InkZoneMove User Guide

Find more information about the product on our website: http://www.digiinfo.com

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Identifier Installation and configuration manual - English

Target group Operator

Product InkZoneMove

Version for v 4.0 and higher

Date August 2024

Article code IZM026-EN

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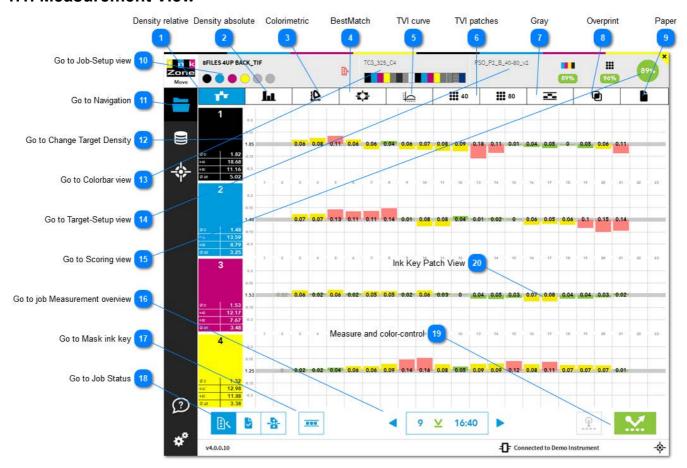
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1. Screens Online Manual

1.1. Measurement View



Density relative



See chapter 1.1.2 Density Relative View

Density absolute

See chapter 1.1.3 Density Absolute View

Colorimetric L

See chapter 1.1.4 ColoriMetric View

BestMatch

See chapter 1.1.5 BestMatch View

1. Screens Online Manual page 6/258





See chapter 1.1.6. Dotgain View



See chapter See chapter 1.1.7. Gray View



See chapter 1.1.8. Overprint View





See chapter 1.1.2. Job-Setup view





Navigate from here to the job setup, reporting etc. pages See chapter 1.1.1. Navigation area



Click on the unit number and change target density
See chapter 1.1.2.1. Change target density for all keys

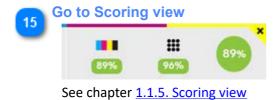
1.1. Measurement View page 7/258



See chapter 1.1.3. Colorbar view



See chapter 1.1.4. Target-Setup view





See chapter 1.1.13. Job Measurement Overview



See chapter 1.1.11. Mask ink key / unit



See chapter 1.1.12. Job Status



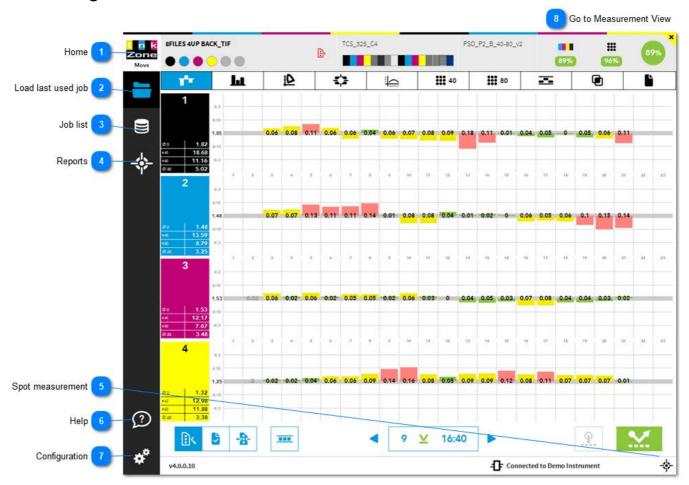
Ink Key Patch View

See chapter <u>1.1.15</u>. <u>Measure and Transfer Button</u>

See chapter <u>1.1.14</u>. Ink-Key Patch View

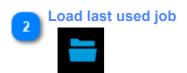
1.1. Measurement View page 8/258

1.1.1. Navigation Bar

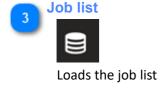




Click on the logo to return to the home screen



Loads the last used job





1.1.1. Navigation Bar page 9/258



Spot measurement



Changes to the spot measurement window, see here 1.1.16. Spot Measurement



Help



Context sensitive help button. Shows a help page for the currently active screen.



Configuration



Opens up the software configuration page.

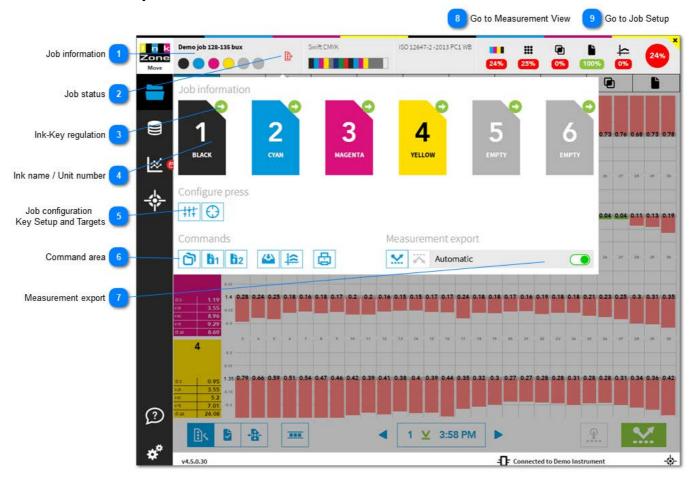


Go to Measurement View

1.1. Measurement view

1.1.1. Navigation Bar page 10/258

1.1.1.1. Job Setup and Commands





A click here opens the setup information view from the current job.



Indicates job status as MakeReady / OK-Sheet / Production Change job status, see here: 1.1.12. Job Status



Status MakeReady



Status OK-Sheet / Production

Ink-Key regulation



In the job setup screen click on the unit to display the ink-key regulation modifier.

See here: 1.1.1.1.1 Ink-key Regulation modifier

Ink name / Unit number





Displays the ink name and its unit number

Job configuration **Key Setup and Targets**







Select predefined ink-key groups. See here: 1.1.2.4. Change Target Density with <Group Ink-Keys> feature



Set color targets and ink-key mask from existing job, see here: 1.1.1.1.2. Targets

from Existing Job

Command area

Commands



Click on the logo to return to the home screen



Clone current job



Set current job setup as template nr. 1. A job template reuses targetset, colorbar, print sequence and machine setting



Set current job setup as template nr. 2. A job template reuses targetset, colorbar, print sequence and machine setting



Create an archive jobs in InkZonePerfect



Creates an ink-preset linearization job in InkZonePerfect





Activate the automatic measurement data export such as SVF etc after every scan.



Data from units before perfector



Data from units after perfector

See setup here: 1.2.8. Data Export Setup

8

Go to Measurement View

1.1. Measurement view



Go to Job Setup

1.3.2. New Job

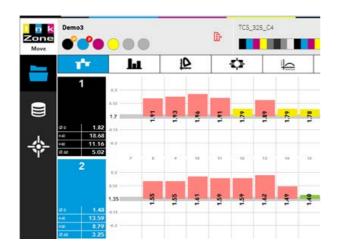
1.1.1.1.1 Ink-key Regulation Modifier





Change the regulation strength in 5 steps for increase or decrease the strength.

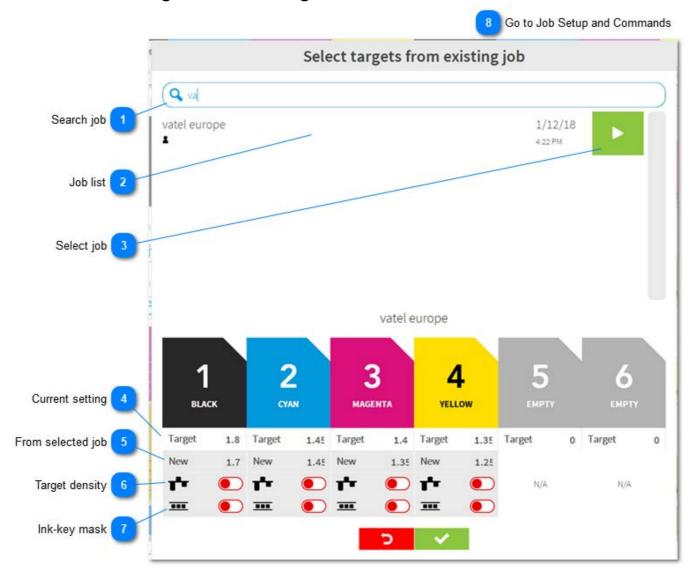
The selected level is indicated in the measurement view top left corner. In the screenshot below the units for black and cyan were changed for stronger regulation.



Go to Job-Setup and Commands

1.1.1.1. Job Setup Information

1.1.1.1.2. Reuse targets from existing Job

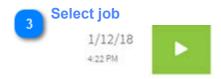




Search here for the job from which the targets should be used



Job list with all matching jobs to the search criteria



Select the job with the green button



Current target density

From selected job
New 1.7

Target density from selected job

Target density

Enable new target density for this unit

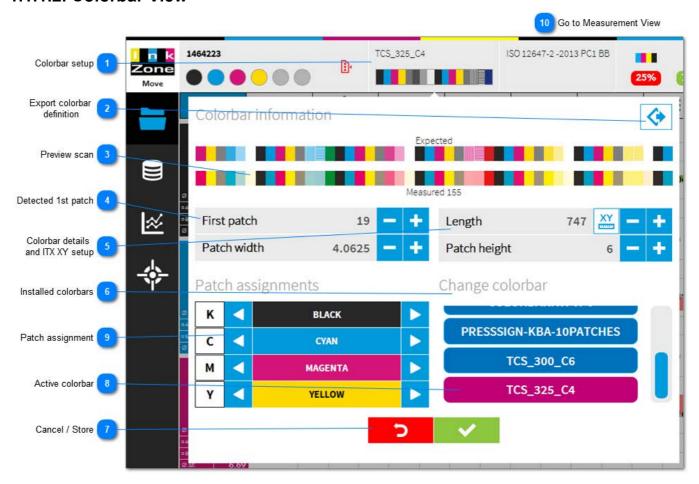
7 Ink-key mask

Enable ink-key mask for this unit

Go to Job Setup and Commands

1.1.1.1. Job Setup Information

1.1.1.2. Colorbar View





Click in the colorbar area for detailed information on the measured colorbar and to change the setup.



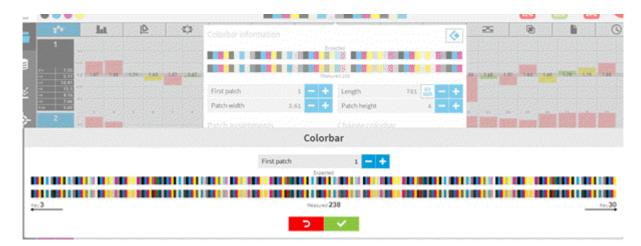
Export the current selected colorbar as a colobar definition file CBF.



Top colorbar shows the colorbar definition, the expected. The colorbar below displays the patch data received from the scanning device.

Click on **Measured** colorbar to preview expected versus measured colorbar:

1.1.1.2. Colorbar View page 18/258



Detected 1st patch

First patch

19 - +

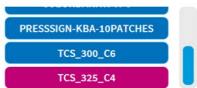
Indicates the number of the first patch from the colorbar definition data. The first patch can be looked when using the IntelliTrax or EasyTrax.

Colorbar details and ITX XY setup

Length 747 XY -

Indicates the length in mm. Use the XY button to setup the XY parameter for IntelliTrax, see here: 1.1.1.2.1. IntelliTrax XY coordinates. Sample setup 1.1.1.2.2. IntelliTrax XY sample

6 Installed colorbars
Change colorbar



Shows all colorbars within InkZoneMove

Cancel / Store

Accept or discard changes

Active colorbar

TCS_325_C4

Currently selected colorbar

Patch assignment

1.1.1.2. Colorbar View page 19/258

Patch assignments



Printed color to colorbar patch assignment. Change with left and right arrow.

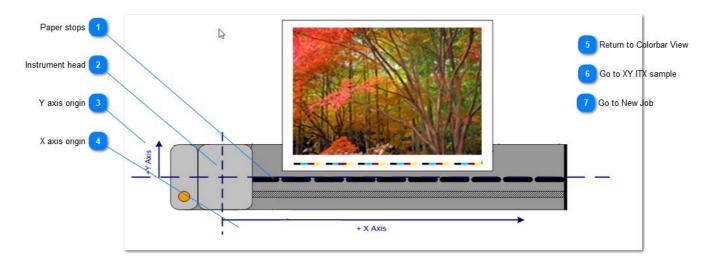


Go to Measurement View

1.1. Measurement View

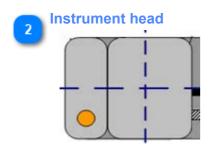
1.1.1.2. Colorbar View page 20/258

1.1.1.2.1. IntelliTrax XY coordinates



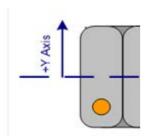


Align the job sheet to the paper stop when using XY measurement.



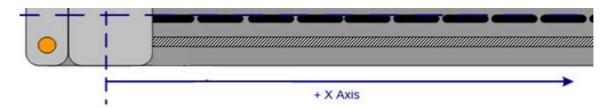
IntelliTrax head in idle position.

Y axis origin



Y axis, starts from paper stop, vertical.

X axis origin



X axis, in instrument head movement direction, horizontal.

Return to Colorbar View

1.1.1.2. Colorbar View

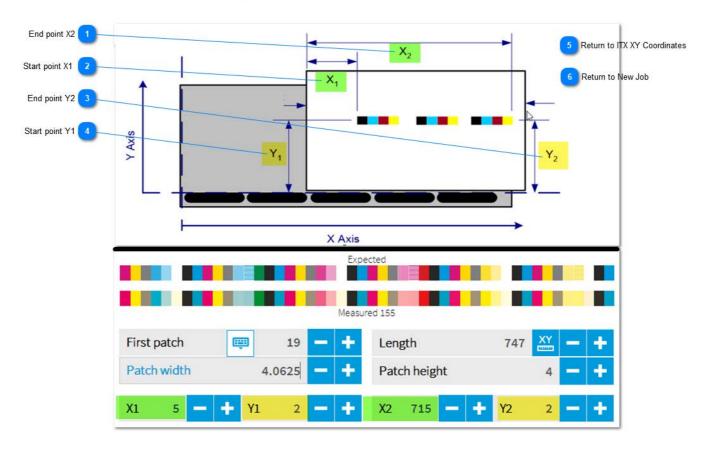
Go to XY ITX sample

1.1.1.2.2. IntelliTrax XY sample

Go to New Job

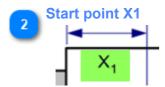
1.3.2. New Job

1.1.1.2.2. IntelliTrax XY sample

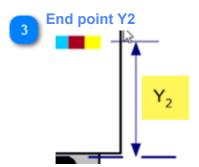




X2 is the distance from the near sheet edge to the **end** of the color patch.

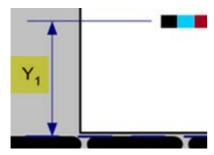


X1 is the distance from the near sheet edge to the **beginning** of the color bar.



Y2 is the distance from the paper stop to the **center** of the last color patch.

Start point Y1



Y1 is the distance from the paper stop to the **center** of the color bar.

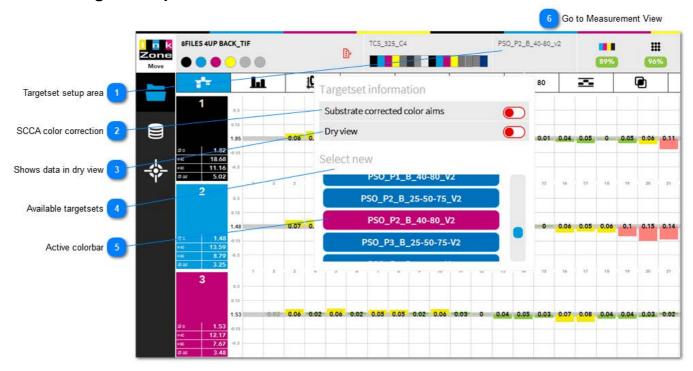
Return to ITX XY Coordinates

1.1.1.2.1. IntelliTrax XY coordinates

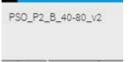
Return to New Job

1.3.2. New Job

1.1.1.3. Target-Setup View



Targetset setup area



Currently selected targetset

SCCA color correction

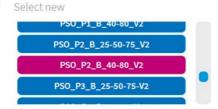
Substrate corrected color aims

Activate SCCA, **S**ubstrate **C**orrected **C**olorimetric **A**ims. Corrects the Lab target of solids to match proof and press sheet when the printing substrate to be used has a color that differs from that of the reference printing.

Shows data in dry view

Displays the measurement data in dry view. Works with any targetset with a wet-dry definition.

Available targetsets



List with all defined targetset within IZMove. Color differences and scoring is recalculated after targetset change.

5

Active colorbar

PSO_P2_B_40-80_V2

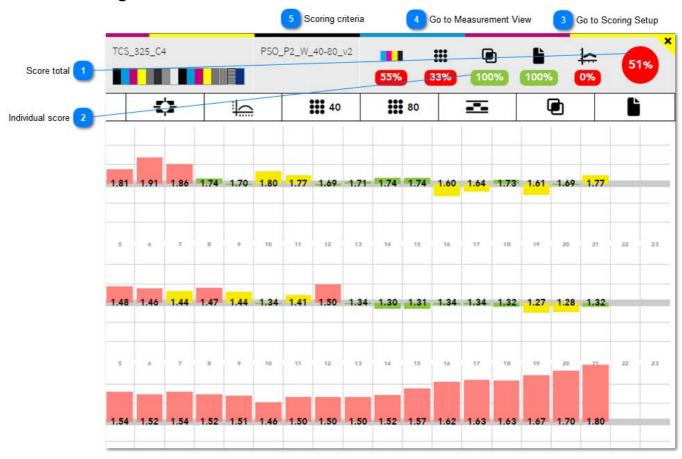
Currently selected targetset.

6

Go to Measurement View

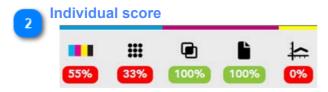
1.1. Measurement View

1.1.1.4. Scoring View





Shows total score from the current sheet.



Shows separate scores for every criterion. See all criteria here: <u>1.2.5.3. Scoring Criteria</u>

Go to Scoring Setup

1.2.5. Scoring Setup

Go to Measurement View

1.1. Measurement View

1.1.1.4. Scoring View page 27/258

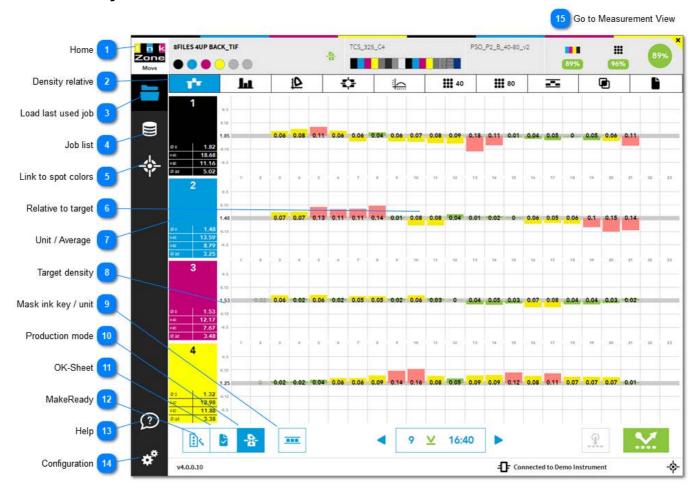


Scoring criteria

1.2.5.3. Scoring Criteria

1.1.1.4. Scoring View page 28/258

1.1.2. Density Relative View





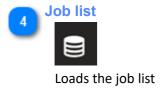
Click on it to return to the home screen



Displays the density relative view



Loads the last used job



5

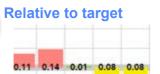
Link to spot colors



Changes to the spot color setup.

See 1.2.4. Spotcolor Setup

6



Shows measured density relative to target, like:

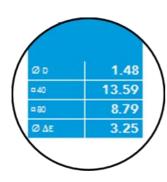
Target density 1.35 Measured density 1.40 Displayed value 0.05

7

Unit / Average



Shows average values.



Average values on:

Density TVI on 40% patches TVI on 80% patches DeltaE

8 Target density
3

1.53 0.15 1.217

Shows currently used target density for the print unit. Target density is changed by clicking on the unit number. Then use the plus and minus button for the change.

Or simply type the new target with your keyboard. See details here: 1.1.1.1. Change target density



Mask ink key / unit



Select ink key/s or unit/s which are not regulated with color control.

These key/s are also ignored by the report system.

See here 1.1.10. Mask ink key / unit



Production mode



Change to production mode.

IZReport uses only sheets which are marked as "Production" for the production report.



OK-Sheet



Sets the currently displayed sheet as an OK-sheet.

The averaged Lab value becomes the new Lab target.

The DeltaE values are recalculated when applying the OK-sheet to a previously scanned sheet.



MakeReady



Every new job is initially as MakeReady. Change to OK-sheet or Production mode. IZReport ignores all MakeReady sheets when a production report is generated.

13

Help



Context sensitive help button. Shows the help page for the currently active screen

14

Configuration



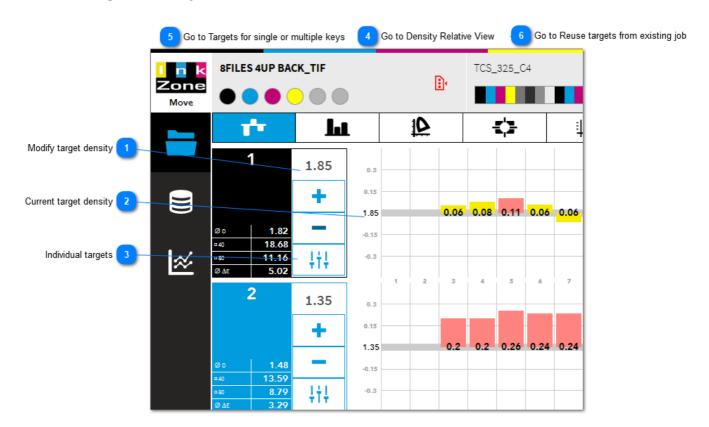
Open up the software configuration page

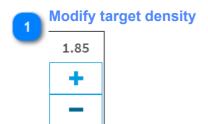
15

Go to Measurement View

1.1. Measurement view

1.1.2.1. Target Density





Change target density for all ink keys with the +/- buttons



Indicates the current target density (1.85) with the tolerance area in grey. Targets and tolerances are set here: 1.2.3. Targetset & Print Tolerance Setup



Change to the individual target density setup.

See details here: 1.1.1.2. Change target density for individual keys

1.1.2.1. Target Density page 32/258

Go to Density Relative View

1.1.2. Density Relative View

Go to Targets for single or multiple keys

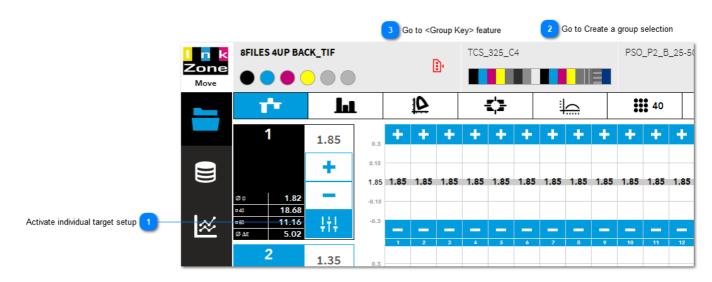
1.1.2.2. Change Target Density for Single or Grouped Keys

1.1.1.1.2. Reuse targets from existing Job

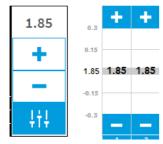
Go to Reuse targets from existing job

1.1.2.1. Target Density page 33/258

1.1.2.2. Change Target Density for Single or Grouped Keys



Activate individual target setup



Set individual target densities for every ink key. Press the plus minus buttons from the key to change targets.

With an ink key group selection several ink keys are changed at once.

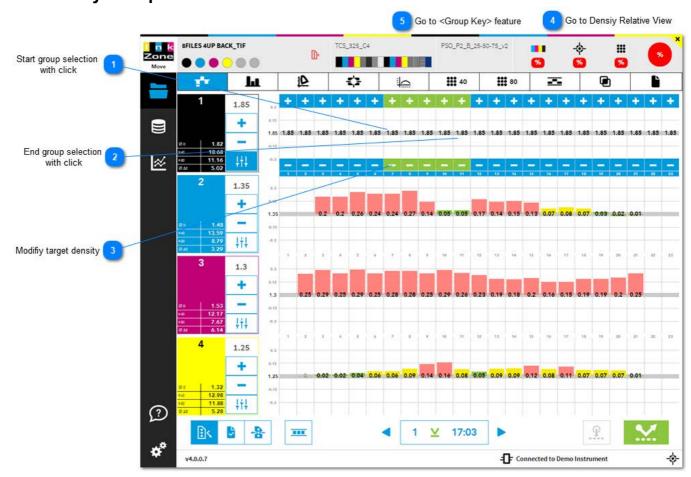
See also the feature ink-key groups: 1.1.2.4. Change Target Density with Group Ink-Keys feature

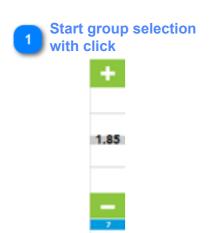
- Go to Create a group selection

 1.1.2.3. Group Selection
- Go to <Group Key> feature

1.1.2.4. Change Target Density with <Group Ink-Keys> feature

1.1.2.3. Key Group Selection





Click on the first key from an ink-key group. The key start to blink.

2 End group selection with click



After selecting the last ink-key, an ink-key group is selected and is indicated by a green overlay on the plus and minus buttons.

Modifiy target density



Change the target density with the plus and minus button

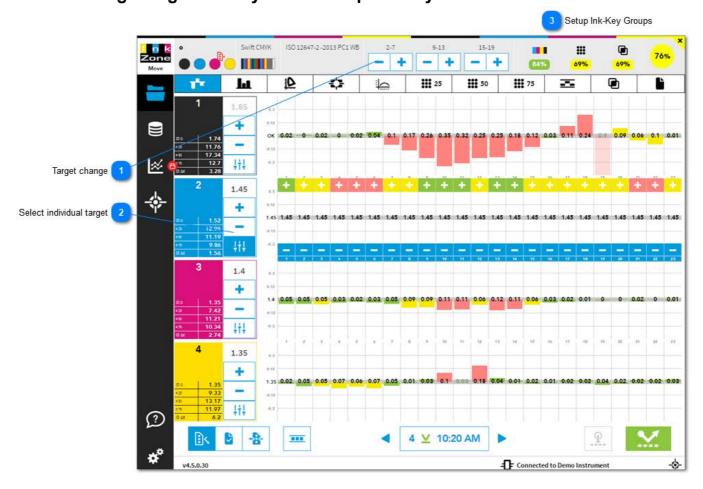
Go to Densiy Relative View

1.1.1. Density Relative View

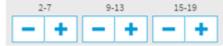
Go to <Group Key> feature

1.1.2.4. Change Target Density with <Group Ink-Keys> feature

1.1.2.4. Change Target Density with <Group Ink-Keys> feature







Change through the plus or minus button the group's ink-keys.

Select individual target



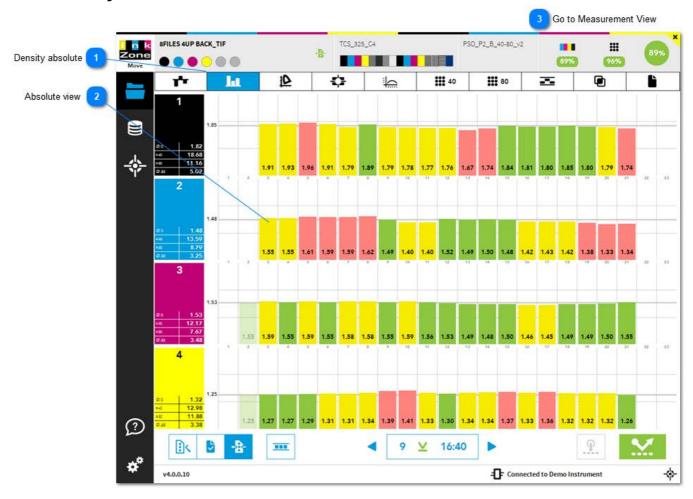
Select the icon individual density target and apply target density changes to a range of keys through the +/- buttons from (1)

Note: it's possible to select more than one unit

Setup Ink-Key Groups

To setup ink-key groups see here: 1.2.1.5. Ink-Key Groups

1.1.3. Density Absolute View



Density absolute



Displays the density relative view



Shows measured density in absolute numbers

Go to Measurement View

1.1. Measurement view

1.1.4. Colorimetric View



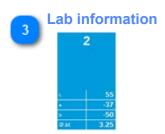
Colorimetric View

Displays colorimetric information



Displays DeltaE on every ink-key.

Select the DeltaE method in the target setup, see $\underline{\text{1.2.3.2. New Targetset}}$



1.1.4. Colorimetric View page 39/258

Shows Lab target and average DeltaE



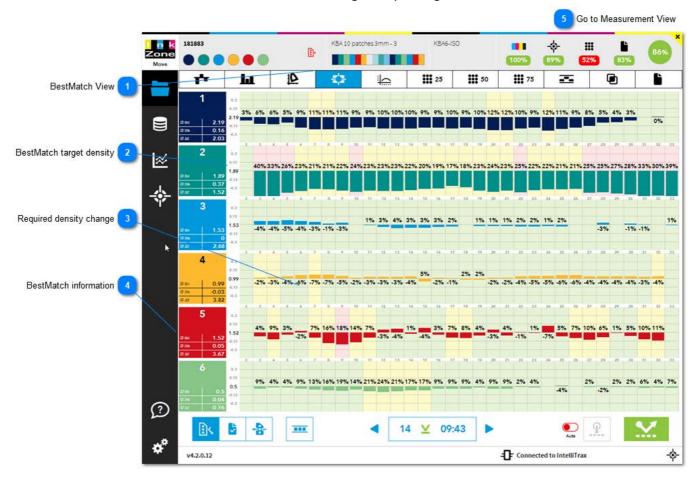
Go to Measurement View

1.1. Measurement view

1.1.4. Colorimetric View page 40/258

1.1.5. BestMatch View

Click on the unit number to enable BestMatch target for printing.





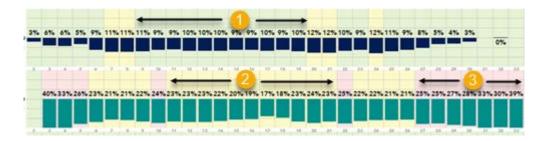
BestMatch View



Displays BestMatch information with green, yellow and red background for every key.

Background indicator:

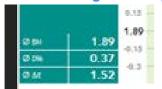
- 1) Green = color is okay and within DeltaE defined by the targetset
- 2) Yellow = color is at the edge of the tolerance
- 3) Red = out of tolerance



1.1.5. BestMatch View page 41/258

2

BestMatch target density



Shows current BestMatch target. In this sample 1.89.

