

Unified Label Utility-II PV3/PV4

BARCODE PRINTER Ver. 1.01



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1. Manual guide

The Unified Label Utility-II can be used for various purposes.

It is advisable to read the contents of this manual carefully before using

"Unified Label Utility-II" utility for the first time.

1) User Setting Manager

This is for changing the printer's default settings such as serial settings, paper size, and print density according to the user's environment.

2) Configure Print Quality This is used to check and set print quality by printing sample labels by the print quality.

Manual Calibration
 This is for manual calibration of gap sensor.

4) PCX File Downloader This manages the images stored in flash memory.

5) File transfer This sends the command file to the printer.

6) Printer Tools This checks the information of a printer or performs the specified function.

7) Communication Window This tests the commands for printing and checks the printer's response data.

8) SLCS Test Tool This tests the SLCS command and creates a simple label.

2. Operating System(OS) Environment

The following operating systems are supported for usage.

Microsoft® Windows XP SP3 (32bit) Microsoft® Windows XP SP1 or later (64bit) Microsoft Windows Server 2003 SP1 or later (32bit/64bit) Microsoft Windows VISTA (32bit/64bit) Microsoft Windows Server 2008 (32bit/64bit) Microsoft Windows Server 2008R2 (64bit) Microsoft Windows 7 (32bit/64bit) Microsoft Windows 8 (32bit/64bit) Microsoft Windows 8 (32bit/64bit) Microsoft Windows 10 (32bit/64bit)

3. Supported models

Model	X Coor	dinates	Y Coordinates
WOder	Minimum	Maximum	Minimum
PV3	0	576	0
PV4	0	832	0

* The maximum Y Coordinate is dependent on paper length

4. Usage Preparation

1) Connection of Printer with PC

Connect the interface cable between the printer and the PC. (The available interfaces are Serial, Parallel, USB, Ethernet, and Bluetooth.)

2) Select the interface type and configure communication setting.

3) Click the "Connect" button.

If the connection is successful, the message "Success open port" appears and the buttons are activated. If a printer is not connected, the error message "Cannot open port! Please check printer and cable" appears.

terface Type	2	User Setting
🔘 Serial	Parallel O USB	Configure Printer Setting
🗇 Ethernet	Bluetooth	Configure Print Quality
ommunication	n Setting	Calibration Setting Manager
PT Port	LPT1: T	File Transfer
OM Port	COM6:	PCX File Downloader
aud Rate	115200 👻	File Transfer
ata Bits	8	Printer Tool
arity	None 🔻	Printer Tool
op Bits	1	Communication Tool
,	192 . 168 . 0 . 4	SLCS Test Tool
ort	9100	RFID Set Configuration Write/Read
Connec	ct Disconnect	EXIT

5. Usage Method

5-1 User Setting Manager

• This is used to change the default settings of the printer, such as serial / Bluetooth settings, paper size, print density, and media processing method, according to the user's environment.

Click the button "Configure Printer Setting."

5-1-1 Serial/Bluetooth Communication Setting

1) Click the "Interface" tab.

2) Select the checkbox of the interface to be configured between serial and Bluetooth.

terface Basic	Advanced	Real-Time Clock	Language	Other
Serial Com	munication Se	etting		
Baudrate :	[-
Data Length	: [-
Parity :				-
Stop Bit :	[-
Protocol mod	le:			-
Bluetooth	Communicati	on Setting	USB Dongle	Type
			obb bongic	Type
Device Name			oob bongio	Туре
Device Name Encryption :			obb bollgio	- Type
	: [
Encryption :	: [
Encryption : Connection M	: [
Encryption : Connection M SSP Mode :	: [(Mode: [[

- 3) Click the "Get" button and check the printer settings.
- 4) After changing each set value, click the "Set" button.
- 5) After clicking the "Default Setting" button, click the "Set" button to set to default.

