

The following signs and symbols are used in this document:

- Items in a list are indicated by a dash.
- ▶ Actions are indicated by a triangle
- ✓ Results of actions are indicated by a check mark.
- Cross-references are preceded by an arrow and are in italics.

2 PRODUCT DESCRIPTION

The Simpati TimeLabs software module is an add-on to the Simpati software. Simpati TimeLabs enables the measurement data of Simpati as well as images of a camera to be recorded simultaneously and presented as a function of one another.

In Simpati TimeLabs, three camera types are pre-installed:

- **Robotix**
- **LevelOne**
- **Edimax**

3 INSTALLATION

3.1 Installing software

Prerequisite:

- Simpati software version 4.50 or higher must be installed on the computer.
- The software „Microsoft.NET Framework 3.5“ and „Microsoft.NET Framework 4.72“ must be installed on the computer.
- You must have administrative rights on the computer.
- Serial number and registration code for Simpati TimeLabs must be available (information on the license).

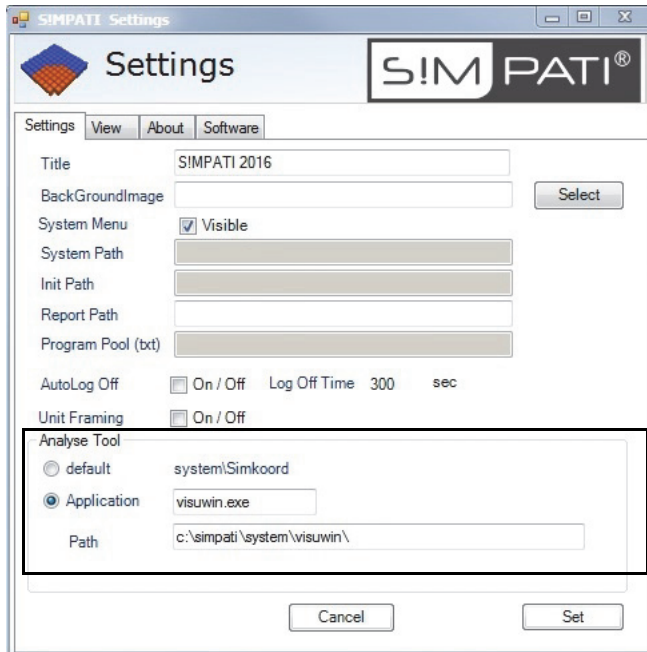
Procedure:

- ▶ Exit Simpati.
- ▶ Insert the installation medium.
- ▶ Select and run the file **Setup.exe** on the installation medium.
- ▶ Select the desired installation language.
- ▶ Select **[Next]**.
- ✓ Installation is effected automatically into the directory where Simpati was installed. If the root folder of the C:\ drive is involved here, then the pre-configured paths in Simpati TimeLabs are set correctly too.

3.2 Configuring the software

Procedure:

- ▶ Right-click on the Simpati interface and select **Configuration**.
- ✓ Configuration menu is displayed.



- ▶ In the **Analyze Tool** section, activate the **Application** option.
- ▶ Make sure that the **Application** field contains the text **visuwin.exe**.
- ▶ Make sure that the path in the **Path** field refers to the directory where the **visuwin.exe** file is located.
- ▶ Select **[Set]**.

