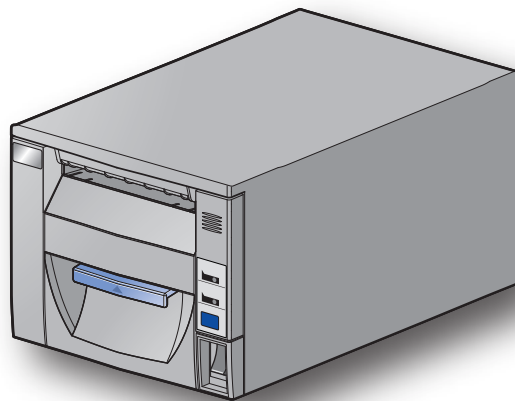


# Software Manual

## for Mac OS X



### ***Supported Models***

- ***FVP10 Series***

*Rev. 3.0*

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## Introduction

This manual describes the setup procedures and the functional outline of the Star CUPS driver which use FVP10 series.

The printer's IP address must be set in advance to use a printer that supports LAN using this driver. If your LAN environment does not allow acquisition of an IP address from a DHCP server, set the IP address to the printer in advance. See 4. Guidelines for Using an Ethernet Environment for details on how to set the IP address for the printer.

## Operating Environment

### Operating System

- ◆ Mac OS X 10.5 <sup>\*1</sup>
- ◆ Mac OS X 10.6
- ◆ Mac OS X 10.7
- ◆ Mac OS X 10.8
- ◆ Mac OS X 10.9 <sup>\*2</sup>
- ◆ Mac OS X 10.10 <sup>\*2</sup>

\* **Limitations for Bluetooth models**

Bluetooth printers are only supported with Mac OS X 10.7 or later.

The maximum page length printable by Bluetooth printers is 1500 mm.

<sup>\*1</sup> **Limitation for Mac OS X 10.5 (USB models)**

The first print job after installing the CUPS Driver will take 10 to 20 seconds to print in the MAC OS X 10.5 environment. This occurs only one time. ( Just the first time )

<sup>\*2</sup> **Limitations for Mac OS X 10.9 or later (USB models)**

If a USB printer is used with Mac OS X 10.9.4 or later, the printer queue is sometimes displayed as Off-line even though the printer can print when powering off the printer or restarting the PC. It can be prevented by allocating a USB serial number.

Please use the "USB serial number allocation script" enclosed in the package to allocate a USB serial number to the printer. Please see the manual attached to the "USB serial number allocation script" for details.

# 1. Installation/Uninstallation Procedures

**Cautions:** The account with administrative privilege for the PC should install/uninstall this driver.

## 1.1 Installing Star Printer Drivers

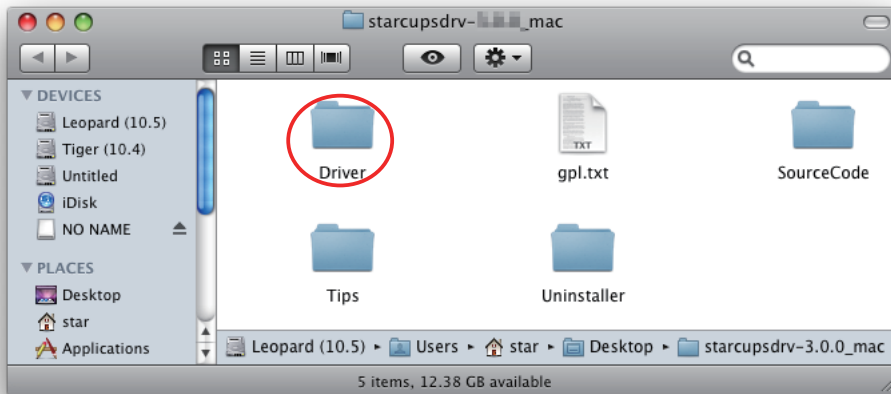
To install the driver, proceed as follows.

**Important:** When using a USB interface, turn on the printer's power after performing "1.1 Installing Star Printer Drivers".

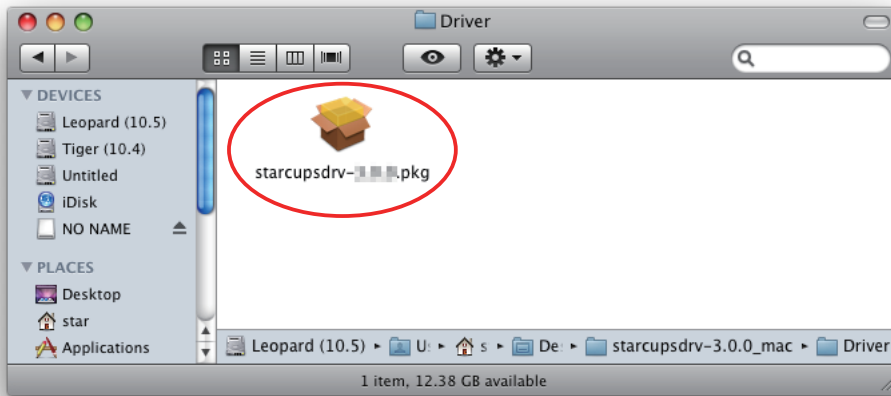
1. Place the "starcupsdrv-x.xx.x\_mac\_yyyymmdd.zip" file on your desktop and expand it by double-clicking on the file.



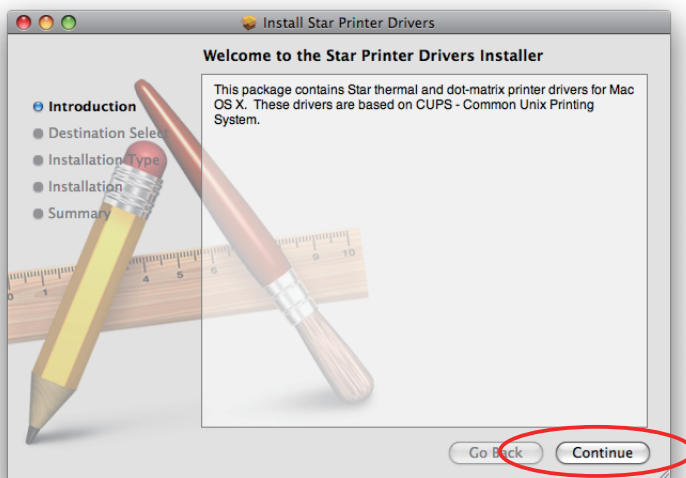
2. The screen below appears by double-clicking the expanded <starcupsdrv-x.xx.x\_mac> file. Click on the "Driver" folder to open it.



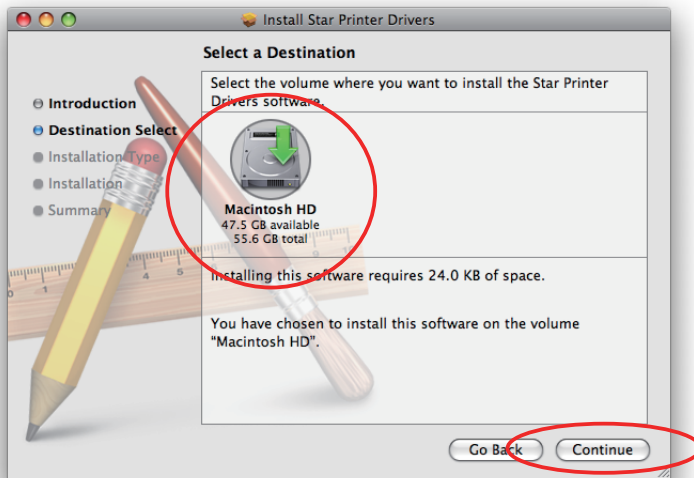
3. The screen below is displayed.  
Double-click <starcupsdrv-x.xx.x.pkg> to begin the installation.



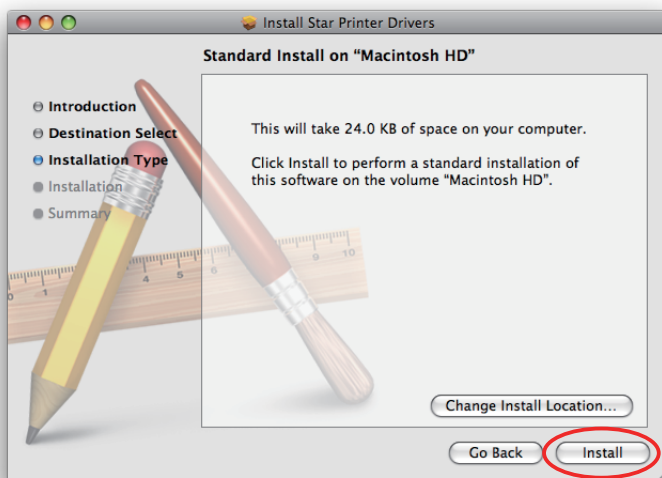
4. The following window is displayed.  
Click [ Continue ].



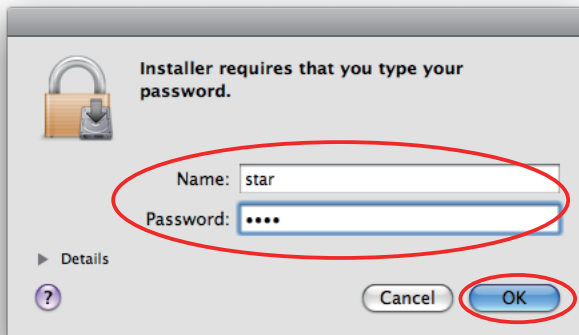
5. Select the harddisk to install with the program, then click [ Continue ].



