

Contents

Contents	03
Caution	04
1. Getting Started	
1.1 Introduction	07
1.2 Contents in Package	07
1.3 Product Features	08
1.4 Loading Ribbon	10
1.5 Loading Cleaning Rollers	11
1.6 Card Feeding Hopper	12
1.7 Card Output Stacker	13
1.8 Power Device, Power cable, Communication Cable	13
2. Software Installation	
2.1 Installing Driver / Application	15
2.2 Installing USB Device Driver	18
2.3 Removing Driver / Application	22
2.4 Removing USB Device Driver	22
2.5 Updating a driver for hardware that isn't work properly	24
2.6 Printing with C-1	26
2.7 Printer Driver Settings	29
2.8 Network Configuration Settings (Option)	36
2.9 Scanner Software Settings (Option)	37
3. Printer Operation	
3.1 Getting Started	39
3.2 Description on Features	39
3.3 Designing Card	40
3.4 Tools	43
3.5 Configuration	44
3.6 Data Synchronizing	45
3.7 Card Printing	50
4. Instructions on Maintenance	
4.1 Maintenance of Product	52
4.2 How to Replace Ribbon	53
4.3 How to Clean the Printer	54
4.4 How to Replace TPH (Thermal Print Head) and Consumables	55
4.5 Troubleshooting	56
4.6 Technical Specifications	58

CAUTION

User should read caution information and keep in mind before using. Different icons remind important information as to safety. Metapace is not responsible for physical harm to body or physical damage to the product occurred by user’s careless use.

 Danger	Warns user of risk of losing life or being seriously injured.
 Warning	Warns user of risk of being seriously or slightly injured, or damage to product.
 Caution	Warns user of slight damage to body.
 Note	Indicates information that supplements detailed information.

**Danger**

Warns user of risk of losing life or being seriously injured.

◆ POWER

- Do not use damaged power cord, plug or socket.
- Do not pull plug with power cord.
- Do not touch power plug with wet bare hand.
- Do not bend power cord or put heavy things on the power cord.
- Unplug during thunder and lightning or storage.

◆ INSTALLATION

- Do not put the printer in wet, dirty place.
- Do not put lightings on the printer. Put the printer away from heat source.
- Unplug while moving the printer.
- Put the printer away from flammable source.

◆ CLEANING

- Clean the wet and dirty plug.
- Unplug the printer before cleaning. Do not use water or chemical cleanser.

◆ MISCELLANEOUS

- Do not put water bowl, medicine, metal on the printer.
- In case of abnormal situation in the printer, unplug the printer immediately and contact your dealer.
- Make sure that you use adequate power adaptor.



Caution

Warns user of slight damage to body.

◆ INSTALLATION

- Do not put the printer on unstable place.
- Avoid direct sunlight that may cause trouble.

◆ CLEANING

- Do not disassemble cover or protection parts.
- When you put hand inside the printer, do not operate it.
- Make sure that you perform cleaning and maintaining according to the instructions.

◆ MISCELLANEOUS

- Do not disassemble, repair, modify.
- Do not put heavy things on the printer.

1 Getting Started

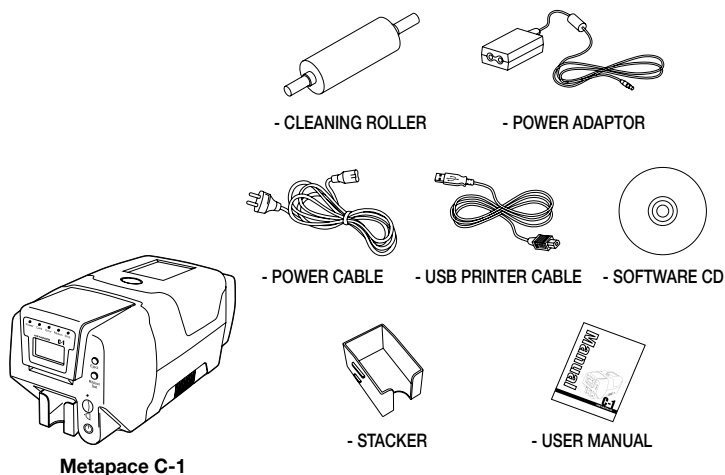
1.1 Introduction

This card printer enables user to create cards easily and shortly in accordance with the card specifications you wish to get.

You can get high quality color image with the card printer of dye sublimation printing. In order to meet customers demand, it provides options such as M/S, IC (Contact), RF (Contactless) encoding as well as bar code, diagram, picture printing.

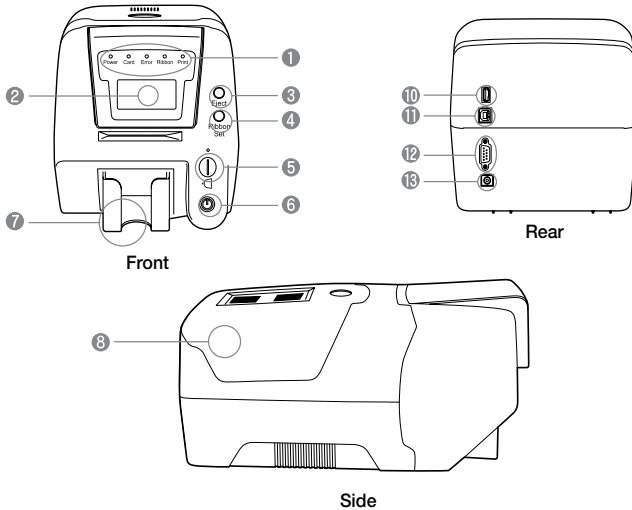
It is useful for creating membership card, bonus card and identification card on PET, PVC card.

1.2 Contents in Package



Please make sure that printer and all the accessories are in good order. If any items are missing, please contact your dealer.