	2	1.89
Ø 84	1.89	
Ø DNL	0.37	1.77
OM	1.52	

2 1.89

© ma 1.89

© ma 0.37

BestMatch **disabled** (=white background) and 1.89 is the BestMatch target

Standard target density is **enabled** 1.77 is currently active target density

BestMatch **enabled** (=blue background and BM icon next to unit number shows up) and 1.89 is the BestMatch target

Standard target density is **disabled** (=white background)

3

Required density change



Required density change, ink-key change to reach BestMatch DeltaE

4

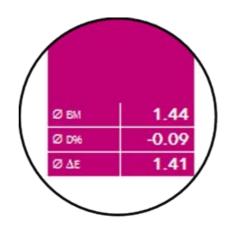
BestMatch information

Shows BestMatch information

BM target density, averaged

Required density change, averaged

Predicted BestMatch DeltaE when BestMatch target density is reached



5

Go to Measurement View

1.1. Measurement view

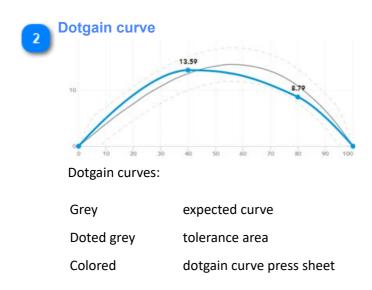
1.1.5. BestMatch View page 42/258

1.1.6. Dotgain Curve View



View Dotgain Curve

Displays dot gain curves

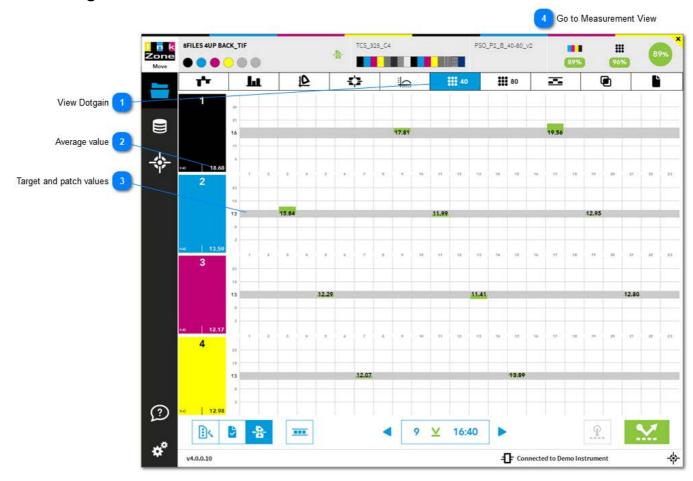


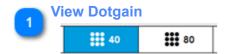


Go to Measurement View

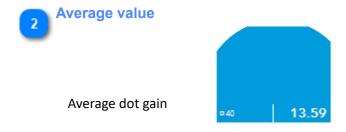
1.1. Measurement view

1.1.7. Dotgain View





Displays dot gain on measured patches





Target and measured dot gain

1.1.7. Dotgain View page 45/258



Go to Measurement View

1.1. Measurement view

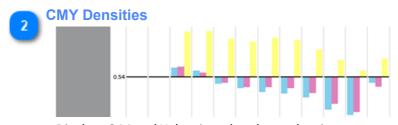
1.1.7. Dotgain View page 46/258

1.1.8. Gray View

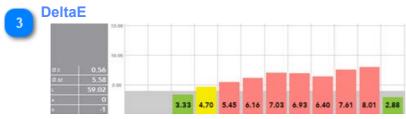




Displays grey tone information



Displays C,M and Y density related grey density target. The targetset 50% grey tone has a density of 0.54



Displays DeltaE on each key

1.1.8. Gray View page 47/258

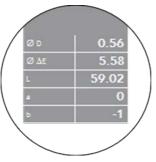
4

Target and average

	0.56
3 M	5.58
i.	59.02
	0
	-1

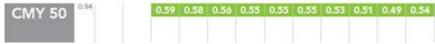
Average density Average DeltaE

Target Lab





Density for CMY



Averaged CMY density on each ink key

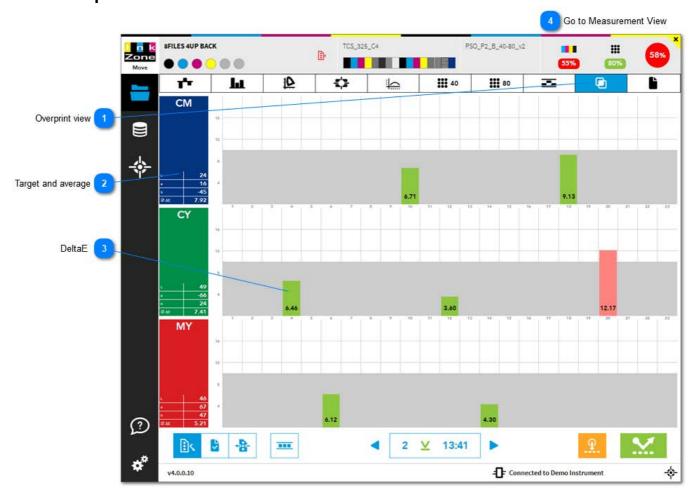
6

Go to Measurement View

1.1. Measurement view

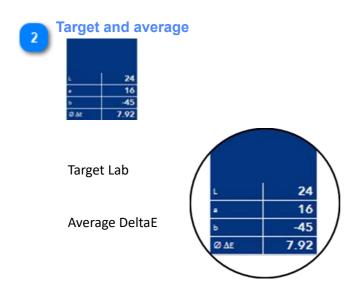
1.1.8. Gray View page 48/258

1.1.9. Overprint View

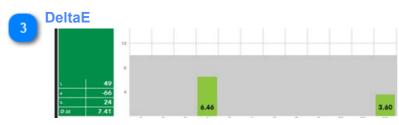




Displays overprint information



1.1.9. Overprint View page 49/258



Shows DeltaE on the overprint patches

Go to Measurement View

1.1. Measurement view

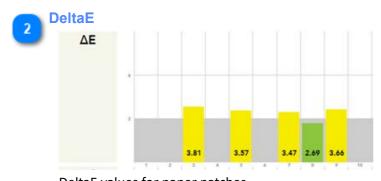
1.1.9. Overprint View page 50/258

1.1.10. Paper View





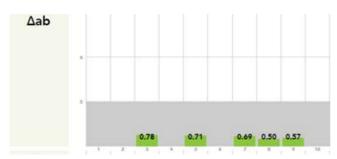
Displays information on paper measurement



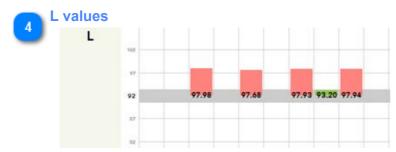
DeltaE values for paper patches

Delta ab

1.1.10. Paper View page 51/258



Delta ab values for paper patches



L value for paper patches

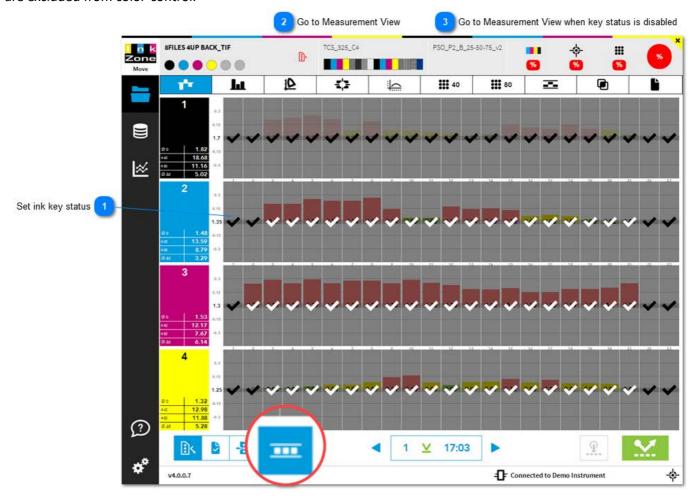
Go to Measurement View

1.1. Measurement view

1.1.10. Paper View page 52/258

1.1.11. Mask Ink-Key & Units

Disable units or single ink-keys in the mask view. The scoring is updated in real time and disabled ink-keys or units are excluded from color-control.

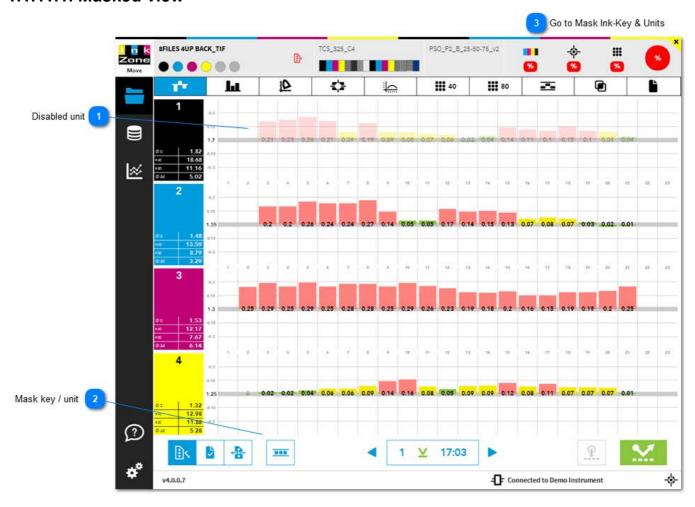


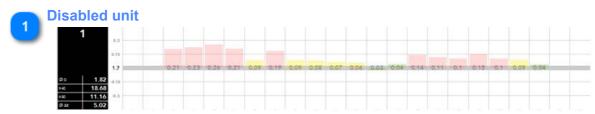


Click on a single ink key or swipe from left to right to change the status of an entire unit White tick = not selected (default) = used for scoring and color-control Black tick = selected = disabled

- Go to Measurement View
 - 1.1. Measurement view
- Go to Measurement View when key status is disabled
 - 1.1.10.1. Masked view

1.1.11.1. Masked view





The measurement data is dimmed indicating disabled key / unit



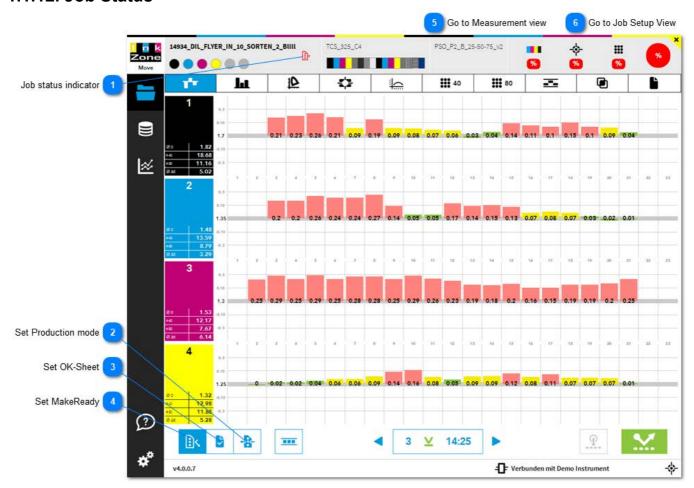
Mask from here key/s and unit/s See here 1.1.10. Mask ink key / unit

Go to Mask Ink-Key & Units

1.1.11. Mask Ink-Key & Units

1.1.11.1. Masked view page 54/258

1.1.12. Job Status



Job status indicator



Shows the current job status

Set Production mode



Change to production mode

Set OK-Sheet



Sets the current measurement, the sheet, as the OK-sheet. See more details here: 1.1.12.1. OK-Sheet

Set MakeReady

1.1.12. Job Status page 55/258



Every new job is initially in MakeReady status. Change to the status OK-sheet or Production mode.

Go to Measurement view

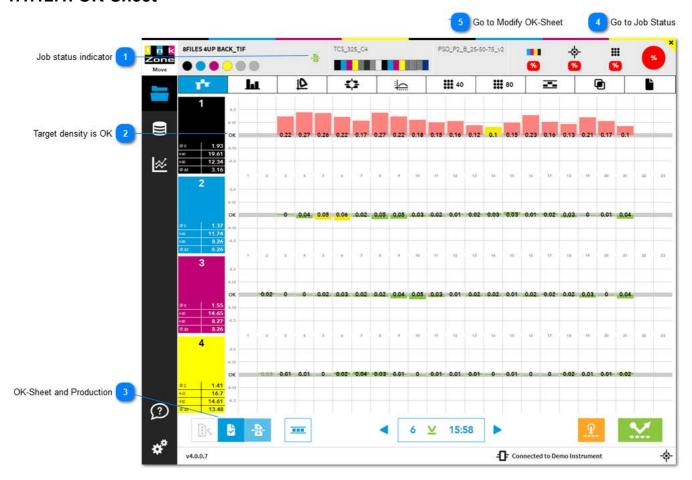
1.1. Measurement view

Go to Job Setup View

1.1.1.1. Job-Setup View

1.1.12. Job Status page 56/258

1.1.12.1. OK-Sheet



Job status indicator

The icon changes to OK-Sheet

Target density is OK

The target density becomes OK

OK-Sheet and Production

The buttons OK-Sheet and Production are active

Go to Job Status

1.1.16. Job Status

1.1.12.1. OK-Sheet page 57/258

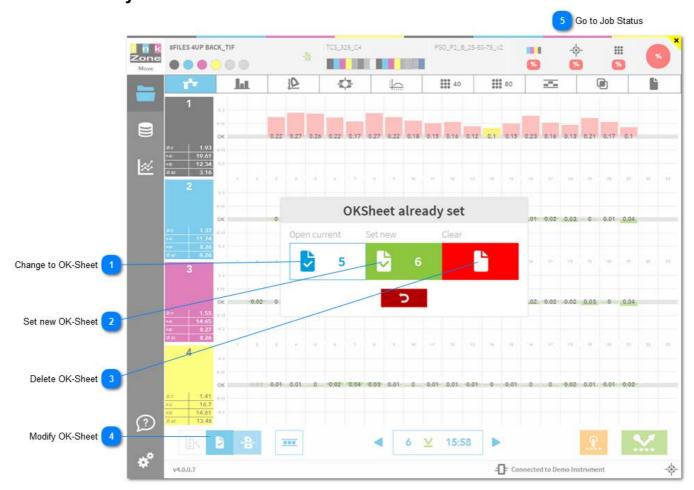


Go to Modify OK-Sheet

1.1.12.2. Modify OK-Sheet

1.1.12.1. OK-Sheet page 58/258

1.1.12.2. Modify OK-Sheet







Opens the current OK-Sheet. In this sample it's sheet number 5.





Sets the current measurement as the new OK-Sheet, like sheet number 6.



Deletes a previously set OK-Sheet and returns to one target density per ink unit.



Modify OK-Sheet



When an OK-Sheet is already set and the button is again pressed then 3 options become available to choose from :

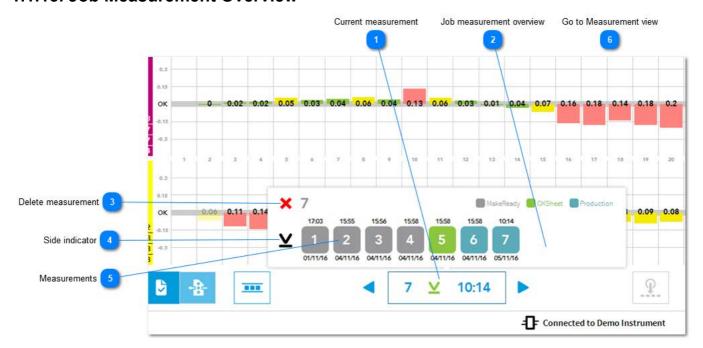
- 1. Change to the currently set OK-Sheet measurement
- 2. Set the current measurement as a the new OK-Sheet
- 3. Remove the OK-Sheet



Go to Job Status

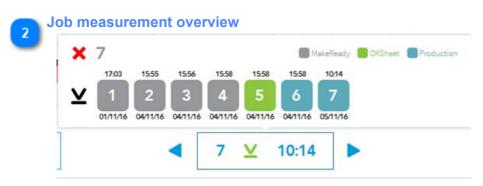
1.1.16. Job Status

1.1.13. Job Measurement Overview





Displays sheet number, front or back side scan and time. Click on the area to open up the job measurement overview.



Displays job measurement history.

Delete measurement × 7

Deletes the currently selected measurement



Side indicator



All scans for top / bottom side are listed here.



Top side (units before perfector)



Bottom side (units after perfector)



Measurements





Indicates time and date on a particular measurement

Grey = MakeReady Green = OK-Sheet Marin = Production

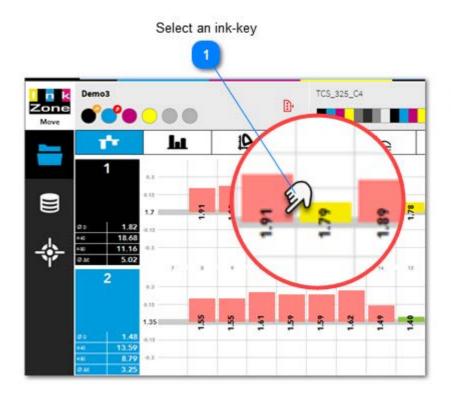


Go to Measurement view

1.1. Measurement view

1.1.14. Ink-Key Colorbar Patch View

Click on a single measurement to display the density, colorimetric or TVI information data. Note that the display varies by the selected view.



- 2 Return to Measurement view
- 3 Go to Single Patch View





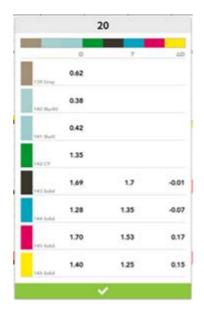
Click on a single measurement to displays density, colorimetric and TVI information for all patches in the selected ink-key. The displayed data depends on the program's selected view.

Ink- key patch data in

Ink- key patch data in Colorimetric

Densitometric view

view





Ink- key patch data in **Dotgain** view

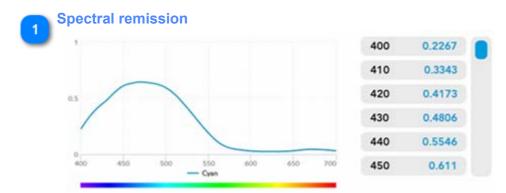


- [D] = measured density / dot gain
- [T] = target density / dot gain
- $[\Delta D]$ = density difference
- [L] = L value
- [a] = a value
- [b] = b value
- $[\Delta E]$ = DeltaE
- $[\Delta H]$ = DeltaH
- [P] = dot percentage from patch
- $[\Delta]$ = difference measured and
- target dot gain
- Return to Measurement view
 - 1.1. Measurement View
- Go to Single Patch View
 - 1.1.14.1. Single Patch View

1.1.14.1. Single Patch View

Preview all color information from a single patch by clicking on the patch in the ink key view.





Spectral remission in graph and table view.



Indicates ink-key number and print unit.



Clicking on a patch opens the single patch view.



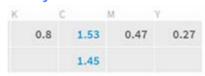
Spectral density



Spectral density of the patch by default used for spot colors.



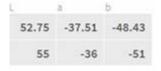
Density K C M Y



The four densities calculated by their filters cyan, magenta, yellow and black (visual). The highest density value is automatically highlighted. The top row shows the measured patch the row below is the target value.



Color data Lab



Color values as Lab with top row from measured patch and its target below.

7

Color difference



Calculated DeltaE and DeltaH.

Note: the DeltaE method (CIE76, D2000, etc) is set in the targetset, see chapter 1.2.3.3. Edit Targetset

8

Go to Ink-Key Patch View

1.1.14. Ink-Key Patch View

9

Go to the Measurement view

1.1. Measurement View

1.1.15. Measure and Transfer Button

The button on the right starts a scan measurement with the instrument. The one on the left transfers ink-key changes to press console for color-control adjustment .





TRANSFER

SCAN

Return to 1.1. Measurement View

Transfer button for color control

Transfer button turns orange after successfully scanning the press sheet.

Scan button

Progress bar indicates instrument is in scan mode



Progress bar indicates ink-key correction is being transferred to press console

Ink key correction for color

control is available.



Progress bar indicates instrument finished scan and scan data is displayed



Ink-key correction for colorcontrol is successfully transferred



Automate the transfer by changing the auto-key correction transfer after a scan. See press setup: <u>1.2.1.2</u>. <u>Advanced Press Settings</u>

1.1.16. Spot Measurement

Use a spectrophotometer for single spot measurements and compare colors. Apply the measurement as the print target for a spot color.



Start measurement sample



Place the spectrophotometer over the sample and start measurement.

Assign to print unit



First measure the color sample which becomes the print target. Then, apply it as the new Lab and density target to a print unit .

Select the print unit in the upcoming dialog:



Paper white calibration



Executes a paper white calibration

4

Select from Targeset



Select a reference color from a targetset

5

Start measurement reference



Place the spectrophotometer over the sample and start measuring

6

Measurement data

lax K			M	Υ	L	а	b	ΔE 76	ΔE 2000	ΔΗ
0.98	0.17	0.09	0.32	1.01	82.59	13.67	73.06	18.65	8.72	6.58
1.7	0.32	0.24	0.44	1.69	72.44	9.18	88.05		-	

Shows measurement and reference data and their color difference as DeltaE 76, DeltaE 2000 and Delta H

7

Go to Navigation Bar

1.1.1. Navigation Bar

1.1.17. Select scoring set

Dynamically recalculates the score when changing the scoring



Detailed scoring view for single criteria.

Criteria marked as "visible" are shown in this area here. See here:



Select from here a scoring set.

Note: it is only possible to select scoring sets which existed during job setup. Hence, it's not possible to apply a scoring sets which is created after job creation.

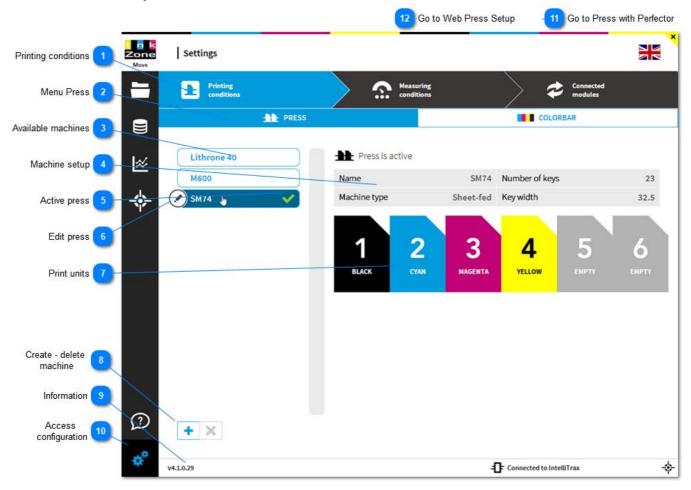
Scoring setup, see here: <u>1.2.5. Scoring Setup</u>

Go to Measurement View

1.1. Measurement View

1.2. Software Setup

1.2.1. Press Setup





Opens the menu Printing conditions with menu entry a) press setup b) Colorbar





All configured press machines are shown here. The current active is marked with a green tick.

1.2. Software Setup page 71/258



Machine setup



Shows the press setup. Change the settings by hovering over the press name and click on the setup button on the left.





Active press



Indicates the current selected press. It is used for all new jobs.

6

Edit press



Hovering with the mouse pointer over the press name brings up the press edit button.

7

Print units



Shows all print units and the standard color sequence.

Press with perfector, see here





Add with the plus sign a new press or delete the selected one with the cross button.

9

Information

v4.1.0.29

Current version is displayed.

With a click on the software release number more information about the dongle is displayed. See <u>1.2.9. License Information</u>

Access configuration



Start with the press machine configuration here

1.2.1. Press Setup page 72/258



Go to Press with Perfector

1.2.1.2. Press with Perfector

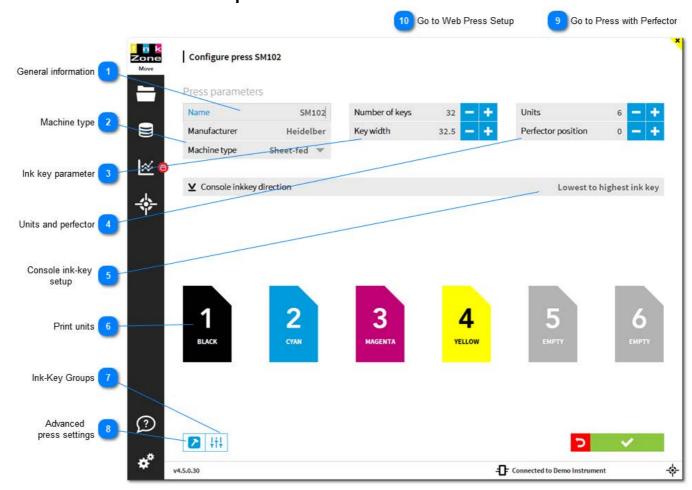
12

Go to Web Press Setup

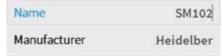
See 1.2.1.4. Web Press Setup

1.2.1. Press Setup page 73/258

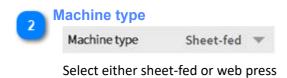
1.2.1.1. Press Machine Setup



General information



Set here the press machine name and manufacturer. This values are passed to the measurement data export files such as SVF, XML etc.







Ink key parameter



Set the number of keys and their width

4

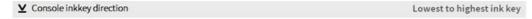
Units and perfector



Set the number of units and the perfector position (if available). For a none perfecting press the position is on 0.

5

Console ink-key setup



Typically, on sheet fed press consoles the ink-key number 1 is on the left side and the highest ink-key is on the right.

Consequently the ink-key direction is "lowest to highest ink-key".

See more on this topic at the web-press setup: 1.2.1.4. Web Press Setup

6

Print units



Press colour setup.

Colour assignment:

First, click on the print unit and then select the color:



7

Ink-Key Groups



With ink-key groups, several ink keys are selected at once to quickly adjust target density. For configuring ink-key groups, see here: 1.2.1.5. Ink-Key Groups

Advanced press settings



Configure further press settings. See <u>1.2.1.3</u>. Advanced Press Settings

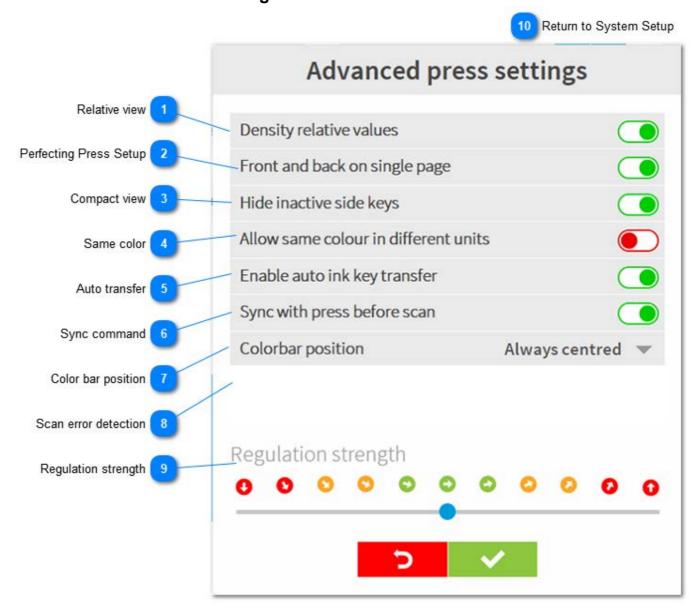
Go to Press with Perfector

See 1.2.1.3. Press with Perfector

Go to Web Press Setup

See 1.2.1.4. Web Press Setup

1.2.1.2. Advanced Press Settings



Relative view

Density relative values

Applies to the density relative measurement view.

When active measured data shows relative to target instead of the absolute density value.



Absolute view



2

Perfecting Press Setup

Front and back on single page

It is recommended to activate when configuring the press as a perfecting press. In the measurement view the control buttons move to the right side to gain more space in height:



3

Compact view

Hide inactive side keys

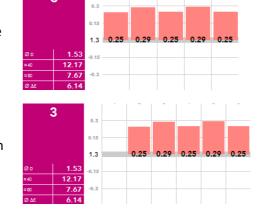
Side ink keys without measurement are not displayed in order to get a more compact measurement data view

Hide active

Side ink keys without measurement data are omitted and not displayed.



All ink keys from press setup are shown even when no measurement data is available for side ink keys.



4

Same color

Allow same colour in different units

When active the software allows to use a specific color in more than one print unit

5

Auto transfer

Enable auto ink key transfer

After scanning a press sheet the software automatically transfers data to InkZoneLoop/console for color-control.

6

Sync command

Sync with press before scan

Activate when InkZoneLoop is used. During the scan operation InkZoneLoop synchronizes its ink key position with the press.

7

Color bar position

Colorbar position

Select from the drop down menu one of the two options:



When selecting <u>always centred</u>, the colobar measurement data is aligned centred over the ink-keys The option <u>centred and shifted</u> lets the operator choose how the color bar is aligned. When selecting shifted, the start key is set in the job setup screen.

8

Scan error detection

Enter a density value to detect wrong scan data. When the scan data exceeds the setup value, the key will be not regulated.

Sample:

Target density setup = 1.55

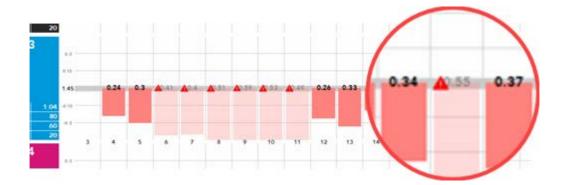
Measurement = 0.3

Setup "disable key for out of range density " = 0.85

Difference of target / measurement = 1.55 - 0.3 = 1.25

The difference 1.25 exceeds the setup value 0.85. The ink key will be not regulated

An ink-key affected by the "out of range" value is shown with a red warning triangle and is not regulated.



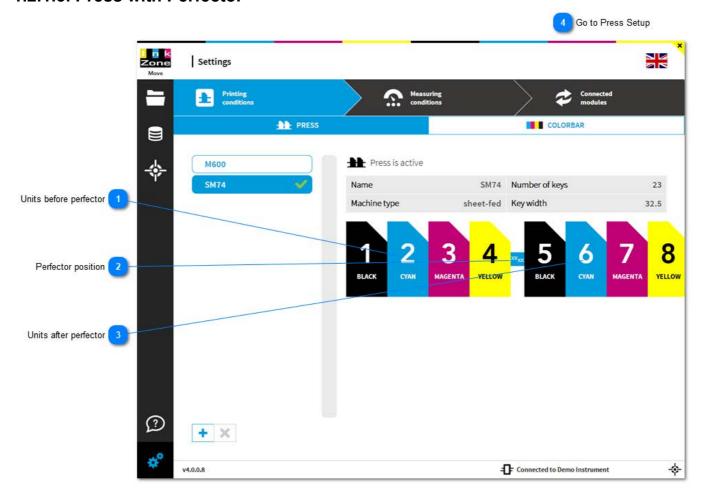


A general regulation change for all units.

