

# TVSE OPOS DRIVER Setup Guide

### **Revision Record**

Date	Revision	Description
31-08-2010	Rev 1.0	Based on Rev 1.09

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### **1.** Operating Environment

#### **Operating System**

This driver supports the following Windows operating systems

- · Windows 2000
- · Windows XP

#### **Object Models**

Object models of this product and the corresponding interface are as shown below.

For details of each model, refer to the Printer User's Guide.

Object Model Interface		Printer Functions
RP-4150	AP / AU	Standard (Paper with blackmark on front side is supported.)
RP-3200	AP / AU	Standard
RP-3300	AP / AU	Standard
RP-35	AP / AU	Standard (Without cutting feature)

#### **USB Interface Connection**

Installation of printer driver is required when using this product with USB connection. In addition, the kind of driver for installation differs by the USB mode setting of printer.

1) In the case when USB Mode is Printer Class

Perform the installation of Windows Driver. Designate USB Interface Port (Virtual Printer Port for USB) which is designated by the Windows Driver at OPOS Driver side.

2) In the case when USB Mode is Virtual COM

Perform installation of Virtual COM Driver. Designate serial interface port designated on the Virtual COM driver at OPOS Driver side.

#### **Parallel Interface Connection**

If the terminal and the printer are connected together through parallel interface, the installation wizard requesting you to install printer driver each time you start the terminal may start. To prevent this installation wizard from starting install Windows driver.

#### **Installing Windows Driver**

For the method of Windows driver installation, refer to "Windows Driver Guide" supplied with Windows driver.

Windows driver includes two types: a driver with status function (language monitor) that allows checking of printer status and a driver without status function.

When using this driver, be sure to install the Windows driver without status function.

\* Use of this driver together with Windows driver having status function is not permitted.

#### **Installation of USB Virtual COM Driver**

Install virtual COM driver corresponding to each model. Please refer to [Virtual COM Driver Installation Guide] attached to virtual COM driver for the installation method of virtual COM driver. In addition, corresponding status of USB virtual COM mode for each model is shown on the table below;

Model Name	Corresponding Status for Virtual COM Mode	Port Name (Port Number)
RP-3200	Supported	Ctvrcom Virtual Communication Port (COM8)
RP-3300	Supported	
RP-4150	Supported	Ctvrcom Virtual Communication Port (COM8)
RP-35	Not supported	-

### 2. Installation

The installation procedure for this product is described below. Before installation, shut down all applications in operation.

1) Click TVSE\_OPOS1.8.4.5 (installer). After starting, follow the installation procedure in accordance with the dialog.

File Edit View Favorites Tools	Help
🚱 Back 🝷 🕥 🕤 🏂 🔎 Se	earch 😥 Folders
Address 🛅 E:\TVSE Driver\Driver\OPOS	(Driver
File and Folder Tasks 🛛 📎	TVSE_OPO51.8.4.5 7z Setup SFX Citizen Systems Japan Co., Ltd.
Other Places 🛛 😵	
Details 😵	
Details 🛛 🛞	

2) Setup wizard starts. Click [Next].

记 TVS Electronics OPOS Driver	
Welcome to the TVS Electronics OPOS Driver Setup Wizard	
The installer will guide you through the steps required to install TVS Electronics OPO computer.	S Driver on your
WARNING: This computer program is protected by copyright law and international tr Unauthorized duplication or distribution of this program, or any portion of it, may resul or criminal penalties, and will be prosecuted to the maximum extent possible under th	t in severe civil
Cancel < Back	Next >

3) "License Agreement" window is displayed.

If you agree with the product license agreement, select "I Agree" and click [Next]. If you do not agree with the product license agreement, select "I Do not Agree" and click [Next] to exit the wizard.

🙀 TVS Electronics OPOS D	river		×
License Agreement	1		2.0
Please take a moment to read th Agree", then "Next". Otherwise (		you accept the terms below, click "I	
Electronics Limited. ("TV: Driver). Your use of the SO and Conditions of this UL/ You only may use the SOI	S-E") and governs your use OFTWARE is deemed to be A set out below. TTWARE if you agree to ab	eement between you and TVS e of SOFTWARE (Printer e your acceptance of the Terms wide by the following Terms and prized to use the SOFTWARE.	
Terms and Conditions			~
🔘 I Do Not Agree	💽 l Agree		
	Cancel	Kext Next >	

4) "Select Installation Folder" window is displayed.

