

METAPACE

Application Programming Guide
OPOS Driver

Ver. 1.00
Metapace T-3III

<http://www.metapace.com>

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Caution

Some semiconductor devices are easily damaged by static electricity. You should turn the printer "OFF", before you connect or remove the cables on the rear side, in order to guard the printer against the static electricity. If the printer is damaged by the static electricity, you should turn the printer "OFF".

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1. Instruction

This is a manual about how to set and configure device and to develop applications to use Metapace T-3III POS printer with Metapace OPOS driver.

You must set the device using the PSP Launcher before using the Metapace printer.

Throughout this manual, "OLE for Retail POS" is called "OPOS".

Throughout this manual, "Unified for Retail POS" is called "UPOS".

[Reference Sites]

<http://monroecs.com/opos.htm>: OLE for Retail POS Committee

<http://www.metapace.com>: Driver Update

We at Metapace maintain ongoing efforts to enhance and upgrade the functions and quality of all our products. In following, product specifications and/or user manual content may be changed without prior notice.

2. Development environment

2-1 Communication Configuration

1) Communication Configuration for serial interface.

You will set communication configuration in METAPACE OPOS Setup Utility.

Printer Model	Baud rate	Printer Type	etc
Metapace T-3III	9600/19200/38400/57600/115200	Mono Thermal	

* Check the default communication setting. For more details refer to the user manual included in the printer package.

3. Property / Method

3-1 Property Range / Default Value

3-1-1 Capability property setting value

Capability Name	1 Color Thermal: Metapace T-3III
Cap Compare Firmware Version	FALSE
Cap Power Reporting	TRUE
Cap Statistics Reporting	FALSE
Cap Update Firmware	FALSE
Cap Update Statistics	FALSE
Cap Transaction	TRUE
Cap Cover Sensor	FALSE
Cap Concurrent Rec Slp	FALSE
Cap Concurrent Jrn Slp	FALSE
Cap Concurrent Jrn Rec	FALSE
Cap Character Set	TRUE
Cap Rec Underline	TRUE
Cap Rec Page Mode	FALSE
Cap Concurrent Page Mode	FALSE
Cap Rec Stamp	FALSE
Cap Rec Rotate180	TRUE
Cap Rec Right 90	FALSE
Cap Rec Papercut	TRUE
Cap Rec Near End Sensor	FALSE
Cap Rec Mark Feed	FALSE
CapRecLeft90	FALSE
Cap Rec Italic	FALSE
Cap Rec Empty Sensor	FALSE
Cap Rec Dwide Dhigh	TRUE
Cap Rec Dwide	TRUE
Cap Rec Dhigh	TRUE
Cap Rec Color	FALSE
Cap Rec Cartridge Sensor	FALSE
Cap Rec Bold	TRUE
Cap Rec Bitmap	TRUE
Cap Rec BarCode	TRUE
CapRec2Color	FALSE
Cap Rec Present	TRUE

3-1-2 Property default value / Range

* List Property

Model	Rec Line Chars List	Rec BarCode Rotation List	Font Typeface List	Rec Bitmap List
Metapace T-3III	"42,56"	""	""	0,L90,R90,180

* Character Set List Property

Model	Value
Metapace T-3III	"437,1(Katakana),850,860,863,865,1252,866,852,858,862,864,23(Thai42),1253,1254,1257,27(Farsi),1251,737,775,31(Thai14),1255,34(Thai11),101(Thai11 custom),874,35(Thai18),855,857,928,39(Thai16),1256,1258,42(KHMER),1250,255,949,932,950,936"

* Receipt Width and Height Property

Model	Rec Line Height	Rec Line Width	Rec Line Paper Cut
Metapace T-3III	24	512	5

* Rec Line Spacing Property

Property	Range		
	Default	Max	Min
Rec Line Spacing	16	127	0

3-1-3 POS Printer Method

Method	Value
Begin Insertion	X
Begin Removal	X
Change Print Side	X
Clear Print Area	O
Cut Paper	O
Draw Ruled Line	X
End Insertion	X
End Removal	X
Mark Feed	X
Page Mode Print	O (Dot, Ink type printer unsupported)
Print BarCode	O
Print Bitmap	O
Print Immediate	O
Print Memory Bitmap	O
Print Normal	O
Print Two Normal	X
Rotate Print	O
Set Bitmap	O
Set Logo	O
Transaction Print	O
Validate Data	O