Return to System Setup

1.2.7. System Setup

1.2.1.3. Press with Perfector



Units before perfector

1 2 3 4

BLACK CYAN MAGENTA YELLOW

Print units with color sequence for units before the perfector

Perfector position

Perfector indicator and position in the press

Units after perfector

5
6
7
8
YELLOW

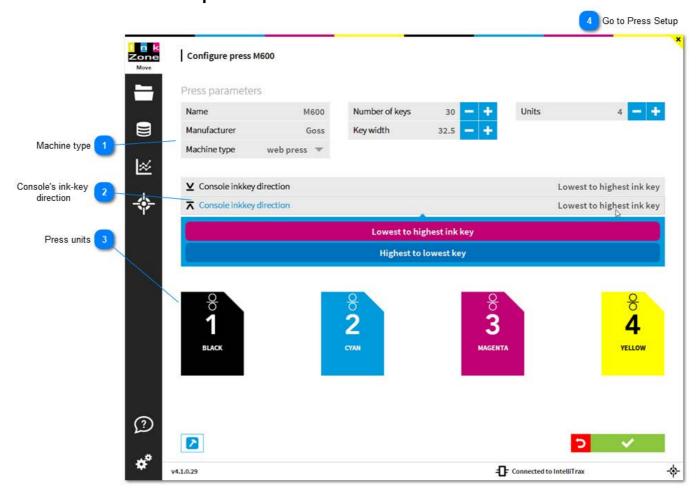
Print units with color sequence for units after the perfector



Go to Press Setup

1.2.1. Press Setup

1.2.1.4. Web Press Setup





Console's ink-key direction



For some web presses with two consoles, one for upper side and one for the lower side units, the ink-key direction on the console desks are not necessarily the same.

On one console side the key nr 1 is on the left which means to use the setting "Lowest to highest inkkey", e.g. 1 to 32.

For the other side, the ink key on the left is the highest and the lowest is on the right, e.g. 32 to 1.

For this case change the ink-key direction to "highest to lowest ink key".

1.2.1.4. Web Press Setup



Press units









Each print tower indicates an upper and lower print unit. A press with 4 print towers is setup with 4 units.

Note:

in IZPerfect/Loop version 6 and 7 you still need to setup 8 units for such web press.



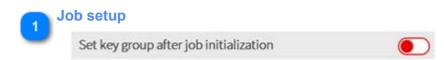
Go to Press Setup

1.2.1.4. Web Press Setup

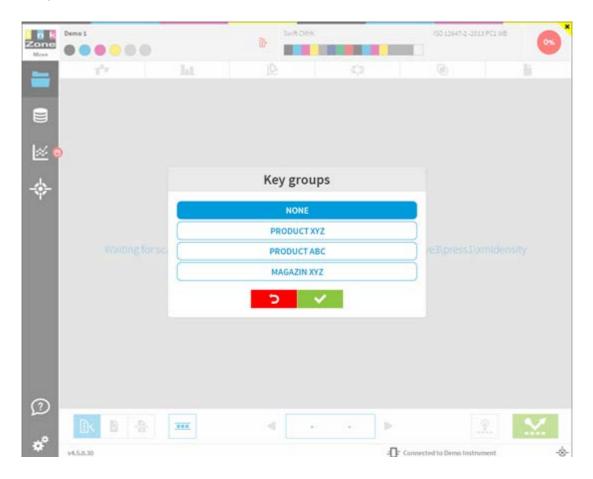
1.2.1.5. Ink-Key Groups

How to use <Key Groups> during production, see : 1.1.2.4. Change Target Density with <Group Ink-Keys> feature





When active, the user is asked to choose from one of the predefined ink-key groups after initial job setup. Like:



1.2.1.5. Ink-Key Groups page 85/258

Defined groups



<TODO>: Insert description text here...



Edit ink-key group, see here: 1.2.1.5.1. Add - Edit Key Group



Add a new ink-key group, see here 1.2.1.5.1. Add - Edit Key Group



Delete an existing ink-key group

- Return to Press Machine Setup

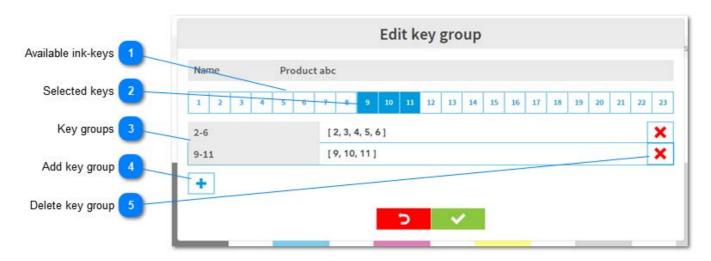
 1.2.1.1. Press Machine Setup
- Return to Change Target Density

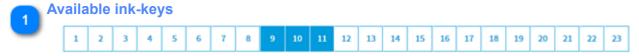
1.1.2.4. Change Target Density with < Group Ink-Keys> feature

1.2.1.5. Ink-Key Groups page 86/258

1.2.1.5.1. Add - Edit Key Group

How to sue during production see here:





All ink-keys from the press are listed. Select from here the keys





All ink-key groups are displayed here with the key group's name on the left and the keys on the right.

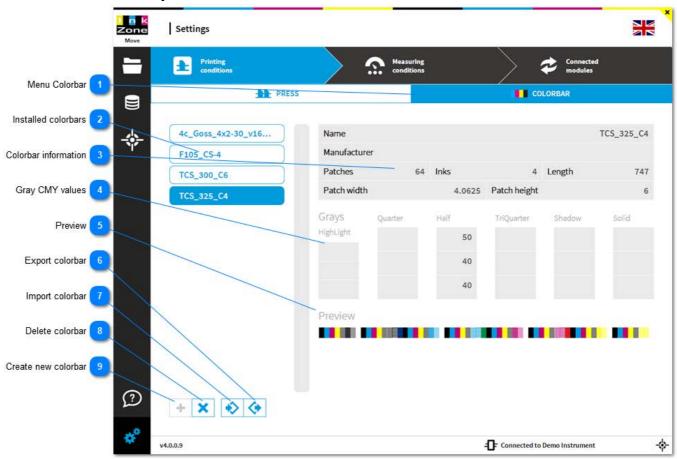


Adds a new ink-key group. Set the name and select the ink-keys



Delete an existing ink-key group

1.2.2. Colorbar Setup





Opens the submenu Colorbar



Shows all available colorbars and the currently selected one.



Detailed colorbar information.

1.2.2. Colorbar Setup page 88/258



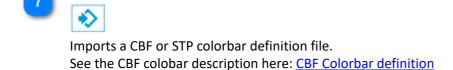
CMY combination for gray patches.





Import colorbar

Exports the selected colorbar



8 Delete colorbar

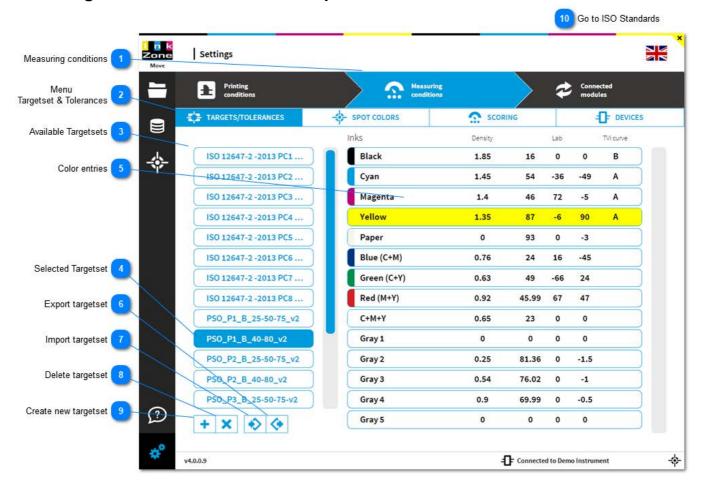
Deletes the selected colorbar

9 Create new colorbar

Create a new colorbar with the colorbar editor

1.2.2. Colorbar Setup page 89/258

1.2.3. Targetset & Print Tolerance Setup



Measuring conditions



Opens the menu Measuring Conditions with menu entry **a)** standard printing targetset **b)** spot-color target sets **c)** scoring **d)** scan device setup.

Menu
Targetset & Tolerances



Opens the submenu Targetset / Tolerances

Available Targetsets



Currently installed targetsets



Selected Targetset

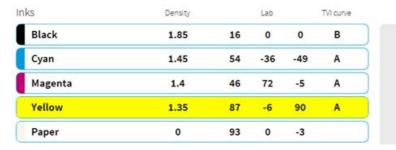
PSO_P1_B_40-80_v2

Currently selected targetset. The shown color entries on the right refer to this target.





Color entries



Color entries from selected targetset. Click on the color for editing. See here: <u>1.2.3.1. Edit Color</u>

6

Export targetset



Export selected targetset



Import targetset



Import targetset data



Delete targetset



Delete the currently selected targetset



Create new targetset



Create a new targetset.

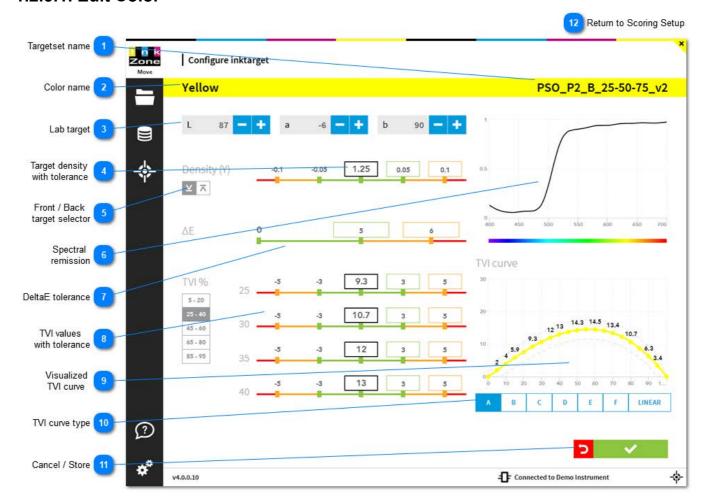
See 1.2.3.2. New Targetset



Go to ISO Standards

See here: <u>1.2.3.4.1. ISO 12647-2:2013</u>

1.2.3.1. Edit Color



Targetset name
PSO_P2_B_25-50-75_v2

This color is from the targetset indicated here

Color name
Yellow

Color name as it appears on the measurement and job setup screen



Don't forget to set front and the back side target for perfecting machines.

1.2.3.1. Edit Color page 93/258

With this setup the density for front side printing is displayed as:

<	1.1	5	re	d

1.15 - 1.19 yellow

1.20 - 1.30 green

1.31 - 1.35 yellow

> 1.35 red



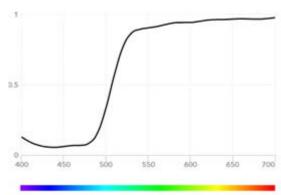
Front / Back target selector

Density (Y)



Setup an individual density target for front and back side.

Spectral remission



Spectral remission curve

DeltaE tolerance

ΔΕ 0 5 6

Color tolerance in DeltaE

With this setup the DeltaE is displayed as:

DeltaE < 6 red

DeltaE 5 - 6 yellow

1.2.3.1. Edit Color page 94/258



TVI values with tolerance



With this setup the TVI curve in the 40% is displayed as:

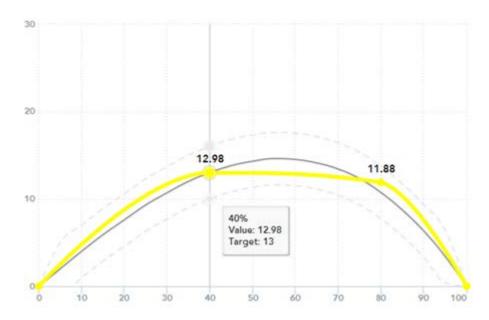
TVI 40% < 8 red

TVI 40% 8 - 10 yellow

TVI 40% 10 - 16 green

TVI 40% 16 - 18 yellow

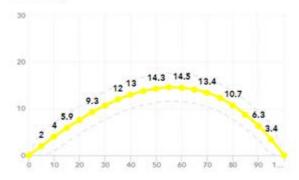
TVI 40% > 18 red



1.2.3.1. Edit Color page 95/258



TVI curve



TVI curve with targets

TVI curve type

A B C D E F

Select from a predefined TVI A to F curve or use a linear curve setup

LINEAR

Cancel / Store

Dismiss change / accept change

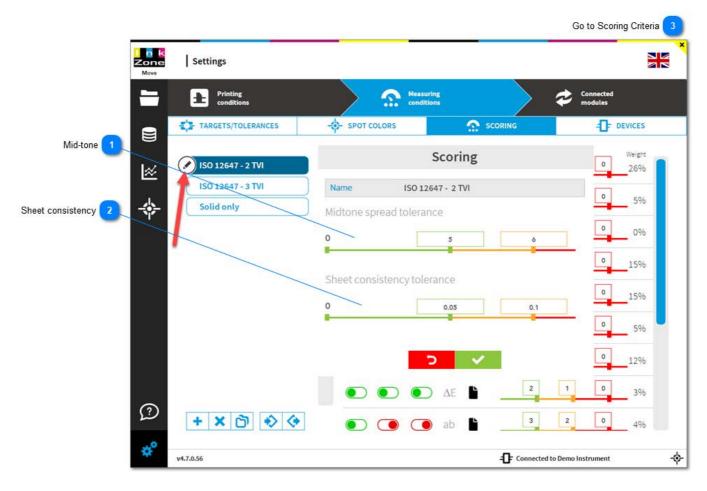
Return to Scoring Setup

1.2.5. Scoring Setup

1.2.3.1. Edit Color page 96/258

1.2.3.1.1. Tolerance for Mid-tone and Sheet Consistency

When hovering over the left side of the targetset name (see red arrow), the tolerance setup for mid-tone spread and sheet consistency is shown.



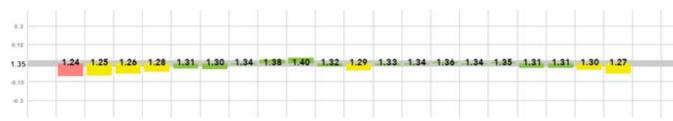


Set-up tolerances for mid-tone spread. It compares the TVI mid-tone value (40 or 80%) of C,M and Y.



Set-up tolerances, deviation from density average, for every printed color.

The sheet consistency density value compares the solid patch distribution to the average density. A good sheet consistency means that the density across the sheet has been perfectly leveled out:



With a low consistency value, the density across the sheet varies a lot:

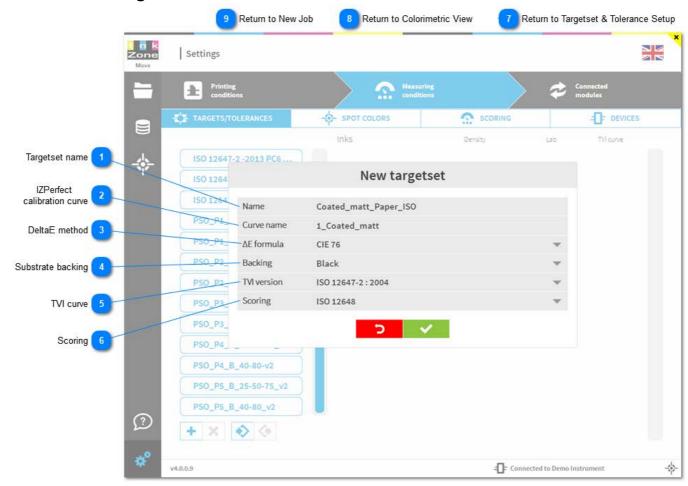


3

Go to Scoring Criteria

1.2.5.3. Scoring Criteria

1.2.3.2. New Targetset



Targetset name

Name Coated_matt_Paper_ISO

Set an unique name for the color targetset.

A targetset is used for every job to define its color standard

| IZPerfect calibration curve

Curve name 1_Coated_matt

Select here the ink preset calibration curve used by InkzonePerfect when a new job is prepared. When a new job is sent from InkzonePerfect to IZMove the "calibration curve" information is passed to IZM. With this information, IZMove loads the corresponding, or let's say linked, targetset in IZMove automatically.

See 1.2.3.2.1. Calibration Curve InkzonePerfect

DeltaE method
ΔE formula CIE 76

1.2.3.2. New Targetset page 99/258

Select the DeltaE formula to be used.



4

Substrate backing

Backing Black

Choose between black and white substrate backing.

The ITX and ETX are always black backing. ISO requires black substrate backing.



5

TVI curve

TVI version

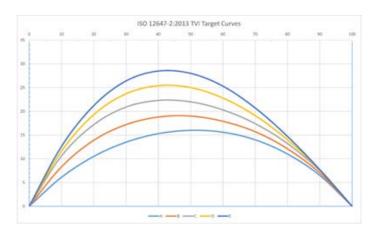
ISO 12647-2:2004

Choose between the TVI curve definition from 2004black and white substrate backing.

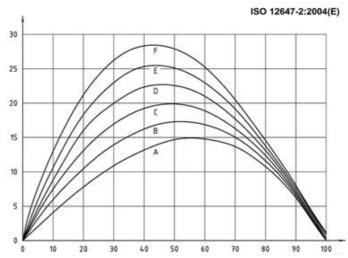


1.2.3.2. New Targetset page 100/258

TVI 12647-2 2013



TVI 12647-2 2004



Scoring Scoring ISO 12648

Select the scoring set. See here: 1.2.5. Scoring Setup



- Return to Targetset & Tolerance Setup
 - 1.2.3. Targetset & Print Tolerance Setup
- Return to Colorimetric View

 1.1.4. Colorimetric View

1.2.3.2. New Targetset page 101/258

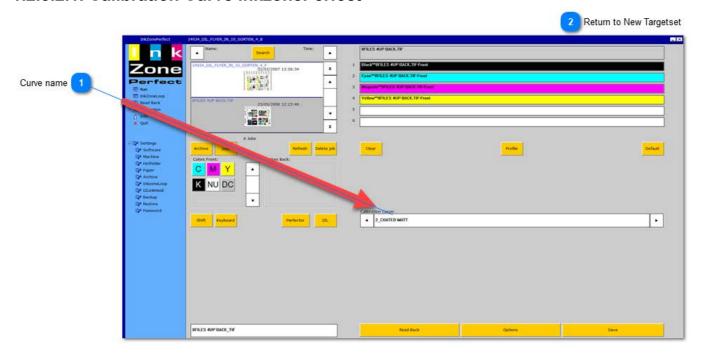


Return to New Job

1.3.2. New Job

1.2.3.2. New Targetset page 102/258

1.2.3.2.1. Calibration Curve InkzonePerfect



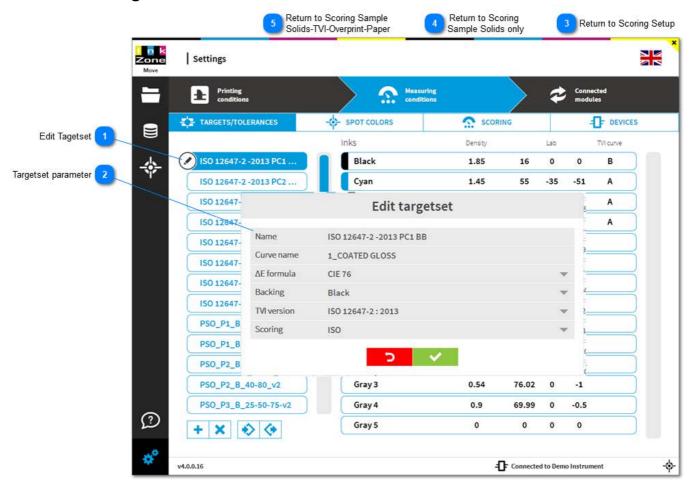


The calibration curve name is passed to IZMove to select the print targetset.

Return to New Targetset

1.2.3.2. New Targetset

1.2.3.3. Edit Targetset

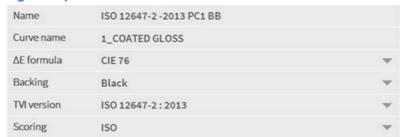


Edit Tagetset



Hoover over the targetset and click on edit (pen icon on the left). The targetset setup window is displayed.

Targetset parameter



Modify the targetset parameter from here. See details 1.2.3.2. New Targetset

Return to Scoring Setup

1.2.5. Scoring Setup

1.2.3.3. Edit Targetset page 104/258



1.2.5.1. Scoring sample - Solids only

Return to Scoring Sample Solids-TVI-Overprint-Paper

1.2.5.2. Scoring sample - Solids-TVI-Overprint-Paper

1.2.3.3. Edit Targetset page 105/258

1.2.3.4. Standards

1.2.3.4.1. ISO 12647-2:2013

1.2.3.4.1.1. Paper Types 1.2.3.4.1.2. TVI Curves

1.2.3.4.1.1. Paper Types

There are 8 different paper types listed in the ISO 2013 standard.

	Paper type and surface					
	PS1	PS2	PS3	PS4		
Type of surface	Premium coated	Improved coated	Standard glossy coated	Standard matte and semi-matte coated		
Typical process	Sheet-fed offset Heat-set web offset	Heat-set web offset	Heat-set web offset	Heat-set web offset		
Typical papers	Wood-free coated, gloss, semi-matte, matte (WFC) High and medium weight coated (HWC, MWC)	Medium weight coated (MWC) Light weight coated (LWC Improved)	Light weight coated, gloss and semi- matte (LWC)	Machine finished coated (MFC) Light weight coated, semi- matte (LWC)		
	PS5	PS6	PS7	PS8		
Type of surface	Wood-free uncoated	Super calendered uncoated	Improved uncoated	Standard uncoated		
Typical process	Sheet-fed offset Heat-set web offset	Heat-set web offset	Heat-set web offset	Heat-set web offset		
Typical papers	Offset, wood-free uncoated (WFU)	Super calendered (SC-A, SC-B)	Uncoated mechanical improved (UMI) Improved newsprint (INP)	Standard newsprint (SNP)		

1.2.3.4. Standards page 106/258

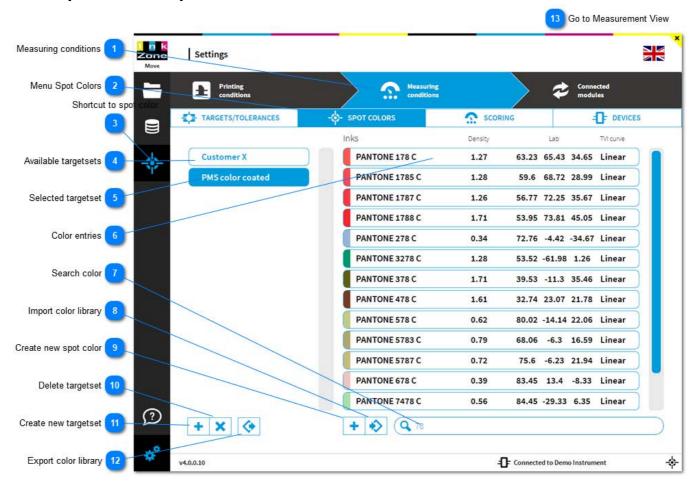
1.2.3.4.1.2. TVI Curves

List with all print conditions and the corresponding TVI curve type.

	Print Substrate (PS)	Colorant Description (CD)	Screening Description	
Printing Condition (PC)			AM - Periodic	
			TVI Curve	Screen ruling - LPI
PC1	PS1	CD1	Α	150 - 200
PC2	PS2	CD2	В	120 - 175
PC3	PS3	CD3	В	120 - 150
PC4	PS4	CD4	В	120 - 150
PC5	PS5	CD5	O	133 - 175
PC6	PS6	CD6	В	120 - 150
PC7	PS7	CD7	O	120 - 150
PC8	PS8	CD8	O	120 - 150

1.2.3.4.1.2. TVI Curves page 107/258

1.2.4. Spotcolor Setup



Measuring conditions



Opens the menu Measuring Conditions with menu entry

- a) standard printing targetset
- **b)** spot-color target sets
- c) scoring
- d) scan device setup.
- Menu Spot Colors

 SPOT COLORS

Open the submenu Spot Colors

Shortcut to spot color

Use this shortcut to get directly to the spot color

Available targetsets

1.2.4. Spotcolor Setup page 108/258



Currently installed spot color targetset

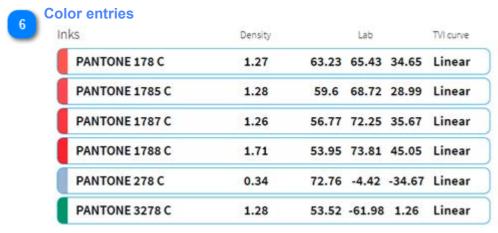
Selected targetset Inks TVI curve Density Customer X PANTONE 178 C 1.27 63.23 65.43 34.65 Linear PANTONE 1785 C 1.28 59.6 68.72 28.99 Linear PANTONE 1787 C 1.26 56.77 72.25 35.67 Linear PANTONE 1788 C 1.71 53.95 73.81 45.05 Linear PANTONE 278 C 0.34 72.76 -4.42 -34.67 Linear PANTONE 3278 C 53.52 -61.98 1.26 Linear 1.28 PANTONE 378 C 39.53 -11.3 35.46 Linear PANTONE 478 C 32.74 23.07 21.78 Linear 1.61 PANTONE 578 C 0.62 80.02 -14.14 22.06 Linear PANTONE 5783 C 0.79 68.06 -6.3 16.59 Linear PANTONE 5787 C 0.72 75.6 -6.23 21.94 Linear PANTONE 678 C 83.45 13.4 -8.33 Linear PANTONE 7478 C 0.56 84.45 -29.33 6.35

+ 1 (2 78

Current selected spot color targetset.

+ X 💠

The shown color entries on the right refer to this target.



Color entries from selected targetset. Click on the color for editing. See <u>1.2.4.1. Spot Color View</u>



Add a part of the spot color name to quickly find the color

8 Import color library

1.2.4. Spotcolor Setup page 109/258



Import a CxF color exchange file



Create new spot color



Creates a new spot color:

Set the spot name Choose the density channel Choose a TVI base curve



10

Delete targetset



Deletes the currently selected spot color targetset

11

Create new targetset



Creates a new spot color targetset

12

Export color library



Exports spot color data as CxF

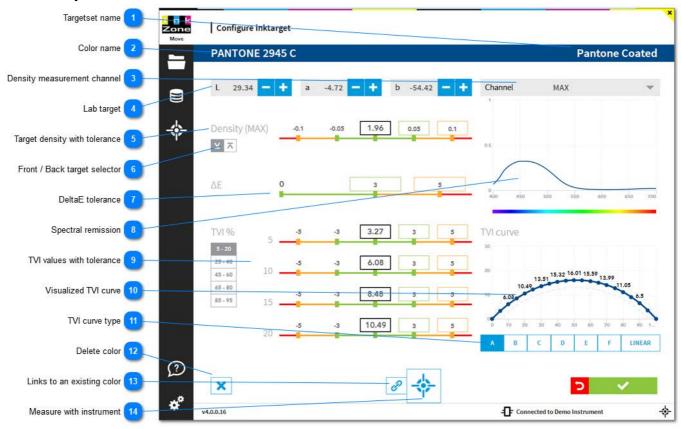
13

Go to Measurement View

1.1.2. Density Relative View

1.2.4. Spotcolor Setup page 110/258

1.2.4.1. Spot Color View



Targetset name

Pantone Coated

The spot color targetset where the color is assigned to

PANTONE 2945 C

Color name

Density measurement channel



Usually the density filter channel for measuring a spot color with a spectrophotometer is set to MAX, meaning the maximum peak from its remission. Nevertheless, it is possible to change the filter to K, C, M or Y

Lab target

L 29.34 - + a -4.72 - + b -54.42 - +

Lab target value

Target density with tolerance



Target density with tolerance

With this setup the density for a front side measurement is displayed as:

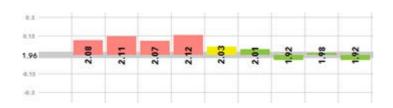
< 1.86 red

1.86 - 1.90 yellow

1.91 - 2.01 green

2.02 - 2.06 yellow

> 2.06 red



Front / Back target selector



Setup an individual density target for front and back side.

DeltaE tolerance



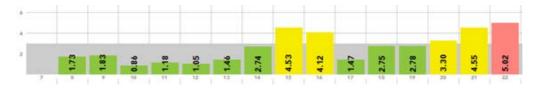
Color tolerance in DeltaE

With this setup the DeltaE for a front and back measurement is displayed as:

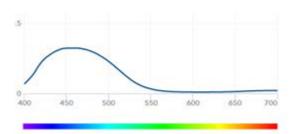
0 - 3 green

3.01 - 5 yellow

> 5 red



Spectral remission



Spectral remission curve

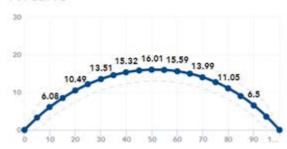




TVI curve values and their tolerance

Visualized TVI curve





Visualized TVI curve with the TVI expected value for 5 to 95%.

TVI curve type



ISO 12647-2 uses different sets of predefined TVI curves named A to F. A linear curve is when the dot gain is expected like 5%Tone TVI=5; 10%Tone TVI=10; etc.

Delete color



Deletes the color

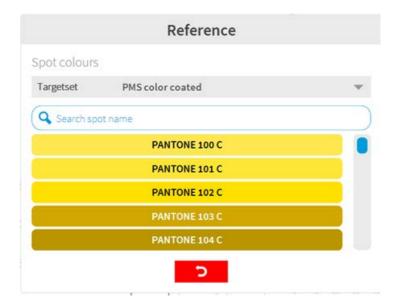


Links to an existing color



Create a link to an existing spot color.

Select the reference color in the dialog. Use the search to filter the color list.



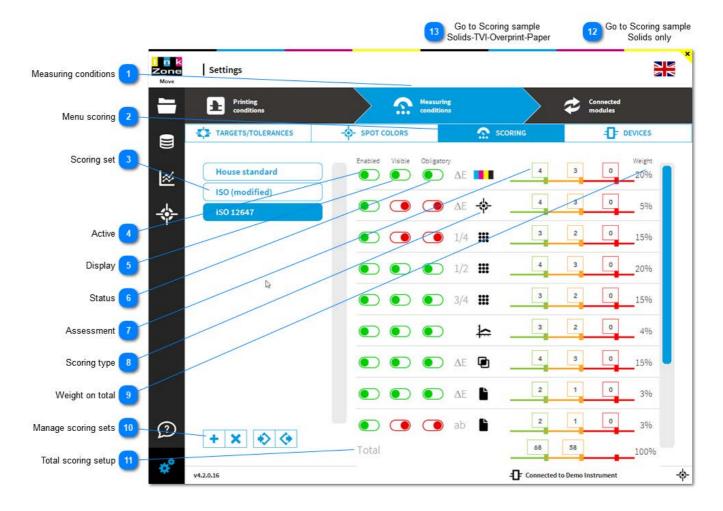


Measure with instrument



Place the instrument on the sample and start the color reading with this button. Alternatively, use the instrument measurement button.

1.2.5. Scoring Setup

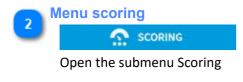


Measuring conditions



Opens the menu Measuring Conditions with menu entry

- a) standard printing targetset
- b) spot-color target sets
- c) scoring
- d) scan device setup





1.2.5. Scoring Setup page 115/258

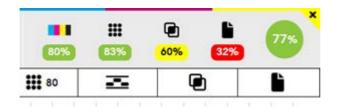
Currently available scoring sets.



Enable / Disable the scoring for the criteria.



Display the criteria on the measurement view in top right corner:



See also the dynamic scoring selection: 1.1.17. Select scoring set



Choose if the criteria is obligatory or informative. Only items with status obligatory are used for the total score calculation.