4 USER INTERFACE

4.1 Main page

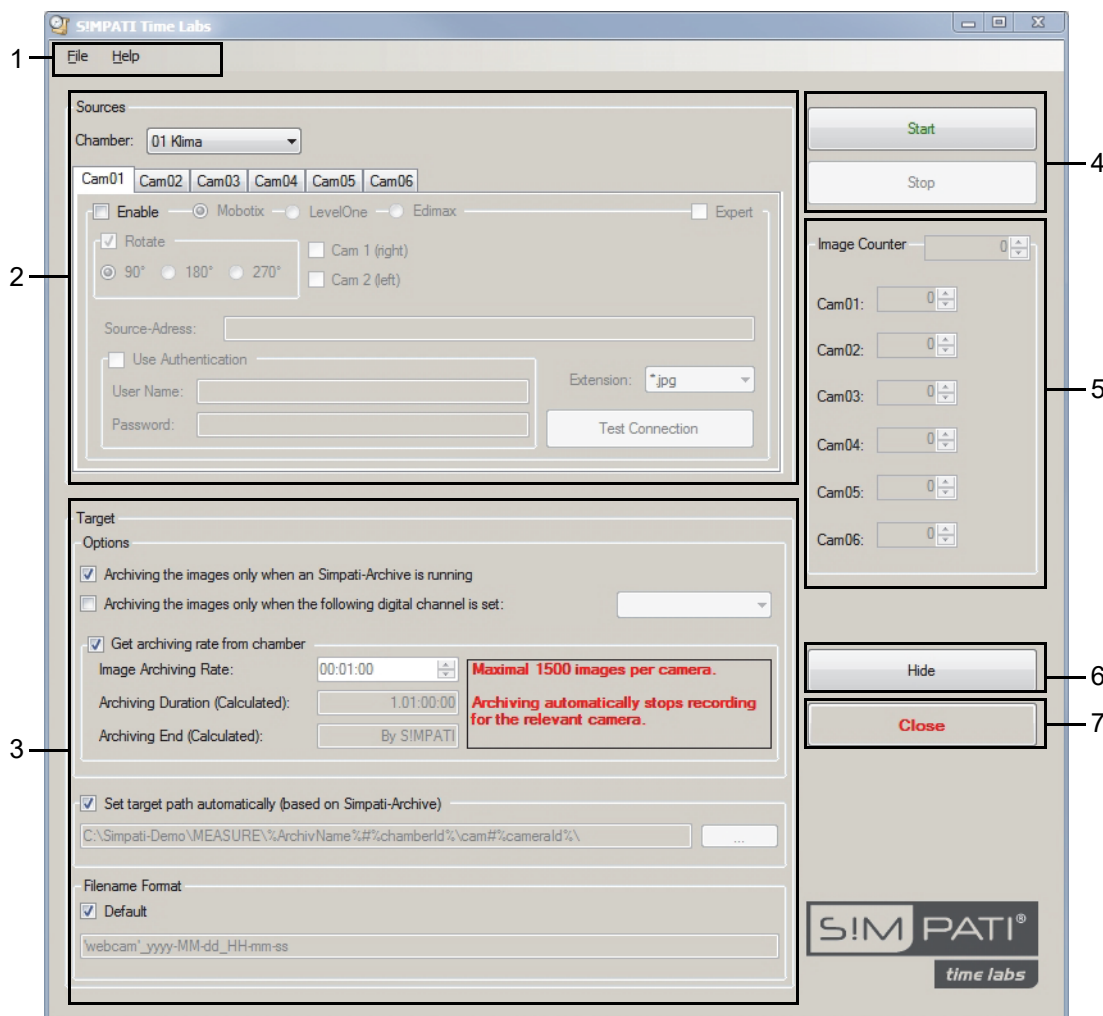


Fig. 4-1 Main page

No.	Explanation
1	<p>Menu bar with the following functions:</p> <ul style="list-style-type: none"> - File > Save [Default]: With this function, the current settings can be saved as default configuration. On startup of Simpati TimeLabs, the default configuration is loaded. - File > Save as: With this function, the current configuration can be saved under a freely selectable name. - File > Load configuration: With this function, a saved configuration can be loaded. - File > Close Application: With this function, the application is closed (analogous to the [Close] button). - Help: With this function, the software version of Simpati TimeLabs can be called up.
2	Section Sources for setting the source of the images, such as camera type and IP address of the camera.
3	Section Target for recording settings, such as recording rate. The settings in this section apply to all cameras of the system. The settings cannot be made differently for individual cameras.