5-1-2 Basic Setting

1) By clicking the "Basic" tab, check the settings of label parameters, speed, print density, and media.

	anced	Real-Time Clock	Language	Others
Label Parameters				Lock
Label Width (dots):		0		
Label Height (dots):		0		
Orientation:			-	
Speed and Darkness				Lock
Speed (inch/s):			-	
Darkness:			-	
Media				Lock
Print Mode:			-	
Media Type:			-	
Tear off adjust (dot	s): 📃	0		
Print Offset (dots):		0		
Get From Print	ter	Set	to Printer	
UNIT:		-		

- 2) Click the "Get" button to check the printer settings.
- 3) Label Width, Label Height, Tear off adjust, Print Offset units can be changed in dots, inch, mm by changing "UNIT".
- 4) Change the values as desired.
- 5) Select the Lock Checkbox to lock the setting.
- 6) After changing each value, click the "Set to Printer" button to apply it to the printer.

5-1-3 Advanced Settings

1) By clicking the "Advanced" tab, check the current settings of the media processing method.

User Setting Manager
Interface Basic Advanced Real-Time Clock Language Others
Advanced settings
Media Handling 🗌 Tear Off 👻
Media feed options 🗌 No feed 👻
Backfeed 🗸 Default settings 👻
Mirror Image
Get From Printer Set to Printer
Close

- 2) Click the "Get" button to check the printer settings.
- 3) Change the values as desired.
- 4) After changing each value, click the "Set to Printer" button to apply it to the printer.

5-1-4 Real-time Clock

1) By clicking the "Real-time Clock" tab, check the current settings of the real-time clock.

User Setting Manager	×
Interface Basic Advanced Real-Time Cloc	k Language Others
Real Time Clock	
Set Real Time Clock	
Set Real Time Clock To Computers	s Clock
Set Real Time Clock To:	
2014-10-06 💷 오크	≅ 2:08:36
Set	to Printer
	Close

2) Click the "Set to Printer" button to apply the specified time to the printer.

5-1-5 Language

1) Click the "Language" tab to display the values of the default codepage and the default international character set.

Jser Setting Manager				×
Interface Basic			Language	Others
-Default CodePa		tting		
Default CodeP	age :		Lock :	
				-
Default Intern	ational Chara	cter Set(ICS) :		
				_
		Get	Set	
		()		
L				ose

- 2) Click the "Get" button to check the printer settings.
- 3) After changing each value, click the "Set" button to apply it to the printer.

5-1-6 Others

1) Click the "Other" tab to display the printer information, information initialization button, and USB serial number setting screen.

User Setting Manager
Interface Basic Advanced Real-Time Clock Language Others
Printer Information
Model Name :
Firmware Version :
Motor Feeding History :
Permanent Motor History :
TPH Energizing History :
Permanent TPH History :
Auto-Cutter History :
Permanent Cutter History :
Get
Initialize Statistics Init Motor Stat Init TPH Stat Init Cutter Stat
USB Serial Number SET
Close

- 2) Click the "Get" button of the "Printer Information" to display the printer settings.
- 3) Click the "Init Motor Stat," "Init TPH Stat," "Init Cutter Stat" buttons to initialize each value.
- 4) After entering 16 characters in USB serial number, click the "Set" button.

5-1-7 Power

- 1) The "Power" Tap is for mobile label printer only.
- 2) Click the "Power" tab to display the Power Off, Power Off Time, Power Save, Save Time setting screen.

Interface Basic Advanced Lang	juage Others Power
Power settings	
Power Off	
Power Off Time(1~90min)	0
Power Save	
Power Save Time(10~255sec)	0
Get From Printer	Set to Printer
Get From Printer	Set to Printer
Get From Printer	Set to Printer
Get From Printer	Set to Printer

- 3) Click the "Get From Printer" button to check the printer settings.
- 4) After changing each value, click the "Set to Printer" button to apply it to the printer.