Setup the scoring value based on the tolerance area green, yellow and red from the targetset. See the tolerance setup in the targetset here: 1.2.3.1. Edit Color

As an example:

In the targetset, the primary's tolerance is set:

Green	Yellow	Red
DeltaE < 4	DeltaE > 4 and < 5	DeltaE > 5

1.2.5. Scoring Setup page 116/258



In this sample, the primary color scoring is set like:

Green	Yellow	Red
Score value = 4	Score value = 3	Score value = 0



Now, let's presume the sheet measurement is:

Average DeltaE's are K = 2.31, C = 3.54, M = 4.52, Y = 5.66

This creates a score as K = 4 points, C = 4 points, C = 3 points, Y = 0 points

Total score = 4 + 4 + 3 + 0 = 11 points (max score is 16 points)

Result in percentage = 11 / 16 * 100 = 68.75%

Scoring type



Scoring criteria such as primary solids, spot colours, TVI, see details here: <u>1.2.5.3. Scoring Criteria</u> Select the DeltaE method in the targetset setup, see here: <u>1.2.3.3. Edit Targetset</u>

Weight on total
Weight
20%

The criteria's weight on the total scoring

1.2.5. Scoring Setup page 117/258



Manage scoring sets



Add, delete scoring sets. Reuse with import and export functionality.

11

Total scoring setup

Total



Total value shows up in the measurement view in a colored circle on the top right corner. Setup total score color here.

In this sample the total's color is set like:

Green 68% to 100%

Orange 58% to 68%

Red 0% to 58%

Go to Scoring sample Solids only

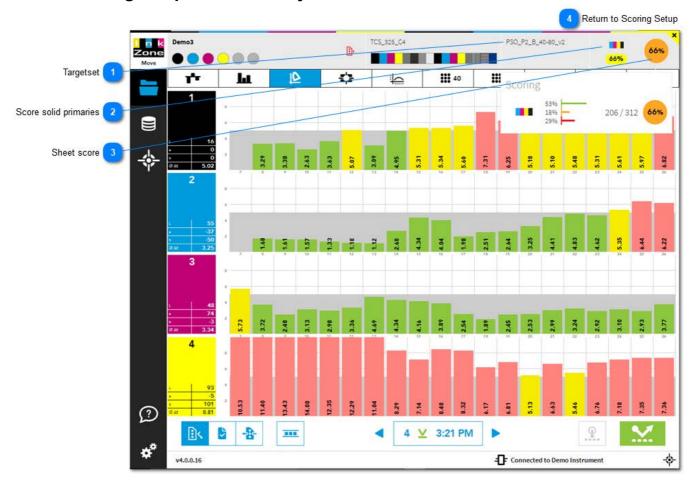
1.2.5.1. Scoring sample - Solids only

Go to Scoring sample
Solids-TVI-Overprint-Paper

1.2.5.2. Scoring set - Solids-TVI-Overprint-Paper

1.2.5. Scoring Setup page 118/258

1.2.5.1. Scoring sample - Solids only



Targetset

PSO_P2_B_40-80_v2

Selected targetset. Each targetset has a scoring set. See here: 1.2.3.3. Edit Targetset

Score solid primaries



Score for the solid primaries CMKY

Sheet score

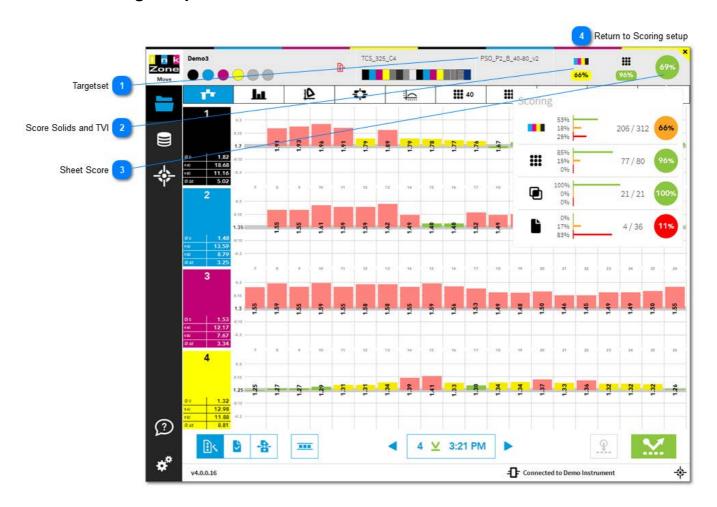


Total score. As only primaries are scored, the total score is equal to the solid primary score

Return to Scoring Setup

1.2.5. Scoring Setup

1.2.5.2. Scoring sample - Solids and TVI





Selected targetset with a scoring set. See here: 1.2.3.3. Edit Targetset



Scoring for primaries and TVI.

Configure this view from the scoring set, enable the criteria with the "visible" setting. See here <u>1.2.5. Scoring Setup</u>



Total sheet score.

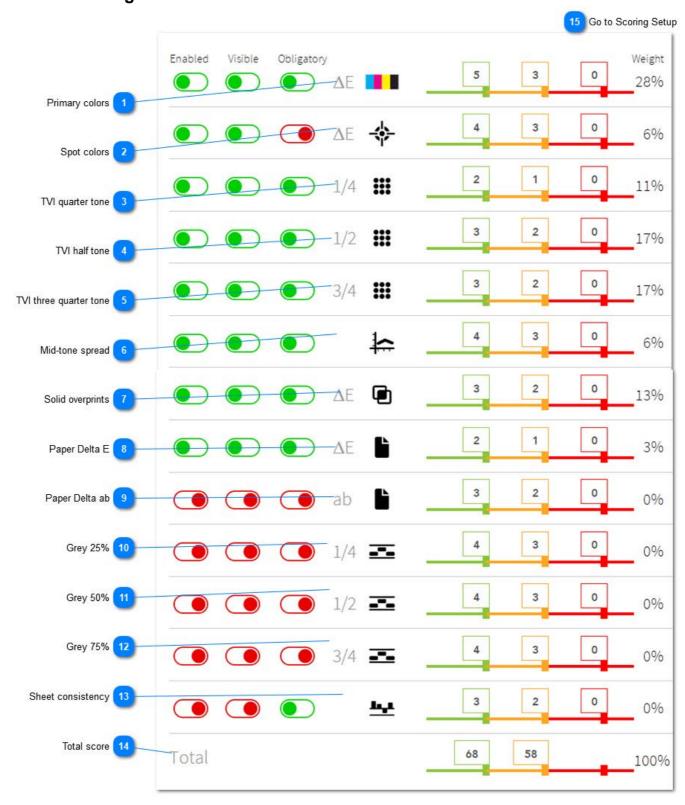
For this sample the score is calculated from the primaries, TVI, overprints and paper patches...



Return to Scoring setup

1.2.5. Scoring Setup

1.2.5.3. Scoring Criteria





Scoring on primary colors C M Y and K $\,$

1.2.5.3. Scoring Criteria page 122/258



Spot colors





Scoring spot colors



TVI quarter tone





Scoring tone value increase (TVI), quarter tone



TVI half tone





Scoring tone value increase (TVI), half tone



TVI three quarter tone





Scoring tone value increase (TVI), three quarter tone



Mid-tone spread



TVI mid-tone spread on C M Y



Solid overprints





Scoring on solid overprints: CM, CY and MY (red, green, blue)



Paper Delta E





Scoring on paper, Delta E



Paper Delta ab





Scoring on paper, Delta ab



Grey 25%

1/4

Grey value 25%

Grey 50%

1/2 ===

Grey value 50%

Grey 75%

3/4 --

Grey value 50%

Sheet consistency



Sheet consistency, see here: 1.2.3.1.1. Tolerance for Mid-tone and Sheet Consistency

Total score

Total

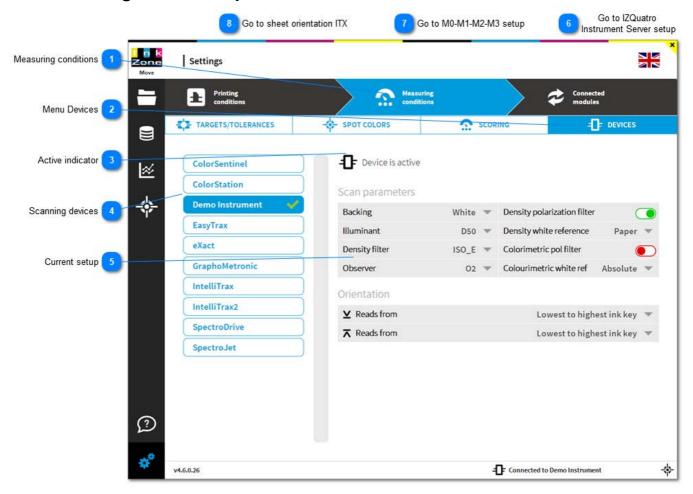
Score on total points

Go to Scoring Setup

1.2.5. Scoring Setup



1.2.6. Scanning Device Setup







Opens the menu Measuring Conditions with menu entry

- a) standard printing targetset
- **b)** spot-color target sets
- c) scoring
- d) scan device setup



Active indicator Device is active

Indicates which instrument is active.

To change to another instrument, select first the instrument from the device list and then click on the **ACTIVATE**:





4

Scanning devices

Lists with all supported scanning devices.

For detailed on the setup see here:

- 1.2.6.1. ColorStation
- 1.2.6.2. Demo instrument
- 1.2.6.3 EasyTrax
- 1.2.6.4. GraphoMetronic
- 1.2.6.5. IntelliTrax
- 1.2.6.6. IntellTrax2
- 1.2.6.7. SpectroDrive
- 1.2.6.8. SpectroJet
- 1.2.6.13. eXact
- 1.2.6.14. SpectroDens



Current setup

Scan parameters



The instrument current setup. The view may vary for other instruments.

Go to IZQuatro
Instrument Server setup

1.2.6.2. Instrument Server IZQuatro

Go to M0-M1-M2-M3 setup

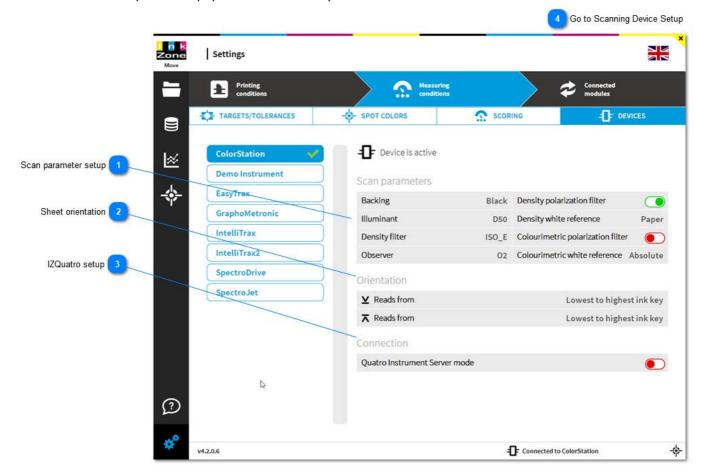
1.2.6.3. M0 - M1 - M2 - M3 setup

Go to sheet orientation ITX

1.2.6.1. Sheet orientation IntelliTrax

1.2.6.1. ColorStation

The ColorStation is the combination of a high quality large format scanner and the DI-ColorStation software. ColorStation difference to all other scanning devices is by scanning the entire sheet without the necessity of a colorbar. Such a setup reduces paper waste drastically.



Scan parameter setup



See details here: 1.2.6.9. Scan Parameter Setup

See details here: 1.2.6.10. Sheet Orientation

3 IZQuatro setup
Connection
Quatro Instrument Server mode

1.2.6.1. ColorStation page 127/258

See details here: <u>1.2.6.12</u>. <u>Instrument Server IZQuatro</u>



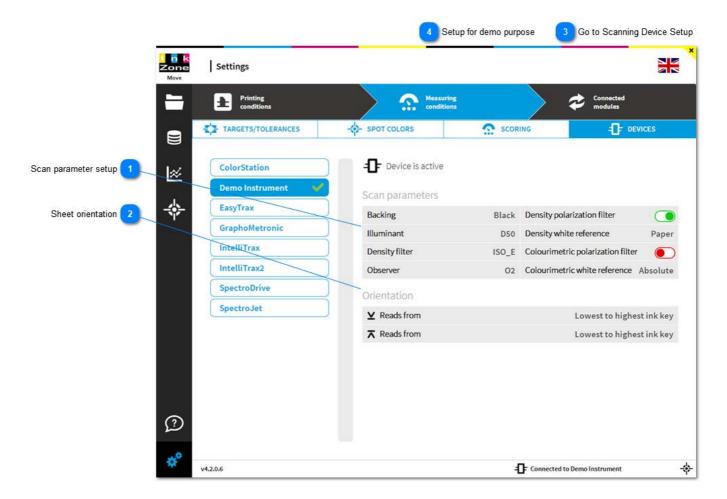
Go to Scanning Device Setup

1.2.6. Scanning Device Setup

1.2.6.1. ColorStation page 128/258

1.2.6.2. Demo Instrument

The demo instrument acts like a virtual instrument. It allows to virtually scan sheets without having a physical scanning instrument attached.



Scan parameter setup



See details here: 1.2.6.9. Scan Parameter Setup

Sheet orientation
Orientation

✓ Reads from
Lowest to highest ink key

Reads from
Lowest to highest ink key

See details here: 1.2.6.10. Sheet Orientation

Go to Scanning Device Setup

1.2.6. Scanning Device Setup

1.2.6.2. Demo Instrument page 129/258



Setup for demo purpose

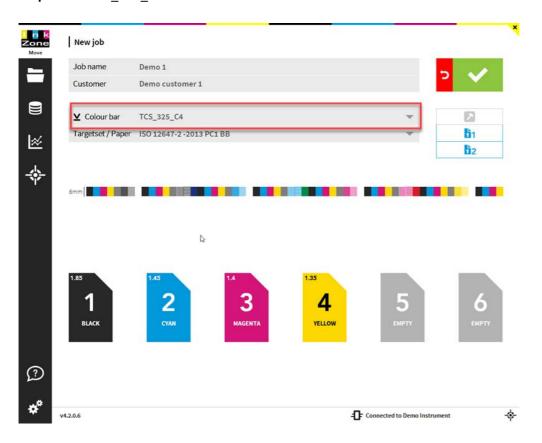
Look up the how-to for using the demo instrument. See here <u>1.2.6.2.1</u>. <u>Setup for Demo Purposes</u>

1.2.6.2. Demo Instrument page 130/258

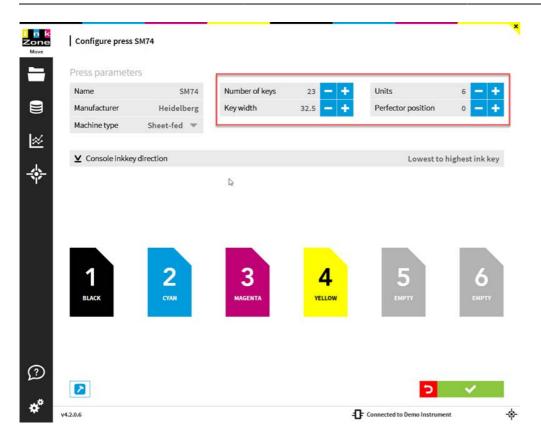
1.2.6.2.1. Setup for Demo Purposes

The Demo Instrument has a set of prepared scan measurement data. The best results are achieved when you following this three steps:

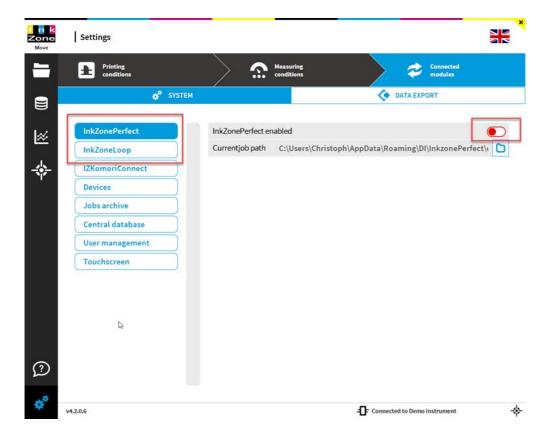
Step 1: Use TCS_325_C4 as the colorbar:



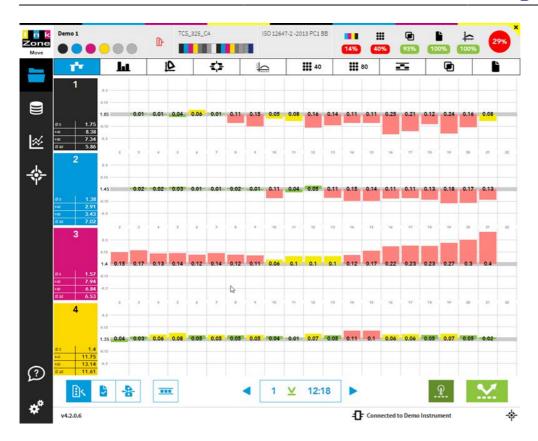
Step 2: Setup the press parameter to 23 keys, key width 32.5mm, 6 units with Perfector off.



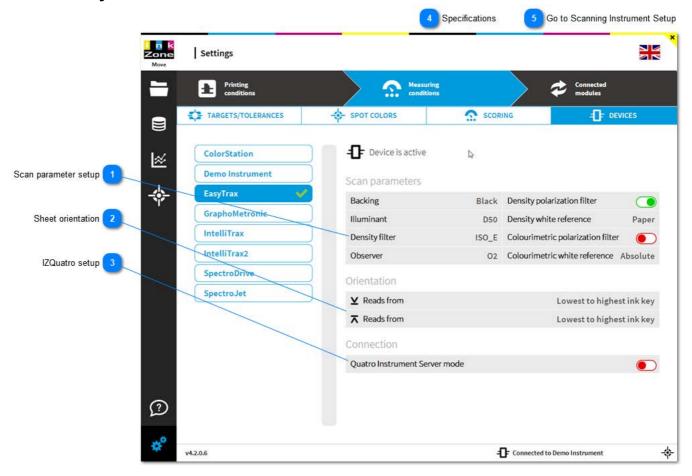
Step 3: Enable InkZonePerfect / InkZoneLoop when the programs are installed otherwise turn them both off:



Step 4: Measurement view after first scan



1.2.6.3. EasyTrax



Scan parameter setup



See details here: 1.2.6.9. Scan Parameter Setup

See details here: 1.2.6.10. Sheet Orientation

3 IZQuatro setup
Connection
Quatro Instrument Server mode

See details here: 1.2.6.12. Instrument Server IZQuatro

1.2.6.3. EasyTrax page 134/258



Specifications

Producer X-Rite

Min. patch width 3.8mm

Min. patch height 4.0mm

Size 29" and 40"

Connected by Ethernet

Comment no M1 reading, legacy product



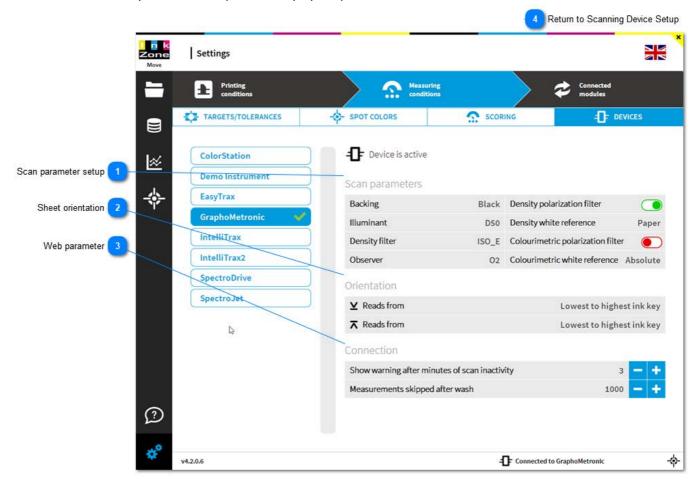
Go to Scanning Instrument Setup

1.2.6. Scanning Device Setup

1.2.6.3. EasyTrax page 135/258

1.2.6.4. GraphoMetronic

Inline measurement system for web presses may by GraphoMetronic.



Scan parameter setup



See details here: 1.2.6.9. Scan Parameter Setup



See detail here: 1.2.6.10. Sheet Orientation

Web parameter
Connection

Show warning after minutes of scan inactivity

Measurements skipped after wash

1000 - +

Setting top Warning when no new scan data is received after "x" minutes.

This helps to identify an instrument error or a network connection

problem to the GM processing unit.

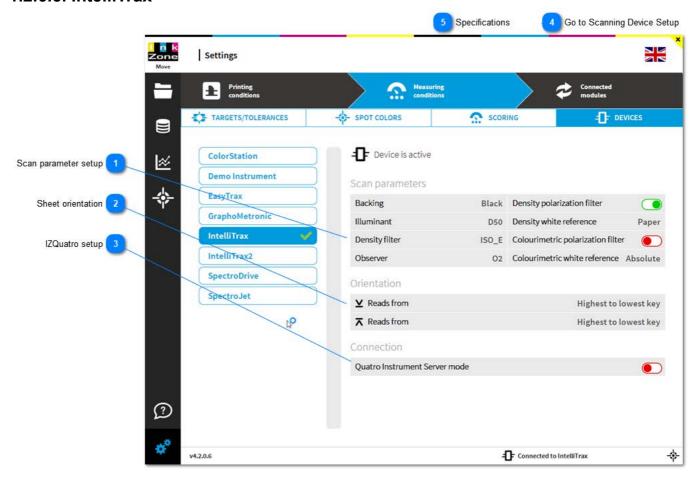
Setting below ignores x sheets for color-control after blanket wash

4

Return to Scanning Device Setup

1.2.6. Scanning Device Setup

1.2.6.5. IntelliTrax



Scan parameter setup



See details here: 1.2.6.9. Scan Parameter Setup

Sheet orientation



See details here: <u>1.2.6.10.1</u>. Sheet Orientation IntelliTrax

3 IZQuatro setup
Connection
Quatro Instrument Server mode

See details here: 1.2.6.12. Instrument Server IZQuatro

1.2.6.5. IntelliTrax page 138/258



Go to Scanning Device Setup

1.2.6. Scanning Device Setup

5

Specifications

Producer X-Rite

Min. patch size standard spot size 3.2mm

small spot (option) 2.0mm polarization (option) 3.5mm

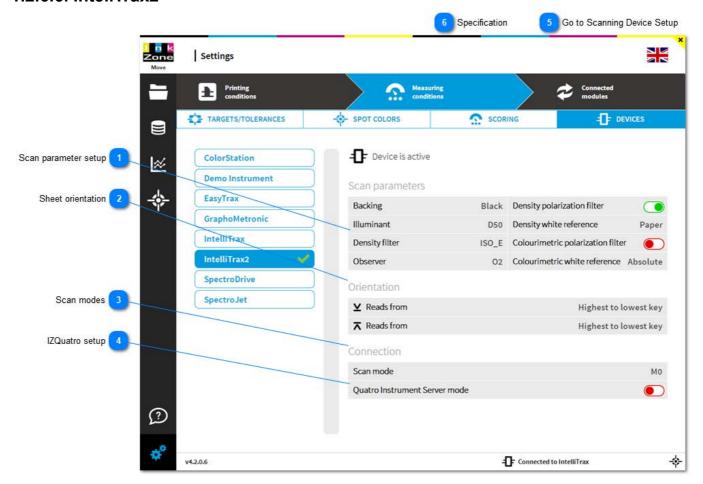
Size 29" to 65"

Connected by Ethernet

Comment no M1 reading, legacy product

1.2.6.5. IntelliTrax page 139/258

1.2.6.6. IntellTrax2

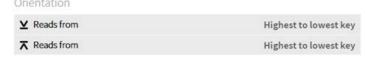


Scan parameter setup



See details here: 1.2.6.9. Scan Parameter Setup

Sheet orientation



See details here: 1.2.6.10.1. Sheet Orientation IntelliTrax

Scan modes
Scan mode Mo

See here the measurement conditions: 1.2.6.11. Measurement Conditions M0 - M1 - M2 - M3

4 IZQuatro setup

Quatro Instrument Server mode

1.2.6.6. IntellTrax2 page 140/258

See details here: 1.2.6.12. Instrument Server IZQuatro

Go to Scanning Device Setup

1.2.6. Scanning Device Setup

Specification

Producer X-Rite

Min. patch size standard spot size 3.0mm

small spot (option) 2.0mm polarization (option) 3.0mm

Size 29" to 65"

Connected by Ethernet

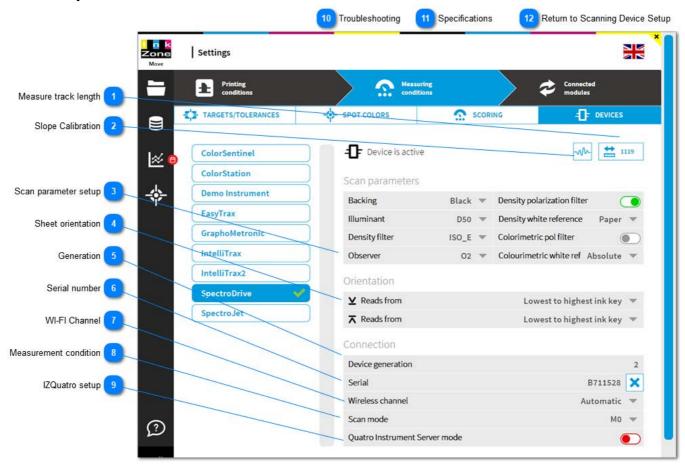
Measurement Conditions M0, M1, M3

Comment supports M1 reading

replaces IntelliTrax1

1.2.6.6. IntellTrax2 page 141/258

1.2.6.7. SpectroDrive



Measure track length



Starts measuring the rail length and stores it afterwards to the instrument.

Slope Calibration



Instrument calibration to be used with a color reference chart or to adjust density values to a 3rd party instrument.

See here: 1.2.6.7.1. Slope Calibration

Scan parameter setup



1.2.6.7. SpectroDrive page 142/258

See details here: 1.2.6.9. Scan Parameter Setup



See details here: 1.2.6.10. Sheet Orientation

Generation

Device generation 2

Generation 2 is for the latest one called SpectroDrive.NG, includes M1 reading Generation 1 is for the predecessor with M0 only reading

Serial number

Serial B711528

Serial number of the currently connected SpectroDrive.

Use the unlock button "x" to disconnect InkZoneMove from the instrument.

WI-FI Channel
Wireless channel Automatic

Change here from the automatic channel selection to a fixed channel. See details in the troubleshooting section: <u>1.2.6.7. SpectroDrive</u>

Measurement condition

Scan mode

M0

M0

See here the instrument measurement conditions: <u>1.2.6.11. Measurement Conditions M0 - M1 - M2 - M3</u>

Quatro Instrument Server mode

See details here: 1.2.6.12. Instrument Server IZQuatro

If you experience continuously connection problem to the device than try using a fixed WLAN channel.

Do like:

10

Troubleshooting

1.2.6.7. SpectroDrive page 143/258

1. Download a WLAN channel scanner app to your mobile



- 2. Find the channel with the lowest traffic
- 3. Change in the configuration "Wireless channel" from Automatic to a fixed channel. Channel 2 to 11 are valid.



4. Quit InkZoneMove and unplug and replug the Techkon USB WLAN box. Restart InkZoneMove. Finish



Producer Techkon

Min. patch size 3.0mm

Size 20" to 80"

1.2.6.7. SpectroDrive page 144/258

Connected by WLAN module

Measurement Conditions M0, M1, M2, M3

Comment supports M1 with SpectroDriveNG

12

Return to Scanning Device Setup

1.2.6.9. Scan Parameter Setup

1.2.6.7. SpectroDrive page 145/258

1.2.6.7.1. Slope Calibration

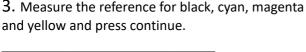
Start the slope calibration and follow the step by step procedure:

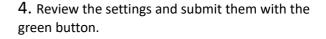
- 1. Measure the paper white of the reference chart. If this has been just before then skip it.
- 2. Type in the reference density data, the values the instrument should read, for black, cyan, magenta and yellow. The values are taken from the reference chart or from the readings of a 3rd party instrument.





3. Measure the reference for black, cyan, magenta



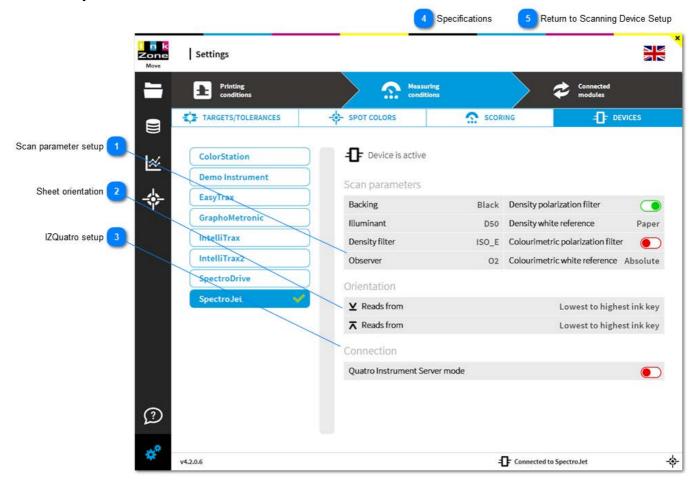






Return to SpectroDrive instrument setup <u>1.2.6.7. SpectroDrive</u>

1.2.6.8. SpectroJet



Scan parameter setup



See details here: 1.2.6.9. Scan Parameter Setup

Sheet orientation



See details here: <u>1.2.6.10</u>. <u>Sheet Orientation</u>

3 IZQuatro setup
Connection
Quatro Instrument Server mode

See details here: <u>1.2.6.12</u>. <u>Instrument Server IZQuatro</u>

1.2.6.8. SpectroJet page 147/258



Specifications

Producer Techkon

Min. patch size 3.0mm

Scan length max 2000 mm

Connected by serial cable

Measurement Conditions M0, M1, M2, M3

Comment supports M1 reading with SpectroJetNG

5

Return to Scanning Device Setup

1.2.6. Scanning Device Setup

1.2.6.8. SpectroJet page 148/258

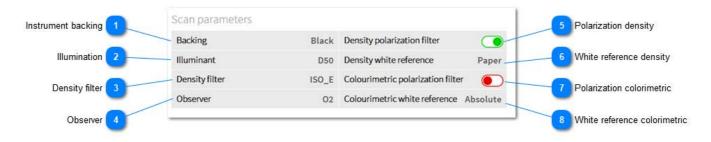
1.2.6.8.1. Encoder wheel

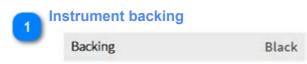
Turn the device up side down. The two larger wheels on the right are connected to the movement encoder of the SpectroJet.

Should those two wheels not turn smoothly adjust it with the screw shown here. Use a Torx 1.5 screwdriver for the adjustment.



1.2.6.9. Scan Parameter Setup

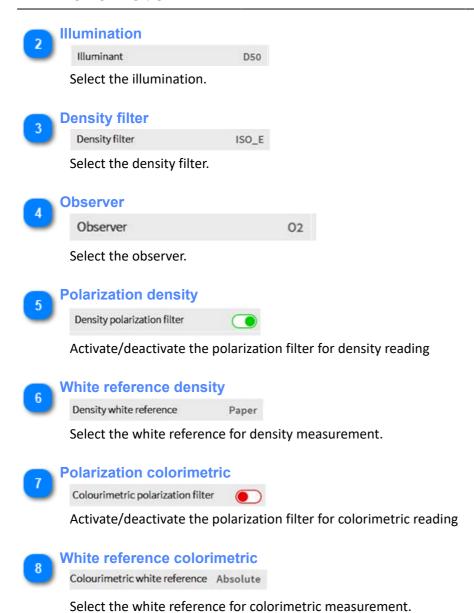




Set instrument backing to black or white (substrate backing).

