

Premi®Scan Help file

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Welcome

Welcome to the Premi®Scan Help file.

With Premi®Scan it is possible to objectively measure positive and negative test results of PremiTest® by using a desktop scanner.

Requirements to operate

Operating System: Windows98 or better.

Scanner: Recommended HP Scanjet 7400 series.

Other :

20MB of free harddrive space, 32MB of internal memory (RAM).

A connection to the internet to download a Kodak Q60 Calibration Target File and to enable links to internet sites.

Computer system and Scanner :

Available at your local computer store and via www.hp.com.

Q-60 Color chart :

Available; <ftp://ftp.kodak.com/GASTDS/Q60DATA/R1-Data>

Black cloth or box :

Available via your local stores.

PremiTest® :

Available; www.premitest.com

Optional: Adobe Acrobat Reader to view the manual (downloadable at www.adobe.com)

Please read the scanner operating instructions before performing any measurements.

User License

DSM Premitest B.V.
Premi@Scan
License Agreement

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July 2003
DSM Nutritional Products
DSM PremiTest BV
Postbox 1163
6160 BD Geleen
tel.: + 31 46 4763573
e-mail: info.premitest@dsm.com
website: www.premitest.com

Selecting a test type

Select a test type from the pull-down menu.

After you have selected a test type click 'Start the test' to select the sample configuration.



Selecting sample configuration

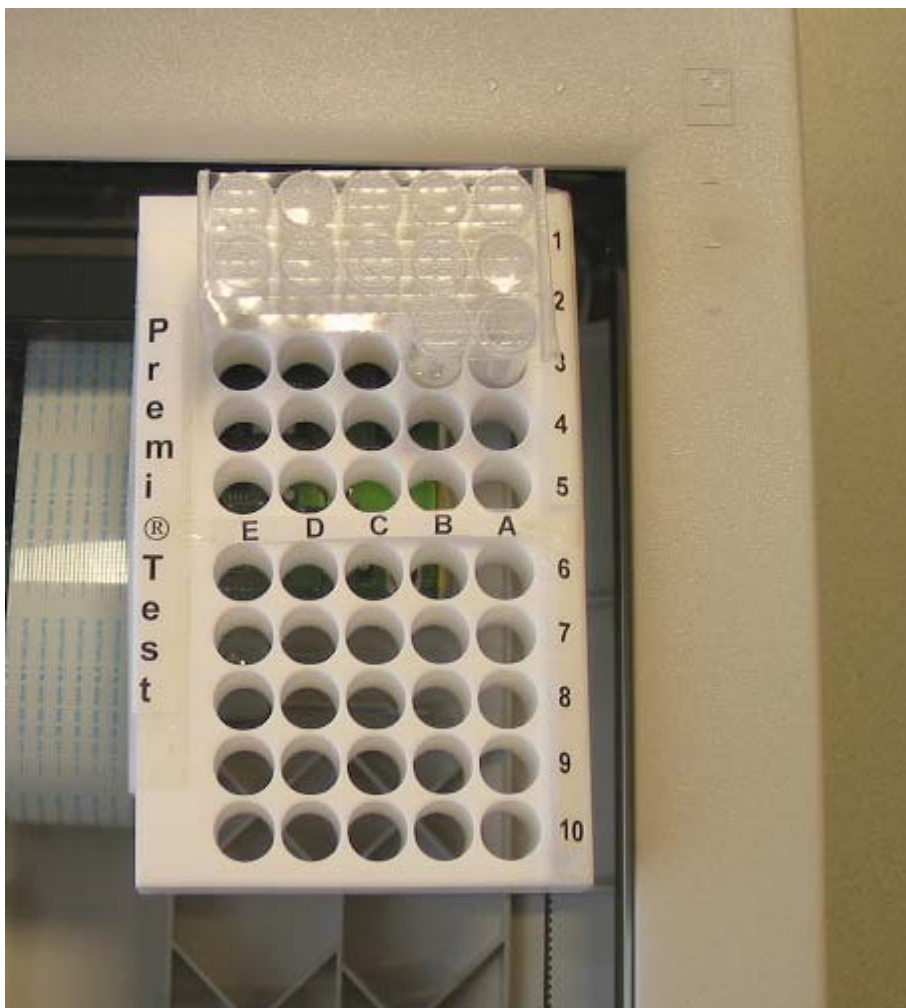
The scan bed is divided into 4 quarters being; upper right hand (position 1), upper left hand (position 2), lower right hand (position 3) and lower left hand (position 4). Templates are to be positioned into the quarters. Only one template can be positioned into each quarter.

