OKI C9x1 ES9xx1 Pro9xx1 series

This document provides information on how to drive the OKI printer series from Fiery XF.

Installation

Devices and drivers

Printer	5th channel	XF Driver	White order	Duplex
OKI C931 OKI ES9431 OKI Pro9431	-	OKI C931 OKI ES9431 OKI Pro9431	-	Yes
OKI C941 OKI ES9541 OKI Pro9541	White	OKI C941 - White OKI ES9541 - White OKI Pro9541 - White	White on Color Color on White	Yes
	Clear	OKI C941 - Clear OKI ES9541 - Clear OKI Pro9541 - Clear		Yes
OKI Pro9541WT	White	OKI Pro9541WT	White on Color	No
OKI C942 OKI ES9542 OKI Pro9542	White	OKI C942 OKI ES9542 OKI Pro9542	Color on White	Yes

C941, ES9541 and Pro9541 have separate drivers for White and Clear toner configuration.

Operation

Print modes

The printers support 3 print modes:

- Normal (600x600 1bit)
- ProQ / High Quality (1200x600 4bit)
- Fine / Detail (1200x1200 1bit)

Physical paper orientations and driver support

Some paper formats, e.g. A4 or Letter have two possible physical orientations; SEF and LEF.

- SEF (Short Edge Feed) means that the shorter edge of the format is parallel with the LED row. All larger formats, e.g. A3NOBI have SEF orientation.

- LEF (Long Edge Feed) is the 90 degrees rotated orientation which uses the printer width more efficiently. The LEF orientation is commonly used for A4, Letter, and B5.

- The drivers consistently avoid 90 degrees printer rotation. LEF is always shown as landscape and SEF as portrait.

Tray usage

Please use the printer menu to configure the trays properly.

- Automatic weight detection is limited.

- Not all paper formats can be detected by the cassettes. The menu entries *A3 Nobi Paper* and *Legal14 Paper* exist because the printer needs your help in some cases.

- The MP Tray (Multi-purpose tray) - Please set the correct size.

The MP Tray has special properties:

- Some media formats are only available for MP Tray:

    - Banner formats (more than 18 inch long)

    - Very small formats: *Statement, Index Card, B6 Half*

    - Envelopes

- Media weight *Ultra Heavy 4* and *Ultra Heavy 5* require MP Tray

- Labels and transparencies print only from MP Tray or Tray 1

The Output Tray setting has two options:

- Face Up supports a straight paper path for thicker media. It uses the face-up tray on the left side of the printer. It is available for all media sizes and types.

- Face Down preserves the order of jobs and their pages. It uses the face-down output tray on top of the printer. It is available for all media except:

    - Very small formats: *Statement, Index Card, B6 Half*

    - User-defined paper formats smaller than 99.0 x 147.3 mm

    - Envelopes

    - Media with a weight of Ultra Heavy 5 (321-360 g/m2)

    - Labels and Transparency

    - The Printer Duplex unit has the same media constraints as the Face Down option (not applicable to OKI Pro9541WT).

Media type and media weight

The following media types can be chosen during profile creation:

- Printer setting

- Ultra Light (52-63 g)

- Light (64-68 g)

- Medium Light (69-83 g)

- Medium (84-104 g)

- Medium Heavy (105-120 g)

- Heavy (121-128 g)

- Ultra Heavy 1 (129-188 g)

- Ultra Heavy 2 (189-216 g)

- Ultra Heavy 3 (217-256 g)

- Ultra Heavy 4 (257-320 g)

- Ultra Heavy 5 (321-360 g)

- Glossy

- Ultra Light Glossy (52-63 g)

- Light Glossy (64-68 g)

- Medium Light Glossy (69-83 g)

- Medium Glossy (84-104 g)

- Medium Heavy Glossy (105-120 g)

- Heavy Glossy (121-128 g)

- Ultra Heavy 1 Glossy (129-188 g)

- Ultra Heavy 2 Glossy (189-216 g)

- Ultra Heavy 3 Glossy (217-256 g)

- Ultra Heavy 4 Glossy (257-320 g)

- Ultra Heavy 5 Glossy (321-360 g)

- Transparency

- Postcard (user-defined)

- User Type 1 to User Type 20

This list contains media weights and all media types that cannot combine with a media weight other than Printer setting.

Combinable media types are the following:

- Printer setting

- Plain

- Letterhead

- Labels

- Bond

- Recycled

- Card Stock

- Rough

- Envelope

Priorities

Two kinds of media formats have the highest priority on media type settings:

- Envelope formats (e.g. Com 10) set the media type to *Envelope*

- Postcard formats (e.g. Hagaki) set the media type to *Postcard* and the media weight to *Printer setting*

Several media types have the second highest priority. They override settings of combinable media types, e.g. *Heavy Glossy* sets type to *Glossy* and weight to *Heavy*:

- Glossy and its weight variants

- Transparency

- Postcard (user-defined)

- User Type 1 to User Type 20

Media Check

Two check marks in the UI let you set the behavior of the printer in case of media type mismatches between XF job and printer's tray menu setting.