Note: the targetsets are linked to the backing parameter white or black. A white backing selection in the instrument setup will force the software to show only white backing targetsets whereas a black selection shows only black targetsets.

1.2.6.8.1. Encoder wheel page 149/258



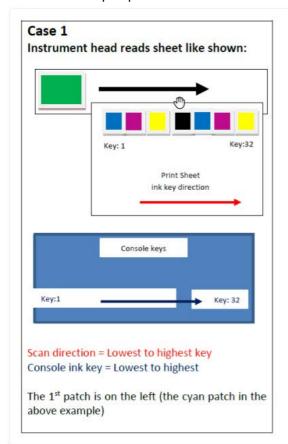
1.2.6.9. Scan Parameter Setup

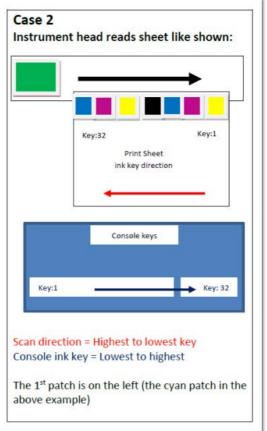
1.2.6.10. Sheet Orientation

Colorbar patch direction in job setup window.



Instrument setup at press console:







Return to
Scan Instrument Setup

1.2.6. Scanning Device Setup

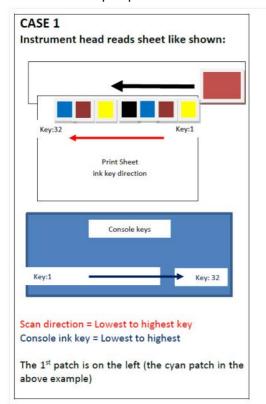
1.2.6.10. Sheet Orientation page 151/258

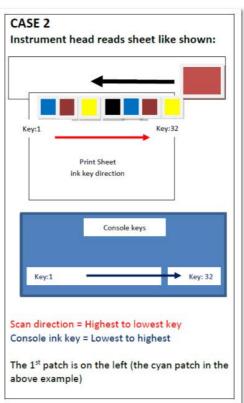
1.2.6.10.1. Sheet Orientation IntelliTrax

Colorbar patch direction in the job setup window.



Instrument setup at press console:





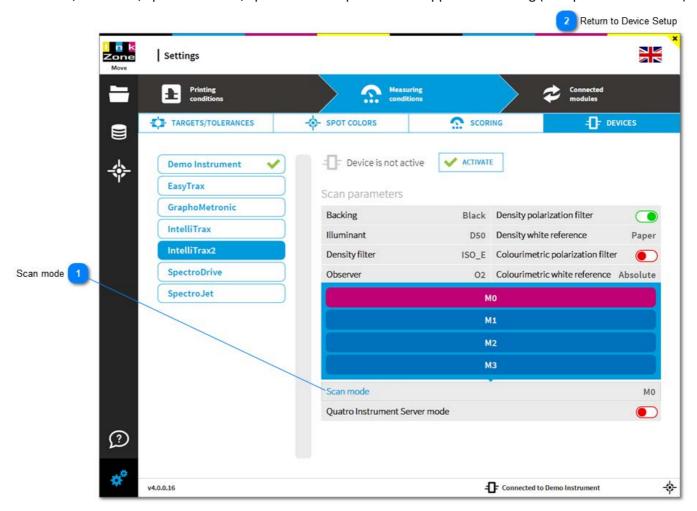


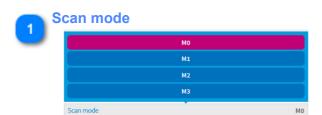
Return to Scan Device Setup

1.2.6. Scan Device Setup

1.2.6.11. Measurement Conditions M0 - M1 - M2 - M3

IntelliTrax2, eXact EAS, SpectroDriveNG, SpectroJet and SpectroDens support M1 reading (ISO specification 13655)





Select the colorimetric scan mode for IntelliTrax2 and SpectroDriveNG:

M0 legacy mode

M1 defined by the new standards ISO-13655 / ISO-3664

M2 UV-cut

M3 polarized

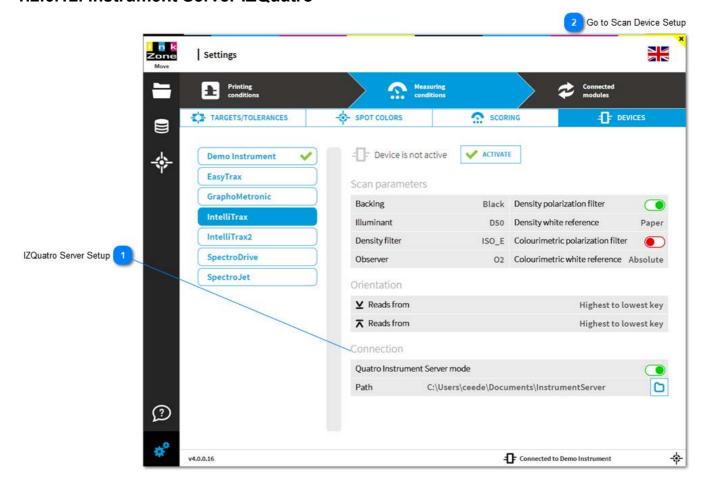
See details here: http://issuu.com/konicaminoltabeu/docs/iso13655_demystified_e/1?e=0



Return to Device Setup

1.2.6. Scan Device Setup

1.2.6.12. Instrument Server IZQuatro



IZQuatro Server Setup

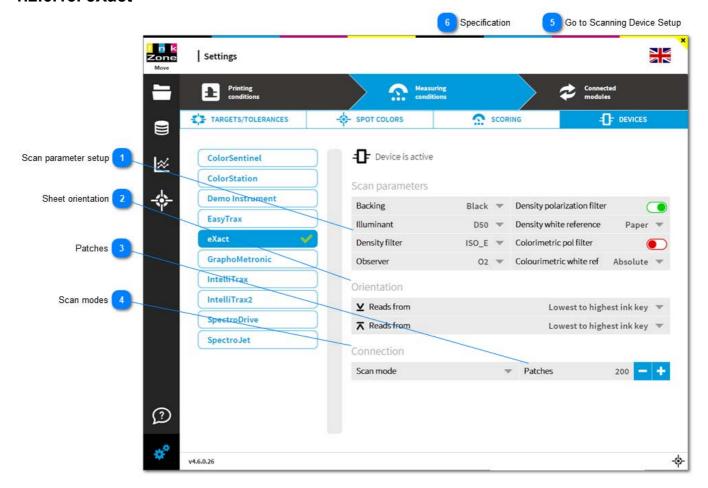


Activate here the **IZQuatro Instrument Server** mode and set the communication path between the two programs.

Go to Scan Device Setup

1.2.6. Scan Device Setup

1.2.6.13. eXact



Scan parameter setup



See details here: 1.2.6.9. Scan Parameter Setup

Sheet orientation



See details here: 1.2.6.10.1. Sheet Orientation IntelliTrax

Patches
Patches 200 - +

Setup here the maximum number of patches to be scanned from the full sheet.

Scan modes

1.2.6.13. eXact page 156/258

Scan mode 🔻

See here the measurement conditions: 1.2.6.11. Measurement Conditions M0 - M1 - M2 - M3

5

Go to Scanning Device Setup

1.2.6. Scanning Device Setup

6

Specification

Producer X-Rite

Patch size min. 3.0mm with aperture size 1.5mm

min 4.0mm with aperture size 2 mm

More details are here:

Min Patch size X-Rite tech support

Size up to 65"

Connected by USB and Bluetooth

See: 1.2.6.13.1. Connect by Bluetooth

Measurement Conditions M0, M1, M3

Comment supports automated scanning

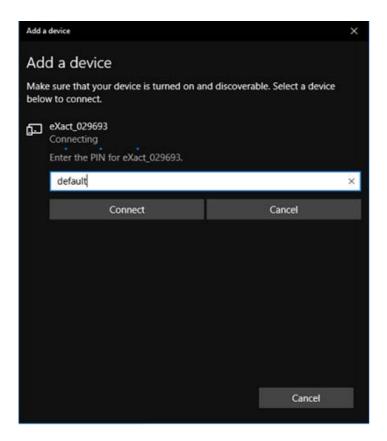
replaces EasyTrax

1.2.6.13. eXact page 157/258

1.2.6.13.1. Connect by Bluetooth

From X-Rite support page:

You must use the pairing code '**default**' (no quotes) when pairing a BlueTooth-enabled eXact to a PC. Pairing the BlueTooth-enabled eXact handheld incorrectly can result in the appearance of a connection, but the device will not interact with X-Rite software.



Step by step pairing procedure:

1. Insert the supplied BlueTooth dongle into an available USB port. Windows will automatically search for and find the proper drivers.

Make sure that BlueTooth is activated on the eXact by going to My Settings>Instrument>BlueTooth and selecting 'On'.

- 2. In the Windows Toolbar (in the lower right corner) click the BlueTooth icon and select 'Add a Device'. A window will open and will populate with available BlueTooth devices. Note that it may take several seconds before the available devices are identified by name in the list. Any eXact with activated BlueTooth that are in range will show up in the list and will be identified by their serial number.
- 3. Select the eXact from the list that you wish to pair. Click 'Next".
- 4. You will be presented with Pairing options. Select 'Use the device's pairing code' and click 'Next".
- 5. In the next window, confirm that you are connecting to the correct device and enter the **eXact's pairing** code: 'default' (do not type the single quotes).
- 6. A message will appear that the eXact has been successfully paired and device drivers will be loaded.

1.2.6.13.2. Connection Status

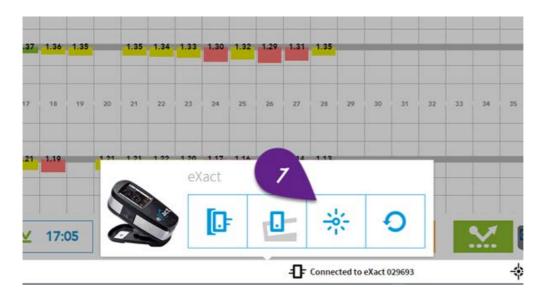
The instrument changes the Bluetooth symbol from **grey** to **blue** when the PC successfully connects to it. Note: the grey symbol means no connection!



1.2.6.13.3. Laser On

Switch on the eXact autoscan line laser (1) in the instrument dialog, accessible from lower right corner. The laser stays on for 30 seconds.

There is no button to switch it off manually.



1.2.6.13.3. Laser On page 160/258

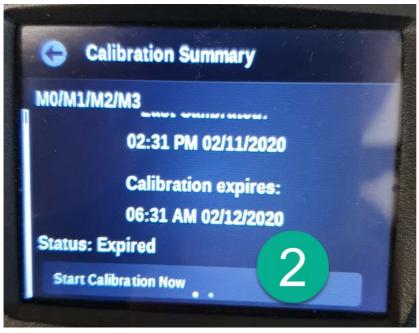
1.2.6.13.4. White Base Calibration

The instrument white base calibration can be started from the instrument itself.

Go to Diagnostic mode and select the calibration icon (1).

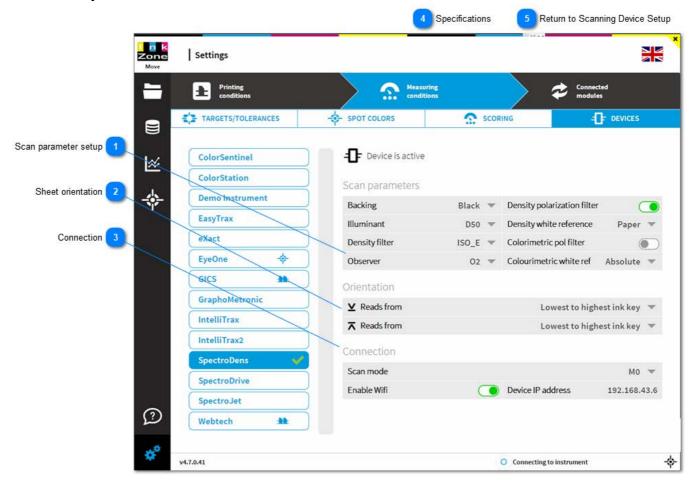


Start calibration (2).



Finish!

1.2.6.14. SpectroDens



Scan parameter setup



See details here: 1.2.6.9. Scan Parameter Setup



See details here: <u>1.2.6.10</u>. Sheet Orientation



Setup the SpectroDens IP configuration with SpectroConnect. See document here: SpectroDens Wlan Setup

1.2.6.14. SpectroDens page 162/258

For IZM, setup the IP address and enable the Wifi setting. An USB connection is used when the Wifi setting is off.



Specifications

Producer Techkon

Min. patch size 6 mm without contrast bar (patch separator)

Scan length max 200 patches in 10 sec

Connected by USB or WiFi

Measurement Conditions M0, M1, M2, M3

Comment Colorbar scanning for color-control is only

supported with SpectroDens Premium

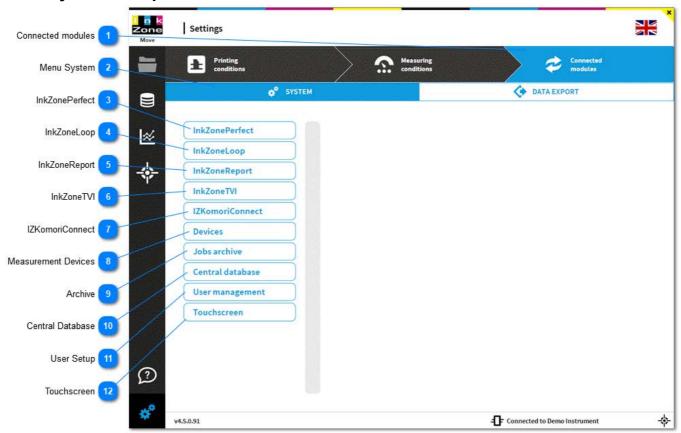
5

Return to Scanning Device Setup

1.2.6. Scanning Device Setup

1.2.6.14. SpectroDens page 163/258

1.2.7. System Setup



Connected modules



Opens the menu Connected modules with menu entry

- a) System
- b) Data-Export
- Menu System

 System

 Opens the submenu System
 - InkZonePerfect

InkZonePerfect

When InkZonePerfect (ink-preset) is installed on the same computer then enable it here. After the activation, a new job from always starts from InkZonePerfect by selecting the prepared CIP3 data with job name and color separation.

Note

The current job path is correctly pre-selected. Change the path only when required. Job setup in InkZonePerfect, see here: <u>1.2.3.2.1. Calibration Curve InkzonePerfect</u>

1.2.7. System Setup page 164/258



4

InkZoneLoop

InkZoneLoop



Setting Enable/Disable

With InkZoneLoop installed on the same computer, enable the application in IZMove here.

All measurement data created by InkZoneMove is sent to the selected scan data folder to be processed by InkZoneLoop.

Setting: Disable key for out of range density

Set a density threshold to detect wrong scan data. When the scan data values exceed the threshold will cause no regulation for this particular ink-key.

Sample:

Target density setup = 1.55

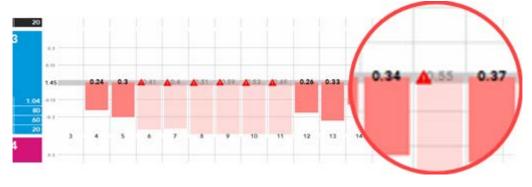
Measurement = 0.3

Setup "disable key for out of range density " = 0.85

Difference of target / measurement = 1.55 - 0.3 = 1.25

The difference 1.25 exceeds the setup value 0.85. The ink key will be not regulated

An ink-key where the density is detected as "out of range" is shown with a red warning triangle and is not regulated at the press.



With InkZoneLoop installed, verify the **synchronize** option (needs to be activate) in the press setup. See here: <u>1.2.1.2</u>. Advanced Press Settings

5

InkZoneReport

InkZoneReport

Company name and logo

Select company name and logo which appears on the report print out

1.2.7. System Setup page 165/258



PDF job name setup

Setup a job name with the parameters in brackets for generating the job name for PDF sheet and production reports:

Printed report filename template

<job>, <date>, <time>, <sheet_number>, <sheet_report>, <production_report>

Sheet report	<job>_<sheet_report>_<date>_<time>_<sheet_< th=""></sheet_<></time></date></sheet_report></job>	
Print Production-Report	<job>_<production_report>_<date>_<time></time></date></production_report></job>	

<job> job name

<sheet_report> if the term Sheet-Report appears in the name

cproduction_report> if the term Production-Report appears in the name

<date><time> date and time

<sheet_number> sheet number

E-Mail report setup

Sends PDF reports over e-mail.

Setup mail server SMTP host address and port. Define the e-mail sender's address.

See further information on sending mails through Google Mail: Send e-mail with Google Mail server



E-Mail recipients

Create an alias with one or a group of e-mail recipients. For a group of recipients, use a semi-colon to separate the mail addresses.

An alias is either internal or external. This helps avoiding mistakes when sending reports.

The rule is that e-mails defined as <u>internal</u> can be send always whereas <u>external</u> addresses are sent only when customer name from the job setup matches the e-mail alias name.

See setup customer name here: 1.3.2. New Job



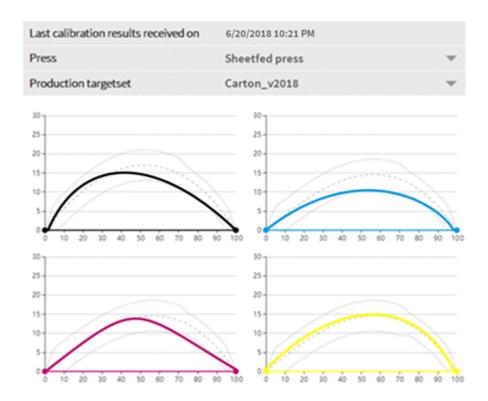
6

InkZoneTVI

InkZoneTVI

Displays information about the current compensation data set for a given press and targetset which both are selected from the drop down list:

1.2.7. System Setup page 166/258



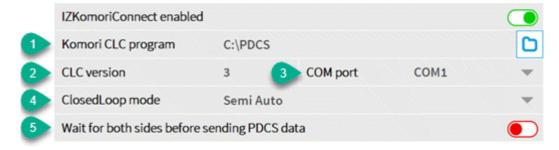
7 IZKomoriConnect
IZKomoriConnect

2

3

COM port

InkZoneKomoriConnect links to the Komori PDCS closedloop application



1 Komori CLC program Set the path to the Komori CLC program. Usually it is located in folder C:\PDCS

COM port used by the CLC program

CLC version Select 3 or 4 (double check what is installed)

·

4 Closedloop mode Semi- and full auto. Standard is semi auto which requires the

operator to confirm ink-key changes at the console desk. The setting

Auto changes ink-keys immediately after transfer.

5 Wait for both sides... Enable when using a perfecting press. Data is sent to press when both

sides are scanned

When using an IZSwitchbox than configure the parameters here:

1.2.7. System Setup page 167/258



Use job name information from Komori KMS:



- 1 Path Select the path to the status folder within KMS
- 2 Project and job name Form the IZMove job name by project and job name from KMS



The **command path** is used to communicate to InkZonePerfect / Loop and needs to be set in these programs to the same location.

The **scan path** for the measurement data delivered by the scan instrument drivers IntelliTrax, EasyTrax, Graphometronic or SpectroJet.

The colorbar path is populated by InkZoneMove with the colorbar information file CBF for the scan instrument driver

Note: the default directories are correctly set and therefore change only when required.

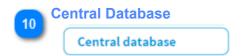




The oldest jobs are automatically archived to the selected **archive path** when the condition **free disk space** is less then **x** % of the disk drive.

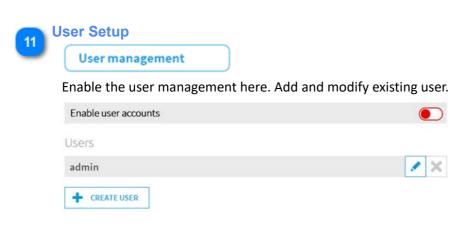
Database size / free space remaining	17.0 MB / 25%
Archive jobs if free percentage is less than	15% - +
Archive path	O

1.2.7. System Setup page 168/258



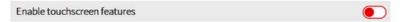
Use a centralized database for jobs and spot colors.

The local database automatically synchronizes to the main database and vice versa.





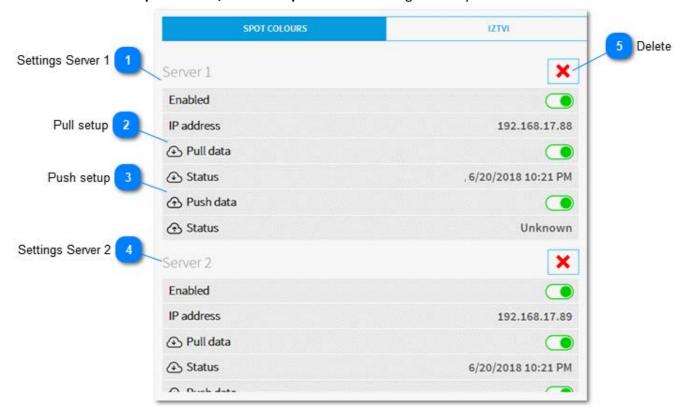
Enables features to run optimized for touch-screen controlled PC.



1.2.7. System Setup page 169/258

1.2.7.1. Central Database

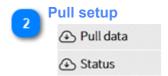
Select one of the tabs **Spot Colours**, **IZTVI** or **Report Jobs** and configure the synchronization to a main database.



Settings Server 1



Shows all settings for server 1, including the connection status to the remote couchDB

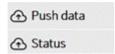


Enable pull data to sync data from the remote server to the local database. All data from the remote database is synchronized to the local database.

First, set IP address and then enable it. The last status of the connection is shown.

Push setup

1.2.7.1. Central Database page 170/258



Enable push data to sync data from the local database with the remote server database. All data from the local database is synchronized to the main database.

First, set IP address and then enable it. The last status of the connection is shown.



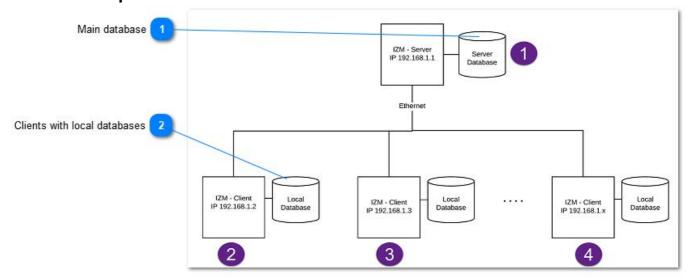
Settings for next server

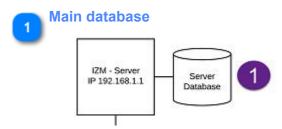


Delete the server setup.

1.2.7.1. Central Database page 171/258

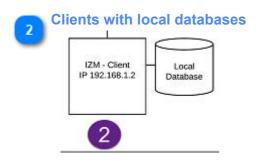
1.2.7.1.1. Sample InkZoneMove with Centralized Database





Settings for PC with main database (192.168.1.1)

The database can run on Linux or Windows. For couchDB v2 a 64 bit operating system is mandatory. It's required to open the TCP port 5984, see Windows firewall setup: 1.2.7.1.2. Firewall Setup

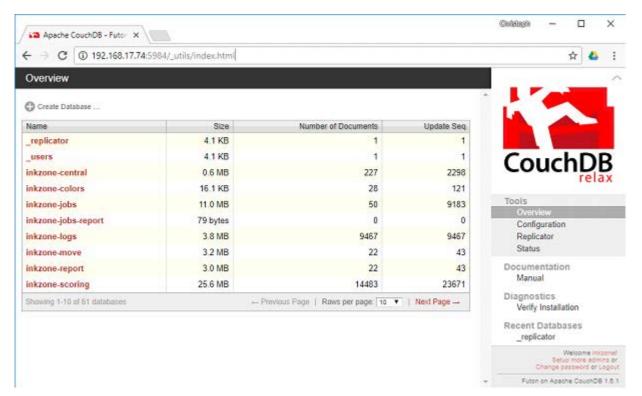


Test at the InkZoneMove client

After changing the firewall setup on the server, every IZM client (192.168.1.2. etc) is able to access remotely the servers couchdb configuration through a web browser, like:

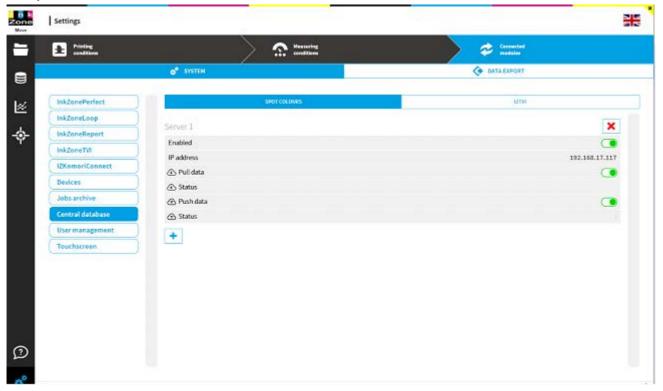
http://SERVER_IP:5984/_utils/config.html (replace SERVER_IP with the real ip address)

username inkzone password testing



You should see the couchdb data from the server database.

Setup InkZoneMove at the client PC



Set in "Central database/Spot Colours/IZTVI/Report" the server IP address and enable Pull and Push data.

Every new spot color is automatically propagated to the server database from where all other IZMove clients pull the spot color data to their local database.

Important

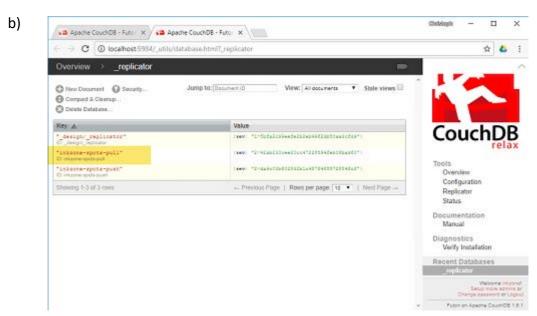
After creating a new spot color targetset, like "Pantone coated", restart the clients IZMove to get it visualized in the client IZMove.

Note

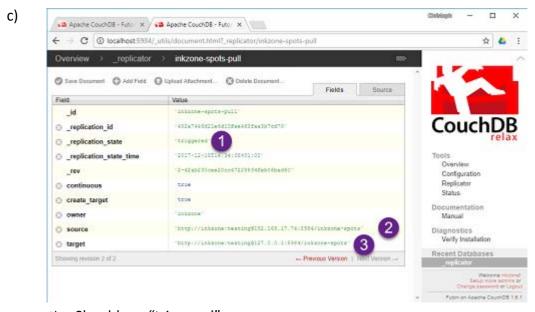
The restart is not required after a new spot colors has been created, the restart applies only for targetset creation.

Verify replication status on client

a) On the client open the link http://localhost:5984/ utils/database.html?_replicator to see the replication status page:



Click on "inkzone-spots-pull"



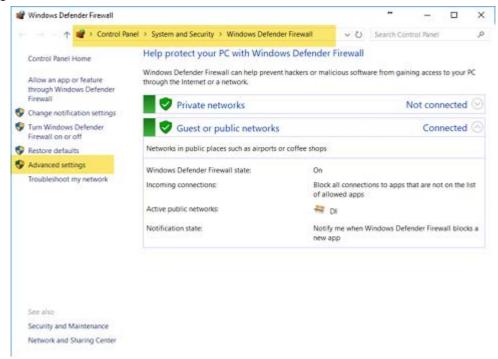
- 1) Should say "triggered"
- 2) Source address points to the IZM database server
- 3) Target is the local PC

1.2.7.1.2. Firewall Setup

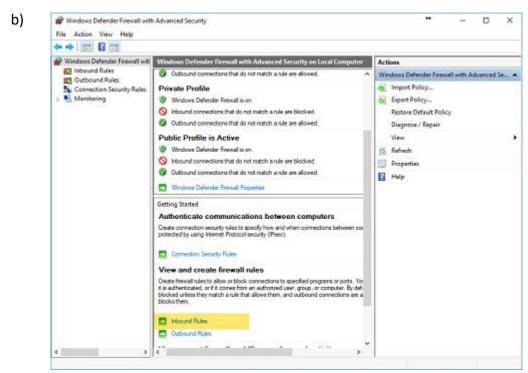
On the main database server, the port 5984 needs to be opened.

Configuration:

a)

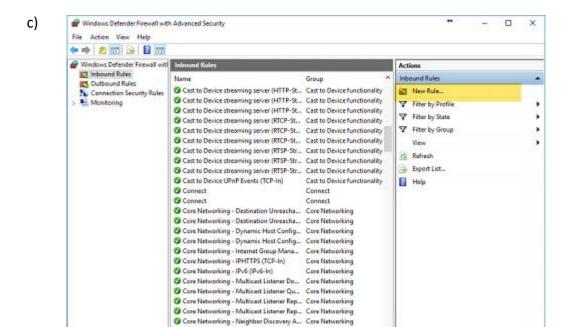


Open Firewall setting



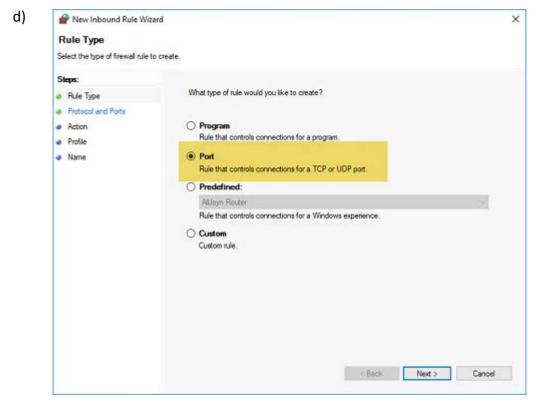
Create a new "Inbound Rule"

1.2.7.1.2. Firewall Setup page 175/258



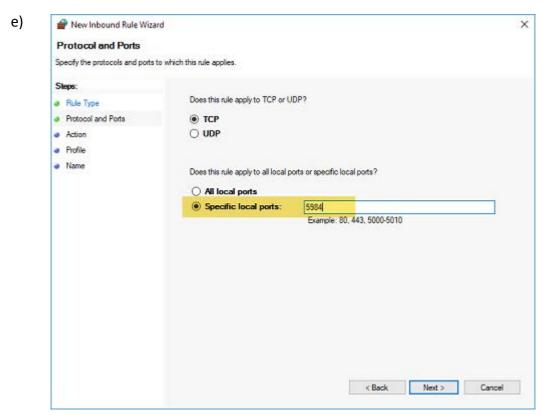
Core Networking - Neighbor Discovery S... Core Networking
 Core Networking - Packet Too Big (ICMP... Core Networking
 Core Networking - Parameter Problem (L... Core Networking

Select "New Rule"

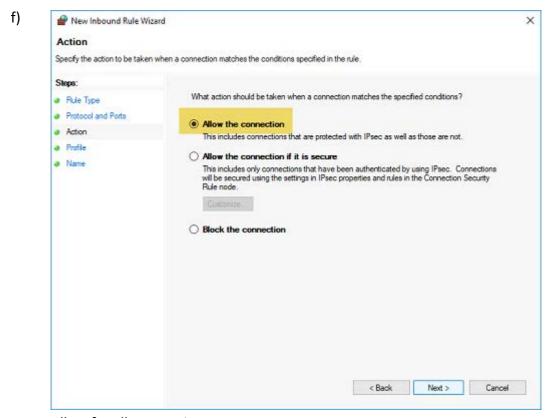


Select Port

1.2.7.1.2. Firewall Setup page 176/258

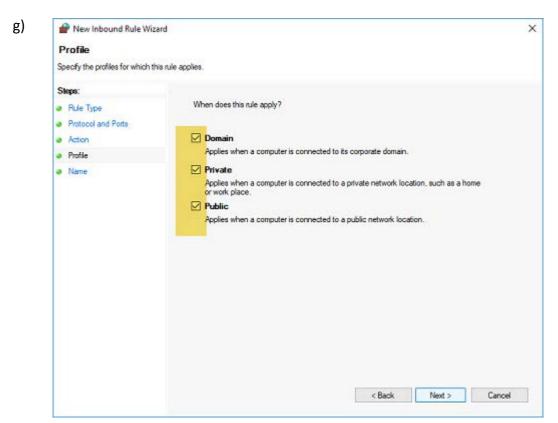


Port address is 5984

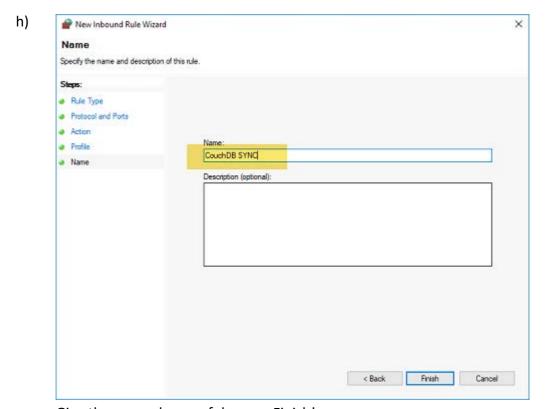


Allow for all connections

1.2.7.1.2. Firewall Setup page 177/258



Enable all networks



Give the new rule a useful name. Finish!