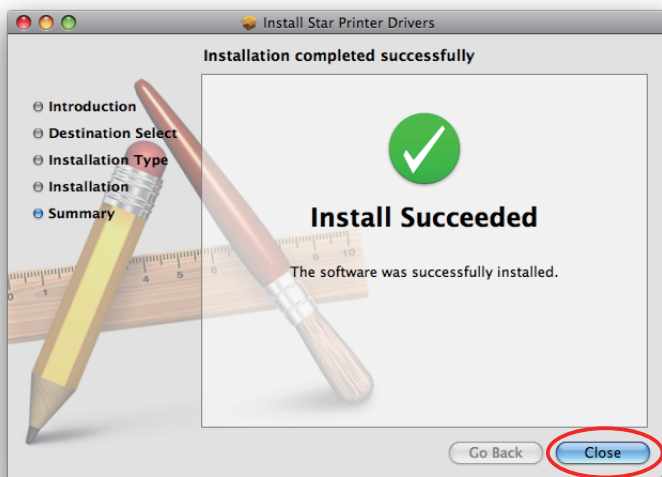
6. Click [ Install ] to start the installation.



7. If the confirmation window shown below is displayed, enter the user name and password having administrator rights, then click [ OK ].



8. The installation ends successfully.  
When the installation has ended successfully, the window shown below is displayed. Click [ Close ].





## 1.2 Registering the Printer

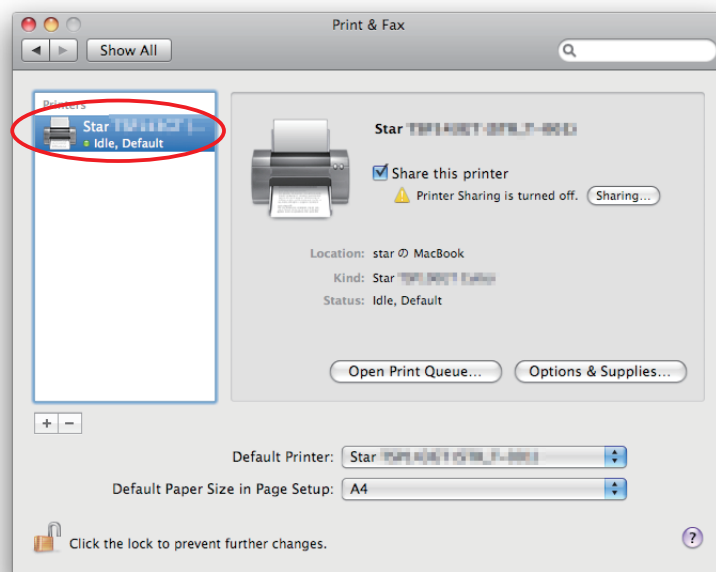
Procedures for registering the printer differ according to the type of interface you use. See the page relating to your environment.

### 1.2.1 When using a USB Interface

1. In the Apple mark in the menu bar, open [System Preferences] and click on the [Print & Fax] icon.



2. Connect the printer, and then turn on the printer's power switch.  
The Plug and Play feature detects the connection of the printer hardware and automatically installs the driver software.
3. If the name of the specified printer is added to the printer list, the printer has been added.

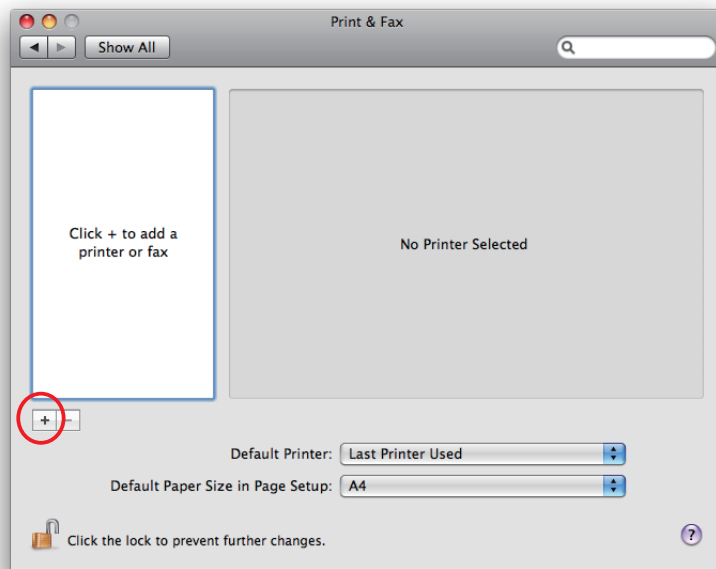


## 1.2.2 When using Ethernet Interface

1. In the Apple mark in the menu bar, open [System Preferences] and click on the [Print & Fax] icon.

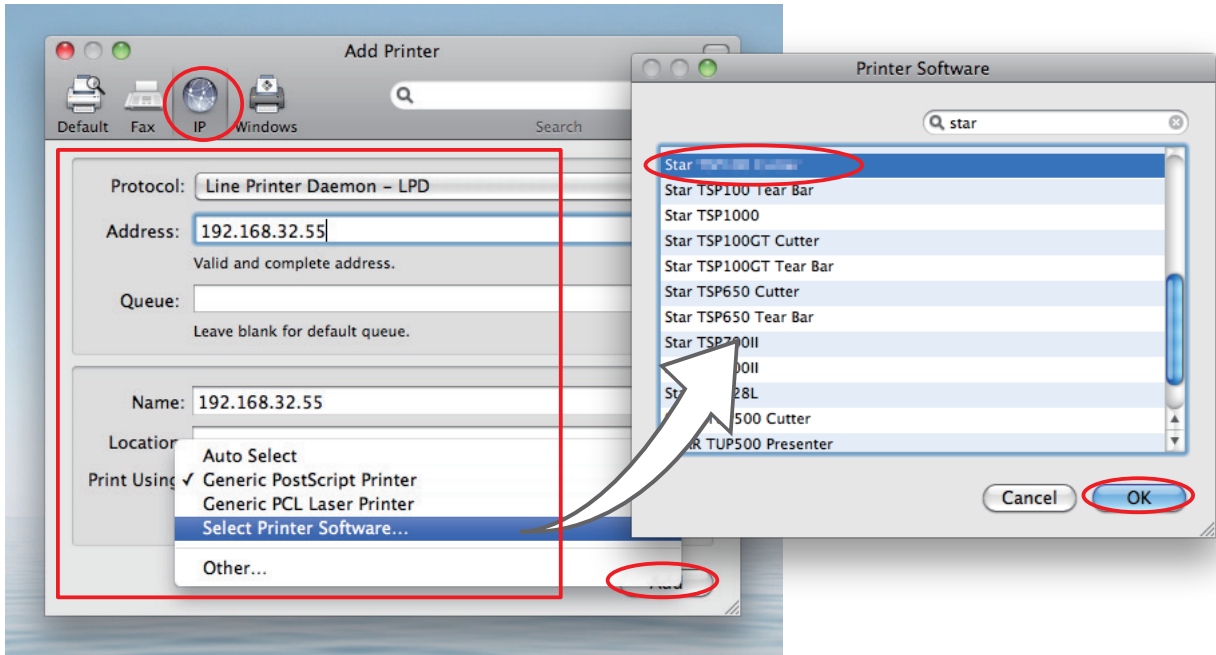


2. The Print & Fax window appears.  
Click on [+].



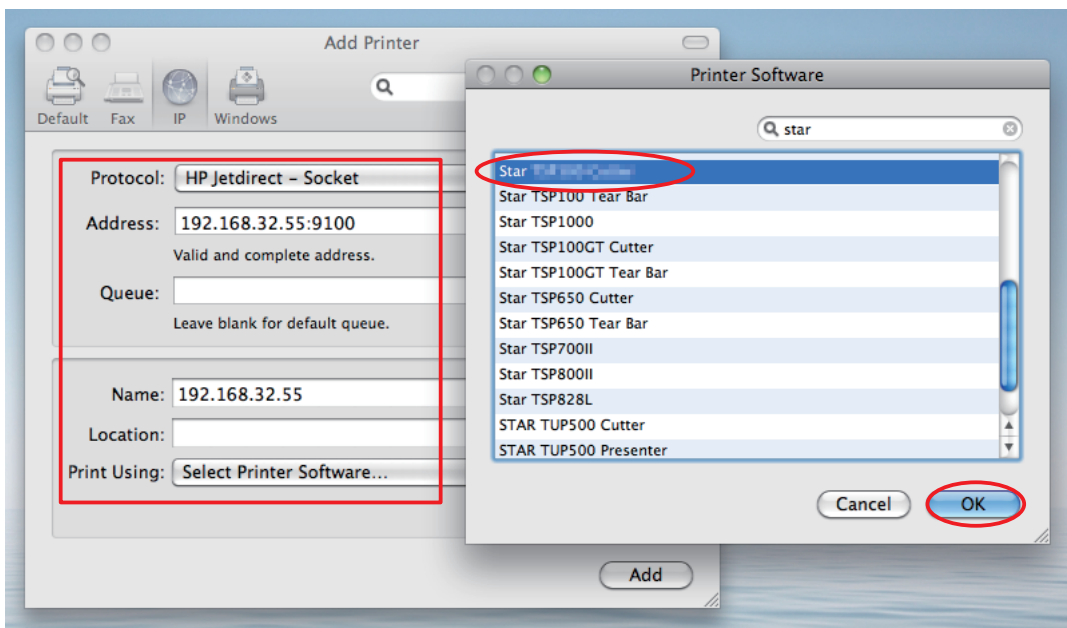
3. From the "IP", make the following settings and click on [Add].

