ES3 Silver/White
How to Use

Sales & Planning Department
Oct. 7, 2010
Ver1.2 final draft
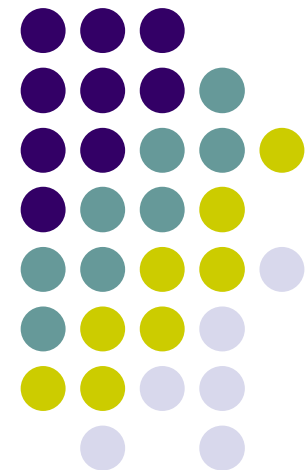
Table of Contents
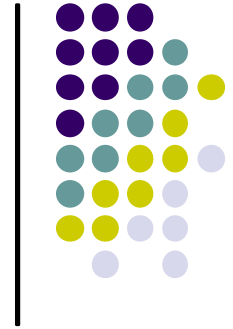
Sale of ES3 Silver and White Ink

1. Release Time

October 2010 Ink release

1. ES3 silver ink will be released simultaneously with white ink.

2. The ink set is an 8-color set of Y, M, C, K, Lc, Lm, Silver and White. All inks are ES3 formulation.

     *SS21 and ES3 cannot be used simultaneously.

3. This configuration does not support the 7-color set with two silvers or two whites. Please use the the 8-clolor set with a silver and white.

     *Seven-color set (CMYKLcLmWW or CMYKLcLmSiSi) is not supported.

2. Ink

ES3silver	220ml
ES3white	220ml
ES3color (CMYKLcLm)	440ml

3. Selected models

-JV33-130/160/260, JV33-130/160Type.B,TS3-1600

-CJV30-60/100/130/160, CJV30-100Type.B,TPC-1000

4. RIP/firmware-capable versions

RasterLinkPro5 ver.2.20

CJV30series-capable firmware ver.2.50

JV33series capable firmware ver.4.60 will be released on Oct. 18.

	Cartridge No.							
	Left	←		Front		→	Right	
	1	2	3	4	5	6	7	8
6.colors + White + Silver	M	Si	C	W	Y	Lm	K	Lc

➤CJV30 or JV33 Users

It is necessary to replace ink using a Field Service Engineer.
>This is not a free service.

[Preparation]

    (1) Cleaning liquid cartridge for MS (220ml): 8 pcs are needed. (Consumption is about 100cc/piece) -> Equivalent to about 4 pcs.

    (2) Damper (For one position to put W in)   * 1   : 1piece

    (3) Rubber stopper to seal UISS joint (Necessary only for switching from four-color)   : 8pcs

    (4) Update for capable firmware   (ver.2.50 for CJV30 ,ver.4.60 for JV33)

    (5) Capable RIP ver2.20

     * 1. When changing from 6-color + white to this ink set, please replace two dampers in the positions into which to put ES3 white and silver.

[Work procedure]

    (1) Upgrade to capable RIP (RasterLinkPro5).

    (2) Upgrade to capable firmware.

    (3) Flush the current ink and wash with clean liquid flush.

    (4) When changing from 4-color set, change UISS joint to six or more colors setting.

    (5) Replace the damper in the position to change to ES3 white with a brand-new.

    (6) Restart power supply to select and be fill up ES3 8-color set.   -> Complete

Note 1. Damper change in the above (5) is done because ink cannot be flushed clean before change. White ink may be discolored due to a
      remaining color. Other inks should be color stable.

Note2. You have the ability to change from water-based ink(Sb51,Sb52,EcoPA1) to ES3 but not returning from ES3 to Water-based
      ink(Sb51,Sb52,EcoPA1)

Necessary procedure for change by ink set is as follows:

No.	Before change	->	After change	\<Procedure(1)\> RLP5 Upgrade	\<Procedure(2)\> Firmware Upgrade	\<Procedure(3)\> Ejection & washing before change	\<Procedure(4)\> UISS Ink Coupler Change	\<Procedure(5)\> Damper change	\<Procedure(6)\> Ink filling after change
1	SS21 4Color	->	ES3 6Color＋White＋Silver	○	○	○	○	○ (1pc)	○
2	SS21 6Color	->	〃	○	○	○	×	○ (1pc)	○
3	SS21 6Color＋White	->	〃	○	○	○	×	○ (2pcs)	○
4	ES3 4Color	->	〃	○	○	○	○	○ (1pc)	○
5	ES3 6Color	->	〃	○	○	○	×	○ (1pc)	○
6	ES3 6Color＋White＋Silver	->	SS21 4Color	×	×	○	○	○ (2pcs)	○
7	〃	->	SS21 6Color	×	×	○	×	○ (2pcs)	○
8	〃	->	SS21 6Color＋White	×	×	○	×	○ (2pcs)	○
9	〃	->	ES3 4Color	×	×	○	○	○ (2pcs)	○
10	〃	->	ES3 6Color	×	×	○	×	○ (2pcs)	○

Refer to the following documents for detail of each procedure.

			JV33Series	CJV30Series
Procedure(1) Upgrade of RLP5	->	Installation instructions	See "Upgrade RasterLinkPro5",	See "Upgrade RasterLinkPro5",
Procedure(2) Upgrade of firmware	->	Service-related document	See CJV30 document on the right.	4.1.2 F/W update
Procedure(3) Ejection & washing	->	Instruction manual	Chapter 4 Ejection & washing	Chapter 6 Ejection & washing
Procedure(4) UISS ink coupler change	->	Maintenance manual	3_3_4 Major parts of cartridge assembly	6.2.9 Change of ink coupler
Procedure(5) Damper change	->	Maintenance manual	3_3_1 Head unit See a portion of removal and	6.2.2 to 6.2.3 Head unit See a portion of removal and
Procedure(6) Initial filling of ink	->	Instruction manual	Chapter 4 Initial filling of Ink	Chapter 6 Initial filling of Ink

* If removing the silver ink, changing the dampers is still necessary (the cases of 6 to 10 in the above table).
   This is because the damper through which silver or white ink passed cannot be flushed clean only with cleaning liquid.
   Therefore, a Field Service Engineer for performing this service is necessary.

➢Prospective Purchasers of CJV30 or JV33

<u>It is not required to replace ink using a Field Service Engineer.</u>

- New owners of silver ink-based machines can select a 8-color set of ES3 ink containing silver ink and doing initial filling.

- Silver-capable firmware is as follows:
  To look up the serial number unit installed with relevant firmware, please contact us.

  - CJV30series-capable firmware is released.
  - JV33series-capable firmware ver.4.60 will be released on Oct. 18.

➢To change from silver ink-based machine to other ink set models

It is necessary to replace ink using a Field Service Engineer .
>This is nonfree.

[Preparation]
(1) Cleaning liquid cartridge for MS (220ml) : 8 pcs are needed. (Consumption is about 100ml/piece)   -> Equivalent to about 4 pcs.
(2) Damper (for two positions which contained silver and white.)   : 2pcs

Note 1. If removing the silver (ES3 8 color) ink, changing the dampers is still necessary.
             * Because the damper through which silver or white ink passed cannot be flushed clean only with cleaning liquid.
Note 2. It is impossible to return from ES3 ink to water-based ink.

➢ Restrictions on Use and Daily Maintenance

Constraints on use

1) Head gap is 2 mm.
2) No small dot (RasterLinkPro5 limits automatically.)
3) No high-speed scanning (RasterLinkPro5 limits automatically.)
           - More ink drops onto the nozzle face.
           *This should be controlled by the RIP. Please confirm "Setup" is "All Host" in printer function.
4) Use within indoor temperature of 20 to 35 degrees C. (Warning is displayed from the device.)
           -Low temperature frequently causes splash, deteriorating the image quality.
5) It is recommended that silver ink concentration is 60%. (100% causes blur.)
6) Rubfastness is inferior, making lamination indispensable.
7) The ink is easy to settle out. Please shake the cartridge before use.

Daily maintenance

  When silver ink is not used for more than two days, the ink tends to settle out. Therefore, it is necessary to discard the ink from the ink feed channel before use. In this case , the guidance prompts the use of the dedicated maintenance function (as displayed).

           * The similar guidance is displayed when white ink is not used for more than 2 weeks(14 days).

[How to respond]
     In the case of storage for more than two days, please implement the dedicated maintenance function.
     - Eject the Ink stated in [Ink Ejection] below.
     - Y, M, C, K, Lc and Lm Ink are only slightly consumed for this maintenance.