◆ Metapace C-1 (Automatic Feeding, Single-sided Printing, Option)



◆ Features Description

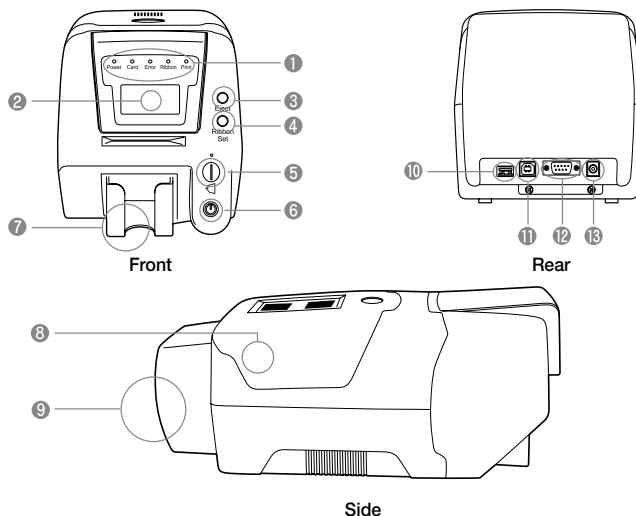
No	Features	Description
1	LED Display	LED shows the status of printer
2	LCD Display	LCD panel displays the status of printer
3	Card Eject	Button for ejecting card from the printer
4	Ribbon Load	Button for replacing or repositioning ribbon
5	Mobile Connector	Socket for mobile chip (Option)
6	Power Button	Power on and off
7	Card Output Stacker	Stacker for released output cards
8	Printer Lid	Open for replacing ribbons and cleaning rollers
9	Flipper	Used for Dual sided printing (Option)
10	USB Socket	Used for memory stick or USB connecting
11	USB Communication Port	Used for connecting PC and printer with USB cable
12	RS232C Communication Port	Used for connecting PC and printer with RS232C
13	Power Socket	Used for supplying power



Note

Even though we have three different models of C-1, since there is no big difference in operating them, user manual is designed for C-1 Dual Sided as main reference.

◆ Metapace C-1 (Automatic Feeding, Dual-sided Printing, Option)



◆ Features Description

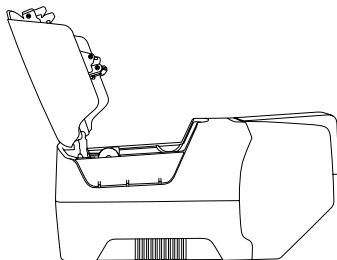
No	Features	Description
1	LED Display	LED shows the status of printer
2	LCD Display	LCD panel displays the status of printer
3	Card Eject	Button for ejecting card from the printer
4	Ribbon Load	Button for replacing or repositioning ribbon
5	Mobile Connector	Socket for mobile chip (Option)
6	Power Button	Power on and off
7	Card Output Stacker	Stacker for released output cards
8	Printer Lid	Open for replacing ribbons and cleaning rollers
9	Flipper	Used for Dual sided printing (Option)
10	USB Socket	Used for memory stick or USB connecting
11	USB Communication Port	Used for connecting PC and printer with USB cable
12	RS232C Communication Port	Used for connecting PC and printer with RS232C
13	Power Socket	Used for supplying power



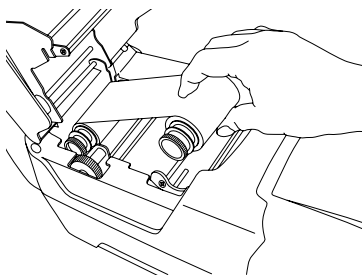
Even though we have three different models of C-1, since there is no big difference in operating them, user manual is designed for C-1 Dual Sided as main reference.

1.4 Loading Ribbon

- 1 Unpack ribbon carton box.



- 2 Open printer lid by pressing Cover Release Button and raise it fully.

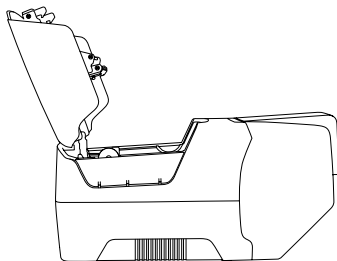


- 3 Make sure that ribbon on is placed in right position and the printer lid is closed.

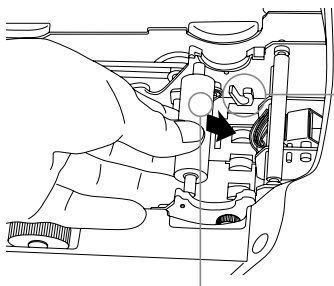


Please note that improper closing lock of the printer lid may cause bad printing. (Check out lock of the printer lid)

1.5 Loading Cleaning Rollers

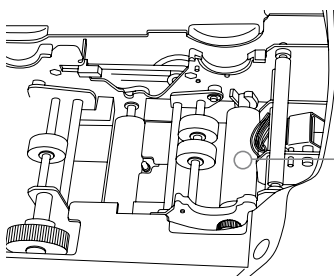


- 1** Open printer lid by pressing Cover Release Button and raise it fully.



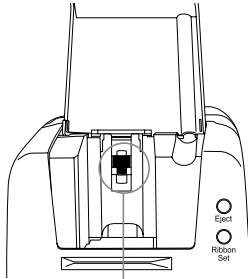
U-shaped Slot

- 2** Slide the cleaning roller into the loading part and insert roller bar into U-shaped slots until it locks in place.



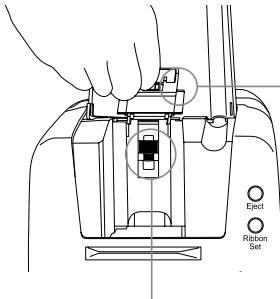
Cleaning Roller

1.6 Card Feeding Hopper



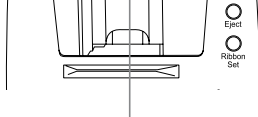
1 Open the card feeding lid.

Card thickness
adjustment controller



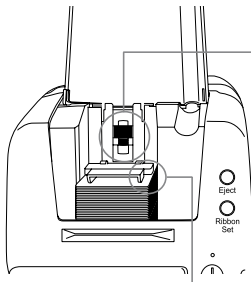
2 Rotate card thickness adjustment controller in the card feeder to synchronize it with the cards you wish to print.

Card feeding weight



3 Lift the card feeding weight.

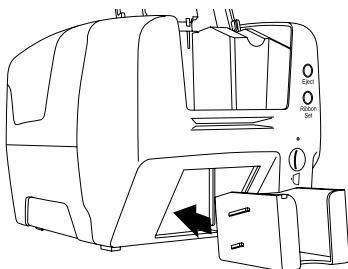
Card thickness
adjustment controller



4 After stacking card into the card feeding hopper, put the weight on the stack of the cards.

Card feeding weight

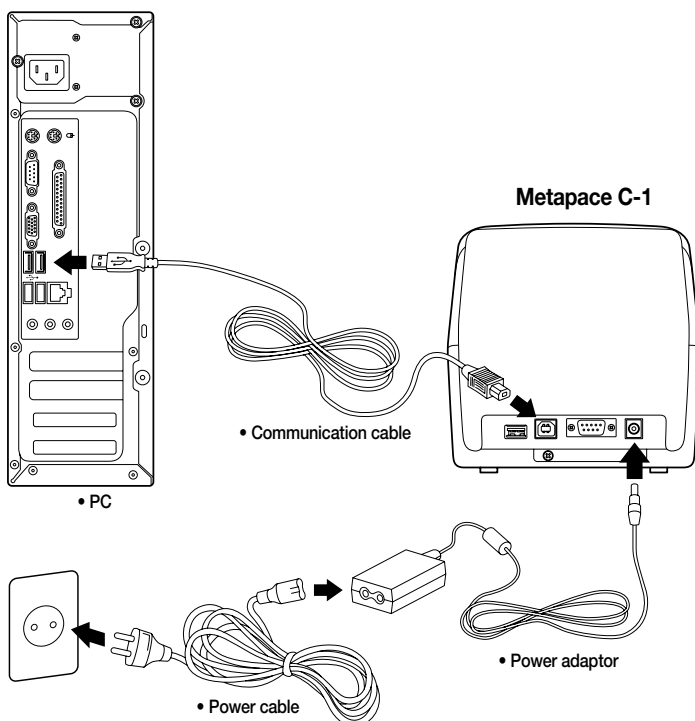
1.7 Card Output Stacker



1

Lock the latch of card output stacker into slots of the front side.