- Protocol: Line Printer Daemon - LPD
- Address: IP address of printer being set (Check in self-print)
- Queue: Any character string (Printer cannot be used if left blank.)
- Name: Any character string (The IP address is automatically input by default.)
- Print Using: "Select the driver to use..." or "Select printer software..."  
 Select the driver to use.

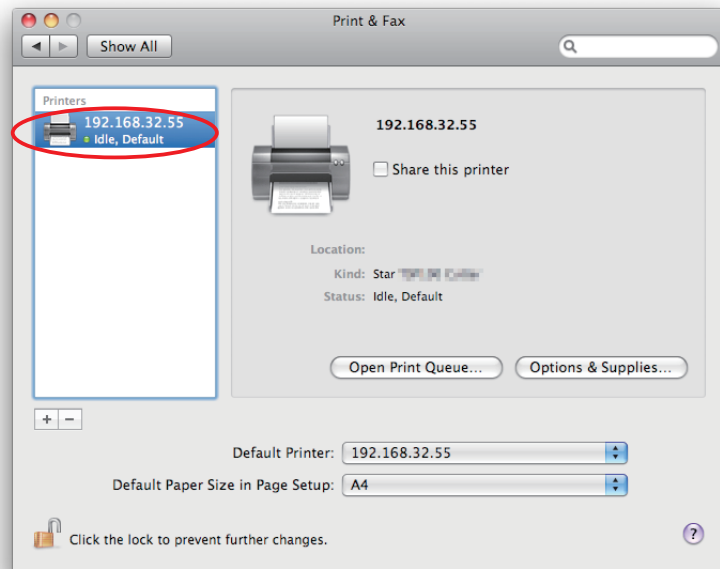


**Point!** When using port 9100, set the following.


- Protocol: HP Jet Direct - Socket
- Address: [ IP address of printer being set ] : 9100
- Print Using: "Select the driver to use..." or "Select printer software..."  
 Select the driver to use.

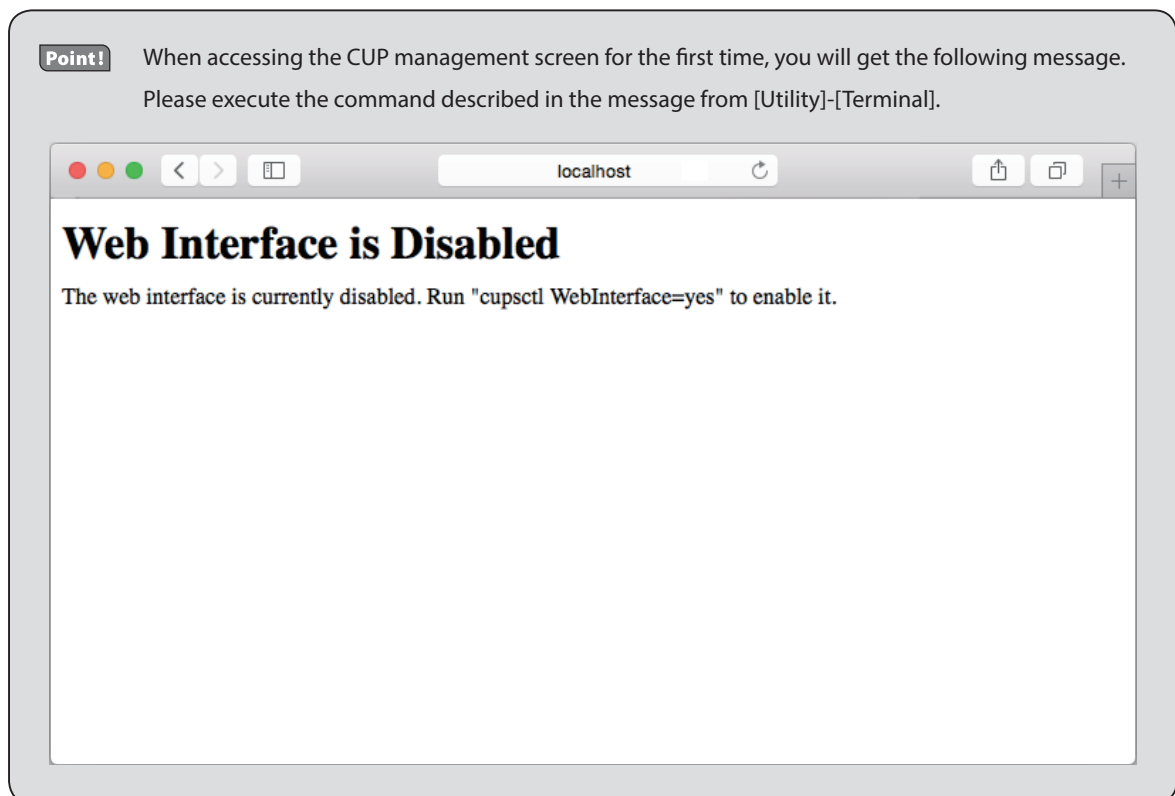


4. If the name of the specified printer is added to the printer list, the printer has been added.



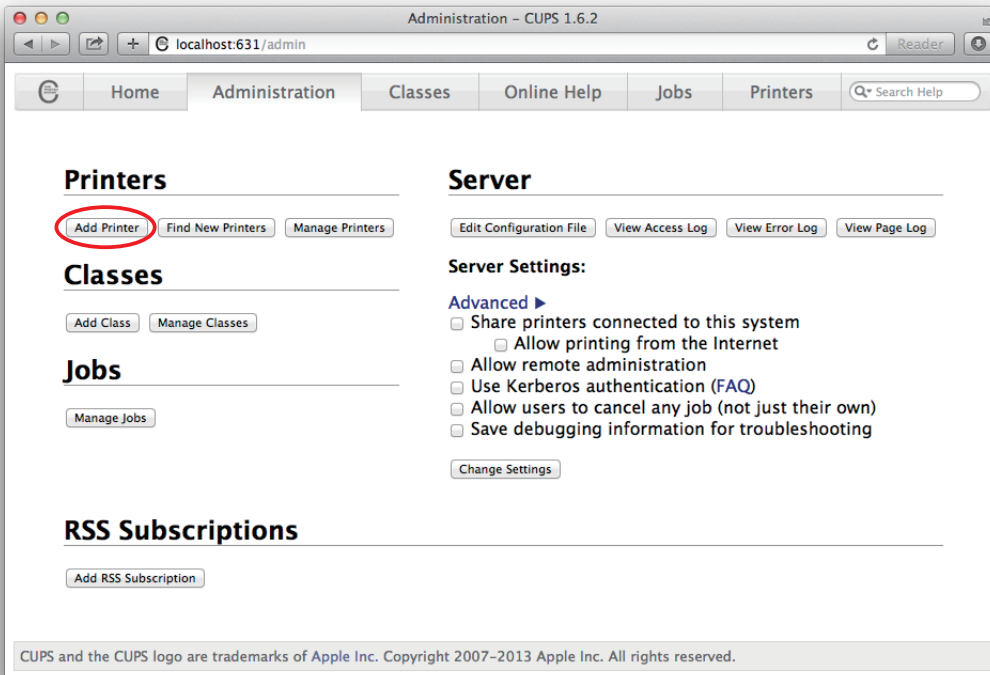
### 1.2.3 With the Bluetooth Interface

1. To pair them with the bluetooth printer, proceed as follows.
  - 1) Turn the printer power ON.
  - 2) Hold down the PAIR button of the bluetooth card for more than 10 seconds to set the pairing mode of the printer.
  - 3) Click Bluetooth icon  , and select "Set up new device". When click "Forward", the system find the printer.
  - 4) Select the printer which is displayed in the Serch panel, and click "Continue". The system start the pairing.  
  
If the pairing is unsuccessful, please try again.
2. Open your favorite web browser and navigate to "http://localhost:631/admin".