1.2.7.1.2. Firewall Setup page 178/258

1.2.7.2. Database IZTVI

Select tab IZTVI and configure synchronization to the IZTVI database for compensation data.



Setup to IZTVI 1



Configuration and status of connection to server 1.



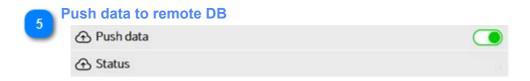
InkZoneTVI data is pulled from the remote InkZoneTVI database to the local database. The second line shows the status of the last execution.



Synchronize data to another InkZoneTVI station.



Deletes the synchronization setup.

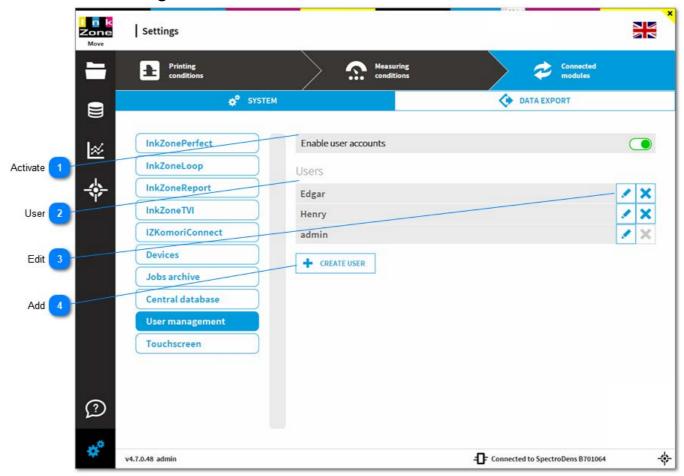


1.2.7.2. Database IZTVI page 179/258

Data for InkZoneTVI is pushed to the remote InkZoneTVI database . The second line shows the status of the last execution.

1.2.7.2. Database IZTVI page 180/258

1.2.7.3. User Management



Activate

Enable user accounts



Enable the user management. After startup, the user can log in with his account. The user names are recorded for every job and is printed on the IZReport.

The operator can logout from a session from the dashboard screen.

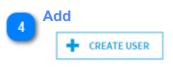




Manage all user from here. The admin account can not be deleted.

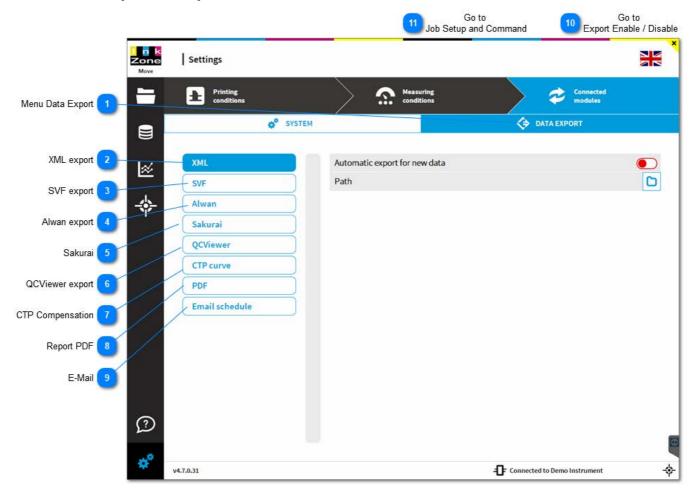


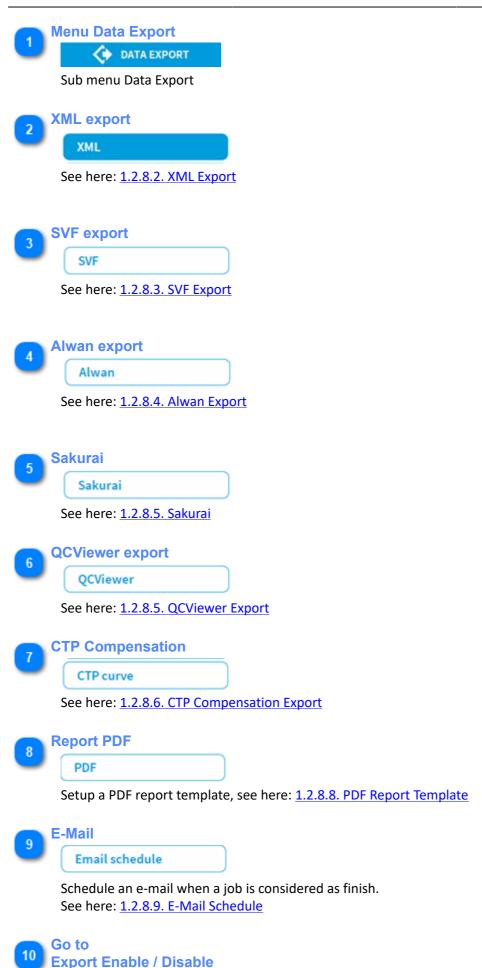
Create a new password or delete the user.



Add a new user

1.2.8. Data Export Setup



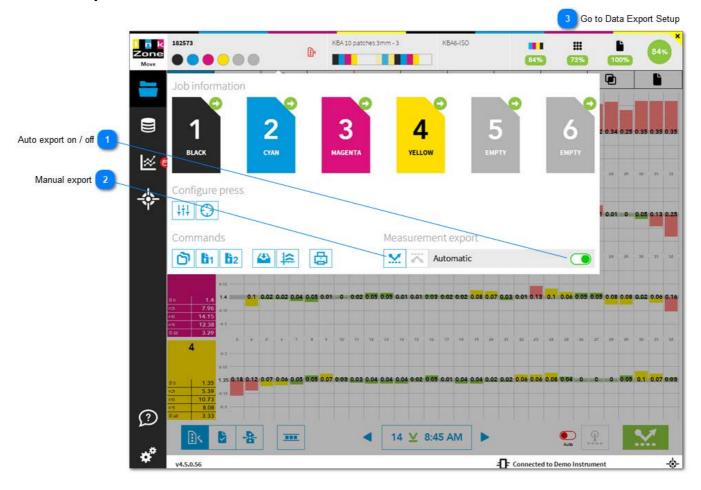


1.2.8.1. Export Enable-Disable



1.1.1.1. Job Setup Information

1.2.8.1. Export Enable-Disable



Auto export on / off

Automatic

By default the automatic export is active and every measurement is automatically exported. When it is disabled than export a single measurement with the buttons on the right.

Manual export

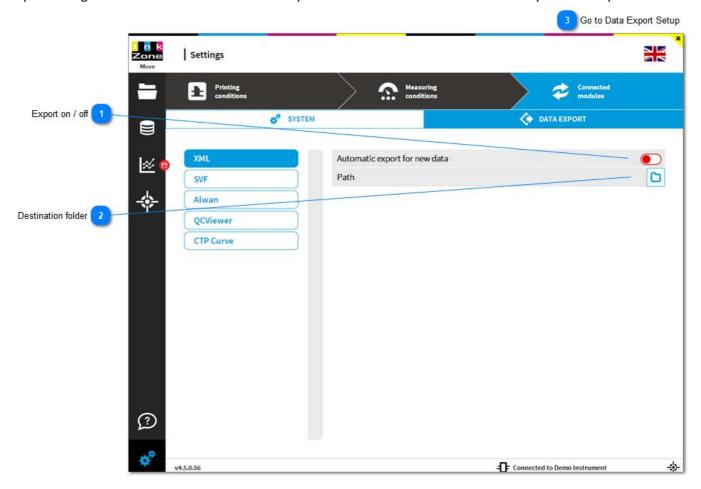
Manually exports measurement data according to the Data Export setup, see here: <u>1.2.8. Data Export Setup</u>

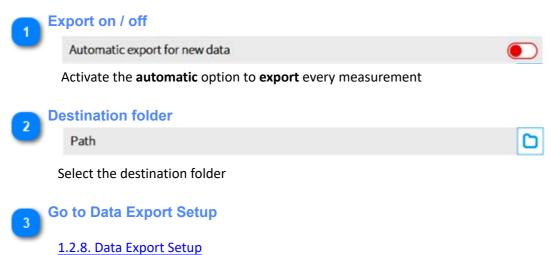
Go to Data Export Setup

1.2.8. Data Export Setup

1.2.8.2. XML Export

Exports the generic data measurement format by InkZone. It contains color data for every measured patch.

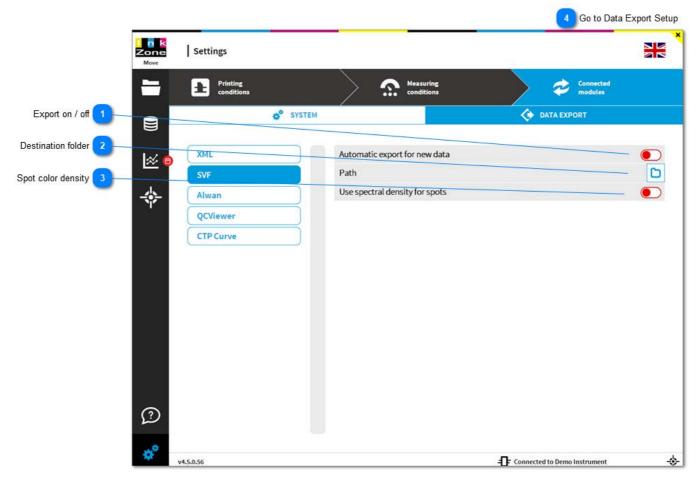


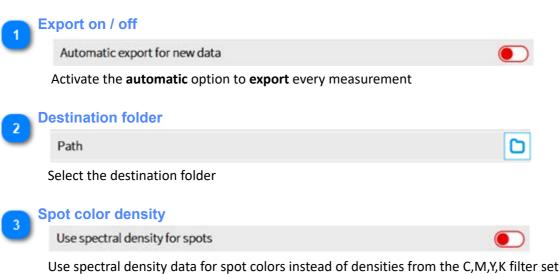


1.2.8.2. XML Export page 186/258

1.2.8.3. SVF Export

Exports the X-Rite SVF measurement format. It contains color data for every measured patch.





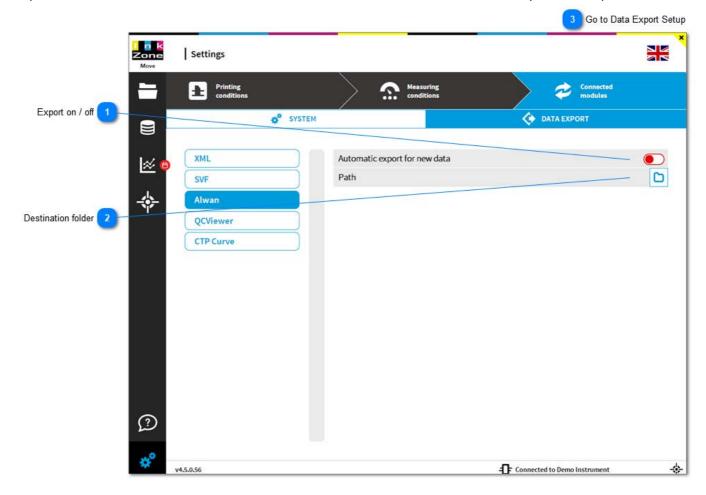
Go to Data Export Setup

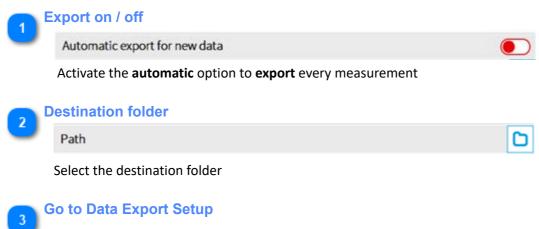
1.2.8. Data Export Setup

1.2.8.3. SVF Export page 187/258

1.2.8.4. Alwan Export

Exports for the data format for Alwan Print Standardizer. It contains color data for every measured patch.



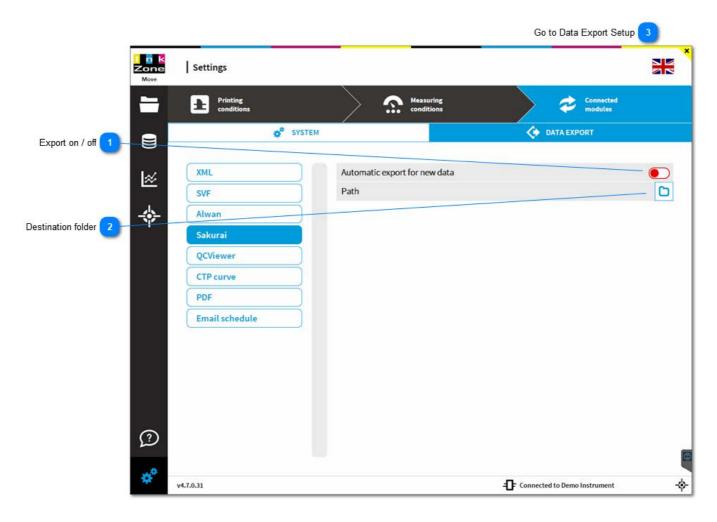


1.2.8. Data Export Setup

1.2.8.4. Alwan Export page 188/258

1.2.8.5. Sakurai

Exports the Sakurai color control data file. It contains color data for every measured patch.



Export on / off

Activate the automatic option to export every measurement

Destination folder

Select the destination folder

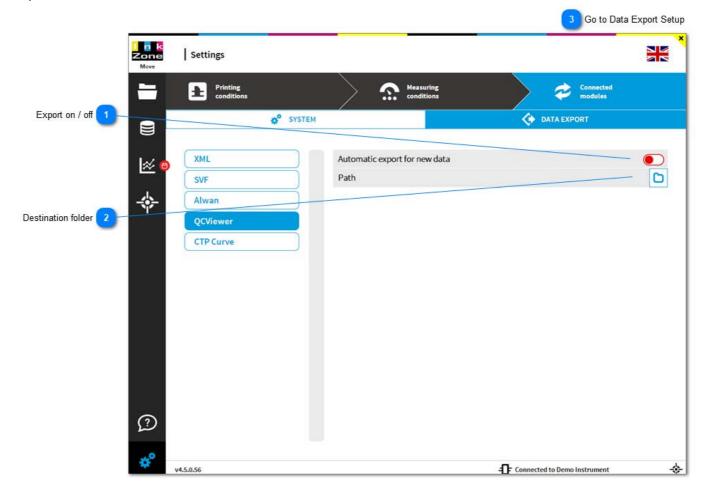
Go to Data Export Setup

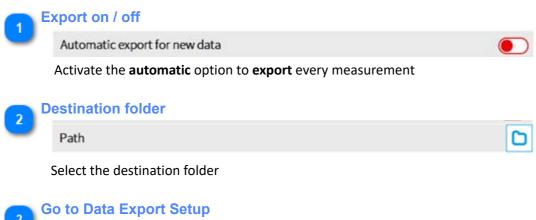
1.2.8. Data Export Setup

1.2.8.5. Sakurai page 189/258

1.2.8.6. QCViewer Export

Exports the data format for QCViewer.

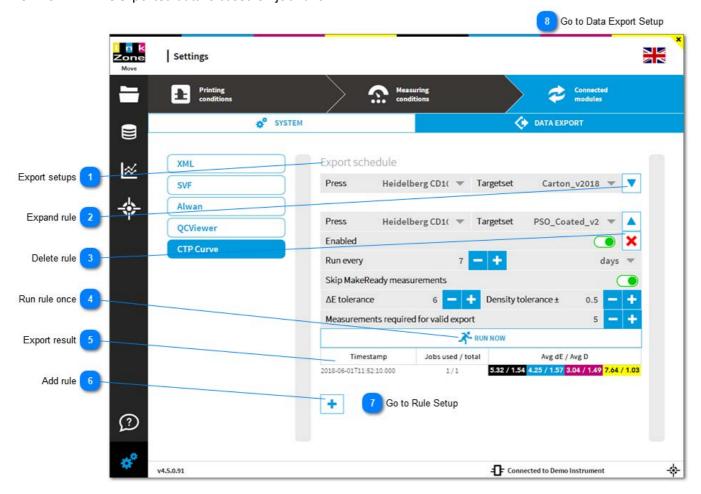




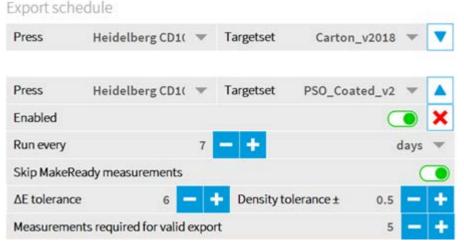
1.2.8. Data Export Setup

1.2.8.7. CTP Curve Optimization

Configure the datasets export for InkZoneTVI. Based on the data InkZoneTVI creates compensation curves for the workflow RIP. The exported data is based on job runs.



Export setups



All export rules are listed here. Expand them with the arrow up/down on the right side. See the rules details here:

2 Expand rule

View rule set for a combination of press and targetset



Delete rule



Remove the rule



Run rule once



Use for testing the setup by running the rule once.

5

Export result



Lists all runs and their result



Add rule



Add a new rule

7

Go to Rule Setup

1.2.8.6.1. Export rules IZTVI

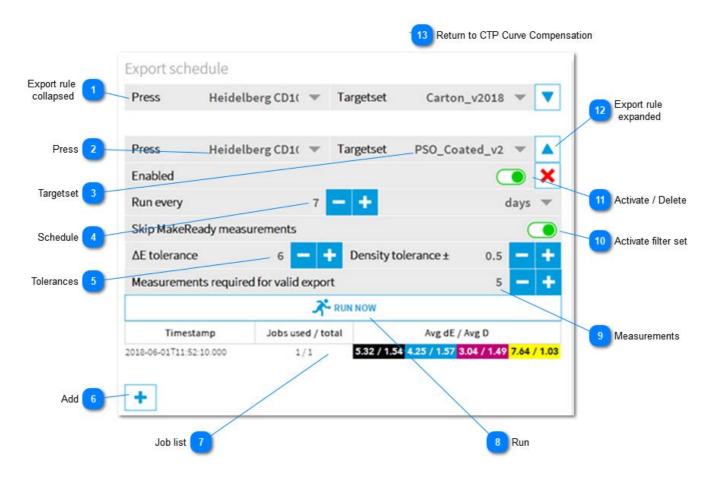
8

Go to Data Export Setup

1.2.8. Data Export Setup

1.2.8.7.1. Export rules IZTVI

Setup the export rules for CTP plate compensation curves.



Export rule collapsed



Export rule with press and targetset name. Expand it to review the setup and see processed jobs with the arrow down button on the right.



Targetset

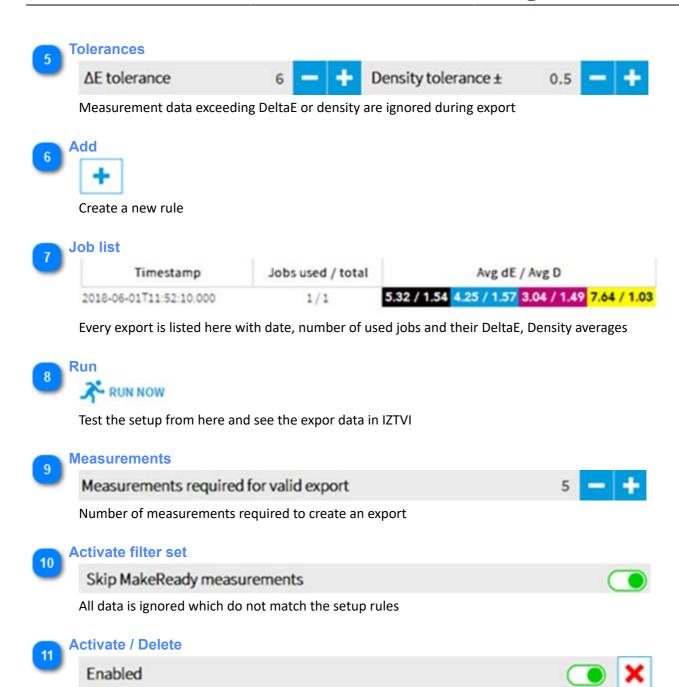
Targetset PSO_Coated_v2

Select the targetset from the list box

Schedule

Run every 7 — + days ▼

The rule is repeated every "number" of "days/weeks"



Enable the rule. Delete it with the red cross on the right

Export rule expanded



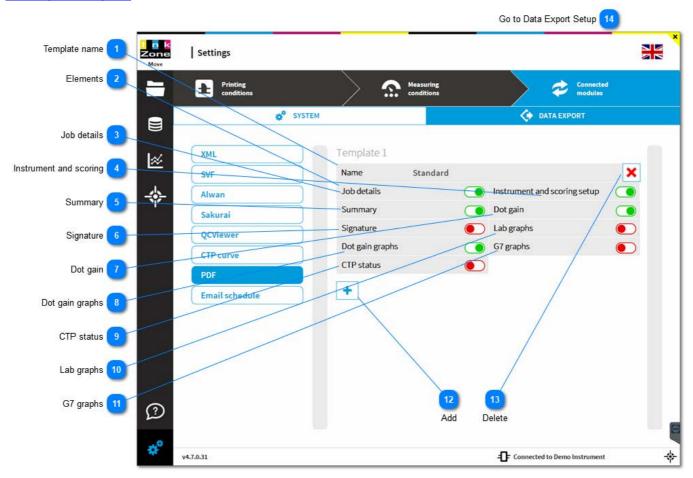
Export rule expanded view

Return to CTP Curve Compensation

1.2.8.6. CTP Curve optimization

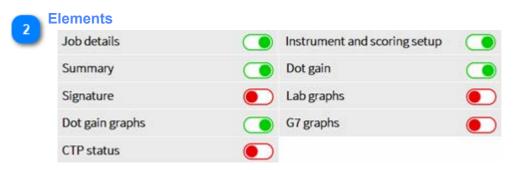
1.2.8.8. PDF Report Template

Create templates with print out elements. A template is selected during the PDF report creation. See here: <u>1.2.8.8.</u> PDF Report Template

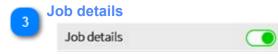




Define a template name. The template can be selected when creating a PDF.



Set the template item to active to include it to the PDF report print out.



Template item Job details

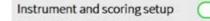
Adds job information, including the total score, to the PDF report:

Report type / Job name / Nr of measurements / Customer name / Date-Time / Assessment Sample:

Report type	Print Production-Report	
Job name	AGRI NK - KONGRESBLAD 2017 INSIDE WT84310_3A	
Number of measurments	4	
Customer		
Date	07/04/2017 12:08 PM	
Assessment	✓ Pass, score 87%	



Instrument and scoring

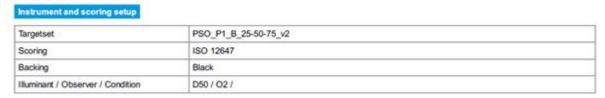


Template item Instrument and scoring

Adds scan instrument the print standard targetsset to the PDF report:

Targetset / Scoring set / Instrument backing / Illuminant, observer and measurement condition (Mx)

Sample:





Summary

Summary



Template item **Summary**

Adds a table with color and TVI assessment to the PDF report.

Read columns as:

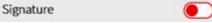
- [1] Print / Target [Lab] : printed value in bold, target values in light color tone
- [2] Density: target density
- [3] Delta E / Tolerance : deltaE of printed color in bold, accepted tolerance for assessment in light color tone
- [4] Delta E score: scores for deltaE with the selected scoring set
- [5] Dot gain score: scores for dot gain values with the selected scoring set
- [6] Midtone spread: scores for mid-tone spread

Sample:





Signature



Template item Signature

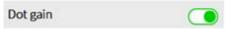
Adds at the bottom of the PDF report a customer sign-off element.

Sample:





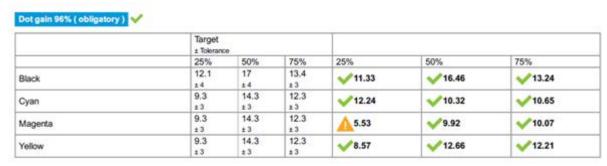
Dot gain



Template item **Dot gain**

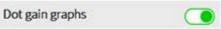
Adds dot gain information to the PDF report.

Sample:



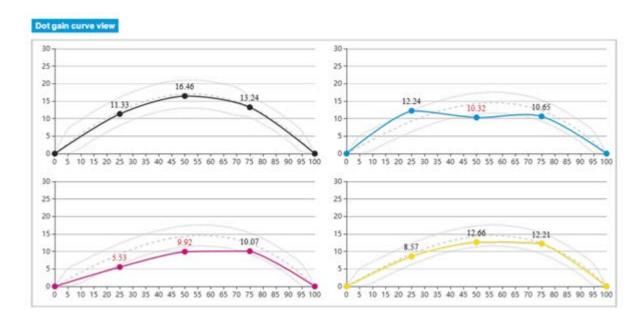


Dot gain graphs



Template item **Dot gain graphs**Adds dot gain graphs to the PDF report.

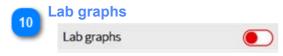
Sample:





Template item CTP status

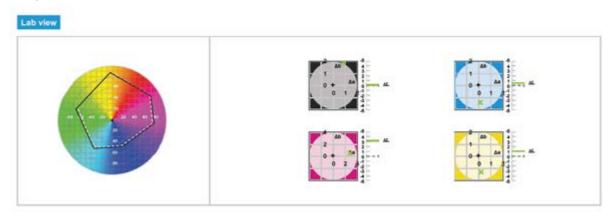
Adds information about data exported by InkZoneTVI to the PDF report.



Template item Lab graphs

Adds a color gamut circle to the PDF report.

Sample:





Adds a G7 graphs to the PDF report.

12 Add



Creates a PDF template which is available during PDF report creation.



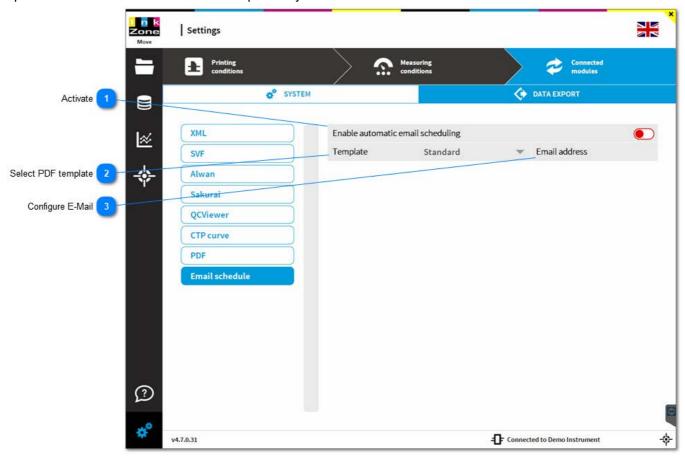
Delete the PDF template.

Go to Data Export Setup

1.2.8. Data Export Setup

1.2.8.9. E-Mail Schedule

Schedule the automatic generation of an E-Mails after the job is finished. The e-mail contains the production report created with the selected PDF template. A job is considered as finish when a new one is created.





Activate the e-mail scheduling here. After activation, a PDF report is sent to the e-mail address after the job ends.

The end of a job is considered when a new job is created.

Select PDF template

Template Standard

Select a defined template for the PDF creation, see here: 1.2.8.8. PDF Report Template

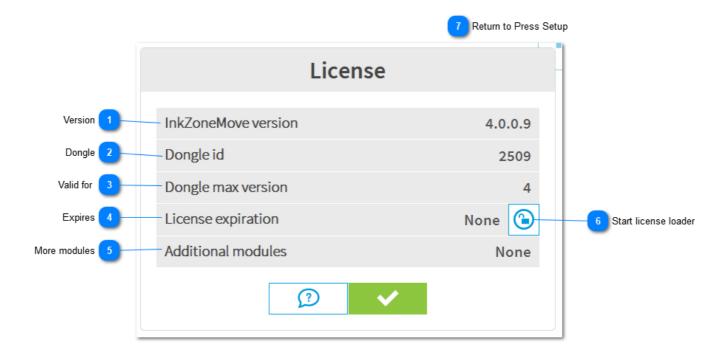
Configure E-Mail
Email address

Choose the e-mail recipient.

Setup the mail server settings here: 1.2.7. System Setup

1.2.8.9. E-Mail Schedule page 201/258

1.2.9. License Information



1 Version InkZoneMove version

Currently installed software version

Dongle Dongle id

Dongle hardware ID. See also the blue identification label attached to the dongle

Valid for

Dongle max version

Dongle is valid for shown version number or lower

4 License expiration
License expires on the given data

More modules

Additional modules

Further licensed modules on this dongle

Start license loader

Starts the license loader module. Request a new license with the license loader.

1.2.9. License Information page 202/258

See <u>1.2.10. License Loader</u>



Return to Press Setup

1.2.1. Press Setup

1.2.9. License Information page 203/258

1.2.10. License Loader



Refresh dongle information

Refresh the shown dongle information

Load License

Load license

Load a license file to change the dongle status

3 License request

Request extended license

Creates a license request file. Send it to your dealer or distributor

Return to License Information

1.2.9. License Information

1.2.10. License Loader page 204/258

1.3. Jobs

1.3.1. Home

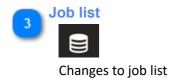




A click on the icon returns you to the home screen (this screen)



Opens current job in measurement view





1.3. Jobs page 205/258

Displays the report from currently active job, see here 1.4.2.3. Report summary

5

Status info

System status

Active device	Demo Instrument	
Active press	Heidelberg CD102	
Current job	W23452_Brochure_Form03_Front	

Displays job name and currently active press setup and the selected instrument.