5-2 Configure Print Quality

• This is used for printing sample labels by the print quality to check and set print quality.

Configure Print Quality	x
Automatic or Manual Setting Print sample labels and choose pri Manually select Speed and Darkne 	
Select number of labels Number of labels to print :	Select Speed and Darkness Speed : 2.0 - inch/s Darkness : 8 -
Print Sam Label Identifier Speed : Darkness :	ple label(s) Save settings to File Set to Printer
	Close

- Printing of sample label and selecting of speed and print density
- 1) Select the desired number from "Select number of labels."
- 2) Click the "Print Sample label(s)" button, and sample labels will be printed at random speed and print density (darkness).
- After checking the printing result, select the desired setting from "Label Identifier" and click the "Set to Printer" button to apply it to the printer.
- Selecting of manual speed and print density
- 1) Select the desired speed and print density (darkness).
- 2) Click the "Print Sample label(s)" button to check the print of the selected setting.
- 3) "Click the "Set to Printer" button to apply the settings to the printer.

5-3 Manual Calibration

• The manual calibration function of gap sensor is used when the printer cannot sense the gap (or black mark) of the label paper even after using the automatic calibration function.

Click the "Calibration Setting Manager" button.

Sensing Value	Distribution	STEP 1 : Start
0 32 :	0000	Sensing Type :
64 :	0000	
0 96 :	0000	🖲 G 🔊 🔘 B
0 128 :	0000	
0 160 :	0000	Label Length : (mm)
0 192 :	0000	150
0 224 :	0000	
0 256 :	0000	
0 288 :	0000	Check Sensing Value
0 320 :	0000	
0 352 :	0000	
0 384 :	0000	
0 416 :	0000	STEP 2 : Save
0 448 :	0000	
0 480 :	0000	Middle Gap Value :
512 :	0000	
544 :	0000	0
576 :	0000	
640 :	0000	Gap Count :
672 :	0000	7 -
072:	0000	
0 736 :	0000	
0 768 :	0000	Save Calibration
0 800 :	0000	L
0 832 :	0000	
0 864 :	0000	
896 :	0000	
0 928 :	0000	Cancel
© 960 :	0000	Cancer
© 900 :	0000	
0 992 .	0000	Cancel Calibration

- 1) After selecting Sensing Type and entering Label Length(mm), click the "Check Sensing Value" button.
- 2) Select the desired value among the values on the left and click the "Save Calibration" button.
- 3) If sensing is not performed normally, select another value and click again the "Save Calibration" button.
- 4) Click the "Cancel Calibration" button to reset to the default value.

5-4 PCX File Downloader

• Manage the images stored in flash memory.

PCX File Downloader
Image Store (IS)
Image Name :
Image File Information
File Name: None
File Size: 0 Byte
DownLoad
Image Delete (ID)
Image Name :
Delete Image Delete All Images
Image Information (II)
Image Information
Image Recall (IR)
Image Name :
X Position : 0 Y Position : 0
Image Recall CLOSE

5-4-1 Image Store (IS command)

- 1) Select the image file (*.pcx, *.bmp, *.jpg).
- 2) Enter "Image Name" and click the "DownLoad" button to start the download. The entered Image Name is used to retrieve (IR) or delete (ID) the image.

5-4-2 Image Information (II command)

Prints the information of the image stored in the printer.

5-4-3 Image Delete (ID command)

- 1) Deletion of a specific image Enter the image name to be deleted and click the "Delete Image" button.
- Deletion of all images Click the "Delete All Images" button.

5-4-4 Image Recall (IR command)

In order to output the stored image, enter the image name and click the "Image Recall" button.

5-5 File Transfer

• It transfers the file to the printer.

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Caution Th
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The contents of the file should consist of commands supported by the printer.

1) Select the "Select File" button to choose the file.

File Transfer		×
		Select File
File Informat	ion	
File Name:	None	
File Size:	0 Byte	
		DownLoad Close

2) Click the "Download" button.