1.8 Power Device, Power cable, Communication Cable



Software Installation

PC Systems requirement

1. The following operation systems are supported:

- Windows 2000
- Windows XP (32bit)
- Windows Vista (32bit)
- Windows 7 (32bit)

1. Computer:

- CPU: Pentium III 1Ghz above (Pentium IV 1.5Ghz recommended)
- Memory: 128 MB above (512 MB recommended)
- HDD: 1 GB above (5 GB recommended)
- Internet Explorer 5.5 above (6.0 recommended)



To install/remove the driver/software using Windows 2000/XP/Vista/7, you must be logged in as the administrator.

2.1 Installing Driver / Application



Note

Close all windows in operation (Recommended)
Install program copies the files necessary for the installation of USB device driver to the computer.

- 1 Putting the installation CD in the CD-ROM Drive of the computer, the installation window will open automatically. Or click Install.exe.
- 2 The initial window of Metapace C-1 installation program like the following will automatically open. Click Start to start installation process.



- 3 Select the software you wish to install. Click Next.



- 4 After reading license agreement for the software installation, select Approval and then click Next.



- 5 Select the port type you wish to install. Click Next.



6 When installation is completed, please click Exit.



7 Check out the selected software is installed.

- (1) Check out Metapace Card Designer installation.
 - Check Start --> All Programs --> Metapace C-1 --> Card Designer
- (2) Check out Metapace C-1 Driver installation
 - Check Start --> All Programs --> Metapace C-1 --> Printer
 - Check Metapace C-1 in Printers folder
- (3) Check out Network software installation
 - Check Start --> All Programs --> Metapace C-1 --> Network
- (4) Check out Scanner software installation
 - Check Start --> All Programs --> Metapace C-1 --> Scanner

2.2 Installing USB Device Driver



Note

Close all windows in operation. (Recommended)

Explanation below is based on Windows XP.

The Picture and sequence can be different in Windows 2000 / Vista / 7.

◆ USB Device Driver

1

Plug the card printer device into the computer.

2

In the Found New Hardware dialog box choose Install from a list or specific location. Click Next.



3

Click Browse to search the installation CD location as follow. Click Next.



- 4 In the Hardware Installation dialog box, click Continue Anyway.



- 5 Click Finish.



- 6 Check out the installation of USB Device Driver.
Click Start --> Control Panel --> System --> Hardware --> Device Manager
Check out "Metapace C-1" installed in Universal Serial Bus controllers.

◆ Smart Card Reader Driver (Option)



This function is supported on the specific models.

- 1 Plug the card printer device into the computer.
- 2 In the Found New Hardware dialog box choose Install from a list or specific location. Click Next.



- 3 Click Browse to search the installation CD location as follow. Click Next.



- 4 In the Hardware Installation dialog box, click Continue Anyway.



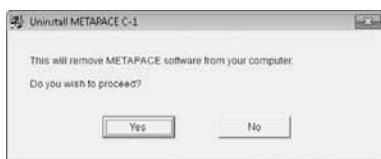
- 5 Click Finish.



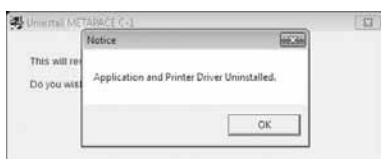
- 6 Check out the installation of Smart Card Reader Driver.
Click Start --> Control Panel --> System --> Hardware --> Device Manager.
Check out "Smart Card Reader" installed in Smart card readers.

2.3 Removing Driver / Application

- 1 Click Start --> All Programs --> Metapace C-1 --> Printer --> Uninstall. And then click Yes.



- 2 When uninstallation is complete, click OK.



2.4 Removing USB Device Driver

◆ USB Device Driver

- 1 Open Device Manager.
Click Start, Control Panel, System, Hardware and Device Manager.
- 2 Double-click the Universal Serial Bus Controllers you want to uninstall.
- 3 Right-click the Metapace C-1, and then click Uninstall.

- 4 In the Confirm Device Uninstall dialog box, click OK. The device is uninstalled successfully.



- 5 If you install this device again, turn off the printer and turn on again.

◆ Smart Card Reader Driver (Option)

- 1 Open Device Manager.
Click Start, Control Panel, System, Hardware and Device Manager.
- 2 Double-click the Smart Card Readers you want to uninstall.
- 3 Right-click the Smart Card Reader, and then click Uninstall.
- 4 In the Confirm Device Uninstall dialog box, click OK. The device is uninstalled successfully.



- 5 If you install this device again, turn off the printer and turn on again.

2.5 Updating a driver for hardware that isn't work properly

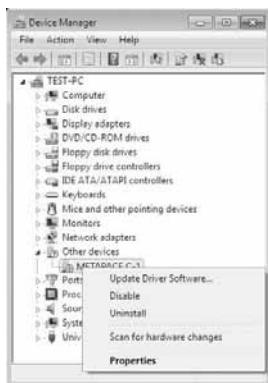


Note

You must be logged on as an administrator to perform these steps.

- 1 Plug the card printer device into the computer.
- 2 Open Device Manager.
If you are prompted for an administrator password or confirmation, type the password or provide confirmation.

Windows XP: Click Start --> Control Panel --> System--> Hardware --> Device Manager.
Windows Vista: Click Start --> Control Panel --> System --> Device Manager.
Windows 7: Click Start --> Control Panel --> Hardware and Sound --> Device Manager.
- 3 Double-click the Other devices or Universal Serial Bus controllers you want to update.
- 4 Right-click the Metapace C-1 (or USB Device). And then click Update Driver Software.



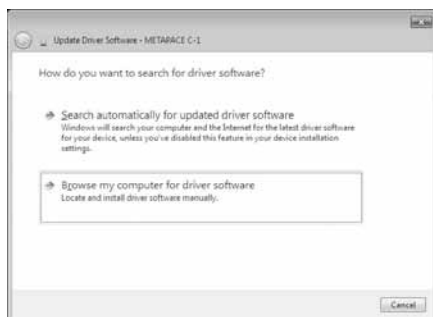
OR



5

Follow the instructions in the Update Driver Software wizard.