[Ink Ejection]
     - Ink capacity in the ink feed channel   : 24ml discarded (Silver:12ml,White:12ml) (* 2)
     - Hard cleaning of all colors (CMYKLcLmSiWi   : 24ml discarded (3ml per color)

     * 2. 160/130sized machine : 24ml, 100sized machine : 18ml, 60sized machine : 17ml, 260sized machine : 34ml

Please explain the proper procedures for use and Daily maintenance to customers when silver and white ink are installed.

Daily Maintenance Cost

Model Case

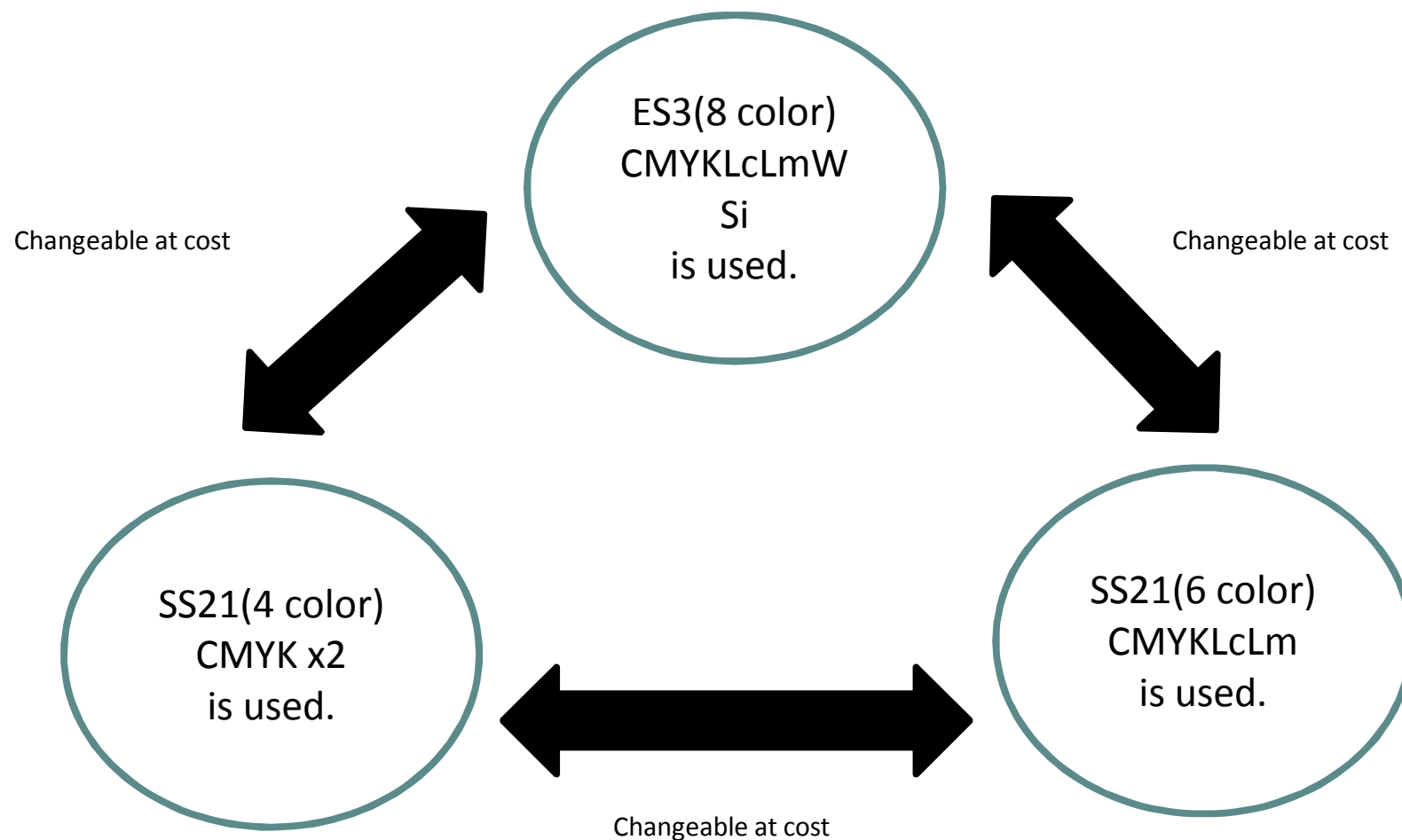|	Day1 (Mon)	Day2 (Tue)	Day3 (Wed)	Day4 (Thu)	Day5 (Fri)	Day6 (Sat)	Day7 (Sun)	Day8 (Mon)	Day9 (Tue)	Day10 (Wed)	Day11 (Thu)	Day12 (Fri)	Day13 (Sat)	Day14 (Sun)	Day15 (Mon)	Day16 (Tue)	---	Next Month Day1 (Thu)
Customer A	★★ ◯	◯	◯	◯	◯	×	×	★ ◯	◯	◯	◯	◯	×	×	★★ ◯	◯	---	----------
Customer B	★★ ◯	×	×	×	×	×	×	★ ◯	×	×	×	×	×	×	★★ ◯	×	---	----------
Customer C	★★ ◯	×	×	×	★ ◯	×	×	×	★ ◯	×	×	×	×	×	★★ ◯	×	---	----------
Customer D	★★ ◯	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	---	★★ ◯