Table 4-1 Main page

4 USER INTERFACE

Main page

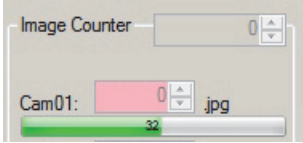
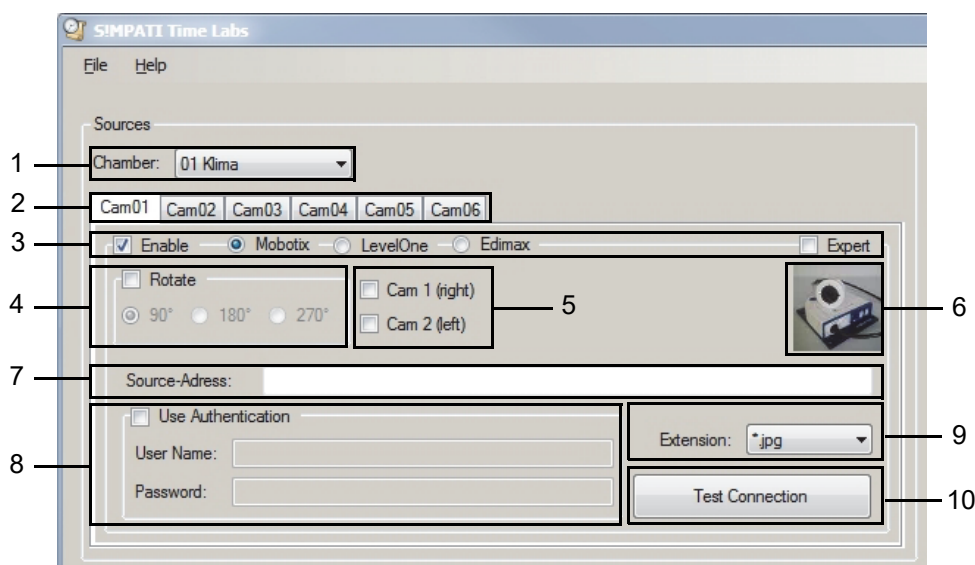
No.	Explanation
4	Buttons for manually starting or stopping the recording of images.
5	<p>Section Image Counter</p> <p>The current number of images in the current recording is displayed here.</p> <p>The green bar indicates the remaining share of storage time. The time is displayed in seconds.</p> 
6	With this button, the application's display is minimised.
7	With this button, the application is closed.

Table 4-1 Main page

4.2 Section »Sources«

Fig. 4-2 Section Sources (example page, camera type **Robotix** selected)

No.	Explanation
1	Drop-down list for selecting the system of which the camera images are to be recorded. The systems displayed in the drop-down list are read from Simpati. In Simpati TimeLabs, only 1 system can be selected at a time. If another recording is to run in parallel for another system, Simpati TimeLabs must be started twice. This will open a second window with the main page of Simpati TimeLabs.
2	Tabs for settings of the respective camera. Up to 6 cameras can be configured.
3	Section for activating and selecting a camera type.
4	If the camera image is displayed with a rotation, the desired rotation of the image can be selected here.
5	Only if camera type Robotix is selected: The camera is equipped with 2 sensors. Both sensors or one sensor can be selected here. If both sensors are selected, the images of both sensors are displayed next to each other in VisuWin.
6	Product image of the selected camera.
7	Section for entering the IP address of the camera. You obtain the IP address from your network administrator.
8	The user data set in the camera must be entered here.
9	Drop-down list for selecting the image format.
10	Button for testing the connection to the camera.

Table 4-2 Section Sources

4.3 Section »Target«

The settings in this section apply to all cameras of the system. The settings cannot be made differently for individual cameras.