1) Click Browse my computer for driver software.



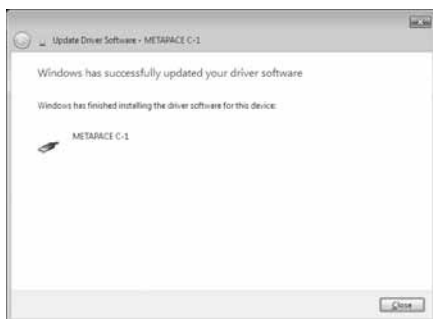
2) Click Browse to search the driver location as follows. And then click Next.



3) Click Install this driver software anyway.



4) Click Close.



6

Check the updated device.

Check out “Metapace C-1” installed in Universal Serial Bus controllers.

2.6 Printing with METAPACE C-1

◆ Setting up as the default printer

1

Click Start, point to Settings, and click Printers and Faxes.

2

Right-click the Metapace C-1, and select Set as default printer.

◆ Changing the printer port

1

Click Start, point to Settings, and click Printers and Faxes.

2

Right-click the Metapace C-1, and select Properties (or Printer Properties).

- 3 Select the Ports (or Details) Tab.
- 4 Click the Print to the following port to find the port and select the printer port. Click OK.
 - Printing to USB Port: CITUSB
 - Printing to Network Port: IP_192.168.0.31(For example - Refer to 2.8 Network Configuration Settings)

◆ Printing a document

- 1 Open file of the Windows application software you wish to print.
- 2 Select the Print in the File menu.
 - Make sure that you choose Metapace C-1.
- 3 Select the printer settings you wish to print. Click Print or OK.
 - Ensure that the printing image is oriented in same direction (vertical, horizontal) as that of paper. Preview function of software will help you check it out.

◆ Canceling Print



There are two ways to cancel printing:

- Canceling in application software and canceling in spool in a queue.
- If card is jammed on the way of printing, you have to cancel it, which costs ribbon and card.

◆ Canceling in Spool



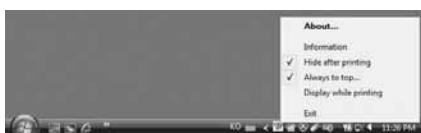
Spooled files queue up for being sent to printer.

1

Double click printer icon in menu bar in bottom right.

2

If user wishes to change settings, right click on the printer icon.

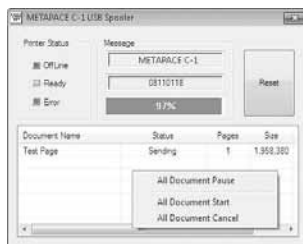


Spool program resume when printing in operating again, even though you have already terminated it.

- About: Shows the information of the spooler program.
- Information: Shows the spooler window.
- Hide after printing: If the printing is complete, the spooler window will be disappeared.
- Always on top: Set the spooler window on the top always.
- Display while printing: Display the spooler window when starting the printing.
- Exit: Exit the spool program.

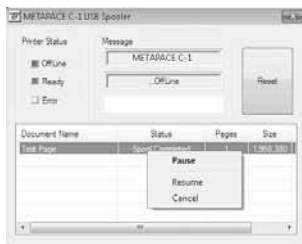
3

Set up all spooled file prior to printing.



- Right click button on the printing standby. You can select one of All Document Pause, All Document Start and All Document Cancel.

4 Set up of spooled file in printing.



- Click right button on spooled file in printing. You can select one of Pause, Resume and Cancel.



Caution

If you stop the document printing, the file in printing can be mixed up with other spooled file.

2.7 Printer Driver Settings



User can set up own printing environment with various functions the printer provides.

◆ Opening in printer folder

You can modify the printer settings for all applications.

- 1 Click Start, point to Settings, and click Printers and Faxes.
- 2 Right-click Metapace C-1, select Properties(or Printing Preferences) and make the desired modifications.
- 3 Click each tab and window will open.
- 4 Upon completing settings, click OK.

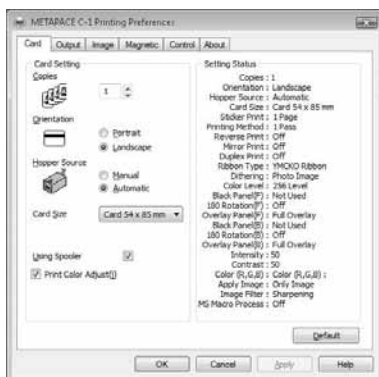
◆ Opening Printing Preferences on application software

The values input in printing program will get back to previous one when current operating program terminates.

- 1 Execute printing order in application program.
- 2 Click Printing Preferences.
- 3 Click each tab and windows will open.
- 4 Upon completing settings, click OK.

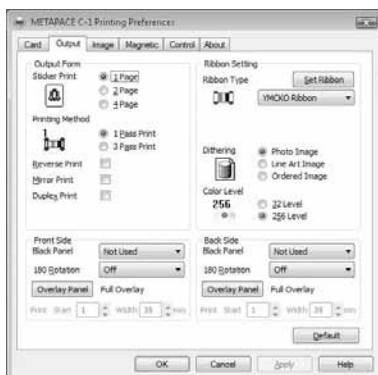
◆ Printing Preferences

- 1 Card tab



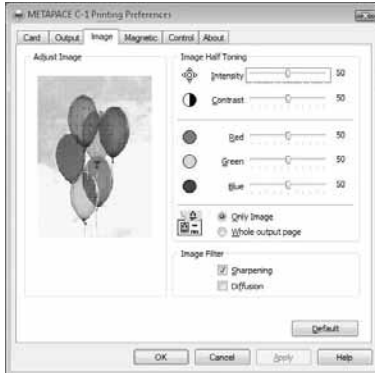
Items	Descriptions
Copies	Set the number of copies: 1 to 999.
Orientation	Set the card orientation.
Hopper Source	Set the source of the card supply in printer.
Card Size	Set the size of card.
Using Spooler	Set the method of transmitting data to printer.
Print Color Adjust	Set the color adjustment when printing.