WARNING;

Ensure scan bed to be clean before placing templates.

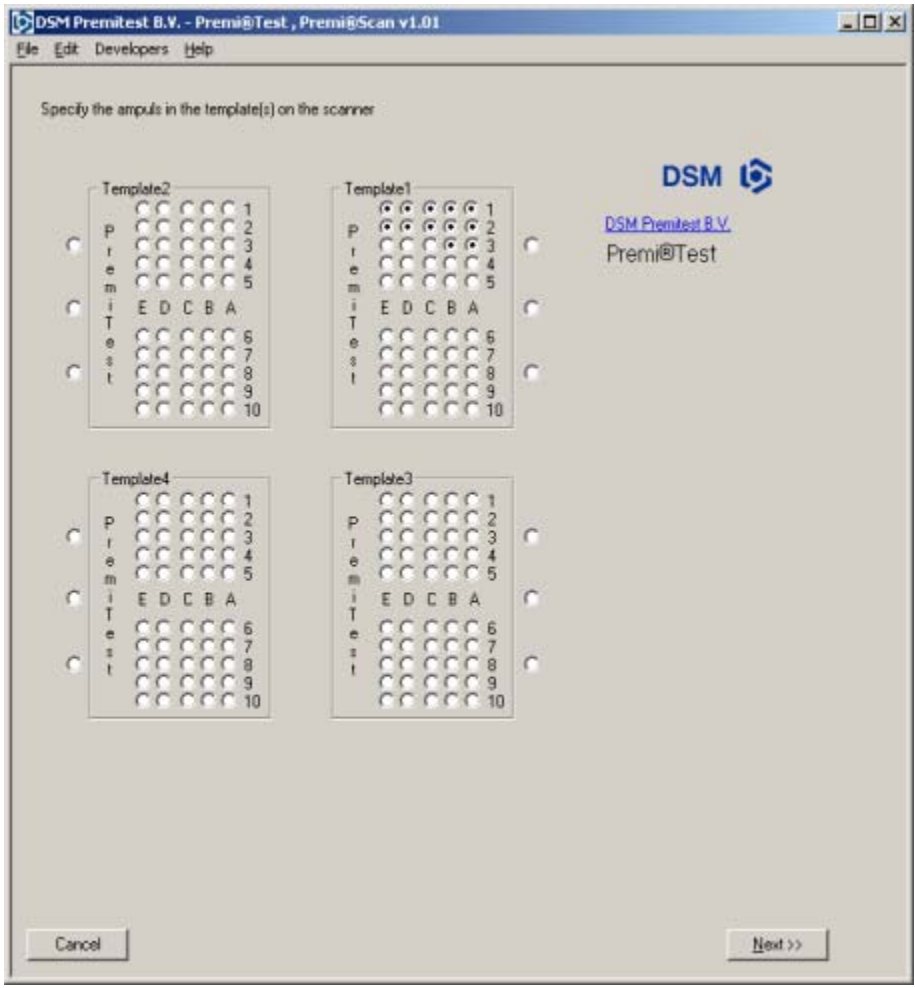
Ensure templates to be dry and cleaned before placing on a clean scan bed.

Start placing the first template at location 1 (upper right hand location of the scanner). Continue with location 2 through 4 if there are more templates to measure.



To select the samples you have placed on the scanned for each template click in the white circle that corresponds to the last sample-position used for that template. In our example we click on the third row, second circle from the right to select the first 12 positions of template1. In case you do not use all sample-positions you can 'unselect' them by clicking on their corresponding circles.

To select all samples in one half or the whole multiplate at once click on the circles next to the multiplate.



Note: after the scanning and calculation of the test results the templates will have a bottom view and (therefore a mirrored) image on the screen.

After you have selected the sample configuration click 'Next' to Enter the test information.