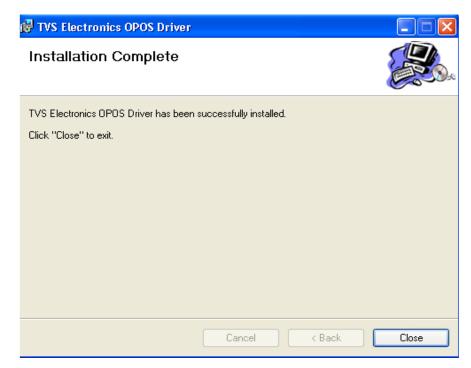
Specify the folder to install. If you use a default folder, click [Next]. If you want to change the folder, change the folder you want to install.

👹 TVS Electronics OPOS Driver	
Select Installation Folder	
The installer will install TVS Electronics OPOS Driver to the following folder.	
To install in this folder, click "Next". To install to a different folder, enter it belo	ow or click "Browse".
<u>F</u> older:	
C:\Program Files\TVS Electronics\	Browse
ĺ	Disk Cost
Install TVS Electronics OPOS Driver for yourself, or for anyone who uses th	nis computer:
O Everyone	
⊙ Just me	
Cancel < Back	Next >

- 5) The installation progress status window is displayed.
  - (It may take longer time to install depending on the environment or specifications of the terminal.)

🙀 TVS Electronics OPOS Driver	
Installing TVS Electronics OPOS Drive	r 🦉
TVS Electronics OPOS Driver is being installed.	
Please wait	
Cancel	< Back Next >

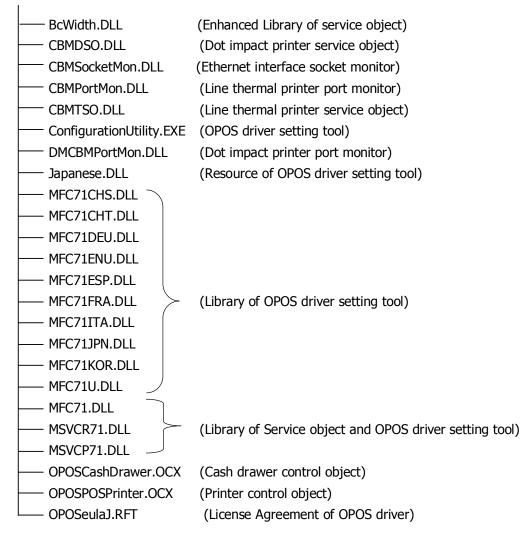
6) When the installation is successful, "Installation Completed" window is displayed. Click [Close].



### 3. Configuration of Installation Files

The following provides the description on the installation files of this product.

"Install Folder" TVS-E Service Objects



### 4. OPOS Driver Setting Tool

This section provides the description of the method of using Configuration Utility. When this driver is installed, a shortcut icon is registered in the Windows Start Menu.

"Start"  $\rightarrow$  "All Programs"  $\rightarrow$  "TVS Electronics"  $\rightarrow$  "Configuration Utility"

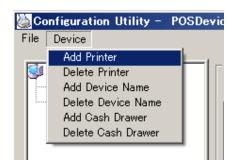
#### Main Screen

🚵 Configuration Utility - POSPrin	ter		X
File Device HELP			
POSDevices POSPrinter CashDrawer	Interface Setting Port Serial Port Setting BaudRate Parity HandShake	Printer Setting Paper Width Columns International Char Code Page	<ul> <li>▼</li> <li>▼</li> <li>▼</li> </ul>
•	Time Adjustment         Status Back Interval         Write Timeout         Bitmap Setting         Map Image with Bimp File Resolution         SetBitmap Mode         NV Bit Image         Raster Bit Image	CashDrawer Setting Signal Length Drawer Status Pin3 Connected Pin3 Status of Drawer O High Low	(× 100) msec
Sett	ing view: Indicates the setting of each de	vice (Direct change of s	setting is available).

Device view: Tree of physical devices and logical devices is indicated.

### 4.1 Adding New Printer and Cash Drawer

1) Click "Add Printer" from the Device menu.



 "Add Printer" wizard starts. Select the model to add and click [Next]. (Here specify RP-3200.)