2 Output tab



Items	
Sticker	Print same image in sticker format for 1, 2, 4 sheets.
Printing Method	During printing, it is the print mode for color ribbon movement. - 1 pass print: Transfer all data of YMCKO and then print. - 3 pass print: Transfer corresponding data of each color and then print.
Reverse Print	Reverse RGB and print.
Mirror Print	Mirror the printing data and print.
Duplex Print	It prints the contents of a document on both sides.
Ribbon Type	Set the type of ribbon.
Dithering	Dithering is applied to only the data transmitted to black ribbon when printing on the black ribbon of color ribbon.
Color Level	When printing, it decides the number of colors.
Black Panel	This is an option to select K panel for the printing black colored text and black image included in the printing file.
180 Rotation	It prints the contents of output data by rotation in a 180 degree.
Overlay Panel	It sets up overlay panel for protect a printed card. - Full Overlay / No Overlay / Selected Area / Use Image File - Smart Card ISO / Smart Card AFNOR / Magnetic Card

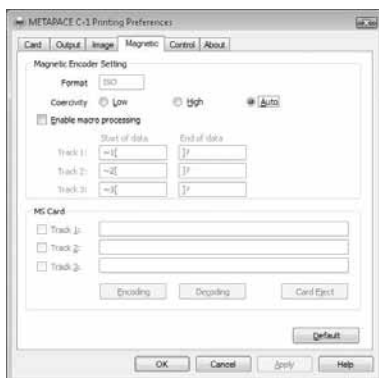
3 Image tab



Items	Descriptions
Intensity	Set the whole brightness of a printing document.
Contrast	Set a dark place as darker and a bright place as brighter.
Red	Set the intensity of red color and print.
Green	Set the intensity of green color and print.
Blue	Set the intensity of blue color and print.
Image Application Mode	Set the image application mode. - Only Image: Half toning applicable only to image. - Whole output page: Half toning applicable whole data.
Sharpening	It increases the contrast of the neighboring pixels and it makes the blurred image sharply.
Diffusion	Mixes the pixel of the image and does make seem like the blurred image.

4 Magnetic tab

You can write or read track information in the magnetic strip.

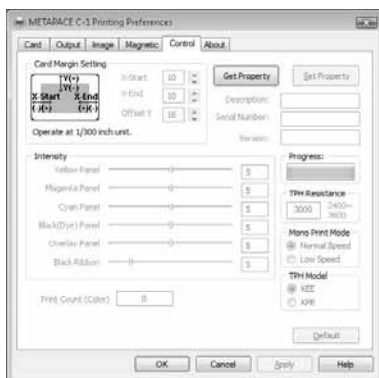


Items	Descriptions
MS Format	Set the encoder format of the magnetic strip.
MS Coercivity	Set the coercivity type of magnetic strip.
Enable macro processing	Send a data to the magnetic strip.
Encoding	Write the data of selected track to the magnetic strip.
Decoding	Read the data of selected track from the magnetic strip.
Card Eject	Eject a card when the card remains inside the printer.

5

Control tab

It controls remotely all of the function related with printer.



Items	Descriptions
Card Margin Setting	It sets card margin (X, Y value). If the printing is not located as you desired, you should set the card margin to change the location.
Intensity	Set the intensity of ribbon.
Print Count(Color)	It reads print counts from a printer. Print count increases one by one per each panel for a color ribbons.
TPH Resistance	Set the TPH resistance from 2400 to 3600.
Mono Print Mode	Set the printing speed during printing with K ribbon.
TPH Model	Set the model of TPH.

6 About tab

It shows version and other information.

If you click the image, the website of our company will be opened on internet browser.



2.8 Network Configuration Settings (Option)



This function is supported on the specific models.

◆ Network Configuration

- 1 Click Start --> All Program --> Metapace C-1 --> Network --> Network Setting.
- 2 The network configuration window will open.



Items	Descriptions
Board List	It lists the searched network printers.
F/W Version	It shows F/W version of the selected network board.
IP Address	It shows IP address of the selected network board.
Subnet Mask	It shows subnet mask address of the selected network board.
Gateway	It shows gateway address of the selected network board.
Local Port	It sets a printing port through network printer. Please select C-1.
DHCP Mode	If the network system supports DHCP, IP is automatically set. If not, you should directly change IP address after being assigned. And then you set it in order to use network printer.
Search button	Search network of a card printer.
Setting button	It saves the changed network information. After change, a card printer will be reset. You can use this after 10 seconds.
Exit button	Exit the program.

2.9 Scanner Software Settings (Option)



Note This function is supported on the specific models.

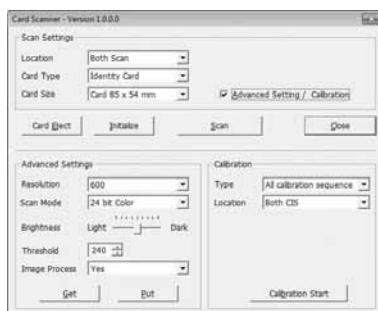
◆ Select Scanner

- 1 Open the graphics program into which you wish to scan.
- 2 Choose the command Select Scanner in the File menu.
- 3 Select as source the Card Scanner driver and choose the command to acquire an image.



◆ Scanning a card

- 1 Click Start --> All Program --> Metapace C-1 --> Scanner --> Scan Software.
- 2 Choose the command Scan New in the File menu.
- 3 The Card Scanner window will open.



Card Printer C-1

Items	Descriptions
Location	It selects location of a card. - Front Scan / Back Scan / Both Scan
Card Type	It sets type of a card. - Identity Card / Driving License / Other
Card Size	It sets size of a card. - Card 85 x 54 mm
Card Eject button	It ejects a card.
Initialize button	It initializes the scanner.
Scan button	It scans a card.
Close button	It closes the scanner dialog box.
Resolution	You can select the resolution. - 100, 200, 300, 400 DPI are supported by software.
Scan Mode	You can select the saving mode of scan image. - 1 bit black-white and 8 bit grey are supported by software.
Brightness	You can set the brightness of a scan image.
Threshold	You can set the threshold. ? 0 to 255. Default: 240
Image Process	You can upgrade the quality of a scan image.
Get button	It gets the set values from a card printer.
Put button	It saves the new values on a card printer.
Type	You can select the type of correction.
Location	It selects location of CIS. - Both CIS / Front CIS / Rear CIS
Calibration Start	It starts the correction.

4 Click Scan.

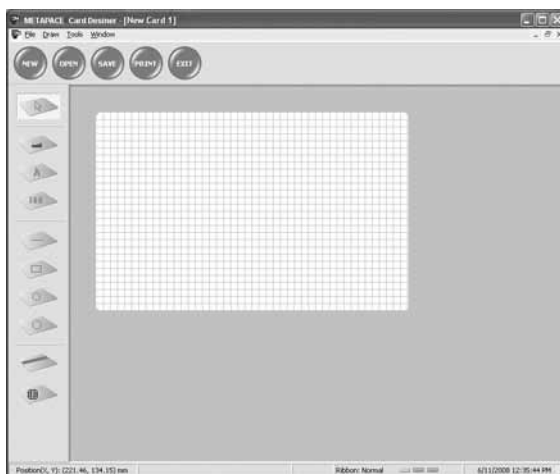
5 Once the scanning procedure is completed, the image of the card can be stored.