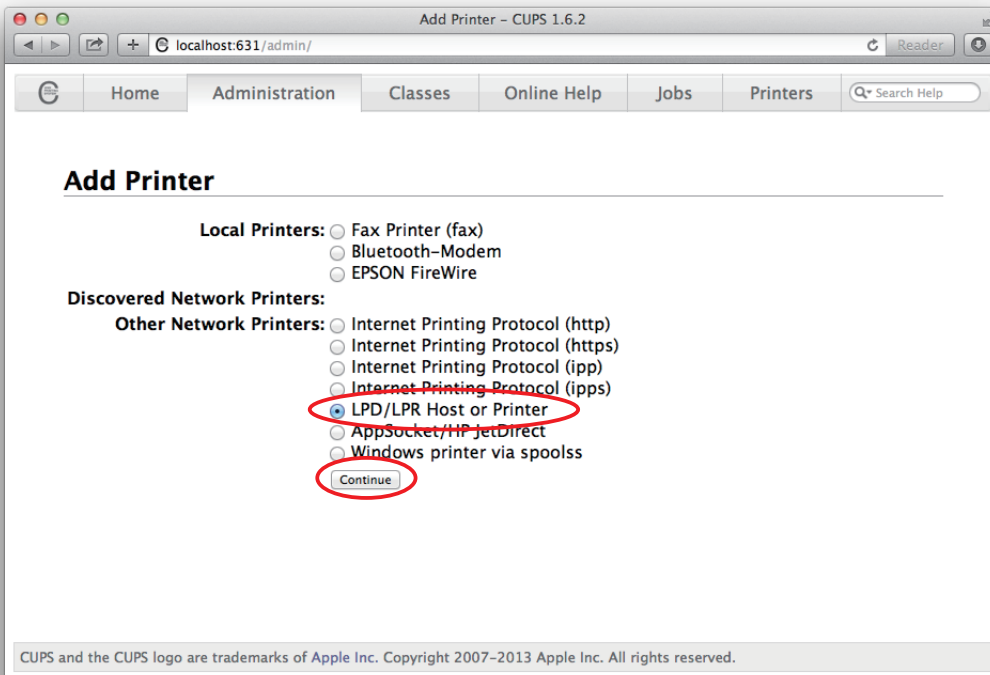


3. Click "Add Printer".

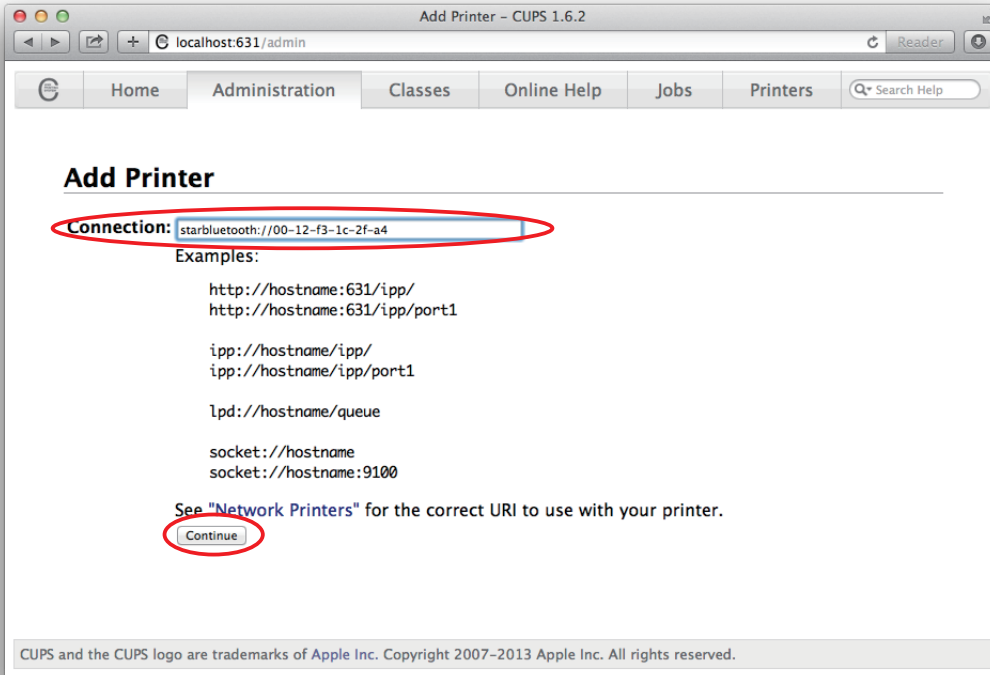
**Note:** When a dialog box is displayed requesting certification, enter the root password and press [Yes].



4. Select the "LPD/LPR Host or Printer". Then click "Continue".

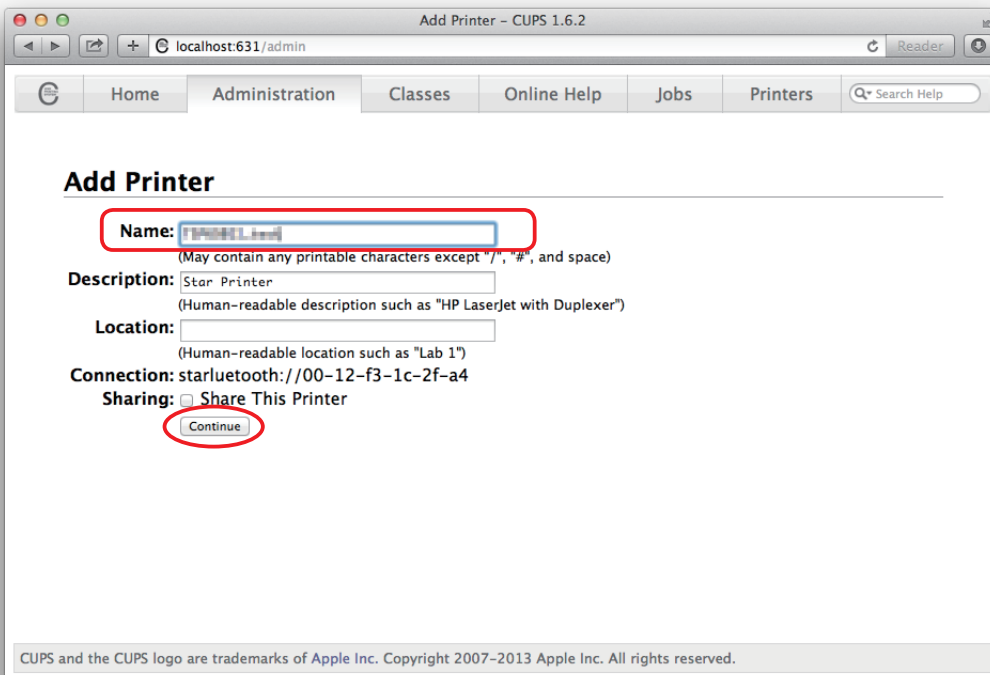


5. Specify the device URI for the printer as shown below and click "Continue".  
**starbluetooth://<<Bluetooth Address>>**  
ex. **starbluetooth://00-12-f3-1c-2f-a4**

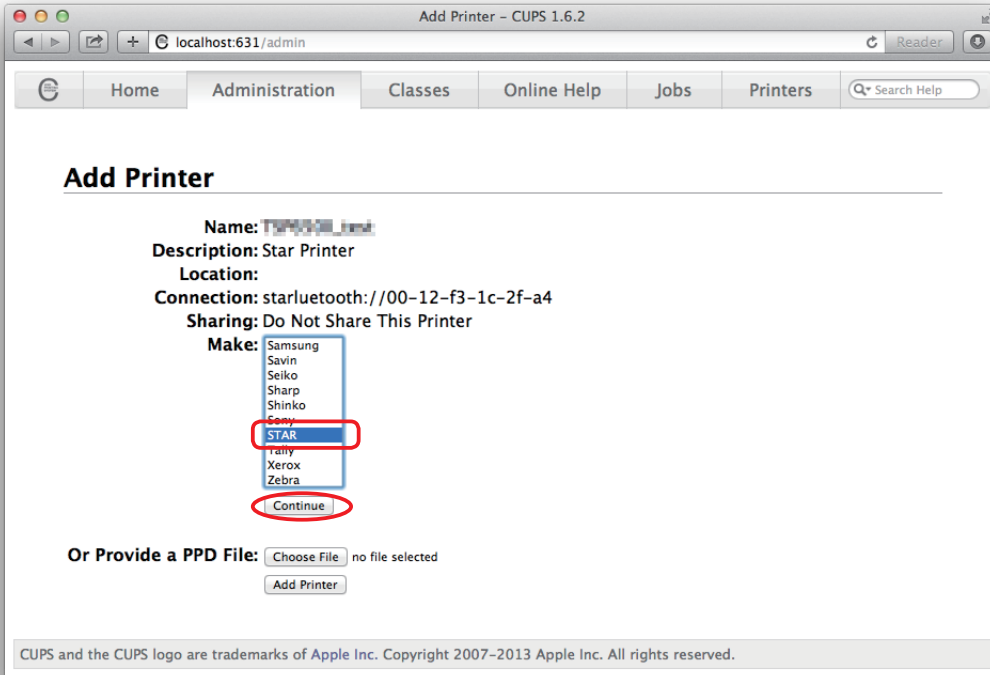


**Point!** The Bluetooth address is included in the Bluetooth information printed by self-print (by powering on while pressing the Feed button).

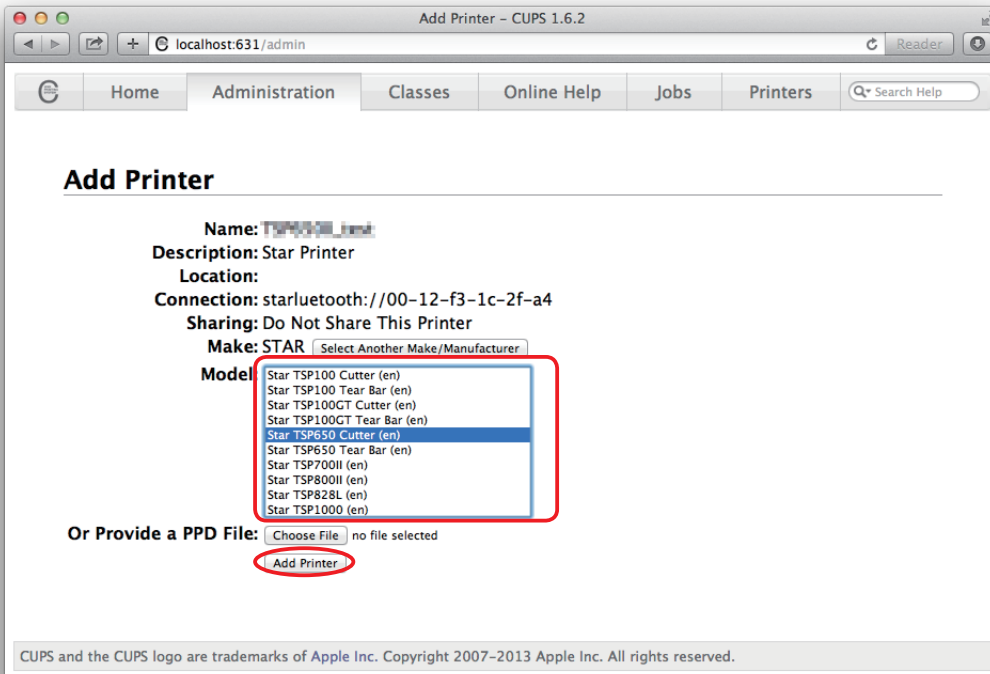
6. In the Add Printer screen, enter the printer name, location and description. Then click "Continue". Location and Description can be left blank.