Add New Printer Wizard	
Add new printer	
Please choose the printer model:	
RP 3200 💌	
	< Back Next > Cancel

For the function of each printer, refer to the section in "1 Operating Environment".

 "Choose the printer type" window is displayed. Specify the size of paper width used and the maximum number of columns per line referring to the following table. This setting is interlocked with the default value of the "RecLineChars/RecLineCharsList" property. For details, refer to Application Development Guide of this product.

Add New Printer Wizard	×
Please choose the printer type	
Please choose the paper width:	
48	
	< Back Next > Cancel

#### RP-3200 / RP-3300

Paper Size (mm)		Font A (12*24dot)	Font B (9*24dot)	Font C (8*16dot)	Max. print columns									
				30	40	45	30							
	60	58	36	48	54	36								
		60		35	46	52	35							
83	80											36	48	54
				42	56	64	42							
				48	64	72	48							
				53	71	80	53							

#### RP-4150

F	Paper Size (mm)		Font A (12*24dot)	Font B (9*24dot)	Font C (8*16dot)	Max. print columns
		80	42	56	64	42
	82.5	80	48	64	72	48
112			55	73	82	55
			60	80	90	60
			69	92	104	69

RP-35

F	Paper S (mm)		Font A (9*9dot)	Font B (7*9dot)	Max. print columns
		F7 F	25	30	25
		57.5	27	33	27
	69.5		30	36	30
76.2			32	40	32
			33	40	33
			35	42	35

After setting the above, click [Next].

4) "Details of settings" window is displayed. Settings of each item are as shown below.

Status Back Interval Write Timeout	200 📻 msec	
		SetBitmap Mode
International Char	U.S.A 💌	🔿 NV Bit Image
Bitmap Image Size	Normal	Raster Bit Image
Map Image with Print	er Resolution 🗖	

#### Status Back interval

Set the polling interval for acquiring printer status. Setting range: 100 to 900msec

#### Write Timeout

Set the write timeout for output port. Setting range: 5000 to 1,000,000msec

#### **International Char**

Specify a international character table to use. Set value: U.S.A/France/Germany/U.K./DenmarkI/Sweden/Itary/SpainI/Japan/Norway/Denmark II/ Spain II/Latin America/Korea

#### Code Page

Designate code page (Selection content differs by the model) Setting Value: 437/ 850/ 852/ 857/ 858/ 860/ 863/ 864/ 865/ 866/ 874/ 932/ 998/ 999/ 1252/User

Defined/

#### SetBitmap Mode

Specify the bit image mode of the SetBitmap method. For details of this mode, refer to Application Development Guide of this product.

Set value: NV bit image/Raster bit image

#### Bitmap image size

Specify the rate of print enlargement of the bit image registered in the SetBitmap method and PrintBitmap method. Set value: Normal/Double-Width/Double-Height/Quadruple

#### Map image with Printer Resolution

By setting the set-up to be valid, output the bit image designated by SetBitmap and PrintBitmap according to printer resolution.

After the above setting, click [Next].

5) "Select the port." window is displayed. Select a port to be used and click [Next].

Add New Printer Wizard		×
Please select the port:		
PT1:		
	< <u>B</u> ack <u>N</u> ext > Car	ncel

6) Then the "Add new cash drawer" wizard starts. Specify the number of cash drawers connected to the printer and click [Next].

Add New Cash Drawer Wizard			×
Add new cash drawer			
Please choose number of cash drawers			
C No Cash Drawer C Ione Cash Drawer			
O Two Cash Drawer			
	< <u>B</u> ack	<u>N</u> ext >	Cancel

If "One Cash Drawer" or "Two Cash Drawers" is specified, the "First drawer settings" window is displayed.

Add New Cash Drawer				×
First drawer settings				
Signal Length 🛛 🗧 🗮	(x 100) msec			
Pin3 Connected 🔽				
Pin3 Status of Drawer Opened				
<ul> <li>High</li> </ul>				
C Low				
		< <u>B</u> ack	<u>N</u> ext >	Cancel

#### **Signal Length**

Specify the time width of the pulse signal output to the solenoid of the cash drawer. Setting range: 1 to 10msec

#### **Pin3 Connected**

Check this when the pin 3 (drawer switch input) of the drawer kick connector is connected.