6

Open active job



Opens current job in measurement view

7

Create new job



NEW JOE

Start a new job from here

8

Help



Context sensitive help button. Brings up a help page from the currently active IZM4 page

9

Configuration



Change to the software configuration page

10

Trend



Trend graphs for printed jobs. Vertical bars indicate job score. Trend lines in different color for Primary, Spot Colour, TVI, Overprint, Gray, Paper and Midtone Spread

11

Configure trend



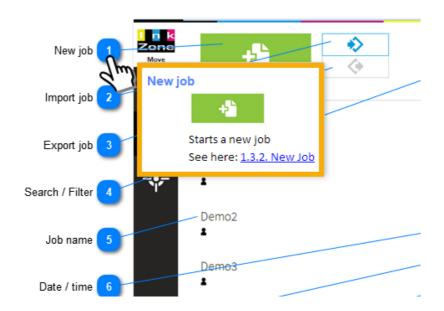
1.3.1. Home page 206/258

Change trend display from **number of jobs** to **last x days**, modify the number.

12

How to use the help

Hover over the number to get extra information or a link to the topic.



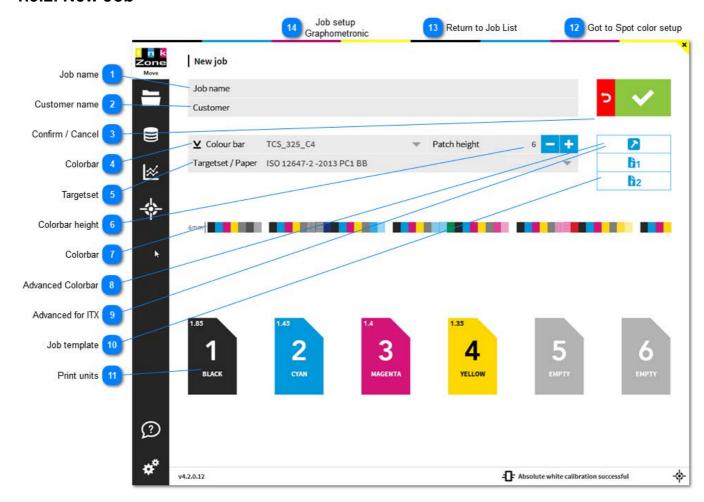
13

Link to Online HTML Manual

InkkZoneMove Online User Guide

1.3.1. Home page 207/258

1.3.2. New Job



Job name

Job name

When the job starts from InkZonePerfect the name is automatically set and refers to the CTP / CIP3 job name scheme from the prepress workflow.

Customer name

Customer

Add a customer/print buyer name to the job.

IZReport can send PDF reports to customers. For this scenario, it is Important that the costumer name set here matches the one in the e-mail setup, see here: <u>1.2.7. System Setup</u>

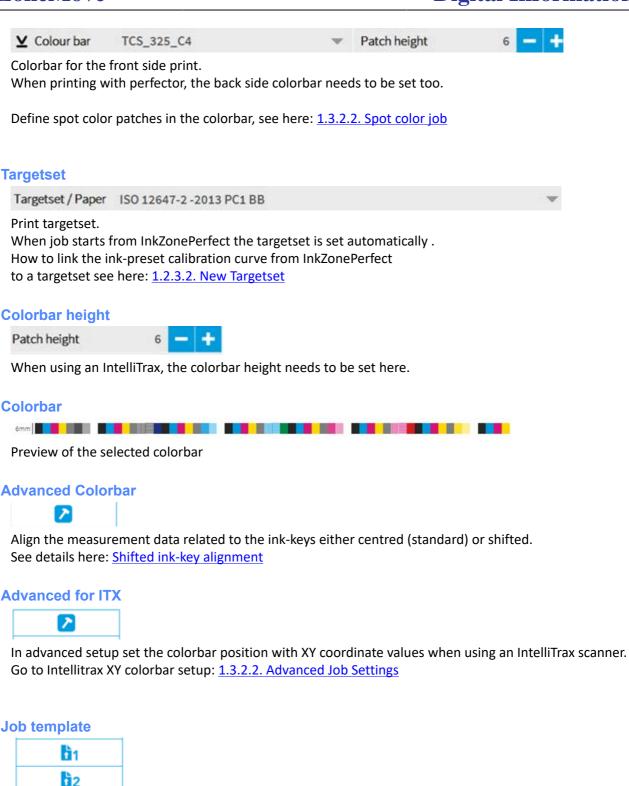
Confirm / Cancel



Confirm or cancel job setup

4 Colorbar

1.3.2. New Job page 208/258



Select a predefined template job. A template job has a defined targetset, colorbar, color sequence and machine type.

See here how to set a template job: 1.1.1.1. Job-Setup View

Print units

1.3.2. New Job page 209/258



Print unit with target density and its assigned color. Click on the unit to add or change a color.

Got to Spot color setup

1.3.2.1. Spot color setup

Return to Job List

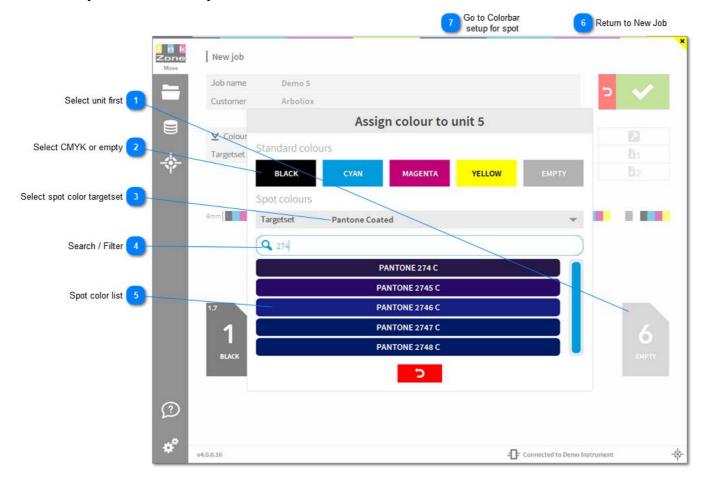
1.3.3. Job List

Job setup
Graphometronic

See here: 1.3.2.3. Graphometronic Job Setup

1.3.2. New Job page 210/258

1.3.2.1. Spot Color Setup



Select unit first



Click on the unit to open the assignment dialog

Select CMYK or empty



Select from here one of the process colors CMYK or set the units as empty, none printing

Select spot color targetset

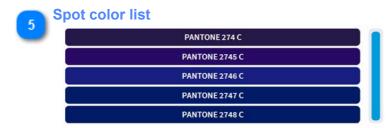
Spot colours



When using a spot color then select the target set first



Add a search string to filter the selection



Select the color from the filtered spot color list

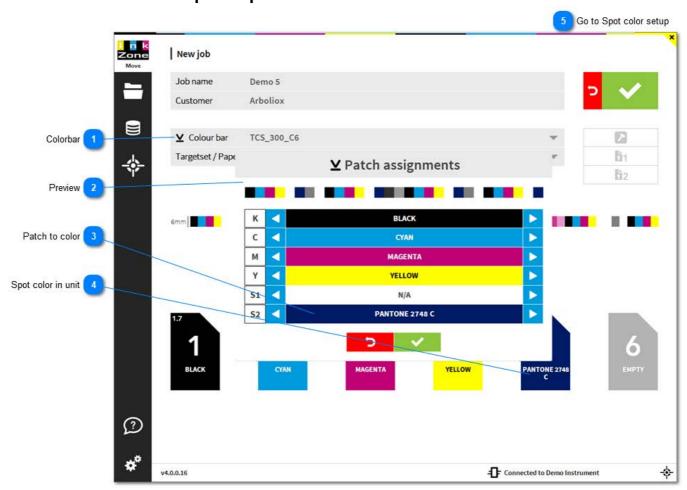
Return to New Job

1.3.2. New Job

Go to Colorbar setup for spot

1.3.2.1.1. Colorbar setup for spot

1.3.2.1.1. Colorbar Setup for Spots





Select an appropriate colorbar for a spot color job. In the sample a 6 patch colorbar is selected.



Preview the patch to color assignment.



Assign to each patch a printing color.

In this sample patch K prints Black etc. and spot color patch S2 prints Pantone 2748 C.

Use the arrow buttons left and right to change the assignment.

Spot color in unit
PANTONE 2748
C

Unit 5 prints spot color Pantone 2748 C. See

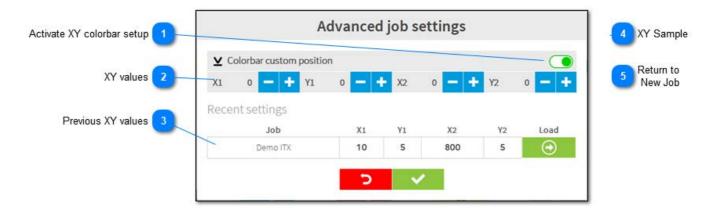
Go to Spot color setup

1.3.2.1. Spot color setup

1.3.2.1.1. Colorbar Setup for Spots

1.3.2.2. Advanced Job Settings IntelliTrax

This screens is only available for IntelliTrax scanners.



Activate XY colorbar setup

Enable the XY setup for IntelliTrax



The XY values are explained here 1.1.1.2.1. IntelliTrax XY coordinates



Reuse a XY setup from a previously printed job.

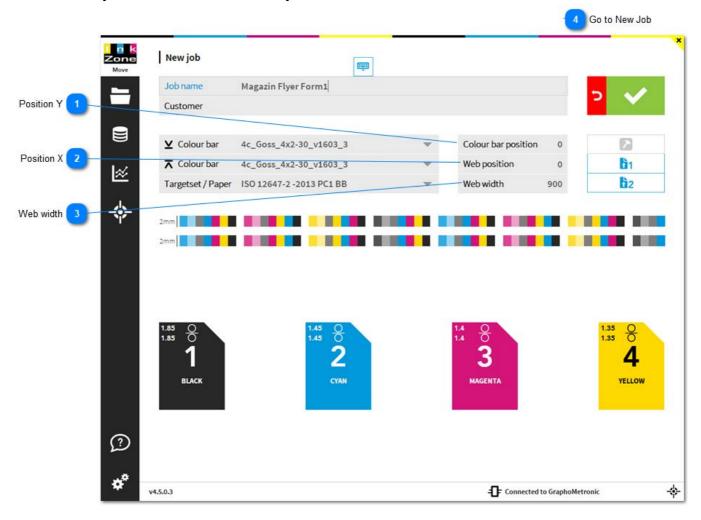
XY Sample

See detailed sample here 1.1.1.2.2. IntelliTrax XY sample

Return to New Job

1.3.2. New Job

1.3.2.3. Graphometronic Job Setup



Position Y

Colour bar position 0

Colorbar circumference position, as an offset to the standard calibrated Y position

Position X
Web position 0

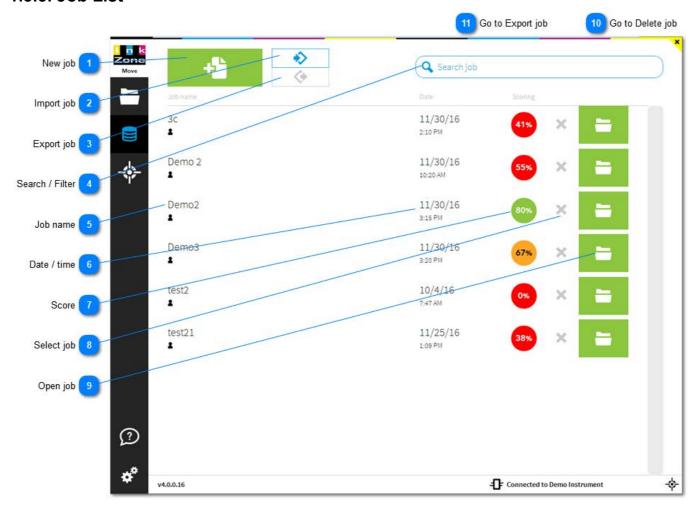
Position across the web, roller. Use this parameter when the web is not centered in the press (e.g. shifted by 1 key) or the colorbar itself is not centered.

Web width
Web width
900
Web width

Go to New Job

1.3.2. New Job

1.3.3. Job List







Starts a new job

See here: 1.3.2. New Job





To export a job, select first the cross icon left of the open



Enter a part of the job name to filter the job list

1.3.3. Job List page 217/258



Job name with date and job score

Date / time 11/30/16 3:15 PM

Printing time and date

7 Score
80%
Production score

8 Select job

Select a job there and then export or delete it. See here: 1.3.3.1. Export Job and 1.3.3.2. Delete Job

Open job

Open the job in measurement view

Go to Delete job

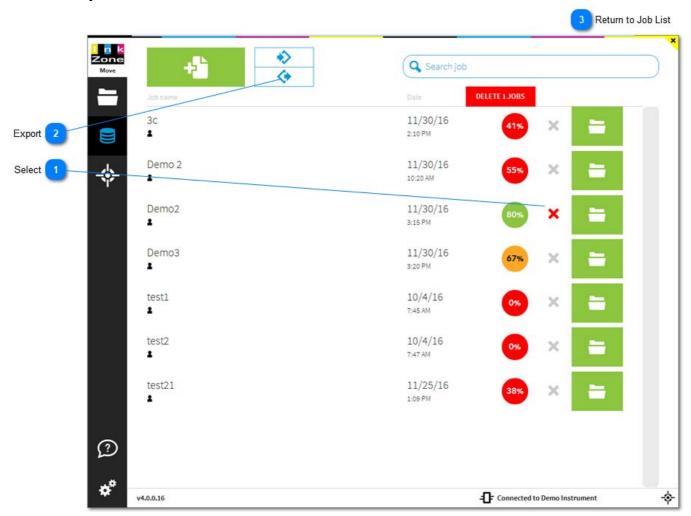
1.3.3.2. Delete Job

Go to Export job

1.3.3.2. Delete Job

1.3.3. Job List page 218/258

1.3.3.1. Export Job



1 Select

First, select the job by clicking on the grey cross. When selected it turns red.

2 Export

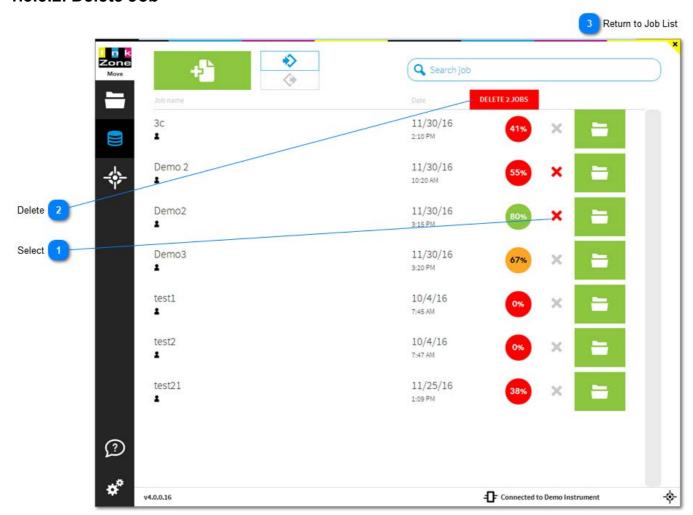
Second, select the export button and choose an export path

Return to Job List

1.3.3. Job List

1.3.3.1. Export Job page 219/258

1.3.3.2. Delete Job





First, select the job by clicking on the grey cross. When selected it turns red.



Second, press the delete butoton and confirm the action.

Return to Job List

1.3.3. Job List

1.3.3.2. Delete Job page 220/258

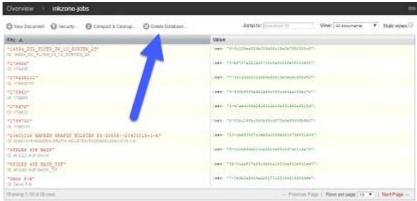
1.3.3.3. Export Job Database

The following procedure describes how to migrate the InkZoneMove job database to another computer:

IZM4 job database migration – move the installation from PC A (source) to PC B (target)

- Install IZM4 on the target PC
- 2. On the target system, open http://localhost:5984/_utils/database.html?inkzone-jobs and select **Delete**Database from top commands

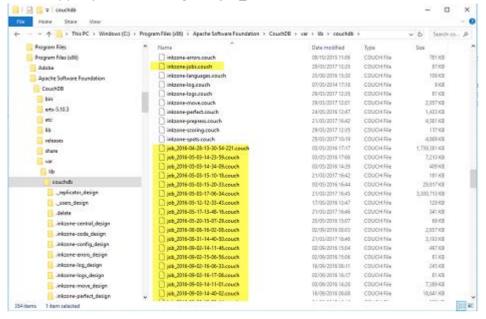
User name: inkzone Password: testing



3. On the source system, go to

"C:\Program Files (x86)\Apache Software Foundation\CouchDB\var\lib\couchdb" (can be also "C:\CouchDB\var\lib\couchdb") and copy the file *inkzone-jobs.couch*

Then, copy all job files starting with **job_*.couch**



- 4. On the target system, open the CouchDB storage folder (same as from point 2) and paste the inkzone-jobs.couch and the job_*.couch files.
- 5. Start InkZoneMove. All jobs should be fully functional now

1.4. IZReport

InkZone Report is an add-on for InkZoneMove to verify print jobs against a given print standard, print reference. For none InkZoneMove user the application can be configured to process X-Rite SVF data or Scan.XML JDF data.

1.4.1. Setup

InkZone Report uses target and scoring sets for the color assessments. For the report configuration it's important to understand targetset: <u>1.2.3.3. Edit Targetset</u> and scoring setup: <u>1.2.5. Scoring Setup</u>

1.4.2. Views

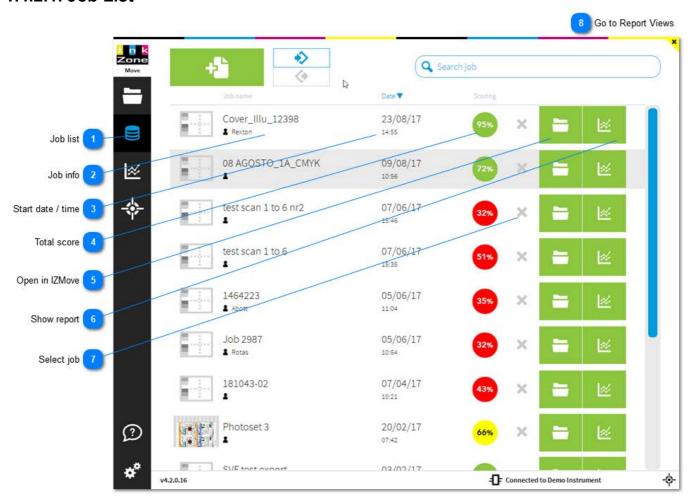
InkZoneReport has different views on job measurement data.

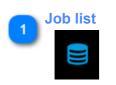
Go to:

- 1.4.2.1. Job list
- 1.4.2.2. Production Report Summary
- 1.4.2.2. Production Report Summary
- 1.4.2.3. Sheet Report Summary
- 1.4.2.4. Sheet Reports
- 1.4.2.5. Trend on Density
- 1.4.2.6. Trend on Lab and TVI
- 1.4.2.7. Sheet Reports with Lab
- 1.4.2.8. PDF output

1.4. IZReport page 222/258

1.4.2.1. Job List





Access job list



3 Start date / time 23/08/17 14:55

Job's start date and time

1.4.2.1. Job List page 223/258



Total score



Total job score calculated from target and scoring set



Open in IZMove



Open job in InkZoneMove measurement view (only when IZMove is available)



Show report



Open report summary



Select job



Select a job for export or removal.

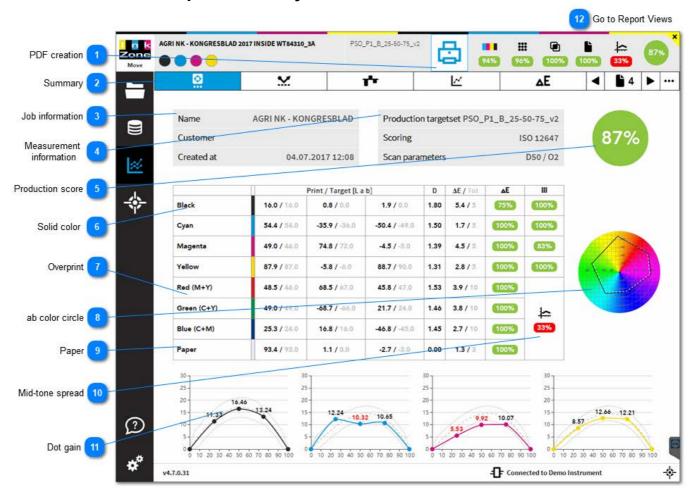


Go to Report Views

1.4.2. Views

1.4.2.1. Job List page 224/258

1.4.2.2. Production Report Summary







Create a PDF report printout. Tab on the icon and select the report type. Details see here: <u>1.4.2.9. PDF output</u>

Summary



Access report summary

Job information

Name AGRI NK - KONGRESBLAD

Customer

Displays job and customer name with start date and time.

04.07.2017 12:08

Measurement information

Created at



Displays time for MakeReady and Production and job's final measurement which marks job end.

5

Production score



Total score on job production according to its target and scoring set.

6

Solid color

Read columns like:

Summary		0		2	3	4	5
		Print / Target [L a b]		D	ΔE / Tol	ΔE	-
Black	16.0 / 16.0	0.8/0.0	1.9 / 0.0	1.80	5.4/5	653	
Cyan	54.4 / 54.0	-35.9 / -36.0	-50.4 / -49.0	1.50	1.7/5	(000)	CHAS
Magenta	49.0 / 46.0	74.8 / 72.0	-4.5 / -5.0	1.39	4.5/5	000	(II)
Yellow	87.9 / 87.0	-5.8 / -6.0	88.7 / 90.0	1.31	2.8/5	(00)	(MAX)
Red (M+Y)	48.5 / 46.0	68.5 / 67.0	45.8 / 47.0	1.53	3.9 / 10	(100)	6
Green (C+Y)	49.0 / 49.0	-68.7 / -66.0	21.7 / 24.0	1.46	3.8 / 10	(22)	₩
Blue (C+M)	25.3 / 24.0	16.8 / 16.0	-46.8 / -45.0	1.45	2.7 / 10	(100)	
Paper	93.4 / 93.0	1,1 / 0.0	-2.7 / -3.0	0.00	1.3/3	600	

[1] Print / Target [Lab] : printed value in bold, target values in light color tone

[2] Density: target density

[3] Delta E / Tolerance : deltaE of printed color in bold, accepted tolerance for assessment in light color tone

[4] Delta E score: scores for deltaE with the selected scoring set

[5] Dot gain score: scores for dot gain values with the selected scoring set

[6] Midtone spread: scores for mid-tone spread

7

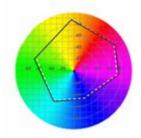
Overprint

Red (M+Y)	48.5 / 46.0	68.5 / 67.0	45.8 / 47.0	1.53	3.9 / 10	100%
Green (C+Y)	49.0 / 49.0	-68.7 / -66.0	21.7 / 24.0	1.46	3.8 / 10	100%
Blue (C+M)	25.3 / 24.0	16.8 / 16.0	-46.8 / -45.0	1.45	2.7 / 10	100%

Score on overprints (secondary colours)

8

ab color circle



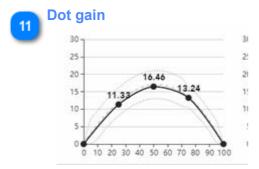
Colour gamut with CMY and RGB coordinates.



Score on paper (DeltaE on Lab)



Score on CMY mid-tone spread

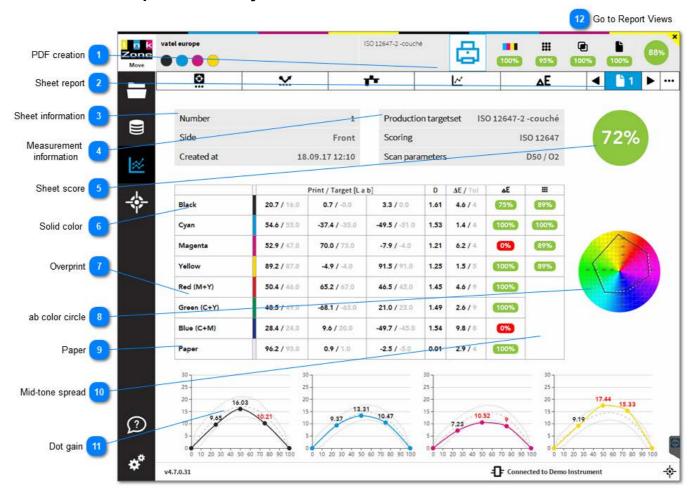


Tone value increase cure with print result and tolerance area.

Go to Report Views

1.4.2. Views

1.4.2.3. Sheet Report Summary





Create a PDF report printout. Tab on the icon and select the report type. Details see here: <u>1.4.2.9. PDF output</u>



Sheet information

Number 1

Side Front

Created at 18.09.17 12:10

Displays job and customer name with start date and time.

Measurement information



Displays time for MakeReady and Production and job's final measurement which marks job end.



Sheet score



Total score on job production according to its target and scoring set.



Solid color

Read columns like:



[1] Print / Target [Lab]: printed value in bold, target values in light color tone

[2] Density: target density

[3] Delta E / Tolerance : deltaE of printed color in bold, accepted tolerance for assessment in light color tone

[4] Delta E score: scores for deltaE with the selected scoring set

[5] Dot gain score: scores for dot gain values with the selected scoring set

[6] Midtone spread: scores for mid-tone spread



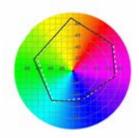
Overprint

Red (M+Y)	50.4 / 46.0	65.2 / 67.0	46.5 / 45.0	1.45	4.6 / 9	100%
Green (C+Y)	48.5 / 49.0	-68.1 / -63.0	21.0 / 25.0	1.49	2.6 / 9	100%
Blue (C+M)	28.4 / 24.0	9.6 / 20.0	-49.7 / -45.0	1.54	9.8 / 8	0%

Score on overprints (secondary colours)



ab color circle



Colour gamut with CMY and RGB coordinates.

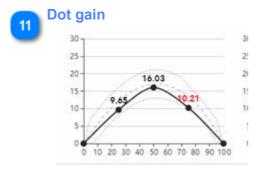


Score on paper (DeltaE on Lab)





Score on CMY mid-tone spread

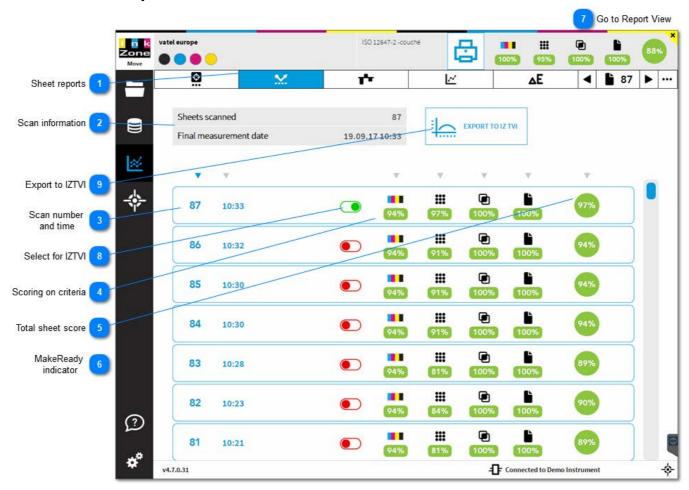


Tone value increase cure with print result and tolerance area.

Go to Report Views

1.4.2. Views

1.4.2.4. Sheet Reports





Scan information



Total scan measurement, including MakeReady, and the time when the last measurement was takenf



Measurement number and time.

A click on a measurement brings you further to the DeltaE sheet report 1.4.2.6. Sheet report DeltaE

1.4.2.4. Sheet Reports page 231/258



Scoring on criteria









Scoring for every criteria:

- solid color CMYK deltaE
- TVI
- overprint deltaE
- paper deltaE



Total sheet score



Total scoring for selected sheet



A grey background indicates that the sheet was measured during MakeReady.

Go to Report View

1.4.2. Views

Select for IZTVI



Select here the measurement data to be exported to InkZoneTVI for CTP plate compensation. After selecting one or more measurement, press the button above "Export to IZ TVI".

9

Export to IZTVI



After selecting one or more scan measurement, see "Select from IZTVI", the export button gets visible. Press the button and the selected dataset are exported for InkZoneTVI. A data average is created if more than one scan is selected.

1.4.2.4. Sheet Reports page 232/258

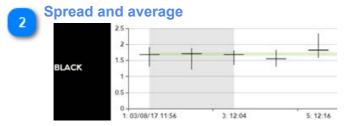
1.4.2.5. Trend on Density

A density trend graphs displays the spread and average density for every measurement.



Density trend

The density trend graphs displays the spread and the average density for every measurement.



Indicates average density (horizontal) and spread (vertical).

Measurement number 5 has an average of 1,8 and a density spread from 1.55 to 2.40 which is the lowest and highest density reading from the black color.

Go to Report View

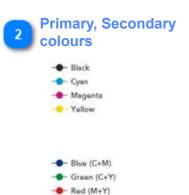
1.4.2. Views

1.4.2.6. Trend on Lab and TVI

Shows Lab trend for primary and secondary colours, trend for TVI plus the mid-tone spread.



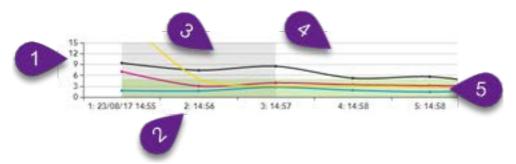




Click on a colour here to toggle it on or off in the graph.

Diagram

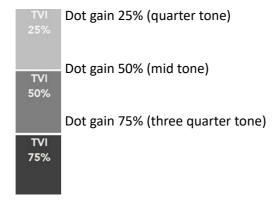
Display of a color is toggled on and off by clicking on the color's name on the right.

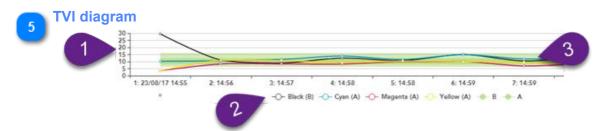


- 1) DeltaE scale
- 2) Measurement number and time stamp
- 3) Grey area = status MakeReady mode
- 4) White area = status Production mode
- 5) Green area = tolerance

TVI percentage

Depending on the target and scoring setup the trend for the TVI percentage are shown here.





- 1) TVI percentage scale
- 2) Toggle diagram colours on and off
- 3) Tolerance area

Mid-tone spread Midtone sprea

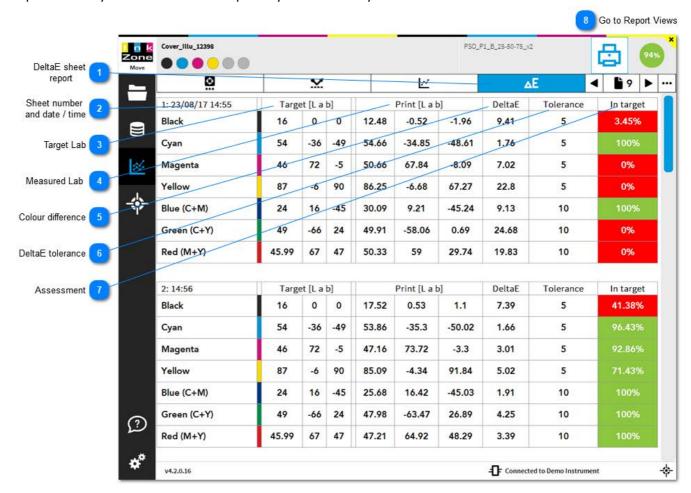
CMY mid-tone spread

Go to Report View

1.4.2. Views

1.4.2.7. Sheet Reports with Lab

Report on every sheet with DeltaE on primary and secondary colours.