5-6 Printer Tools

• It checks the printer information, or performs the specified function.

Printer Tools	×
Print	Action
Configuration	Calibrate media
Object list	Factory reset
	Enter diagnostics mode
	Exit diagnostics mode
	Close

- 1) Print
 - Configuration: Prints the printer settings.
 - Object list: Prints the object information (barcode, image, font, etc.) registered in the printer.
- 2) Action
 - Calibration media : Adjusts the sensor value by the label size and type.
 - Factory reset : Sets the printer to factory default.
 - Enter diagnostics mode: Runs in Diagnostics Mode (all data received by the printer is printed in ASCII characters and Hexadecimal).
 - Exit diagnostics mode: Switches to normal mode from diagnostics mode.

5-7 Communication Window

- This tests the commands for printing and checks the response data of the printer.
- 1) Click the "Communication Tool" button.

Communication Window		×
Send command data		
	*	File Open
		Save to File
		Clear Data
		Copy (Ctrl+C)
		Cut (Ctrl+X)
		Paste (Ctrl+V)
		Replace (Ctrl+H)
	-	Send
Data received from the printer		1
	*	Read
		Clear
		Data Type
		ASCII
	Ŧ	Close

- 2) Command transmission: 2 ways of command transmission.
 - Manual input: Manually input the command in the Send Command Data window.
 - File selection: Click the File Open button to choose the file.
- 3) "Send" button: Transmits the input command.
- 4) "Read" button: Displays response data.
- 5) "Clear" button: Clears the displayed response data.

5-8 SLCS Test Tool

- This tests the SLCS command and creates a simple label.
- 1) Click the "SLCS Tester" button.

BPL(SLCS) Command Tester				×
BPL(SLCS) Command				
			× (Сору
			[Cut
			[Paste
			(Clean
				1
			ſ	
			*	Multi Send
Data received from the printer				
			^ I	Read
				Clear
			CI	Data Type
			Ŧ	○ HEX
Printing Setting	Printing Module			
Speed & Density & Direction	Line & Box	1D Barcode	2D Barcode	Copies
Margin & Width & Length	Bitmap Text	Vector Text	Character Set	:
Printer Status	2Byte Code F	file		
Check Printer Status	Print Codes	Load	Save	Convert
RFID Write and Read				
Write Read	Password	ecurity	Kill	Close

- 2) "Multi Send" button: Transmits the input command for a specified number of times.
- 3) "Read" button: Displays response data.
- 4) "Clear" button: Clears the displayed response data.

5) The function of each button is as follows.

Item	Button	Description
	Line & Box	Generating commands to draw lines and boxes
	1D barcode	Generating one-dimensional barcode command
	2D barcode	Generating two-dimensional barcode command
Printing Module	Copies	Number of copies
	Bitmap Text	Generating bitmap image string recognition command
	Vector Text	Generating vector image string recognition command
	Character Set	Generating code page and ICS configuration command
Printing Setting	Speed & Density & Direction	Generating configuration command for speed, print density, and print direction
	Margin & Width & Length	Generating configuration command for margin and print paper width and length
Printer Status	Check Printer Status	Function to check printer cover, paper, and error status
	Write	Writing data to RFID tags
	Read	Retrieving data from RFID tag
RFID Write and Read	Password	Setting a password on RFID tag
Rodu	Security	Setting the security code on the RFID tag
	Kill	Disabling RFID Tags
2Byte Code	Print Codes	Printing double-byte characters (Korean, Chinese, Japanese)
File	Load	Loading the file in which the command was saved
	Save	Saving the generated command as a file
Convert	Convert	Converter of each unit (inch, mm, cm)
Close	Close	Closing SCLC test program

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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".

Revision history

Rev.	Date	Page	Description
1.00	20.09.19	-	New
1.01	16.04.20	-	Added PV4