3 Software Operation

3.1 Getting Started

CardDesigner 1.0 is software that allows user to design and issue cards. Follow the steps below to create cards.

Select Start --> All Programs --> Metapace C-1 --> Card Designer



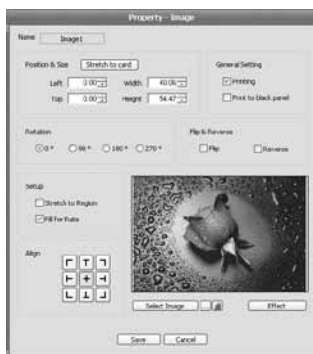
3.2 Description on Features

- NEW : Design new card. Up to 10 windows can be created at the same time.
- OPEN : Read a saved card design.
- SAVE : Save a card design.
- ISSUE : Print a card.
- EXIT : Terminate the window.

3.3 Designing Card

◆ IMAGE designing

- 1) Select  icon to start image designing in CardDesigner.
- 2) Drag mouse on the range where image is positioned on card.
- 3) When window of “Properties-Image” opens, Click “Select Image” button or “Cam” button. Select image you wish to insert.
- 4) Click “Save”, then the selected image is inserted.
- 5) You can change properties of the inserted image.



◆ TEXT designing

- 1) Select  icon to start text designing in CardDesigner
- 2) Drag mouse on the range where text is positioned on card.
- 3) When window of “Properties-Text” opens, type the text you wish to insert.
- 4) Click “Save”, then the text is inserted.
- 5) If you wish to change properties of the inserted text, double click on the text.

◆ BARCODE designing

- 1) Select  icon to start barcode designing in CardDesigner.
- 2) Drag mouse on the range where barcode is positioned on card.
- 3) When window of “Properties-barcode” opens, insert “Code” you wish to insert.
- 4) Click “Save”, then the bar code is inserted.
- 5) If you wish to change properties of the inserted text, double click on the barcode.



◆ DIAGRAM designing

- 1) Select  icon to start diagram designing in CardDesigner.
- 2) You can draw Diagram; Circle, Rectangle, Oval.
- 3) If you wish to change properties of the diagram, double click on the diagram.

◆ MAGNETIC CARD

- 1) Select  icon to start diagram designing in CardDesigner.
- 2) Magnetic stripe is displayed within the range of card.
- 3) If you wish to input data into magnetic stripe, double click the magnetic stripe and input data in the relevant track.



◆ IC CARD

- 1) Select  icon to start ic job left of the ISSUE window.
- 2) IC chip is displayed within the range of card.

3.4 Tools

◆ Magnetic card

After input of data to be written on magnetic track, click “Write”.
Click “Read” to read the saved data on each track.



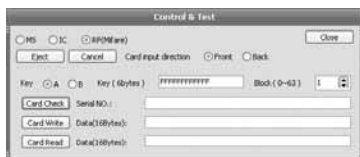
◆ IC CARD

Select “IC” and click “Read” button.
Progress bar will show communication status with IC chip.



◆ RF CARD

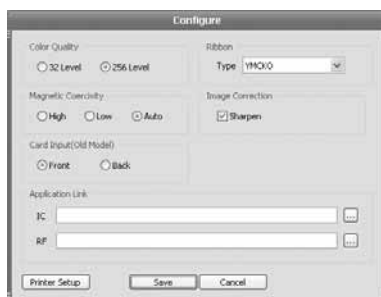
Click “Card Read”. The progress will show communication status with RF card.



3.5 Configuration

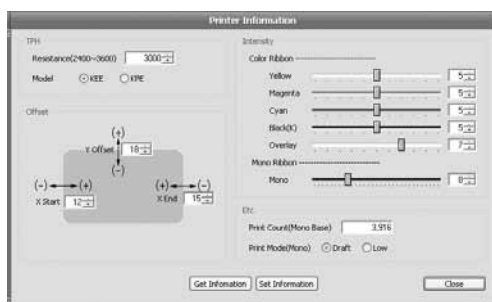
◆ Configure

When issuing card, user can set the type of ribbons, the card orientation and dithering for black ribbon. When issuing IC card or RF card, user can set the external program necessary.



◆ Printer Information

You can change set-up of a printer at configure by clicking Printer Setup.



3.6 Data Synchronizing



Note

Data Synchronizing will help user to synchronize data created in Microsoft Excel or Microsoft Access with what will be used in card issuing software for card creation. User can make card effectively in shorter time.

◆ Data Connect Wizard

1

CardDesigner “Tool” --> “Data Connect” --> “Data Connect wizard”



2

Select target database to synchronize.

(Select Excel Worksheet if target DB is in Excel Copy&Paste method.)

If you select “Microsoft Excel worksheet (Copy&Paste)”, you should input the numbers of column you will use.

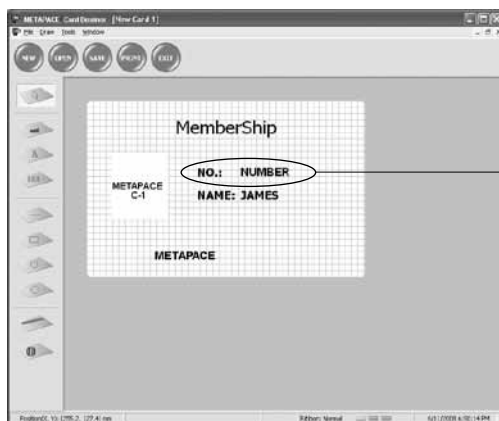


3 Choose Sheet to be used in database.



◆ Synchronizing data on the card with database (ex.Staff number)

1 Double click Barcode on database to synchronize.



Article for DataField1:
Double click

- 2 Click “Data input” button. Select “Data field” for data input. Select “Staff number” for data field. Click “+” to add data for staff number. Click “Finish”.

The 'Property - Barcode' dialog box contains the following sections:

- Name:** Barcode1
- Position & Size:** Stretch to card, Left: 46.88, Width: 34.88, Top: 19.97, Height: 7.55.
- General Setting:** Printing (checked), Print to black panel (checked).
- Rotation:** 0, 90, 180, 270 degrees.
- Flip & Reverse:** Flip (unchecked), Reverse (unchecked).
- Bar Type:** Code39
- Code:** [Text field with a red circle around the '+' button and the label 'Data Field Connection Button']
- Bar Color:** Black
- Use Background Color:** White
- Show Guard Character:** (unchecked)
- Automatic Font Size:** (unchecked)
- Font:** Name: [font icon], Size: 8, Color: black.
- Line Space:** [Text field]
- Buttons:** Save, Cancel, Font Change.