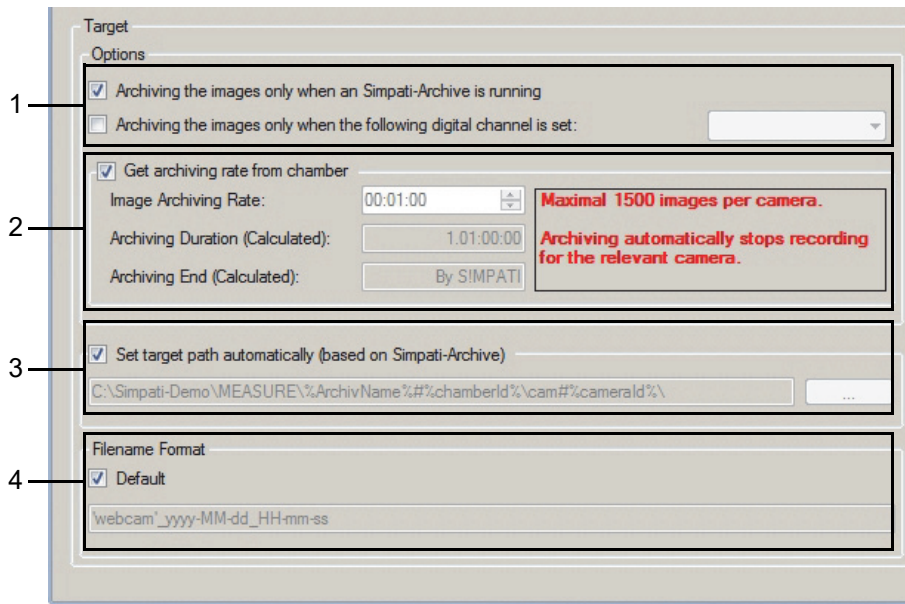


Fig. 4-3 Section Target


No.	Explanation
1	Here you can set when the images are to be recorded.
2	<p>Per day, a maximum of 1,500 images can be saved per camera. The images are saved in a folder. A separate folder with the current date is created for each camera. If 1,500 images are stored in the folder, the folder is full and no more images from the camera will be stored. On the next day, a new folder with the current date will be created for the camera.</p> <p>There are two ways to set the desired recording rate:</p> <ul style="list-style-type: none"> - If the field Get archiving rate from chamber is activated, the recording rate of the measurement data is used. The minimum value is 5 seconds. - If the field Get archiving rate from chamber is not activated, the duration can be set in the field Image Archiving Rate (at least 5 seconds) (format: hh:mm:ss). <p>The field Archiving Duration (Calculated) shows how long images can be recorded until the maximum possible number of 1,500 images is reached. The archiving duration is calculated depending on the set recording rate.</p> <p>The date and time when archiving stops are displayed in the field Archiving End (Calculated). The end of archiving is calculated by adding the archiving duration to the current time. If it is set that the images are only recorded when archiving is active in Simpati, then Simpati is displayed in the field.</p> <p>Calculation of the max. possible image recording rate for the desired recording duration Example: You want to record the images of a test running 24 h. Formula: number of images (max. 1,500) / archiving duration = max. recording rate Procedure: first convert desired recording duration (e.g. 24 h) to seconds: 24 h = 86,400 sec Enter data into formula: 1,500 images / 86,400 sec = 0.01736 sec = 1.04 min Result: A maximum recording rate of 1 minute can be set (00:01:00).</p> <p>If you, for example, set a recording rate of 5 seconds, 1,440 images will be saved after 2 hours. The desired recording duration of 24 h cannot be achieved in this case.</p>

Table 4-3 Section Target

No.	Explanation
3	The target directory for storing the images is displayed here if the check mark is set. The target directory must not be changed.
4	The format in which the camera saves the images permanently is set here. The default format is yyyy-MM-dd_HH-mm-ss.

Table 4-3 Section Target

4.4 Icon in notification area

After starting Simpati TimeLabs, the icon of Simpati TimeLabs is displayed in the notification area of the computer's taskbar .

If you click on the icon, a menu with functions opens.

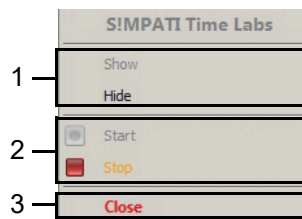


Fig. 4-4 Menu called up via icon in notification area

No.	Explanation
1	Opens/closes the main window of Simpati TimeLabs.
2	Starts/stops the image recording.
3	Exit Simpati TimeLabs.

Table 4-4 Menu called up via icon in notification area

4.5 Graphic analysis with software module »VisuWin«

4.5.1 Note on the total number of channels

NOTICE

Data loss when exceeding the total number of channels


When the service data are recorded, the total number of channels must not exceed 128. If this is the case, an error message is displayed and VisuWin will be closed.

4.5.2 Opening VisuWin

Procedure:

- ▶ In Simpati, right-click on the device and select **Analyse graph..**

or

- ▶ Select the VisuWin icon in the start menu of the computer 

or

- ▶ Enter **VisuWin.exe** in the search field of the computer and select **VisuWin.exe**.