Use of silver ink requires the following daily maintenance costs.

- **Customer A**: Used every day (Saturday & Sunday off)/**Customer B:** Used only once a week
  => Cleaning by dedicated maintenance function is necessary once a week.
  -Discard about 168ml ink per month.
  - *36ml (Silver+ All colors cleaning) x twice (Once a two weeks)
  - *48ml(Silver + White + All colors cleaning) x twice(Once a two weeks)
- **Customer C**: Used once every three days
  => Cleaning by dedicated maintenance function is necessary twice a week.
  -Discard about 240ml ink per month.
  - * 36ml (Silver+ All colors cleaning) x 4 times (Once a weeks)
  - * 48ml(Silver + White + All colors cleaning) x twice(Once a two weeks)
- **Customer D**:Used one a month
  => Cleaning by dedicated maintenance function is necessary once a month
  -Discard about 36ml per a month.
  - *36ml(Silver + All colors cleaning) x once (Once a month)

Conditions
Silver ink cleaning : 12ml discarded
White ink cleaning : 12ml discarded
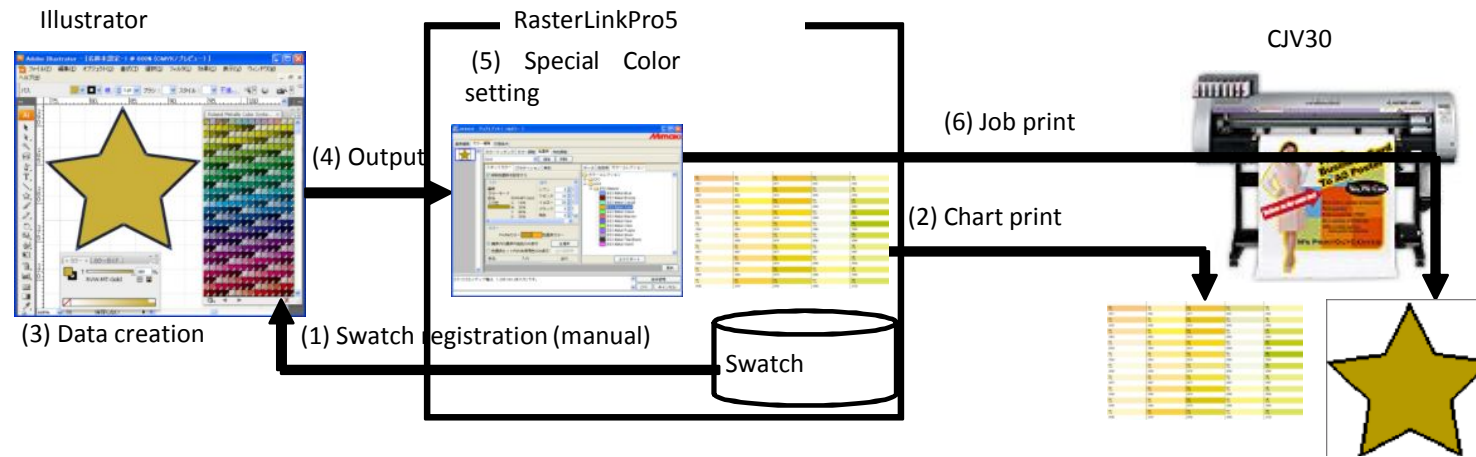All color inks cleaning : 24ml discarded => 8 colors

9

Manner of Operation of Ink Set Change

ES3(8 color)
CMYKLcLmW
Si
is used.