#### **Pin3 Status of Drawer Opened**

Specify the drawer switch input signal level with cash drawer open. Setting value: High/Low

After the above setting, click [Next].

\* When "Two Cash Drawers" is specified, clicking [Next] causes the "Second drawer settings" window is displayed.

Set the second cash drawer as in the same manner as the above and click [Next].

7) "Finish the printer setting" window is displayed.

Click [Finish]. Here, this tool performs registration processing for system registry. \* It takes some time till registration of system registry is completed.

Add New Printer Wizard			×
Finish the printer settings			
	< <u>B</u> ack	[ Finish ]	Cancel

8) When this wizard is finished, the printer and the cash drawer registered in "Device view" and "Setting view" are indicated.

Seconfiguration Utility - RP 32	200_1		
File Device HELP			
POSDevices POSPrinter POSPrinter CashDrawer CashDrawer RP 3200_1.CD1	Interface Setting         Port       LPT1:         Serial Port Setting         BaudRate         Parity         HandShake         Time Adjustment         Status Back Interval         Status Back Interval         Write Timeout         5000         Bitmap Setting         Map Image with Bimp File Resolution         SetBitmap Mode         NV Bit Image         Raster Bit Image	Printer Setting       80         Paper Width       80         Columns       48         International Char       U.S.         Code Page       437         CashDrawer Setting       3         Signal Length       9         Drawer Status       9         Pin3 Status of Drawer Open       1         High       1         Low       1	(x 100) msec

\* Setting of each item can be changed directly from Setting View.

Each time setting of item is changed, the change is reflected to the system registry immediately.

### 4.2 Adding New Cash Drawer

Click "Add Cash Drawer" from the "Device" menu.
 \* Be sure to execute Add Cash Drawer after finishing printer registration.



2) "Add new cash drawer" wizard starts.

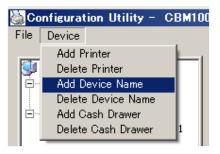
Add New Cash Drawer Wizard					×
Add new cash drawer					
Please choose the devi	ce to connect				
RP	3200_1	~			
Please choose number	of cash drawers				
0	lo Cash Drawer				
<ul> <li>1</li> </ul>	Cash Drawer				
○2	? Cash Drawer				
		< Back	< Next >	Cano	:el

Following this step, refer to the description in "<u>6</u>) Then the "Add new cash drawer" wizard starts" of the section "<u>4.1 Adding New Printer and Cash Drawer</u>" and later, and perform adding drawer procedure in the same manner.

### 4.3 Adding Logical Device

A logical device name can be assigned to the printer and cash drawer registered.

1) Click "Add Device Name" in the "Device" menu.



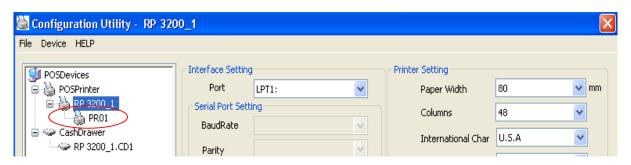
2) "Add Device" window is displayed.

The printer or cash drawer registered is shown in the list of "Select the device". Select the object printer or cash drawer and enter a logical device name in the text box of "Enter the device name".

Add Device	×
Please select the device	
RP 3200_1	
Please enter the device name	
PR01	
Add Cancel	

After the above setting, click [Add]. If [Cancel] is clicked, the above setting is discarded.

3) After completion of the above procedure, the added logical device name is indicated on the Device view.



### 4.4 Deleting Device

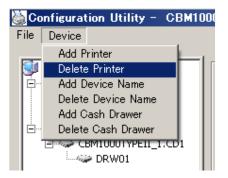
This section describes deletion of physical device (printer) and cash drawer registered.

#### **Deleting Printer**

1) Select the printer you want to delete from the "POSPrinter" list of Device view.

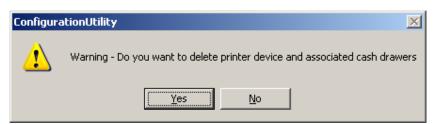
Sconfiguration Utility - RP 320	00_1					×
File Device HELP						
POSDevices	-Interface Setting	J		Printer Setting		
POSPrinter	Port	LPT1:	~	Paper Width	80	🗸 mm
RP 3200_1	Serial Port Sett	ing		Columns	48	~
CashDrawer	BaudRate			International Char	U.S.A	~

2) Click "Delete Printer" in the "Device" menu.