4.5.3 Overview of the graphic analysis

Instructions for VisuWin can be called up in the menu bar of VisuWin via the **Help** menu.

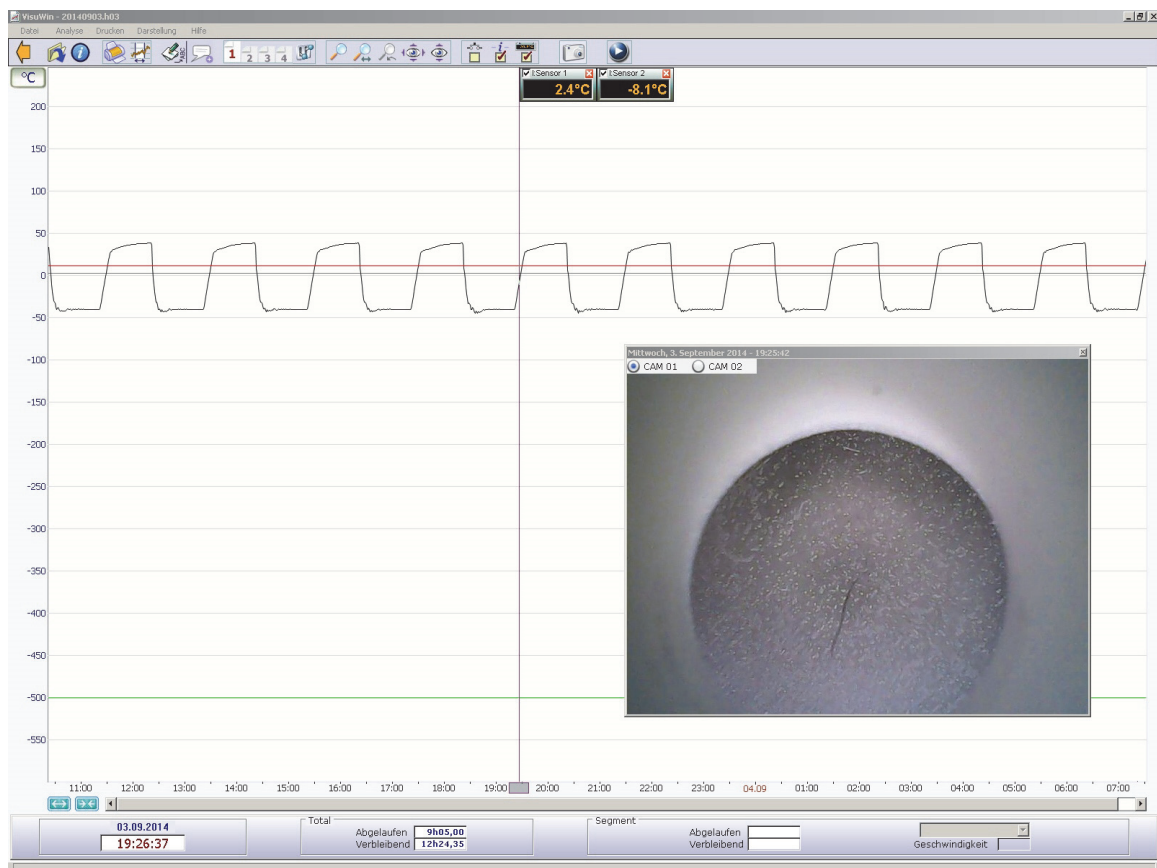


Fig. 4-5 Graphic analysis with image display shown (example illustration)



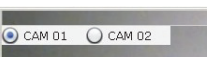
Icon	Explanation
	The image display can be shown and hidden using the camera icon. This button is also used to update the images while the display is on.
	The time for which the image and the measurement values are required can be selected using the slider.
	Every camera on file is shown in the image display. You can switch to the images by clicking on the desired camera.

Table 4-5 Graphic analysis

4.5.4 Image display

The size of the image can be increased or decreased with the mouse pointer by pressing the left mouse button. This setting is then saved. The window can be moved.