7. Select "STAR" as the Make. Then click "Continue".

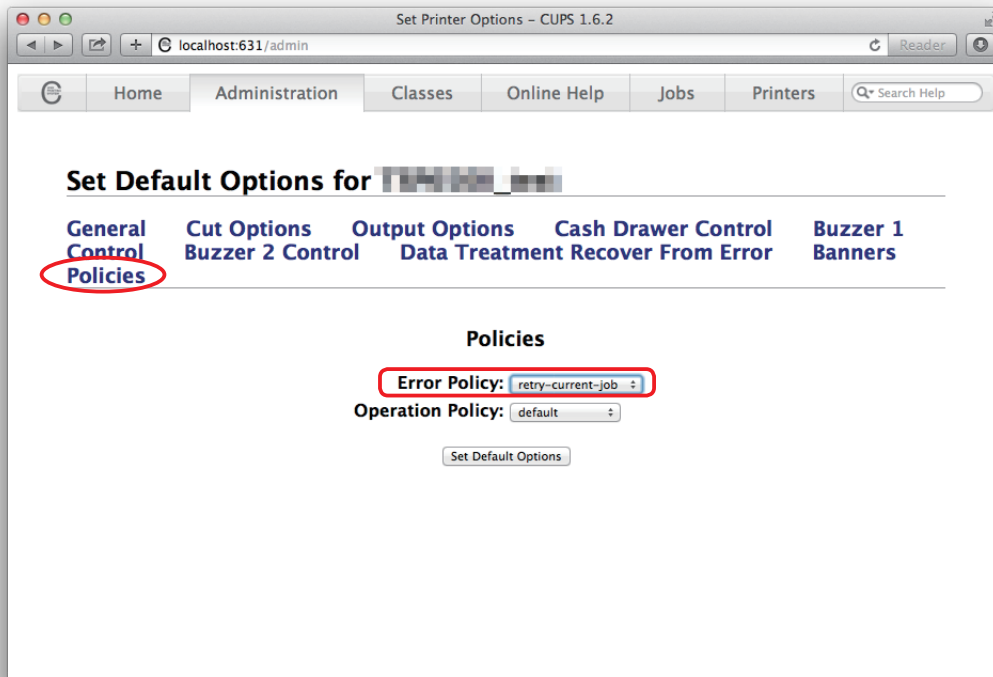


8. Select the printer model. Then click "Add Printer".





9. In the Set Printer Options screen, select "Policies" and set "Error Policy:" to [retry-current-job].



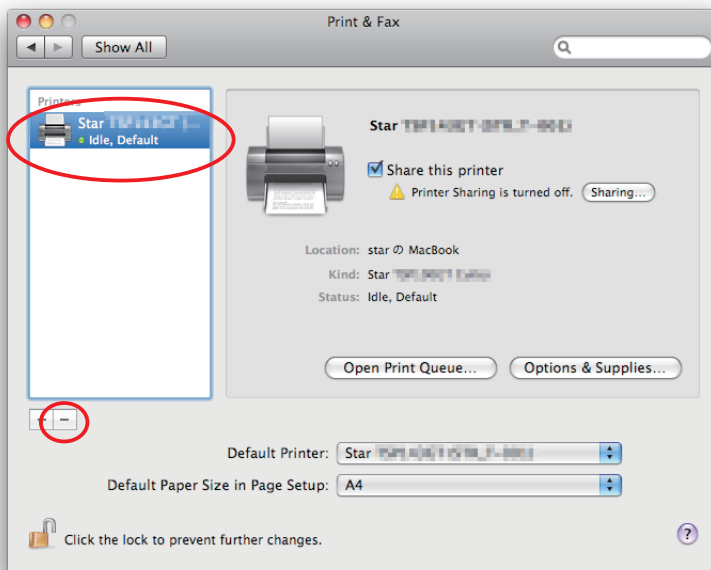
This completes the bluetooth printer installation and registration.



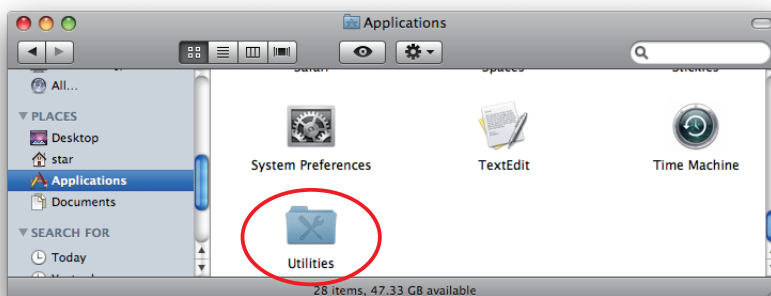
5. In the Apple mark in the menu bar, open [System Preferences] and click on the [Printer & Fax] icon.



6. Delete the entire Star printer queue from the printers list.



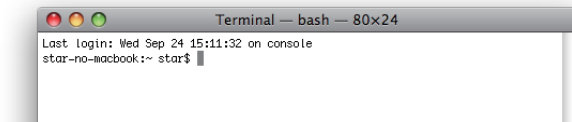
7. Startup the Finder from the Mac OS X Dock and click [Applications] - [Utilities].



8. Click on [Terminal].

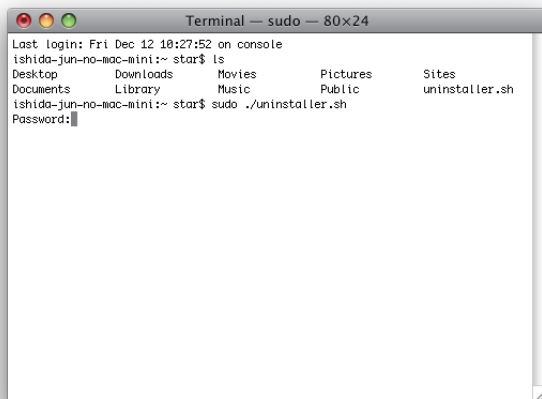


9. The terminal starts up.



10. Uninstall the Star Printer Driver by running the following command on your terminal.  
When starting up, you will be prompted to input your user password.

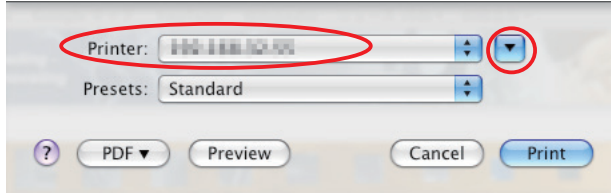
**sudo ./uninstaller.sh**



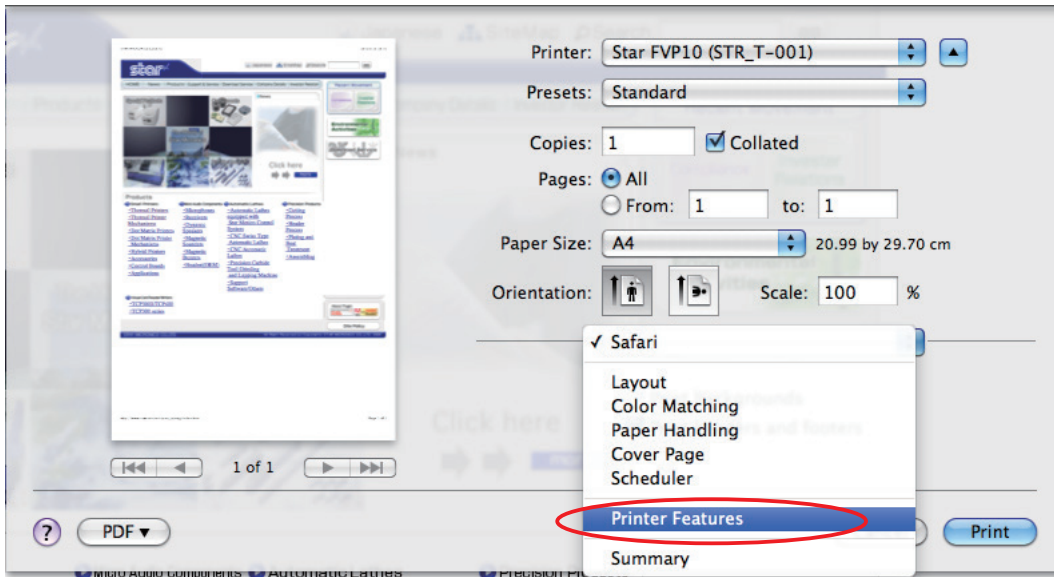
## 2. Setting Printer Functions

Use the dialog box opened by [File] -> [Print] in the Mac OS X menu.

