# Smart
# Smart Dual

## Card Printer

## CARD PRINTER Operating menual

# RF ID tag & board

* This ID Card Printer check its ribbon RFID tag whether it is authorized ribbon or not
  when it is power on.
* If the authorized ribbon is installed, the printer check the remained card.
* Each motors are initialized to its default locations and display the current firmware version
  and finish its booting.
* RFID tag is used to check the authorized ribbon.
* To read the information of RFID tag, RFID board is connected with Main board.
* If try to use the ribbon without RFID tag, the printer will not be operated.

# white card printing

* Place the card to hopper.
* Execute the printing command on PC.
* The print data will be saved on SD RAM through USB port.
  ( 5 panel data : Y, M, C, K, O )
* Not used yellow panel will be adjusted to its starting point.
* The card is moving to the printable location and the thermal head will be down.
* Yellow panel data of SD RAM will be printed to the card using thermal head.
* After finished yellow panel printing, the thermal head will be up.

* Magenta panel will be adjusted to the starting point.
* The card is moving to the printable location and the thermal head will be down.
* Magenta panel data of SD RAM will be printed to the card using thermal head.
* After finished magenta panel printing, the thermal head will be up.

* Cyan panel will be adjustied to the starting point.
* The card is moving to the printable location and the thermal head will be down.
* Cyan panel data of SD RAM will be printed to the card using thermal head.
* After finished cyan panel printing, the thermal head will be up.

* Black panel will be adjusted to the starting point.
* The card is moving to the printable location and the thermal head will be down.
* Black panel data of SD RAM will be printed to the card using thermal head.
* After finished black panel printing, the thermal head will be up.

* Overlay panel will be adjusted to the starting point.
* The card is moving to the printable location and the thermal head will be down.
* Overlay panel data of SD RAM will be printed to the card using thermal head.

* After finished overlay panel printing, the thermal head will be up.

* The printed card is moving to the stacker.


# magnetic card (R/W)

* Place the magnetic card to the hopper.
* Execute the magnetic encoding command from PC.
* The encoding data will be saved to SD RAM through USB port.
* The magnetic card is moving to the magnetic head location.
* The encoding data in SD RAM is writing to the magnetic card using the magnetic head.
* After finish its encoding, the magnetic card is moving again to the magnetic head location.
* Read the magnetic card.
* Verify between the writing data and reading data.
* If there is an error in writing or reading, it will be recorded as an error.
* If there is no problem in writing and reading, the encoded magnetic card will be moved
  to the stacker.