3) Message dialog "Warning – Do you want to delete printer device and assorted cash drawers" is displayed.

Click [Yes (Y)]. If you click [No (N)], deleting the printer is aborted.

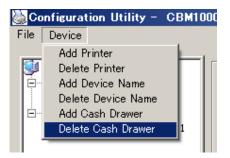


\* When deleting a printer is carried out, all the registered drawer and logical device are deleted.

#### **Deleting Cash Drawer**

<ol> <li>Select a cash drawer you want to delete from the "CashDrawer" list of the Device view.</li> <li>Configuration Utility - RP 3200_1</li> </ol>					×	
File Device HELP						
POSDevices POSPrinter POSPrinter PR01 CashDrawer RP 3200_1.CD1	Interface Setting Port Serial Port Setti BaudRate Parity	LPT1:	<ul> <li>✓</li> <li>✓</li> </ul>	Columns	80 🔹	rm

Click "Delete Cash Drawer" on the "Device" menu. 2)



\* When deleting a drawer is carried out, logical device is also deleted (printer is not deleted).

#### **Deleting Logical Device (Printer)**

1) Select a logical device to delete from the "POSPrinter" of the Device view.

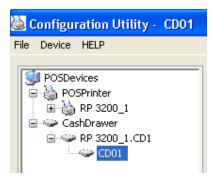


Click "Delete Device Name" on the "Device" menu. 2)



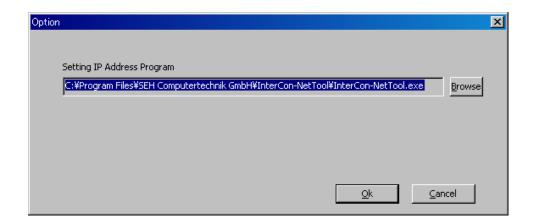
#### **Deleting Logical Device (Cash Drawer)**

1) Select a logical device you want to delete from the "CashDrawer" list of the Device view.



2) Click "Delete Device Name" on the "Device" menu.





#### 4.5 **Help Menu**

<u>Version Information</u>1) Click [Regarding Configuration Utility] from [Help] Menu.

9	Configuration Utility - RP 320	0_1					×
File	e Device HELP						
	About ConfigurationUtilit	y arface Setting			Printer Setting		
	😑 🍓 POSPrinter	Port	LPT1:	~	Paper Width	80	🗙 ww
	E - B 2200_1	Serial Port Setti	ng		Columns	48	~
	GashDrawer	BaudRate		<u> </u>	International Char	U.S.A	~
		HandShake			Code Page	437	~

2) [Regarding OPOS Configuration Utility] dialog box is displayed. Details on version information for OPOS Driver/OPOS Configuration Utility can be viewed.

About ConfigurationUtility	×
TVS Electronics OPOS Configuration Utility Version 1.3	ОК
ConfigurationUtility.exe : 1.3.0.24 BcWidth.dll : 1.8.3.3 CBMDSO.dll : 1.8.3.5 CBMportMon.dll : 1.8.4.1 CBMSocketMon.dll : 1.8.2.4 CBMTSO.dll : 1.8.4.5 dmCBMPortMon.dll : 1.8.0.10 Japanese.dll : 1.3.0.24	

### 5. Uninstall

Uninstall of this product is explained.

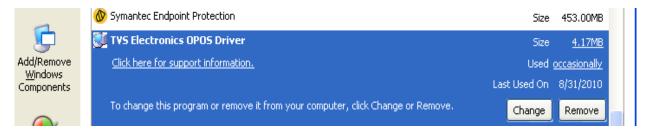
#### **Deleting System Registry**

Physical and logical devices are deleted by Configuration Utility.

- For the method of deleting device, refer to the section "4.4 Deleting Device".
- \* When upgrading this product, retaining the registered device setting is recommended.

#### **Deleting OPOS Driver**

1) From the "Add or Remove Programs" in "Control Panel", select "TVS Electronics OPOS Driver" and click [Remove].



2) A message dialog "Are you sure you want to remove TVS Electronics OPOS Driver from you computer?" is displayed.