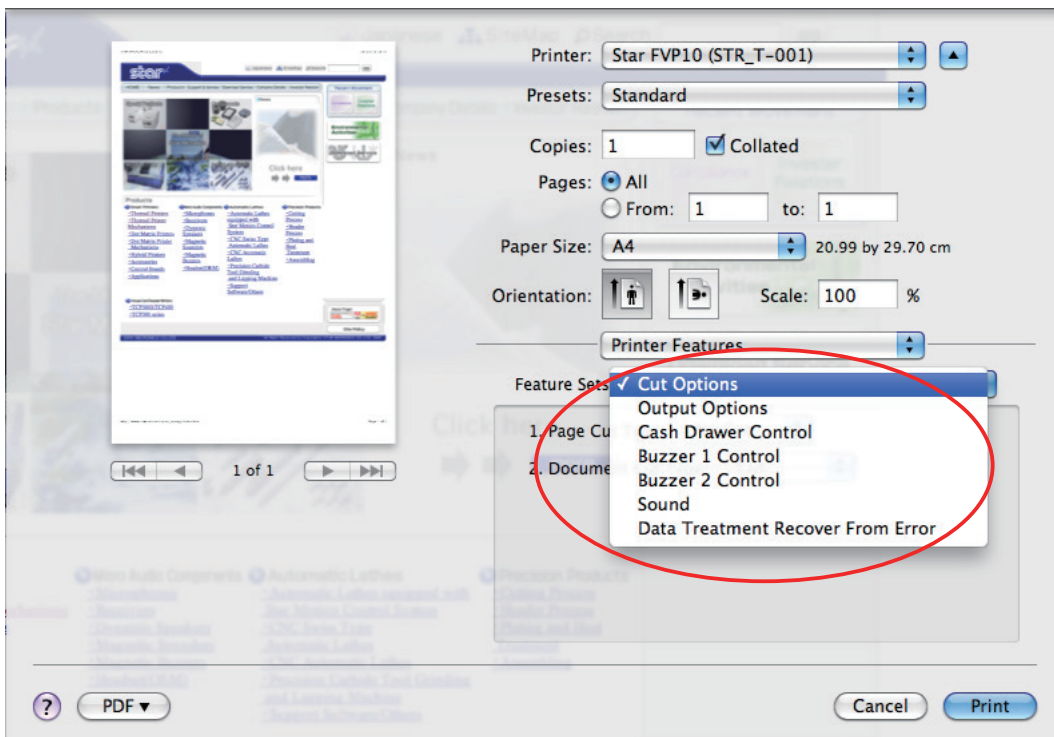
From the "Printer:" pull-down menu, select the printer name to set, then click [▼] to display the details.



Select "Printer Features" from the setting pull-down menu.



"Feature Sets:" Customizes printer operation.



## 2.1 Function List

### ■ Output Options

• **Print Speed:**

Sets the print speed. Note that the setting also affects the print quality.

Setting	Default	Details
High	○	Print speed has priority over quality.
Middle		Print quality and speed are in the middle.
Low		Best quality, but slow print speed.

• **Print Density:**

Sets the printing density.

Setting Value	Default	Details
-3 to -1		Larger value with -(minus) makes print density lighter.
Standard	○	Prints with normal density.
+1 to +3		Larger value with +(plus) makes print density darker.

• **Page Type:**

Sets the page type.

Setting	Default	Details
Variable Length	○	Does not output blank data until the bottom of the page. Receipt ends after final data is printed.
Fixed Length		Outputs blank data as a blank until the bottom of the page. Receipt ends after printing the length specified by paper size.

• **Top Search:**

Selects whether the printer executes a reverse-feed before print.

Setting	Default	Details
Disable	○	No reverse-feed before print.
Enable		Executes reverse-feed before print.

**Note:** 1) This function is available only when the **Cut Options** setting is configured to 'Full Cut'. The function is not available when 'PartialCut' is selected.  
 2) When switching the cutter mode, refer to the Hardware Manual, and configure the DIP switches and cutter settings correctly. Be particularly careful when you are using this function.

## ■ Cut Options

• **Page Cut Type:**

Sets the cutting method for the end of all pages, excluding the last page.

Setting	Default	Details
No Cut	<input type="radio"/>	Does not perform a cut and page feed.
Cut	<input type="radio"/>	Paper is fed to cutting position, then a full cut or partial cut is applied.

• **Document Cut Type:**

Sets the cutting method for the last page.

Setting	Default	Details
No Cut	<input type="radio"/>	Does not perform a cut and page feed.
Cut	<input type="radio"/>	Paper is fed to cutting position, then a full cut or partial cut is applied.

**Note:** When switching the cutter mode, refer to the Hardware Manual, and configure the DIP switches and cutter settings correctly. Be particularly careful when you are using this function.

## ■ Data Treatment Recover From Error

• **Data Treatment Recover From Error:**

When an error occurs, you can handle the unprinted data which has already been sent to the printer as below.

Setting	Default	Details
No Use	<input type="radio"/>	The paper feed operation is not performed.
Clear Data By Document Unit	<input type="radio"/>	After the recovery, the unprinted data of the remainder is canceled after the recovery from the error.

## ■ Cash Drawer Control

### • Cash Drawer:

Sets the operations of the cash drawer.

Setting Value	Default Value	Details
Do Not Open Drawers	○	No cash drawer drive.
Open Drawer 1		Drives cash drawer 1 immediately after printing.
Open Drawer 2		Drives cash drawer 2 immediately after printing.
Open Drawer 1 and 2		Drives cash drawers 1 and 2 immediately after printing.

### • Cash Drawer 1 Pulse Width:

Sets the cash drawer 1 pulse width.

Setting Value	Default Value	Details
10 milliseconds		Sets the pulse width to 0.01 seconds.
100 milliseconds		Sets the pulse width to 0.1 seconds.
200 milliseconds	○	Sets the pulse width to 0.2 seconds.
300 milliseconds		Sets the pulse width to 0.3 seconds.
400 milliseconds		Sets the pulse width to 0.4 seconds.
500 milliseconds		Sets the pulse width to 0.5 seconds.
600 milliseconds		Sets the pulse width to 0.6 seconds.
700 milliseconds		Sets the pulse width to 0.7 seconds.
800 milliseconds		Sets the pulse width to 0.8 seconds.
900 milliseconds		Sets the pulse width to 0.9 seconds.
1000 milliseconds		Sets the pulse width to 1.0 seconds.
1100 milliseconds		Sets the pulse width to 1.1 seconds.
1200 milliseconds		Sets the pulse width to 1.2 seconds.

**Note:** 1) Do not enable the cash drawer and buzzer at the same time.  
 2) The pulse width for cash drawer 2 is fixed at 200 milliseconds.



■ Buzzer 1 Control and Buzzer 2 Control

• Buzzer 1 ( or Buzzer 2 ):

Sets the drive of either buzzer 1 or buzzer 2.

Setting Value	Default Value	Details
No Use	○	Buzzer 1 or buzzer 2 is not used.
Document Top		Buzzer 1 (or buzzer 2) plays the buzzer sound at the top of the document.
Document Bottom		Buzzer 1 (or buzzer 2) plays the buzzer sound at the bottom of the document.

**Cautions :** When a device other than a buzzer, such as a cash drawer, is connected, absolutely never use the buzzer control command. There is the possibility that the connected device and the circuit can be damaged by using that command.

• Buzzer 1 ( Buzzer 2 ) - On Time:

Sets the time to play the buzzer sound for buzzer 1 (or buzzer 2).

Setting Value	Default Value	Details
20 milliseconds	○	Sets to 0.02 seconds.
40 milliseconds		Sets to 0.04 seconds.
100 milliseconds		Sets to 0.1 seconds.
200 milliseconds		Sets to 0.2 seconds.
500 milliseconds		Sets to 0.5 seconds.
1000 milliseconds		Sets to 1.0 seconds.
2000 milliseconds		Sets to 2.0 seconds.
5000 milliseconds		Sets to 5.0 seconds.

• Buzzer 1 ( Buzzer 2 ) - Off Time:

Sets buzzer 1 or buzzer 2 off time.

Setting Value	Default Value	Details
20 milliseconds	○	Sets to 0.02 seconds.
40 milliseconds		Sets to 0.04 seconds.
100 milliseconds		Sets to 0.1 seconds.
200 milliseconds		Sets to 0.2 seconds.
500 milliseconds		Sets to 0.5 seconds.
1000 milliseconds		Sets to 1.0 seconds.
2000 milliseconds		Sets to 2.0 seconds.
5000 milliseconds		Sets to 5.0 seconds.

• **Buzzer 1 ( Buzzer 2 ) - Repeat:**

Sets the number of times that the buzzer sound is played according to the on and off times set for buzzer 1 (or buzzer 2).

The buzzer sound will stop regardless of the number of times set by pressing the "FEED".

Setting Value	Default Value	Details
1	○	Plays the buzzer sound buzzer 1 (or buzzer 2) once.
2		Plays the buzzer sound buzzer 1 (or buzzer 2) twice.
3		Plays the buzzer sound buzzer 1 (or buzzer 2) three times.
5		Plays the buzzer sound buzzer 1 (or buzzer 2) five times.
10		Plays the buzzer sound buzzer 1 (or buzzer 2) ten times.
15		Plays the buzzer sound buzzer 1 (or buzzer 2) fifteen times.
20		Plays the buzzer sound buzzer 1 (or buzzer 2) twenty times.

**Note:** The on and off times for the buzzer sound should not exceed 90 seconds in total.

■ **Sound**

• **Document Top Sound:**

To play audio at the start of a document, select an audio file that is stored on the printer by specifying 'Sound n'.

Setting Value	Default Value	Details
No Sound	○	Does not play audio at the top of the document.
Sound1 - Sound20		Plays the 'Sound n' audio data, which is registered in the printer, at the top of the document.

• **Document Bottom Sound:**

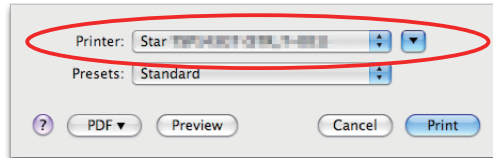
To play audio at the end of a document, select an audio file that is stored on the printer by specifying 'Sound n'.