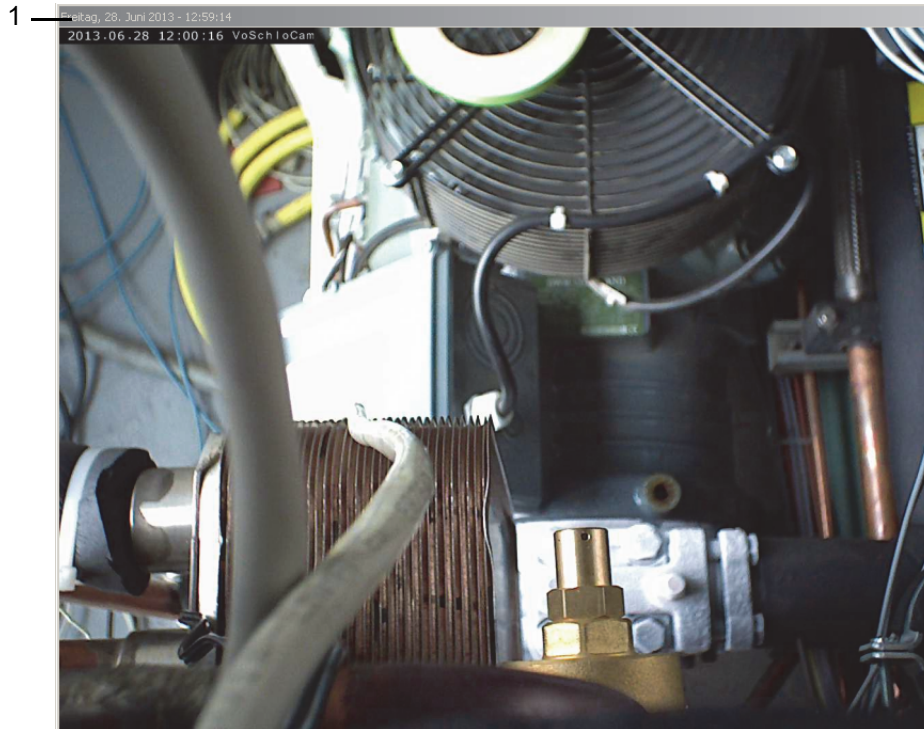


Fig. 4-6 Image display in the graphic analysis (example illustration)

No.	Explanation
1	Displays the time (date, time) at which the image was taken.



Table 4-6 Image display

5 OPERATION

5.1 Opening Simpati TimeLabs

Simpati TimeLabs is stored in the same folder as the Simpati software.

Procedure:

- ▶ Select the shortcut of Simpati TimeLabs on the desktop  .
- or
- ▶ Select the Simpati TimeLabs icon in the start menu of the computer  .
- or
- ▶ Enter **SimTimeLabs** in the search field of the computer and select **SimTimeLabs**.
- ✓ The main page of Simpati TimeLabs will be displayed.

5.2 Configuring the recording

Up to 6 cameras can be configured per system and used for recording images. The configuration of each individual camera can be accessed and edited via the tabs **Cam01** ... **Cam06**.

Prerequisite:

- Camera must be integrated into the network. Contact your network administrator.
- The IP address of the camera must be known. Contact your network administrator.
- The access data set in the camera (password and user name) must be known.

Procedure:

Settings in section »Sources«

- ▶ In the drop-down list **Chamber**, select the system for which camera images are to be recorded.
- ▶ Select the desired tab on which the configuration for a camera is to be saved (**Cam01** ... **Cam06**).
- ▶ Activate the selection field **Enable**.
- ▶ Select the camera type used. To do so, activate the option **Mobotix**, **LevelOne** or **Edimax**.
- ▶ Only for camera type **Mobotix**: Select the sensor whose images are to be used. To do so, activate selection field **Cam 1 (right)** and/or **Cam 2 (left)**. If both sensors are activated, 2 images are displayed in VisuWin.
- ▶ Enter the set IP address of the camera in the field **Source Address**.
- ▶ Activate the field **Use Authentication** and enter the user name and password set for the camera.
- ▶ Select **[Test connection]**.
- ✓ If a live image of the camera is displayed, there is a connection to the camera.