Data Field Connection Button

The 'Input Data' dialog box shows the 'Select data input method' section with three radio buttons: Direct input, Auto increment, and Data field (selected). Below is a preview field and buttons for Cancel, << Previous, and Next >>.

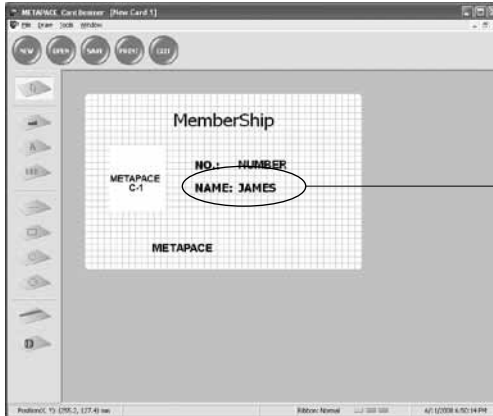
The 'Input Data' dialog box shows the 'After selecting data field to connect, press 'Add' button' section. The 'Data field' dropdown is set to 'DataField1'. Below is a preview field and buttons for Cancel, << Previous, and Finish.

Card Printer C-1

◆ Synchronizing data on the card with database (ex. Staff name)

1

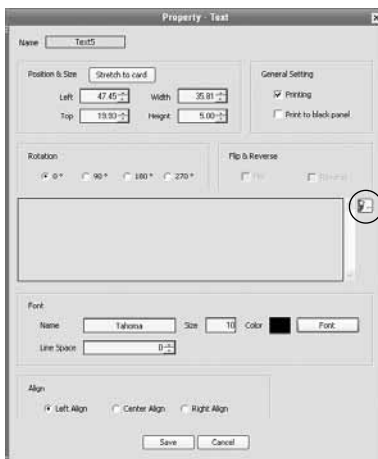
Double click Name on database to synchronize.



Article for DataField 2:
Double click

2

Click “Data input” button. Select “Data field” for data input. Select “Staff Name” for data field. Click “+” to add data for staff number. Click “Finish”. And Click “Save”.

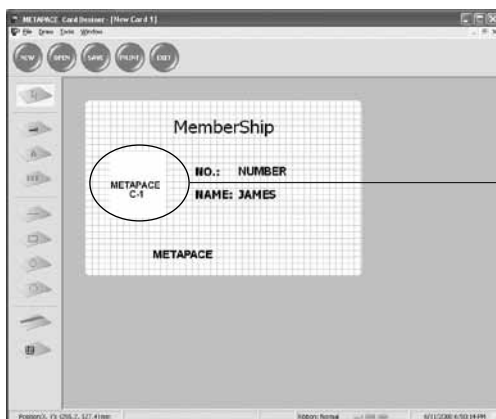


Data Field Connection Button

◆ Synchronizing data on the card with database (ex. Staff picture)

1

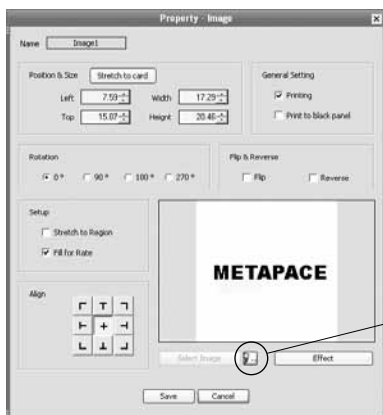
Double click Picture on database to synchronize.



Article for DataField 3:
Double click

2

Click "Data input" button. Select "Data field" for data input. Select "Staff Name" for data field. Click "+" to add data for staff number. Click "Finish". And Click "Save".



Data Field Connection Button

3.7 Card Printing

◆ Card Issue (Normal)

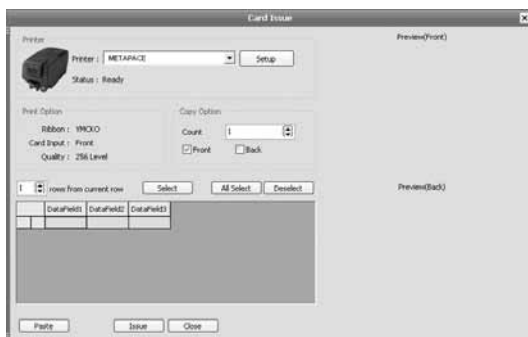
- 1 If you click “Issue” on CardDesigner, window below will open.



- 2 Select the type of printer (Driver or Direct).
- 3 Make a print with “Issue” button after finishing the setup of ribbon and other details.

◆ Card Issue (Data Field Connection)

- 1 If you click “Issue” on CardDesigner, window below will open.



2 Execute Microsoft excel --> Select the data area and copy them.

	A	B	C	D	E
1	BARCODE	NAME	PICTURE		
2	45698752	James Dean	C:\James.jpg		
3	45698753	Calvin Johnson	C:\Calvin.jpg		
4	45698754	Adrian Peterson	C:\Adrian.jpg		
5	45698755	Joe Thomas	C:\Joe.jpg		
6	45698756	Ted Ginn Jr.	C:\Ted.jpg		
7	45698757	Leon Hall	C:\Leon.jpg		
8	45698758	Jake Long	C:\Jake.jpg		
9	45698759	Justin Blalock	C:\Justin.jpg		
10	45698760	Glenn Dorsey	C:\Glenn.jpg		
11	45698761	Alan Branch	C:\Alan.jpg		

3 When you use Microsoft Excel worksheet (Copy&Paste) mode, click "Paste" button or click the marked area with mouse right button and click Paste at pop-up menu, then data will show up.



4 Check at the left of data which you will print and Click "issue" to make a print.

4 Instructions on Maintenance

4.1 Maintenance of Product

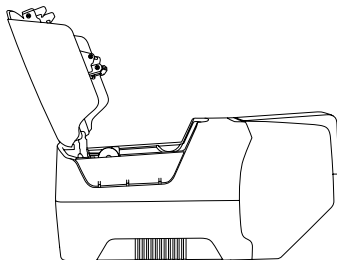
Never use card below

- Heavy damaged card
- Card with heavy dirt
- Card with scratch
- Bended or deformed card

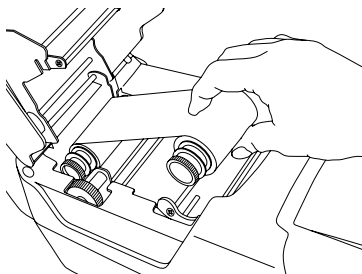
Cleaning

- Place the printer power switch in the OFF position and pull out the plug and power adaptor. Cleanse the surface of the printer with wet soft cloth.
- Do not let water inside the printer.
- When the printer gets dry, turn power on.