Setting Value	Default Value	Details
No Sound	○	Does not play audio at the end of a document.
Sound1 - Sound20		Plays the 'Sound n' audio data, which is registered in the printer, at the end of the document.

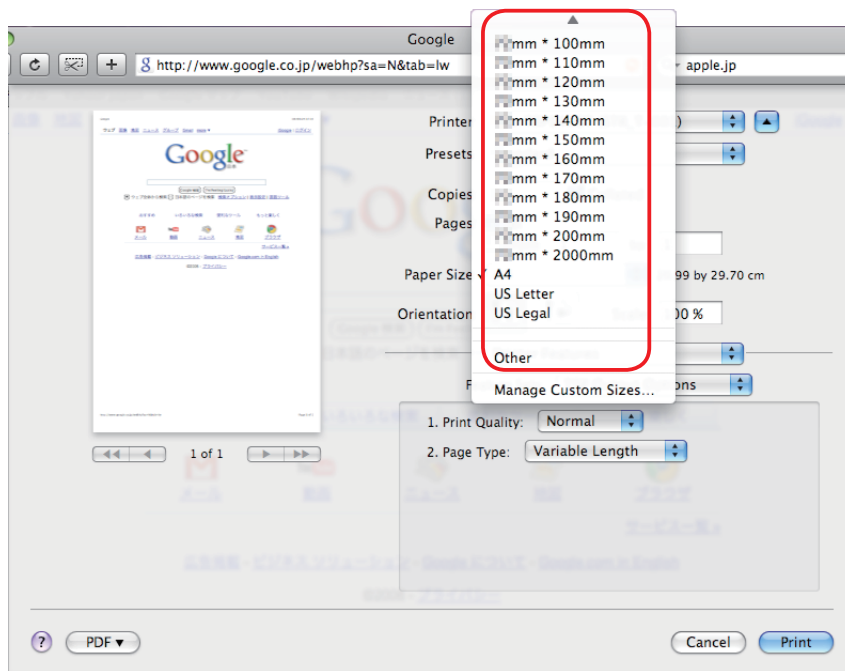
### 3. Setting Paper Size

#### 3.1 Setting Paper Size

From the menu bar on Mac OS X, open [File] - [Printers].  
Select the printer to set from the "Printer:" pull-down menu.  
If details are not displayed, click on [ ▼ ] to display them.



Next, select the paper size from the Paper Size pull-down menu.  
See section 3.2 Settable Paper Sizes for details on the sizes of paper that can be used.



**Point!** When a paper size is selected that exceeds the maximum printing width, the print is shrunk to fit the maximum printing width.

**Limitations for Bluetooth models:**  
The maximum page length printable by Bluetooth printers is 1500 mm. Please specify the paper size within 1500 mm.

### 3.2 Settable Paper Sizes

The following paper sizes are available and can be set.

Paper Size	default setting value.(●)
50.8 * 30mm	○
50.8 * 40mm	○
50.8 * 50mm	○
50.8 * 60mm	○
50.8 * 70mm	○
50.8 * 80mm	○
50.8 * 90mm	○
50.8 * 100mm	○
50.8 * 110mm	○
50.8 * 120mm	○
50.8 * 130mm	○
50.8 * 140mm	○
50.8 * 150mm	○
50.8 * 160mm	○
50.8 * 170mm	○
50.8 * 180mm	○
50.8 * 190mm	○
50.8 * 200mm	○
50.8 * 1500mm	○
50.8 * 2000mm	○
52 * 30mm	○
52 * 40mm	○
52 * 50mm	○
52 * 60mm	○
52 * 70mm	○
52 * 80mm	○
52 * 90mm	○
52 * 100mm	○
52 * 110mm	○
52 * 120mm	○
52 * 130mm	○
52 * 140mm	○
52 * 150mm	○
52 * 160mm	○
52 * 170mm	○
52 * 180mm	○
52 * 190mm	○
52 * 200mm	○
52 * 1500mm	○
52 * 2000mm	○

Paper Size	default setting value.(●)
52.5 * 30mm	○
52.5 * 40mm	○
52.5 * 50mm	○
52.5 * 60mm	○
52.5 * 70mm	○
52.5 * 80mm	○
52.5 * 90mm	○
52.5 * 100mm	○
52.5 * 110mm	○
52.5 * 120mm	○
52.5 * 130mm	○
52.5 * 140mm	○
52.5 * 150mm	○
52.5 * 160mm	○
52.5 * 170mm	○
52.5 * 180mm	○
52.5 * 190mm	○
52.5 * 200mm	○
52.5 * 1500mm	○
52.5 * 2000mm	○
72 * 30mm	○
72 * 40mm	○
72 * 50mm	○
72 * 60mm	○
72 * 70mm	○
72 * 80mm	○
72 * 90mm	○
72 * 100mm	○
72 * 110mm	○
72 * 120mm	○
72 * 130mm	○
72 * 140mm	○
72 * 150mm	○
72 * 160mm	○
72 * 170mm	○
72 * 180mm	○
72 * 190mm	○
72 * 200mm	●
72 * 1500mm	○
72 * 2000mm	○
A4	○
Letter	○
Legal	○

\* In some cases, these settings will not work as expected depending on the application being used to print from.

## 4. Guidelines for Using an Ethernet Environment

The printer's IP address must be set in advance to use a printer that supports LAN using this driver. If your LAN environment does not allow acquisition of an IP address from a DHCP server, set the IP address to the printer in advance.

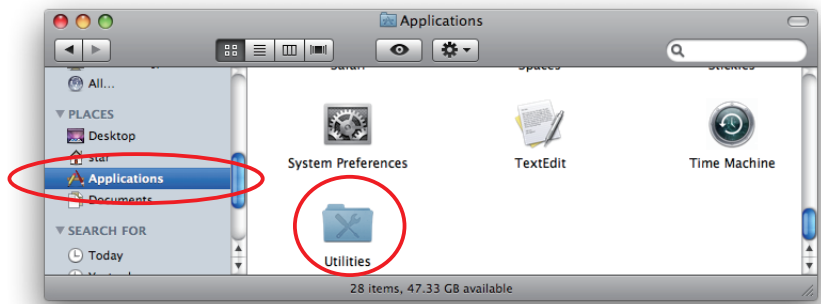
### 4.1 Setting a Temporary IP Address

Use the following procedures to set a temporary IP address to the printer.

**Important:** Printer settings should be done by a user with administrator rights.

**Point!** A MAC address of the printer to be set is necessary for the temporary IP address. Confirm the MAC address in a self-print from the printer. See the Hardware Manual for details on running a self-print.

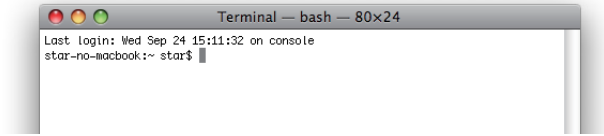
1. Connect the Ethernet cable to the printer and turn the power ON to the printer.
2. Startup the Finder from the Mac OS X Dock and click [Applications] - [Utilities].



3. Click on [Terminal].



3. The terminal starts up.



Execute the following command in the terminal to set a temporary IP address to the printer.

1. `sudo arp -d [Printer temporary IP address]`
2. `sudo arp -s [Printer temporary IP address] [Printer MAC address]`
3. `ping -c 4 [Printer temporary IP address]`
4. `sudo arp -d [Printer temporary IP address]`

*Example of temporary IP address (192.168.222.217)*

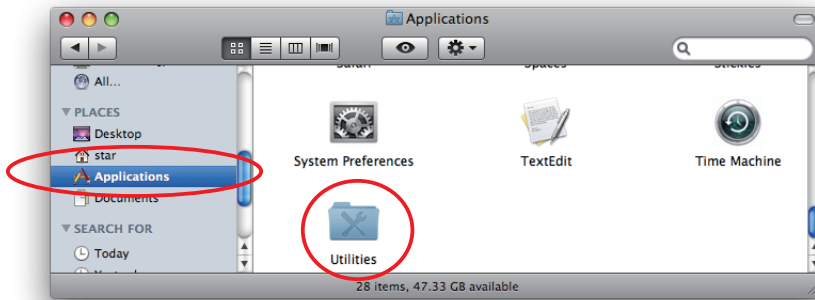
```
sudo arp -d 192.168.222.217
sudo arp -s 192.168.222.217 00:11:62:00:03:4D
ping -c 4 192.168.222.217
sudo arp -d 192.168.222.217
```

**Note:** The temporary IP address set here is erased when the printer power is turned off. Continue by setting the IP address. ( From (2) in section 4.2. )

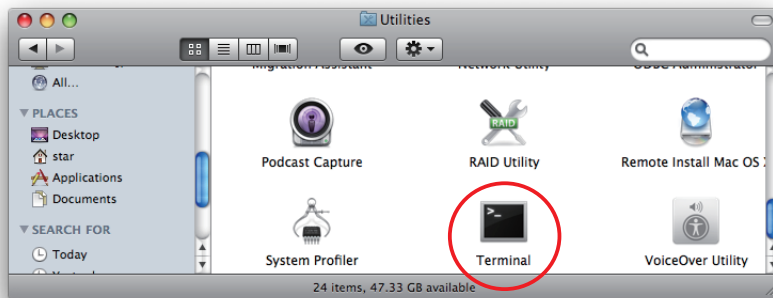
## 4.2 Setting the IP Address << StarPrinter TELNET Utility >>

The Telnet command connects directly to the printer to make settings.