- ▶ In order to rotate images:
 - ▶ Activate the selection field **Rotate**.
 - ▶ Activate option **90°**, **180°** or **270°**.
- ▶ In the drop-down list **Extension**, select the desired image file format.

Settings in section »Target«

- ▶ Set when to record the images:
 - ▶ To start image recording automatically when Simpati archiving is active, activate the selection field **Archiving the images only when an Simpati-Archive is running**.
 - ▶ To start image recording automatically when a specific digital channel is set, activate the selection field **Archiving the images only when the following digital channel is set** and select the desired digital channel in the drop-down list.
- ▶ Set the image recording rate:
 - ▶ To use the recording rate of the measurement data of the system, activate the selection field **Get archiving rate from chamber**.
 - ▶ To set the image recording rate yourself, enter the desired rate in the field **Image Archiving Rate** (setting range: 5 sec ... 99 h 59 min 59 sec).
- ✓ The calculated runtime is displayed in the field **Archiving Duration (Calculated)**.
- ✓ The field **Archiving End (Calculated)** shows who stops the archiving.

5.3 Saving the configuration of a recording

Procedure:

- ▶ To save the current configuration as the default configuration, select **File > Save [Default]** from the menu bar.
- ▶ To save the current configuration under a freely selectable name, select **File > Save as** from the menu bar.

5.4 Loading the configuration of a recording

Prerequisite:

- A configuration must have been saved.

Procedure:

- ▶ Select **File > Load configuration** from the menu bar.
- ✓ The dialog box for selecting a file appears.
- ▶ Open the desired configuration.

5.5 Starting the recording

Prerequisite:

- You must have configured a recording.

Procedure:

- ▶ Open or configure the desired recording.
- ▶ To use only specific cameras for recording, select the corresponding camera tab and check or uncheck the selection field **Enable**.
- ▶ To start the recording, select **[Start]**.
- ✓ The recording starts. The section **Image Counter** shows how many images are currently being recorded. The green bar indicates the remaining share of storage time.
- ▶ To hide the window of Simpati TimeLabs, select **[Hide]**.
- ▶ To display the window of Simpati TimeLabs, select the icon of Simpati TimeLabs in the notification area and select **[Show]**.

5.6 Stopping the recording

Procedure:

- ▶ Select **[Stop]**.
- ✓ A query is displayed asking whether the image archiving should be stopped.
- ▶ Select **[Yes]**.

5.7 Closing Simpati TimeLabs

Procedure:

- ▶ Select **[Close]**.

6 ADVANCED FUNCTIONS

If you are not using any of the camera types specified in Simpati TimeLabs, you will need to make additional settings. The following settings must be made differently from the settings described in chapter → 5 »Operation« (page 17).

Prerequisite:

- The camera must store an image in a directory on the Simpati computer at least every 5 seconds.
- The image must always be stored using the same file name, so every 5 seconds an updated image is in the directory.
- The image must be in JPEG format.

Procedure:

- ▶ Activate the selection field **Expert**.
- ▶ Activate the option **Path**.
- ▶ In the field **Path**, enter the path to the directory where the images will be temporarily stored. The images are overwritten cyclically. When a recording is in progress, the images are saved permanently.
- ▶ To select the driver for the camera, activate the selection field **Start external program** and select the driver. Simpati TimeLabs automatically starts the selected driver.

7 TROUBLESHOOTING

Error	Cause and remedial measure
Message "runtime error 13" is displayed.	An initialization file (INI file) is corrupted. ▶ Delete the docawa.ini file in the C:\Program\DoCaWa directory. In Windows 7 this file is located in a different directory. The file can be found using the computer's search function.
Message "Timeout" is displayed.	Network connection to the camera is insufficient or interrupted. ▶ Check the connection. To do this, select [Test connection] .
The image is displayed incompletely in VisuWin.	▶ Drag the image to the centre of the screen.
No image is displayed in VisuWin.	▶ Connect a second screen to the computer. ▶ Drag the image to the centre of the screen. Afterwards, the second screen can be removed again.

Table 7-1 Troubleshooting

8 SERVICE HOTLINE

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