

UNICHROMA RIBBONS

March 2017

MUCH MORE THAN CARD PRINTERS



Signature pads



Software



Card printers



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Services

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UCYMCK RIBBONS

PRINT POLYCARBONATE CARDS WITH D2T2 PRINTERS

The Unichroma™ ribbon is formulated to produce sharp, bright images and clear text on many card substrates, including Polycarbonate (PC).

The Unichroma™ ribbons makes polycarbonate cards compatible with Evolis dye-sublimation printers.

The clear, colourless Unichroma™ dry coating is applied directly to the surface of the card using a normal direct-to-card printer (thermal transfer). Then, D2T2 colour personalization (Y, M, C, K) can continue in the normal way.



Whole panels (length: 98 mm)

PC CARD PRINTING WITH DYE SUBLIMATION TECHNOLOGY

PC card printed with YMCK+Unichroma™

You get a high-quality, professional print on Polycarbonate cards. A protective layer (with hologram or clear), can then be applied with a lamination module (require additional lamination ribbon).



PC card printed with YMCK only
Ribbon sticks on the card and tears apart, preventing any printing of polycarbonate card with a dye sublimation equipment.

ADVANTAGES

Offering an alternative to more expensive equipment like retransfer technology, the Unichroma™ ribbons make the issuance cost of Polycarbonate cards extremely attractive (TCO around -20% compared to AVANSIA for single-sided colour printing).

Compatible with hologram and lamination technologies, the Unichroma™ ribbons offer bright level of security so as to prevent any attempt of counterfeiting.

GENERAL SPECIFICATIONS

- Single or dual-sided colour printing
- PET ribbon with thin layer of specialized coating
- 5 whole panels - Unichroma™, Yellow, Magenta, Cyan, Black : 98mm length
- Compatible with Polycarbonate (PC), PET-G, ABS
- For dye-sublimation and thermal transfer technologies
- Printing process: diffusion temperature above 50°C

COMPATIBILITY & CAPACITY – OFF CATALOGUE

Part#	Number of prints	SECURION	PRIMACY LAMINATION	CORE
R3611	200	●		
R5F009NAA	200		●	●

LIMITATIONS

- **Film limitations : colour density and image sharpness**

Even with adjusted parameters for Uc coating (in Front side varnish adjustment) **and colours** (in Advanced color parameters / Color adjustment), **colour density and image sharpness are lower** when printing on PC cards with UcYMCK ribbons compared to PVC cards, **especially for dark backgrounds**.

Refer to some examples of printed cards in Appendix 1.

- **PC card limitations: heat requirements can vary significantly depending on the card used**
- **UcYMCK ribbons require specific settings out of the driver or Evolis Premium Suite**

Please find processes in broad outline in Appendix 2 & Appendix 3.

- **Lamination is mandatory to protect card's surface**
- **Lamination settings may require adjustments depending on the PC card, especially for Patch 1.0 mil**

PRIMACY LAMINATION: Temperature =17 and Speed = 3

SECURION/CORE: current patch 1.0 mil may not have a good adhesion on every PC cards printed with UcYMCK ribbon. ITW formula S01695 is an alternative and may have better results (T=175°C and 3mm/s).

→ **Project qualification is needed (card and design)**

STORAGE INFORMATION

Unopened ribbons:

- 1 year lifetime (in original packaging) stored in a cool dry environment
- Temperature of storage must be between 5-25°C / 41-77°F
- Humidity rate must be comprised between 50-70%

Opened ribbons: 3 months lifetime stored in a cool dry environment

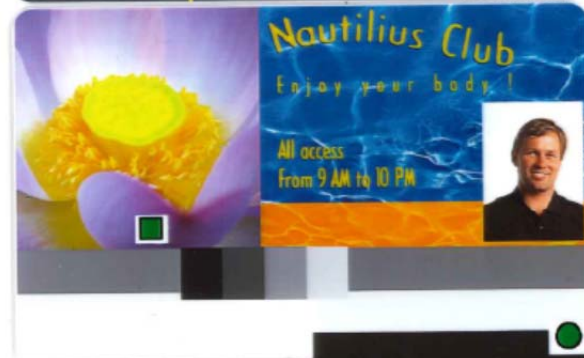
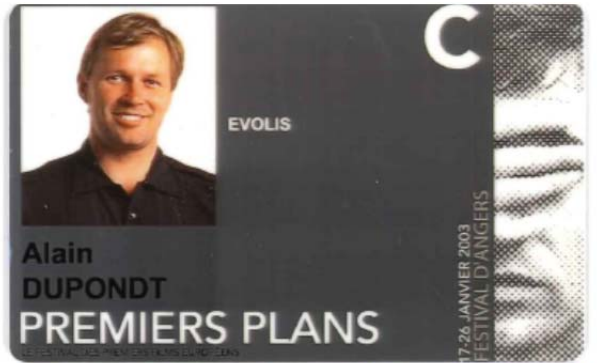
Avoid dust, direct sunlight, high humidity and high temperatures. Do not place near solvent or other chemicals.