Entering test information

To generate a valid test report you **must** fill in the following fields :

- The test kit lot number
- The name of the Operator

The descriptions of the samples

- type the descriptions
- load the descriptions
- save the descriptions

Before entering 'Scan' ensure a black background by draping a black cloth or using a black tray.

Attention: The black cloth or black tray should be placed gently to avoid a displacement of the templates from their correct position in the quarters.

After all information has been entered and the background has been provided press 'Scan' to scan the tests.

When the scan has successfully completed and all multiplates have been localized you can evaluate the test results.

The localization of the templates may fail with one of the following error messages:

- Number of templates does not match scan
- Template-size found in scan is incorrect
- Not all specified ampuls in template X could be located

If such an error occurs, please check the following

- Check if your selection matches the samples in the templates
- Check if all your ampuls are dry
- Verify that a clean and dark cloth or tray has been used.

See Troubleshooting template localization & failures in measuring for more information.

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File Edit Developers Help

Enter test information

Testkit lot number

Operator

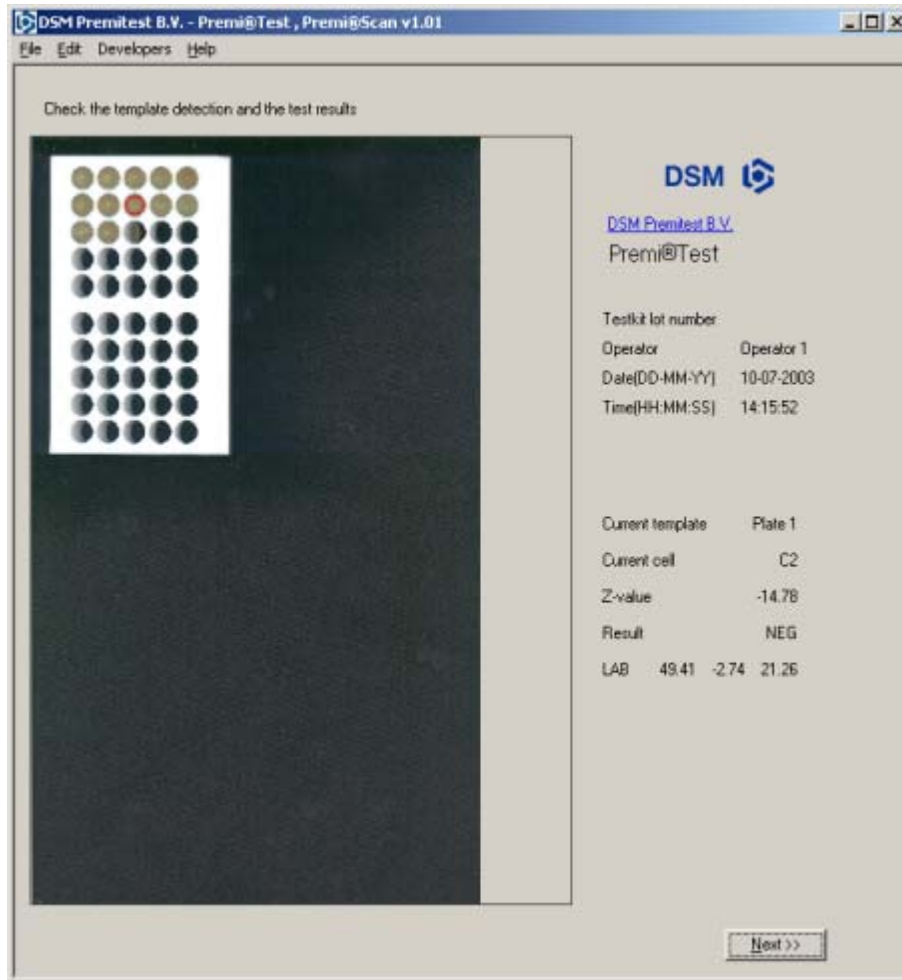
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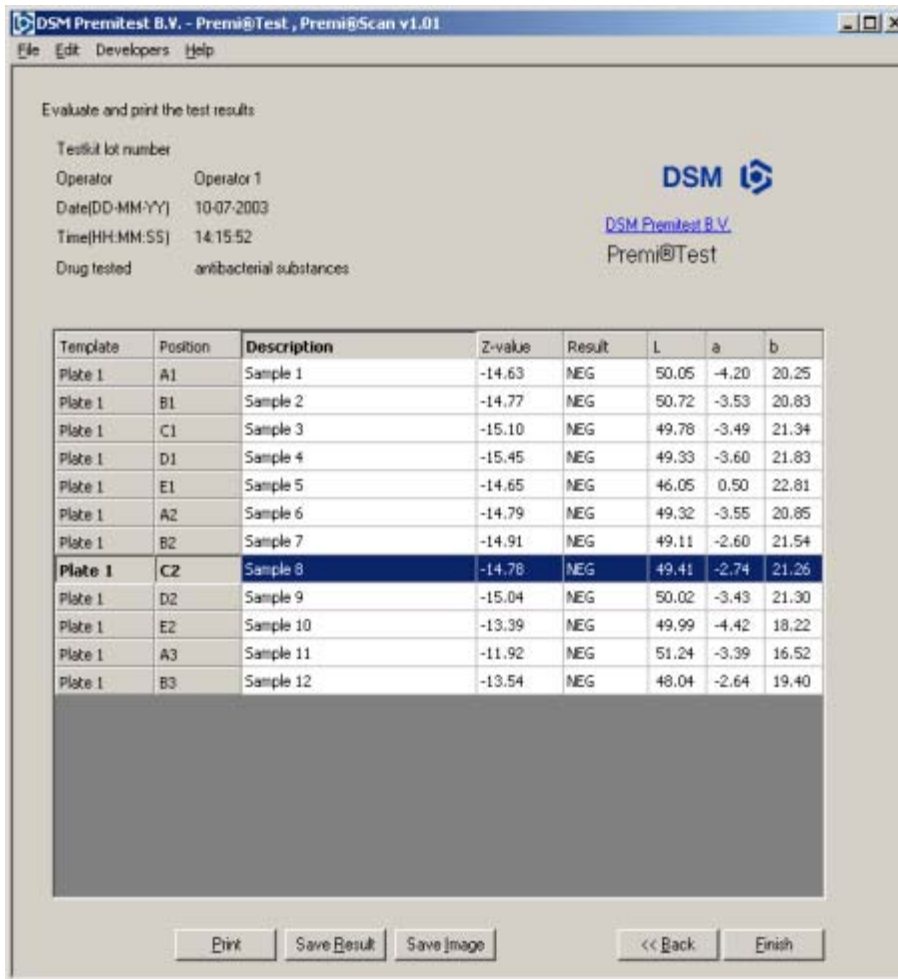
Plate Area	Position	Description
Plate 1	A1	Sample 1
Plate 1	B1	Sample 2
Plate 1	C1	Sample 3
Plate 1	D1	Sample 4
Plate 1	E1	Sample 5
Plate 1	A2	Sample 6
Plate 1	B2	Sample 7
Plate 1	C2	Sample 8
Plate 1	D2	Sample 9
Plate 1	E2	Sample 10
Plate 1	A3	Sample 11
Plate 1	B3	Sample 12