DeltaE sheet report

ΔE

Opens DeltaE report for every measured sheet

Sheet number and date / time

1: 23/08/17 14:55

Indicates sheet number and date and time

Target Lab

Target [L a b]

16 0 0

54 -36 -49

46 72 -5

Target Lab for all printed colours



Measured Lab

	Print [Lab]
12.48	-0.52	-1.96
54.66	-34.85	-48.61
50.66	67.84	-8.09

Average Lab from all measured patches



Colour difference

De	ltaE
9.	.41
1.	.76
7	.02

DeltaE from target and measured patches



DeltaE tolerance

\perp	Tolerance
	5
T	5
T	5

Tolerance for every colour, set in targetset



Assessment



Displays number of patches in target [in percentage] with pass, fail indication

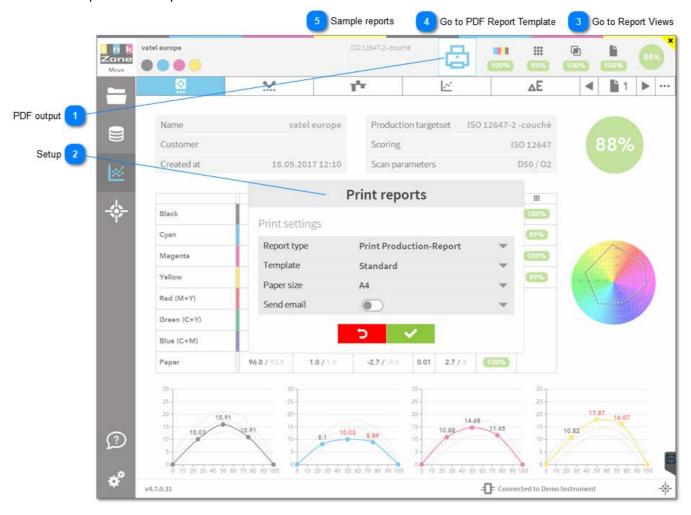


Go to Report Views

1.4.2. Views

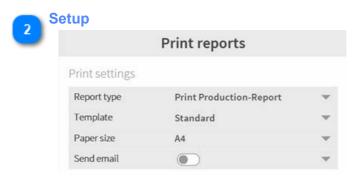
1.4.2.8. PDF output

Print sheet or production report.





Start here to create a PDF sheet or production report



Report Type

- 1) Production report
- 2) Single sheet report

Template

1.4.2.8. PDF output page 238/258

Select a PDF report template.
Setup a template here 1.2.8.8. PDF Report Template

Paper size

- 1) A4
- 2) Letter

Label print

On or off

Creates a narrow sized PDF to print on a label printer

Go to Report Views

1.4.2. Views

Go to PDF Report Template

1.2.8.8. PDF report template

Sample reports

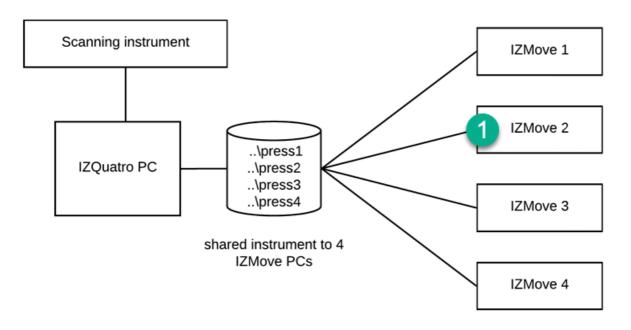
Sample

1.4.2.8. PDF output page 239/258

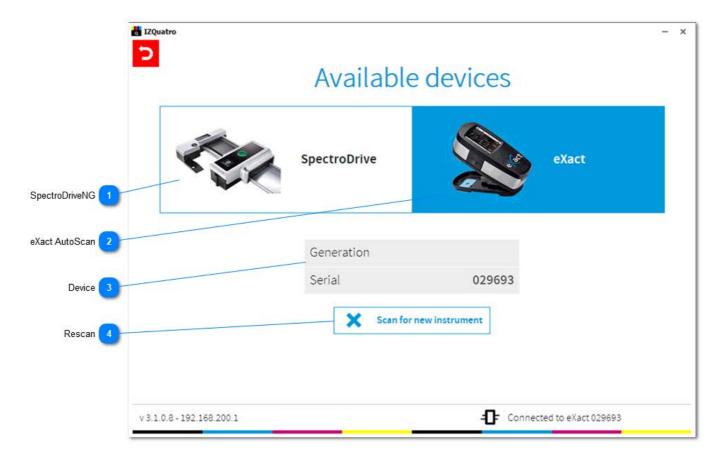
1.5. IZQuatro v3

InkZone Quatro shares a single scanning instrument between up to 4 press machines equipped with InkZoneMove.

The release v3 supports the instruments eXact AutoScan and SpectroDrive.



1.5.1. IZQuatro setup



1.5. IZQuatro v3 page 240/258

1

SpectroDriveNG



SpectroDrive

Install the Techkon Device Service first. Then look up the SpectroDrive serial number at the device and set the serial number in the database. Open the database serial number setting with the link here: <u>Set serial number in database</u>

2

eXact AutoScan



Install the EAS driver and pair the eXact Bluetooth connection with the IZQuatro workstation. Bluetooth pairing, see here: <u>1.2.6.13.1</u>. Connect by Bluetooth

3

Device



Device serial number

4

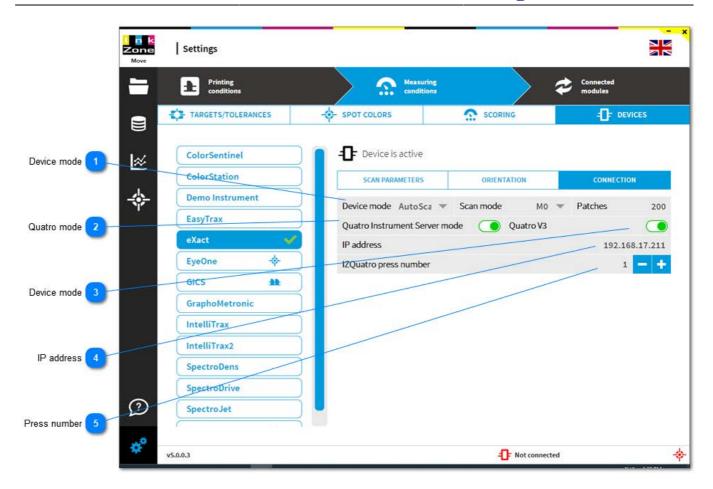
Rescan



Lookup all available instruments and select them from the list

1.5.2. eXact Setup at Workstation

At the InZoneMove Workstation, go to "Devices" and enable "IZQuatro Instrument Server mode" and enable "Quatro V3".



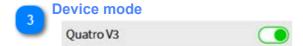


Select AutoScan for the eXact AutoScan system

Quatro mode

Quatro Instrument Server mode

Activate the IZQuatro server mode



For eXact EAS and SpectroDrive NG select Quatro V3



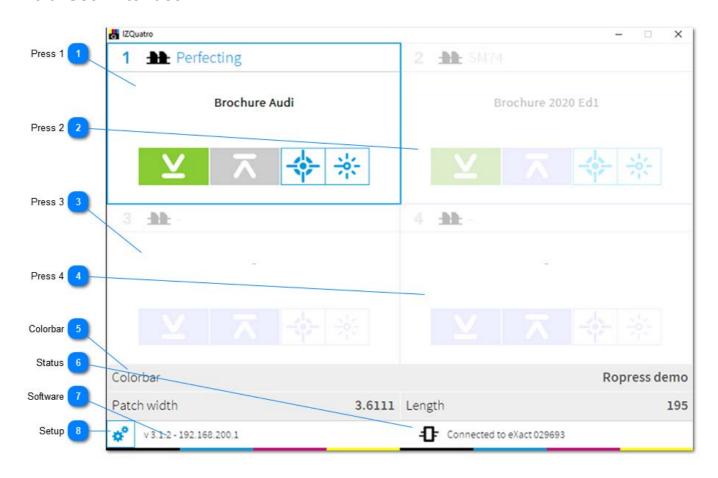
Enter the IP address of the IZQuatro PC here.

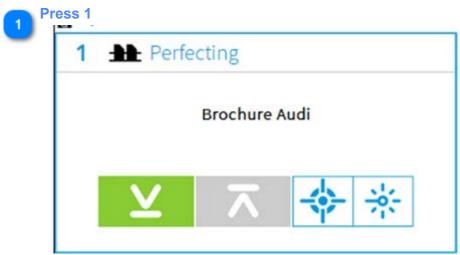
Important: the TCP port 5984 at IZQuatro PC's firewall needs to be open, see the firewall configuration here $\underline{1.2.7.1.2.}$ Firewall Setup



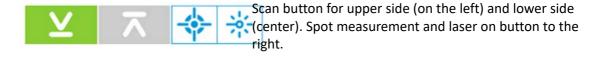
Assign for every IZMove workstation a printing press number which is then used as a reference on the IZQuatro UI.

1.5.3. User Interface





Settings for press 1 with press name on the top and job name in the center.



Press 2

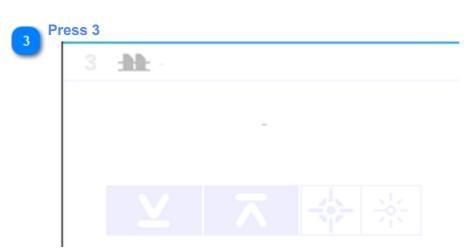
1.5.3. User Interface page 243/258



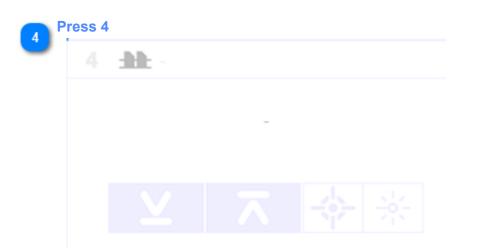
Brochure 2020 Ed1



Press 2 scan and job area



Press 3 scan and job area



Press 4 scan and job area

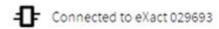


Colorbar information from current selected press: colorbar name, patch width and length/patches

1.5.3. User Interface page 244/258



Status



Device status messages



Software



v3.1.2 - 192.168.200.1

Software version and IP address of the IZQuatro Server.

Add this IP address at the InkZoneMove workstation. The IZQuatro PC, needs TCP port 5984 to be open in the Firewall.



Setup



Access software settings

FAQ section

Find here a collection of frequently asked questions.

Installation and Maintenance

Load license

Startup error MSVCR100.DLL

Computer with 2 monitors

How to migrate job database to a new hard disk

Setup

Send e-mail with Google Mail server

Shifted ink-key alignment

Prevent ink-key adjustment for invalid data by setting up density threshold parameter

Add a handheld device for as spot reading

Measurement

Colorbar reading, trigger exclusion for measurements before and after the sheet

Exclude paper white patches with Intellitrax

Exclude paper white patches IZTrack - SpectroJet

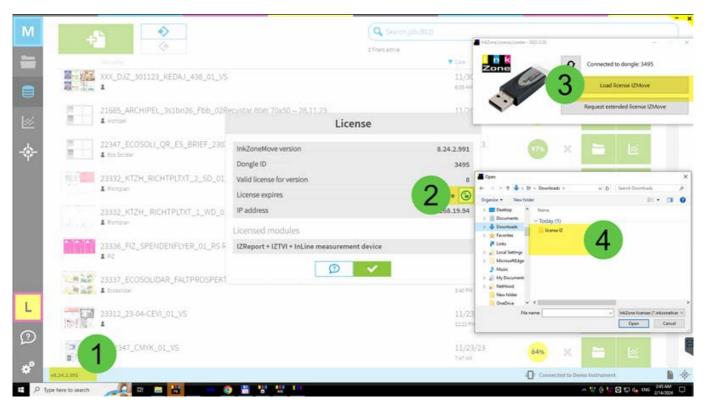
Instruments

SpectroJet encoder wheel adjustment

Load license

- 1. Select the dongle ID
- 2. Start the license loader
- 3. Load the license
- 4. Select the license from the local PC

FAQ section page 245/258



Computer with 2 monitors

InkZoneMove should appear on the 2nd monitor. How to configure? Press CTRL + ALT + 2 . Return to monitor 1 with CTRL + ALT + 1

Send e-mail with Google Mail server

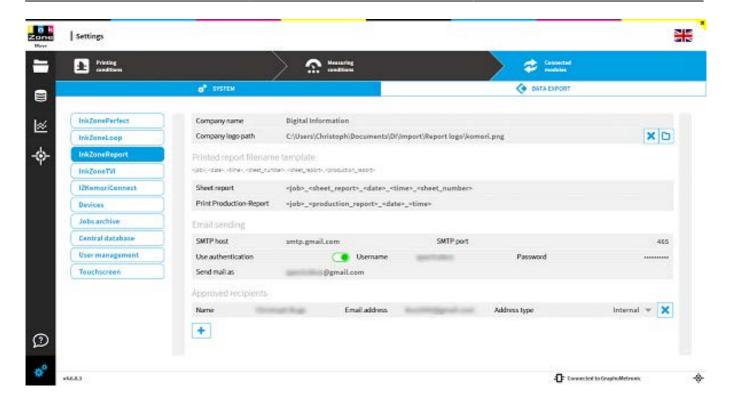
a) Setup

- # Gmail SMTP server address: smtp.gmail.com
- # Gmail SMTP username: Your Gmail address (e.g. example@gmail.com)
- # Gmail SMTP password: Your Gmail password
- # Gmail SMTP port (SSL): 465

If you can't send mail with your Gmail account for that reason, it's unlikely that you're entering the wrong SMTP settings. Instead, you'll get a message related to the security of the email client.

To solve this, log in to your Google account through a web browser and <u>enable access through less secure apps</u> <u>through this link</u>.

If that is not the reason Gmail isn't working in your email client, see <u>How to Unlock Gmail for a New Email Program or Service</u>.



b) Verify SSL connection with OpenSSL for Windows

- 1. Download OpenSSL for Windows from sourceforge: https://sourceforge.net/projects/openssl/
- 2.Copy folder OpenSSL to c:\OpenSSL
- 3.Start openssl.exe from C:\OpenSSL\bin
- 4. Connect to the smtp server:

OpenSSL> s_client -connect smtp.gmail.com:465 -crlf

The complete procedure is described here: https://taufanlubis.wordpress.com/2016/02/08/how-to-send-email-via-gmail-server-using-openssl/

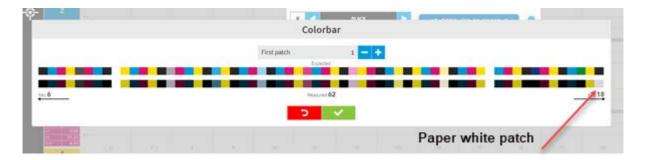
```
C:\OpenSSL\bin\openssl.exe
(ARNING: can't open config file: C:/OpenSSL/openssl
OpenSSL> s_client -connect smtp.gmail.com:465 -crlf
ONNECTED(0000010C)

Jepth=1 C = US, O = Google Trust Services, CN = Google Internet Authority G3

verify error:num=20:unable to get local issuer certificate
    s:/C=US/ST=California/L=Mountain View/O=Google LLC/CN=smtp.gmail.com
i:/C=US/O=Google Trust Services/CN=Google Internet Authority G3
s:/C=US/O=Google Trust Services/CN=Google Internet Authority G3
     i:/OU-GlobalSign Root CA - R2/O-GlobalSign/CN-GlobalSign
server certitate
-----BEGIN CERTIFICATE----
HIIEgjCCA2qgAwIBAgIITzPNiIDpglAwDQYJKoZIhvcNAQELBQAwVDELMAkGA1UE
BhMCVVMxHjAcBgNVBAoTFUdvb2dsZ5BUcnVzdCBTZXJ2aWNlczElMCMGA1UEAxMc
R29vZ2xlIEludGVybmV0IEF1dGhvcml0eSBHMzAeFw0xODA4MDcxCOM4NDVaFw0x
DDEwMTYxODI4MD8aMGgxCzAJBgNVBAYTAlVTMRMwEQYDVQQIDApDYWxpZm9ybmlh
IRYwFAYDVQQHDA1Nb3VudGFpb5BWaWV3HRMwEQYDVQQKDApHb29nbGUgTExOMRcw
FQYDVQQDDA5zbXRwLπdtYW1sLπNvbTCCASIwDQY3KoZIhvcNAQE88QADggE9ADCC
kQoCggE8ALZ6yDZπwrQUOps/g+MhejCdYb9v1Dk/c5L9g4HEπ342UrwθKE8OjoOf
  ncd+Hyd1dFtGtZHJ0CuyhKXuwqLPKnM1RpERSOv1Q262GTSXX8KPvF/fOwhF7h
CeuaiNIPYvmjP2u16vVPn/guzcGz6dxmZPjuc5G56eG87GhEvWMCOXpDa08FPn4
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SMEGDAWgBR3wrhQmmd2drEtwobQg6B+pn66SzAhBgNVHSAEGjAYMAwGCisGAQQB
InkCBQMwCAYGZ4EMAQICMDEGA1UdHwQqHCgwJqAkoCKGIGh0dH46Ly9jcmwucGtp
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yp4cPYe5Z9PKbXqa9qc9UlaskXLG6BByuHE+RYk448g839hg1wRcIvjXipyYPlY6S
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odeFCaJI/JKjBoXwj6VO4Qlivh9nZNP1LNeGQqG2fvD8J5h8Wayo7i2O3diq4fnY
     -- END CERTIFICATE----
 ubject=/C=US/ST=California/L=Mountain View/O=Google LLC/CN=smtp.gmail.com
ssuer=/C=US/O=Google Trust Services/CN=Google Internet Authority
lo client certificate CA names sent
Peer signing digest: SHA256
Server Temp Key: ECDH, P-256, 256 bits
SL handshake has read 2986 bytes and written 434 bytes
New, TLSv1/SSLv3, Cipher is ECDHE-RSA-AES128-GCM-SHA256
Server public key is 2048 bit
Secure Renegotiation IS supported
Compression: NONE
```

Exclude paper white patches with Intellitrax

Certain papers types can cause an incorrect reading of the leading paper white area on the sides of the colorbar. The sample below shows a paper white patch at the end of the measured colorbar which should be excluded.



There is a ${\bf L}$ threshold setup to exclude such patches on both sides of the colorbar.

Open the database with this link:

http://localhost:5984/photon/_design/photon/index.html#inkzone-central/_view/config/instruments

Go to the entry and change:

First_bad_patches_L_min

First_bad_patches_L_max

Exclude paper white patches with IZTrack - SpectroJet and SpectroDens

Certain papers types can cause an incorrect reading of the leading paper white area on the sides of the colorbar. The sample below shows a paper white patch at the end of the measured colorbar which should be excluded.



Paper white patches on start and end of the scan are removed by the following logic:

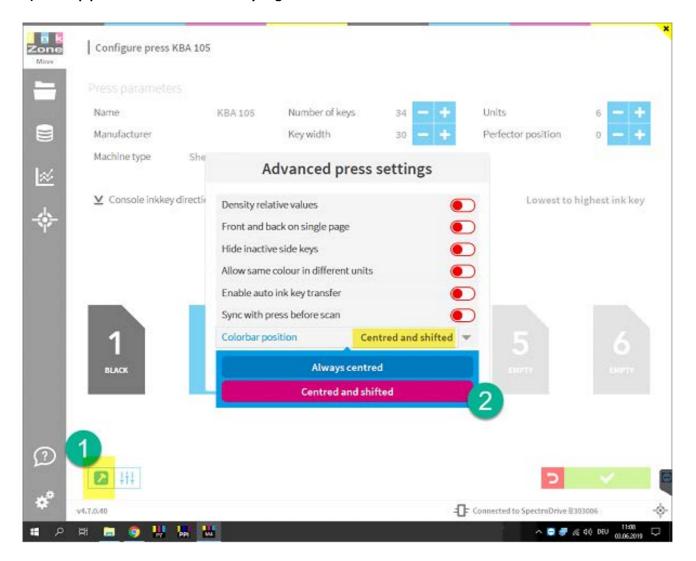
- 1. The first scan measurement of a newly created job uses the L value from the selected targetset with double tolerance to detect and exclude the paper white on the side of the colorbar. The default tolerance is 2 for the initial scan it becomes $2 \times 2 = 4$.
- 2. The second measurement uses the measured paper white patch from the colorbar itself plus the default tolerance.
- 3. If paper white patches on the side are not detected as such then slightly increase the tolerance for the white paper detection in document. Open the database with this link: http://localhost:5984/photon/_design/photon/index.html#inkzone-central/config-move

Go to the key called **max_L_tolerance**. Its by default on 2. A larger tolerance value excludes paper white patches with low L value on the side of the measurement.

Shifted ink-key alignment

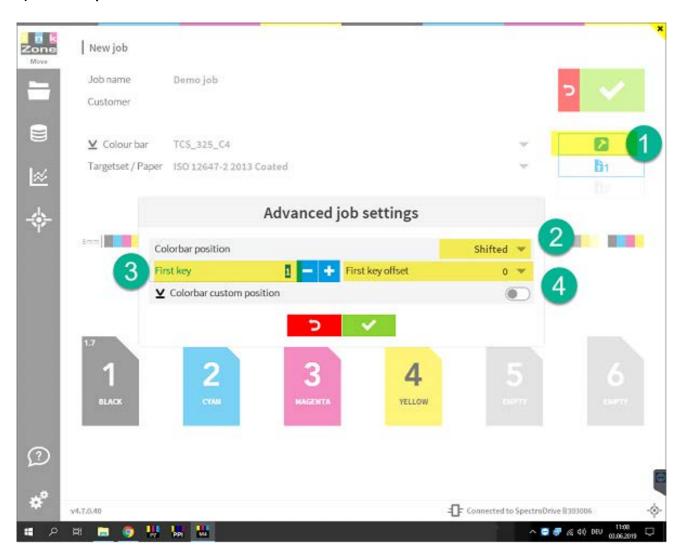
Use the following setup parameters when the colorbar is not printed centred over press machines ink-keys.

1) Setup press with "shifted" ink-key alignment



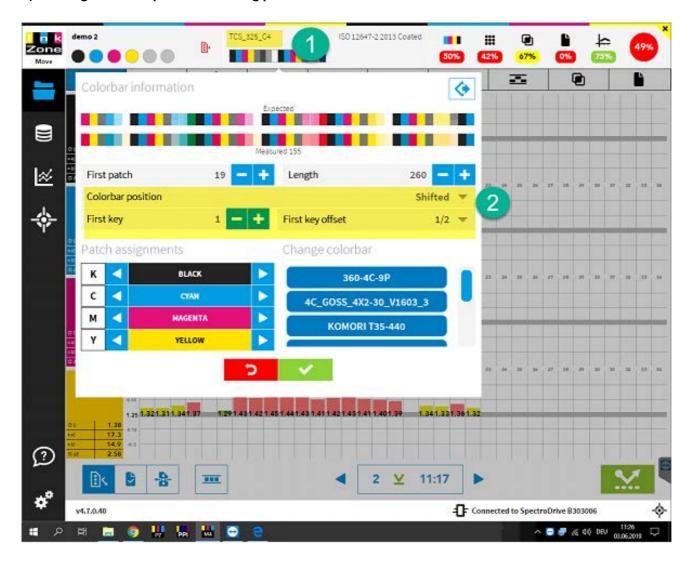
- 1) Advanced press settings
- 2) Choose centred and shifted

2) Job setup



- 1) During job setup, choose extended job setting.
- 2) Select shifted
- 3) Select the ink-key number where the color bar starts
- 4) Select an offset of <u>0 or ¼ or ½ or ¾</u> within the selected ink-key (selected at 3)

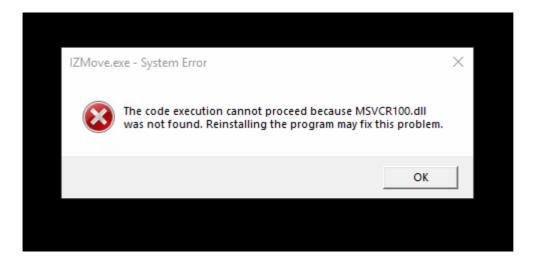
3) Change colorbar parameter during print



- 1) Select colorbar menu
- 2) Set-up the colorbar positioning parameter

Startup error MSVCR100.DLL

The X-Rite eXact DLL requires a DLL from the Microsoft Visual C++ 2010 Service Pack 1. If the DLL is missing, InkZoneMove throws an error during startup:



Update or install the DLL from the Microsoft website or from here: link to vcredist_x86.exe

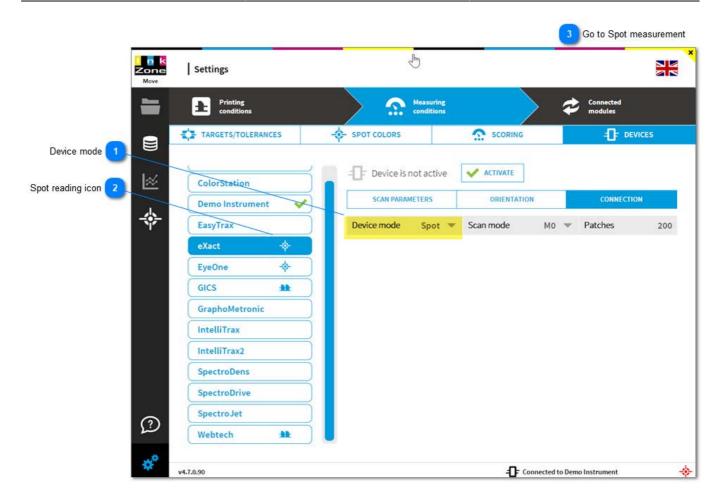
Prevent ink-key adjustment for invalid data by setting up density threshold parameter

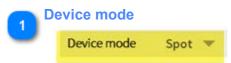
Go to the InkZoneLoop setting in the system setup: 1.2.7. System Setup

Add a handheld device for spot reading

The X-Rite i1 or X-Rite eXact device can be used for spot reading when IntelliTrax or others. Go to the instrument device page and activate the spot reading device, see 1.2.6.13. eXact

Note: install the X-Rite driver eXact driver: https://download.digiinfo.com/#x-rite-exact-autoscan-driver-v3-0-0





Select the option "Spot" when using the instrument for spot measurement.

Spot reading icon

For an instrument in spot reading mode an icon appears next to the instrument name.

Go to Spot measurement

eXact - White Base Calibration

1.1.16. Spot Measurement

Start a white base calibration from the instrument when you experience problems during connecting to the device.

See here: 1.2.6.13.4. White Base Calibration

How to migrate job database to a new disk

When disk space is getting low on the disk where CouchDB is installed, then it is advisable to move the database to another disk with enough disk space.

- 1. Start **Services** on the InkZone computer
- 2. Stop the service Apache CouchDB
- 3. On the new disk, create a new folder, e.g. E:\CouchDB

- 4. Copy the folder C:\couchDB\data to folder E:\CouchDB
- 5. Edit the file C:\couchDB\etc\local.ini and add in the section [CouchDB] the lines:

[couchdb]

...

database_dir=E:\CouchDB\data view_index_dir=E:\CouchDB\data

...

- 6. Start the service Apache CouchDB
- 7. Finish

Colorbar reading, trigger exclusion for measurements before and after the sheet

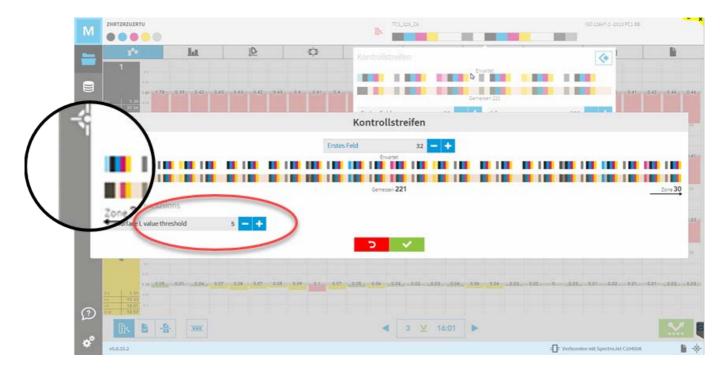
The scanning instrument scans the colorbar and may return to the data of the real colorbar the data for the area left and right of the sheet. These patches are invalid and need to be removed automatically.

Dark area (black surface)
Light area (paper)

Dark area

When the surface of the instrument reading area is black and after scanning several dark patches are visible on the right / left then you need to adjust the <u>Black surface L threshold</u> value.

The example below shows the extended colorbar view where the L threshold is 5. All patches on the sides with a L value between 0 and 5 are excluded from the reading. The L=5 value is too low and needs adjustment. In the extended colorbar view, click on the dark patches on the side and review the L value. Then adjust the <u>Black</u> surface L threshold value for the exclusion.





Light area (paper)

When patches on the left and right are missing due to their weak contrast to the paper surface, the L value of such patches are very close to the L value of the paper, they will get removed automatically.

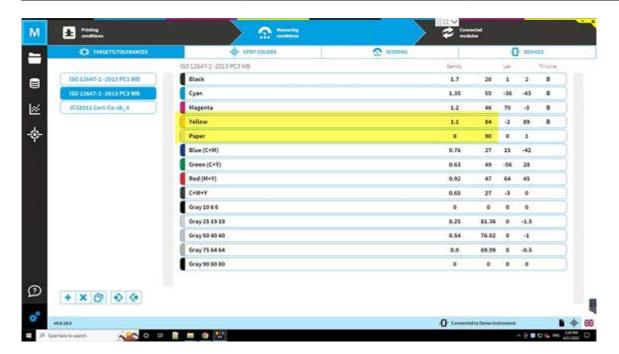
InkZoneMove excludes patches where the L value indicates a paper. Depending on the paper itself (coated, uncoated etc), the L is somewhere between e.g. 90 and 95. The critical L for a yellow patch are somewhere between e.g. 84 to 89.

Coated



Uncoated

Light area page 257/258



InkZoneMove detects the paper L value by looking at:

- 1. Paper white patch from scan
- 2. Paper white from paper white calibration
- 3. Paper white from targetset

Ideally, it finds a paper patch in the colobar (item 1). If there is no such patch, it takes the L value from the paper white calibration (item 2). If neither available, it looks at the paper definition in the targetset (item 3).

If you find that the patches are removed on the side, check carefully:

- is a paper white patch available in the colorbar?
- was the paper white calibration done before measuring?
- is the targetset correctly chosen for the paper?

The database setting <u>max_L_tolerance</u> in inkzone-central/config-move can be adjusted to a higher value when light patches were incorrectly excluded.

Video tutorial

Find here a collection of video tutorial for InkZoneMove.

Job setup

Load an archived job and setup a new print sequence

Video tutorial page 258/258