Click [Yes (Y)]. If you click [No (N)], deleting this program is cancelled.



3) A dialog indicating the progress of uninstall process is displayed.

Citizen Systems OPOS Driver	
18	
	Cancel
	Lancei

4) When the uninstall procedure is finished normally, "TVS Electronics OPOS Driver" is removed from the "Add or Remove Programs" list.

## 6. Printer Setting

Using this product assumes that the DIP switch and memory switch of the printer are set as shown below. For the details of the method of operating each switch and the content of setting, refer to User's Guide of each model.

### 6.1 RP-3200 / RP-3300 DIP Switch Setting

DSW No.	Function	Setting	Description
8	INIT (when serial interface is used)	OFF	Disabled

### **Memory Switch Setting**

MSW No.	Function	Setting	Description
1-1	Power ON notify setting	OFF	Enabled
1-2	Input buffer	OFF	4KB
1-3	Busy condition	ON	Buffer full
1-4	Receiving error character	OFF	Character?
1-5	CR mode	OFF	Disabled
1-7	Select DSR signal (when serial interface is used)	OFF	DSR
1-8	Select INIT signal (when serial interface is used)	OFF	-
2-2	Auto cutter operation	ON	Enabled
3-1	Auto cutter restore	OFF	L/F enabled
3-3	Parallel 31Pin (when USB and parallel IF are used)	OFF	Reset
3-7	CBM1000-compatible mode	ON	Compatible
3-8	Cover opened while printing	OFF	Auto restore
4-8	Forced partial	OFF	Disabled
5-2	Vertical basic calculation pitch	OFF	360 dots
6-1	Act. For Driver	ON	Valid
7-6	DMA control	Enabled	-
9-1	Code page	Katakana	-
9-2	Foreign language characters	Japan	-
9-3	Kanji	Enabled	-
9-4	JIS/Shift-JIS	Shift-JIS	-
10-3	ACK output timing (when USB and parallel IF are used)	Before BUSY	-

### 6.2 RP-4150

#### **DIP Switch Setting**

DSW No.	Function	Setting	Description
8	INIT (when serial interface is used)	OFF	Disabled

### Memory Switch Setting

MSW No.	Function	Setting	Description
1-1	Power ON notify setting	OFF	Enabled
1-2	Input buffer	OFF	4KB
1-3	Busy condition	ON	Buffer full
1-4	Receiving error character	OFF	Character?
1-5	CR mode	OFF	Disabled
1-7	Select DSR signal (when serial interface is used)	OFF	DSR
1-8	Select INIT signal (when serial interface is used)	OFF	-
2-2	Auto cutter operation	ON	Enabled
3-1	Auto cutter restore	OFF	L/F enabled
3-3	Parallel 31Pin (when USB and parallel IF are used)	OFF	Reset
3-7	CBM1000-compatible mode	ON	Compatible
3-8	Cover opened while printing	OFF	Auto restore
4-8	Forced partial	OFF	Disabled
5-2	Vertical basic calculation pitch	OFF	360 dots
5-5	Power OFF notify	Disabled	-
7-6	DMA control	Enabled	-
9-1	Code page	Katakana	-
9-2	Foreign language characters	Japan	-
9-3	Kanji	Enabled	-
9-4	JIS/Shift-JIS	Shift-JIS	-
10-3	ACK output timing (when USB and parallel IF are used)	Before BUSY	-

### 6.3 RP-35

#### **DIP Switch Setting**

DSW No.	Function	Setting	Description
8	INIT (when serial interface is used)	OFF	Disabled

### Memory Switch Setting

MSW No.	Function	Setting	Description
SoftCtrl-1	Command Type	EPSON	-
SoftCtrl-5	Paper End (when USB and parallel IF are used)	DIS	At paper end Only Busy signal is output.
SoftCtrl-6	Paper Near-End (when USB and parallel IF are used)	DIS	At paper near-end Signal not output
SoftCtrl-8	Print Direct (Specifies print direction)	BI-DIR	Print from right or left end nearer from the print stop position.
SoftCtrl-9	Auto LF	OFF	-
SoftCtrl-11	Buffer Size	4Kbyte	-
SoftCtrl-12	Init Signal	ENB	Initialize signal enabled
Mechanical-2	Auto-Cutter	FREE	-
Mechanical-3	Color Ribbon	ON	Command switching