Cancel

Evaluating test results



You can evaluate the test results by moving your cursor over the samples in the scan. By clicking it a sample will be selected. With a double-click or by first selecting a sample and then pressing 'Next' this selection is also active in the result list.



By double-clicking on a row in the result list you will return to the previous screen with the clicked row as the selected sample.

Before you finish the test you **must** at least print the test results. It is also possible to save the test results and to save the scan image.

When you have finished printing (and saving) you can press 'Finish' to end the current test. You are then returned to the selection of a new test type.

Scanner calibration

For the measurement of color with a standard desktop scanner in a way similar to the way a human perceives color, it is necessary to calibrate the scanner with a standard color reference. The color reference used in the calibration procedure is a Kodak Ektacolor Professional Paper (5x7 inch) Q-60R1 Color Input target. See Q-60 for more information on this topic.

Before calibration

Before the calibration procedure is started, please make sure the following conditions are met:

- The scanner is in operating condition.
- The scanner plate is dry and clean.
- A Kodak Q-60 Color Input target, with its corresponding data file, is available. See Kodak Q-60 Color Input target for more information.

Calibration steps

The scanner calibration consists of following steps:

1. Select 'Calibration' from the 'File' menu.
2. Select the name and location of the Q-60 data file by clicking on the next button
3. Take the Q-60 photo out of its plastic cover and place the Q-60 photo on the **upper** part of the scanner in a centered position. Ensure that the target is lying flat on the scan plate.
4. Before entering 'Scan' ensure a black background by draping a black cloth or using a black tray.
Attention; The black cloth or black tray should be placed gently to avoid the Q-60 photo to be displaced from its position on the scan bed.
5. Scan the Q-60 photo by clicking the next button in the user interface.
6. Place the Q-60 photo on the **lower** part of the scanner in a centered position. Ensure that the target is lying flat on the scan plate.
7. Scan the Q-60 photo by clicking the next button in the user interface.
8. Look at the result message.

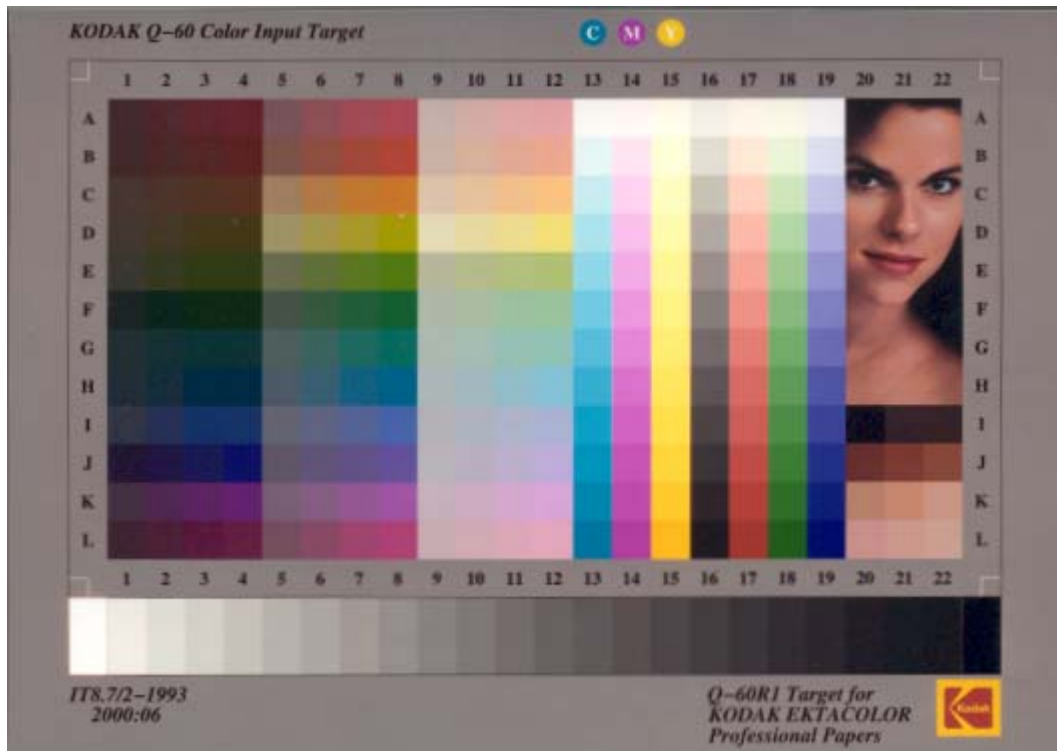
If the computation of the calibration succeeds the results are stored. These results are automatically reloaded each time you start the application.

The scanner calibration procedure needs to be repeated every month in order to verify the performance of the scanner. At startup the application will automatically give a warning to calibrate when this period has passed.

See Troubleshooting calibration for more information in the case the calibration fails.

Kodak Q-60 Color Input target

The Kodak Ektacolor Professional Paper Q-60R1 Color Input target is a 5x7 inch photo as shown below.



In this document Q-60 is used as an abbreviation. The Q-60 is based upon ANSI IT8.7/2 and ISO 12641 standards. Each Q-60 photo has a batch number, which can be found in the lower left part of the photo. The batch number is of the form YYYY:MM (where Y is year and M is month).