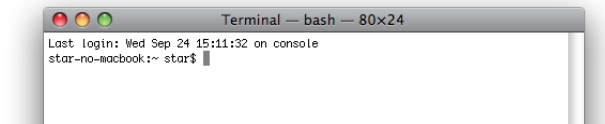
1. Connect the Ethernet cable to the printer and turn the power ON to the printer.
2. Startup the Finder from the Mac OS X Dock, and and click [Applications] - [Utilities].



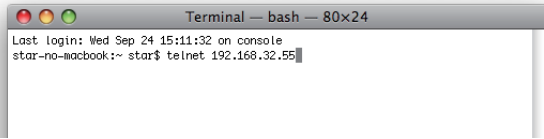
3. Click on [Terminal].



4. The terminal starts up.



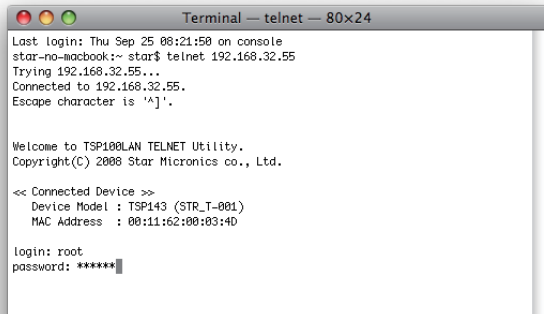
5. Use the Telnet command to connect to the printer to set.



Ex. >telnet 192.168.222.217 (The IP address of the printer to be set.)

**Note:** You cannot connect to a printer that does not have an IP address. See section 4.1 Setting a Temporary IP Address for details on setting such an address on the printer in advance.

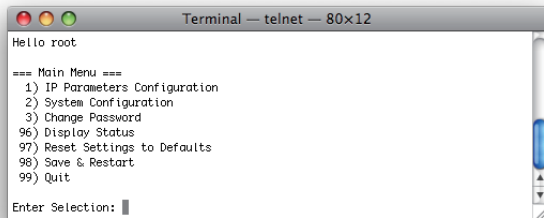
6. Log-in to the printer to be set as a "root" user.  
The default password is "public."  
To change the password, input the changed password.



7. The following menu is displayed.

- 1) IP Parameters Configuration
  - 2) System Configuration
  - 3) Change Password
  - 96) Display Status
  - 97) Reset Settings to Defaults
  - 98) Save and Restart
  - 99) Quit
- Enter Selection

Input the number that corresponds to your selection.





8. When all settings are completed, save the changes using "98( Save and Restart)" - "1(Save & Restart device & Configuration printing)", or "2 (Save & Restart device)". The settings of the printer will be saved. Reset the printer.

*Example : Set the fixed IP address <192.168.222.55> on the printer set with the temporary IP address <192.168.222.217>, the check printing the setting contents.*

```
>telnet 192.168.222.217
login : root
password : ***** ( Use "public" when not making changes. )
Enter Selection : 1 ( IP Parameters Configuration )
Enter Selection : 1 ( Static )
Enter Selection : 1 ( IP Address )
Enter IP address (x.x.x.x) : 192.168.222.55
Enter Selection : 99 ( Back to IP Address Menu )
Enter Selection : 99 ( Back to Main Menu )
Enter Selection : 98 ( Save & Restart )
Enter Selection : 1 ( Save & Configuration printing & Restart device )
```

\* The actual input portions are shown in bold characters.

## 5. Guidelines for Using the lpr Command

When printing using the lpr command from the command line, you can specify options with the following format.

```
$lpr -o [option]=[value] -o [option]=[value] ... [Filename]
```

In [option] • [value], specify the name shown in the command "specify name" in section 5.1 List of Supported Functions".

Also for options not specified, print using the default driver settings.

**Point!** Use the printer name confirmed using the "lpstat -p" command, when specifying the printer name using the option "-P".

### Use Example 1

Printer Name : FVP10\_ \_STR\_T\_001\_  
File Name : sample1.txt  
Paper Size \* : 50.8 \* 200mm  
Margin(top) \* : 0mm  
Margin(bottom) \* : 0mm  
Margin(left) \* : 0mm  
Margin(right) \* : 0mm

\* This option is not a printer driver option, but an OS standard option.

```
$ lpr -P FVP10_ _STR_T_001_ -o media="X50D8MMY200MM"  
-o page-top=0 -o page-bottom=0 -o page-left=0  
-o page-right=0 sample1.txt
```

### Use Example 2

File Name : sample2.txt  
Print Speed : Low

```
$ lpr -o PrintSpeed=2Low sample2.txt
```

### Use Example 3

File Name : sample3.txt  
Document Cut Type : No Cut

```
$ lpr -o DocCutType=0NoCutDoc sample3.txt
```

## 5.1 Function List

See section 2.1 Function List for the details on the functions.

	Option Name		Command Name		Default Setting
	option	value	[ option ]	[ value ]	Value( ● )
Output Option	Print Speed	High	PrintSpeed	0High	●
		Middle		1Middle	○
		Low		2Low	○
	Print Density	-3	PrintDensity	0Minus3	○
		-2		1Minus2	○
		-1		2Minus1	○
		Standard		3ZERO	●
		+1		4Plus1	○
		+2		5Plus2	○
		+3		6Plus3	○
	Page Type	Variable Length	PageType	0Variable	●
		Fixed Length		1Fixed	○
Top Search	Disable	TopSearch	0Disable	●	
	Enable		1Enable	○	
Cut Options	Page Cut Type	No Cut	PageCutType	0NoCutPage	●
		Cut		1CutPage	○
	Document Cut Type	No Cut	DocCutType	0NoCutDoc	○
Cut		1CutDoc		●	
Data Treatment Recover From Error	Data Treatment Recover From Error	No Use	DataTreatment RecoverFrom Error	0NoUse	○
		Clear Data By Document Unit		1ClearDataByDocumentUnit	●
Cash Drawer Control	Cash Drawer	Do Not Open Drawers	PresenterTimeout	0DoNotOpenDrawers	●
		Open Drawer 1		1OpenDrawer1	○
		Open Drawer 2		2OpenDrawer2	○
		Open Drawer 1 and 2		3OpenDrawer3	○
	Cash Drawer 1 Pulsh Width	10 milliseconds	CashDrawer1PulseWidth	0Millis10	○
		100 milliseconds		1Millis100	○
		200 milliseconds		2Millis200	●
		300 milliseconds		3Millis300	○
		400 milliseconds		4Millis400	○
		500 milliseconds		5Millis500	○
		600 milliseconds		6Millis600	○
		700 milliseconds		7Millis700	○
		800 milliseconds		8Millis800	○
		900 milliseconds		9Millis900	○
		1000 milliseconds		10Millis1000	○
1100 milliseconds	11Millis1100	○			
1200 milliseconds	12Millis1200	○			

	Option Name		Command Name		Default Setting		
	option	value	[ option ]	[ value ]	Value( ● )		
Buzzer1 Control / Buzzer2 Control	Buzzer1 / Buzzer2	No Use	Buzzer1Setting / Buzzer2Setting	0NoUse	●		
		Document Top		1DocumentTop	○		
		Document Bottom		2DocumentBtm	○		
	Buzzer1 - On Time / Buzzer2 - On Time	20 milliseconds	Buzzer1OnTime / Buzzer2OnTime	0Millis20	●		
		40 milliseconds		1Millis40	○		
		100 milliseconds		2Millis100	○		
		200 milliseconds		3Millis200	○		
		500 milliseconds		4Millis500	○		
		1000 milliseconds		5Millis1000	○		
		2000 milliseconds		6Millis2000	○		
		5000 milliseconds		7Millis5000	○		
	Buzzer1 - Off Time / Buzzer2 - Off Time	20 milliseconds	Buzzer1OffTime / Buzzer2OffTime	0Millis20	●		
		40 milliseconds		1Millis40	○		
		100 milliseconds		2Millis100	○		
		200 milliseconds		3Millis200	○		
		500 milliseconds		4Millis500	○		
		1000 milliseconds		5Millis1000	○		
		2000 milliseconds		6Millis2000	○		
		5000 milliseconds		7Millis5000	○		
	Buzzer1 - Repeat / Buzzer2 - Repeat	1	Buzzer1Repeat / Buzzer2Repeat	0Repeat1	●		
		2		1Repeat2	○		
		3		2Repeat3	○		
		5		3Repeat5	○		
		10		4Repeat10	○		
15		5Repeat15		○			
20		6Repeat20		○			
Sound		Document Top Sound		No Sound	DocumentTopSound	0NoSound	●
	Sound1		1Sound	○			
	Sound2		2Sound	○			
	•		•	•			
	•		•	•			
	•		•	•			
	Sound19		19Sound	○			
	Sound20		20Sound	○			
	Document Bottom Sound		No Sound	DocumentBottomSound		0NoSound	●
			Sound1			1Sound	○
			Sound2			2Sound	○
		•	•		•		
		•	•		•		
		•	•		•		
		Sound19	19Sound		○		
		Sound20	20Sound		○		

## 6. Confirmed Operating Environments

- Mac OS X 10.5 Intel

- ▶ Macbook

- OS: Mac OS X 10.5
    - CPU: 1.83GHz Intel Core2 Duo
    - RAM: 512MB 667MHz DDR2 SDRAM

- Mac OS X 10.6 Intel, Mac OS X 10.7 Intel, Mac OS X 10.8 Intel  
Mac OS X 10.9 Intel, Mac OS X 10.10 Intel

- ▶ iMac

- OS: Mac OS X 10.6.2
    - Mac OS X 10.7
    - Mac OS X 10.8
    - Mac OS X 10.9
    - Mac OS X 10.10
    - CPU: 3.06GHz Intel Core2 Duo
    - RAM: 4GB 1067MHz DDR2 SDRAM





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