Changeable at cost

Changeable at cost

SS21(4 color)
CMYK x2
is used.

SS21(6 color)
CMYKLcLm
is used.

Changeable at cost
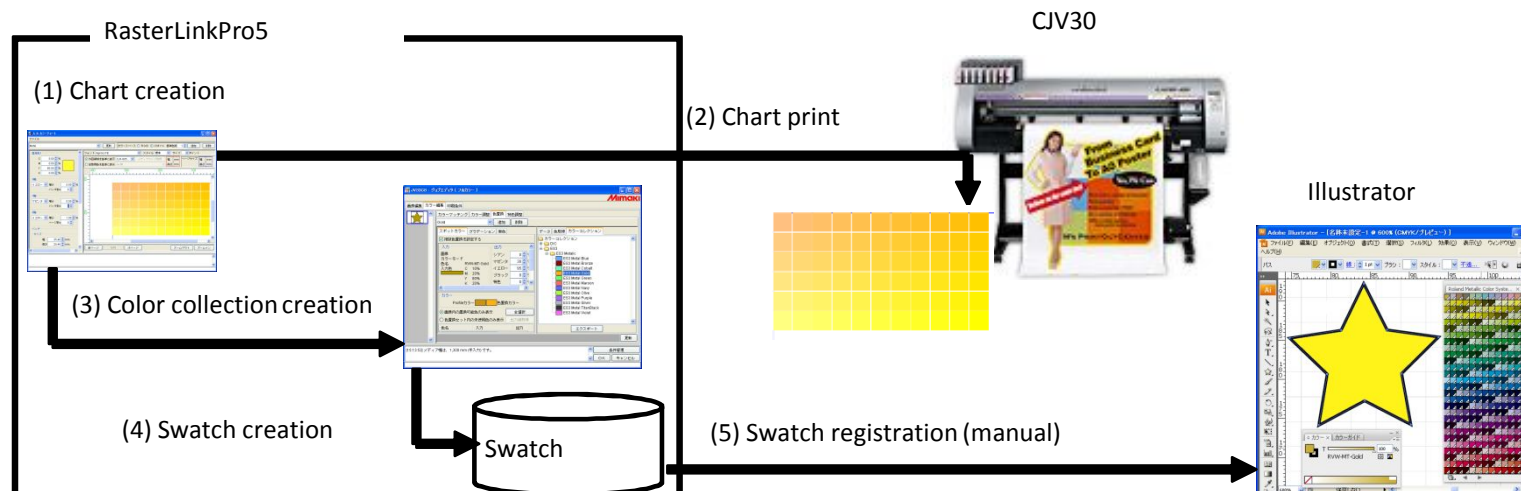
Each ink set replacement incurs a cost. Please take note of the manner of operation.
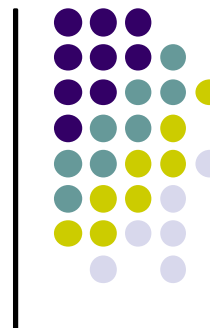New ink is required as needed.

➢ Response of RasterLinkPro to Silver

(1) Metallic color print workflow is realized.
- Metallic color Swatch library is provided.
- Standard file for metallic color chart print is provided.

Illustrator   RasterLinkPro5

(5) Special Color setting

CJV30

(4) Output

(6) Job print

(2) Chart print

(3) Data creation

(1) Swatch registration (manual)

Swatch

(2) Metallic color adjustment print and workflow are made easy.
- Any Special Color chart is automatically created by simple designation.
- Favorite Special Color definition is created as a Swatch library of Illustrator.

RasterLinkPro5

CJV30

(1) Chart creation

(2) Chart print

(3) Color collection creation

Illustrator

(4) Swatch creation

Swatch

(5) Swatch registration (manual)

11