O: Supported X: Not supported

3-1-4 POS Printer Escape Sequences

Escape Sequence	Value
[#]P	0~100
[#]fP	0~100
[#]sP	X
sL	X
[#]B	1~20
tL	O
bL	O
[#]lF	0~9999
[#]uF Base Pitch [inch]	O
[#]rF Maximum[inch]	X
#E	O
#R	X
#dL	X
#fT	O
[!]bC	O
[!][#]uC	O
[!]iC	X
[#]rC	O
[!]rvC	O
[#]sC	X
1C	O
2C	O
3C	O
4C	O
#hC	O
#vC	O
[#]fC	X
[!]tbC	X
[!]tpC	X
cA	O
rA	O
lA	O
[!][#]stC	X
N	O

O: Supported X: Not supported

3-1-5 Color bitmap printing support

Metapace OPOS Driver supports following image formats;

- GIF, JPG, BMP Image Format.

The image will be converted into monochrome or 2 colors depending on printer model.

3-1-6 Page Mode printing

METAPACE Thermal printers support page mode printing.

* Methods used with Page Mode Printing

Method	Value
Print Normal	O
Print Bitmap	X
Print Barcode	X
Print Memory Bitmap	X

O: Supported X: Not supported

4. Extended Functions

This section is to explain Direct IO method. This method will operate properly only with Metapace POS printer.

4-1 Direct IO Method

Parameter	Explanation	Type
Command	Output format	Long
PData	Number of output data / Value defined by command	Long
PString	Output Data	String

METAPACE OPOS Direct IO Command

Command	Description
PTR_DI_OUTPUT	Output defined pString data
PTR_DI_INTERNATIONAL_CHAR	International character set define.

PTR_DI_OUTPUT

Argument	Command	PTR_DI_OUTPUT
	PData	
	PString	Output data
Description	Sends data without any process after checking printer status. "PString" is not affected by "Binary Conversion"	
Return	Result Code	Result Code Extended
	OPOS_SUCCESS	0
	OPOS_E_CLOSED	0
	OPOS_E_CLAIMED	0
	OPOS_E_NOTCLAIMED	0
	OPOS_E_DISABLED	0
	OPOS_E_BUSY	0
	OPOS_E_ILLEGAL	0
	OPOS_E_OFFLINE	0
	OPOS_E_FAILURE	0

PTR_DI_INTERNATIONAL_CHAR

Argument	Command	PTR_DI_INTERNATIONAL_CHAR
	PData	One of the commands: PTR_DI_CHAR_USA PTR_DI_CHAR_FRANCE PTR_DI_CHAR_GERMANY PTR_DI_CHAR_UK PTR_DI_CHAR_DENMARK1 PTR_DI_CHAR_SWEDEN PTR_DI_CHAR_ITALY PTR_DI_CHAR_SPAIN1 PTR_DI_CHAR_NORWAY PTR_DI_CHAR_DENMARK2
	PString	Printing position
Description	Sets International character set. If Character Set property value is changed, International character set will be reset.	
Return	Result Code	Result Code Extended
	OPOS_SUCCESS	0
	OPOS_E_CLOSED	0
	OPOS_E_CLAIMED	0
	OPOS_E_NOTCLAIMED	0
	OPOS_E_DISABLED	0
	OPOS_E_BUSY	0
	OPOS_E_ILLEGAL	0
	OPOS_E_OFFLINE	0
	OPOS_E_FAILURE	0

4-2 Direct IO Event

Not used.

5. Error Information

This section is to explain returned error information when use POS Printer methods. For more details, please refer to the UPOS specifications.