APPENDIX 1: PRINTED CARDS EXAMPLES

PVC card + YMCKO printing
Parameters = 10

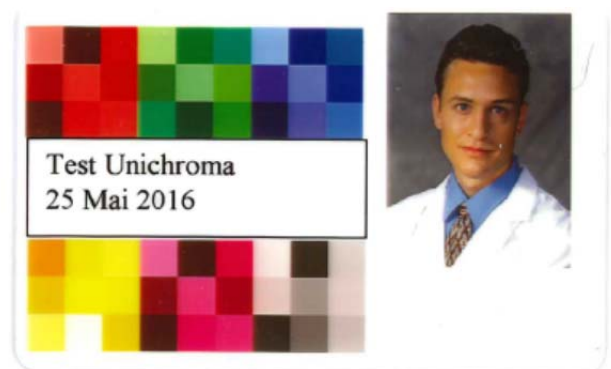
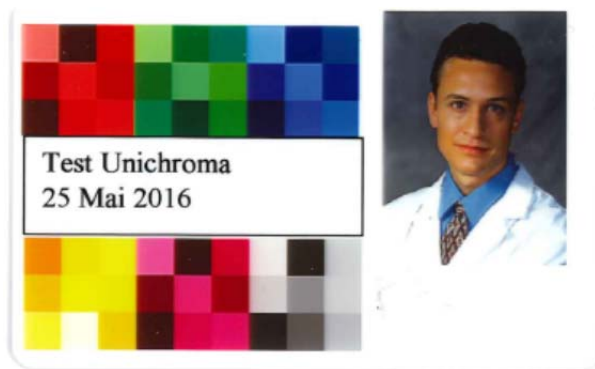


PC card + UcYMCK printing
Parameters = 12 for Uc & 16 for YMCK



PVC card + YMCKO printing
Parameters = 10

PC card + UcYMCK printing
Parameters = 12 for Uc & 16 for YMCK



PVC card + YMCKO printing
Parameters = 10

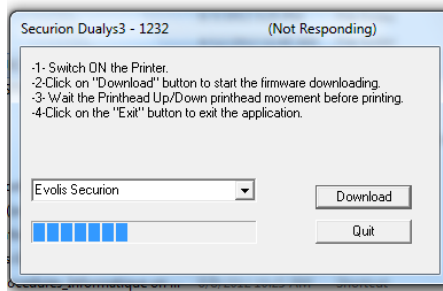
PC card + UcYMCK printing
Parameters = 12 for Uc & 16 for YMCK



APPENDIX 2: PROCESS SECURION/R3611

1- INSTALLATION FIRMWARE

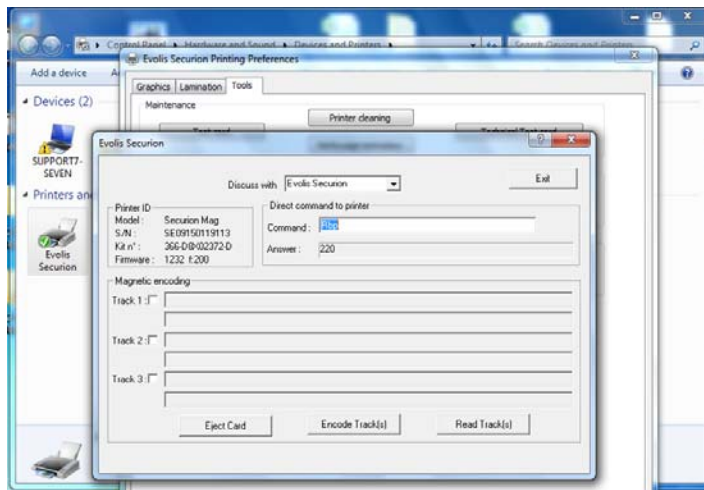
1. In the Securion file (Unichroma/Securion on the USB Key) choose the exe file: Securion Dualys3 - 1232.exe
2. Launch the program



3. Wait for the print head to go up and down

2- UNICHROMA RIBBON SET UP

1. In printing preference / in Tools / Dialog with the printer
2. In the command box, type Pbp ;220
3. Enter
4. The response should be : OK
5. Double check by typing Rpb
6. Enter
7. Response should 220 (Value entered)



8. In the command box , type Pr;YMCKO;Pon
9. Enter
10. The response should be Error Parameters
11. Double check by Rr
12. Enter
13. Response should be pymck
14. In graphics/ Advanced settings (Front and back of the card, according to design) Set the contrast around 17/18, and brightness at 14. Change those 2 parameters until you reach the required quality of printing.

Note: To reverse printer in normal mode, send the following command Pr;YMCKO;Poff

APPENDIX 3: PROCESS R5F009NAA/PRIMACY LAMINATION

- Automatic ribbon recognition by the printer, but UcYMCK ribbon is not managed in driver or Evolis Premium Suite
- Set Unichroma coating energy using Pbp;value command. The default energy applied for the Unichroma coating is the same as standard overlay, so the default value is 100%. But it can be increase if needed. This value is not memorized by the printer it has to be set before each job. The value entered is the percentage to be applied, for example Pbp;130, will apply 30% more than standard energy.
- Ribbon synchronization starts on Unichroma™ dry coating panel (first panel of the sequence). Send print job only using Specific Unichroma Evolis Sequencer (available for project only). This sequencer can be configured for any usage (single side, double side, with or without lamination, etc.).