- If *Media Check* is on, the printer will detect the mismatch and ask the operator to fix it.

- If *Media Check* is off, the printer will use the settings from XF job regardless of what is set in the printer's tray menu.

CMYK + White printing

This section is applicable to 5 channel models equipped with white toner.

Print mode

The white printing group on the special tab offers options for print mode:

Option	Meaning
Spot color WHITE_INK	Use the spot color channel WHITE_INK or a spot color channel reassigned to WHITE_INK (alias) from a separated job.
Inked image	If the pixel value CMYKW on the printer side differs from (0,0,0,0,0), set the white channel of pixel.
Bounding Box	Set the white channel for all pixels.
White_INVERSE	This is like WHITE_INK but inverted. The substrate becomes the spot color.
Ink chroma map	Use enough white to cover the substrate but use less white in darker areas.
Off	No white

White ink coverage

This is the multiplicator for the amount of white ink.

Spread and Choke

Even the smallest register inaccuracy between CMYK and white is clearly visible.

As countermeasure the area if white ink can be:

- enlarged (spread) by a positive value
- shrinked (choke) by a negative value

The setting can be done in millimeter with 0.01mm increment. Eventually the setting is rounded to pixels where one pixel is 0.042mm @600dpi and 0.021mm @1200dpi.

Printing order

For the following printers the printing order is fixed:

Printer	5th channel
OKI Pro9541WT	White on Color: This prints white on top of CMYK. It is printed in one single pass. It is well suited for transparencies and transfer.
OKI C942 OKI ES9542 OKI Pro9542	Color on White: This prints CMYK on top of white. It is printed in one single pass. It is well suited for printing on colored material.

For OKI C941, ES9541 and Pro9541 with white toner, the white printing group on the special tab offers two options for printing order:

- White on Color: This prints white on top of CMYK. It is printed in single pass. It is well suited for transparencies and transfer.
- Color on White: This prints CMYK on top of white. It is printed in two passes. First the machine prints the white pass, then it prints the CMYK pass. It is well suited for printing on colored material.

CMYK + Clear printing

This section is applicable to 5 channel models equipped with clear toner.

Print mode

The clear printing group on the special tab offers options for print mode:

Option	Meaning
Spot color CLEAR_INK	Use the spot color channel CLEAR_INK or a spot color channel reassigned to CLEAR_INK (alias) from a separated job.
Inked image	If the pixel value CMYKV on the printer side differs from (0,0,0,0,0), set the clear channel of pixel.

Option	Meaning
Bounding Box	Set the clear channel for all pixels.
Gloss enhancer	Set the clear channel for all pixels but apply a total ink limit of 240% instead of 340%.
Off	No clear

Clear ink coverage

This is the multiplicator for the amount of clear ink.

Size reduction printing

This section does not apply to OKI Pro9541WT.

When two print passes are applied to the paper, there is a small size mismatch between the first pass and the second pass because the paper shrinks in size. This happens in two cases:

- Duplex printing: At first the even page (e.g. the second) is printed. Then the odd page (e.g the first) is printed. Without correction the image of the even page is slightly smaller.
- Color on White (C941, ES9541, Pro9541): At first the white layer is printed. Then the CMYK layer is printed. Without correction the white layer is slightly smaller than the CMYK layer.

The correction value can be set in the range between 95.00% and 100.00%. Typical values are around 99.8%.

Creating profiles

The printer has a hard-coded maximum ink limit of 240% for CMYK. You can set higher values up to 300% but it affects only white. The ink limiting including the spot color is done according the following rule:

- At first CMYK is limited to the minimum of 240% and the setting.
- White
  - White on color: The sum CMYKW is limited to the setting (for example, 300%) by reducing white.
  - Color on White: This option depends on the printer.
    - C941, ES9541, Pro9541: White is unlimited as if the setting was 340%.
    - Others: The sum CMYKW is limited to the setting (for example, 300%) by reducing white.
- Clear
  - Clear is unlimited as if the setting was 340%.

OKI Job Accounting

The OKI Job Accounting application is supported by embedding the following information into the print job:

- Computer name
- Username
- Application name

- Port name

- Reception time

- Document name

This information depends on the way the job is submitted. The origin can be:

- XF Hot Folders : The origin is the computer where XF Server is running. User is XF user. For example, admin.

- XF Client: The origin is the computer where XF Client is running. User is XF user. For example, admin.

- XF Unidriver: The origin is the computer where XF Unidriver is running. User is system user running the application from which XF Unidriver is launched.