5-1 Result Code List

Claim Device

Method	Result Code	Result Code Extended
Claim Device	OPOS_E_ILLEGAL	OPOS_EPTR_UNRECOVERABLE
		OPOS_EPTR_MECHANICAL
		OPOS_EPTR_CUTTER
		OPOS_EPTR_OVERHEAT
		OPOS_EPTR_REC_EMPTY
		OPOS_EPTR_JRN_EMPTY

Check Health

Method	Result Code	Result Code Extended
Check Health	OPOS_SUCCESS	0
	OPOS_E_CLOSED	0
	OPOS_E_CLAIMED	0
	OPOS_E_DISABLED	0
	OPOS_E_ILLEGAL	0
	OPOS_E_OFFLINE	0
	OPOS_E_OFFLINE	0
	OPOS_E_FAILURE	OPOS_EPTR_UNRECOVERABLE
		OPOS_EPTR_CUTTER
		OPOS_EPTR_MECHANICAL
		OPOS_EPTR_OVERHEAT

Clear Output

Argument	Argument	Argument
Clear Output	OPOS_SUCCESS	0
	OPOS_E_CLOSED	0
	OPOS_E_CLAIMED	0
	OPOS_E_NOTCLAIMED	0

Direct IO

Method	Result Code	Result Code Extended
Direct IO	OPOS_SUCCESS	0
	OPOS_E_CLOSED	0
	OPOS_E_CLAIMED	0
	OPOS_E_NOTCLAIMED	0
	OPOS_E_DISABLED	0
	OPOS_E_ILLEGAL	0
	OPOS_E_OFFLINE	0
	OPOS_E_FAILURE	OPOS_EPTR_COVER_OPEN
		OPOS_EPTR_UNRECOVERABLE
		OPOS_EPTR_CUTTER
		OPOS_EPTR_MECHANICAL
		OPOS_EPTR_OVERHEAT
	OPOS_E_EXTENDED	OPOS_EPTR_COVER_OPEN
		OPOS_EPTR_JRN_EMPTY
		OPOS_EPTR_REC_EMPTY

Print Normal

Method	Result Code	Result Code Extended
Print Normal	OPOS_SUCCESS	0
	OPOS_E_CLOSED	0
	OPOS_E_CLAIMED	0
	OPOS_E_NOTCLAIMED	0
	OPOS_E_DISABLED	0
	OPOS_E_ILLEGAL	0
	OPOS_E_OFFLINE	0
	OPOS_E_FAILURE	OPOS_EPTR_UNRECOVERABLE
		OPOS_EPTR_CUTTER
		OPOS_EPTR_MECHANICAL
		OPOS_EPTR_OVERHEAT
	OPOS_E_EXTENDED	OPOS_EPTR_COVER_OPEN
		OPOS_EPTR_JRN_EMPTY
		OPOS_EPTR_REC_EMPTY

Print Immediate

Method	Result Code	Result Code Extended
Print Immediate	OPOS_SUCCESS	0
	OPOS_E_CLOSED	0
	OPOS_E_CLAIMED	0
	OPOS_E_NOTCLAIMED	0
	OPOS_E_DISABLED	0
	OPOS_E_ILLEGAL	0
	OPOS_E_OFFLINE	0
	OPOS_E_FAILURE	OPOS_EPTR_UNRECOVERABLE
		OPOS_EPTR_CUTTER
		OPOS_EPTR_MECHANICAL
		OPOS_EPTR_OVERHEAT
	OPOS_E_EXTENDED	OPOS_EPTR_COVER_OPEN
		OPOS_EPTR_JRN_EMPTY
		OPOS_EPTR_REC_EMPTY

Cut Paper

Method	Result Code	Result Code Extended
Cut Paper	OPOS_SUCCESS	0
	OPOS_E_CLOSED	0
	OPOS_E_CLAIMED	0
	OPOS_E_NOTCLAIMED	0
	OPOS_E_DISABLED	0
	OPOS_E_ILLEGAL	0
	OPOS_E_OFFLINE	0
	OPOS_E_FAILURE	OPOS_EPTR_UNRECOVERABLE
		OPOS_EPTR_CUTTER
		OPOS_EPTR_MECHANICAL
		OPOS_EPTR_OVERHEAT
	OPOS_E_EXTENDED	OPOS_EPTR_COVER_OPEN
		OPOS_EPTR_JRN_EMPTY
		OPOS_EPTR_REC_EMPTY