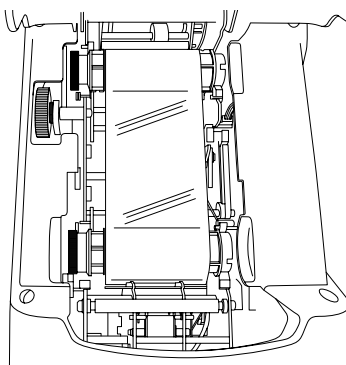
4.2 How to Replace Ribbon



- 1** Open printer lid by pressing the Cover Release button.



- 2** Hold the used ribbon and pull it out from the printer.



- 3** Make sure that supply ribbon and rewinding ribbon placed in right position. Close the printer lid.

4.3 How to Clean the Printer

◆ Cleaning Card



Dirt or embedded contamination on roller may cause problem.
Follow the recommended maintenance procedures below.

- 1 Turn the power off and remove card and ribbon cartridge.
- 2 Turn the power on with pressing “Eject” button at the same time. When front LED panel flashes, insert the cleaning card wet with alcohol cleanser into the front card slot.
- 3 After completing cleaning, cleaning card is ejected automatically. And the cleaning card is reusable.
- 4 Leave the printer for 2 ~ 3 minutes until alcohol cleanser evaporates.

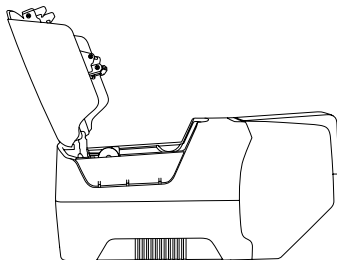
◆ Cleaning



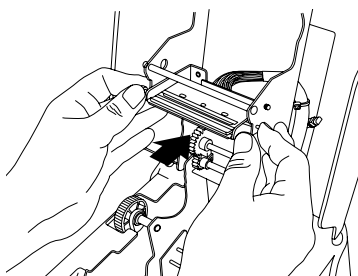
For cleaning roller maintenance, follow the procedures below.

- 1 Remove the cleaning roller from the printer.
- 2 Wet and clean the cleaning roller in flowing water.
- 3 When the cleaning roller gets dry, insert it into the printer.

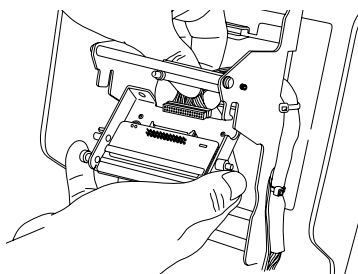
4.4 How to Replace TPH (Thermal Print Head)



- 1 Turn the power off. Open printer lid by pressing the Cover Release button.



- 2 Pull the TPH upward and backward, then head cover is detached. And disconnect cable connectors from the printer.



- 3 Connect the new TPH's cable connectors to the printer.

- 4 After completing TPH replacement, execute Start --> All Programs --> Metapace C-1 --> Printer --> Printer Setting. In control program, set the resistant value of new TPH. Click the "Set Property" button.



For more information, refer to "Control tab" on page 34 in the user's manual.

TPH resistance value is described on TPH.

4.5 Troubleshooting

◆ 1. In case front LED keeps on flashing or always on all the time.

Error Code		Solution
10	TPH Module open	- Check TPH module is closed
11	TPH Up/Down failure	- With TPH module opened, check printer inside and turn power off and on. Perform module Up/Down.
12	Card jammed	- Remove the jammed card inside the printer
13	TPH temperature trouble	- Check that temperature is within the operating temperature range. - Open TPH module and check that cable is correctly connected.
14	Encoder trouble in ribbon control part	- Check that ribbon is cut - Check that ribbon run out. - Check that encoder in ribbon control part is correctly assembled and operates normal.
15	Medium trouble	- Check that size of the medium meets specification - If same trouble repeats, contact dealer.
16	EEPROM trouble	- Turn power on again. - If same trouble repeats, contact dealer.
17	IC Contact Module not correctly positioned	- Check that IC Contact Module is correctly positioned - If not correct, turn power off and on. - If same trouble repeats, contact dealer.
50~51	Flipper module communication trouble	- After remove card, turn power on. - If same trouble repeats, contact dealer.
52~56	Flipper module mechanism trouble	- After remove card, turn power on. - If same trouble repeats, contact dealer.
57	Flipper improperly positioned or Card inside	- After remove card, turn power on.



Caution

After the trouble above is resolved, perform one of three below to get printer into normal operation.

- 1) Press reset button with ribbon cartridge correctly loaded.
- 2) Press "EJECT" button
- 3) Place power switch in OFF position, and ON position.

◆ 2. Other troubles

Trouble	Solution
Found frequently ribbons cut in the front edge of card when printing	- In printer driver or CardDesigner settings, increase Print Start Position.
Found frequently ribbons cut in the rear edge of card when printing	- In printer driver or CardDesigner settings, increase Print End Position.
Printer not found in CardDesigner or application software	- Check that printer driver is correctly installed. - Check that communication cable is properly connected - Reboot your PC.
Other than power LED, 4 Front LEDs continuously flash in sequence	- Check out www.metapace.com for firmware download. - Download the latest version of firmware for the printer. - Perform install using firmware install program.
Firmware installation not performed	- With pressing "EJECT", "RIBBON SET" switch at the same time, place power switch in the ON position. - Check that front 4 LEDs flash in sequence, install firmware using firmware install program.

4.6 Technical Specifications

Print

Thermal Ink Sublimation	1) Printing: Dye Sublimation 2) Printing Speed: Color single sided 26-27 sec, 3) Printing side: Single or Dual sided (Option)
TPH	1) Resolution: 12 dots/mm (300 dpi) 2) Pulse Life: 1x10 ⁸ , Abrasion: 50km
Color	Full color

Ribbons Cartridges

Color (YMCKO)	200 cards / roll
---------------	------------------

Electrical

CPU	16 Bit Processor
RAM	16 Mb
User interface	LCD, LED, Switch
Power adaptor	Input: 100 ~ 240V / 50 ~ 60Hz, Output: 24V / DC

Cards

PVC Card	53.98(W) x 85.7(H) x max. 0.77(T)
----------	-----------------------------------

Encoding

Magnetic Stripe	1) ISO7811 (Track1,2,3) (Option) 2) HiCo/LoCo (Option)
Contact (IC)	ISO7816 (Option)
Contactless (RF)	ISO14443 A,B, Mifare (Option)

Interface

USB	USB1.1, USB2.0
-----	----------------

Environmental

Operating Temperature	5°C ~ 45°C, 20 ~ 70% RH
Storage Temperature	-25°C ~ 70°C

Dimension

LxHxW	403x202x192
-------	-------------

Driver

Windows 2000, XP (32bit), Vista (32bit), 7 (32bit)
--

Warranty

Printer	24 Months
Print head	24 Months (100.000 prints maximum)