Q-60 Data file

The Q-60 photo has a corresponding data file, which contains the accurate color measurements. This file is provided by Eastman Kodak Company at <ftp://ftp.kodak.com/GASTDS/Q60DATA/R1-Data>. Please download the data file which corresponds to your batch number. You can do this by selecting it in your browser and then saving it to your local harddrive. If your batch number is of the form YYYY:MM (where Y is year and M is month) the corresponding file will be R1YYYYMM.Q60.

Availability

The Kodak Q-60 Ektacolor Professional Paper Q-60R1 Color Input target can be obtained from your local specialized photography shop. It is advisable to purchase two or more copies of the Q-60 Input target, in case your target gets damaged. Further information on the availability can be found at <ftp://ftp.kodak.com/GASTDS/Q60DATA>.

Storage and handling

For storage and handling instructions please read the file TECHINFO.PDF which is available at <ftp://ftp.kodak.com/GASTDS/Q60DATA>.

Troubleshooting calibration

The computation of the scanner calibration may fail for several reasons:

1. The scan plate is dirty. Please clean the scanner plate.
2. The Q-60 Color Input target is combined with the wrong data file. Please confirm that the data file you have selected is a valid Q-60 data file and that it corresponds to the batch of your Kodak Q-60 Color Input target. Note; Condense on the bed should be avoided when warm wet plates are placed on the scan bed.
3. The Q-60 Color Input target is damaged. In case of a bended target use scanner lid to ensure that the target is lying flat on the scan plate.
4. The scanner fails to provide consistent color scans. This is a hardware problem, please replace your scanner.

Troubleshooting template localization & failures in measuring

When an image has been acquired by the scanner the application will automatically search for the templates and samples in the image. These localization steps may fail for several reasons:

1. The background of the image is not dark enough. Please use a dark background as described in scanner operating instructions.
2. The scan bed is polluted. Please clean and dry the scan bed before operation.
3. The ampuls are wet (e.g. small drops on the bottom). Please make sure they are dry.
4. The wrong samples have been selected in the sample configuration dialog.
5. The templates have been placed incorrectly. A template should have a minimum distance of 1 cm (0.4 inch) to the border of the scan bed and other multiplates. Please consider the fact that most scanners do not scan the entire scanbed but only the top right part of it. Therefore do not position the templates too close to the left or to the bottom.
6. One of the templates is heavily rotated. Please align the template with the borders of the scan bed, while keeping a minimum distance of 1 cm (0.4 inch).

Troubleshooting Export Data

In order to analyze the testdata it is possible to copy/paste the results into a spreadsheet application. Export can also be done by saving the results and importing the result-file into a spreadsheet program. If the international settings (such as; using dots or comma's) of your PremiScan PC and the PC running the spreadsheet do not match, the spreadsheet program may not be able to interpret the numbers.

WARNING: NUMBERS ARE FORMATTED ACCORDING TO THE INTERNATIONAL SETTINGS OF THE COMPUTER THAT RUNS PREMISCAN.

Scanner operating instructions

The image acquisition in Premi®Scan is done with a Hewlett Packard ScanJet 7400C desktop scanner. This ScanJet model (HP PrecisionScan Pro driven) has proven to be a fast and reliable scanner, suitable for color measurements. In order to obtain accurate measurement results it is important to create a consistent environment in which the scanner will operate.

ATTENTION : Operating environment

THE SCAN BED OF THE SCANNER SHOULD BE CLEANED AND DRIED BEFORE EACH MEASUREMENT OR CALIBRATION.

THE PREMITEST® TESTS AND TEMPLATES SHOULD ALSO BE AS DRY AND CLEAN AS POSSIBLE.

Black background

For accurate measurements the scanner needs a black background. The standard scanner cover is *not* sufficient for this purpose. A black background can be realized in two ways:

1. By draping a black cloth over the scanner and closing the cover. The material of the cloth should be as non-reflective and as black as possible. Furthermore, the cloth must show a minimum of structure, i.e. the individual threads in the cloth must be indistinguishable.
2. By using a closed, black tray, instead of the standard scanner cover. The material of the tray should be non-reflective. Furthermore corners, edges and other structure elements of the tray must not be visible on the scanned image.