Rotate Print

Method	Result Code	Result Code Extended
Rotate Print	OPOS_SUCCESS	0
	OPOS_E_CLOSED	0
	OPOS_E_CLAIMED	0
	OPOS_E_NOTCLAIMED	0
	OPOS_E_DISABLED	0
	OPOS_E_ILLEGAL	0
	OPOS_E_OFFLINE	0
	OPOS_E_FAILURE	OPOS_EPTR_UNRECOVERABLE
		OPOS_EPTR_CUTTER
		OPOS_EPTR_MECHANICAL
		OPOS_EPTR_OVERHEAT
	OPOS_E_EXTENDED	OPOS_EPTR_COVER_OPEN
		OPOS_EPTR_JRN_EMPTY
		OPOS_EPTR_REC_EMPTY

Print Bitmap

Method Name	Result Code	Result Code Extended
Print Bitmap	OPOS_SUCCESS	0
	OPOS_E_CLOSED	0
	OPOS_E_CLAIMED	0
	OPOS_E_NOTCLAIMED	0
	OPOS_E_DISABLED	0
	OPOS_E_ILLEGAL	0
	OPOS_E_OFFLINE	0
	OPOS_E_FAILURE	OPOS_EPTR_UNRECOVERABLE
		OPOS_EPTR_CUTTER
		OPOS_EPTR_MECHANICAL
		OPOS_EPTR_OVERHEAT
	OPOS_E_NOEXIST	0
	OPOS_E_EXTENDED	OPOS_EPTR_COVER_OPEN
		OPOS_EPTR_JRN_EMPTY
		OPOS_EPTR_REC_EMPTY
		OPOS_EPTR_SLP_EMPTY
		OPOS_EPTR_TOOBIG
		OPOS_EPTR_BADFORMAT

Set Bitmap

Method	Result Code	Result Code Extended
Set Bitmap	OPOS_SUCCESS	0
	OPOS_E_CLOSED	0
	OPOS_E_CLAIMED	0
	OPOS_E_NOTCLAIMED	0
	OPOS_E_DISABLED	0
	OPOS_E_ILLEGAL	0
	OPOS_E_OFFLINE	0
	OPOS_E_FAILURE	OPOS_EPTR_UNRECOVERABLE
		OPOS_EPTR_CUTTER
		OPOS_EPTR_MECHANICAL
		OPOS_EPTR_OVERHEAT
	OPOS_E_NOEXIST	0
	OPOS_E_EXTENDED	OPOS_EPTR_COVER_OPEN
		OPOS_EPTR_JRN_EMPTY
		OPOS_EPTR_REC_EMPTY
		OPOS_EPTR_SLP_EMPTY
		OPOS_EPTR_TOOBIG
		OPOS_EPTR_BADFORMAT

Set Logo

Method	Result Code	Result Code Extended
Set Logo	OPOS_SUCCESS	0
	OPOS_E_CLOSED	0
	OPOS_E_CLAIMED	0
	OPOS_E_NOTCLAIMED	0
	OPOS_E_DISABLED	0
	OPOS_E_ILLEGAL	0

Transaction Print

Method	Result Code	Result Code Extended
Transaction Print	OPOS_SUCCESS	0
	OPOS_E_CLOSED	0
	OPOS_E_CLAIMED	0
	OPOS_E_NOTCLAIMED	0
	OPOS_E_DISABLED	0
	OPOS_E_ILLEGAL	0
	OPOS_E_OFFLINE	0
	OPOS_E_FAILURE	OPOS_EPTR_UNRECOVERABLE
		OPOS_EPTR_CUTTER
		OPOS_EPTR_MECHANICAL
		OPOS_EPTR_OVERHEAT
	OPOS_E_NOEXIST	0
	OPOS_E_EXTENDED	OPOS_EPTR_COVER_OPEN
		OPOS_EPTR_JRN_EMPTY

		OPOS_EPTR_REC_EMPTY
		OPOS_EPTR_SLP_EMPTY